PROCEEDINGS OF THE WORLD BANK ANNUAL CONFERENCE ON DEVELOPMENT ECONOMICS 1991

Supplement to The World Bank Economic Review and The World Bank Research Observer

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The World Bank Annual Conference on Development Economics is a forum for discussion and debate of important policy issues facing developing countries. The conferences emphasize the contribution that relevant policy, empirical, and basic economic research can make to understanding development processes and to formulating sound development policies. Conference papers are written by researchers in and outside the World Bank. The conference series was started in 1989.

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Introduction

Lawrence H. Summers and Shekhar Shah

The 1991 World Bank Annual Conference on Development Economics, the third in the series, was held April 25–26 in Washington, D.C. The conference highlighted four themes: governance, urbanization, military expenditure and development, and transition in socialist economies. The twelve papers on these four topics cover a broad range of subjects, indicative of the large set of development issues that concerns the World Bank in its operational and research activities and in its policy dialogue with member countries. The conference ended with a roundtable discussion on the sustainability of economic growth.

The annual conference series has two principal objectives. First, each conference draws attention to important policy and research issues of interest to the World Bank as well as to the larger community of development practitioners. The topics selected for the conference represent either new areas of concern or areas in which it is useful to review existing knowledge and to identify areas for further inquiry. The 1991 conference included both types of subjects. Military expenditure and governance are new themes; however, the World Bank has worked on urbanization issues over the years, and more recently has become involved with the problems relating to the transition in socialist economies.

As its second objective, the conference series provides a regular forum for World Bank staff and outside participants to discuss research needs and policy issues emerging from the conference discussions. The conference has evolved to include more outside authors, with World Bank staff reacting to the papers as discussants following the presentation of each paper. This combination has worked well in allowing an open and collegial dialogue between Bank staff and prominent experts, including researchers from developing countries.

Both objectives of the conference complement the World Bank's research program, which has four principal goals: to support all aspects of World Bank operations in developing countries; to broaden understanding of the development process; to improve the Bank's ability to give timely policy advice; and to assist in enhancing indigenous research capacity in developing countries. Through the choice of topics and the papers discussed, the conference helps to identify issues for the Bank's research agenda. At the same time, previous and ongoing Bank research in related areas informs the conference discussions. On both sides the interaction with outside researchers and policymakers is particularly fruitful. The wider dissemination of the conference papers in this volume is an important step in orienting the conference to the basic goals of Bank research.

The 1991 conference began with an inaugural address by President Barber B. Conable, who emphasized the importance of development research for a knowledge-based institution such as the World Bank. We are grateful to Mr. Conable for his strong support of the Bank's research program and his interest in establishing the annual conference as a vital component of that program.

Lawrence Summers, then newly arrived at the World Bank as its chief economist and vice president for development economics, delivered the keynote address, "Knowledge for Effective Action." Summers's address emphasizes the Bank's and the development community's central priority of creating and helping to implement improved strategies for economic development, a task for which the generation of good ideas and their cost-effective implementation is as important as financial resource transfers.

In his paper on privatization in Eastern Europe, Jeffrey Sachs builds on his ongoing work in Poland and argues that there is no alternative to rapid and sweeping enterprise reform if privatization is to succeed. Sachs is particularly concerned about the opposition to reform that can quickly lead a country into a trap in which it ends up doing too little too late.

Jan Vanous, in contrast, presents an enterprise-based view of reform. Vanous makes the point that privatization schemes are often blind to the microeconomic realities of existing socialist enterprises. He argues that unless these realities are taken into account, the progress of enterprise reform in Eastern Europe will be very uneven and uncertain.

Writing with some focus and perspective about an economic reform process as it is unfolding is always fraught with danger, particularly when the country's political map is itself undergoing rapid change. Anders Åslund took on this difficult task in his paper on the U.S.S.R. In a concise rendering of Soviet economic and political events, as seen in early 1991, Åslund carefully traces the forces behind the gathering political and economic crises, concluding with a stage-by-stage characterization of the transition from a command to a market economy that is equally applicable to other economies in transition.

Robert S. McNamara, in his paper on military expenditure in developing countries, argues that the end of the Cold War offers the opportunity for sharp reductions in defense spending. His approach emphasizes the need to redeploy these funds to economic development goals. This vision involves a combination of United Nations Security Council guarantees of territorial integrity, continuing reductions in nuclear and conventional weapons by the major industrial countries, and limits on arms exports. Linking development assistance to levels of national military expenditure, McNamara concludes, is one way of dealing with excessive military spending in low-income countries.

Saadet Deger and Somnath Sen discuss the links between defense expenditure and aid—military and civilian. Their paper explores the critical question of the fungibility of aid flows and asks how such fungibility could be reduced. One conclusion is that appropriate incentives are needed for the successful implementation of conditionalities linked to military expenditure.

Mary Kaldor's paper turns to the question of converting existing industrial capacity from military to civilian uses. Kaldor identifies the political, technological, and industrial obstacles to reductions in military spending, and suggests possible ways to overcome such resistance in the industrial and developing countries.

The three papers on urbanization in developing countries provide somewhat contrasting views of city growth and the policies required to manage it. Emphasizing the state's role in generating productive, entrepreneurial activities, Akin Mabogunje calls for microeconomic solutions to raise productivity in urban economies, particularly policies that will encourage and nurture indigenous capitalist institutions, discourage rent-seeking behavior, and provide incentives for profit-oriented entrepreneurship. In contrast, the papers by Jeffrey Williamson and Edwin Mills investigate the sources of the urban transition and ask whether governments should seek to intervene and if so, what policies are effective. Edwin Mills points out that cities in developing countries function much better than many scholars and government officials believe. He discusses policies that can promote the economies of scale and scope that are unique to cities and that make them desirable locations. Jeffrey Williamson projects a slowdown of city growth in the developing countries, and suggests that appropriate tax policies would make it possible to deal much more effectively with the problems of large city size.

The theme of governance and development was introduced by Edgardo Boeninger, who brings to the topic his own experience of governance in Chile. He discusses necessary conditions for effective governance in its political, technical, and institutional functions. Denis-Contant Martin, with a primary focus on Africa, traces the reasons why a society's cultural foundation makes a difference to good governance and public accountability. He suggests several questions that should be explored to help relate core cultural and ethical values in specific settings to governance. Starting with the question of how governance affects the effectiveness of aid and promotes economic growth, Pierre Landell-Mills and Ismaïl Serageldin provide a framework for donor agencies to legitimately and effectively foster the core characteristics of good governance.

The final event of the conference was a discussion of the question "Is Growth Sustainable?" Lester Brown and Theodore Panayotou exchanged differing views of the adequacy of market- and nonmarket-based policy tools to deal with the environmental costs incurred in the course of economic growth. Their ideas—particularly those relating to environmental externalities and species survival—for dealing with environmental degradation through the market mechanism, afford a window on the current state of the debate on sustainable growth.

Acknowledgments

The Annual Conference on Development Economics is organized by the World Bank's Research Advisory Staff, headed by Gregory Ingram. His overall guidance and support contributed to the success of the conference. We would also like to thank Susan Miller, the coordinator of the conference, who worked hard and well on the many logistical details, and Mani Jandu, who provided able support. Other Bank colleagues assisted us in various capacities, both to organize the conference and to publish its proceedings. Without implicating them in any way, we record the contributions of Michael Cohen, Alan Gelb, Geoffrey Lamb, Pierre Landell-Mills, Kyu Sik Lee, and I.J. Singh. Finally, Stanley Fischer and Dennis de Tray made important contributions to the 1991 conference, even as it marked their transitions: Stanley Fischer, who started the conference series, left the World Bank to return to the Massachusetts Institute of Technology; Dennis de Tray, who oversaw the planning of the 1991 and earlier conferences as the Research Administrator, moved to a new position in the World Bank. We would like to thank them both.

Opening Remarks

Barber B. Conable

I would like to welcome you to the third in the series of ABCDE meetings. I want you to know that I am most grateful for the acronym. In the world of confusing, complex, and not very memorable World Bank acronyms, I am pleased that I learned so early in life that ABCDE stands for the Annual Bank Conference on Development Economics.

We thank you for bringing a breath of fresh air to our embattled and somewhat cloistered buildings. If the Bank has a comparative advantage in research, it is because we undertake both research and operational activities in development and therefore are able to test our theories against practice. As a result of our research we know more about structural adjustment, about debt, and about alleviating poverty. We know how important human capital is. We are looking at how the private sector can impart its particular dynamic to economies that need to grow since official development aid is not likely to increase. We understand more about the nexus between environment, population, and poverty—an area that is particularly relevant in today's world. We know more about education and health, particularly their importance to women. And we have been doing a great deal of study on the reform of socialist economies, at a time when Central and Eastern Europe and the Soviet Union are opening up.

The Bank is involved in a vast range of countries, sectors, and policies, which adds to our comparative advantage. So does the close working relationship between the Bank staff and decisionmakers in member countries, because ultimately, development doesn't happen unless the decisionmakers are willing to heed the results of our research. But to retain our comparative advantage, like any other democratic institution, we have to be willing to withstand tests, to reach out for information, and to call on the kinds of skills that are present in this room to challenge our ideas and to add to our knowledge. We have some particular themes for this meeting: governance, urbanization, military expenditure, and the transition of socialist economies. We have discovered a growing awareness that these areas should be challenged in the process of development.

Clearly, if many developing countries are spending more on military programs than on education and health, it raises interesting questions about their capacity to develop. We do not expect to become great experts on military needs, but we do expect to include it in the dialogue in ways that will test decisionmakers in the

Barber B. Conable is the former president of the World Bank.

developing world. All countries have the sovereign right to defend themselves, but the fiscal implications and the tradeoffs involved must be discussed.

Governance is a particularly sensitive issue to the World Bank Board because of the perception that the Bank might impose specific types of conditionality—political conditionality—on Bank clients. Governance is, however, very much on peoples' minds. My modest investigation of this subject has convinced me that our member countries expect us to encourage the kind of environment in which reforms will have a broad base of support. If we are to achieve development, we must aim for growth that cannot be easily reversed through the political processes of imperfect governance.

In short, development is a constantly changing process. We have had to learn from our mistakes and from a dramatically changing set of externalities. In the last five years, the expectations of this institution have changed considerably. I don't believe the institution has ever been insensitive, but external circumstances are changing the emphasis. We will have to continue to adapt. The dialogue today is a major contribution toward that goal.

I came to the Bank five years ago with little knowledge about development but with an open mind. I am leaving the Bank this year with still relatively little knowledge of the Bank's work on development—but I now have a closed mind about the centrality, relevance, and importance of this institution. I think the World Bank is badly needed. And the World Bank badly needs your counsel and the challenge your research provides if we are to succeed—as we must if development is to proceed.

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KEYNOTE ADDRESS

Knowledge for Effective Action

Lawrence H. Summers

There is an apocryphal story about the great Canadian surgeon William Osler that may have some resonance for the economics profession. The story holds that Osler was asked in 1915 "At about what point in the history of medicine did a random patient confronting a random physician have a better than 50 percent chance of being helped?" Osler hesitated a moment and then responded "Perhaps 15 years from now."

We in the economics profession are well ahead of where medicine was in 1915. Much of what is said about the propensity of economists to disagree is vastly exaggerated. I suspect that the discussion here on the problems of socialist transition will not belie my impression that there has been a striking consensus in the advice that mainstream economists have given on the transition in Eastern Europe.

But there is much that we do not know. Despite rapid technological progress, living standards in the last decade have actually declined on two continents. It seems that we can identify and reject quack prescriptions that violate necessary conditions for development more readily than we can provide policies to promote rapid development. More than ever before, creating and implementing better strategies for economic development must be the central priority of the World Bank, and indeed of the entire aid community, for the next decade.

I. Money Versus Ideas

To put it bluntly, since there will not be much money for development over the next decade, there had better be a lot of good ideas. For the developing world as a whole, aggregate net transfers totaled $50 billion (all dollars are 1991 dollars) in 1980. In the last five years, net transfers have been significantly negative, and a restoration of earlier levels is not in sight. Although the contraction in the 1980s reflected in large part the response of commercial banks to the debt crisis, the prospects for large net transfers from institutions like the World Bank have also declined. Between 1975 and 1980, the World Bank Group achieved net transfers of $9 a person in the developing world; it is expected that net transfers will be just over $2 a person in the next five years. For the many

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countries that do not qualify for funds from the International Development Association, the net flow of money will actually be to the World Bank.

Although resource transfers will be limited, more bang is actually more important for development than more bucks. More efficient use of resources will often make a greater difference than more investment. Consider the following striking comparison: A two-tenths of one percent increase in total factor productivity in developing countries would do more for living standards than an additional $100 billion invested at historical rates of return.

The Marshall Plan—the most widely cited of all foreign aid successes—illustrates the point that good strategies, well implemented, and not simply the transfer of resources, make the greatest difference for development. There are calls for the Plan's replication all over the globe. What actually happened?

During the Marshall Plan years, the United States granted the recipient countries less than 2.5 percent of their incomes a year, and less than a third of the resources transferred were used directly for investment. What the Plan did—and on a major scale—was assure the stability of the economic environment and permit governments to provide an enabling environment in which the private sector could flourish. I cannot help but wonder whether it is a complete accident that the countries in which the ratio of policy insistence to financial aid was highest after the war—West Germany and Japan—were also the countries that performed best.

With money scarce, we need ideas. What type of ideas? The great lesson of the 1970s and the 1980s was that governments that tried to occupy the commanding heights of their economies found themselves looking a long way down, to stagnating growth and deteriorating performance. The policy lesson was and is clear. Governments must get out of activities that competitive markets do best: producing and allocating goods and services. That message has been heard around the world and to great effect. The booming economy of Mexico, the vast increases in agricultural productivity obtained in China, and the bold reforms being undertaken in Eastern Europe illustrate its power.

The market message was new and true, but it is only part of the story. There are indeed things that governments must not do. But taking the brakes off is not enough to make your car go, and crash diets do not ensure continuing health. Government involvement to make the tangible and intangible infrastructure investments that underpin rapid growth and a healthy private sector—and that ensure social and economic justice—is critical to growth.

It is more difficult to undertake activities effectively than it is to divest them, especially in a resource-constrained environment. We have worked very hard in recent years on governments' errors of commission; it is time for work on the errors of omission. The research agenda I see for the next few years addresses the pivotal issue of helping governments identify and perform the central functions that only they can do.

I want to highlight several areas where there is both an urgent need for better ideas and a real prospect of finding them. Inevitably a list excludes as much as—

or more than—it includes. I have consciously tried to avoid reiterating the World Bank's current areas of operational emphasis—the environment, reform of socialist economies, debt, adjustment, and so forth—because they are familiar and because an important dimension of any research program should be directed at setting the priorities of tomorrow as well as responding to the needs of today. Not surprisingly, a number of these areas are closely related to the World Bank's priorities and to areas that will be examined during this conference.

II. Evaluating Investments for Infrastructure

Let me start with perhaps the most traditional role of government—investing in public goods and getting the highest return possible from those investments. Helping governments make necessary infrastructure investments was after all an important rationale—perhaps the central rationale—for the creation of the World Bank.

Economic logic suggests that when an institution with a small amount of capital (relative to a large world capital market) allocates funds, diminishing returns should come into play only very slowly, so the capital should be allocated to its highest value use. That is very different from the way the World Bank and other development institutions operate. Our portfolio is highly diversified, with investment in many sectors in most countries. Why? I fear that we practice a kind of diversification out of ignorance. Not knowing what types of projects have the highest return in any given country, we invest broadly, as do our member governments.

Yet there is every reason to think that there are large differences in the social rate of return to different types of project lending. Taken literally as measures of social return (which one surely should not do, I am told), the World Bank's own operational evaluations suggest a large variation in the rate of return to projects in different sectors.

This raises an important point for research: We need to make tougher judgments than we have in the past. Of course, comparing bridges and power plants is comparing apples and oranges. But comparing their returns analytically must surely make more sense than investing in both so as to be sure of including the better one in the portfolio—or than making choices based on hunches.

Comparing investment returns across different types of investment will mean developing analytical techniques that go beyond traditional cost-benefit analysis in accounting for a variety of externalities produced by different types of projects. For example, economists now think—though they haven't always thought this way—that reduced deadweight losses constitute the smallest part of the gains from free trade. Such losses are dwarfed by the effect of competition in spurring efficiency and reducing rent-seeking, and by the gains trade brings (economies of scale and product variety). Improved transportation, beyond its benefits in reducing travel time, must have the same effects, yet such considerations have not been fully or even partly accommodated in our analyses of the attractions of this type of lending. We must devise ways to make more systematic and complete evaluations of different types of projects that recognize the full range of their effects.

A different kind of infrastructure that government can provide is the development of markets that otherwise would not exist. Advocates of laissez-faire would do well to remember that there was no commercial mortgage market in the United States immediately after World War II. It took the Federal Housing Administration to demonstrate that loans for houses could work, that you could collect those loans, and that you could earn a profitable return on them, while at the same time allowing people who could not otherwise afford it to purchase their own homes. That experience, and its message, must have resonance for institutions and places with much less-developed capital markets than those in the United States after World War II.

The contrast between the excesses of Wall Street and the major and obvious need to enable countries and companies to hedge the enormous risks they face from international financial and commodity markets is striking. Markets have become considerably more volatile in recent years—especially commodity markets, which have a special impact on many developing countries. The price of the average internationally traded commodity has fluctuated over a range of more than 100 percent in the last decade. But this is just the beginning of the problem. Countries are also exposed in complex ways to changes in interest rates and changes in their own and their competitors' exchange rates.

We have learned the painful lesson that commodity or exchange markets cannot be rigged, and prices cannot be durably set in a way that deviates from market forces. What, then, can we do? It seems to me that the challenge is to find ways, and to help governments find ways, to use the vast world capital markets more effectively to spread risk and permit it to be borne more efficiently. Often this will mean that speculators in developed countries must assume risks that developing countries can ill afford. But in some cases—for example, developing country importers and exporters of oil—the risk can be handled in the developing world.

Capital market development doesn't just mean insuring against risk—it also means attracting capital. The flow of capital to the developing world will be much smaller than it has been in the recent past. Commercial bank flows to many developing countries will not be restored soon. The downside of resource transfers for the lender has become all too obvious in the last decade. Those who invest in the developing world in coming years will want a large potential upside in their investment to balance the downside that they faced in the past. The Bank—and especially the International Finance Corporation—have done fundamentally important work in catalyzing equity flows by introducing country funds, but the amounts are still very small. We need to think about how to leverage these flows more effectively because equity—not debt—will be the basis for any large amount of foreign investment in developing countries in the next decade.

III. Achieving Economic Justice

The World Bank is committed to reducing poverty. But poverty alleviation is a means, not an end; it is a way to ensure that people live healthier, longer, and more fulfilling lives. We know a great deal about the distribution of income—and a fair amount about how to change it—but the lack of hard quantitative evidence on the effect of social sector interventions in health, literacy, nutrition, and so forth is striking. Any effort to make lives saved and monetary values commensurate is problematic, to say the least, but it is not unreasonable to ask for information on what can be accomplished through social sector programs.

Social Progress

Economic growth and social progress are related, and rising tides lift all boats. But there are vast differences in social sector performance among countries at similar income levels.

- Among low-income countries, the Republic of Yemen, Sri Lanka, and Indonesia have almost exactly the same per capita income. Life expectancy, however, is fifty-one in Yemen, sixty in Indonesia, and seventy in Sri Lanka.
- Among upper-middle-income countries, Brazil and Uruguay have essentially the same income level, but life expectancies differ by six years—twice what you would achieve by eliminating all forms of cancer in the United States.
- In China per capita income is less than $500, and less than 5 percent of it is devoted to health care. Yet Shanghai has more favorable health statistics—measured by infant mortality and life expectancy—than New York City.

These figures emphasize health statistics. Equally compelling are the differences at similar income levels for literacy rates, treatment of women, and other social investments. What are the roots of these differences? What can be done to reduce them? The different experiences among countries must demonstrate the vast potential of strategically designed, relatively inexpensive government interventions. But how do they demonstrate their potential? The answer must go well beyond targeting. Differences of this kind cannot be ascribed simply to the failure to concentrate social services on the lower social strata of the population; they must reflect differences in how these services are delivered to all social strata. The problem of how best to deliver social services is an important one for future research.

I have spoken of a kind of macrodimension involving comparisons across countries. Of possibly equal or greater importance is a microdimension. Medical researchers have agonizingly concluded over the last century that only double-blind evaluations of drugs, or carefully controlled statistical evaluations of surgical procedures, are valid. Without such comparisons mistakes are incessant. Obviously, the scope for controlled evaluations is greater in some settings than in others. In the real world not every ceteris can be paribus. But too often we operate in a kind of statistical stone age. It would cost little to maintain a standard policy of using baseline groups as controls in evaluating social sector projects or—to the extent that matched enterprises can be found—even projects directed at restructuring enterprises. Social services are important. So is raising the income of those who work. And that means making sure their skills are valued in the labor market. It is high time we rechannel some of the energy we have directed at the capital market to the labor market. This means understanding how labor market regulations constrain economic expansion so their removal can be a more significant aspect of adjustment programs. But it also means finding ways to provide employment—not for a small fraction of workers at high wages, but for a much larger number of workers in labor-intensive industries. Human capital is a principal asset of the poor; raising its return is an important priority.

Population Growth

Population as an issue is nearly unique among areas of development policy in the disjunction between seemingly compelling beliefs and the current state of scientific literature. It is widely believed that population growth inhibits economic growth and perpetuates poverty in developing countries. Paul Ehrlich may be dismissed as an extremist, but Robert McNamara represents the views of many when he equates population growth and nuclear war. Yet a recent National Academy of Sciences report provided a dramatic shift in viewpoint.[1] The study concluded that there is no compelling evidence that population growth along the current trajectory will have disastrous consequences that population control programs could mitigate. Perhaps this is not surprising since most of the recent emphasis has been devoted to the determinant rather than to the consequences of population growth.

I suspect that getting the population question straight—or at least straighter than we have it now—will require recognizing that the consequences of lower population density depend on the circumstances. Changes in population growth are likely to have different outcomes when they are brought about by a decline in the death rate of the aging population, a decline in the death rate of children, responses to changes in social security arrangements, and specific family planning efforts. The effect of changes in population is also likely to differ across places. In rural areas where most of the population lives off the land, population growth is likely to be more pernicious than in cities, where land is less important as a factor of production.

Beyond the traditional question of how population affects economic growth, the answers to other questions would also help guide a rational population policy. How strong are the links between population growth and environmental degradation? Is it really population pressure that is pushing migration into the Amazon? What are the links between population growth and inequality in the wage structure? What are its fiscal consequences? And, finally, will investments in population control pay off for governments?

1. *Population Growth and Economic Development*. 1986. Washington, D.C.: National Academy of Sciences.

These answers are only the beginning of what we need to know about demographic change and its consequences. Over any but the longest horizon, little can be done about the rate of population growth. We need a better approach to the aging population of the developing world, and we must think through the pressures that are building for migration. If current projections hold, in the next two decades the developing world will account for 95 percent of the growth of the labor force, but less than 15 percent of capital investment. This calls for either transferring capital to places like Africa—where the labor force is growing more rapidly—accepting large flows of migrant labor, or recognizing that an important force will be operating to increase inequality in the coming decades.

Governance

The question of what governments must do, what they can do, and how we can help them do it better leads to the difficult problem of governance. We have learned in the last three decades that the heavy hand of government retards growth, and that, contrary to economists' beloved tradeoffs, even as governments retard growth, they are also less sensitive to objectives that are thought to conflict with growth, like the environment or inequality.

That much we know. What is less clear is drawing the right line between the invisible hand and government's helping hand. It is fair to assert that the rhetoric that surrounds the use of selective credit policies in Japan and East Asia is not very different from the rhetoric that surrounds much less successful development banks and other tools of selective credit policy in other parts of the world. Much the same could be said about industrial policies of other kinds, particularly in the trade arena.

But the results have been dramatically different. And so, in a sense, the policies must have been different. Failed policies in Asia have been reversed much more quickly than failed policies in Latin America or Africa, and thus have not mushroomed, or bred the same kind of corruption. But in a deeper sense the underlying policy intention has been the same in both places. Why the difference in outcomes? It must go back in some way to politics, broadly defined. Perhaps the degree of urbanization or of underlying inequality shapes political forces differently—or so it has been argued. Just how susceptible these things are to change I do not know. The view that governments should simply swear off selective policies if they cannot achieve them well may be a bit naive. The same political forces that make them unable to accomplish them well may make them unable to resist them.

Understanding the politics of economic success and failure is an important intellectual task. It alone can contribute to judgments about when assistance is and is not likely to be effective. Beyond this question is the issue of crafting policy advice that reflects political realities—that insulates results from inherently political pressures, or that pushes the politics in the appropriate direction.

A sensitive and closely related question concerns democracy, civil liberties, and economic performance. An important lesson over the last decade is that authoritarian regimes are not necessary for growth. Growth, on average, proceeds at about the same rate in democratic and nondemocratic regimes. We know two other things. Since World War II there has been no war between two democratic nations, and in the last fifty years, as Amartya Sen pointed out at this conference last year, there has never been a famine in a country with a free press. These facts raise the question of whether democracy, while not essential to growth, may improve development performance. The statistics on Shanghai and New York that I raised earlier suggest that the correspondence cannot be universal, but it is time to look at the relationship between democracy and development in much more detail. We need to begin to think about what—beyond economic policies that promote growth—we can do to improve the nexus of governments' performance.

Recent events press yet another governance question. What is the future of nation states as independent actors? On the one hand, pressure for integration and cooperation mounts; witness what is happening in the European Community. On the other hand, pressure for devolution is increasing in many countries. This raises questions of how to manage the transition to preserve the stability that is essential for growth.

IV. Conclusion

In a world that is short on money, ideas are important—and it takes research to generate ideas. Focusing the research effort in the next decade in the areas I have spoken of can be justified using the Pascal defense. To paraphrase Pascal, if there is no God and I go to church on Sundays, I will have wasted some time. If there is a God and I fail to go, the costs will be transcendently greater. So, too, with the search for new ideas. The payoffs to success dwarf the consequences of failure.

John F. Kennedy told a story about Jean Monnet that ought to inspire anyone involved in an activity that yields benefits only with long and variable lags: Monnet asked his gardener how long it would take a tree that he was going to plant to grow. The gardener said it would take a hundred years to reach its full height. Monnet responded: "Then we had better plant it this morning."

Accelerating Privatization in Eastern Europe: The Case of Poland

Jeffrey D. Sachs

The need to accelerate privatization is the paramount economic policy issue facing Eastern Europe. If there is no breakthrough in the privatization of large enterprises in the near future, the entire process could be stalled for years to come. Privatization is urgent and politically vulnerable; such international institutions as the World Bank and the European Bank for Reconstruction and Development can help speed the process by providing financial and technical support for the key operations of mass privatization. Because most of the effort in the next few years will involve industrial firms that are already subject to domestic or international competition, privatization should precede restructuring—at least for these enterprises.[1]

Programs to privatize public enterprises will necessarily differ across countries, given the strong social and political dimensions of the process, though the need for rapid action is common to all the countries in the region. Because it is impossible to discuss specific efforts country-by-country, this paper focuses on Poland.

I. Poland: The Current Situation

In July 1990 Poland established the legal framework for privatization, and created the Ministry of Ownership Transformation to supervise and coordinate the effort. Since then, small-scale privatization has proceeded rapidly, usually under the authority of local governments. Although the extent of private ownership is unknown, it is probably between 40 and 45 percent of employment and

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1. In Poland, the government position is that privatization (at the initiative of the privatized enterprise) should precede enterprise restructuring. In the bureaucracy, however, there are powerful groups arguing the contrary. The World Bank should be on guard lest its support for restructuring policies inadvertently play into the hands of bureaucrats trying to reassert their influence over the economy.

This situation differs from that of the United Kingdom, where privatization involved so-called natural monopolies, such as telecommunications, railroads, or public utilities. In those cases, privatization could not proceed until the government had developed regulatory policies. In Eastern Europe, privatization of utilities, railroads, and telecommunications are generally being put off until later.

gross domestic product (GDP). (This estimate is a bit higher than usual because a significant amount of private economic activity is currently unmeasured by official agencies.) In 1990 and 1991 an estimated 60,000 shops were sold or leased to the private sector, and a few hundred thousand new private businesses in the service sector were in operation. As a result, about 70 percent of retail trade—and a growing share of wholesale trade—is now in private hands. Truck transport has been substantially privatized, and construction and international trade are shifting to the private sector. Moreover, there are now an estimated 2,200 joint ventures between foreign-owned and Polish firms (in many cases, Polish state enterprises).[2] Agriculture has long been about 75 percent privately owned.

In addition to actual privatization, the legal basis for private capital ownership has improved with the establishment of the stock exchange and new securities and foreign investment regulations. Land ownership rights have been somewhat clarified, and the government plans to privatize the banking system, starting with two or three (of nine) state commercial banks. About 100 enterprises have been "commercialized" (the term used to describe the process of converting firms to joint-stock companies with 100 percent treasury ownership).

In industry, however, the situation is less encouraging. Of the estimated 2,890 industrial (mining or manufacturing) enterprises in the state sector, only between 100 and 150 have been privatized. Leveraged buyouts by workers (in Poland the process is called "liquidation" because the old state enterprise is terminated) have been the most popular route for medium-size enterprises (500 or fewer employees). Seven firms were privatized through traditional methods: five firms through initial public offerings, one through a sale to a foreign firm, and one through a management buyout. It is also estimated that about 7,100 (mostly small) private industrial firms are now in operation as a result of new start-ups, and that there are about 1,100 industrial joint ventures. Thus despite some progress in privatizing industry, the great majority of large-scale industrial enterprises remains in public hands.

The government is committed to a five-year privatization scenario. The intention is that by the end of 1993, more than half the 7,000 state-owned enterprises (including both industrial and nonindustrial firms) will be transferred to the private sector; by the end of 1995, the economy's ownership structure should be similar to Western Europe's.

Risks

The gross economic inefficiencies arising from the socialist ownership structure are widely understood in Poland. Nonetheless, the process of privatization entails enormous risks, and there is a real possibility that the process could still become paralyzed. Four specific risks underscore the urgency of a breakthrough.

First, there is a risk that renewed macroeconomic instability could derail the reform program. Unrelenting wage pressures threaten a renewal of a wage-price

2. Unless otherwise noted, data refer to the end of the first quarter of 1991.

spiral and large budget deficits. Workers and managers in state enterprises constitute a coalition to maximize their short-run incomes. There is no internal wage bargaining, since the managers (often elected by the workers) tend to side with the workers in wage disputes with the government. It is only a slight exaggeration to say that the finance minister is the only man in the country who actively fights for wage restraint. This is clearly an untenable position; he reports not to a board of directors but to the voters. Not surprisingly, the government's brave and correct incomes policy in relation to state enterprises has become the focal point of public protest and opposition.

Second, there is the risk that political parties will try to get their tentacles around the state enterprises. As the Italians, Argentines, and so many others have amply demonstrated, public enterprises can be a seemingly bottomless gold mine for patronage and party financing. Political parties will find an active base of support in the bureaucracy and among public sector workers and managers, all of whom have a stake in the enterprise and will resist privatization unless it includes compensation (such as equity participation, guarantees of future employment, debt relief for the enterprise, and so on).

Third, there is the risk that privatization will become increasingly associated in the public's mind with unemployment, thereby forcing the government to scale back its plans. It is inevitable that major political parties will begin to champion the cause of slow (or no) privatization, together with government-led bailouts of firms, as an electoral response to widespread fears of rising unemployment. The German government is already stepping back from rapid privatization in response to the burgeoning unemployment in former East Germany, even though that unemployment is caused by excessive wage settlements rather than privatization per se.

Similar political pressures are likely to build in Poland, where the recent policy statement of the important ROAD Club, a Solidarity-based group of supporters of former Prime Minister Tadeusz Mazowiecki, hinted at this mood. Although the statement as reported in *The Insider* (in turn translated from *Zycie Warszawy* 1991) is ambiguous, it seems to endorse self-management rather than privatization.

> According to the club, because state-run enterprises will prevail in Poland for the next ten years, a plan to ensure their efficiency should be drawn up. The club proposes to turn these firms into joint-stock companies of the state treasury, [and later into] regional holding companies in competition with each other. The companies would be controlled by the workers through representatives on the supervisory boards.

Fourth, there is the risk that other constituencies will slow the process. Former owners are pressing for restitution of their property, even though widespread restitution is sure to lead to a mountain of lawsuits based on claims half a century old. But because many former owners are wealthy or politically well-connected, the issue remains a potential trap. Ironically, foreign investment bankers also constitute an important interest group, since standard British-style privatization—based on detailed valuations of enterprises followed by public offerings—holds the promise of substantial fees (although this method is far too slow to be relied on in Poland).

For these reasons the issue is not simply the pace, but whether privatization will be accomplished at all. If the process is too slow, macroeconomic instability—driven by explosive wage demands—could reappear, generating political resistance and dooming the privatization effort.

These fears of paralysis are not yet widely shared. There is a false sense of security—both in Poland and in the international institutions—about continued progress. Since 1989 economic policy has been directed by a skilled technocratic team led by Deputy Prime Minister Leczek Balcerowicz, but this technocratic period is likely to end soon.

Organized political parties and lobbying groups barely existed when the post-Communist government took office (since the Communists had virtually destroyed all organized groups). Inevitably, however, the policy process will become increasingly politicized, and the scope for decisive actions will be greatly circumscribed. Rent-seeking behavior will grow dramatically. Moreover, because of the adoption of a proportional representation system, political parties are likely to be vying for a place in a multiparty coalition government. Poland's prewar history and recent cross-country research suggest that multiparty governments are prone to parliamentary paralysis. The complications of coalition politics are illustrated in Hungary, where a coalition partner is pressing for restitution of nationalized property, although it is widely believed that such a policy could gravely threaten the overall privatization effort.

II. Methods of Rapid Privatization

Several methods for accelerating privatization have been suggested, and a variety of techniques will have to be employed to guarantee that the government meets its targets. This will require improved managerial capacity and foreign technical assistance. But above all, it will require acting before this opportunity for decisive action drifts away.

Initial Public Offerings

The original intention of senior officials in the privatization ministry was to dispose of firms through initial public offerings; the international institutions shared the same view. An adviser to the International Finance Corporation told the government in mid-1990 that newly developed techniques would allow the government to privatize hundreds of large enterprises in a single year through initial public offerings. The idea was to sell enterprises in bundles of about twenty a month, every month. A team of international investment bankers would carry out valuations of enterprises.

The attempt to rely on initial public offerings was predictably flawed, even though it was urged on the government by dozens of investment banks familiar with that method. Initial public offerings are always time-consuming, and local circumstances suggested that they would be especially difficult in Poland where there are thousands of firms involved, no domestic investment banks, low household savings, and only the most rudimentary stock exchange. Moreover, there is no reliable way to establish the value of enterprises. Consider the public's financial holdings in relation to the capital value of industrial enterprises. The after-tax profits of the largest 500 state-owned firms are approximately $5 billion. With a price-earnings ratio of 5, the capital value of the largest 500 firms is about $25 billion. The public's financial holdings in the banking system, however, total approximately $10 billion—only 40 percent of this amount. And because other property is to be privatized as well, it is clear that in order to privatize through initial public offerings, share prices would have to be at very low price-earnings ratios, which in turn would risk a socially unacceptable concentration of share ownership. The alternatives are to transfer the shares to the public by some means or to sell the shares on a leveraged basis, which would also pose risks and complications.

In the summer of 1990, the government's goal was to privatize about 20 enterprises (through initial public offerings) by year end. In the fall the number was scaled back to five. These enterprises were finally offered in December. When the shares were undersubscribed for some of the firms, the closing date was extended to early January. In the event, only three of the five enterprises were fully subscribed by the general public; the shares of the other two were purchased by a new state development bank.

The valuations of the five companies had taken several months and had cost about $4 million in fees (and millions more in bonuses) to the foreign investment banks. The baseline fee to the investment banks was about 12 percent of the sale price of the firms (around $31 million in tendered shares, some of which were bought by the state bank). Overall payments, including bonuses, might have amounted to about 25 percent of the value of the five companies. One of the three companies that had been completely subscribed, the Krosnienskie (Krosno) Glassworks, quickly fell into serious financial difficulty and its share price fell as well. Although there is, of course, nothing wrong with a decline in share price, it is disappointing because the government had deliberately set prices low to encourage capital gains and spur public enthusiasm for the share purchases, and on expert advice had tried to pick five "sure winners." The point is that even when the government tries to pick five winners out of hundreds of firms, it turns out to be hard to do.

As a result of this expensive and time-consuming experience, the government has decided *not* to continue with bundled sales but instead to conduct initial public offerings individually. At most a few dozen enterprises are now expected to be privatized in this manner in 1991.

Transferring Ownership to Insiders

A simpler method of privatization is to transfer the ownership of the enterprises to insiders, that is, management and workers. This can be done rapidly through direct giveaways, leveraged buyouts, or some combination of the two (leveraged buyouts at concessional prices). Indeed, it would be possible to give away the entire enterprise sector to insiders in a very short period. Transfers—or sales of shares to insiders—should be widely used, subject to clear standards and limitations.

One key problem is fairness. Although insiders should receive some explicit property rights in their enterprise as compensation for their implicit property rights, transferring whole firms to insiders at low prices is unfair to the rest of society. The work force in state industrial enterprises is about 3.6 million (in a labor force of 18 million) and of course, some workers are in profitable companies whereas others are in bankrupt firms.

There is also the problem of efficiency. Employee ownership is most often not desirable for workers (who should diversify their capital rather than concentrate it) or for the capital structure of the firm, which should have outside as well as inside ownership. A firm owned mainly by its employees tends to be isolated from capital markets, since potential investors are concerned that inside owners, who control the firm, will appropriate the profit stream. Employee owners, for example, have an incentive to push for wage increases at the expense of outside investors. These efficiency concerns are greatest in large, capital-intensive enterprises that aim to participate in capital markets; they are probably of little concern to small, labor-intensive enterprises. There is no risk from a small—say 20 percent—noncontrolling proportion of share ownership by employees.

Indeed, the public outrage at spontaneous privatization by managers, and concerns about how large enterprises would fare with insider ownership, persuaded the government to opt for public offerings. But the reaction was exaggerated. The simplest methods of privatization—direct sales or giveaways to insiders—have been underutilized, whereas more difficult initial public offerings have been overemphasized.

Poland's Privatization Law of July 1990 attempted to allow for—but to limit—insider privatization by permitting a limited number of shares to be sold to workers at concessional prices. (Employees are entitled to buy up to 20 percent of the shares of the enterprise at half price, provided that the total value of the concession does not exceed the company's wage bill for a year.) Because the law calls for sales at half price, and the authorities have interpreted this to mean the market price, the concessional sales approach has so far been applied only when the firm is actually being sold. In the five sales reported above, for example, employees were able to buy 20 percent of the shares in each case. Thus the concessional transfer of shares to the workers has so far played almost no role in speeding up the process of privatization.

If the law had simply granted employees 20 percent of the shares free, the transfer could have been used to accelerate (partial) privatization without the agony of determining the share price. Even if the government sticks with the original plan, it could use book (or registered) value—rather than market price—as the basis for the sale price.

During 1991 there has been a promising increase in insider privatization of medium-size firms. The group buys the enterprise with an up-front payment of about 20 percent of value (based on a quick outside valuation that in fact relies heavily on book value). The rest of the investment is funded with a loan from the government. This method should be used more extensively, with generous terms on the government loan.

Outsider Privatization

Large industrial public enterprises are to be privatized through sales or transfers of shares to the general public, foreign investors, financial intermediaries (banks, pension funds, mutual funds), and other industrial enterprises. As noted, however, the general public has limited savings and little experience. Moreover, prudent share ownership requires a set of institutions (the stock market, securities laws, regulatory oversight, institutional means to diversify risk, and so on) that is only now coming into existence.

What are the possibilities of sales to foreign investors? Not only is it politically untenable to privatize *mainly* through sales to foreign owners, but the current arrangements for such sales are particularly troubling. The investor has two options: a joint venture or an outright purchase. Each involves a distinct and somewhat vague structure of bargaining. In both cases the investor must negotiate with the manager of the enterprise, the workers' council, and the government. The fact that the potential investor must negotiate with management virtually guarantees that bad offers may be accepted while good offers are rejected. A manager naturally considers a foreign bid from two viewpoints: his or her own future role, and whether the takeover will mean a "cut" of the action. The workers' council, of course, is primarily interested in guarantees of future employment and wage levels. Neither managers nor workers have an interest in the capital value of the offer. Managers might accept low bids for the firm if they are cut in on the deal, and turn down good bids that threaten their personal position. In the United States, court decisions regarding takeovers have gone to some lengths to guarantee that the takeover offers are judged by boards of directors who represent the interests of the shareholders. Although the Ministry of Ownership Transformation can, in principle, override the decisions of the enterprise manager or the workers' council, it may be difficult in practice given political constraints (or simply given the huge number of firms involved).

Clearly, what is needed is a new procedure. An individual (or a group) with fiduciary responsibility (such as a trustee for the Ministry of Ownership Transformation) should be given the same legal status as the board of directors of a

U.S. firm to consider the viability of a foreign bid and to generate competing offers.

Sales and Transfers to Financial Intermediaries

In most advanced market economies, more than half the equity of a firm is owned by financial institutions, such as banks, pension funds, and investment trusts (or mutual funds). The capitalization of financial intermediaries is a promising way to proceed with rapid privatization although this method has been almost wholly unexploited in Poland (see Sachs and Lipton 1990 for details). Although there are complexities in creating new financial intermediaries, the difficulties have been unnecessarily magnified by the Polish government. An opportunity remains to progress rapidly in this area.

One important opportunity lies in share ownership by commercial banks, a common practice in Germany and Japan. Poland has nine state-owned banks that dominate the commercial banking market. (About 50 new private commercial banks have been licensed, but most of these banks are still very small.) One possibility would be to give the commercial banks an equity share of industrial enterprises as part of the process of bank privatization. The valuation of the banks at the time of privatization would, of course, reflect the portfolio of corporate equities given to them by the treasury.

The case for giving shares to the banks is very strong because the banks are the one existing financial institution in Poland capable of holding and managing corporate equities. Moreover, a growing body of international evidence and theoretical reasoning suggests that banks are excellent candidates for equity ownership in that they provide particularly effective corporate governance. (See the discussions in Cable 1985; Aoki 1988; and Hoshi, Kashyap, and Scharfstein 1990a; 1990b.) Bank ownership of industrial equities presupposes effective banking regulation, however.

The close relationship of industrial enterprises and banks is especially important when other capital markets, such as bond markets, are relatively weak, as was the case in postwar Germany and Japan—at least until very recently. In Poland, long-term bond markets will probably remain relatively undeveloped for several years. If that is so, bank lending will play a predominant role in the economy, thus strengthening the case for bank holdings of industrial equities.

Banks in Germany and Japan develop intimate relationships with their corporate clients, based in part on their equity holdings in the enterprise. German and Japanese banks usually do not have a controlling equity interest in a firm, but they do have a seat on the board and are able to scrutinize management decisions, especially when the enterprise is in trouble. (In Germany the banks have more power because they tend to vote the proxy shares of individuals whose equities are on deposit in the bank.) In popular parlance, the banks tend to use "voice" in troubled enterprises, whereas other kinds of institutional investors tend to use "exit."

Many Polish officials argue that the state banks are not capable of exercising corporate governance, and in fact can barely clear checks. This is a plausible but ultimately unconvincing argument. Under any circumstances the banks will have to be greatly improved if the economy is to function. Even if they do not have an equity position, the banks will have to understand business structure simply to make basic credit decisions. Poland will therefore have to make a major effort to improve the banks. That effort has already started with the assistance of the World Bank, the International Monetary Fund, and several central banks and foreign commercial banks.

A second method of privatizing shares through financial institutions would be to capitalize pension funds using the treasury's shares. Under current arrangements, pensions are paid by the government on a pay-as-you-go basis, financed by a payroll tax. This system could be partly privatized along the lines successfully carried out in Chile in the early 1980s. The government would deposit a portion of its equity ownership into several new portfolios, each of which would be managed as a private pension fund by a portfolio management group that has been licensed by the government. For example, 20 percent of the corporate equity of the top 500 enterprises would be deposited in five funds, each of which would receive 4 percent of the shares (the shares would be tradable by the pension fund managers). A portion of the industrial work force would then be transferred from the public pension fund system to the new private system, and future payroll taxes would be paid to a private pension fund.

It would probably take several years to phase in such a system. Careful preparation would be needed to account for the budgetary effects of the changeover and to protect the benefits of workers. Nonetheless, the process could start quickly, with the allocation of equities to the new pension funds and the licensing of pension fund managers. Assigning the work force to the pension funds would take more time, but could be sequenced after the funds are established.

A third way to privatize through financial institutions would be to give households shares in investment trusts (closed-end mutual funds) set up with treasury equities. This plan, which has been endorsed by the government, calls for licensing several investment trusts—known as Polish Management Funds—and distributing government-owned shares in industrial enterprises to these funds. Shares would be distributed free to all adults. Current discussions suggest that about 30 percent of the equity of several hundred large corporations would be included in this process.

The specific design of the investment trusts has been heatedly debated. Should individuals have a choice between the shares of individual enterprises or the shares of an investment trust? Should individuals choose their investment trust? Should the funds be passive investors, with no involvement in corporate governance, or should they have a controlling interest in the enterprise, with each fund playing an active role in the enterprises it holds? Should households be able to trade their shares without restriction, or should they be required to hold their shares for a specific time (say a year)? Should the funds be allowed to trade their shares immediately, or should they be required to wait for a given period? How should the managers of the funds be compensated?

Officials are leaning toward a system of maximum choice for households and funds. One popular notion is to distribute voucher coupons that could be used to buy either individual shares or shares in an investment fund. That scheme calls for giving vouchers to the investment funds that they would then use to bid for shares from the government, so the investment trust would have a key role in building its initial portfolio.

Many Polish officials take the position that the investment funds should have a controlling interest in industrial enterprises—in some proposals a fund could hold up to 100 percent of the firm's equity. There is a natural desire to create powerful ownership groups, modeled on venture capital funds, that could play a key role in restructuring state-owned companies. The investment funds are widely looked upon as the institutions to carry out such a function.

I would opt for a simpler system, however, with less choice at the outset—and weaker funds—to minimize the risks and reduce the administrative complexities. The process of creating investment funds will require the prompt distribution of 25 million shares in a situation where there are no tested institutions of share ownership, no brokerage houses, and no established investment funds.

In the interest of simplicity I would recommend assigning individuals at random to an investment trust (based on the number of their national identity card, for instance), and randomly allocating the treasury's shares to the investment trusts. There would seem to be little reason to expend great effort in auctioning the shares when the funds will be free to trade their initial allocations once they receive them. The distribution should be designed to meet two criteria: equality across fund portfolios in the reported 1990 after-tax earnings, and equality in the book value of the shares held by each fund.

I would also recommend against giving the investment funds a majority stake in individual enterprises; in my view, the funds should be limited to between 10 and 15 percent of the enterprise. Even though the idea of powerful active investors is attractive, giving control to newly established funds that have no management track record and that do not even have the fund managers' money at stake is not a good idea.

The risk is magnified because the funds would hold shares in a significant proportion of the industrial sector. The result could be very powerful holding companies that could be anticompetitive and that could block the development of capital markets. (It would be impossible, for example, to mount a hostile takeover if more than half the shares were held in an investment trust.)

The desire for holding companies also reflects a widespread misunderstanding in Poland about the nature of share ownership in publicly traded companies in the West. It is commonly believed that these firms have a dominant owner that guides the corporation. In fact, in most cases there is no single controlling interest. In the United States the largest five shareholders of major corporations usually hold much less than 50 percent of the shares. A study by Demsetz and Lehn (1985) reports that the five largest shareholders had less than 25 percent of the shares in 60 percent of the corporations, and less than 50 percent in the case of more than 90 percent of the corporations in the sample.

III. Recommendations

If the Polish government adopts simplified procedures, there is still time to accomplish a massive privatization of industry. For all firms with less than 1,000 employees, the preferred method should be some form of worker-management buyout, on a leveraged and concessional basis. If the cutoff is 1,000 workers, this category would cover 2,200 of the 3,200 state-owned industrial enterprises, and approximately 25 percent of the labor force in the state industrial sector. If the cutoff is 500 workers, it would cover 1,400 enterprises with about 10 percent of the public sector industrial work force. All small firms should be put on notice that for a short time (say six months) the government would be willing to authorize leveraged worker-management buyouts on highly concessional terms. Certain basic procedures would have to be followed to ensure the participation of all members of the work force on equitable terms.

If no inside group purchased the firm during the allowed period, the government would automatically assign the enterprise to investment banks to carry out sales to domestic and foreign investors. Note that in this case, the workers would be entitled to part ownership on a discounted basis according to the privatization law. Together, worker-management buyouts and trade sales could result in the privatization of nearly all 2,200 public sector industrial enterprises with 1,000 employees or fewer.

Alternative Tracks for Privatizing Large Enterprises

The process of privatizing large firms (more than 1,000 employees) will typically involve the distribution or sale of shares to several groups, including employees, financial institutions, and domestic and foreign investors. These operations could follow a set course, although a small proportion of firms needs to be treated individually.

Restructuring large, capital-intensive enterprises will require foreign investment to provide technology, management, and an infusion of capital. Rehabilitating the two automotive companies, Fabryka Samochodow Osobowych (FSO) and Fabryka Samochodow Malolitrazowych (FSM), for example, depends on attracting a leading foreign partner. For these firms it is important that the Ministry of Ownership Transformation initiate the privatization process. The government can retain a minority block of shares because the merger agreement will entail control by the foreign owners. Eventually, this minority block of shares can be sold to the public. Workers will receive a concessional block of shares as well, according to the provisions of the privatization law.

Direct sales through initial public offerings should be used in those cases in which it is particularly attractive to have a large number of small shareholders.

The commercial banks would seem to be ideal candidates, since banks are prone to conflicts of interest when ownership is highly concentrated. (The risk is greatest when commercial banks are owned by enterprises that use the bank as a source of loans.) To compensate for the lack of strong shareholder control, regulatory oversight should be the responsibility of the National Bank of Poland.

Programs to close down uncompetitive enterprises should precede privatization. Obvious candidates are firms that rely almost entirely on the Soviet market—which has now collapsed—and that are not competitive in world markets. It makes little sense to privatize enterprises that unquestionably should be closed, since privatization itself is likely to create a new pressure group for subsidies or trade protection, frustrating reform efforts. This is not to say that privatization is only viable for firms that are financially healthy, but that unviable enterprises should typically be liquidated rather than privatized. (A possible alternative is to simply give such enterprises to the work force to manage as best it can.)

A Procedure for Mass Privatization

For the hundreds of enterprises that are not targeted at the outset for sales to foreign investors, for initial public offerings, or for closure, a process of privatization based largely on the distribution of shares to workers and financial intermediaries is appropriate. Such an approach is the only realistic way to process large numbers of firms—and, more important, to cut down on the amount of bargaining and rent seeking that will take place between the enterprises, the politicians, and the Ministry of Ownership Transformation.

The first step is to convert the enterprise into a joint-stock company. The registered capital of the enterprise can be based on the book valuation of the enterprise. Initially, all the shares of the company would be held by the treasury. The first board of directors could be constituted within three months of incorporation; two-thirds of the members would be government representatives and a third would be elected. (Subsequent boards would be elected by shareholders.)

As noted earlier, regulations on the concessional distribution of shares to employees stipulate that the sale is to be at "half price," but the lack of a clear "price" has meant that this provision has not been helpful. If the book value of the share is used instead, the problems of obtaining an independent valuation or actually selling shares to determine the price would be eliminated. The government could speed the process by enabling enterprises to purchase shares for workers through an employee stock-ownership plan. In fact, the government could allow firms to use their accumulated profits to purchase shares for workers. These purchases could be tax deductible. (Such share-purchase schemes are currently blocked by various limits on compensation payments to workers in state enterprises.) Alternatively, about 20 percent of the shares of the enterprise could simply be transferred free to workers and managers.

Second, the government would set aside up to 20 percent of the shares for the pension fund program. In the course of two or three years, these pension funds would be privatized and employees would be transferred to membership in one of the private funds.

Third, about 30 percent of the shares would be put in the investment funds described earlier. The shares would be distributed to several portfolios, each of which would constitute a new, privately owned fund.

Fourth, shares would be assigned to the state banks that are in the process of privatization. Each bank would receive a small proportion of the shares (say up to 5 percent) of several large enterprises, and would hold these shares as a trustee for the treasury. The actual ownership of the shares would be transferred to the banks *only upon privatization*. Banks would then be free to buy and sell equities, but would be subject to a strict ceiling on the proportion of an individual enterprise's shares they could hold (say less than 10 percent). As part of the bank rehabilitation project now under way, the banks would be trained in portfolio management.

In all, the treasury would distribute about 75 percent of the shares; the remaining 25 percent would be held by the government and sold in due course to domestic or foreign investors. There would be no urgency, however, since the bulk of the privatization process would already have been accomplished.

One way to limit the mechanistic aspects of this program without slowing it down would be to set in place programs for considering alternative proposals by outside investors and by the enterprises themselves. For example, if an enterprise received a foreign bid, the government should have a procedure for appointing a trustee to consider the bid, and perhaps to solicit competitive offers.

Some Measures to Accompany Rapid Privatization

Several tasks should be carried out in concert with the privatization process to enhance the functioning of capital markets. The most important is the introduction of bankruptcy procedures for state-owned companies. Since there is no reliable legal mechanism for closing state-owned firms, the fiscal drain on state assets is out of control and will lead to a significant misallocation of capital resources. Firms with no prospect of recovery continue to operate with impunity by running down their bank balance and liquidating assets. Several firms in the Soviet trade sector are living on such asset liquidations without any realistic prospects for generating future cash flow. Employees in these enterprises realize that they are in an endgame: because the enterprise is likely to fail in any event, their best strategy is to "milk" the enterprise in the short term for all they can get. Wage demands are strong in such enterprises because workers know that even with low wages the enterprise will probably fail.

The problem is that neither the government nor the creditors of an insolvent enterprise (mainly the state banks) has the authority to suspend operations and liquidate or reorganize the firm. An important step is to establish administrative procedures (akin to Chapters 7 and 11 of the U.S. Bankruptcy Code) so that creditor banks can intervene to protect their claims on an enterprise before the assets are dissipated. For such a procedure to operate, there must be a clear mechanism by which the creditors benefit from the enterprise liquidation—either by receiving the cash generated by the sale of assets or by taking over the equity of the firm.

Because of the large number of firms to be liquidated, and the absence of an experienced court system to manage the process, expedited administrative procedures are essential. Creditors should have the authority to force a firm into the hands of a government-appointed administrator who is responsible for liquidating the firm, perhaps in conjunction with the Ministry of Ownership Transformation, the courts, and outside advisers.

A second task is to help prepare privatized enterprises to function according to the legal guidelines and procedures of a normal corporation. The government's first responsibility is to identify and train members of the boards of directors of newly privatized enterprises. One possibility would be to recruit Polish emigré businessmen to serve in this capacity. Another is to encourage the use of international management firms. In some important enterprises an entirely new management team (possibly recruited internationally) must be identified. The need is especially pressing in sensitive sectors, such as coal and steel, in which there will have to be significant cutbacks in employment. Poland would do well to emulate British Steel, which brought in an internationally renowned foreign manager, Ian MacGregor, to oversee the process of retrenchment and technological upgrading.

One idea that has been discussed is a "Prime Minister's Fund" to channel international financial assistance from Western governments and international financial institutions to individual enterprises to underwrite the costs of foreign and domestic management consultants. The fund would cover a proportion, say two-thirds, of the cost, and the enterprise would cover the balance. For political and economic reasons the fund would be available to every industrial firm.

A third important area involves the legal administration of privatization. Basic concepts of property management, such as the use of bond covenants to protect creditors, or the designation of senior and junior creditors, are often unknown in Poland. Basic instruments of privatization, such as the so-called liquidation procedures (which constitute a leveraged buyout by workers and managers), have not been properly scrutinized. And as noted earlier, the law sets no standards for managers or boards of directors in considering bids for mergers or sales to foreign investors.

Finally, attention must be given to appropriate compensation schemes for state enterprises and newly privatized companies. To date there has been little use of such incentive-based compensation packages as stock options, employee share ownership, and profit-sharing schemes. The issue to be decided is whether such practices are consistent with sound corporate restructuring. If these arrangements are introduced before privatization, would they have a detrimental effect on privatization itself? So far such questions have barely been addressed.

The Role of the International Financial Institutions

It is essential that the international financial institutions recognize the importance of speeding up privatization. Otherwise, they might inadvertently slow the process.

Mass privatization will require large-scale administrative support, foreign expertise, and a flexible expenditure of funds to recruit that expertise. Most international support for privatization comes with strings attached; special efforts should be made to increase the operational flexibility of donated funds. The international institutions can provide vital financial support to:

- Provide legal assistance to design privatization procedures, including worker-management buyouts, auctions, and appointments of trustees in cases of foreign bids, and to prepare contracts for financial intermediaries, such as pension and mutual funds.
- Privatize the pension system.
- Recruit management teams for investment trusts and pension funds.
- Identify and train members of boards of directors.
- Identify and train management teams to privatize state-owned industrial enterprises.
- Manage state-owned commercial banks in the process of privatization.
- Recruit international investment bankers to carry out trade sales and initial public offerings for enterprises that are not included in the mass privatization.

With an ambitious timetable and careful coordination by the Ministry of Ownership Transformation, the World Bank, and the European Bank for Reconstruction and Development it should be possible to set up teams to carry out these tasks and put the privatization program on a rapid and irreversible course. But the opportunity to do so may last only a few months; after that, encroaching political realities could dangerously slow the process.

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Comment on "Accelerating Privatization in Eastern Europe," by Sachs

Marko Simoneti

Professor Sachs has written a stimulating paper on privatization—the most difficult problem facing reforming socialist countries. Sachs asks all the right questions and offers innovative and pragmatic solutions. But his argument that massive and speedy privatization of large companies in Poland (and in other reforming socialist countries) is a precondition for the success of overall economic reform is very controversial. Most analysts accept the general proposition that unless privatization is rapid, it will be stalled by political and social pressures, but they do not agree on how to achieve this objective.

The principal element in Professor Sachs's proposal is the free distribution of shares to all citizens through financial intermediaries. This scheme, however, amounts to quasi-privatization; the control of large companies remains firmly in the hands of the state. Real privatization is postponed until the controlling package of shares is sold to a core group of investors. In fact, this first step is just a politically attractive sideshow. No improvement in efficiency can be expected until the company has been taken over by owners that are willing and able to make changes. Moreover, from the viewpoint of those who are responsible for the practical aspects of the plan, the distribution scheme would be difficult to implement and might well make real privatization in the future even more complicated.

I. Quasi-privatization versus Real Privatization

The objective of real privatization is to find owners to guide state-owned companies through the stormy transition to a market economy. Although it is true that the state is not capable of making the detailed management decisions required to operate these companies, private ownership alone does not guarantee any improvement. It is hard to see how widespread ownership, for example, would be enough of an incentive to restructure a company. Effective transition is contingent on active—not passive—owners, strategic partners instead of financial investors, and a coherent group of private investors rather than thousands of small owners. The optimal ownership structure and the appropriate privatiza-

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tion technique can be determined only by an analysis of the company. There is no real substitute for a case-by-case approach in real privatization.

Professor Sachs proposes introducing the ownership structure used by large corporations in the West (with institutional investors as important shareholders) and establishing legal joint stock companies virtually overnight. It is difficult to believe that institutional investors would be able to monitor these companies when there is no reliable financial information, no capital market to sell shares, and no active investor threatening a takeover. In addition, the publicly held Western corporation is a questionable model to copy given its inherent difficulty in separating ownership and control. The takeover mania in the West in the 1980s that turned many publicly held corporations into closely held private firms through leveraged buyouts has shown that narrow ownership is needed to introduce major changes in a corporation. As there is little doubt that most companies in these countries will have to go through such major restructuring, narrow ownership is preferred.

II. Implementation

Although many innovative and logically consistent models for privatization have been proposed, implementing them would be a logistical nightmare. Privatization may prove to be intractable not because we have chosen the wrong conceptual model but because of the difficulty of implementing the selected model. Sachs is well aware of these limitations and argues that his proposed mass privatization scheme deals with these issues. Nevertheless, resolving the problems of implementation will be difficult and time-consuming.

Financial Institutions

It will take a lot of time and effort to introduce new financial institutions and create an economic environment in which they can function properly. Most reforming socialist countries have no legal framework for institutional investors. Accounting standards are poor, capital markets are underregulated and undeveloped, and portfolio expertise is lacking. It is easy enough to transfer shares to newly established financial institutions, but one should not expect these new owners to do much before some basic preconditions are met. In the meantime, banks will remain the dominant financial institutions. I would argue that although banks should be restructured, these existing institutions are more likely to be effective in monitoring company performance than newly established financial institutions.

The contention that distributing shares of large companies to different financial institutions would transform these companies into private-sector corporations, with supervisory boards to represent the owners, is an oversimplification. Boards of directors in the West operate in many different ways. In the United States and Great Britain, boards are often dominated by management, but German banks are important players in monitoring corporations. Treuhand—the organization that took over all the companies in the former East Germany—is a case in point. Treuhand appoints supervisory board members, but its officials admit that they control the companies through credit allocations. Corporate governance is in the hands of Treuhand the banker—not Treuhand the owner.

Even if we assume that boards of directors can work, the agent problem is not resolved. Board members are appointed by managers of financial institutions who are only agents for the real owners. Distributing shares to the general public makes it difficult to control the management of investment funds. Incentives exist for managers to act in the best interest of the owners, but such measures might be hard to introduce. It is more likely that the state will indirectly control the financial institutions. Thus partial privatization will take place, but the extent of state control might be more sweeping than it is under existing property rights (with workers' councils in Yugoslavia and enterprise councils in Hungary). For a country like Yugoslavia, the proposed scheme implies moving from partial privatization of control to partial privatization of net worth. Workers' councils are replaced by boards of directors appointed by the state and by the agents of real owners. Which arrangement would be more effective in a transitional period is not easy to predict.

A very difficult practical problem arises: Where will we find thousands of professionals to manage these newly created financial institutions and to serve on the boards of directors? If the appointed managers currently work for the company, who will take over day-to-day operations? It will be costly and politically sensitive to use foreign experts on such a large scale.

Ownership Issues

The key implementation question is whether the state will be able to ultimately privatize a company by selling its 25 percent controlling package of shares to a core group of investors. Many examples suggest that if a state-owned company is partially privatized, it is difficult to persuade the core group of investors to buy the remaining interest. Legal issues, such as which assets belong to the company and which to the government, and whether the company is liable for environmental pollution, layoffs, and the claims of former owners will be difficult to resolve if 75 percent of the equity has already been transferred to private hands, without due diligence.

Most enterprises have to be reorganized before they can be offered for sale to real investors. Nonbusiness assets (for example, apartments, vacation facilities, health centers, and recreation facilities) have to be divested; activities that have little to do with the core business have to be spun off into separate legal entities; related activities have to be consolidated; production capacity has to be downsized or improved; and so on. With only 25 percent of the shares in the hands of the seller (the state), it might be almost impossible to take these steps.

Companies can be privatized by purchasing assets or shares. Professor Sachs's proposed mass privatization scheme would make it impossible to sell a company to a core group of investors in an asset deal, an arrangement attractive to foreign buyers that are not familiar with local conditions or are not willing to accept existing liabilities. Many large strategic buyers insist on full ownership. It will be impossible to accommodate such requests once 75 percent of the shares have been distributed to workers and financial institutions. Practically all strategic investors buying the remaining 25 percent would want to make sure they controlled the company. (With most of the shares owned by a few banks, pension funds, and investment funds, strategic investors might be unwilling to take the risk of losing control.)

An even more important obstacle is that the core group of investors is expected to do most of the work in turning around the company, while the results of this effort are to a large extent appropriated by passive investors and by those who received free shares. This is a very peculiar arrangement.

III. Alternatives

The proposed mass-distribution scheme is not easy to implement, and it might make real privatization even more difficult in the future. We might end up with a situation that will take even more time to resolve. Is there another way to speed up privatization?

Hungary has chosen a very pragmatic approach that gives all interested parties a chance to initiate privatization. There are government-led privatization programs, spontaneous manager-led initiatives, and investor-led privatizations. Although these operations do not include the free distribution of shares, what is important is that the process is taking place at remarkable speed. To avoid bureaucratic delays the government has decentralized the administration of the program—a sort of privatization of the privatization process. Most of the technical work is performed by external professionals; the government provides only guidelines and supervision. In short, real privatization has been accelerated by improvements in the legal, institutional, and administrative framework. These are not exciting conceptual proposals but are nonetheless changes that should not be overlooked.

The draft law in the Republic of Slovenia calls for decentralized privatization supervised by the privatization agency. Within that framework, purchases by insiders have an important role. To overcome the problem of low purchasing power, the state would offer financing to domestic buyers. An important element is the possibility of a partial sale of the company. The objective is to start to privatize immediately by introducing the control of active (partial) owners in as many companies as possible. The remaining shares would be transferred free to financial institutions or other nonactive owners. In contrast to Sachs's proposal, the law opts for "real" (over "quasi-") privatization. If free shares are to be distributed, it can be done ex post when real share values are better understood. This interval is important for transparency and equity. In addition, ex ante distribution might eventually work against privatization once people understand that their shares are of questionable value.

Comment on "Accelerating Privatization in Eastern Europe," by Sachs

Alan Gelb

A good discussant always feels under some obligation to disagree with the paper—otherwise the audience may not get value. But I am under some constraint: I think the approach outlined in the paper basically makes sense and should be taken seriously, although I think several points need to be clarified.

Professor Sachs's message is that Polish enterprises are drifting dangerously between three perils: first, workers and managers, whose drive for higher wages will decapitalize their firms; second, politicians and bureaucrats, whose threats of intervention may paralyze decisionmaking; and third, past owners, who may jeopardize the process of reform by introducing complex restitution proceedings.

Based on limited field experience, I agree with the thrust of this analysis; we need a process that will pluck these enterprises out of limbo. Logically, it must be some form of privatization to lend legitimacy to the process of wresting control from the firms and to insulate new owners from political pressures.

In considering this question the paper identifies two messy but vital facts. First, privatization will require a variety of techniques, not just one. And second, not all firms are alike; each requires a unique approach.

Small firms, for example, can be sold off through leveraged buyouts to insiders (managers and workers), although there has been some overreaction to abuses in this process. I think it is important to ensure that there is no prohibition on subsequent sales of shares to outside investors. There are few cases in market economies in which workers really own firms, and if you look at the various models of this type of ownership, they all have some long-term problems of dynamic capital structure. Let the employees sell the good firms if they so desire and make money. Cases such as the National Freight Company in the United Kingdom and the Vermont Asbestos Group in the United States spring to mind. One may want to rely more on this process in the U.S.S.R. to buy off the current elite and establish a constituency for privatization.

In the case of big chronic losers, however, government may have to intervene so that privatization does not become identified with job losses. The speed of

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closure is an important issue here, and one that is closely related to credit policy. How rapidly can the government withdraw support from industries like capital goods, steel, and petrochemicals, where major downsizing is likely? There may be a lot of these losers, and it may be hard to determine just which firms fall into this category.

The paper points out that for a few very large companies, such as those in the automotive industry, the government may be required to deal directly with foreign investors rather than leave negotiations to the companies themselves. This prospect raises a wider issue. The success of any ownership arrangement will depend on how well the government facilitates the process of forming joint ventures and integrating Polish and foreign firms. This is especially vital in Eastern Europe, where industry has had little contact with multinational corporations.

What is the best way to ensure that the proposed ownership structure is receptive to joint ventures and foreign purchases, given the implicit threat to domestic control of key industrial firms? Built-in assurances will be needed to show that the ownership pattern that is selected facilitates the evolution of "normal" ownership and management changes beyond the initial restructuring. Such restructuring (with the close involvement of the government) must complement other methods of ownership change and not be considered the only alternative.

The banks are a case in point. The question of who is to own the banks has been surprisingly neglected. The Sachs paper is right about the need to insulate banks from their clients; clearly it is not desirable for banks to be owned by the same holding companies that own their clients. But it may be acceptable to allow the banks to hold, say, a 5 percent share of the equity of a company. One should not hope, however, for too much corporate governance in the short run because the banks will need time to acquire this expertise. In addition, it may not be easy to privatize the principal banks speedily (and thus create private shareholders) before a portfolio cleanup that would, in turn, require enterprise restructuring. It is also important that the banks are not distracted from their major task on the credit side.

Several outstanding issues are not entirely clear in the paper. Who are the active investors? Which institutions are permanent and which are self-liquidating? Are pension funds, for example, mainly to use exit, whereas investment trusts are to use voice? Are investment trusts to gradually liquidate themselves? Is the government to be an active shareholder? If not, when it sells its shares to a foreign company that expects to play an active role, does the nature of those shares change on sale?

A final issue, and one that requires study, is how to shape incentives for managers of funds and trusts as well as foreign managers and owners. Sachs touches on this subject. Note that the early years of reform will involve a volatile and unpredictable environment—a noisy one—for decisionmakers, and that they will need to make radical decisions on assets. It will not be as smooth as managing established firms in a predictable, stable economy. This, along with the absence of stock markets, raises the problem of how to structure high-powered incentive schemes. Such incentives are highly dependent on performance, but the uncertainties make it difficult to set suitable reward schedules. At the same time such incentives are essential because the noise increases the problem of monitoring performance. Some observers have argued for low-powered incentives because of the noise. I disagree, but it may be the next area for serious thought and it may be more important than the simple question of "who owns what."

In short, Professor Sachs's scheme may not be ideal, even for Poland (and care should be taken not to apply prescriptions indiscriminately to other countries). But it seems to be better than the current position, and it is certainly better than what could otherwise evolve. If it facilitates further changes of ownership as suggested by efficiency criteria, it could be useful. Meanwhile, research should focus on innovative ways to make incentives work in this type of system.

Floor Discussion of the Sachs Paper

Jan Vanous (speaker in another session) suggested that Sachs would have real problems turning around a company with widely disbursed ownership. If money is to be invested in critical enterprises, Vanous said, the owners will insist on highly concentrated ownership because of the difficult tasks ahead.

Vanous found it disturbing that a Harvard economist would recommend that Eastern Europeans imitate the German or Italian capitalist structure and pursue heavy bank control of industry. The literature on Czechoslovakia in the 1930s, he said, suggests that it was a mistake then, and even in Germany observers argue now that the banks should get out of industrial ownership.

Sachs responded that no single institution should control the enterprises; several of them should share ownership. To avoid overconcentration of power, he said, an individual bank's share of an enterprise's equity should be limited to perhaps 5 percent—enough so a bank that is also lending to these enterprises can exercise economies of scope in governance and oversight, roles for which banks are useful. Sachs said he does not advocate that banks act as holding companies.

The idea that owners must be active in a firm and that foreign owners should not take it over is historical at this point, argued Sachs, because we live in an age of professional management. Firms such as Volkswagen are owned by diversified financial institutions and are run by professional managers. According to a recent survey, the five largest shareholders in the largest U.S. enterprises own roughly 20 percent of the shares.

Moreover, Sachs continued, the popular image of a bankrupt enterprise sector in Eastern Europe is totally false. Most of these enterprises are making money and will continue to do so unless they experience the German phenomenon of unrealistic wage increases that exceed productivity. But even if these enterprises are not all loss-makers that need to be turned around, the notion of professional management with outside owners (typical for large enterprises in the capitalist world) is a realistic model for Eastern Europe.

A participant asked what the source of capital would be in a country such as Viet Nam, with its legacy of twenty to thirty years of central planning. Where will the country find the capital to put Vietnamese enterprises into private hands? Putting ownership of the economy into foreign hands would be a political problem, the participant explained. It is government policy to invite foreign capital into the country, but how do we do so without permanently giving up

This session was chaired by Joseph C. Brada, Professor of Economics at Arizona State University.

ownership of the enterprises and the economy to foreign interests? What role should the government play? What legislative actions should the government take to invite foreign capital while encouraging domestic capital or enterprises to take part in the management of newly established enterprises?

Sachs replied that foreign investment—which brings not only capital but also management and technology—is extremely important, but that in the next few years it won't come close to overtaking domestic sources of capital (retained earnings and domestic bank loans), partly because of uncertainty. Sachs said he would unostentatiously leave foreign investment unrestricted. He would privatize by distributing shares domestically to citizens and financial institutions, placing no restrictions on whether those shares are later sold to foreign or domestic investors.

What Sachs would avoid is the "Hungarian fallacy": privatization as the sale of a country's principal enterprises exclusively to foreigners. Hungary has sold its flagship enterprises one by one, and each sale has created a political crisis.

Sales to foreign interests will be politically tolerable if two conditions are met: first, that such sales not happen up front as the only means of privatizing; and second, that they are made to diverse buyers and not to a single, dominant country. He found it unnecessarily provocative that Hungarian shares were sold on the Austrian exchange but that Hungarians were not allowed to buy them because of capital controls.

Admitting that his view of the situation is not universal, Sachs did not see the end result as wrong. He expects that Poland, Hungary, and Czechoslovakia will ultimately have substantial foreign ownership—just as much of Polish, Hungarian, and Czech wealth will be invested abroad when their pension funds are internationally diversified. (Larry Summers, he said, is researching how to make that happen faster.)

As for government's role in privatization, Sachs stressed that there is no compelling reason for maintaining any government ownership in the manufacturing sector, except for the tank factory. Privatization may have to be combined with government regulation when the so-called natural monopolies (such as railroads and utilities) are privatized, as happened in Great Britain in the 1980s. Sachs applauded the Polish strategy of privatizing the manufacturing and competitive service sectors first and waiting until later to privatize the harder cases (the railroads and utilities).

He approved of treating government shares in manufacturing firms as common shares—basically unvoted, except (on a golden-share mechanism) for a few key decisions such as issues of new shares and fundamental reorganization of the firm's capital structure. He suggested protecting the government's share of enterprises by various covenants so the shares aren't stolen right out from under its nose, but in such a way that the government's residual shares don't become an avenue for bureaucrats or political parties to get back into managing the economy.

Mary Kaldor (speaker in another session) expressed alarm at terms such as "technical solution" and "the advantages of professional people in contrast to political people." She noted that Eastern Europeans have long struggled to avoid this outcome, saying, "Save us from technical solutions; we want political solutions." Commenting on Sachs's criticism of the political crises involved in Hungarian privatization, Kaldor argued that political crises are a way to express public opinion and that skipping this essential step stores up problems for the future.

Kaldor agreed that it was important to divest the state of most industries (except perhaps the natural monopolies), but she wondered how to develop a sense of autonomy and responsibility in managers of Eastern European state enterprises who never had a sense that their jobs were invested in the enterprises' future—whose sole concern had been to fulfill orders from a senior official. Perhaps the idea of active owners is old-fashioned, but do financial intermediaries and broad-based shareholding necessarily encourage such autonomy and responsibility?

Kaldor asked two questions: First, isn't there an advantage to slowing down privatization precisely so there can be public debate about the right way to do it? And second, could one alternative, at least initially, be decentralization of the large state enterprises, that is, providing some autonomy through municipal ownership without going through the complex process of privatization?

Sachs responded that nobody is pulling a fast one; privatization is a highly political, democratic process that has been intensely debated in the parliament and by the public for eighteen months. The question is: How quickly can we come up with workable rules of the game so that enterprises can function and people can get on with their lives? "My nightmare," said Sachs, "is Argentina, a country that for forty years has been arguing just over who owns what of a shrinking pot," with no stable rules of the game. He said countries that have no real owners can and do experience enormous damage: theft, asset-stripping, unethical behavior, the bleeding of public enterprises, and prolonged internal fights that are not about real production or development but about shifting around increasingly worthless and obsolescent equipment. So long as rights remain undefined, such opportunism is a threat.

Marko Simoneti (discussant) suggested that the argument was controversial because in a sense Sachs was saying, Let's do it before these new democracies wake up. Simoneti agreed, however, that it is not useful to debate these issues endlessly. He suggested that the reason Sachs's proposal was popular with Yugoslav politicians was that it avoided politics by introducing them up front—by allowing politicians to give some property to the voters. If that works, he said, then privatization can take place.

One participant asked whether wage restraint was important (and how long it should last) and observed that nobody had mentioned tax reform.

Sachs said that in Poland, wages are deregulated in the private sector and regulated in the state sector—not because there is a macroeconomic wage target but because of the need to adjust wages and profits when it has been decided that the workers do not own the company. If workers own the company, wage controls are not needed; the worker-owners make wage decisions. Sachs said he favored decontrolling wages and allowing market-based wage bargaining as soon as companies are private—even if they are unable to resist union demands.

On tax reform, he continued, in a year or two Poland will have a harmonized system: a value added tax; a household income tax; a corporate income tax; and a low, nearly uniform, tariff. The real difficulty will be tax compliance because there is an explosion of private activity, most of it unmeasured. It is important to bring the hundreds of thousands of new firms into the system and to insist on full compliance.

Prospects for Economic Reform in the U.S.S.R.

Anders Åslund

The extraordinary crisis facing the economy of the U.S.S.R. *is a direct result of lax monetary and fiscal policies. The magnitude of these excesses led to the emergence of a sizable budget deficit in 1986, an imbalance between wage and price deregulation in 1988, and a loss of political control over the state budget in 1990. The ensuing shortages have resulted in a sharp decline in real national income, and a deterioration in the nation's debt and foreign trade positions.*

This paper analyzes the reforms that were proposed and describes the main difference between the Shatalin—or 500-day—program, and the government program. The Shatalin group opted for a loose confederation of states, a swift balancing of the budget, a gradual introduction of free prices, and fast privatization through sales; the government wanted stronger central power, a reduction in the budget deficit, regulated price increases, and slow privatization.

The government line has prevailed in principle, but the economy has not responded. The budget deficit reached 20 percent of gross national product (GNP) *in the spring of 1991. Prices are about to be raised, but the real (inflation adjusted) wage increase is likely to be so large that it will compound the crisis, and no effective anti-inflation measures are in sight. The* U.S.S.R. *seems ripe for hyperinflation, with a sharp fall in national income opening the possibility for some kind of authoritarian stabilization.*

After six years of energetic—but confused—attempts at economic reform, the U.S.S.R. has entered a stage of extraordinary national and political tensions characterized by economic imbalance. On the one hand, the changes have been far-reaching and all paradigms seem to have been altered. On the other hand, only the destruction has been successful. Neither a viable political nor economic system has been constructed.

The starting-point of this analysis is March 1985, when Mikhail Gorbachev was elected General Secretary of the Communist Party of the Soviet Union. During 1985–87, the leadership concentrated its efforts on traditional measures.

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The author wishes to thank his collaborators Grigorii Khanin, Ivan Major, Marion Cutting, and Sten Luthman. This paper, which draws on Åslund (1989, 1991), was written in March 1991, and provides a snapshot of the economic dilemma facing the U.S.S.R. at this time.

When these approaches were unsuccessful and it became apparent that the desired result could not be achieved within the old system, the leadership began to rethink its policies. A series of reform laws were adopted in an attempt to achieve market socialism. The key legal act in this reform wave was the Law on State Enterprises, adopted in June 1987. Instead of the economic recovery promised, however, Soviet society gradually realized that the economy was deteriorating. By the end of 1990, the crisis had reached such dimensions that a radical break appeared virtually certain.

The first part of this paper highlights important economic problems from 1985 to 1991: the emergence of a sizable budget deficit in 1986, the rise in monetary income since 1988, and the complete loss of control over the state budget in 1991. These problems, which led to shortages, a monetary overhang, an inflationary gap, and inflation had secondary effects on the real economy, as reflected in national income, foreign trade, and foreign debt.

Although it took some time to realize what had happened, by the summer of 1989 the political leadership decided to renew economic reform efforts. A number of alternative programs aimed at stabilization and systemic change were considered, of which the three most important were the government program, the Shatalin (or 500-day) program, and the program actually implemented. On some points there was broad consensus: the need for a market economy with a wide variety of markets, the importance of normal financial institutions, diversified enterprise ownership, and the liberalization of foreign trade. On four points, however, vicious disputes prevailed: relations between the center and the republics; stabilization policy (notably the budget dispute); price policy; and privatization.

In the final section of the paper I assess the prospects for the Soviet economy, drawing on the experience of other formerly Communist countries, to see what stages are likely to reappear on the Soviet scene.

I. Monetary and Fiscal Problems

The most significant economic development under perestroika has been the emergence of formidable imbalances of most kinds, while all the traditional problems of a command economy remained in place (poor incentives, an inefficient investment process, little innovation, declining quality, and so on). For decades, a concealed budget deficit had hovered at 2 to 3 percent of gross national product (GNP) (Birman 1981; Ofer 1989), but in 1986 it widened to 6 percent and by 1988 had reached 10 percent (see table 1).

The most crucial period was 1985–86, because then the leadership had a choice. Three major causes for the deficit are apparent: a severe cut in the sales of vodka, excessive investment targets in the five-year plan for 1986–90, and a sharp fall in the oil price on world markets, which reduced trade tax revenues. Tax revenues on alcohol sales fell 8.2 billion rubles from 1985 to 1986 (Ofer 1989) and probably as much from 1984 to 1985 (a reduction of almost 2.5 percent of GNP).

Table 1. *U.S.S.R. Budget Deficit, 1990–91*

Year	*Billions of nominal rubles*	*Percent of GNP*
1980	17.9	2.9
1981	15.1	2.3
1982	21.3	3.1
1983	15.9	2.2
1984	14.9	2.0
1985	18.0	2.3
1986	47.9	6.0
1987	57.1	6.9
1988	90.1	10.3
1989	91.8	9.9
1990[a]	80	8
1991[b]	400	20

Note: Data are derived from official Soviet sources. Alternative statistics exist, but the differences are small. See also IMF (1990). Data for 1980–84 are PlanEcon estimates.

a. Estimated Yasin and Aleksashenko (1990); *Izvestiya* (Dec. 30, 1990).

b. Estimated.

Source: PlanEcon Report, Nov. 4, 1988; Narkhoz (1989, pp. 11, 612); *Pravitelstvenny vestnik* no. 49 (1990); *Ekonomika i zhizn,* no. 5 (1991, p. 9).

The Five-Year Plan for 1986–90 was based on the illusory concept of "acceleration" launched by Gorbachev. One tenet was that investment should be stimulated, and from 1985 to 1986, investment financed through the state budget rose 1.3 percent of GNP (Åslund 1991).

The main point, however, is that the new leadership was unconcerned about the budget deficit. To judge from Gorbachev's comments in December 1990, he and Prime Minister Ryzhkov were not aware of the budget deficit in 1985 (*Pravda*, December 10, 1990). The budget deficit was not made public until October 1988 (*Izvestiya*, October 28, 1988), although Birman (1981) had publicized it earlier in the West. Even so, economic problems during these early years of perestroika were not a major concern.

As a further result of the leadership's general contempt for finances, the enterprise sector seems to have been left afloat in money (see table 2). This condition was barely noticed, however, since enterprise bank accounts were strictly isolated from currency in circulation. However, a steady swelling in

Table 2. *Average Annual Growth of Money and Credit in the U.S.S.R., 1981–90*
(percent)

Item	*1981*	*1986*	*1987*	*1988*	*1989*	*1990*[a]
Currency	6.0	6.1	7.8	13.6	19.5	26.7
M2, of which	7.5	8.5	14.7	14.1	14.8	15.3
Households	7.2	9.4	9.8	11.3	15.0	13.5
Enterprises	8.7	5.5	32.6	22.5	14.5	20.0
Total credit	8.7	4.2	6.6	11.3	11.2	10.9

a. Estimated.

Source: IMF (1990, p. 49); *Ekonomika i zhizn,* no. 5 (1991, p. 9).

unfinished construction (see the Soviet statistical yearbook, Narkhoz *1989*, p. 547) can be explained by the huge amounts of money in enterprise accounts.

The Effects of Wage Deregulation

In January 1988 the Law on State Enterprises loosened wage controls, and monetary income, which had increased 3.6 percent in 1985, rose to 9.2 percent in 1988, 13 percent in 1989, and 16.9 percent in 1990. Wages have steadily increased more than twice the levels planned since 1988. However, two points are worth noting: First, strikes for higher wages have not proliferated; the motive for most strikes was primarily noneconomic. Wages went up because enterprises were competing for scarce labor. The cooperative sector is widely blamed for enticing the best workers to leave state enterprises. Officially, the average wage in a cooperative was 450 rubles a month in 1990 (though it is likely that it was even more), compared with 270 rubles a month in the state sector (*Ekonomika i zhizn*, no. 5, 1991, p. 9).

Second, if the figure for remuneration in 1990 is correct, wage increases have been checked somewhat. It seems likely that the progressive wage tax (up to 75 percent for annual wage increases of 7 percent or more) introduced in October 1989 has had a considerable effect (*Pravda*, August 11, 1989).

The inflation problem goes beyond excessive wage increases, however. Inflation in communist economies may be divided into three parts: open (officially acknowledged), hidden (actual but not shown in official statistics), and repressed (expressed in unsatisfied surplus demand). Because few price increases were allowed, actual inflation (open plus hidden) did not keep up with wages. As a result both hidden and repressed inflation have risen. Hidden inflation implies an exaggeration of official production and sales because of changes in assortment, deterioration of quality, and sheer cheating. Repressed inflation represents a gap between demand and supply, causing shortages and a decline in the value of the currency.

There are no recognized conventions on calculating hidden inflation in the U.S.S.R., and the official price index severely understates actual inflation (Shenfield 1986). Still, table 3, which is limited to Russia, gives a reasonable picture

Table 3. *Annual Inflation in Russia, 1986–90*
(percent)

Year	*Retail price index*	*Repressed inflation*	*Total inflation*
1981–85	2.1	2.5	4.6
1986	2.1	6.3	8.5
1987	2.7	6.9	9.8
1988	2.4	3.9	6.4
1989	2.4	5.4	7.9
1990[a]	6.0	12.2	18.9

Note: Repressed inflation is calculated as an assessment of the increase in unsatisfied demand in relation to the total amount of commodities and services sold domestically.

a. Estimated.

Source: Galitskii and Yakovlev (1991).

Table 4. *Expenditure and Saving in the U.S.S.R. as Shares of Monetary Income, 1985–90*
(percentage)

Item	*1985*	*1986*	*1987*	*1988*	*1989*	*1990*
Total purchases	93.4	92.7	92.0	90.4	87.4	86.0
Savings[a]	6.5	7.3	8.0	9.6	12.5	14.0

a. Total monetary income minus purchases, direct taxes, and social fees.
Source: Narkhoz (1989, p. 76); Zoteev forthcoming; *Ekonomika i zhizn,* no. 5, (1991, pp. 9–10); author's calculations.

of open and repressed inflation (although it neglects hidden inflation, thus understating inflation levels). Still, it seems to conform with official statistics, showing repressed inflation rising in 1986 and 1987, while inflation in 1988 and 1989 was surprisingly low.

The problem is a shortage of goods and services for sale at regulated prices. The effects on the consumer market are illustrated in table 4. The saving ratio (household saving as a ratio of the disposable income of the population) rose from a high 6.5 percent in 1985 to 14 percent in 1990. In addition, the amount of savings held in cash has steadily increased (from 74.5 billion rubles in 1987 to 132.7 billion rubles in 1990, or 78 percent).[1] At the same time bank savings rose 43 percent, from 266.9 billion rubles to 380.7 billion rubles (Narkhoz *1989*, p. 92; *Ekonomika i zhizn*, no. 5, 1991, p. 10).

Mounting Subsidies and Social Expenditures

As a result of the democratization process, starting with the March 26, 1989 elections, populist pressures surfaced. The democratization of the popular assemblies had been mandated by the central government. The assemblies were given certain limited powers (although no real responsibilities). The natural result was that the parliamentarians pressed popular demands for state resources, and the unpopular regime gave in rather than lose power altogether. Social expenditure financed through the state budget began to skyrocket in 1990, increasing by as much as 25.5 percent—almost twice as much as remunerations. Note, however, that pensions and other social benefits were tiny before perestroika. Many (but not all) of the new social benefits would probably appear reasonable in a Western country at a similar level of development. The gradual assertion of power by regional politicians and the lack of any agreement between the central government and the republics added to the pressure on the state budget.

The severe financial and monetary imbalances were reminiscent of Poland in 1981 (Gaidar 1990; 1991). Excess demand may be divided into two parts—a stock called a monetary overhang and a flow variable that we may call the

1. The latter figure is given in *Ekonomika i zhizn*, No. 5, 1991, p. 9, and is used to calculate the former, with the help of Zoteev (forthcoming).

inflationary gap (or involuntary saving, that is, the difference between current income and current expenditure plus voluntary saving). The huge monetary overhang can be assessed based on the quantitative theory of money. Soviet estimates vary widely, but the official assessment was 200 billion rubles at the end of 1990 (*Pravitelstvenny vestnik*, no. 1, 1991, p. 2). Western estimates put the amount at about 250 billion rubles (IMF 1990; Nordhaus 1990). The dispute is over how much saving can be considered voluntary. Presumably people save because pensions are poor. With the recent increase, however, there is reason to believe that saving will decline sharply. Rising inflation (coupled with still-low interest rates) is an even stronger argument for reducing saving.

To neutralize the monetary overhang, the general price level would have to rise by 60 percent if no compensation is given (see table 4). In addition, retail stocks have been reduced to a bare minimum. Traditionally, stocks of finished goods correspond to sales over a four-month period, but supplies have fallen to half that level (see table 5). To increase stocks by two months, a price increase of 16 percent is needed. Therefore, 70 billion rubles (16 percent of annual retail turnover) would be added to the monetary overhang, bringing it to 320 billion rubles. It may be argued, however, that household stocks, which were assessed at about 80 billion rubles in March 1990, offset the shortage of retail stocks. If the market is stabilized, these household stocks will be used up. Thus I do not include the need for stock accumulation in discussing the monetary overhang.

The existence of such a large accumulated surplus demand is a strong argument for trying to find a solution other than price increases. The monetary overhang represents only two-thirds of the bank deposits of the public, which could be frozen or transformed into assets (vouchers for land, purchases of equipment, shares, or enterprises). Another alternative—a currency reform—was also tried.

The inflationary gap can be deduced from table 6 with the assistance of some historical statistics. Assuming that a normal voluntary saving ratio is 5 percent

Table 5. *Year-end Stocks as Indicators of Shortages in the U.S.S.R., 1980–89*

Year	*Ratio of stocks of inputs to stocks of finished goods*	*Number of days' worth of stocks of finished goods at retail sales rate*
1980	4.8	96
1981	4.9	101
1982	4.6	114
1983	4.6	116
1984	4.7	117
1985	4.7	118
1986	5.2	108
1987	5.6	97
1988	5.8	88
1989	6.2	80

Source: Narkhoz (1985, pp. 474, 554); Narkhoz (1987, pp. 432, 586); Narkhoz (1989, pp. 126, 626).

Table 6. *Changes in National Income in the U.S.S.R., 1981–90*
(percent)

Indicator	*1981–85*	*1986*	*1987*	*1988*	*1989*	*1990*[a]
Official net material product (constant prices)	3.2	2.3	1.6	4.4	2.4	−4
Khanin estimates (constant prices)	0.6	3.0	1.0	0.0	−4 to −5	−8 to −10
Official GNP (constant prices)	3.7	3.3	2.9	5.5	3.0	−2
CIA figures (constant prices, 1982)	1.8	4.1	1.3	2.2	1.4	n.a.

n.a. Not applicable.
a. Preliminary.
Source: Narkhoz (1989); *Ekonomika i zhizn* no. 5. (1991); Khanin (1988, 1990); CIA (1990); Shmelev and Popov (1989), Aganbegyan (1989).

of disposable income, and the saving ratio amounted to 14 percent in 1990, it would seem sufficient to raise prices 10 percent to balance supply and demand. But as we assume that people do not want to save, we add 5 percent to the necessary price increases. Thus the inflationary gap is worse than it seems, and a 15 percent price rise is probably necessary to close the gap even if the monetary overhang has been erased.

The crucial question is the degree of shortage in the economy. (Kornai 1980 has suggested various ways of assessing the shortfall.) A useful indicator is the relation between stocks of inputs, or total stocks, and stocks of finished goods (shown in table 5). This figure was stable from 1982 (when significant open price increases occurred) to 1985, and has risen steeply every year since then. We can assume that the increase was even greater in 1990. The current assessment is that a nearly total shortage of virtually all commodities prevails (*Pravitelstvenny vestnik*, no. 47, 1990).

The black-market exchange rate for foreign currency might be a useful indicator, but the market is not the least transparent, and the disparities are great. The exchange rate seems to be twice as high in Georgia as in Leningrad or Estonia, while Moscow falls between these extremes. Since November 1989 currency auctions have been held in Moscow, but entry is limited to certain enterprises, and the authorities would hardly allow the price to rise beyond what they consider tolerable. Still, the exchange rate climbed 270 percent from November 1989 to February 1991 (*Ekonomika i zhizn,* various issues).

A third indicator is the price level at the free "kolkhoz" markets, although these markets officially account for only 2.4 percent of total retail trade (Narkhoz *1989*, p. 97). Unofficially, it is conceded that the real turnover is likely to be several times larger (Shenfield 1986). Still, prices have risen so sharply that the changes are apparent. The U.S.S.R. seems to be on the verge of hyperinflation.

The market situation has been accompanied by a weakening of the functions of the state. In December 1990, only 60 percent of the volume of intended deliveries among Soviet enterprises had been contracted. (Without a contract, no state enterprise is likely to sell to another.) In any case, enterprises have little reason to comply with contracts. There are general complaints that the old command system has ceased to function while no new market economy has emerged. State enterprises have very little reason to maintain production, and even if they aspire to do so, it is becoming increasingly difficult to acquire supplies. The major cause of this severe crisis is the extraordinary neglect of financial and monetary policy. Republics, enterprises, and consumers are switching to barter on an ever-greater scale. Barter, with its horrendous transaction costs, is much less efficient than a command economy; it virtually guarantees rapid economic decline.

The situation is more severe than it was in September 1990, when the government predicted that unless the situation improved, national income in 1991 would decline by 15 to 20 percent (*Pravitelstvennaya* 1990, p. 6). Based on these estimates the result will be worse.

Although inflation has been increasing, the official national income deflator was less than 1 percent in 1986–88, and 1.7 percent in 1989. In addition, there is hidden inflation (quality deterioration, manipulation of the product mix, and fraudulent practices). Obviously, these factors are sizable and growing. Table 6 gives official Soviet and CIA statistics (which are confusingly similar), along with assessments by Khanin (1990), which I think are the most appropriate. Soviet reform economists estimate that the decline will fall between 15 and 30 percent.[2] What we are witnessing is a formidable economic collapse (Åslund 1990; for a different view see Noren 1990.)

With the realization of the sorry state of the Soviet economy, its level in relation to other countries has been downgraded in a variety of assessments. The U.N. International Comparison Project assessed GNP at 37 percent of the U.S. level in 1985, and consumption at 26 to 31 percent of the U.S. level. The chairman of the State Committee on Statistics, Vadim Kirichenko, put per capita consumption at a fifth of the U.S. level; Belkin (1990) estimated GNP at 14 percent of U.S. GNP in 1987, well below CIA's (1990) 51.2 percent estimate.

The Crisis in Foreign Trade

Economic collapse will also have severe effects on the country's foreign trade and foreign debt. Table 7 shows that foreign trade had seriously deteriorated during the second half of the 1980s. The debt service ratio reached 33 percent in 1990. But the situation is much worse than these figures suggest. Oil, gas, gold, and armaments account for four-fifths of Soviet exports. Sales of natural gas and gold might provide two steady sources of foreign currency, but neither will increase. Gas production is nearly stagnant, and the country has been selling more gold than it produces since 1986.

2. Personal conversations, February 1991.

Table 7. *Soviet Trade in Convertible Currencies, 1986–90*
(billions of U.S. dollars)

Item	*1986*	*1987*	*1988*	*1989*	*1990*[a]
Trade balance (excluding gold)	4.1	8.3	4.8	—	−5.7
Current account (excluding gold)	2.3	6.7	1.6	−3.8	−10.7
Gold sales	4.0	3.5	3.8	3.7	3.6
Capital account	−5.7	−12.5	−6.1	−3.6	−7.2
Overall balance	0.6	−2.3	−0.7	−3.7	−14.3
Gross external debt[b]	31.4	39.2	43.0	54.0	52.2[c]
Debt service (percent)	28.0	27.0	23.0	24.0	33.0
Foreign exchange reserves	14.7	14.1	15.3	14.7	5.1

— Not available.
a. Estimated.
b. External debt may be understated by $6 billion.
c. June 1990.
Source: IMF 1990.

Oil production is the big worry. Oil exports peaked at 205 million tons in 1988 and fell 20 million tons in 1989 (Narkhoz *1989*, p. 644). In 1990 production dropped 6.1 percent, or by 37 million tons (*Ekonomika i zhizn*, no. 5, 1991), and the decline in exports was similar. Production is currently falling at a monthly rate of 10 percent, suggesting a decline of about 60 million tons in 1991. The result may very well be that oil exports will be halved. Thus it will matter little that Eastern European countries have to pay in hard currency at real world market prices for their purchases from the U.S.S.R.

Arms exports, which have been made public for the first time, are said to have amounted to 9.7 billion rubles in 1990 ($16 billion at the official exchange rate). Because of both Soviet foreign policy and declining demand, the government is expecting a 25 to 64 percent decline in volume in the first half of the 1990s (*Pravitelstvenny vestnik*, no. 2, 1991, p. 12).

Although the U.S.S.R. was supposed to benefit from the transition to trade in hard currency at world market prices with former CMEA countries, this trade almost collapsed in 1991. Essentially, no payment mechanism exists; the U.S.S.R. refuses to purchase most machinery from East-Central Europe, and Soviet deliveries of oil have been cut by half because of shortfalls in oil production.

Thus official statements that exports will fall by only 8.4 percent seem far too optimistic. In addition, Soviet arrears amount to $5 billion (IMF 1990). Considering the likely collapse of the domestic economy it appears that the U.S.S.R. will not be able to meet its foreign debt payments in 1991 unless imports are reduced sharply. In any case, the margin for additional borrowing has evaporated; foreign reserves fell to a third of previous levels in 1991. A possible budget deficit of 400 billion rubles will make economic improvement impossible without truly fundamental changes. The key problems thus are policy-induced, and could have been avoided. As Moscow's mayor Gavriil Popov (1990, p. 1) said, the country is facing a crisis of the current state system, a national crisis, and an economic crisis.

II. Attempts at Stabilization and Systemic Change

In the summer of 1989 when the government became alarmed about the economic crisis, broad discussions were held to review a number of competing economic programs. The most important were the government program[3] and the Shatalin—or 500-day—program.[4] Officially, the outcome was reported in the president's "Basic Guidelines for Economic Stabilization and Transition to a Market Economy" in *Pravda* (October 18, 1990), but the guidelines were unclear. The government program was implemented piecemeal, without a framework for coordination.

On many issues the government and the Shatalin group agreed. Four issues, however, gave rise to protracted disagreement. First, the government wanted a rather strong center within a federal structure, while the Shatalin group opted for a loose confederation modeled on the European Community. Second, the Shatalin group intended to balance the budget within 100 days, while government officials said that such a goal was both impossible and socially irresponsible. Third, the government advocated price increases at an early stage with full compensation, creating a more rational structure of relative prices, although fixed prices would be maintained for most goods. The Shatalin group preferred to free all prices, but they were to be introduced gradually, after a severe contraction and substantial privatization. Fourth, the Shatalin group hoped for swift and extensive privatization, while the government was hesitant and ruled out private ownership of land.

After the Shatalin group lost, most of its members resigned (notably Stanislav Shatalin, Nikolai Petrakov, Grigorii Yavlinskii and Boris Fedorov), but major architects of the government program also resigned or lost their jobs (Nikolai Ryzhkov and Leonid Abalkin). By the end of 1990, it was striking how few of the innovative economists remained in any post of influence. Economists who hoped for a political future opted to get out of government.

Since 1989 the U.S.S.R. has adopted a number of laws based on the reform agenda established by Abalkin's Reform Commission. The regulations necessary for a normal market economy are being worked out and adopted as they are prepared without any particular coordination. The quality of these laws varies greatly. Some are market-oriented, some are inconsistent, and a few are reactionary (notably legislation prohibiting speculation). Another trend has become

3. The first program was the Abalkin Program (*Ekonomicheskaya gazeta*, No. 43, 1989), which was surprisingly radical. It was followed by further elaborations (Abalkin and Milyukov 1990) from a conference (Hewett 1989). Next, Prime Minister Ryzhkov, under the influence of Gosplan and party conservatives, presented a substantial reversal (*Izvestiya*, December 14, 1989). After toying with more radical ideas, the government returned to its December track in April 1990 as clarified by Ryzhkov's speech in May 1990 (*Pravda*, May 25, 1990), which essentially advocated retail price increases with two-thirds compensation. The final government program was printed as *Pravitelstvennaya* (1990) in September 1990. Essentially, it was much more liberal and market-oriented than its predecessors.

4. Published in *Perekhod* (1990a; 1990b) with 21 draft laws. Much of this had been prepared by the government reform commission but had been rejected. For an excellent discussion of the Shatalin program, see Hewett (1990–91).

apparent—a flow of presidential decrees that marks a reversal to arbitrary intervention by the center, the KGB, the police, the military, and the worker committees. Virtually all presidential decrees relating to the economy spring unpleasant surprises and even destabilize economic life. The timing of their appearance seems as arbitrary as their content. In addition, the republics are adopting their own laws and refuting the authority of centrally issued commands. In fact, neither the central nor the republican decisions are implemented. No order can be established before this form of policymaking and legislation has been abandoned.

Financial Policy

Many disputes came to a head in the talks over the 1991 budget (which was not adopted until January 11, 1991). The major debate was about populist demands for social expenditure in the face of the government's desire to limit the budget deficit. The actual outcome was not made public. The state budget was divided into the central budget and the republican budgets. Both, in turn, were divided into an actual budget and a "stabilization fund" (*Izvestiya*, December 30, 1990). The state budget deficit was given as only 26.7 billion rubles. The government has delegated the deficit to the republics and to the stabilization funds, and the republics have delegated their deficits to their stabilization funds. The republican budgets are difficult to survey, and apparently the balance of the stabilization funds has not been made public.

Before the budget was adopted, Minister of Finance Valentin Pavlov said the budget deficit amounted to 248 billion rubles (*Pravitelstvenny vestnik*, no. 49, 1990, p. 5), or about 20 percent of 1990 GNP. Presumably this amount is unchanged because additional demands for expenditures were not adopted. Similarly, it is not credible that the budget deficit for 1990 stopped at 58 billion rubles. Yevgenii Yasin and Sergei Aleksashenko have suggested that it was 20 billion rubles higher (*Izvestiya*, December 30, 1990; see Tedstrom 1991). It is worth remembering that the Soviet government did not admit to any budget deficit before October 1988, and it may never have stated its real size. In particular, various loans are presented as budget revenues.

The three big increases in the budget were new social programs (150 billion rubles), consumer subsidies (110 billion rubles), and defense expenditure (28.1 billion rubles). Allegedly the rise in defense expenditure reflected changes in wholesale prices and in fact represented a real decline of seven billion rubles. The actual cuts fell on investments financed by the state budget and foreign aid. (*Pravitelstvenny vestnik*, no. 5, 1991; *Izvestiya*, January 26, 1991; see also Gaidar 1991).

To raise revenue, a 5 percent sales tax and a payroll tax of 37 percent were introduced (*Pravitelstvenny vestnik*, no. 5, 1991). The profit tax rate was set at 45 percent, although actual tax revenues were expected to amount to 37 percent of profits. A progressive income tax rising to a maximum of 60 percent replaced the previous flat tax rate of 13 percent, but was expected to provide little revenue (*Ekonomika i zhizn*, nos. 20 and 30, 1990).

Soviet thinking on taxation seems unrealistic. McKinnon (1990, p. 133) notes that, "as in the other liberalizing socialist economies of Eastern Europe and Asia, the Soviet government's ability to collect tax revenue has greatly diminished as a result of the liberalization itself." Previously "taxes" were based on the confiscation of enterprise profits, turnover taxes, and duties on foreign trade. The U.S.S.R has no effective tax inspection and no basic legal framework. Lawlessness prevails, formal tax rates are high, and the state enjoys little legitimacy. The government should realize what the practical constraints are. It should be obvious that tax pressure should be reduced to a bare minimum because tax revenues are so hard to catch. In addition, three items in the budget must be cut: 229 billion rubles in subsidies (*Izvestiya*, February 19, 1991, p. 1), defense expenditure (officially 98.6 billion rubles), and social programs. Note, for instance, that the current retirement age of 55 for women and 60 for men is untenable in a country with such a low level of economic development. In any case, it is not a matter of actual retirement; traditionally, Soviet pensioners have been forced to continue working to earn a subsistence income.

The economic imbalance leaves only two alternatives; a severe currency reform or price deregulation, both accompanied by a serious stabilization policy. All other measures, such as sales of state property or imports on credit are insufficient.

Currency reform. On January 22, 1991, a currency reform was launched "in the interest of the overwhelming majority of the country's population, for the reinforcement of the struggle against speculation, corruption, smuggling, forgery, unearned income, and for the purpose of normalizing the money supply and the consumer market" (*Izvestiya*, January 23, 1991, p. 1). This presentation opened the way for its introduction as a populist measure directed against economic crime (see also *Ekonomika i zhizn*, no. 5, 1991, p. 1).

The technique used was to declare all banknotes in 50- and 100-ruble denominations invalid as of January 23; exchanges of limited amounts—usually one month's salary or 1,000 rubles—were permitted during January 23–25 (*Izvestiya*, January 23, 1991). The measure was announced at 9 pm, January 22. Rumors of a currency reform had been circulating for some time, however, and most people who stood to lose money were prepared.

As a result, of 48.2 billion rubles in circulation in large banknotes on January 1, 1991, only about 5 billion rubles were eventually confiscated. Considering that the total money supply (currency plus bank accounts of individuals and enterprises) was in excess of 600 billion rubles, little more than 1 percent of the money supply (M2) was confiscated. (The government had hoped to reduce M2 by 26 billion rubles.) Although estimates of rubles held outside the U.S.S.R. ranged from 7 to 12 billion rubles (*Financial Times*, February 1, 1991), in the end, only half a million rubles were confiscated (*Izvestiya*, January 31, 1991).

The currency reform was clearly irresponsible. Instead of arousing confidence in the currency, this measure had the opposite effect. Even if all the outstanding banknotes had been confiscated, the reduction in the money supply would have been insignificant, considering the monetary overhang of 250 billion rubles. And while black market operators had ample opportunities to salvage their assets, ordinary people suffered. Even if the response had not been undercut by rumors that the government was about to act, the currency reform was bound to fail since it was not accompanied by any serious attempt at stabilization. The gap between current income and expenditure was unchanged, and the budget deficit worsened.

In view of the inefficiencies of Soviet banks, it seems to have been an extraordinary mistake to call for the exchange of banknotes. Obviously, several days of work were lost as people explored every channel to exchange money. Prime Minister Pavlov's explanation that it was necessary to undertake this currency reform to avoid a coup could hardly have been further from the truth.

This experience should deter the government from trying again, and presumably the previously strong political support for currency reform from all sides has abated. Still, one could argue that confidence in the currency is already virtually nil, so that another attempt would cost little. Moreover, the multitude of errors in the execution of this currency reform was so striking that logic seems to be a poor guide for predicting the actions of the Soviet government.

Price reform. The prices of most traded items are officially regulated and fixed, but the government is gradually raising and liberalizing prices. Various categories of "negotiated," "cooperative," or "commercial" prices have been extended for years, with no coordination. As a rule, price changes in 1990 increased the budget deficit rather than reduced it; in 1991 this gap will have to be bridged.

On October 4, 1990, Gorbachev issued "immediate measures for the transition to market relations," raising wholesale prices as of January 1, 1991 (*Izvestiya*, October 5, 1990). About 40 percent of the wholesale trade was to be "negotiated," 30 percent was subject to price ceilings, and 1,500 commodities (essentially raw materials and construction materials), comprising 30 percent of the retail trade, were fixed at higher levels (*Ekonomika i zhizn*, no. 10, 1991, p. 5). The price of oil, for instance, rose 130 percent. In essence, the rise in wholesale prices meant that the government awarded enterprises huge new subsidies, amounting to almost 110 billion rubles in 1991 (*Pravitelstvenny vestnik*, no. 5, p. 4). These prices had been prepared in 1988 and were introduced regardless of the changes that had subsequently occurred (*Izvestiya*, October 5, 1990).

The wholesale price increase virtually compelled the government to raise retail prices to limit the budget deficit. In addition, high inflationary expectations made enterprises hold back deliveries of manufactured consumer goods. As a humble start, the prices of about 5 percent of retail trade (primarily luxury goods) had been freed on November 15, 1990. Even so, the Russian and Kazakhstan Supreme Soviets protested that they had not been consulted and tried to prohibit some of the price increases (*Izvestiya*, November 16 and 27, 1990; *Argumenty i fakty*, no. 46, 1990).

The principal bone of contention, however, was the retail price of basic foodstuffs and consumer goods. The government had proposed large price increases of about 50 percent in May 1990, falling to 33 percent in September, but leading to new fixed prices—along with full compensation. The government's line seems to have prevailed. Since November 1990 senior government officials have acknowledged that large price increases are under way. The general expectation among senior Soviet economists was that retail prices would increase in March or April 1991.[5]

On February 18, 1991, Prime Minister Pavlov presented the price reform and the compensation to be offered to the population in considerable detail. The general retail price level was to rise about 60 percent; prices of about 30 percent of retail trade would be freed. Gradually, all prices would be deregulated; subsidies would persist for the most sensitive commodities; the population would receive payments to compensate for 85 percent of the price hike; compensation would be targeted to the poor; some unspecified compensation was promised for savings accounts; and wages would be deregulated (*Izvestiya*, February 19, 1991).

It is vital that the government act to reduce the monetary overhang and the budget deficit. The supposed price reform will reduce both, but not enough. If Pavlov's figures are correct, excess demand would only fall some 25 billion rubles (because of falling production and sales) and is bound to increase thereafter because it will be very difficult to raise retail prices again. At the same time, budget expenditures and wholesale prices are sure to rise, prompting new subsidies. At the most, a sixth of the budget deficit will be erased (and probably less).

A second problem is that the government insists on gradual price increases, category by category, and gradual price deregulation. Minister Vyacheslav K. Senchagov has argued that this approach makes it possible to avoid "avalanche-like inflation and ascertain social guarantees and compensation to the population" (*Izvestiya*, January 29, 1991). There is no empirical or theoretical foundation for this view. On the contrary, Poland and Yugoslavia arrived at hyperinflation through such an approach. If anything, a gradual increase in prices is likely to reinforce inflationary expectations, which, judging from recent wage demands, seem to have reached 200 percent. In addition, gradual deregulation of prices implies that the relative price is always wrong and will be altered by administrative means (see also Kornai 1990; Lipton and Sachs 1990; Sachs 1990). A gradual deregulation arouses unnecessary uncertainty and hampers the development of entrepreneurship.

5. Personal conversations with senior Soviet economists, February 1991.

Third, Pavlov announced that the wage tax would be abolished, and he urged enterprises to pay workers in accord with their means. This sounds like a suggestion that workers demand full compensation for price increases. And indeed, in February 1991, the coal miners struck for wage increases of 100–200 percent. Workers in large prestigious industrial enterprises will be hard-hit by price hikes, because numerous goods have been distributed at the workplace at low state prices. The intention was that they should get little compensation, but they are in a strong position to demand more than full compensation. Nor do their directors have much reason to object. A plausible result is that an extraordinary inflation will be unleashed with a race between prices and wages, while shortages may persist.

Ever since the massacre of striking workers in Novocherkassk in 1962, prompted by a meat price increase, Soviet authorities have been reluctant to raise prices of basic foodstuffs. One question is how Soviet workers will behave this time. Some Soviet economists and officials argue that the population is so tired of shortages and has heard about price increases for so long that the higher levels will be readily accepted. Others—more plausibly—expect strikes in many places. The response could lead to huge compensatory wage demands or the imposition of some kind of state of emergency.

Fourth, Pavlov's policy contains no credible anti-inflationary element. He suggests no comprehensive economic policy. There is hardly a mention of monetary policy. By criticizing and downgrading the Reform Commission headed by former Deputy Prime Minister Leonid Abalkin, Pavlov has removed the best economic expertise from the Council of Ministers.

Finally, even if both the monetary overhang and the budget deficit were miraculously erased, there are so many underlying inflationary pressures in the economy that it is only a matter of time before the old imbalances re-emerge, albeit mitigated. A key problem is that the regime, and possibly even the union as such, lacks legitimacy and popular support. It is a sobering thought that in Poland, macroeconomic imbalances were largely erased in 1982 after martial law had been introduced, but they reappeared as piecemeal stabilization was pursued—and eventually inflation accelerated.

Privatization. Possibly because of the current economic crisis, there has been an acceleration of privatization. A number of laws have been adopted to facilitate ownership transitions including laws on ownership, leasehold, and land as well as statutes on joint stock companies and trade in securities (Hanson 1990). In 1990, 6.2 million people were employed in new cooperatives that are, in fact, private companies. About 3,000 joint ventures with foreign companies had been established as well as 1,400 commercial banks and 40,600 family farms (*Ekonomika i zhizn*, no. 5, 1991, p. 9). As the state sector collapses, private activities are taking over, although because of imbalances in the economy, illegal practices abound. Public reaction over the lack of law and order—and against "speculation"—has been sharp.

Discussions on privatization started late, and took off in 1990 (Hanson 1990). The government has published a draft legal act (*Ekonomika i zhizn*, no. 7, 1991, pp. 18–9) outlining three principal methods of privatization: distribution of property to employees, distribution of property to the population at large, and sales of property. The last is preferred, but the government will attempt all three alternatives (*Izvestiya*, February 5, 1991; *Pravitelstvenny vestnik*, no. 3, 1991).

A number of enterprises have been singled out for sale: 21,100 enterprises in retail trade, 9,300 in dining services, and 12,800 service enterprises (*Ekonomika i zhizn*, no. 5, 1991, p. 9). Private ownership of land, which has been legislated in Russia (on December 3, 1990) and in the Baltic republics, continues to be controversial. Another controversy concerns the transformation of large industrial enterprises first into leaseholds and then into joint stock companies in such a manner that management can buy the bulk of the shares at a low price. The same practice is notorious in Poland and Hungary (Grosfeld 1990), but unfortunately, the Soviets have not learned from problems in Eastern Europe.

An inevitable question is why Gorbachev did an about-face in the fall of 1990. Judging from the facts at hand, the primary reason was his lack of popularity (his approval ratio had fallen below 20 percent). It is apparent that he could not be democratically elected. Gorbachev says that he is not prepared to accept any further weakening of the union—and certainly not separatism (*Pravda*, December 1 and 2, 1990). He insists that he is a Communist and that there are some socialist values that he is not prepared to give up. Although he is skilled at compromising and balancing various political forces, the collapse of the Communist Party in 1990 left him without a base, and for reasons mentioned earlier, he chose to join the conservative Communist alliance that he had previously tried to weaken.

The combination of growing national and democratic pressures, and an isolated ruling elite renders any attempt at serious systemic change virtually untenable. A fundamental political change must occur if the Soviet economy is to be salvaged. The most positive thing that can be said at present is that such a sharp deterioration cannot last for long.

III. Prospects for Reform

Looking back at the experience of Communist economies, it is possible to discern consecutive stages of development, although the situation is still unclear.

The decline of Communism starts with a long period of internal qualitative decline that eventually results in economic stagnation. The system lacks the ability to renew itself because incentives, prices, and the economic structure become ever more distorted. In the end, a general demoralization takes over. However, stagnation can persist without any dramatic fall, as shown by the stagnant Soviet economy under Leonid Brezhnev, the Czechoslovak economy under Gustav Husak, and the East German economy under Erich Honecker.

A real crisis may occur if the leadership tries to squeeze out more than the system can offer. Consider Poland in 1976–81 and the U.S.S.R. at present. Possibly the current economic crises in Romania and Bulgaria are similar, but Hungary and Czechoslovakia have shown that this second stage can be avoided. Overspending is the basic problem, resulting in budget deficits and gross imbalances in the domestic market as huge amounts of money chase scarce commodities whose prices are controlled for political reasons. Typically, subsidies grow extraordinarily. As a result, the markets that usually function in a command economy, notably the consumer market and the labor market, are also severely disrupted. Money is effectively devalued, and currency flight occurs. There is little interest in earning money, and labor inputs fall. Transaction costs become excessive as various forms of barter proliferate. Much production becomes economically futile, since it cannot be bartered, and the old commands are disregarded.

Aside from democratization, the natural third stage for countries with extreme shortages is authoritarian stabilization, though so far the only good example is the introduction of martial law in Poland on December 13, 1981. It seems likely that the U.S.S.R. will follow a similar course. There have been warnings of a military coup (Nuikin 1990), though some other kind of authoritarian rule is more widely anticipated (by Eduard Shevardnadze, for example, at his resignation on December 20, 1990). Currently, there seems to be much talk in Moscow of pursuing economic modernization and marketization under authoritarian rule, as in the Republic of Korea, Taiwan (China), Spain under General Franco, and Chile under General Pinochet (*Financial Times*, February 5, 1991, p. 1). General Jaruzelski attempted something similar in Poland and failed because state ownership was so dominant that a normal market could not develop. Inefficient state enterprises, which lacked autonomy, sought support from the state. A state director knew that he could be sacked if he disobeyed his superiors in the government, while economic failures were rarely sanctioned (see also Herer 1985). Thus if the U.S.S.R. attempts a Chilean course, it is likely to end up as Poland under Jaruzelski.

In 1981 Jaruzelski attempted a stabilization program (with limited compensation at the outset) that raised retail prices 101 percent and slashed "real wages" 25 percent (*Rocznik statystyczny 1985*, p. 37). At the same time, a dual economic system was introduced with central state orders for large-scale production, while a growing private, marketized sector (permeated with illegal practices) expanded on the side (Åslund 1985; Rostowski 1989). On the one hand, a sharp (22 percent) decline in national income from 1979 to 1982 facilitated a relatively fast economic recovery of about 5 percent a year for four years (*Rocznik statystyczny 1988*, p. 35). On the other hand, by 1987, renewed stagnation became evident as well as various imbalances (Lipton and Sachs 1990; Nuti 1990). Two important lessons should be drawn from this experience. First, stabilization is not likely to be successful if the population effectively resists the government. Second, marketization will not succeed before the majority of enterprises are private. Presumably these lessons also hold for the U.S.S.R., though they are obviously not understood by the current leadership. Today there is a broad realization among the best students of socialist economies that market socialism is not a preferred economic system (Brus and Laski 1989; Kornai 1986, 1990).

A fourth and necessary stage in the transition from a command economy to a market economy appears to be democratization. That is the big lesson of 1989. There are several reasons why democratization is necessary for a successful transition to a market economy. First, the old political command structure between the government and enterprise directors must be broken. Second, when Communists try to reverse policies they have always supported, they lack credibility. In a formerly socialist state, business confidence is a crucial factor in short supply. The confusion is well illustrated by Gorbachev's statement in October 1990: "One of the most important tasks of the party as I see it is to help society to rid itself of disquiet and fears in the face of the market" (*Pravda*, October 9, 1990, p. 1). Just about any party seems more suitable for this task than the Communist Party of the U.S.S.R. In fact, it seems vital to declare openly that the goal is capitalism, and to do that credibly noncommunists are required.

After democracy has been established, a fifth stage of systemic change, involving liberalization and stabilization should ensue as quickly as possible. The lesson from Poland is that a swift systemic change is possible, and in the absence of any apparent alternative, the Polish path of comprehensive systemic changes seems the only sensible choice. According to the IMF (1990, p. 2), "Ideally, a path of gradual reform could be laid out which would minimize economic disturbance and lead to an early harvesting of the fruits of increased economic efficiency. But we know of no such path..." Instead, the conclusion is that stabilization and structural reform should be attempted simultaneously. Or as Vaclav Klaus noted, there is no need for sequencing, only a need for undertaking as many liberalizing changes as possible as rapidly as possible.

A sixth stage—privatization—is unfortunately lagging in Eastern Europe. No systemic change can be complete without privatizing most of the economy. No well-developed Western economy employs more than a third of its labor force in the public sector, and recently the trend toward privatization throughout the West is even encroaching here. Old truths are at long last becoming generally accepted. "Exchange relations between production-goods can only be established on the basis of private ownership of the means of production" (von Mises 1972, p. 81).

There are many reasons why swift, large-scale privatization is vital. A boundary must be created between economics and politics; enterprises must become truly independent to observe financial constraints; only independent enterprises can compete; private ownership is necessary for Schumpeterian "creative destruction." Moreover, no socialist economy has ever presented any rational criteria for the allocation of capital. In the West state enterprises are widely considered less efficient than private enterprises. This contrast is understood to stem from the fact that public enterprises tend to concentrate on noneconomic goals. But they are likely to be far more efficient in comparison with local private companies than is the case in state-dominated economies because in the West, successful state enterprises compete with and imitate private enterprises. In the East, there are few private enterprises to imitate. A critical mass of private enterprises is necessary for the orderly functioning of a market. Poland's experience shows that a third of the labor force is not enough under the disorderly conditions that are likely to prevail (Åslund 1984, 1985; Rostowski 1990). Finally, there is a political aspect. No democracy has proved stable without predominant private ownership, or as Hayek quotes Hilaire Belloc: "The control of the production of wealth is the control of human life" (Hayek 1986, p. 66).

To these six stages I would add a seventh: the distribution of power among the central government, the republics, and the local authorities. It may be too early to say where this stage should be inserted, but the most natural place is between democratization and systemic change.

These stages are of different lengths. Stagnation may last for decades. The severe crisis and the ensuing authoritarian stabilization are optional and likely to appear where the political situation is particularly complicated. The downturn is likely to last only a few years, because otherwise little would remain of the economy. The third stage lasted a long time in Poland, but presumably only because of Soviet dominance. Judging from economic growth rates, democratization would have been natural in 1987 or soon after because of declining growth. Democratization can be accomplished within a year, as several East European countries showed in 1989 and 1990. Systemic change may be pursued in many ways. Clearly states can make many mistakes. The sixth stage of privatization may last too long if the government lacks the necessary willpower. The question is: What is the alternative? Lipton and Sachs (1990, p. 132) fear that the "short-run costs of the move to a market economy may well lead to a rise of populism, protectionism, and a prolonged macroeconomic crisis". They offer the "decades-long agony of Argentina" as an example. Indeed, if systemic change and privatization are not pursued energetically enough, it seems likely that the former communist countries will end up in an "Argentinization."

This list of the characteristic transition stages from a Communist command economy to a liberal market economy suggests how far the U.S.S.R. has to go. The scenario I consider most likely is that the country is approaching the end of the second stage and entering the third stage. This transition may occur with or without Gorbachev, since a broad coalition of the military-industrial complex, the KGB, the military, and the Communist Party favor such an outcome (Klyamkin 1990). The three major problems—the lack of generally accepted political decisions, tensions between the center and the republics, and economic imbalances—may be handled with as much force as necessary, facilitating the necessary increase in retail prices without full compensation. As in Poland, national income may continue to fall because of popular unrest, but should then start picking up, precisely because it has fallen so much already. If national income falls no less than 30 percent (4 percent in 1989, 8–10 percent in 1990, and perhaps 15–20 percent in 1991), it should be possible to pursue Jaruzelski's course for five or six years. As in Poland, such a traumatic period would probably erase all appreciation for socialism among the vast majority of the population, and thus facilitate the transition to a market economy. Moreover, a great deal of market-oriented legislation is already in place—much more than in Poland in 1982—and a large part of the economy is likely to be turned over to the market as the government's capacity to govern has weakened considerably.

There are several bodies that could orchestrate the contents of such a program in the U.S.S.R. today. The outstanding candidate is the "Scientific-Industrial Union of the U.S.S.R.," founded in 1990 by the largest state manufacturing enterprises, currently comprising 65 percent of Soviet manufacturing. Member enterprises pay high fees, and have built a large secretariat of well-paid officials, including several prominent reform economists who abandoned the government (Nikolai Petrakov, Pavel Bunich, Nikolai Shmelev, Yevgenii Yasin, and Sergei Aleksashenko). The program of this union is distinctly more economically liberal than that of other associations of state enterprises. It advocates privatization of industrial enterprises on very beneficial terms for management and defends cooperatives; it favors a market economy, but insists on a gradual transition "as in Japan, South Korea, and Taiwan"; it aims at an all-union market, that is, the preservation of the U.S.S.R. Democracy is bypassed, while the rule of law is basically honored. In effect, the union advocates the same program that Jaruzelski pursued. It is not dogmatic or bloodthirsty, but it favors an authoritarian order and a gradual transition to a market economy and privatization. Politically, it appeals primarily to the directors of large enterprises, who seem to comprise the center in Soviet politics today (*Kommersant*, no. 8, 1991, p. 3; *Ekonomika i zhizn*, no. 11, 1991, pp. 6–7).

An alternative to such an outcome is a stalemate, which is possible since Gorbachev has concentrated formal power in his own hands while his authority has been severely undermined. If Gorbachev does not make the necessary decisions, while preventing others from doing so, it is possible that senior military commanders might act in accordance with orders issued without a final go-ahead or various garrisons might rise to establish order. In that case, any disturbance—including an actual civil war—seems possible, though not very likely, given the strong traditions of hierarchy and subordination in the Soviet military forces and the virtual absence of non-Slavic officers in the senior officer corps (see also Nuikin 1990).

A third scenario would be some kind of revolution from below. Soviet citizens refer to February 1917, when Russian soldiers refused to shoot on the population. Westerners think of Romania in December 1989. A strong popular majority seems to support democratization, and Boris Yeltsin, whose popularity ratio is close to 60 percent, appears to be a viable political alternative. His popularity is falling, however, and he has been unable to keep able policymakers. Judging from the public debate, confusion abounds.

The conservatives have mobilized against the reformers, and Gorbachev's previous pro-reform allies and aides have all resigned or been ousted. Thus it is difficult to imagine democratization from above. Economist Grigorii Khanin says that the leadership cannot support radical economic and political reform because it is "afraid of losing control over society" (*Golos*, no. 1, 1990, p. 4). Thus an authoritarian stabilization seems the most likely scenario. However, as in Poland, we should expect a radical liberal political and economic turnaround after several years, when the old system has become politically and economically exhausted.

As long as the U.S.S.R. does not have a regime that enjoys political legitimacy, there is little the outside world can do to assist it. Its demand for foreign credits is likely to be insatiable for the bad reason that the government uses these funds to mitigate popular dissatisfaction, but there is no good reason for others to provide such funds. Admittedly, limited amounts of humanitarian aid might be required, but only because the distribution system functions so poorly—not because of absolute poverty. Instead, the outside world should take a long-term view and attempt to upgrade the country's human capital for the moment when actual systemic change does occur.

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Comment on "Prospects for Economic Reform in the U.S.S.R.," by Åslund

Leonid M. Grigoriev

Anders Åslund offers a broad and basically correct recent picture of macroeconomic policy in the U.S.S.R. and its interaction with the domestic policies pursued by the central government. As an "insider" I would like to concentrate on some social and psychological aspects of the problems discussed in the paper.

I. The Economic Crisis

What Åslund describes as the "extraordinary" economic crisis in the U.S.S.R. is the inevitable result of objective processes. But his account of the U.S.S.R.'s political and legal decisions after 1985 suggests that the crisis might have been less severe if the government had managed the reform program more skillfully. From an economic perspective, that is undoubtedly true, but Soviet decisionmakers were not focusing on economic matters. The result was a clash, not just of philosophies, but of fundamental technical training. Unlike Eastern Europe, where macroeconomics is viewed with approval, the educational background of Soviet decisionmakers is a combination of engineering and orthodox central planning. This explains why the recent experience with decisionmaking, including drafting reform programs and legislation, was essentially a process of learning-by-doing—and a costly one. The first lesson was that the central government could exercise only limited power over the economy—even a command economy. At this point its priorities were to speed up the transformation of the economy (1985-86), discourage the consumption of alcohol, liberalize the restrictions on entrepreneurship (1987-88), and gradually move toward a market economy (from mid-1989).

The paper gives a good description of the sudden emergence (for the Union Government, certainly) of the budget deficit—an event that with hindsight is not surprising. The Soviets assumed that the budget was in balance because in a planned economy it has to be. The result was that most of the people who were in a position to do something—the government, the bureaucrats, the leadership—ignored the deficit, deferred discussion of the problems facing the economy, and maintained the distorting strategies of central planning. As long

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as specified quantities of goods were produced and delivered, the leadership was not inclined to worry.

Not until the spring of 1990 did the government of Nikolai Ryzkov (with Valentin Pavlov as finance minister) face up to the deteriorating budget and begin to resist popular pressures for government spending programs. One of the reasons it deferred action for so long (apart from a lack of competence and courage) was the unstable political situation in the republics.

Instability

The overlapping effects of three economic crises contributed to slowing down the government's first attempts at reform in 1987. These were: the collapse of the command system; a recession with growing unemployment and a fall in gross national product; and the looming instability generated by regional strife. As Åslund observes, by the time reformist pressures peaked in the summer of 1990, it was already too late; the recession had become more severe and the procurement system had broken down. If the same actions had been initiated earlier in the year, the reforms might have been more effective. But the government did not have the ability to turn the situation around.

A broader reason for the failure was the lack of consensus about how to deal with the problem. Instead of evaluating alternative measures, a small group of economists (mostly anonymous) drew up the formal reform programs. None of the drafts, however, including the "500-day plan," reflected social and cultural considerations. In the end, a series of promises that this or that action would ensure prosperity undermined the government's (and the president's) credibility, and eroded the public's tolerance.

Even the positive response by the public and the media to the 500-day plan has been overestimated. Leonid Abalkin, the director of the Institute of Economics, introduced the concept of a market economy to the public and was able to gain its acceptance as a government goal. But by late 1990, the political strength to enact this program was beyond the government's capability. In retrospect, the 500-day plan is seen as the best chance to strengthen the hand of the government. This is in part because it was never implemented (the "live martyr" effect), and in part because of its favorable coverage by the democratic press. One second-round effect is likely to be a more professional approach to subsequent planning efforts.

New Efforts at Reform

In late 1990 the government began to make major economic decisions, implementing a currency exchange and announcing other moves to signal its control over the economy. The main test of this new competence was the implementation of an administrative price hike in April.

At the time this paper was written exact numbers were not available, but many economists and citizens questioned the official figures put out on price changes and subsidies. Some observers estimated the increase in prices at two to three times the announced level, and suggested that immediate compensation was closer to 30 or 40 percent rather than 85 percent. In any case, the rise in nominal incomes in the next six months outstripped the increase in prices, so the outcome was disappointing.

The middle class was the hardest hit. Although the government had hoped to downplay resistance by concentrating on financial help for children and pensioners, it was unable to contain rising social tensions. Officials had been preparing for this step since 1987 (at which time Pavlov was head of the State Price Committee), but they overlooked two major effects of the currency reform. First, because the rise in agricultural prices turned out to be less than the price increase in mining and manufacturing, the government would be obliged to index wholesale prices to agricultural products (through subsidies or changes in retail prices). Second, the decision to eliminate subsidized meals for workers and schoolchildren encountered severe opposition. In some locations parents refused to pay for school lunches. The reaction was so strong that within a few days the government agreed to reinstate the subsidies.

At the same time pressure mounted as industrial strike committees called for compensation packages and higher wages. The assumption that cuts in subsidies to producers would allow an increase in social welfare payments proved to be a costly mistake, as the settlements left little room for future maneuvering. Moreover, the central government's share of new revenues is small, and the unresolved issues of taxes, the division of revenues between the central government and the republics, and a shortage of credit and capital threaten financial stability. The government appears to be heading for hyperinflation, and is likely to resort to printing money.

One side effect will be a change in expectations. The Soviets will begin to adjust to inflation, and it looks like it will be around for a long time.

Privatization

Spontaneous privatization is spreading, but the pace and scope are unknown. Two thousand commercial banks and numerous small enterprises and associations (established by nomenclature) form the basis of a new private sector. The situation has created a convenient environment for establishing new legal entities despite uncertain property rights. Some well-advertised "model privatizations" of large enterprises are merely disguised as people's enterprises. In fact they are still controlled by their former managers. This raises questions about ulterior property rights in a command economy. Clearly, the distribution of goods and the management of assets gave certain bureaucrats invisible (and sometimes illegal) sources of income (actually rents). So privatization in a sense amounts to reprivatization.

Evidence suggests that social attitudes probably lag attempts at democratization. According to recent polls, the general attitude toward private property is still very uncertain. Only a handful of people have any memory of a market economy. In many cases the public—and even political leaders—talk about completely different types of market economies. Thus public acceptance of the concept does not suggest that there is a consensus on what the country's future economy should look like. Approval of market economics varies depending on how the question is phrased. Half the respondents polled were opposed to hiring "face to face," and found market-based pricing unacceptable. About 40 percent were against privatization altogether. To these residents the proposed changes are too radical. The rise in populism could threaten government decisionmaking, and in my opinion it is a major threat.

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Prospects for Economic Reform in Eastern Europe

Jan Vanous

Against the background of uncertainty in Eastern Europe, predicting the prospects for economic reform, even in the near term, is a risky proposition. Even the most prescient observers acknowledge that a number of unknowns—the effect of domestic economic policies, the scale of Western financial support, and the state of the world economy—figure prominently in the forecast. After some thought, therefore, I have decided to address some of the problems that have occurred in the course of transforming the East European countries into semi-market economies. I have two reasons for this shift in focus. First, unless reformers learn from their mistakes—and there is no guarantee that will be the case—the outlook for economic reform is fairly bleak. I would not discount the possibility that many reformers at present are more concerned about their political positions than about the principles of reform. Second, and most important, we are beginning to find out that we have vastly underestimated the difficulties involved in this complex task.

The paper is written from the viewpoint of an observer indirectly involved in the process. Because a considerable amount of insight was obtained through informal personal conversations and interviews with policymakers in the region, I have presented the issues in a generic sense, homing in on the need to deal with the broader issues of reform rather than presenting an academic paper in the context of the theoretical and empirical literature.

I. Macroeconomics and Microeconomics

Microeconomics has traditionally been overlooked in Eastern Europe; even today the key economic decisionmakers with academic backgrounds are predominantly macroeconomists. They typically lack an in-depth knowledge of microeconomics; a familiarity with accounting, corporate finance, management, and other practical economic disciplines is rare. Thus the problems of firms that are struggling to undo the damage from decades of central planning often are blamed solely on incompetent managers instead of attributing some of them to the negative effects of macroeconomic policy.

The current vogue among East European reformers, for example, is to be tough with managers by deliberately tightening monetary policy and allowing

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enterprises to be brought to the brink of bankruptcy—and even to fail—so that managers (and labor) are taught "a lesson." Irrespective of whether the individual enterprises deserve such a fate, this model is almost suicidal because the state, in effect, is destroying its own property. The assumption that tight monetary policy will have the same effect in a non-market economy in the process of reform as in a capitalist market economy does not hold.

In market economies firms do not operate without liquid capital, nor do they have debt amounting to the total cost of inventories. In the real world this scenario is highly improbable since the credit market would not supply capital to such firms. In the East European countries, however, when governments lacked funds to cover the budget deficit and were reluctant to resort to internal or external borrowing, they simply stripped many state-owned companies of equity and substituted debt. The low cost of the debt and the fact that the state (central) bank made all lending decisions made this option viable. But the imposition of tight monetary policies and high interest rates is a prescription for disaster. It will increase the pressure on highly leveraged companies and put them into technical bankruptcy. In such an environment the wrong companies will be bankrupt along with the right ones. In other words, some firms are indeed unprofitable and deserve to go into bankruptcy, but others simply are not financed with a proper mix of equity and debt and may be worth saving. This is an elementary proposition, yet one which neither East European governments—nor the International Monetary Fund (IMF)—appear to have accounted for.

In Czechoslovakia, for example, the government has attempted to paper over the problem and avoid returning the so-called stolen equity by resorting to a cosmetic transfer of a portion of inventory credits outside the banking sector into a special institution at lower interest rates. But the problem of inadequate equity or overleveraging cannot be solved by cutting interest rates. The way to tackle the problem would be to issue government bonds and use the proceeds to replace the equity. The problem, of course, is that the government would have to admit to a larger internal debt and incur the cost of financing it. Because of the pressure for balanced budgets, this would either mean raising taxes or, more likely, cutting expenditures.

One of the more useful equations from my graduate economic course at Yale is: $o = f(e, s, p)$. Contrary to the initial impression, this does not mean that outcome is a function of extrasensory perception; rather it means that outcome is a function of environment, system, and policies. Regrettably, some Western economists advising East European governments have reduced the above equation to $o = f(p)$, that is, outcome is a function of policies, or at least implicitly, that the environment and system are not very important, and policies are all that matter. Thus, in the case of Poland, the government was advised that a sufficient fall in real wages—by allowing prices to settle wherever they would settle and controlling wages—would automatically stimulate recovery. It is true that in a market economy a sufficient fall in real wages ultimately leads to lower product prices, increased product demand, and increased employment. This automatic mechanism exists because profit-seekers will resume hiring labor or start new businesses once labor costs come down. However, no such automatic mechanism exists in a reforming non-market economy.

Even with a drastic fall in real wages, Poland's economic recovery is stalled because of the lack of infrastructure for private enterprise. Starting a new business in Poland still remains a complicated matter, beginning with the bureaucratic permission process, the lack of credit, shortage of office or manufacturing space, and the difficulties of securing manufacturing inputs. Although the Polish government may not have had much choice before it adopted the Balcerowicz–Sachs plan and "crashed" the economy, other East European countries should avoid this model (unfortunately it is too late to stop this trend). Before allowing a drastic fall in real wages, governments should attempt to implement measures to make it easier to start new businesses and take advantage of more competitively priced labor.

II. Price Discipline through Competition

In the real world, efficient monopolists and oligopolists, taking advantage of economies of scale, can earn extraordinary profits yet deliver goods to the consumer for less than small-scale competitive firms. In most Western countries, for example, the bulk of food is sold through oligopolistic (frequently duopolistic) supermarket chains, to the general satisfaction of most consumers. Yet many East European reformers are pushing for a return to the romantic capitalism of near-perfect "competition" of the pre-World War II era. In the name of competition, enterprises are being broken up into smaller units with little thought as to whether it makes economic sense, except that the smaller the units the more easily they can be privatized.

The widespread collapse of government-controlled distribution networks, particularly in the case of food and basic consumer goods, is likely to result in the creation of costly, inefficient, but highly competitive distribution systems. Although the rest of the world appears headed for supermarkets, department stores, and similar distribution outlets, some East European reformers are determined to recreate the mom-and-pop retail operations of the 1930s and then wait a couple of decades for competition to select the most efficient firms.

Moreover, a unique opportunity is being wasted. East European economies can build onto centralized distribution systems and convert them (at significant cost) to efficient Western-style distributors. But such conversions would require substantial large-scale investment, which in the near term could probably come only from the West. Instead of surrendering control of domestic retailing to foreigners, the policy seems to be to let consumers suffer the high cost and inefficiencies of an emerging small-scale domestically owned retailing sector. In the new environment, consumers first experience world market prices, but do not get a taste of world market quality or services.

For most East European countries, competition will require trade liberalization rather than breaking up large holdings or limiting the market shares of domestic enterprises. This is particularly true for tradable goods. With the development of more elaborate highways in Eastern Europe (by the late 1990s), residents of most countries will be able to reach the border within two hours. Trade liberalization and cross-border shopping should have a serious disciplinary effect on the price-setting behavior of domestic producers.

Trade barriers are a greater danger than domestic monopolists or oligopolists; in many cases there will be room for only one or two producers of a particular product in each country. As was apparent in the case of Skoda, the Czechoslovak automotive concern, the moment the government imposed a 40 percent duty on new and used cars imported from the West, Skoda boosted car prices almost 100 percent. The government's decision to revoke the duty is likely to be the best way of fighting Skoda's monopolistic behavior. (Skoda itself is suffering from the monopolistic pricing practices of its own suppliers.) The way to tackle this problem is by liberalizing imports, instead of limiting manufacturers to a share of the market. The domestic monopolist loses sales to imports, and responds by lowering prices. In a competitive environment, the anti-cartel office has no role. Just as anti-cartel offices in countries such as Belgium, Denmark, the Netherlands, or Sweden have little to do (these are, after all, truly open economies), the outcome should not be any different in Eastern Europe.

The Role of Commercial Banking

The reform process and the creation of market economies will be stymied without a Western-style commercial banking infrastructure. Despite this basic requirement, East European reformers are typically unwilling to permit Western banks access to set up the necessary infrastructure because domestic financial systems are so fragile. By Western criteria, Eastern Europe's banks are essentially bankrupt due to their limited capitalization (equity is typically roughly 1 percent of assets) and large holdings of loans inherited from the central bank that cannot be repaid.

Before reform, the public deposited its savings in state savings banks, which in turn lent most of the money to the central bank. Only a small part was available to savers in the form of consumer and real estate loans. The central bank made loans to enterprises, primarily to finance inventories, which in many cases were grossly overvalued and sometimes even nonexistent. When official policy dictated spinning off these dubious loans to newly created commercial banks, the central bank effectively rendered them bankrupt in the true economic sense. Government authorities have been unwilling to create a bank for troubled loans and recognize the obligation of the state to cover such loans because it would add to the government's debt.

Policymakers are also concerned about competition. If Western banks set up full-fledged commercial operations, domestic commercial banks—with their troubled loan portfolios—would be unable to compete. There is also the legitimate fear that foreign banks would pick the most creditworthy clients and further degrade the quality of the loan portfolios of domestic banks. Another argument is that they will tend to hire the best talent at high salaries rendering domestic banks unable to compete.

Under the guise of protecting domestic banks from competition, governments in Eastern Europe are ensuring that banking services will remain totally inadequate in the near term and unable to support the creation of full-fledged market economies. In contrast, the first decision made by the West German government was to engineer a massive infusion of West German banking skills into East Germany as a prerequisite for restructuring. The same change is needed in Eastern Europe, and Western banks could be attracted to this task by the size of the market and the prospects for solid profits. But first domestic banks must be given a chance to compete with Western banks and this, in turn, will require a massive clean-up of their portfolios.

This could be done without the loss of a significant portion of the population's savings by creating a special bank (along the lines of the Consolidation Bank in Czechoslovakia) for troubled commercial loans. In order to cover the liabilities of such a bank, the government would issue bonds at competitive interest rates to cover the shortfall between the special bank's liabilities and the true commercial value of transferred assets. But this means that East European finance ministries have to admit to another massive government liability. Ultimately, of course, the taxpayers will have to bear the cost of this rescue through higher taxes or a decline in government spending in other areas. As painful as this may be, such a step is necessary if a viable and competitive domestic commercial banking sector is to be created.

Restitution or Privatization?

Politicians in East European countries have made much of the issue of restitution or return of nationalized (confiscated) property. It is argued that to break with the Communist past once and for all, it is critical to repair this moral wrong and either return the property or compensate the former owners or their heirs. This position leads to a related question: Was Communism a disaster against which no one was insured? It also ignores the issue of whether restitution or return of property makes economic sense on a cost-benefit basis. If the by-product of such a policy is an environment of uncertainty about property titles and rights, accompanied by a multitude of lawsuits that will discourage foreign investors, the economic cost can outweigh the political benefits by a wide margin.

The East Europeans can opt to be "fair" and be unequal in poverty, or take a more practical step (in a cost-benefit sense) and be more equal in prosperity. An environment that guarantees the protection of private property and offers the possibility of earning profits is more desirable to entrepreneurs than struggling to qualify for restitution or the return of their former properties. Certainly the risks of legal challenges to ownership and the general capital shortage that would result as foreign capital flows halted would make it hard for potential entrepreneurs to operate private businesses.

Even if one concedes the morality of the argument, in practice East European politicians are not pursuing this goal. Their attitude appears to be that they cannot be bothered about the claims of Jews and emigrants. Judging from the number of claims lodged by Jews since 1989 for property confiscated in East Germany, there are a substantial number of Jewish property owners who could demand property restitution in Eastern European countries. Most of this property was confiscated by the Germans or by local fascist regimes during the war and was never returned. These owners will not be able to reclaim their property in other East European countries because typically these policies exclude nationalizations prior to the establishment of Communist rule. Some countries (such as Czechoslovakia) are also explicitly excluding emigrants unless they accept their original citizenship and return home. Such a myopic view ignores the fact that emigres may provide an economic contribution to development by staying where they are and channeling capital to their countries of origin. It also reveals that, to a considerable degree, restitution policies in Eastern Europe are driven by political expediency and not by morality.

Another characteristic of the restitution process appears to be that property return laws favor small property holders rather than large property holders. The general principle appears to be that the more lost in value terms, the smaller the percentage that will be returned. Most large property owners held the bulk of their property in stocks, bonds, and cash, for which they are unlikely to receive any compensation. The absurdity of this approach is illustrated by the following example. Under Czechoslovakia's restitution law, a holder of bonds, stocks, or large cash deposits seized after 1948 receives no compensation. Say the bonds were used to finance a mortgage on an apartment building. Now the government proposes to return the apartment building to its original owner or heirs free of any mortgage, despite the fact that the average apartment building in Prague in 1948 had a mortgage equivalent to about 65 percent of the building's value. The minority owner of the building will thus receive three times his or her original investment; the original effective owner (whoever financed the mortgage) will get nothing! The most productive segment of society, the true entrepreneurs, will get very little in terms of restitution or property; the least productive—holders of real property—will get the most. True entrepreneurs held their wealth in financial instruments—stocks, bonds, and cash—or fixed capital. They will typically receive little or no compensation. It is possible that this no longer matters as an incentive to entrepreneurship, but the new entrepreneurs may remember how the emerging democratic regimes favored the heirs of the most conservative capitalist class—the holders of real property.

Domestic Privatization versus Restructuring

Small-scale privatization should take place rapidly throughout Eastern Europe. Large-scale privatization will be effective only if accompanied by substantial restructuring and recapitalization. Reform economists in Eastern

Europe argue that the key to the turnaround of state-owned enterprises is a change in ownership. This is an extremely dangerous fiction.

The most common cause of failure of Western businesses is undercapitalization; by Western standards, all East European enterprises are undercapitalized. Many state-owned or semi-private businesses in the West perform well, or at least adequately, even though they are not privately owned. Just because an enterprise now has many new private owners instead of one state owner, it is unlikely to change in the short- to medium-run. The output structure will probably remain unchanged, as will the technology and quality, and there is not much likelihood of a change in the style of management. There is little reason to expect a large number of inexperienced stockholders to have a positive effect on the efficiency of a typical East European enterprise.

Two critical factors in turning around an enterprise in the near term are restructuring and an infusion of capital. But as we know from restructuring bankrupt companies, it is a painful and difficult process, particularly when too many parties are involved. Successful complex restructuring typically requires concentrated ownership and control; recapitalization requires investors with available capital (often foreigners). Yet in most Eastern European countries governments appear to be intent on encouraging broad share ownership and discouraging concentrated equity ownership. Moreover, in some countries, the use of foreign capital in the initial stages of large-scale privatization is either explicitly or implicitly discouraged.

But it is not clear that popular, broad-based privatization can work. In most Western countries, less than 10 (if not 5) percent of the population has ever made an active investment decision, say, to purchase stocks or bonds. In Eastern Europe, no one has had any experience with financial investments of this type. Yet reformers are pushing non-standard privatization schemes based on share ownership in a situation in which there is neither an objective valuation of company assets nor any basic financial information. Only a few individuals have any real sense of which companies are good or bad investments (and they may not be particularly eager to share such information). Moreover, buyers of securities have no investment experience and the entire process requires infrastructure that is totally lacking.

A far simpler and more sensible method of privatization would be to establish mutual funds and transfer a portfolio of shares to these funds. Each fund would be directed by a management team selected on the basis of specific criteria. Each fund would issue shares equal to the total population eligible to receive free (or low-cost) shares. A certain number of shares would be reserved for other uses (pension funds and so on).

This is a way to privatize rapidly without having to establish the initial value of assets and relative share prices. It eliminates the need to disclose information about companies to protect investors, and limits the number of shares acquired by "insiders" (investors with inside information about specific companies).

III. The Role of Foreign Capital

In contrast to the early euphoria, the West's perception of a successful economic outcome in Eastern Europe appears to have swung almost to the opposite extreme. This is probably an overreaction. I attribute the abrupt shift in opinion to several factors. First, the West has been shaken by the disastrous state of the East German economy. If, as the West Germans claim, East Germany was the best functioning economy in Eastern Europe, and even it is a complete basket case, it is hard to imagine what the others are like. This conclusion ignores an obvious proposition: By taking away the only two defenses available to East Germany—its separate currency and its comparatively low wage structure—the economy could not cope. Because of West Germany's decision to extend the use of the deutsche mark (the world's strongest currency) to East Germany, and to fix wages at levels that are six to eight times higher than neighboring Czechoslovakia's (with an identical level of productivity), the country went into shock. If this strategy had been forced on a solid market economy, such as Spain, the result would have been the same.

Second, the collapse of perestroika in the U.S.S.R. and the rise of regional ethnic strife does not exactly reinforce Western optimism. And the new political leadership in Eastern Europe exhibits nearly the same degree of political arrogance and economic incompetence as its predecessors. The only difference is that these leaders are not Communists, but hold "correct" views consistent with the new political environment.

Foreign Investment

There is little reason to be concerned about the region's vulnerability to a foreign takeover. Eastern Europe may have some attractions to investors, including cheap labor and relatively cheap assets, a central location in the global economy, and a potential bridge to the huge Russian market, but it is not by any means the most attractive market for Western capital. There are faster-growing markets (the Far East), cheaper sources of labor in solid market economies (Latin America), and more mature markets with huge spending potential (Western Europe, Japan, and North America).

One tactic that might work would be to create dual economies in Eastern Europe—a foreign-owned sector, with higher labor productivity and above-average wages, and a domestically owned sector. By creating a tension between the two sectors (labor in the second demands higher wages, but management points to its lower productivity), the lagging sector is likely to try to restructure and catch up. Western investment is also likely to bring with it management and marketing skills that are lacking at present. Because foreign investors are likely to be cautious about Eastern Europe in the face of the political and economic risks, they are also likely to run fairly lean and efficient operations with above-average returns on capital. Hence the misallocation of resources is unlikely to be a problem. Governments will have to monitor investments to prevent abuse, and will need to restrict so-called junk investments (gambling and casinos, highly speculative real estate deals, and investments with potentially adverse environmental consequences).

In my view, attracting enough Western capital will be a major struggle. Some government officials, including Václav Klaus, Czechoslovakia's finance minister, argue that Western investors should not be admitted until a later stage of privatization. Their position is that "there is little reason to worry that we will miss the boat as solid Western investors will gladly wait for the opportunity to invest here..." Those who share his vision may be in for an unpleasant surprise.

The international scene has changed over the past eighteen months since the Eastern European revolution began. The reconstruction of East Germany alone is expected to require hundreds of billions of deutsche marks, resulting in a dramatic drop in net West German capital outflows. The reconstruction of Kuwait, and down the road possibly Iraq as well, will require several hundred billion dollars. Japanese capital exports have declined significantly and are not likely to recover any time soon. Demand for capital in Latin America and the Far East continues to grow, and will compete with requests for funds from Eastern Europe. Finally, should the U.S.S.R. stabilize politically and embark on a significant economic reform, it will also compete with Eastern Europe for Western capital. With its huge endowment of natural resources and a population that will top 300 million before the end of the century, the U.S.S.R. is likely to prove more attractive to Western capital than the much smaller and poorer countries of Eastern Europe.

The bulk of external capital inflows that will be required for reconstruction will ultimately have to come from private rather than from official sources. The casual attitude about foreign capital—and in some cases outright suspicion of it—does not bode well for the economic outlook in the near term. Although foreign capital is not a panacea for an East European economic recovery, it is a critical component. Attracting Western private capital should be a much higher priority than it has been, and at least as much effort should be devoted to this task as is devoted to securing aid from Western governments, the European Community, and such international agencies as the IMF, the World Bank, and the European Bank for Reconstruction and Development.

IV. Industrial Restructuring: Will the Invisible Hand Work?

Given experience with the visible hand of central planners, I hesitate to propose that it still has a role—not in planning but in industrial strategy. Most industrial restructuring in Eastern Europe should occur through privatization and with the active participation of foreign investors. The marketplace and the profit motive should drive economic decisions. However, allowing the entire process to be controlled by market forces may not be the most sensible way to restructure the industrial sector.

There are several considerations that lead me to this conclusion. First, East European economies are in a state of severe crisis and lag decades behind Western Europe. If democracy is to survive, progress on the economic front should be as rapid as possible—probably more rapid than a free-market approach would permit.

Second, although interfering with market processes is risky in the West because decisionmakers may not know what the optimal outcome is, this is not the case in the Eastern Europe. We have ample experience from the West as to what the desirable market outcome is: Why not help the process along and accelerate it? For example, if we know that 85 percent of the food in Western Europe is sold in supermarkets, how can we go wrong encouraging a similar development in Eastern Europe? Although it is not always advisable to jump a stage of development, it would certainly make sense to do it in this case and deliberately encourage the concentration of food distribution networks in the hands of several highly efficient companies.

Third, the so-called follow-the-market philosophy is an incremental process that does not entail courage and foresight. A typical market approach to restructuring is to start small and grow step by step. A bold strategy that deliberately encourages a contraction of those industries in which a country lacks comparative advantage (which may have been subsidized in a noncompetitive market) and encourages those sectors with superior prospects may well be a sound approach to industrial restructuring.

Surely one could not envision letting the market alone decide the degree and pace of downsizing Eastern Europe's coal and steel industries. Equally, one could hardly object to a deliberate and aggressive strategy to promote tourism and other service sectors to replace failing manufactures. I could even envision a government role in building several key multinational companies in each East European country in areas where they have a comparative advantage, based on tradition and the availability of attractively priced inputs or resources—or both. Similarly, a government role negotiating cross-border mergers would make sense. For example, a trans-East European airline—something along the lines of Scandinavia's SAS—would be a useful replacement for several uneconomical country-based airlines.

Is Trade with the Soviets and Eastern Europe Dead?

The current Western prescription for Eastern Europe calls for redirecting trade away from the U.S.S.R. and Eastern Europe. In part, this is based on perfectly valid reasons: the Soviet economy is a mess; deliveries of oil and critical raw materials to Eastern Europe have been curtailed and are only available for hard currency in cash; and the contraction in East European economies has reduced the demand for imports. In the long run, however, intra-East European trade and trade with the Soviets is likely to be at least as important for these countries as trade with Western Europe.

With the exception of Poland, the Eastern European countries are relatively small (and will be even smaller if Yugoslavia and Czechoslovakia are partitioned), and will depend heavily on cross-border trade with their neighbors. Except for Poland (which has good supplies of coal), these countries, particularly land-locked Czechoslovakia and Hungary, are poorly endowed with natural resources and dependent on access to Soviet energy and raw materials. When all trade is conducted at world market prices and in convertible currency, the Soviets will undoubtedly be happy to engage in such trade. In fact, in the case of natural gas, Eastern Europe's desire to diversify suppliers and reach out to Algeria, the Islamic Republic of Iran, and Norway, are proving a serious threat to the U.S.S.R., whose sales to the West cannot be increased.

In addition, the quality of East European exports limits their potential in Western markets, even at the low-priced end. The point is that Western markets have only a limited ability to absorb low-quality—though rather cheap—consumer goods and machinery. It is the markets of certain developing countries (such as China, India, Africa, and Latin America) along with those of the U.S.S.R. and the rest of Eastern Europe that will offer superior sales potential until the economic recovery is under way and a true market economy has begun to emerge. The collapse of trade among East European countries and with the U.S.S.R. deepens the region's economic woes. To the degree that it reflects the absence of a payments mechanism, the provision of credits by Western governments and international organizations could be money well spent—or rather well lent!

Requirements of the Reform Process

In the past eighteen months many serious errors were made in the course of reforming the Eastern European economies. The damage to an already difficult and complex reform process has been done, and is bound to deepen the next crisis. Eastern Europe's present crisis, in relative terms and for some countries, will, at its depths, go beyond the Great Depression of the 1930s. Most of the errors that have been committed can be rectified and there are lessons to be learned from the past. But it is clear that a fast turnaround in the region will require a much greater commitment of Western resources than had been anticipated, together with a parallel infusion of private capital investment.

It would also make sense to turn to the West for technical assistance—beginning with macroeconomic policy and continuing on to enterprise-level strategic decisions about restructuring. A determination to go it alone may well turn out to be a poor posture. In the end, the reformers will be judged on the results of their reforms, not on the domestic content of reform thought. As for the future, I am actually fairly optimistic about a strong recovery if:

- The transformation to a market system is retrieved from academic reformers and bureaucrats and turned over to an eclectic group of individuals with solid industrial management experience. We need capitalists, or at least people who think like capitalists, not chronic planning types or specialists who advocate inflexible policies.
- Eastern European political leaders concentrate on public welfare instead of focusing on ethnic strife.

- The West stops posturing and transfers a significant portion of the peace dividend (I do not buy for a moment that there is none) to Eastern Europe for development (and to stimulate new markets). A new plan for Eastern Europe should include amounts not in the tens—but rather in the hundreds—of billion dollars over the next decade.
- The West opens its markets to Eastern European products and accepts the need to restructure its own industrial and agricultural sectors to survive the competition.

I am convinced that Eastern Europe can modernize its economies, and I hope that we will not have a civil war, a confrontation between countries, or a reversion to some form of authoritarian military dictatorship anywhere. My own guess is that some countries will spurt ahead. If I were looking for a new Spain in Eastern Europe, I would bet on Slovenia, Bohemia and Moravia, Croatia, Hungary, and possibly some of the Baltic republics. I am somewhat less optimistic about Poland and the Balkan area—other than its westernmost part. This judgment reflects historical considerations; it is much easier to recover to a "normal" rank, having been temporarily depressed by the disaster called communism, than to rise from rags to riches like the Republic of Korea or Taiwan (China). The sooner Eastern European reformers regain this historical perspective, the more hopeful I will be about the prospect of their respective countries rejoining developed Europe.

Comment on "Prospects for Economic Reform in Eastern Europe," by Vanous

Manuel Hinds

I support Jan Vanous's overall diagnosis of the current economic strategies being implemented in Eastern Europe. These strategies frequently ignore or underplay the microeconomic differences between the capitalist economies and the economies of Eastern Europe. As a result, the application of these policies leads to unexpected results, such as large and prolonged drops in real production, protracted financial problems in the existing enterprises, and the conspicuous absence of a supply response.

Although I agree with that analysis, I have two comments. First, I don't think Vanous goes far enough in his iconoclastic questioning of the microeconomic differences between Eastern Europe and normal market economies. Thus, his analysis cannot be extended to integrate macroeconomic results with a sustainable macroeconomic stabilization policy. Second, Vanous does not question the true level of wealth and income in Eastern Europe, which should condition expectations about the feasible outcome of economic strategies.

I. Stabilization and Microeconomic Behavior

Vanous argues that the economic strategies now in place in Eastern Europe would force a deeper adjustment than the same policies would impose on enterprises in a full-fledged market economy because the government played a financial trick; it extracted all the equity capital and provided the same funds through the banking system, leaving the enterprises vulnerable to higher interest rates. In his view that is why these programs are not producing the desired results.

I doubt this diagnosis for several reasons. First, the stabilization programs have not led to substantial excessive adjustment by enterprises. Just the reverse. Enterprises have not adjusted at all. It is true that stabilization policies have pushed many enterprises to the brink of bankruptcy—in Yugoslavia within a few months and in Poland with a longer lag—but they have remained in this precarious position, with less output, with their labor force intact, without any gains in efficiency, in a suspicious limbo that makes one wonder how they finance themselves. By refusing to adjust—trimming administrative expenses,

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reducing their wage bills, getting rid of unprofitable activities and diversifying into profitable ones—the enterprises face an explosive situation: either all of them go bankrupt, or the government supplies them with new money. When this has occurred in the past, the enterprises have used the money to increase wages or benefits, and have returned to the brink of bankruptcy.

Furthermore, although financial vulnerability increases with leveraging, I doubt whether reduced leverage would have any effect without deeper structural changes in the corporate sector. Vanous refers to the firms' defective financial structure. That is, their lack of liquid capital (which I interpret to mean the absence of liquid assets) and their lack of equity capital (an item on the other side of the balance sheet). He asserts that because of the shortage of equity capital, enterprises must finance their inventories completely with debt instruments. But it is difficult to understand how these two things come together. If a firm does not have liquid assets (which would include inventories), how would the interest expenditure caused by their financing lead to bankruptcy? If they have inventories but not equity capital, why not sell the inventories to reduce their financial burden? They could also sell other liquid assets that they do not need (up to the point at which the value of the assets sold equals the interest payments due). That would not provide equity capital, but it would avoid bankruptcy.

If the sale of these assets would not solve the liquidity problem, the enterprise does not generate enough cash to service its debt. Either overall debt is excessive, given the actual value of the capital assets of the enterprise—which would suggest the existence of a serious capital loss—or the current costs of production are excessive, or both. I suspect that the problem is both. Capital losses exist in all cases in which funds were directed toward activities in which the countries did not have comparative advantage or when they invested in obsolete or low-quality equipment. These cases seem to be abundant.

It is fair to say that enterprises in the region are seriously overstaffed, and do not use equipment efficiently. Although overleveraging may have been a factor in Czechoslovakia, it did not exist in Poland or Yugoslavia when stabilization programs were initiated. The negative interest rates that preceded these programs left the enterprises quite comfortable financially. In Poland the real debt of the enterprises was almost completely wiped out; in Yugoslavia, enterprise debt was left at reasonable levels. The only difference it made was that firms in Yugoslavia had to be rescued sooner than Polish firms (and the government of Yugoslavia expanded the money supply earlier than the government of Poland to avoid widespread bankruptcies).

In both cases enterprises used whatever resources they could find to protect—or increase—the real income of workers rather than to become more efficient. For example, in May 1990, Yugoslav officials allowed the banks to repatriate their international reserves deposited abroad to finance ailing enterprises. From June to September the enterprises increased salaries 40 percent—with borrowed money—and returned to the brink of bankruptcy. It is easy to believe that they would have done the same with money acquired as equity capital.

I also found Vanous's position regarding financial problems in contradiction with his stance on trade reform. He argues correctly that the best protection against oligopolistic and monopolistic pricing practices in tradable goods is trade liberalization, and he suggests that all protection be eliminated immediately. But it is not clear that a reduction in tariffs would force enterprises to become competitive. If enterprises do not adjust to restrictive monetary policies, why would they adjust to competition from abroad? The shock to domestic enterprises caused by an immediate reduction of tariffs is likely to wipe out the entire tradable sector (and with it, all the demand for nontradable goods from that sector), leaving the population practically without income.

Independent Monetary Policies

Vanous believes that independent monetary policies are essential, and cites East Germany as proof of the dangers of the converse situation. This is not a good example, however, since the problem is not caused by the stability of the deutsche mark; it is the result of the pressure to equalize wages—including social security and fringe benefits—across Germany. This raises real wages beyond the marginal productivity of East German workers, but reflects a problem in the labor—not the monetary—market.

The main danger is that monetary policies could become too independent—in the sense that countries would have the independence to be expansive. The possibility of devaluing the currency is always useful, not only because of domestic monetary disorders but also because of negative terms of trade. But monetary stability in general is preferable to instability, and trying to link the currency to an external parameter—which could be a basket of currencies—may not be a bad idea, provided that monetary policy then adjusts to maintain that parity. That is, provided that monetary independence is surrendered.

Vanous cites Spain as an example of a country that would be destroyed if it had to abandon its independent monetary policy. Spain abandoned its monetary independence the moment it entered the European monetary scheme. The Bank of Spain is obliged to follow the leadership of the Bundesbank, and the monetary stability provided by the arrangement has been a factor in the country's recent success.

Wages

Vanous criticizes governments for allowing reductions in the real wage without putting in place the necessary infrastructure to develop the private sector. But how can government prevent a fall in the real wage when the country is producing less than it is consuming and when enterprises do not fire workers? There are two possibilities. One is to put the burden of increased unemployment on the young. This is an unacceptable policy, however, as the decline in real wages that would be necessary to bring about macroeconomic equilibrium is likely to be too large. (Indeed, in many countries unemployment rates among the youth are very high but nominal domestic demand is still excessive.) The other possibility is to borrow abroad to finance the excess of the real wage over what the country can afford. If foreign funds are unavailable, monetary expansion will be required, and either inflation or rationing and scarcity will reduce real wages. Government cannot avoid that.

Macroeconomics and Microeconomics

I have argued on several occasions that the perverse behavior of enterprises is just a symptom of the principal–agent problem. Without an owner (an advocate for capital in the enterprise) the firm has every incentive to spend its liquid resources to increase the real income of the workers and managers rather than to increase its net worth. At its extreme this behavior is conditioned by two rules. One is that no one will be fired. The second is that marginal revenue will be equal to marginal non-labor costs, in cash terms. In this way enterprises maximize the real income that workers and managers can extract in cash—which results in decapitalization, as depreciation is not a cash expenditure. If the prices of nonlabor inputs increase relative to wages, or if the enterprise finds it difficult to finance those inputs, rather than adjusting to become more efficient, the monopolistic enterprise would raise prices and reduce output to the point where it could comply with the second rule. Some enterprises may export to get cash, but they would do so at a loss, and only up to the point where this loss did not cut into their requirements for cash. This is approximately what we see happening in Eastern Europe.

This is not the only microeconomic problem causing rigidity in enterprises. Housing problems, the lack of an adequate financial system, and many other factors contribute to such rigidity. However, if the principal–agent problem is not resolved—mainly through massive privatization and the encouragement of a strong new private sector—enterprises will continue behaving in a perverse way.

II. Institutional Reforms

The proposal discussed by Vanous for recapitalizing enterprises would produce strange results. The government would supply funds to the enterprise, which the firm would use either to repay bank debt or to invest in restructuring. In both cases the citizens would be paying—through taxes—without ownership or debt claims on the enterprise. If, later, the enterprises—or the shares of the mutual funds—are sold, they would pay again, but would still not acquire management rights. Moreover, since the recapitalization would automatically cleanse the portfolios of the banks, Vanous's proposal to recapitalize them independently seems unnecessary.

The problems of both banks and enterprises are much deeper than just their balance sheets. More money will not make them more efficient. It may, in fact, make them less efficient because they would have more money, which they might not spend wisely. In a financial market with many inefficient enterprises, the banks have little choice but to lend to them. So the banks would become insolvent again through lending to bad borrowers.

Vanous correctly notes that just privatizing will not make enterprises efficient. His privatization plan would not resolve the principal–agent problem. The Western managers of mutual funds would be vulnerable to the same temptations, since ownership of the mutual funds would be quite dispersed. The new owners would have little incentive to control the managers of the trust funds because their stake in the enterprises would be too small.

Even if, as Vanous suggests, managers are compensated on the basis of profit-sharing, such schemes are a poor substitute for the real motivation of an owner: the maximization of the present value of the enterprise. The power of the managers would allow them to appropriate more than the equivalent of the profit bonus (without ensuring the efficient operation of the enterprise). And on top of that, they would enjoy enormous political power.

In many ways turning over all the enterprises in the economy to a few mutual funds would simulate the structure of the old branch ministries, especially if they are organized along industrial lines—one of the possibilities that Vanous mentions. In fact, if this would work, I see no reason to privatize. Why not just create mutual funds and turn managerial responsibility over to them?

Although foreign managers can be useful, the problem is not that simple. For one thing, such expertise is not in unlimited supply and may command a salary so high that enterprises could not afford it. For another, foreign managers too could be subject to substantial conflicts of interest. And third, East Europeans are unlikely to accept foreign managers—especially if they have to fire workers.

Another important issue is whether foreign capital can be relied on to finance reconstruction, since it would require practically all the liquid resources available in international markets. Moreover, the influx of capital does not seem to be a solution. By the end of 1991, Germany will have transferred to the eastern region an amount equivalent (in real terms) to the whole Marshall Plan—for only 16 million inhabitants; about $9,000 a person. But the economy in former East Germany is very depressed and the prospects of recovery are still dim.

For these reasons Eastern Europe is likely to have to rely on local managers, local capitalists, and local savings. Thus a privatization framework that ensures that entrepreneurial groups control each enterprise is essential. Many proposals in the literature address these issues.

Finally, the establishment of private banks should be designed to make the sector more efficient. These banks need not be the old ones in new guise—and maybe it is better that they are not. In any case financing for socialized enterprises has to be constrained to avoid crowding out the efficient by the inefficient. This can be done by taking away the old banks' authority to mobilize deposits, and giving it to new banks. All financial savings would go at the margin to the private sector, while the old banks would become the depository of all the bad loans—as they are at present.

In sum, my impression is that Vanous underestimates the gravity of the situation and the difficulties ahead. I hope I am wrong.

Floor Discussion of the Åslund and Vanous Papers

Jan Vanous, responding to a question about foreign experts, said the issue is not one of Western managers. He is indifferent as to whether the managers are Western or Eastern, so long as they are competent. He stressed the constraints under which Eastern European managers have to work. Typically, for example, a manager in Czechoslovakia has been in the job no more than eighteen months, has inherited a real mess, and is shackled in his efforts to restructure the company by institutional barriers—set up in some cases by the World Bank. He can't liquidate assets, including real estate, although he could get a lot of money from, say, the Deutsche Bank, which is desperate to establish a headquarters in Prague. Although prices are higher in Prague than in London, the World Bank says these assets "don't have any value."

Suppose I go to the bank to finance inventory, and I'm buying copper and aluminum. The bank is under instructions to cut everybody's inventory, so it won't lend me the money. The fact is, if I make the wrong decision, I can sell the stuff across the border. The bank doesn't care if I'm buying textiles that may be salable at 10 cents on the dollar or something that I can always liquidate. The banks are totally incapable of making a distinction. Tell me how an enterprising manager can function in this environment?

It's not true, Vanous said, that enterprises don't want to adjust. They are willing to adjust a great deal. But they don't have the necessary freedom, liquidity, banking structure, or markets—in short, a system that can respond. Take the example, Vanous continued, of a fundamentally sound enterprise with a good product, which the government decides to sell to Iraq for $500,000. Now Iraq refuses to pay, and the government tells the enterprise: it's your problem. The government is responsible for the sale, but is forcing the business into technical bankruptcy. Similarly, banks that in the past have routinely rolled over credits to finance the inventories of firms with no access to liquid capital are now quadrupling interest rates and setting loan terms that would cause Western companies to fold.

Vanous admitted that some Eastern European businesses are basket cases and should declare bankruptcy. But he maintained that the fact that a business is in bankruptcy says nothing about whether the enterprise should survive or not. We have an obligation to bail out companies that are bankrupt because of bad

This session was chaired by John Holsen, Special Adviser to the World Bank.

government decisions, Vanous argued. These people are not lazy or incompetent; most of them are trying hard.

He felt that these policies could push Eastern European countries toward the same large-scale bankruptcies recorded in East Germany. East Germany can afford them, he said; they can ruin the whole economy and rebuild it. But nobody will bail out other Eastern European economies.

Suppose, concluded Vanous, 90 percent of an enterprise's output typically goes to the U.S.S.R. But because trade is disrupted, the enterprise is on its knees, despite having a good—not a shoddy—product. Six or nine months from now the Soviets will have come to their senses and trade will have resumed. Should the firm be allowed to be in bankruptcy or should we bail it out?

These are tough decisions. You cannot simply leave such decisions to the market, or all enterprises selling to the U.S.S.R., whatever the quality of their product or management, will declare bankruptcy. Their market has vanished; it isn't just a problem of not adjusting, he warned.

A World Bank participant asked Åslund about events the day before—the agreement of nine Soviet republics on a renewed federation, cuts in taxes, and increased subsidies—in the midst of a fiscal crisis. If stabilization could be carried out from this political base he wondered which of Åslund's three categories it fell into: democratic stabilization, more of the same, or authoritarian stabilization?

Åslund was unimpressed with the events of the day before, saying they simply continued Gorbachev's course of concealing the depth of the crisis instead of dealing with it. The agreement was convenient for both leaders, he said—for Yeltsin because he had to look constructive for a month or so before looking destructive again, and for Gorbachev because he needed to show he could negotiate an agreement, which he had proven incapable of doing. It is rather natural for these nine republics to develop a confederation, he explained. But at the same time four republics, plus Georgia, do not want to stay in the U.S.S.R. So either they will be allowed to go or there will be a military clampdown. Aslund believes this group will not reach a compromise by peaceful means and sooner or later will demand to leave.

The substance of the agreement, Åslund warned, does not improve the U.S.S.R.'s financial situation but represents an extension of madness; a leapfrogging of increasing taxes and higher state expenditure. State spending at all levels amounted to 75 percent of gross national product (GNP) in April, up from around 52 percent, he noted, although state revenues traditionally run about 42 percent of GNP.

Grigoriev (discussant) stated that he, too, saw the agreement between Gorbachev and the nine republics as populist, solving today's problems but not tomorrow's. He also explained that the departure from the Central Soviet Parliament of members from the Baltics, Moldavia, Georgia, and Armenia had reduced its power by half.

Jeffrey Sachs (speaker on an earlier panel) was disturbed by the broad generalizations in Vanous's paper and in Hinds's comments. He felt that Vanous's observations about debt in Czech enterprises were correct, but that he was wrong to generalize across countries without supporting data. He was even more disturbed by Hinds's blanket statement about there having been no adjustment and his assertion that these enterprises were all operating at the brink.

In Poland, he said, it's true that many enterprises are "brain dead" as a result of bad management and the lack of corporate governance, but many are adjusting rapidly. A 50 percent jump in exports reflects a great deal of energy, as a World Bank mission found, and it is not just the result of the prior recession. Thousands of new contacts were made last year, and many firms that produced only final goods before are now producing components as intermediate goods for western German firms.

Second, said Sachs, the cash flow is exactly the opposite of what the speakers said. In 1990 the firms operated almost completely with positive cash flows, profits were high, much debt was liquidated at the beginning of the year, and the accumulation of real money balances fed the growth of the money supply, to the point that the enterprise sector had $5 billion in monetary assets at the end of February 1991. Many enterprises are in trouble, but most firms will manage unless a wage explosion takes place. If there were a complete decontrol of wages, these firms would be up against the wall—or at least would quickly spend down the quasi-rents of capital.

Third, Sachs continued, the notion that there has been no structural adjustment is belied by the nearly 20 percent drop in state industrial employment (mostly voluntary) since mid-1989. True, little of that has come from collective layoffs. Most of it came from workers leaving for higher-paying jobs in the service sector. But this is real structural adjustment of the most desirable sort. This is atypical in development, where we are used to thinking about how to manage industrialization. But in Poland only 30 percent of the labor force is in services, compared with the OECD average of 55 percent, and in 1988 only 9 percent of the Polish labor force was in distribution, compared with an OECD average of 19.2 percent. Since 1990, he said, Polish workers have left heavy industry and have opened up tens—and perhaps hundreds—of thousands of shops, pizzerias, travel agencies, investment advisory firms, and consulting and accounting firms.

Sachs described important differences between Czechoslovakia, on which Vanous focused, and Poland. For one thing, Czech enterprises began with heavy indebtedness; Polish firms did not because most enterprise debt was written off during a period of hyperinflation. By contrast, Czechoslovakia came into this period with stable prices and with monetary accounts in which credits to the enterprise sector were more than half of GNP.

Moreover, Sachs added, Poland had a running start on Czechoslovakia. Poland had been breaking apart since 1981, and martial law did not stop liberalization. Poland's prime minister, who worked in a private trucking company from 1982 to 1986, had his own private consulting firm after 1986. Czechoslovakia, which had a far more repressive regime, was "in a coma" until November 17, 1989.

As for policy implications, concern about the distribution sector is largely misplaced, Sachs said, because there can be a quick pickup in this sector. In Poland in early 1990, for example, there was no way to get goods from factories to market, so people drove goods to market in their own cars and lorries—and those people are now among the richest in the country. In six months more than half the lorries were privatized; in one year the private transport sector became extraordinarily well-capitalized through retained earnings. And warehousing and distribution went into private hands quickly.

As for the question of indebtedness, Sachs agreed that if Iraq had suspended a claim, something had to be done about it. But it was not so simple, he thought, to decide what to do about the problem of managing credit. Tight credit is important not only for maintaining macroeconomic stability but also because it forces a liquidation of assets to the public.

Finally, apropos of "no aid without reform," Sachs chided the West for its mind-boggling failure to spell out the case for "with reform." Sachs regretted that the West has emphasized the stick without defining the carrot. Defining what must be done for large-scale aid could, after some painful politics in Washington, make an enormous psychological difference for Soviet reformers and politicians, who could coalesce around a plan that promised to "bring in the bucks." In Poland, the commitment to a future stabilization loan was critical to inducing people to sit down and hammer out a program. Without that promise, Sachs doubted they would have agreed to convertibility, which is so vital to exports and rational domestic pricing.

Grigoriev (discussant) had found the position of the Houston group on international help to be reasonable: no substantial money without political reform. But what does political reform mean? The preconditions for financial aid are unclear, but obviously the U.S.S.R. needs to build the financial infrastructure needed for market reform, and the best way to begin slipping money in small amounts to the emerging market sector is to create technological and educational preconditions for the market economy. Unlike Eastern Europe—one week of crisis and radical reform—the process will be long and painful, he said. To save the country from economic collapse and push it toward a market economy will take not just 1991, but all of the 1990s.

Observing that to take unpopular measures you need a credible government, one participant from the United Nations asked if an authoritarian (not totalitarian but authoritarian) government was not the only solution to stabilizing the U.S.S.R.

Vanous responded that he was more optimistic. In 1989 Poland, Hungary, and Czechoslovakia managed to balance their budgets. Particularly in Poland, he said, you can see how much of a beating people are prepared to take—at least to begin with—if there is a credible policy they support. Political legitimacy through democratization is very forceful and was, he thought, possible.

A participant made three brief observations. First, speaking of the need for a critical mass of entrepreneurs to support the social process of reform, he expressed amazement at Vanous's statement that mom-and-pop stores are not useful. He said that such stores give people the feeling of being real owners with a vested interest in supporting reform.

Second, he said the prospects in Eastern Europe are affected by the worsening international and domestic climates. The economies of Romania and Bulgaria, where there has been no real attempt at stabilization, are falling apart and the government must do something. These countries don't have the tools at their disposal to control their economies and the participant didn't feel that the intellectual advice they were getting from the International Monetary Fund and the World Bank was enough to put a lid on the domestic economy. The paradox in these countries—laggards in the movement toward market-based economies—is that the fewer elements of a market economy they have with which to move forward, the more acute is the need to act quickly. And, he commented, the governments of Romania and Bulgaria seem to be suspended somewhere above society, unable to work the levers to control their economies.

Hinds (discussant) emphasized that managers of Eastern European firms, if they have the right incentives, can solve their own problems. The big problem in Poland was not in the private sector, he argued, but in the socialized enterprises, where there is heavy pressure on wages. Unemployment is growing but mostly among people just entering the labor market; there have not been massive layoffs in the socialized enterprises. Should a wage explosion occur, stabilization will end and Poland will revert to very high wages.

Holsen (chair) closed the session with some general remarks. Åslund, he said, saw stabilization as the main issue; many people in the World Bank would look as well at systemic reform, because they are so closely linked. But stabilization requires hard budget constraints to control enterprise management and price reform to eliminate subsidies—so the differences are in words, not substance. Bank analysts, he said, emphasize that the present disruption of production comes largely from the disruption of the supply network. Price stabilization, with market-clearing prices, is the most efficient way to overcome the problem—so there could be short-term gains from systemic reform of pricing policies.

Holsen expressed concern that so many people in Eastern Europe and in the U.S.S.R. are fed up with the state because many World Bank observers believe the state has a positive role to play. He observed that one problem in many countries, including Czechoslovakia, is that free markets can become an ideology instead of a pragmatic way of organizing affairs.

Holsen reminded the audience that both Grigoriev and Åslund saw populism as a threat to reform. One issue we are far from resolving, he said, is how much privatization to aim for, and how fast. Unlike Vanous, many economists argue that rapid privatization—particularly of distribution, trade, and transport—is very important. Another is how to bring about enterprise restructuring—how to shock a potentially viable enterprise enough to permit it to restructure and become profitable and how to dispose of enterprises that are no longer viable so that their resources can be reallocated. A delicate balance will be required in the U.S.S.R., he felt. The World Bank endorses the Soviet proposal for a stabilization fund that would offer financial and technical assistance for restructuring, but would want it to be managed so that it is not a bailout. He agreed with Vanous that it is easier to talk about macroeconomic policies and systemic reform than to discuss specific issues.

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The Post–Cold War World: Implications for Military Expenditure in the Developing Countries

Robert S. McNamara

Military expenditure in developing countries quintupled in constant dollars between 1960 and 1988, increasing at a rate twice that of per capita income and accounting for approximately 4.3 percent of gross national product (GNP) in 1988. Can such large outlays, in countries so drastically in need of capital to accelerate economic and social growth, be reduced? The paper argues that the end of the Cold War offers dramatic opportunities for moving in this direction. A combination of United Nations Security Council guarantees of territorial integrity; continuing reductions in conventional and nuclear arms by the great powers; tight control of the proliferation of weapons of mass destruction and their delivery systems; substantial limitations on arms exports; and tying development aid to reductions in military expenditure can reduce the risk of war among developing nations and halve military expenditure as a percentage of GNP by the end of the decade. International organizations, including the World Bank, can catalyze this process, and accelerate economic and social development without reducing security.

In 1988 military expenditure in the developing countries amounted to approximately $170 billion, or 4.3 percent of GNP (USACDA 1990). Outlays quintupled in constant dollars between 1960 and 1988 (Sivard 1989), increasing at a rate twice that of income per capita, and reached a level only slightly below total expenditures for health and education.

Can such large outlays, in countries so drastically in need of capital to accelerate the rate of economic and social advance, be reduced? My answer is yes. This paper argues that the end of the Cold War offers dramatic opportunities for moving in this direction. A combination of United Nations Security Council guarantees of territorial integrity; continuing reductions in conventional and nuclear arms by the great powers; tight control of the proliferation of weapons of mass destruction and the means to deliver them; substantial limitations on arms exports; and tying financial aid to reductions in military spending can lower the risk of war among developing nations and halve military expenditure as a percentage of GNP by the end of the decade. International organizations, including the World Bank, can catalyze the process and accelerate economic and social development without reducing security.

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I. New Thinking for the Post–Cold War World

In 1941, in the midst of a titanic struggle not yet won, Franklin Roosevelt and Winston Churchill presented a new vision of a postwar world in the form of the Atlantic Charter. Their dream was never to be realized; the Cold War intervened. Today, for the first time in half a century, we have another opportunity to reformulate our thinking about international relations, and emerge from the Cold War to a totally new vision of world order. The shift should allow us to enhance global stability and at the same time produce significant long-term budgetary savings to augment the economies of the industrial and the developing countries.

The Global Context

The principal influence on global economic, political, and social trends in the late twentieth and early twenty-first century will be the revolutionary changes in Soviet policy introduced by Mikhail Gorbachev. And I say that in full recognition of the fact that his days in power may be numbered. The Soviet leader, who has emphasized on numerous occasions that war between the great powers is no longer an acceptable instrument of political change, concludes that "today's problems between East and West must be resolved through political means." He has indeed ended the Cold War. But the West has not yet revised its foreign or defense policies to reflect that proposition. In the United States, for example, in the fiscal year ending September 30, 1990, defense expenditure totaled approximately $300 billion. In constant dollars that is 50 percent more than a decade ago, only 3 percent less than at the height of the Viet Nam War, and only 10 percent below the peak levels in the Korean War. Moreover, the five-year U.S. defense program projects only a gradual decline from 1990 levels. Defense outlays in 1996, in constant dollars, are forecast to be at least 25 percent higher than they were in the midst of the Cold War.

Although the great powers, and particularly the United States, must continue to be prepared to repel aggression of the kind we witnessed in the Gulf, a defense program of the size we are contemplating is not consistent with my view of the post–Cold War world. Before Gorbachev's appointment in March 1985 as general secretary of the Communist Party, Soviet foreign (and defense) policy was like a zero-sum game; Moscow could guarantee its security only to the extent that other nations felt insecure. Since 1986, however, Gorbachev has sought to redefine Soviet perceptions of national security. The point that he returns to when discussing foreign policy is that modern military technologies have rendered war an inadmissible means of advancing a nation's security interests. What is the origin of this thinking? The answer to that question will permit us to judge whether, as some believe, this is only a phase that may pass with Gorbachev's departure.

Two forces have led to the change in the Soviet view of relations with the West. The first is obvious: the country's economic crisis. But there is a second reason as well that is not often recognized. Gorbachev has come to understand the increasing danger of military action in the nuclear age. The Soviets have studied the origin and implications of the confrontations over Berlin, Cuba, and the Middle East, and they recognize that through misinformation, misjudgment, and miscalculation, such crises may escalate. In this connection let me quickly summarize a series of four recent meetings, attended by senior Soviet, Cuban, and U.S. officials, which were held to discuss the Cuban missile crisis of 1962 and review the lessons to be learned from that event.

With hindsight, it is clear that the United States and the U.S.S.R. were on the verge of a military conflict that would have brought the world to the brink of nuclear disaster. Just how close disaster was is demonstrated by a recently released cable written by Fidel Castro. The cable, dated October 26, 1962, was sent to Nikita Khrushchev, and said: "I consider a [U.S.] attack to be almost imminent—within the next 24 to 72 hours. . . . if they manage to carry out an invasion of Cuba. . . then that would be the moment to eliminate this danger forever [that is, by launching Soviet nuclear weapons from Cuba against the United States] in an act of the most legitimate self defense. However harsh and terrible the solution, there would be no other." Those are chilling words.

Two lessons were learned from the discussions. (For a detailed study see Blight and Welch 1989.) First, in this age of high-technology weapons, crisis management is dangerous and uncertain. It is not possible to predict with confidence the consequences of military action between nations equipped with such weapons. Therefore, we must direct our attention to crisis avoidance. That, I believe, is what Gorbachev has sought to do by proposing dramatic changes in East–West political and military relations. But until quite recently—and I would say even today—the world has failed to visualize the implications of the changes that are under way. Perhaps at this stage that is to be expected; for more than forty years Western foreign and defense policies have been shaped largely by one major force: fear of, and opposition to, the spread of Soviet-sponsored communism. It will require a leap of the imagination to conceive of new national goals.

A World of Conflict

Before the world can respond to Gorbachev—and before we can deter and, if deterrence fails, respond properly to Iraqi-type aggression—we need a vision of a world that is not dominated by U.S.–Soviet rivalry. As the Iraqi action demonstrates, it will not be a world without conflict. Racial and ethnic differences will remain. Political revolutions will erupt as societies advance. Long-simmering disputes over political boundaries will continue. Economic differences among nations will increase.

It is often suggested that Cold War rivalries have turned the developing world into an ideological battleground (see appendix 1). In the past 45 years, some 125 wars and conflicts, leading to 40 million deaths, have taken place there. Rivalry has undeniably been a contributing factor and some of the most costly wars, for example, Korea (4.5 million dead), Viet Nam (2.5 million dead), and Afghanistan (1 million dead), have directly involved one or more of the great powers. Still others involved former colonial powers, as France, Great Britain, the Netherlands, and Portugal were forced to relinquish control in Asia, Africa, and the Middle East. At least 600,000 Vietnamese (and perhaps twice that number) died in the nine-year struggle for independence from France. Many of these conflicts, however, including some of the most costly in terms of human lives, had their roots in historical enmities within and among developing nations, in the desire for regional dominance, in attempts to alter the social order, and in the persistence of substantial inequities within nations. After all, the withdrawal of U.S. forces from Indochina in 1975 did not bring an end to conflict in that region. More than 2.1 million people have died in Cambodia, Laos, and Viet Nam since 1975, the vast majority of them civilians. And 2 million are estimated to have died in the civil war in Biafra.

A New World Order

In view of the diverse reasons for going to war, we must conclude that conflicts within and among nations will not disappear even though East and West cease to fight proxy wars in "the South." But how different that world would be if the superpowers and their allies agreed to adjust their foreign and defense policies to reflect these points:

- Neither would take advantage of disputes to increase or extend their political or military power beyond their borders.
- Neither would intervene unilaterally in regional conflicts.
- Bilateral relations would be conducted according to rules of conduct that preclude the use of force.

Neither the U.S.S.R. nor the United States has formulated a plan that will answer the question of how nations will relate to each other in such a world or how they can move toward it in a series of steps over the next decade. In what follows I will deal with two issues that play a prominent role in the discussion: political actions and changes in military forces.

In the twenty-first century, regardless of actions by the superpowers, relations among nations will differ dramatically. In the postwar years the United States had the power—and to a considerable degree it exercised that power—to shape the world as it chose. In the next century that will not be possible. The United States will live in a multipolar world and its foreign policy and defense programs will have to be adjusted to that reality.

Japan is destined to play a larger role on the world scene, exercising greater political power and assuming greater political and economic responsibilities. The same can be said of Western Europe. With economic integration in 1992, it is bound to achieve greater political unity, strengthening its power in world politics. And by the middle of the next century, several of the developing countries will have so increased in size and economic power as to be major participants in decisions affecting relations among nations. India is likely to have a population of 1.6 billion; Nigeria 400 million; and Brazil 300 million. If China achieves its economic goals by 2000, and if it then moves forward during the next fifty years at satisfactory but not spectacular growth rates, the income per capita of its approximately 1.6 billion people in 2050 may be roughly equal to that of the British in 1965. China's total GNP would approximate that of the United States, or Western Europe, or Japan, and very likely would exceed that of the U.S.S.R. These figures are, of course, highly speculative. I point to them simply to emphasize the magnitude of the changes that lie ahead and the need to begin now to adjust our goals, our policies, and our institutions to take account of them. In such a world, neither the United States nor the U.S.S.R. will be able to dominate their respective spheres. New relationships must be forged that will establish the military neutrality of the developing countries vis-a-vis the great powers; commit the great powers to end military support of conflicts in the developing countries; support a system of collective security to guarantee territorial integrity, with a mechanism for resolving regional conflicts; and increase technical and financial assistance to the developing countries.

In sum, we should strive to move toward a world in which relations among nations would be based on the rule of law, supported by a system of collective security and sustained by the peacekeeping authority of the multilateral institutions. This vision is consistent with the Roosevelt–Churchill conception of the postwar world.

In contrast, many political analysts predict that as ideological competition between East and West dies down, there will be a return to the power politics of the nineteenth century. In this view, the major powers will be guided by basic territorial and economic imperatives: the United States, the U.S.S.R., China, India, Japan, and Western Europe will seek to assert themselves in their own regions while competing for dominance where conditions are fluid. The *New York Times* (1989) quotes Michael J. Sandel, a political theorist at Harvard who takes this point of view:

> The end of the Cold War does not mean an end of global competition between the superpowers. Once the ideological dimension fades, what you are left with is not peace and harmony, but old-fashioned global politics based on dominant powers competing for influence and pursuing their internal interests.

Professor Sandel's concept of international relations is historically well-founded, but I would argue that it is not consistent with the increasingly interdependent world—interdependent in terms of its conduct of economic, environmental, and security policies—into which we are now moving. In such a world no nation will be able to stand alone. The United Nations charter offers a far more appropriate framework for relations among nations in such a world than does the doctrine of power politics. This approach is argued by Carl Kaysen (1990), the former director of the Institute of Advanced Studies at Princeton:

> The international system that relies on the national use of military force as the ultimate guarantor of security, and the threat of its use as the basis of

> order, is not the only possible one. To seek a different system. . . is no longer the pursuit of an illusion, but a necessary effort toward a necessary goal.

I propose we undertake this effort.

II. A System of Collective Security

A new world order would require the great powers to renounce both the use of force in disputes among themselves and unilateral action in regional conflicts. It would also require Security Council agreement that regional conflicts endangering territorial integrity will be dealt with through economic sanctions—and, if necessary, military action—imposed by collective decision and with the use of multinational forces.

Inevitably, the world I have described would need a leader. I see no alternative to U.S. leadership. I want to stress, however, that a system of collective security implies collective decisionmaking. Correspondingly, all the partners must share the financial costs, the political risks, and the dangers of casualties and bloodshed.

If the United States had made it clear that East and West would eschew the use of military force and would seek to protect developing nations against aggression, and obtained the endorsement of the Security Council prior to August 2, 1990, the Iraqi action against Kuwait might well have been deterred.

In addition, the scope of the arms control negotiations now under way should be expanded, and the process should be speeded up. Both short- and long-term objectives are essential. The short-term agenda should stress the obvious: the early completion of the START treaty; further progress in the restructuring and balancing of conventional forces in Europe (CFE); and a sharp reduction in tactical nuclear forces. This step should be followed by the speedy introduction of the second and third stages of the START and CFE treaties. Meanwhile, we should begin work on these follow-on treaties. The START negotiations will result in reductions of 10 to 20 percent in each side's strategic nuclear warheads, say from 12,000 to 9,000–10,000. The follow-on START could well cut those totals to 5,000. The CFE calls for balancing NATO forces at levels 10 to 15 percent below NATO's 1989 conventional force levels. I would support General Goodpaster, the former Supreme Allied Commander in Europe, who recommended a 50 percent cut in NATO's 1989 strength.

Although this short-term program will improve crisis management, NATO and the former Warsaw Pact countries will still retain thousands of nuclear warheads. The danger of nuclear war—the risk of destruction across the globe—will have been reduced but not eliminated. Can we go farther? The answer must be yes.

Today, most political and military leaders feel that basic changes in NATO's nuclear strategy are required. Some agree that the long-term objective should be to return, insofar as practical, to a non-nuclear world. That is a very controversial proposition: Western security experts—both military and civilian—continue to believe that the threat of nuclear weapons prevents war. For example, Zbigniew Brzezinski, President Carter's National Security Adviser, warns that a non-nuclear strategy "is a plan for making the world safe for conventional warfare. I am therefore not enthusiastic about it." Even if one accepts this argument, it must be recognized that nuclear deterrence carries a high cost: the risk of a nuclear exchange.

Gerard Smith, President Nixon's arms negotiator, quotes Secretary of State John Foster Dulles in a top-secret assessment of internal strategy in 1954 as saying:

> The increased destructiveness of nuclear weapons and the approach of effective atomic parity are creating a situation in which general war would threaten the destruction of Western civilization and of the Soviet regime and in which national objectives could not be obtained through a general war even if a military victory were won.

He proposed, therefore, to transfer control of nuclear forces to a veto-free United Nations Security Council. Gorbachev has gone beyond the Dulles proposal to suggest that the United States and the U.S.S.R. aim at eliminating nuclear weapons by 2000. But the genie is out of the bottle—we cannot remove from men's minds the knowledge of how to build nuclear warheads. Unless technologies and procedures can be developed to ensure detection of any steps toward building even a single nuclear bomb by any national or terrorist group—and such safeguards are not on the horizon—an agreement for total nuclear disarmament will almost certainly degenerate into an unstable rearmament race. Thus such an agreement does not appear feasible in the foreseeable future.

However, if the nuclear powers were to agree, in principle, that each nation's nuclear force would be no larger than necessary to deter cheating, how large might such a force be? Policing an arms agreement that restricted the nuclear powers to a small number of warheads is quite feasible with present verification technology. The number of warheads required for a force sufficiently large to deter cheating would be determined by the number any nation could build without detection. I know of no studies that point to what that number might be, but surely it would not exceed a hundred, and possibly it would be far less.

With existing nuclear forces totaling more than 50,000 warheads, with the Cold War over, and with the danger of proliferation of weapons of mass destruction increasing every day, should we not begin immediately to discuss alternative objectives? Three options appear obvious: a continuation of the present "counterforce strategy," but with each side limited to approximately 3,000 warheads; a minimum deterrent force for each side of perhaps 500 warheads; or, as I would prefer, a return, insofar as practicable, to a non-nuclear world, with total worldwide nuclear inventories reduced from 50,000 warheads to less than 200.

Controlling Proliferation

What scope is there for a debate on the proliferation of weapons of mass destruction and arms exports to the developing countries? Efforts have been made to control nuclear, biological, and chemical weapons through the 1968 Non-Proliferation Treaty and the Biological Weapons Convention of 1972. Yet in 1991, nine countries were believed to possess nuclear weapons, three were said to have biological weapons, and other nations are known to be carrying out research that could place them in these categories.

Although substantial efforts have gone into negotiating a chemical weapons treaty since 1968, no agreement has been signed—let alone ratified. Informal international guidelines on the transfer of chemical precursors have been poorly implemented and enforced. Fifteen countries are now believed to be in the process of acquiring chemical weapons; their ranks may be enlarged by as many as eleven others.

Of equal concern, some twenty-five countries have ballistic missiles that are capable of delivering these munitions. About three-quarters of these countries have or are in the process of acquiring production capability. The Missile Technology Control Regime is limited in scope and in membership. Only the transfer of production facilities is explicitly banned and several important suppliers, notably the U.S.S.R. and China, are not members. It has been reported recently that China is developing advanced ballistic missiles to permit it to expand its sales of such weapons in the developing countries. Twenty economies possess or have the capacity to produce weapons in at least two of these categories (see appendix 2). The five permanent members of the U.N. Security Council plus Israel, North Korea, South Africa, Iraq, Syria, India, Pakistan, Egypt, Taiwan (China), Iran, Libya, South Korea, Argentina, Brazil, and Cuba. Most have or are believed to be developing a capability in three or four categories. (For more detail on the status of individual countries see appendix 3.) To limit the spread and prevent the use of such weapons, inspection and export-control regimes already in place should be strengthened. The treaty banning chemical weapons should be concluded and a new accord restricting the production, possession, and use of ballistic missiles and related systems must be negotiated.

Returning to a non-nuclear world would greatly strengthen the hand of those who seek to control or eliminate chemical, biological, and ballistic-missile arsenals throughout the world. One of the main complaints of the non-nuclear developing countries has been that the nuclear non-proliferation treaty is a discriminatory agreement that prevents them from acquiring nuclear weapons without requiring others to dismantle their arsenals. From this point of view, the agreement on biological weapons and the proposed chemical-weapons treaty, which do not distinguish between the haves and the have-nots, are preferable models.

In order to stop the proliferation of weapons of mass destruction and the means of delivering them, the Security Council must be prepared to undertake collective—and, if necessary, coercive—action. To begin with, the council should prohibit the development, production, or purchase of nuclear, chemical, and biological weapons and ballistic missiles by nations that do not now possess them. Countries in violation of relevant Security Council resolutions would be subject to strict economic sanctions by the international community. If sanctions failed to alter the behavior in question, a United Nations military force would be given a mandate to eliminate the country's production capability and any stocks that had been produced or otherwise acquired. Countries that now have weapons of mass destruction would be subject to international inspection and control as well.

Reducing Military Expenditure

The move to limit both nuclear and conventional forces, while providing for collective action against military aggression wherever it may occur, can reduce military budgets throughout the world—in both industrial and developing countries. In the United States, it should be possible, within six to eight years, to cut military expenditure in half in relation to 1989 GNP, that is, from 6 percent to 3 percent. That would make available $150 billion a year (in 1989 dollars). Similar reductions can be made in the developing countries.

Between 1978 and 1988, the developing countries imported $371 billion worth of arms (nearly $450 billion at 1988 prices), or more than three-quarters of the arms traded internationally (see appendix 4). While these figures reflect the relative lack of domestic production capability and a legitimate concern to protect national sovereignty, there is great scope for cutting military expenditures by reducing imports of arms.

Two major factors drive weapons exports: supply and demand. The United States and the U.S.S.R. tend to use arms transfers as a means of maintaining political support in strategically located nations. For many European and developing-country suppliers (particularly China and Brazil), economic considerations have been paramount (and are of growing importance to the U.S.S.R.). Export sales have made the domestic defense industries of these smaller producers economically viable and opened the door to non-military exports. But the demand for weapons is strong, too, and the number of ongoing conflicts—internal or external—is an important factor. Of the top fifteen arms importers listed in appendix 4, who together account for about three-quarters of the arms imported by the developing countries, thirteen have been fighting for many years. Iran and Iraq were at war from 1980 to 1988. Egypt, Syria, and Israel have all been involved in wars. Saudi Arabia has armed against threats from other regional powers, notably Iran and Iraq. Algeria has been involved in disputes with Morocco and Libya. Ethiopia, Afghanistan, and Angola have fought civil wars, while Viet Nam, Libya, and India are parties to longstanding regional disputes. In addition, arms are seen as necessary to bolster a country's regional power status, as a symbol of unity and independence, as tangible evidence that it will defend its sovereignty, and to reward the armed forces for support.

The availability of financing is an extremely important factor in a country's decision to import weapons. Seven of the top fifteen importers have had access to petrodollars (Iraq, Egypt, Saudi Arabia, Syria, Libya, Iran, and Algeria). The availability of security assistance in the form of outright grants or subsidized credits from the United States and the U.S.S.R. has been instrumental in weapons buildups in a number of countries. Over the last decade, India, Cuba, Israel, Viet Nam, and Egypt have benefited from free (or subsidized) weapons from their superpower patrons.

Not all the weapons procured by developing countries are imported. More than fifty-four of these countries have some domestic arms production capacity; but nine countries (excluding China) produce nearly all the major weapons (appendix 5). The investment needed to create this capacity has been significant, particularly in terms of foreign exchange. Fungibility is an additional factor, important but hard to assess, in the financing equation. Common sense—and some evidence—suggests that the availability of external balance of payments or budget support enables governments to spend more on the military than would otherwise be possible. In my view, it is bad economics and bad policy for donor nations and the international financial institutions to continue to behave as if the funding of stabilization adjustment and development programs can be separated from the financing of military expenditures.

Security Assistance

The United States is the only country for which detailed and reliable security assistance figures are available. The program has three components: the Military Assistance Program, which provides grant aid; the Economic Support Fund, which provides balance of payments support and finances commodity import programs (increasingly on a grant basis); and the Foreign Military Sales program, which provides credit. In fiscal 1989, 80 percent of the $468 million in the Military Assistance Program went to El Salvador, Honduras, the Philippines, Thailand, Turkey, Greece, and Kenya. The $4.3 billion in credits appropriated under the Foreign Military Sales program went to Israel, Egypt, Pakistan, Greece, Turkey, Portugal, Morocco, Jordan, and Tunisia, although Israel and Egypt received nearly 75 percent of the total, all of which was converted into grants. Almost 80 percent of the $3.6 billion appropriated under the Economic Support Fund went to Israel, Egypt, Pakistan, El Salvador, and the Philippines. Israel and Egypt alone received nearly 60 percent. In fact, Israel and Egypt received nearly two-thirds of the $8.4 billion in security assistance under all three programs in fiscal 1989 (U.S. Congress 1990).

While very little is known about Soviet security assistance, the state of the economy makes any massive aid unlikely. Cuts are planned in military assistance to Cuba in 1991. And India, for example, must pay in hard currency for its imports of Soviet weapons and arms-production technology.

The oil-surplus countries of the Middle East, including Saudi Arabia, Algeria, Kuwait, and the United Arab Emirates, have also provided varying amounts of military assistance, primarily to other Muslim countries, such as Pakistan, Sudan, Iraq, Syria, and Egypt.

The Military Expenditure Burden

Wars and arms procurement result in high military expenditures. To the extent that security assistance takes the form of loans, barter trade, or causes additional security-related outlays, it adds to that burden. In the last decade the Middle East and East Asia have had the highest levels of military expenditures (see appendix 6). At the same time, rather large individual outlays may be masked by relatively low regional shares. Countries such as Libya, Mozambique, Ethiopia, Morocco, Zambia, Zimbabwe, Afghanistan, Pakistan, Argentina, and Nicaragua devote a significant proportion of GNP and central government expenditures to the military. All of them have been involved in recent major conflicts: several are among the top fifteen arms importers in the developing countries.

To reduce the demand for arms, the collective security system must guarantee the territorial integrity of member states through the Security Council and regional organizations. The international organizations should actively assist countries in finding negotiated solutions to conflicts. Existing regional organizations such as the Organization of American States and the Organization of African Unity as well as new entities in Asia, and the Middle East can be important elements in a global collective security system. Ideally, these bodies would function as regional arms of the Security Council.

Such a system should reduce developing country military expenditures as a percentage of GNP by 50 percent by the end of the decade. The savings would approximate half the amount spent on health and education and twice the amount of development assistance received from the Organisation for Economic Co-operation and Development countries and the international financial institutions. Even in the absence of a formal collective security system, expenditures should decline by 25 percent by the end of the decade as a result of an end to some of the more intractable conflicts and the significant improvement in relations between the two superpowers.

There is, of course, the danger that the end of the Cold War—and the effectiveness of high-tech weapons in the Gulf war—will lead arms producers from the industrial countries to seek new markets in the developing countries. Such a strategy assumes the funds will be available for such purchases, and in a number of Middle East and Gulf states, they are. In addition, as I have noted, other countries have financed a sizable proportion of the arms market in recent years. Reducing such financing will make it more difficult for arms purchasers to continue importing at earlier levels. And if arms transfers are restricted, the international trade in weapons will decline even more.

Internal security considerations. Some developing nations have not engaged in conflicts for many years and face no obvious external threat. Yet they still allocate considerable funds to military procurement, largely because a strong internal power posture is an important objective of the armed forces. In fact, in some countries, it is the primary objective. Where governments have armed themselves against the population in an attempt to maintain their power and protect their privileged positions, the general public often has limited access to the policymaking process and is excluded from the formal economic system. Under these conditions, conflicts and power clashes between the government and disenfranchised groups are inevitable. In these instances, international and regional conflict resolution must be undertaken in concert with internal conflict resolution strategies.

Consider the case of Pakistan. Islamabad has been involved in a longstanding conflict with India, which has led to three wars since the end of World War II. Pakistan has also been involved indirectly in the civil war in Afghanistan. Negotiated settlements to the Afghan war and to the outstanding territorial disputes between India and Pakistan, coupled with a Security Council guarantee of territorial integrity, are vital to solve the dispute in the subcontinent. A settlement should also undercut to some degree the perceived need for nuclear weapons, since the rivalry between India and Pakistan was unquestionably a central motive in Pakistan's acquisition of a nuclear weapons capability (USACDA 1989). At the same time, although an end to regional conflicts should enable both India and Pakistan to substantially reduce their procurement of weapons and their overall level of military expenditure, the armed forces, particularly in Pakistan, have for many years played a domestic role.

The political and social conditions that have given rise to military involvement in domestic affairs must be addressed if the benefits of increased regional stability are to be realized. Both countries have significant unmet political and economic development needs, at least some of which could be overcome if additional funding were available. In 1987, for example, only 52 percent of the children in Pakistan were enrolled in primary schools, and only 19 percent were in secondary schools. For girls, the figures were 35 and 11 percent respectively. Even in such other low- and lower middle-income Asian countries as Sri Lanka, China, and the Philippines, primary school enrollment in 1987 for children of both sexes was in the 95-100 percent range; secondary school enrollment ranged between 43 and 68 percent. Almost all school-age girls in these countries were enrolled in primary school and between 37 and 69 percent attended secondary school.

Health care statistics offer a similar picture. In countries such as Chile, Argentina, Mexico, Costa Rica, and Panama, the population per nursing person ranged from 370:1 to 880:1 in the mid-1980s; infant mortality ranged from 20 to 46 percent (1988 figures) per thousand live births. In Pakistan, however, there was only one nurse for some 4,900 people, and infant mortality was 107 per thousand live births (World Bank 1990).

While it is difficult to draw conclusions about the relationship between poverty and military expenditure from statistics such as these, it is clear that a country such as Costa Rica, which has only 8,000 civil and rural guards and spends about 0.7 percent of GNP on military-related spending, has more resources at its disposal for social and economic programs than countries that spend nearly an order of magnitude more on the military.

The influence of the military. One of the most important effects of military spending, and one that has serious implications for political and economic development, is the degree to which it strengthens the political influence of the armed forces at the expense of civilian groups within society. In many developing countries, economic systems function primarily to benefit a relatively limited number of people, and political systems are frequently manipulated to guarantee the continued dominance of the elite. If development is to meet the needs of all social groups, a relatively equitable distribution of resources is vital. This, in turn, relies on a political system that allows all groups to participate and that can devise workable compromises between competing interests. The greater the political power of the security forces, the less likely it is that democratic governance will develop. Indeed, security forces do not, in most cases, seek to make all citizens equally secure. All too frequently the security forces do not protect a majority of the population from a minority bent on pursuing its own political and economic objectives; instead they seek to guarantee the security of the military regime.

The role of the military is the prerogative of each government. Nonetheless, the international community needs to identify ways to reward countries that reduce military expenditures to signal that priorities have been altered in favor of development. One step would be to monitor the share of central government expenditure devoted to the security sector, along with the share of GNP, to give some insight into government priorities.

I would urge linking financial assistance, through conditionality, to progress toward "optimal levels" of military expenditure. Optimal levels should, of course, take external threats into account. Conditionality could take the form of the proposal in *Facing One World*, the report of the Independent Group on Financial Flows to Developing Countries, chaired by former German Chancellor Helmut Schmidt, and including the former presidents or prime ministers of Nigeria, Peru, Canada, and Korea. This group urged that, when decisions concerning allocations of foreign aid are made, special consideration be given to countries that spend less than 2 percent of GNP on security. The huge savings that would result could be used to address pressing economic and social needs. Although the application of such conditionality will be difficult and contentious, it is, I believe, an essential part of the solution to the waste represented by excessive military spending by poor countries. If we are bold—if we dare to break out of the mind-set of the past four decades—we can reshape international institutions as well as relations among nations, and we can reduce military expenditures in ways that will lead to a more peaceful and a more prosperous world for all the peoples of our interdependent globe.

Appendix I. *Wars and Conflicts in Developing Economies and Estimates of Related Deaths since the End of World War II*

		Deaths[a]		
Region	*Conflict*	*Civilian*	*Military*	*Total*
Latin America				
Argentina				
1955	Armed forces vs. Peron	2,000	2,000	4,000
1976–79	"Disappearances"	12,000	3,000	15,000
1982	Falklands/Malvinas	0	1,000	1,000
Bolivia				
1952	Revolution vs. government	1,000	1,000	1,000
1955–67	Guerrilla insurgency	. . .	. . .	200,000
Brazil				
1980	Rightist terrorism	. . .	. . .	1,000
Chile				
1973	Military coup vs. Allende government	. . .	. . .	5,000
1974	Executions by military junta	20,000	0	20,000
Colombia				
1948	Conservatives vs. government	. . .	. . .	1,000
1949–62	Liberals vs. conservatives	200,000	100,000	300,000
1980–89	Government vs. left opposition	8,000	0	8,000
Costa Rica				
1948	National Union vs. government	1,000	1,000	1,000
Cuba				
1958–59	Cuban revolution	2,000	3,000	5,000
Dominican Republic				
1965	Civil war/U.S. intervention	1,000	2,000	3,000
El Salvador				
1979–89	FMLN vs. government	50,000	23,000	73,000
Guatemala				
1954	Conservatives vs. government/ U.S. intervention	. . .	. . .	1,000
1966–89	Government vs. URNG vs. military opposition	100,000	38,000	138,000
Honduras				
1969	Soccer War with El Salvador	3,000	2,000	5,000
Jamaica				
1980	Election violence	1,000	0	1,000
Nicaragua				
1978–79	Civil war vs. Somoza government	25,000	10,000	35,000
1981–89	"Contras" vs. Sandinista government	15,000	15,000	30,000
Paraguay				
1947	Liberals vs. conservatives	. . .	. . .	1,000
Peru				
1981–89	Sendero Luminoso vs. government	10,000	5,000	15,000

Appendix I. *Wars and Conflicts in Developing Economies and Estimates of Related Deaths since the End of World War II (continued)*

Region	Conflict	Deaths[a] Civilian	Military	Total
Middle East				
Cyprus				
1974	National Guard/Turkish invasion	3,000	2,000	5,000
Egypt				
1956	Suez invasion/France, Israel, U.K.	1,000	3,000	4,000
1967–70	Six-Day War; War of Attrition	50,000	25,000	75,000
Iran				
1979–89	Government vs. opposition (esp. Kurds)	...	0	17,000
Iraq				
1959	Shammar tribe vs. government	1,000	1,000	2,000
1961–74	Kurds vs. government	...	...	200,000
1980–88	Iran–Iraq War[b]	...	...	600,000
1980–89	Government vs. Kurds (KDP, PUK)	...	...	67,000
Israel				
1948	Arab League vs. Israel	0	8,000	8,000
1973	Yom Kippur War vs. Egypt, Syria	0	16,000	16,000
1987–91	Intifada[b]	3,000	0	3,000
Jordan				
1970	Palestinians/Syrians vs. government	1,000	1,000	2,000
Lebanon				
1958	Civil war	1,000	1,000	2,000
1975–89	Civil war/Syrian and Israeli interventions	...	...	131,000
Syria				
1982	Government massacre of Muslim Brotherhood at Hamah	10,000	0	10,000
Turkey				
1984–89	Government vs. Kurdish Workers' Party	...	...	2,000
Yemen, Republic of				
1948	Yahya family vs. government	2,000	2,000	4,000
1962–69	Civil war, including Egyptian intervention	...	...	101,000
Yemen, PDR				
1986	Civil war	...	...	10,000
South Asia				
Afghanistan				
1978–89	Civil war/Soviet intervention[b]	...	...	1,000,000
Bangladesh				
1971	Civil war/Indian intervention	1,000,000	500,000	1,500,000
1975–89	Autonomy struggle in Chittagong	...	...	1,000

Appendix I. *Wars and Conflicts in Developing Economies and Estimates of Related Deaths since the End of World War II (continued)*

		Deaths[a]		
Region	*Conflict*	*Civilian*	*Military*	*Total*
India				
1946–48	Partition-related strife	800,000	0	800,000
1947–49	India vs. Pakistan over Kashmir	1,000	2,000	3,000
1948	India vs. Hyderabad	1,000	1,000	2,000
1962	Sino-Indian War	1,000	1,000	2,000
1965	India vs. Pakistan/Rann of Kutch War	13,000	7,000	20,000
1971	India vs. Pakistan (associated with Pakistani civil war)	0	11,000	11,000
1983	Assam election violence	3,000	...	3,000
1983–89	Ethnic and political violence (largely Sikh autonomy campaign)	...	...	16,000
Pakistan				
1973–77	Baluchis vs. government/Afghan intervention	6,000	3,000	9,000
Sri Lanka				
1971	Maoists vs. government	1,000	1,000	2,000
1983–89	Government vs. Tamil separatists/Indian intervention/Singhalese People's Liberation Front intervention	...	...	15,000
Far East				
Burma				
1948–51	Karens vs. government/Chinese intervention	...	...	8,000
1980	Burma Communist Party vs. government	...	...	5,000
1981–88	Government vs. opposition (mostly Karen)	0	6,000	6,000
Cambodia				
1970–75	Civil war/Indochina conflict	...	...	156,000
1975–78	Pol Pot government vs. civilians	1,500,000	500,000	2,000,000
1978–90	Vietnamese invasion and civil war	20,000	50,000	70,000
China				
1946–50	Civil war[b]	5,000,000	1,200,000	6,200,000
1949–54	Land reform movement[b]	4,500,000	0	4,500,000
1949–54	Suppression of counterrevolutionaries[b]	3,000,000	0	3,000,000
1950–51	Takeover of Tibet	0	1,000	1,000
1956–59	Tibetan revolt[b]	...	...	200,000
1965–75	Cultural Revolution[b]	1,613,000[c]	537,000	2,150,000
1983–84	Government executions	5,000	0	5,000
Indonesia				
1945–46	Independence struggle	4,000	1,000	5,000
1950	Moluccans vs. government	...	...	5,000
1953	Darul Islam vs. government	...	...	1,000
1956–60	Communists vs. government	...	...	30,000

Appendix I. *Wars and Conflicts in Developing Economies and Estimates of Related Deaths since the End of World War II (continued)*

		Deaths[a]		
Region	*Conflict*	*Civilian*	*Military*	*Total*
Indonesia (continued)				
1965–66	Massacres following attempted coup	500,000	0	500,000
1975–89	Annexation of East Timor	90,000	11,000	101,000
Korea				
1948	Yosu Rebellion	0	1,000	1,000
1950–53	Korean War[b]	3,000,000	1,500,000	4,500,000
Laos				
1960–73	Civil war/Indochina conflict	12,000	12,000	24,000
1975–87	Government/Viet Nam vs. National Liberation Front[b]	30,000	10,000	40,000
Malaysia				
1950–60	UK intervention in civil war	...	...	13,000
Philippines				
1950–52	Hukbalahop vs. government	5,000	4,000	9,000
1972–87	Muslims (MNLF, MILF)/New People's Army vs. government	20,000	15,000	35,000
1988	Muslims (MNLF, MILF)/New People's Army vs. government	...	...	2,000
Taiwan (China)				
1954–55	Civil strife	...	...	5,000
Viet Nam				
1945–54	Independence struggle vs. France[b]	300,000	300,000	600,000
1960–75	N. Viet Nam vs. S. Viet Nam/ United States[b]	1,200,000	1,158,000	2,358,000
1979	China vs. Viet Nam	9,000	21,000	30,000
1980–88	China vs. Viet Nam/border	0	1,000	1,000
Sub-Saharan Africa				
Angola				
1961–75	Independence struggle vs. Portugal	30,000	25,000	55,000
1980–88	Civil war/Cuban-South African intervention[b],	...	...	500,000
Burundi				
1972	Hutus vs. government/massacre	80,000	20,000	100,000
Cameroon				
1955–60	Independence struggle vs. France	...	...	32,000
Chad				
1965–89	Government vs. opposition/ Libyan intervention	...	...	28,000
Ethiopia				
1978	Somalian invasion[b]	...	...	150,000
1962–89	Eritrean and other opposition vs. government[b]	...	...	1,000,000
Ghana				
1981	Konkomba vs. Nanumba	...	...	1,000

Appendix I. *Wars and Conflicts in Developing Economies and Estimates of Related Deaths since the End of World War II (continued)*

		Deaths[a]		
Region	*Conflict*	*Civilian*	*Military*	*Total*
Guinea-Bissau				
1962–74	Independence struggle vs. Portugal	5,000	10,000	15,000
Kenya				
1952–63	Independence struggle vs. UK	. . .	. . .	15,000
Madagascar				
1947–48	Independence struggle vs. France	3,000	2,000	5,000
Mozambique				
1965–75	Independence struggle vs. Portugal	. . .	. . .	30,000
1981–88	Civil war[b]	. . .	. . .	900,000
Namibia				
1967–89	SWAPO independence struggle vs. South Africa	. . .	. . .	13,000
Nigeria				
1967–70	Civil war	1,000,000	1,000,000	2,000,000
1980–81	Fundamentalist Muslims vs. government	. . .	. . .	5,000
1984	Fundamentalist Muslims vs. government	. . .	. . .	1,000
Rwanda				
1956–65	Tutsis vs. government/massacre	102,000	3,000	105,000
Somalia				
1980–90	Civil strife	5,000	5,000	10,000
South Africa				
1985–89	African National Congresss vs. Inkatha[b]	5,000	0	5,000
Sudan				
1955–72	Civil war[b]	. . .	. . .	750,000
1983–90	Civil war[b]	500,000	10,000	510,000
Uganda				
1966	Bungandans vs. government	1,000	1,000	2,000
1971–78	Idi Amin massacres	300,000	0	300,000
1978–79	Tanzanian invasion	. . .	3,000	3,000
1981–85	Obote government massacres[b]	300,000	0	300,000
1981–89	National Resistance Army vs. government/NRA vs. opposition	100,000	6,000	106,000
Western Sahara				
1975–89	Polisario vs. Morocco	4,000	8,000	12,000
Zaire				
1960–65	Civil war	. . .	. . .	100,000
Zambia				
1964	Civil strife	. . .	. . .	1,000
Zimbabwe				
1972–79	Struggle for majority rule	. . .	. . .	12,000
1979–87	Government vs. ZAPU, MNR	2,000	0	2,000

Appendix I. *Wars and Conflicts in Developing Economies and Estimates of Related Deaths since the End of World War II (continued)*

		Deaths[a]		
Region	*Conflict*	*Civilian*	*Military*	*Total*
Northern Africa				
Algeria				
1954–62	Independence struggle vs. France[b]	. . .	. . .	1,000,000
1962–63	Rebel leaders vs. government	1,000	1,000	2,000
Morocco				
1953–56	Independence struggle vs. France	3,000	0	3,000
Tunisia				
1952–54	Independence struggle vs. France	3,000	0	3,000
Total				40,144,000

Note: Wars are defined as conflicts that result in the death of at least 1,000 individuals and include inter- and intrastate conflicts. While every attempt has been made to include all relevant conflicts, some events meeting the criterion for inclusion may inadvertently have been excluded.

a. The data on war and war-related deaths must be considered approximate. In some cases, particularly those in which large numbers of people have been killed, the estimates can vary substantially. Although data published by the Stockholm International Peace Research Institute attempt to *exclude* war-related deaths due to famines and disease, an effort has been made to include war-related deaths wherever possible in this list.

b. The estimates for these conflicts have been derived from the private archives of Milton Leitenberg, University of Maryland (see 2 below).

c. Excludes the approximately 6 million deaths in labor camps that occurred during this period.

Source: This list was compiled by Nicole Ball with the assistance of Milton Leitenberg from three major sources:

1. William Eckhardt's table, "Wars and War-Related Deaths, 1700–1987," in Ruth Leger Sivard, *World Military and Social Expenditures: 1987–1988*, Washington, D.C.: World Priorities, 1987, pp. 29–31.

2. The private archives of Milton Leitenberg, University of Maryland, including: R. J. Rummel, *China's Bloody Century: Genocide and Mass Murder Since 1900*, Transaction Books, (forthcoming), chapters 7, 9, 10, 12 and appendix II; Joseph Eaton, "35 Years After Warsaw, and Genocide is Thriving," *New York Times*, April 19, 1978; United Nations, Africa Recovery Programme/Economic Commission for Africa, *South African Destabilization: The Economic Cost of Frontline Resistance to Apartheid*, New York: October 1989, p. 6; Bernard Brodie, "The Test of Korea," *War and Politics*, New York: Macmillan, 1973, p. 106; Jon Halliday and Bruce Cuming, *Korea: The Unknown War*, New York: Pantheon Books, 1988, p. 200; Larry Minear, "Civil Strife and Humanitarian Aid: A Bruising Decade," in *World Refugee Survey, 1989*, Washington, D.C.: U.S. Committee for Refugees, 1990; and *Kampuchea in the Seventies. Report of a Finnish Inquiry Commission*, Helsinki, 1982, p. 32.

3. The annual compilations of major armed conflicts published by the Stockholm International Peace Research Institute since 1987: G. Kenneth Wilson, and Peter Wallensteen, "Major Armed Conflicts in 1987," pp. 285–98, in *SIPRI Yearbook 1988. World Armaments and Disarmament*, Oxford: Oxford University Press, 1988; Karin Lindgren, G. Kenneth Wilson, and Peter Wallensteen, "Major Armed Conflicts in 1988," pp. 339–55, in *SIPRI Yearbook 1989. World Armaments and Disarmament*, Oxford: Oxford University Press, 1989; Karin Lindgren, G. Kenneth Wilson, Peter Wallensteen, and Kjell-Ake Nordquist, "Major Armed Conflicts in 1989," pp. 393–419, in *SIPRI Yearbook 1990. World Armaments and Disarmament*, Oxford: Oxford University Press, 1990.

Appendix II. *Weapons of Mass Destruction and Ballistic Missiles*

Region	*Nuclear weapons*	*Chemical weapons*	*Biological weapons*[a]	*Ballistic missiles*
United States	X	X	[X]	X
Soviet Union	X	X	[X]	X
China	X	X	[X]	X
Israel	X	X	[X]	X
North Korea	[X]	X	X	X
France	X	X	[X]	X
South Africa	X	[X]	[X]	[X]
Iraq		X	X	X
Syria		X	X	X
India	X	[X]		X
Pakistan	X	[X]		[X]
Egypt		X	[X]	X
Taiwan (China)		X	[X]	
United Kingdom	X		[X]	X
Iran		X		X
Libya		X	[X]	[X]
South Korea		[X]		X
Argentina	[X][b]	[X]		[X]
Brazil	[X][b]			[X]
Cuba		[X]	[X]	X[c]

Note: X = possesses weapons or is believed to be able to produce them. [X] = developing/strongly suspected to be developing weapons/engaged in research (BW only).

a. Defensive research is allowed under the Biological Weapons Convention of 1972.

b. Has facilities potentially capable of producing nuclear weapons but head of state recently reversed decision to proceed with development.

c. Inventory includes only Soviet Free Rocket Over Ground (FROGs), which are sometimes excluded from compilations of ballistic missiles because their extremely short range renders them virtually useless in interstate conflict.

Source: Appendix III.

Appendix III. *The Distribution of Nuclear, Chemical, and Biological Weapons and Ballistic Missiles*

III-1. Distribution of Nuclear Weapons, 1990

Declared nuclear-weapon states	
United States	United Kingdom
Soviet Union	France
China	
De facto nuclear-weapon states	
Israel[a] (possible test, 1979)	
India (single test, 1974)	
South Africa (possible test, 1979)	
Pakistan (no test)	
Regions with current or past programs or efforts to obtain nuclear weapons	
Brazil[b]	North Korea[d]
Argentina[b]	Iran[e]
Taiwan[c] (China)	Iraq[e]
South Korea[c]	Libya[f]

a. Not a declared nuclear weapon state but widely understood by experts in the field to be a full-fledged nuclear weapon state with a stockpile of over 100 weapons

b. Has facilities potentially capable of producing nuclear weapons but head of state recently reversed decision to proceed with development

c. Has sizable nuclear program but no ability to produce weapons-grade nuclear materials

d. Has large research reactor; progressing rapidly toward ability to produce weapons-grade nuclear materials

e. Has limited program

f. Has no program; attempted to purchase a nuclear weapon

Source: Leonard S. Spector with Jacqueline R. Smith, *Nuclear Ambitions: The Spread of Nuclear Weapons, 1989–1990*, Boulder, Colo.: Westview Press for the Carnegie Endowment, 1990 and personal communication with Leonard S. Spector, February 11, 1991.

III-2. Distribution of Chemical Weapons, 1990

Regions acknowledging CW capability or for whom use definitively confirmed			
Iraq	Soviet Union	United States	
Countries officially reported by United States as developing, producing or possessing chemical weapons			
Burma[a]	Ethiopia[a]	Israel[a,b]	Syria
China[a]	France[a]	Libya[a]	Taiwan (China)
Egypt[a]	Iran	North Korea[a]	Viet Nam[a]
Regions reported by Western governments as seeking a CW capability or suspected of possessing chemical weapons			
Angola	India[a]	Pakistan[a]	South Korea[a]
Argentina[a]	Indonesia[a]	Somalia	Thailand[a]
Cuba	Laos	South Africa[a]	
Countries alleged to be seeking a CW capability or suspected of possessing a CW capability for which CW capability is doubtful			
Afghanistan[a]	El Salvador	Mozambique	Philippines[a]
Chad	Guatemala	Nicaragua[a]	Sudan
Chile[a]	Jordan[a]	Peru[a]	

a. The governments of these countries have denied possession of chemical weapons. The governments of India, Pakistan, and Burma have denied the intention to acquire these weapons.

b. Although it was reported in testimony before the Senate Armed Services Committee in 1974 that the Israelis had claimed to have a chemical weapon capability, Israel is not placed by most CW experts in the "acknowledged capability" category.

Source: Elisa D. Harris, "Chemical Weapons Proliferation: Current Capabilities and Prospects for Control," p. 72, in *New Threats: Responding to the Proliferation of Nuclear, Chemical, and Delivery Capabilities in the Third World*, Aspen Strategy Group, Lanham, MD.: University Press of America, 1990, pp. 70–72; Julian Perry Robinson, "Chemical Weapons Proliferation in the Middle East," Paper prepared for the IEWSS Conference, February 6, 1990; and United States Senate, Committee on Armed Services Committee, *Fiscal Year 1975 Authorization for Military Procurement, Research and Development, and Active Duty, Selected Reserve and Civilian Personnel Strengths, Part 9*, 93rd Congress, 2nd Session, March 7, Washington, D.C.: U.S. Govt. Printing Office, 1974, p. 4931; "Navy Report Asserts Many Nations Seek or Have Poison Gas," *New York Times*, March 10, 1991.

III-3. Distribution of Biological Weapons, 1990

Regions reported by Western governments to possess BW capability[a]		
Iraq	Syria	North Korea
Regions reported to be engaged in BW research		
Bulgaria	France	South Africa
Canada	Germany	Soviet Union
China	Israel	Sweden
Cuba	Libya	Taiwan (China)
Czechoslovakia	Norway	United Kingdom
Egypt	Romania	United States

a. The word "capability" has been used by different government spokesmen in different ways and has never been definitively defined. It is not publicly known whether the countries in the first group are being alleged to have a) *built* a military facility with large bacteria production capacity; b) *produced, harvested and stockpiled* wet or dry agent; or c) *filled and stockpiled munitions* with BW agents.

Source: "Statement of Rear Admiral Thomas A. Brooks, U.S. Navy, Director of Naval Intelligence, Before the Seapower, Strategic and Critical Materials Subcommittee of the House Armed Services Committee on Intelligence Issues," March 14, 1990; "Statement by Admiral C.A.H. Trost, U.S. Navy, Chief of Naval Operations, Before the Senate Armed Services Committee on the Posture and Fiscal Year 1991 Budget of the United States Navy," February 28, 1990; William H. Webster, "Chemical Weapons Give the Poor Man's Answer to Nuclear Armaments," *The Officer*, June 1989, p. 7; "Statement of Rear Admiral William O. Studeman, U.S. Navy, Director of Naval Intelligence, Before the Seapower and Strategic Critical Materials Subcommittee of the House Armed Services Committee on Intelligence Issues," March 1, 1988; Joseph D. Douglass, Jr., "Soviets Surge in Biochemical Warfare; West Remains Drugged with Apathy," *Armed Forces Journal International* 126:1 (August 1988): 54, 58; Transcript from NBC Nightly News, April 13, 1990; and Matthew Meselson, Martin M. Kaplan, Mark A. Mokulsky, "Verification of Biological and Toxic Weapons Disarmament," pp. 149–164, in *Verification: Monitoring Disarmament*, ed. Francesco Calogero, Marvin L. Goldberger and Sergei P. Kapitsa, Boulder, Colo: Westview Press, 1990.

III-4. Distribution of Ballistic Missiles, 1990[a]

Region	*Proven production capability*	*Developing production capability*	*Ballistic missiles in inventory*
Afghanistan			X
Algeria			X[b]
Argentina		X	
Belgium			X
Brazil		X	
Bulgaria			X
China	X		X
Cuba			X[b]
Czechoslovakia			X[c]
Egypt		X	X
France	X		X
Hungary			X[c]
India		X[d]	X
Iran	X		X
Iraq	X		X
Israel	X		X
Italy			X
Kuwait			X[b]
Libya		X	X
North Korea	X		X
Poland			X
Pakistan		X	
Romania			X
Saudi Arabia			X
South Africa		X	
South Korea	X		X
U.S.S.R.	X		X
Syria			X
Taiwan (China)		[?]	
United Kingdom	X		X
United States	X		X
Yemen			X

a. The designation of missiles as "ballistic" follows the conventions employed by Aaron Karp and includes FROGs (Free Rocket Over Ground) which are sometimes excluded from other compilations because their extremely short range renders them virtually useless in inter-state conflict.

b. Force consists of FROGs only.

c. Government has announced intention to destroy inventory.

d. Has near-term plans to enter into the production stage with the Prithi missile.

Source: Aaron Karp, "Ballistic Missile Proliferation," pp. 382–390, in *SIPRI Yearbook 1990: World Armaments and Disarmament*, London: Oxford University Press, 1990; Robert Shuey and others, *Missile Proliferation: Survey of Emerging Missile Forces*, 88-642F, Washington, D.C.: Congressional Research Service, October 3, 1988; and personal communication from Robert Shuey, February 13, 1991.

Appendix IV. *The Trade in Weapons, 1978–88*

IV-1. Major Developing Economies Arms Importers, 1978–88
(1988 US$ million)

Region	*Value of arms transferred (cumulative)*	*Percentage of world value*
Iraq	66,422	11.5
Saudi Arabia[a]	40,342	7.0
Libya	29,424	5.1
Syria	29,290	5.1
Viet Nam	23,186	4.0
India	21,488	3.7
Iran	21,091	3.6
Cuba	18,082	3.1
Egypt	14,344	2.5
Israel	12,896	2.2
Angola	12,139	2.1
Afghanistan	11,048	1.9
Ethiopia	10,822	1.9
Algeria	10,723	1.8
Taiwan (China)	7,686	1.3
Top 15 importers	328,983	56.7
Total developing countries of which	438,939	75.7
Africa	86,834	15.0
Middle East	211,880	36.5
South Asia	38,065	6.6
East Asia	61,115	10.5
Latin America	41,045	7.1
Total world	579,720	100.0

a. Because USACDA data on arms transfers exclude the transfer of U.S. military-related services, which consist primarily of construction for Saudi Arabia, this figure is an underestimate of the value of military-related transfers.

Source: USACDA (*1989*, table II).

IV-2. Major Arms Exporters, 1978–88
(1988 US$ million)

Country	*Value of arms transferred (cumulative)*	*Percentage of world value*
U.S.S.R.	243,680	42.0
United States[a]	127,745	22.0
France	43,840	7.6
United Kingdom	22,723	3.9
Germany (West)	14,665	2.5
China	14,616	2.5
Czechoslovakia	13,354	2.3
Poland	12,725	2.2
Italy	11,468	2.0
Switzerland	5,392	0.9
Yugoslavia	4,669	0.8
North Korea	4,430	0.8
Israel	4,258	0.7
Bulgaria	4,186	0.7
Brazil	4,140	0.7
Top 15 exporters	531,891	91.7
Total world	579,810	100.0

a. Because USACDA data on arms transfers exclude the transfer of U.S. military-related services, this figure underestimates the value of U.S. arms transfers.

Source: USACDA, (*1989*, table II).

Appendix V. *Developing Economy Producers of Major Weapons, 1950–84*

Region	*Percentage*	*Cumulative percentage*
India	31	31
Israel	23	54
South Africa	9	63
Brazil	9	72
Taiwan (China)	8	80
North Korea	6	86
Argentina	5	91
South Korea	4	95
Egypt	2	97
ASEAN countries[a]	2	99
Others[b]	1	100

a. Indonesia, Malaysia, Thailand, Philippines, Singapore.

b. Bangladesh, Burma, Chile, Colombia, Dominican Republic, Gabon, Madagascar, Mexico, Pakistan, Peru, Senegal, Sri Lanka.

Source: Michael Brzoska and Thomas Ohlson, eds., *Arms Production in the Third World*, London: Taylor and Francis, 1986, p. 10.

Appendix VI. *Military Expenditure Compared with Outlays on Health and Education*

Region	*1988 Military expenditure (million 1988 US$)*	*Military as percentage of GNP 1988*	*Health as percentage of GNP 1986*[a]	*Education as percentage of GNP 1986*[a]
World	1,032,400	5.0	4.1	4.9
Industrial	865,000	5.2	4.7	5.2
Developing	167,300	4.3	1.6	3.8
Africa	14,300	4.2	1.2	4.4
Algeria	1,784	3.4	2.2	6.1
Angola[b]	1,181	12.0	1.0	3.4
Benin	38	2.3	0.8	3.5
Botswana	99	8.2	2.9	9.1
Burkina Faso	55	2.7	0.9	2.5
Burundi[c]	34	3.3	0.7	2.8
Cameroon[c]	255	1.9	0.7	2.8
Central African Republic[c]	19	1.8	1.2	5.3
Chad	39	4.3	0.6	2.0
Congo[c]	102	5.1	2.0	5.0
Côte d'Ivoire	199	2.3	1.1	5.0
Ethiopia[c]	447	8.2	1.0	4.2
Gabon	167	5.2	2.0	4.8
Gambia[c]	1	0.8	2.3	4.0
Ghana	23	0.5	0.3	3.5
Guinea	27	1.2	1.0	3.0
Guinea-Bissau[c]	3	2.4	...	...
Kenya	294	3.6	1.9	6.0
Lesotho[b]	15	2.4	1.6	3.5
Liberia[c]	44	3.8	1.5	5.0
Libya[c]	2,996	12.9	3.0	10.1
Madagascar	34	2.0	1.8	3.5
Malawi	34	2.5	2.4	3.7
Mali	45	2.4	0.7	3.2
Mauritania[c]	38	4.2	1.9	6.0
Mauritius	4	0.2	1.8	3.3
Morocco	1,138	6.0	1.0	5.9
Mozambique[c]	74	8.0	1.8	...
Niger	21	0.9	0.8	4.0
Rwanda	37	1.6	0.6	3.2
Senegal	97	2.1	1.1	4.6
Sierra Leone	6	0.7	0.7	3.0
Somalia[b]	46	3.2	0.2	6.0
South Africa	3,607	4.3	0.6	4.6
Sudan	175	2.4	0.2	4.0
Swaziland[b]	9	1.6	2.4	6.2
Tanzania	111	3.9	1.2	4.2
Togo[c]	46	3.7	1.6	5.5
Tunisia	255	2.7	2.7	5.0
Uganda	68	1.5	0.2	1.1
Zaire	49	0.8	0.8	0.4
Zambia[b]	84	3.2	2.1	4.4
Zimbabwe	386	6.3	2.3	7.9

Appendix VI. *Military Expenditure Compared with Outlays on Health and Education (continued)*

Region	*1988 Military expenditure (million 1988 US$)*	*Military as percentage of GNP 1988*	*Health as percentage of GNP 1986*[a]	*Education as percentage of GNP 1986*[a]
Middle East	60,700	8.8	2.1	5.8
Bahrain	187	6.4	2.6	5.0
Cyprus	44	1.1	1.9	3.6
Egypt	6,086	7.8	1.0	4.8
Iran[b]	16,200	20.0	1.8	3.5
Iraq[b]	12,160	32.0	0.8	3.7
Israel	6,001	13.8	2.1	7.3
Jordan	882	21.0	1.9	5.1
Kuwait	1,340	5.1	2.9	4.6
Oman	1,371	19.1	3.3	6.6
Qatar[b]	194	5.0	...	5.6
Saudi Arabia	13,560	16.5	4.0	10.6
Syria	1,604	10.9	0.8	5.7
United Arab Emirates	1,587	6.8	1.0	2.2
Yemen, Republic of	566	9.9	1.1	5.1
Yemen, PDR[b]	207	22.0	2.0	6.0
South Asia	12,800	3.8	0.8	3.2
Bangladesh[c]	342	1.8	0.6	2.2
India	9,458	3.5	0.9	3.4
Nepal	35	1.1	0.9	2.8
Pakistan	2,516	6.9	0.2	2.2
Sri Lanka	321	4.6	1.3	3.6
East Asia[d]	77,600	2.0	3.7	4.5
Brunei[b]	255	7.1	0.7	3.4
China	21,270	3.9	1.4	2.7
Indonesia	1,400	1.8	0.7	3.5
Malaysia	908	2.8	1.8	7.9
Mongolia[b]	182	10.5	1.3	...
Myanmar	350	3.2	1.0	2.1
North Korea	5,840	20.0	1.0	...
Philippines	680	1.7	0.7	1.7
Singapore	1,321	5.3	1.2	5.2
South Korea	7,202	4.3	0.3	4.9
Taiwan (China)	6,156	5.2	2.5	4.0
Thailand	1,718	3.1	1.3	4.1
Oceania[d]	7,100	2.6	5.1	5.1
Fiji	25	2.3	2.4	6.0
Papua New Guinea	49	1.5	3.3	5.6
Latin America	12,000	1.3	1.6	3.3
Argentina	2,972	3.1	1.5	1.8
Barbados	10	0.7	3.6	5.7
Bolivia	162	4.0	0.4	2.4
Brazil	1,209	0.3	1.3	3.4
Chile	808	4.0	2.1	5.2
Colombia	656	1.8	0.8	2.8
Costa Rica	20	0.5	5.4	4.7
Cuba	1,326	3.8	3.2	6.2
Dominican Republic	45	1.1	1.4	1.6
Ecuador	155	1.6	1.1	3.6

Appendix VI. *Military Expenditure Compared with Outlays on Health and Education (continued)*

Region	*1988 Military expenditure (million 1988 US$)*	*Military as percentage of GNP 1988*	*Health as percentage of GNP 1986*[a]	*Education as percentage of GNP 1986*[a]
Latin America (continued)				
El Salvador	212	3.8	1.0	2.3
Guatemala	129	1.7	0.7	1.8
Guyana	46	14.6	4.6	8.0
Haiti	34	1.5	0.9	1.2
Honduras	120	2.9	2.6	5.0
Jamaica	32	1.1	2.8	5.6
Mexico	1,016	0.6	1.7	2.8
Nicaragua[b]	457	16.0	6.6	6.1
Panama	105	2.4	5.4	5.5
Paraguay	84	1.4	0.4	1.4
Peru[c]	2,205	5.0	1.0	1.6
Trinidad & Tobago[b]	64	1.0	3.0	5.8
Uruguay	168	2.2	1.1	3.0
Venezuela	848	1.4	2.7	6.6

. . . Data not available.

a. The data for social expenditure are for 1986 and are therefore not strictly comparable to the military expenditure figures presented in this appendix, which are, for the most part, from 1988 and have been used in the interest of presenting the most recent data available.

b. Military expenditure data are for 1987.

c. Military expenditure data are for 1986, from Sivard (1989).

d. The regional totals for East Asia include Japan. The regional totals for Oceania include Australia and New Zealand.

Source: For military expenditure and military expenditure as a percentage of GNP: USACDA (1989, table I). See also "Statistical Notes," pp. 133–40. For health and education expenditures as a percentage of GNP: Ruth Leger Sivard with Arlette Brauer and Milton I. Roemer, M.D., *World Military and Social Expenditures, 1989,* Washington, D.C.: World Priorities, 1989, pp. 47–9. See also "Notes on Data," p. 57, and "Statistical Sources," p. 59.

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Comment on "The Post–Cold War World: Implications for Military Expenditure in the Developing Countries," by McNamara

Keith Hartley

Mr. McNamara's timely, challenging, and stimulating paper poses the central issues related to a reduction in military expenditure in developing countries and provides a clear set of policy proposals. The aims are likely to attract almost universal acceptance; but the means to accomplish these aims—and the problems encountered in their pursuit—are sure to arouse controversy. Let me start by summarizing the aims, the underlying model, and the instruments of Robert McNamara's new world order.

- *What are the aims?* The end of the Cold War offers the possibility of significant long-term savings in defense budgets, savings that can be used to restructure developed and developing nations. These changes are to be made without reducing security.
- *What is the underlying model?* Although conflicts will not disappear, the world would be different if the superpowers and their allies agreed to a set of rules governing international relations, and agreed to the circumstances in which military force might be used. The model assumes changes in the behavior of nations, the acceptance of a set of international rules, and a willingness to police and enforce these rules.
- *How is this vision to be achieved?* Mr. McNamara suggests that these changes will take time; probably a decade or more. The instruments for achieving his objectives are guided by the following assumptions. First, arms reductions agreements, embracing ballistic missiles, and nuclear, biological, and chemical weapons, would be enforced by the United Nations Security Council using economic sanctions and, if necessary, military force. Second, the United States and the developing nations would cut their defense budgets by 50 percent, and would agree to restrictions on the international arms trade. Third, aid to developing nations would be tied to cuts in defense spending. And finally, the United Nations and regional organizations would insure collective security using multinational forces.

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I. The Framework

My comments focus on five areas—international organizations, the peace dividend, the barriers to disarmament, the costs of disarmament, and arms control. I propose to explore these questions: What problems are likely to arise in trying to achieve McNamara's vision? How do we get there? What are the possible barriers to change? Who are the likely gainers and losers? And will the losers be compensated? These are areas in which economists can contribute by applying their knowledge of externalities, transaction costs, collective action, and public choice. This process can help generate a constructive debate on how to put Mr. McNamara's vision into place.

International Organizations

Are international organizations equipped to conduct international transactions? The proposed new world order requires the international community to agree on two issues. First, there must be a set of rules governing relations between nations and the obligations of the international community. Such rules would define concepts of justice and human rights, and establish dispute settlement and enforcement procedures.

Second, is the United Nations the appropriate institution and would U.S. leadership be an obstacle (to the European Community, for example)? Do we need a new international organization? This also raises the question of whether there are gaps in the existing international institutional arrangements that prevent regional transactions and arms control agreements between states.

Even if we accept the United Nations (or another appropriate body) as the institution for these transactions, four issues need to be addressed:

- Constitutional considerations: A set of rules must be devised governing election to the Security Council and specifying voting power (that is, majority voting versus unanimity versus veto).
- The standard problems of burden sharing and "free riding."
- Uncertainty and the need for flexibility. Today's superpowers and their allies might be tomorrow's minor powers. New superpowers will emerge and we need an international organization and rules to cope with uncertainty and change and to allow for new entrants.
- Will this vision be accepted voluntarily or will coercion be required? Here, a major challenge will be to persuade nations that they can sacrifice independence and rely on U.N. collective security for their protection. It is possible that in democracies, voters and politicians might not be willing to accept U.N. decisions.

The Peace Dividend: Myth or Reality?

Three myths surround the peace dividend: First, it is reputed to be large. This is unlikely if it is restricted to the cuts in conventional forces in Europe, and if the armed forces succeed in achieving better-equipped but smaller forces. Also, in the short run costs will be incurred in the destruction of equipment as well as in verification, inspection, and compensation for the losers from disarmament policies. So any peace dividend is only likely to emerge in the long run.

Second, it is believed that the peace dividend will solve economic and social problems. It might help, depending on the size of the dividend and whether it is used for public or private consumption or investment.

Third, adjustment problems and costs are purported to be relatively small and localized, so they can be ignored. In fact, adjustment problems and costs may be substantial for those groups and communities likely to lose from disarmament. Without adequate compensation and adjustment policies (regional manpower training policies), these groups will resist disarmament.

Barriers to Disarmament

Interest groups in the military–industrial complex will oppose disarmament: These groups are the likely losers. The armed forces will point to a continuing and uncertain threat; scientists and technologists will stress the need to remain at the frontiers of technology; industrialists, unions, and local communities will focus on job losses. All of which suggests that disarmament is not a costless process.

The Cost of Disarmament

Disarmament requires changes that will be expensive and will take time. There are adjustment problems and adjustment costs for military manpower and defense facilities, and for capital and labor in defense industries. We need to identify which industries, regions, and types of manpower (including military manpower) are likely to encounter the greatest adjustment problems (that is, the marketability of defense resources). We then need to decide whether market forces can solve the disequilibria created by disarmament; or whether some form of state intervention is needed—active conversion policies or regional and manpower policies.

Arms Control and Substitution Effects: The Search for Alternatives

We need to recognize that the military–industrial complex will try to expand unregulated weapons and forces to replace those that are regulated. For example:

- Controls on arms exports might lead to the creation or expansion of domestic defense industries.
- Police forces might replace military forces if overseas aid is tied to cuts in defense spending.
- Civil nuclear and chemicals industries and technologies could be adapted for military purposes (dual-use technologies). And new military technologies might emerge that could be destabilizing (for example, a national threat to U.N. forces).

Let me end by agreeing with Mr. McNamara's conclusions. This is a moment of tremendous opportunity.

Comment on "The Post-Cold War World: Implications for Military Expenditure in the Developing Countries," by McNamara

Robert Picciotto

"Since wars begin in the minds of men, it is in the minds of men that the defenses of peace must be constructed."

Constitution of UNESCO, 1946.

I. The Vision

The new McNamara world order posits a perestroika in international relations that would spawn continued progress toward disarmament; bring into force strict limits on the trade and production of nuclear, biological, and chemical weapons; and give the United Nations Security Council the resources to enforce peace.

The vision is compelling: The end of the Cold War offers an escape from the strictures of the past, provides resources for peaceful global pursuits, and makes the advent of multilateral security guarantees and global arms reduction more likely.

But is the scheme realistic? Machiavelli warned that: "There is nothing more difficult to arrange, more doubtful of success, and more dangerous to carry through, than to initiate a new order of things." How plausible then are the propositions that underlie the scheme? Is each dependent on the other? What are the likely prospects for peace in the developing countries? My comments focus on the political prerequisites and the economics underlying Mr. McNamara's new world order.

The First Pillar: Disarmament

The first proposition is almost self evident: The end of the Cold War should logically be expected to produce a peace dividend.

But this presumes that the U.S.S.R. will progress toward a market economy, and will transform itself into a democratically run federation. Yet the daily headlines suggest that the centrifugal dynamics unleashed by *glasnost* could well interrupt the progress of Soviet reform.

Still, despite these risks, the economic and political appeal of nuclear arms reduction is likely to remain strong for both superpowers. Hence the time is ripe

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to push forward with strategic arms reduction. With luck, this first pillar of the new order might yet be erected.

This step could have unintended consequences for the developing countries. A substantial share of defense production is dependent on exports. During 1982–89, according to the Congressional Research Service, the developing world purchased $16 billion worth of arms annually from the U.S.S.R.; $7 billion from the United States; $3 billion from France; $2.6 billion from the United Kingdom; $1.8 billion from China; and $6 billion each from Italy and West Germany. A declining internal market for defense products is likely to increase the commercial and political pressures to increase weapons exports to the developing countries, which would undermine the second pillar of the new order.

The Second Pillar: Arresting Nuclear, Chemical, and Biological Proliferation

It may be too late to put the proliferation genie back into the bottle. Defense Secretary Cheney (as quoted by Krauthammer 1991, p. 30) recently noted that by 2000 "more than two dozen developing nations will have ballistic missiles, 15 of those countries will have the scientific skills to make their own, and half of them either have or are near to getting nuclear capability as well. Thirty countries will have chemical weapons and ten will be able to deploy biological weapons."

As the Gulf War has dramatically shown, the developing world is a very dangerous place, and this means a strong and profitable demand for a wide range of weaponry. On the demand as well as on the supply side, there are powerful incentives to continue the arms race at the periphery. Export controls by industrial countries would, in any case, prove ineffective. Conflicts among the developing countries can be sustained indefinitely by weapons produced within those countries. China, Brazil, India, and Pakistan, to name a few, have become major global suppliers of light weapons and even missiles.

The Third Pillar: Collective Security

Can the third element of the scheme overcome these obstacles by enhancing collective security? Probably not. In a world of sovereign nation-states, the advent of enforceable multilateral security guarantees is not likely. In practice, the great powers, and especially the United States, would have to shoulder the burden of safeguarding the territorial integrity of developing countries. But experience suggests that collective action will not be readily deployed unless the vital interests of the industrial democracies are directly involved. Indeed, the heavy direct costs of the Gulf War ($70 billion or so) have introduced a cautionary threshold in the calculus of policymakers, thus dampening the likelihood of great power intervention in future regional conflicts.

This leaves ample scope for war in the developing world where internal strife plays a major role in triggering local conflicts. According to one count, thirteen of the fourteen major conflicts raging in the developing countries in 1989 did not involve large-scale international border crossings. In Sub-Saharan Africa alone, wars are being fought today in Angola, Ethiopia, Liberia, Mali, Mauritania, Mozambique, Rwanda, Senegal, Somalia, and Uganda. In Eastern and Central Europe, internal tension is on the increase, while drug wars are being fought in Latin America, and the Middle East is a powder keg waiting for another spark.

Thus from a realpolitik perspective, of the three elements that constitute the new order, only the first can be rated as probable. The second is undermined by the dynamics of technological change and regional conflict. The third is hindered by internal strife and, except for extreme challenges, such as that triggered by the invasion of Kuwait, by a lack of cohesive will among the great powers. Are the economics of the new order any more promising?

II. Military Economics

To deal with this question, I will briefly consider the state of defense economics for developing countries—a new and burgeoning field—and then reassess collective security—the lynchpin of the new order—from the standpoint of institutional economics.

Military spending is a complex equation subject to fluctuating thresholds, discontinuous production functions, and sharply diminishing returns to scale. Other things being equal, beyond a given level of military spending, each dollar buys less security and imposes a more exacting burden on the civilian economy.

Common sense suggests that poor countries should limit their military expenditures to a minimum. But for poor countries, famine, epidemics, and large-scale migration are the common result of war. Hence, the key policy issue for a developing country is how much military expenditure is economically justified as a deterrent to war.

At the optimum level of expenditure, the value of the last dollar spent on defense equals the utility of the marginal dollar spent in the civilian sector. To establish such an equilibrium requires full knowledge of the links between the military and the civilian economies. The answer is far from obvious.

The burden of the literature seems to be that military spending crowds out productive investment, contributes more to external indebtedness than to export capacity, lowers aggregate growth rates, distorts the pattern of sectoral investment, and aggravates income disparities. But the correlations are weak and, at a global level, unconvincing. Focused, country-oriented research is in short supply.

Military spending can increase productivity, for instance, when it contributes to better use of aggregate national resources in an economic downturn. Although military expenditures are not typically cyclical, and most developing economies suffer from a variety of supply-side constraints, military spending can be directed at removing them. Studies have shown that positive spillover effects exist as, for example, when military roads and communications infrastructure create indirect benefits in the civilian economy, when military training inculcates teamwork, or when military technology is effectively harnessed for civilian use. But other analyses have highlighted the exorbitant cost and inappropriate focus of military research, infrastructure, and training investments from a civilian perspective.

Some developing countries have achieved high rates of military spending and dynamic growth (for example, Taiwan [China], the Republic of Korea, Greece, and Israel). In most of these cases, substantial concessional military and economic aid came together, often for strategic reasons associated with superpower rivalry. This strategy was often successful in transforming military industries into viable export sectors. In brief, the overall evidence regarding the impact of military spending on development is not decisive from a national security perspective. In the end, military expenditure must be justified as a security investment, and we lack a good handle on the objective function.

Thus it is war or the perceived risk of war that accelerates the growth of military outlays by a quantum leap. The threat to security considered likely by a government (given the military expenditure incurred by its neighbors, geostrategic considerations, the momentum of the regional arms race, and so on) best explains its chosen level of military expenditure.

Diplomacy can defuse threats to peace, but it is a laborious and uncertain process. Reliable territorial guarantees are, in principle, preferable. Unfortunately, global collective security—like any collective good—is unlikely to be actively sought by individual states precisely because it accrues to all states. This premise is illustrated by Mancur Olson's paradoxical logic of collective action (Olson 1971), which suggests that an individual state is unlikely to incur significant risks or costs for a new order, the benefits of which will accrue to all members of the group. (Indeed, the rational behavior in such situations is to cheat unless credible enforcement mechanisms are in place to ensure disciplined application of the collective security pact.)

The larger and more heterogeneous the group, the greater the need for compulsion or the time to put durable arrangements in place, or both. This is analogous to the challenges faced by a cartel of large and heterogeneous membership: an enforcer must be found to deal with "free riders" or else the cartel collapses.

Thus economics confirms what political considerations had earlier suggested: a reliable collective system of security guarantees is at once the most fundamental and the least likely component of the proposed new order. Only with such guarantees would a ban on military production and trade be effective. Without them, effective controls—in order to be stable—would require judicious balancing of relative military assets among rivals, a truly imperial project.

To repeat, in a world of sovereign nation-states, no incentives exist for an individual state to voluntarily comply with a collective security agreement or an arms ban unless it encompasses a limited number of member states who, for reasons that go beyond economics, enjoy a commonality of purpose and decide to pool their resources to face a common threat or to secure other advantages from the cooperation.

In sum, the economics of the new order, like its politics, look shaky. Yet Mr. McNamara has again put forward a bracing and powerful set of ideas, and ideas can move mountains. So I fervently hope that his vision will in the end prevail and that the obstacles I have outlined will be overcome. In the meantime, what is to be done?

III. A Second-Best Agenda

I would venture an alternative second-best agenda in three parts:

First, the international community should seek partial diplomatic and arms reduction solutions focusing on specific threats. As proposed in various articles by Michael Klare, a prominent U.S. defense analyst, this might involve quadrilateral talks between, for example, India and Pakistan, Israel and Syria, and so on, together with their superpower patrons.

Second, development assistance should be promoted more vigorously. Just as peace favors development, development ultimately favors peace. Along with the switch in expenditure from military to civilian use, there should be a deliberate shift of resources from military to development assistance.

Third, in search of improved governance, military expenditure and weapons trade data should become more transparent and additional research into the links between military outlays and development should be supported. Greater dissemination of knowledge would mean greater accountability and would help to enhance security. Empowerment of the individual, encouragement of participation in the policymaking process, and increased access to information are all positively associated with economic development—as well as with peaceful governance.

Although this modest agenda falls short of the sweeping multilateral architecture visualized by Mr. McNamara, concerted bilateral reforms in military assistance policies combined with expenditure switching to economic assistance—and complemented by systematic knowledge and dissemination about military expenditure—could help move the developing world closer to peace and prosperity.

What About Conditionality?

The level of military expenditure incurred by a country has a bearing on the economic programs that development agencies support. Military expenditure in the mid-1980s was estimated at about 6 percent of the gross national product of the average developing country. At that time it absorbed 21 percent of gross federal budget expenditures, and employed about 0.5 percent of the population. (In the Middle East, the figures were 13 percent, 30 percent, and 1.5 percent respectively.) As Ruth Sivard reminds us, the military competes directly with education, health, and other social expenditure (Sivard and others 1989).

Without credible security guarantees, however, and considering the dim security prospects facing developing countries, military conditionality for economic assistance could be either futile or potentially destabilizing. Futile where governments motivated by genuine national security considerations are determined to incur military expenditure as insurance against an internal or external threat. Destabilizing where conditionality does influence a government and leads to dangerous imbalances in the regional power structure.

Technically, available data are poor and the state of the multidisciplinary art of defense-cum-development economics is still in its infancy. Without reliable information and a sound analytical base, any ceiling imposed on military expenditure would be arbitrary. Without an appropriate rationale, conditionality would, in the end, damage the effectiveness of any development agency that chose to wield it: in most situations, it would be bitterly resented as an affront to national sovereignty.

In any event, the proposed link between economic and military policy conditionality is not a necessary component of the new order. Conversely, the advent of the new order would make it redundant. Better to concentrate on other aspects of the development agenda.

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Floor Discussion of the McNamara Paper

One participant offered three brief observations about McNamara's paper. First, he qualified the general admiration of Churchill's position in the Atlantic Charter by pointing out Churchill's less-than-strong commitment to the self-determination of colonial peoples. Second, he said that the history of the last forty years showed that excessive concern with United Nations guarantees of territorial integrity can lead to a violation of human rights unless the initial territorial arrangements are in some sense fair. Finally, he said that members of the United Nations have not abided by the agreements signed in the past, and he wondered if mind-sets have changed much.

Another participant asked how an organization such as the Bank could get a country to comply with the condition to limit military spending when there are so many ways to hide expenses. He asked if it might not be more productive to divide a country's accounts crudely into overhead (including military) accounts and economic development accounts, to look for transparency in the economic development accounts, and to let the country decide how to distribute its own overhead accounts. If the country's military behavior creates a problem for its neighbor, the organization might invoke diplomatic efforts to control the problem.

McNamara responded that his use of the term "guarantee of territorial integrity" was shorthand for guaranteeing a nation's security against external aggression. Certain circumstances should justify U.N. Security Council intervention in support of human rights, but the problem is that the U.N. charter is ambiguous on that point. U.N. intervention, for example, on behalf of the Kurds, is based on a single clause that justifies intervention in the interest of international security. The issue of how to protect peoples' rights and freedoms, particularly those of minorities within nations, should receive more attention than it has, McNamara said. Meanwhile, U.N. guarantees of territorial integrity against external aggression (which might be difficult to achieve) would substantially reduce military spending in the developing world.

Another participant suggested that the kind of conditionality hinted at in McNamara's paper would damage the effectiveness of any development agency wielding it. Because we don't have reliable information or the analytical base needed to set the right levels of military spending, any ceiling put on expansion would be seen as arbitrary.

This session was chaired by Wilfried P. Thalwitz, Vice President for Europe and the Central Asia Region of the World Bank.

McNamara said he understood the complex politics involved, but 40 million people had died in wars waged in the last forty-five years, and the developing countries are spending $200 billion a year on defense. This is undesirable, and the World Bank can do something about it. What can it do? Japanese officials told McNamara that they were prepared to take the level of military expenditure into account when allocating overseas development assistance. This was a major step, McNamara contended, and he had never heard anything like it from an OECD nation. At least three leaders of developing countries, one of them from the Republic of Korea, told him they were prepared to recommend conditionality. Why don't we take them up on it? That would be a good place to start. And then the Bank could talk to the suppliers. Why isn't there more transparency, so that we can begin to see the problem and talk to some of the major nations?

Admitting that he was going to step on some toes with what he said next, McNamara said it was time the Bank (a symbol for all of the international institutions, including the United Nations) began to address obvious problems. Pakistan, for example, spends 6.5 percent of GDP on the military although most Pakistani women are illiterate and have not attended even primary school. Pakistan, he said, cites its need to defend itself against India, which has seven times Pakistan's population, several times its conventional force, and a nuclear weapon. That is a problem, he said, but any military budget in the world can be cut 20 percent without reducing security. "I guarantee it, starting with the U.S. budget, and it is coming."

The United States spent 5.9 percent of its GNP on defense in 1989, he said, but has budgeted only 4.2 percent for 1996, which, by his calculations, amounts to a peace dividend of $1.8 billion. Although McNamara was of the opinion that the United States had already squandered this peace dividend on excessive health costs (without taking care of its health problems), he said there is a peace dividend and a host of things could be done with it.

A participant asked where one would start on McNamara's agenda and how the process would go on from there? What about institutional arrangements? What other institutions would push this issue forward? The Security Council? Heads of government?

Another participant said that McNamara's background as U.S. secretary of defense and as president of the World Bank made him the right person to present this proposal. We should think about a new international regime, he said, building on the formal regime we have with the nonproliferation treaty and working with the London suppliers' group and other informal mechanisms. In Geneva there is a group trying to negotiate a similar regime for chemical weapons but a comparable international regime for conventional weapons was also essential.

Hartley (discussant) agreed that an international regime to limit conventional weapons was important, and pointed out two other concerns. First, on the question of the need for leadership, he thought it likely that France and other

European countries would resist U.S. leadership. And second, in creating international organizations, we need to discuss whether the idea is a voluntary solution or whether ultimately coercion will be required.

McNamara explained that he was suggesting U.S. leadership only as a fallback position—he hoped agreement could proceed without it. And in many areas there would be no U.S. leadership. He doubted, for example, that the United States would take the lead in reducing exports of conventional arms; within the past six weeks it had proposed to do the opposite. He would love to see the European Community or its individual members take a leadership role, he said, but he didn't expect to see that happen either. He said he had stressed U.S. leadership partly to emphasize its corollary: that if the United States does lead, it must accept collective decisionmaking. He did not feel that the situation in Kuwait and the Gulf was an example of either collective decisionmaking or collective risk-sharing. But leadership is needed and we have to get it wherever we can, if it is in the right direction—and international organizations, including the World Bank, can play a leadership role.

Another participant pointed out that we can't even define the borders McNamara would defend because some countries don't recognize others, and many of these border disputes have persisted for 2,000 years. He suggested that it might be best to target McNamara's proposal to the few countries that spend the most on defense. McNamara replied that it is still important to look at individual nations. Tanzania, for example, does not account for a large proportion of the $180 billion spent on the military, but the proportion of Tanzania's GNP or GDP that goes to the military is far too high and should be reduced.

Another participant concurred with the need to deal with border issues, such as the dispute between Pakistan and India. In the literature published by the World Bank and the United Nations, he added, there is always a disclaimer saying that the maps used are not an endorsement of particular borders. The first step we should take is to get the United Nations and its Security Council to help resolve these disputes and define borders, as they are now doing with Kuwait and Iraq.

McNamara said that one solution would be an agreement between the Security Council and the United Nations that border disputes would not be resolved by military action. Once that is done, he suggested, they could set up a mechanism for dealing with the issue in the World Court, although he made the point that the effectiveness of the court was reduced when the United States wouldn't accept its jurisdiction. Now that the end of the Cold War had released the United States from certain constraints, he said, he could see the Security Council agreeing that if a country attempted to resolve a border dispute through military action, the United Nations would impose economic sanctions and, if necessary, take other actions.

McNamara concluded that the developing world spent almost $200 billion a year—roughly what it spent on health and education—on the military. The amount that would be saved might not translate directly into spending on health and education, but surely it amounted to a waste of human resources in a world short on human capital. We have to address this problem, he said, while we have an unparalleled opportunity to do so.

After the Cold War: Obstacles and Opportunities in Cutting Arms Budgets

Mary Kaldor

The end of the Cold War offers the opportunity to shift resources from the military to the civil domain. Reductions in military spending by advanced industrial countries would be economically beneficial; they could help to reduce budget and trade deficits and thereby ease the debt burden on poor countries. There are, however, strong political and institutional obstacles to such a shift. Military power is thought necessary to counter the spread of violence and the proliferation of weapons in the developing countries and Eastern Europe. High-technology arms projects, favored by the arms industries, will put pressure on military budgets in the future. To overcome these obstacles, this paper proposes a new approach to security: economic cooperation and peaceful, democratic ways to manage conflicts; a defensive lower-technology military posture; and support to local conversion initiatives in defense-dependent areas by labor unions, churches, and other community groups.

The disintegration of the U.S.S.R., the withdrawal of Soviet forces from East-Central Europe, and the Paris summit agreement on conventional forces in Europe mean that the U.S.S.R. no longer poses a military threat to Western Europe. The end of the Cold War potentially releases substantial resources from the military sectors of the industrial countries. Europe, including the U.S.S.R., accounts for more than 50 percent of world military spending, and the portion of the U.S. budget devoted to the defense of Western Europe accounts for another 20 percent (USACDA 1990).

The end of the Cold War could also release funds now devoted to military purposes in developing countries by reducing East-West tensions and allowing greater international cooperation in resolving conflicts and in controlling transfers of military technology. In fact, military spending in developing countries as a whole fell both absolutely and as a share of gross national product (GNP) during the 1980s (USACDA 1990). The decline was caused primarily by economic constraints and secondarily by the process of democratization in Latin America and Asia. Although the end of the Cold War has already eased tensions in some areas, notably Namibia and Central America, conflicts continue in the Middle

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East and Afghanistan, and low-level violence is increasing in many poor countries.

Failure to take advantage of the opportunities for cutting military spending in the post–Cold War era could mean a growing economic, political, and military gap between a rich but stagnating West and an increasingly impoverished, chaotic, and violent South and East. Among Organisation for Economic Co-operation and Development (OECD) countries, there is evidence that high levels of military spending have led to declining international competitiveness and trade imbalances. In particular, high military spending is a major factor in explaining the U.S. budget deficit. Unless budget and trade deficits are corrected, interest rates will remain high, and the savings of surplus countries in Europe and the Far East will be available neither for investment and economic assistance in East Europe and in the developing countries nor for domestic fiscal expansion, which would increase the markets of these regions.

Lowered rates would also significantly ease the costs of the debt burden in the developing world. Today those costs fall most heavily on poor people, even though most developing countries have trimmed their military budgets. A continuation of high-cost debt and a failure to tackle the problems of poverty could thus contribute to violent ethnic crime, to communal and social tensions, and to new national and religious fundamentalisms, all of which threaten fragile democracies and strengthen the position of the military and the police.

Moreover, military trends in the West tend to lead those in developing countries. As long as the West insists on acquiring technologically elaborate and costly weaponry, pressure for imitation among armed forces of the developing countries will continue unabated.

In the former centrally planned economies, liberalization and stabilization policies have increased inequalities and unemployment, which are associated with a rise in violent crime and in political and social instability. Resistance in the Soviet armed forces and defense industries to military spending cuts, which has been rationalized in terms of the Western failure to undertake similar cuts, was one cause of the failed coup in the U.S.S.R. The rise of nationalism is associated with new demands to create national guards and national armies.

Unless the world's leading weapons spenders and producers seize the opportunity to scale back militarization, military power will continue to be seen as the answer to instability in East Europe and in the developing countries. In practice, the new forms of violent conflict in these regions tend to be subnational conflicts that can be managed only through police action and civil dialogue. Indeed, military intervention may exacerbate such conflicts. Moreover, high-cost military budgets may actually contribute to the very causes of instability because of the economic deprivation they entail. Alternatives to the simplistic equation of military power and stability exist, but they must overcome powerful political and institutional resistance to the reduction of arms spending. This paper explores the sources of resistance and the ways around them.

I. OECD Countries

For most of the 1980s, military spending increased in real terms in nearly all the advanced industrial countries of the West.[1] A key characteristic of the rise in the OECD countries has been the greater emphasis on high technology, which can be traced through the rise in spending per soldier and the rise, as a share of total military expenditures, in spending on equipment.[2] In particular, spending on military research and development has risen as fast or faster than equipment expenditures. In the United States, for example, spending on research, development, testing, and evaluation rose from 9.9 percent of total military spending in 1980 to 12.4 percent in 1989 (SIPRI 1990).

The tendency to develop more complex and sophisticated weapons systems does not stem from some force inherent in technology. In wartime, military technology is driven by requirements on the battlefield. In peacetime, technological choices tend to be the outcome of institutional bargaining and therefore they reflect the conservatism of the armed services, and the tendency to cling to established missions and routines as well as competitive pressures from arms manufacturers (see Kaldor 1982; 1986). These phenomena shaped military developments in the 1980s, when the war experiences of the 1960s and 1970s in Viet Nam and the Middle East demonstrated that design improvements in weaponry, especially in electronics, had greatly increased the accuracy and destructiveness of all munitions. The resulting rise in the rate of loss of ships, tanks, and aircraft provoked a debate about whether to shift strategy by developing weapons for a more defensive military posture.

Advocates of the shift argued that the advantage of offensive missions had been eroded because of the vulnerability of weapons platforms. Defensive strategies, which would aim to bog down an offense and give time for negotiations (Canby 1974–75; Ahfeldt 1983), could be based on relatively cheap, numerous, and dispersed defensive equipment, like small antitank or antiaircraft missiles.

Others argued that offensive equipment needed to be *more* complex and *more* expensive so as to evade defenses (through so-called stealth technology) and overwhelm them (through area-destruction munitions). This view prevailed probably because of the vested interests of the military and the arms industries. And it was this view that was tried out in the Gulf war. An indication of the expense of the offensive strategy can be derived from the cost of the U.S. Stealth

1. The most dramatic increase was in the United States, where it rose nearly 70 percent in real terms between 1978 and 1988; U.S. military spending also rose as a share of world military spending in that period, from 23 percent to 30 percent. Since 1986, the rate of increase in U.S. arms budgets has slowed and, in 1990, it may have declined slightly. The Department of Defense plans further reductions, although these do not seem to affect spending on research and development, and the extent of these cuts is still a matter for debate.

2. Spending per soldier rose the most in the United States and Japan. According to NATO (1990), equipment expenditure as a share of total military spending has risen significantly over the past twenty years, especially in the United States and in the United Kingdom.

bombers, used apparently effectively in the Gulf war. Each bomber will cost $500 million assuming 132 are ordered (Deger and Sen 1990).

The Economic Cost of Military Spending on High Technology

Econometric cross-country comparisons for OECD countries suggest that high levels of military spending as a share of gross domestic product (GDP) are inversely correlated with rates of economic growth (Smith 1977; Dunne and Smith 1990). Explanations for this observed relationship vary. Smith (1977) argues that because social plus private consumption is constant as a share of GNP, military spending competes with investment expenditure. However, this argument presupposes full capacity, a condition that did not obtain in the 1980s.

An alternative explanation, not inconsistent with Smith's, would emphasize the technological consequences of high military spending. Because it absorbs a disproportionate share of technological resources, especially scarce skills, and because it distorts the trajectory of civilian technological development, high levels of military spending contribute to a decline in in the growth of productivity and in the international competitiveness of manufacturing (Kaldor and Walker 1988).

Some argue that military spending could facilitate civilian technology through so-called spin-offs. Undoubtedly, computer and semiconductor technologies have benefited from military technology spinoffs (or at least from the existence of a military market), and adaptations may still result in such countries as Sweden and Japan, where military technologies are closer to civilian technologies. But in the United Kingdom and the United States, the trend toward complex weapons systems has increased the divergence between military and civilian technologies. A recent report to the British government by the Advisory Council on Science and Technology (ACOST) says that less than 20 percent of military research and development expenditures are likely to have any application to the civilian sector. According to the report, the cultures are so different that "bridging the difference requirements" in the United Kingdom is extremely difficult (ACOST 1989).

Obstacles to Reductions in Military Spending

The obstacles to cuts in military spending in the OECD countries are political, institutional, and technological. The political obstacle lies in the argument that the former U.S.S.R. and East-Central Europe are still potentially unstable areas and that new threats are emerging in developing countries—terrorism, religious fundamentalism, drug trafficking, and the proliferation of advanced military technology. Proponents of this view see Iraq's invasion of Kuwait as a confirmation of this danger.

The institutional problem lies in the fact that substantial cuts in military spending are likely to require the cancellation of major projects involving high technology, all of which have significant constituencies in the armed forces, in industry, and in particular geographic regions. In the United States the administration argues that the adjustment to lower levels of military spending can be left to the market (Raumer 1990). From an economic point of view, this assessment is probably correct. Recent evidence from OECD countries suggests that military spending has no specific employment effect and that reductions in military spending are therefore no more likely to create unemployment than reductions in other forms of public spending (Dunne and Smith 1990). Likewise, studies of the peace dividend in the United Kingdom (Barker, Dunne, and Smith 1990) suggest that any reduction in military spending that is offset by an increase in other forms of public expenditure will actually increase economic growth. But these studies do not take into account the political strength of the constituencies supported by the highly complex, capital-intensive projects that now dominate spending. Specific adjustment measures may not be necessary economically, but they will be required politically to overcome the resistance of these constituencies to potentially massive losses.

The technological obstacle lies in the lumpiness of large military projects with technological components. The cost of projects now being designed and developed will increase many times as the projects move through the stages of procurement, operations, and maintenance. And continuing high levels of expenditure for research and development put considerable pressure on future budgets. Indeed, in the United States, spending on military research and development is expected to rise despite planned cuts in overall military spending.

Even if there is a correlation between military spending and low growth rates in OECD countries, trimming defense outlays will not automatically increase economic growth. That depends on whether the resources released are used to increase public spending and investment, and whether scientific and technological activities are redirected for civilian purposes. Assuming appropriate policies, a contraction of military spending is likely to be beneficial.

II. Developing Countries

Since the mid-1970s, military spending in developing countries has been falling as a share of gross domestic product (GDP) and as a share of central government expenditure, and since the mid-1980s it has declined in real terms. The shrinkage is partly the result of democratization in a number of Latin American and Asian countries, but economic constraints have played an even bigger role. For developing countries as a whole, debt service as a share of GNP in 1988 was higher than military spending as a share of GDP. Part of the debt was military-related, and according to a widely quoted estimate, a third was related to arms imports (Deger and Sen 1990).[3]

3. Most discussions of the influence of military spending on economic growth in developing countries are based on cross-country econometric comparisons, which are used to support a variety of arguments. Some argue that military spending has been beneficial for economic growth on the grounds that it plays a mobilizing modernizing role; or that it has a Keynesian multiplier effect (Benoit 1973); or that it is associated with authoritarian governments, which keep consumption low through the redistribution of income and thereby increase the savings-income ratio (Evans 1985).

Others argue that military spending is bad for growth either because it competes with social

Can the reductions in military spending that took place in developing countries during the 1980s be sustained and even accelerated in the 1990s through the extension of debt relief or a loosening of economic constraints? The answer depends, as it does in the OECD countries, on political, institutional, and technological factors. First, will regional wars persist? Second, will internal unrest persist—a question that is tied to the prospects for debt relief and the type of structural adjustment policies governments adopt. Currently, the burden of structural adjustment programs tends to fall most heavily on the poorest people, even with cuts in military spending.[4] In some very poor, heavily indebted countries, one can observe a sort of syndrome: Domestic unrest and internal or external violence lead to increases in military spending, which—in the context of structural adjustment programs involving curbs on public expenditure as well as trade liberalization—necessitates a drastic squeeze on public investment and social consumption. This squeeze increases poverty and social inequalities, which exacerbates domestic unrest and further increases pressure for increased military spending. So far, this syndrome is mainly to be found in Central America and Sub-Saharan Africa (see table 1) but it could spread elsewhere.

The connections between changing economic conditions, domestic unrest, and increased military spending are important to investigate. Although the connection between war and military spending is self-evident, a link between domestic unrest and higher military spending is not so obvious. The cost of domestic repression—police forces or the use of military forces in police actions—is relatively low and does not require the kind of expensive, high-tech equipment that may be used in wartime. Nevertheless, the military budget may rise in these situations for political reasons—to secure the loyalty of the armed forces or to enhance the government's image of power and legitimacy.

Third, even if regional and internal violence can be dampened, will developing countries withstand the pressure for the acquisition of advanced military technology? During the 1980s arms imports stagnated and may even have declined in real terms. One of the ways that defense spending was cut and foreign exchange saved was by postponing the replacement of major weapons systems. Major systems—aircraft, tanks, ships, and so on—define the roles of particular branches of the armed forces. In countries where the military is politically powerful, especially in new and fragile democracies, resisting the pressure for replacement could be difficult without a redefinition of military roles.

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consumption—thereby leading to an increase in private consumption and a reduction in the savings-income ratio—or because it absorbs scarce resources, especially foreign exchange and engineering skills (Deger 1986). Another argument along these lines would be that reductions in social consumption coupled with austerity policies reduce economic efficiency.

These comparisons help to clarify the arguments and limit the range of possible explanations. However, the experiences of developing countries are so varied, the data so poor in many cases, and the equations open to so many interpretations that further investigation would require case studies.

4. Nonetheless, a failure to cut military spending means that structural adjustment programs designed to reduce budget deficits are more likely to compete with forms of public spending that protect the poor or increase economic efficiency (Cornea and Stewart 1990).

Table 1. *Elements of Government Spending as a Percentage of Central Government Expenditures for Selected Low-Income, High-Debt, Primary-Producer Countries, Selected Periods*

	Military		Education		Health		Memo: Long-term debt service (percent of GDP)		Memo: Growth of GDP (percent)
Country	*1978*	*1988*	*1972*	*1988*	*1972*	*1988*	*1970*	*1988*	*1980–88*
Ethiopia	20.6	23.3[a]	14.6	10.6	5.7	3.6	1.2	4.3	1.4
Liberia	3.7	17.5	15.2	–	9.8	–	4.3	–	−1.3
Mozambique	28.9	34.6	–	–	–	–	–	2.0	−2.8
Niger	4.3	4.8	–	–	–	–	0.4	5.6	−1.02
Zambia	12.6	–	19.0	8.3	7.4	4.7	4.6	4.9	0.7
Sri Lanka	3.2	13.3	13.0	7.8	6.4	5.4	2.1	4.8	4.3
El Salvador	11.0	34.9	21.7	17.1	10.9	7.1	3.3	12.0	0.0
Guatemala	10.0	13.4	–	–	–	–	1.6	4.5	−0.2
Honduras	6.8	9.6	22.3	–	10.2	–	1.4	7.2	1.7
Bolivia	16.1	28.1	31.3	18.4	6.3	1.9	2.6	5.6	−1.6
Colombia	6.3	14.4	–	–	–	–	1.7	7.5	3.4

— Not available.
a. 1984.
Source: World Bank (1990); USACDA (1990).

Fourth, in some relatively advanced developing countries the shrinking export market for arms could lead to pressure for increased domestic procurement. (In just the same way, reduced domestic procurement in advanced industrial countries increases the pressure to export.) Can civilian manufacturing grow sufficiently to constitute an alternative outlet for the defense industry and an alternative political constituency for government expenditure?[5]

China is an interesting example of a country that has cut military expenditure dramatically, from 6.7 percent of national income in 1975 to 1.9 percent in 1989 (SIPRI 1990). (In 1990 military spending increased sharply, presumably in response to the events in Tiananmen Square.) China in this period also changed the structure of its military, from a labor-intensive people's army to a smaller, more technology-intensive, more professional army (although the technology is indigenously developed and does not correspond to the Western model). The purpose of the spending cuts was presumably to release resources for China's program of economic liberalization. The big reductions in defense spending were brought about partly by a dramatic increase in arms exports, especially to both sides of the Iran–Iraq war, and partly by increased civilian production by the armed forces and the defense industry ministries.

The efforts to achieve industrial conversion have been one of the most interesting features of the Chinese experience. The government declassified and disseminated military technology for its application to marketable civilian products, and it made an almost Japanese-style commitment to the integration of development, production, and marketing. Civilian services, as well as goods, were extracted from the military sector; the air force, for example, is providing scheduled civilian air service and military hospitals are admitting civilian patients. The commercial output of the defense industries during the 1980s increased at an average annual rate of 20 percent—double the pace of growth in GDP—and the share of commercial products in the total output of the defense industries increased from 8 percent to 66 percent. Economic liberalization, however, was not accompanied by political liberalization. Moreover, a disturbing feature of the conversion program has been its extension of control by the military and the defense industry ministries over parts of the civilian economy.

III. The Former Centrally Planned Economies

Military spending after World War II was much higher as a share of national income in East European countries than in the West, although the numbers are

5. Beside the countries of Central America and Sub-Saharan Africa, another group of developing economies countered the general trend and did not cut real military spending during the 1980s—namely, the East Asian regions that did not experience severe economic constraints on public spending, such as Malaysia, India, Singapore, the Republic of Korea, and Taiwan (China). In Korea and Taiwan (China), military spending per soldier is much lower than in other countries at a similar level of development and, although both countries produce and export arms, the military sector is rather unimportant as a proportion of overall manufacturing. This suggests that technology may be less significant in pushing up military spending and that opportunity costs for manufacturing, or the distorting effects on civilian innovation, are less than elsewhere.

in considerable dispute.[6] Some argue that military spending benefited the economy in two ways. First, the perception of an external threat, combined with repression, allowed governments to keep consumption down. Second, the arms competition with the West introduced new technologies to the economy, thereby raising productivity. These propositions may have been true in the 1930s, 1940s, and 1950s. In the past two decades, however, as the pressure for more consumption has grown and the increasingly complex nature of military technology has limited its benefits to the civilian economy, the high levels of military spending and the rigid central planning system have come to be viewed as the two main sources of stagnation.

Beginning in the late 1980s, all East European countries (including the U.S.S.R.) substantially reduced military spending, initially because of Gorbachev's policy of "reasonable sufficiency," and later as a result of the 1989 revolutions. In particular, the Volksarmee of the German Democratic Republic was dismantled following German unification. The reduction of Soviet military spending and the disappearance of the East German arms market has dramatically reduced arms production in East-Central Europe. The East European countries are thus struggling through a dual transition: from central planning to a market system and from a Cold War economy to a peacetime economy.

All the East-Central European countries face severe problems stemming from high interest rates, rising oil prices—they have the most energy-intensive economies in the world—and the decision to pay hard currency for Comecon transactions; and all the new democracies of East-Central Europe have adopted neoliberal policies in varying degrees: harsh austerity measures combined with trade liberalization and privatization. In the Soviet republics, the economic situation has also worsened dramatically for many reasons, among them the breakdown of the state distribution system, unsuccessful attempts to control the overhang of rubles, and the legacy of neglecting the environment and capital infrastructure.[7]

Before the breakup, the U.S.S.R. has initiated a major program of military conversion. As in China, it aimed for a large increase in the civilian portion of defense industry output—in the Soviet case, from 43 percent in 1988 to 60–65 percent in 1995. About 500,000 workers are expected to be freed from military work, and the civilian research and development budget is expected to rise from 29 percent of the budget to 45 percent (Cooper 1991).

6. Official figures for military spending in East European countries, including the U.S.S.R., only express a fraction of the actual costs. (I use the term "East Europe" to include the U.S.S.R. and "East-Central Europe" to exclude the U.S.S.R.) They include the personnel budget and, in some cases, a nominal price paid by ministries of defense for supplies. Other costs—investment, research and development, construction, energy, food, and supplies—come under other budget headings. It is extremely difficult to reconstruct these figures, especially as prices for weapons and other supplies were determined arbitrarily.

7. No one knows the true size of the budget deficit or of military spending. This year's deficit may well be as high as 200 billion rubles. Military spending is officially estimated to be some 96 billion rubles in 1991, but this is almost certainly an underestimate—perhaps as little as half the true budget.

The Soviet program has been criticized for being overly centralized and too dependent on administrative methods (Izumov 1990). The increase in civilian output is, in large part, achieved through the takeover of civilian industries, particularly textile machinery, medical equipment, and food processing. The ministry for the aviation industry, for example, is planning to start up the first Soviet production lines for macaroni (Alexander 1990). The top-down approach to conversion has meant that the defense factories are often producing products unrelated to markets, needs, or the skill-mix in the defense plants. For example, some high-tech plants are producing such low-tech goods as milk pumps, bicycles, bottling machinery, and baby food products, a use of capital and technology that many workers, especially engineers and scientists, find frustrating, and that results in unnecessarily costly products.

Despite such difficulties, continued cuts in military spending in East Europe are essential to release resources for economic reform. Such cuts could be difficult for political and institutional reasons. First, some countries are already experiencing increased levels of violence that may well be linked to economic hardships. Yugoslavia is gripped by civil war. Some parts of the U.S.S.R.—Armenia and Azerbaijan, for example—are close to civil war. There is considerable concern that the Yugoslav "virus" will spread to other parts of East-Central Europe. Some countries are tightening up border controls against what is likely to be a rush of economic and ethnic refugees from the U.S.S.R. and from the Balkan countries—Albania, Romania, Bulgaria, and Yugoslavia. In the wake of the disintegration of the Warsaw Pact, the new democracies of East Europe, including newly independent Soviet republics, are debating how to reorient their armed forces. Some countries see the armed forces as a symbol of nationhood, while other countries want a more European posture; Poland, Czechoslovakia, and Hungary are all applying to join NATO.

Second, cuts in military spending, here as elsewhere, face political resistance from the armed forces and from the arms industries. Resistance from the armed forces has been greatest in the Soviet republics, although it has diminished since the August coup.[8] Arms industries often dominate the output of the regions in which they are located. In Leningrad, for example, where arms production is said to account for two-thirds of total industrial production, the defense sector plays an important political role. Cuts are also resisted by the articulate scientists and technicians employed in the defense industries. In September 1990, for example, forty-six general directors and general designers of organizations attached to the defense industry ministries sent a letter to *Pravda* calling for the maintenance of centralized control, increases in the central Union budget, and

8. Growing instability is linked to dissatisfaction within the armed forces. In the U.S.S.R. before the attempted coup, military leaders felt threatened by the withdrawal from East-Central Europe and by what they perceived as highly unequal cuts imposed on the U.S.S.R. by the Treaty on Conventional Forces in Europe. More general unrest has been created as officers released from service have found themselves without housing or jobs, and by the withdrawal from Afghanistan, which has reportedly created an Afghanistan syndrome akin to the Viet Nam syndrome in the United States (Holden 1990).

so on. Likewise, defense plants in the Baltic states have been active in pro-Union positions (Cooper 1991). A similar situation obtains in Slovakia where defense cuts have led to high levels of unemployment. Nationalist politicians claim they will increase defense procurement.

IV. Arms Trade

Reductions in military spending are often associated with an increase in both geopolitical and economic pressure to export arms. The geopolitical pressure stems from the fact that the United States may compensate for any reduction in its global role by supporting what might be described as regional surrogates, as it did in the 1970s after the Viet Nam War. The sale of American and European arms to Arab partners in the Gulf war is an example of this kind of geopolitical pressure.

Economic pressure stems from the fact that reductions in military spending are likely to increase surplus capacity among arms manufacturers, a problem that already can be observed in the United States, Europe, and China as well as in developing countries that are significant arms producers.

Past efforts at multilateral control of the arms trade have been unsuccessful. Even the modest proposal for an arms trade register, on the table since the days of the League of Nations, has never been close to implementation. Talk of an arms control regime for the Middle East came in the aftermath of the Gulf war, but as noted above, the United States has already announced arms sales to the region.

Perhaps the main impediment to multilateral arms control is the perception by developing countries that such control would merely preserve a monopoly of power by keeping military technology out of the hands of the powerless. A multilateral agreement is difficult to imagine without reductions in Western levels of arms acquisition and changes in the character of those arms or a change in the perception of developing countries that the West offers the definitive model of military and political power.

In contrast to multilateral efforts, however, unilateral restraints on arms trade have been relatively successful. Some suppliers—Sweden, Germany, and Japan among them—refuse to sell arms to countries in conflict or to countries with repressive regimes; although these rules are sometimes broken, their existence constitutes a restraint. On the side of the recipients, economic constraints have reduced purchases of arms during the 1980s. Because of the pressures to export and to import, restraining arms trade would seem to depend on restraining both buyers and sellers in the context of overall restraint on levels of procurement and production.

V. Paths to Reduced Military Spending

The Gulf war is a presentiment of a future in which military spending receives continued priority. In that war, Western military power confronted a phenomenon that emerged from the economic, social, and political conditions of the region and was nurtured by the sale of arms (often on guaranteed or soft credit terms) from advanced industrial countries. From a Western perspective, the war seems to have proved the efficacy of high-technology weapons and the possibility of fighting wars with few Western casualties. From an Arab perspective, the war has left a legacy of bitterness, division, and humiliation that is likely to lead to continuing violence, to the rise of nationalism and fundamentalism, and to new arms buildups.

The war itself has contributed to the gap between rich and poor, North and South. The war is estimated to have cost the United States about $60 billion, all of which is to be financed by Saudi Arabia, Kuwait, other Gulf states, and Japan. British costs are estimated at $4.1 billion, of which $2.8 billion is to be provided by Japan, Germany, some of the Gulf states, Hong Kong, and Denmark (Willet 1991). The other coalition partners also incurred direct costs, as of course did Iraq and Kuwait from the immense damage inflicted by combat. To all these direct costs must be added the very high indirect costs for developing countries, especially those imposed by the rise in the price of oil and the loss of remittances. A report for the British Overseas Development Institute (Manuel and Page 1991) suggests that the indirect cost of the war will amount to more than 1 percent of GDP in at least thirty-four developing countries, more than 30 percent in Jordan, more than 10 percent in the Republic of Yemen, and nearly 5 percent in Egypt. Moreover, these figures do not include the forgone peace dividend nor the loss of humanitarian assistance to such countries as Sudan, whose governments supported Saddam Hussein.

Averting a new North–South economic and military division in the future requires a determined effort to overcome political and technological resistance to reductions in military spending. How might this be done?

An Alternative Approach to Security

Overcoming the political resistance to cuts requires an approach to security that does not depend on military power to deal with instability or regional dictators. It was, after all, the peoples of East-Central Europe, not Western military might, that in the end toppled the Communist regimes and brought about the withdrawal of Soviet military forces. The sources of instability and the conditions that produce dictatorships are often internal. The exclusion of a large part of society from the material gains of development or from access to political institutions is likely to provoke violence and repression. Although the repression is generally the responsibility of the police, domestic authoritarianism is often associated with increased militarization. The military may be a powerful political actor; it may constitute a symbol of legitimacy, and exaggerated fears about external threats may be used to foster domestic cohesion.

In his paper Robert McNamara outlines some important proposals for an alternative security regime. The main objective of McNamara's proposals is external security, which is the rationale for military forces. But it is important to emphasize the connection between external security and internal conditions. An alternative approach to security must therefore address not only the problems described by McNamara but also encourage democracy and economic cooperation and develop peaceful and democratic ways to express and manage conflicts. At the international level, the approach would emphasize dialogue and diplomacy and strive for greater representativeness and accountability at international institutions such as the United Nations and the International Monetary Fund so as to obtain greater political weight for the poor. It would mean cuts in military spending and arms sales as well as the realization that global economic redistribution through debt relief, trade preference schemes, and economic assistance are at least as important in tackling the sources of instability.

This kind of approach would also need to be applied at a domestic level. Governments can never achieve the basic conditions for a democratic, nonviolent society unless underprivileged groups are involved in political processes and have certain basic needs met.[9]

Shifting to Less Costly, Defensive Technologies

Ways must be found to reverse the technological pressure for larger arms budgets. An important feature of the increase in military spending in the West during the 1980s was the rapid rise in military spending per soldier. (Military spending per soldier declined in developing countries in real terms during the 1980s but mainly because of the postponement of arms purchases.) The substantial cuts in military spending currently planned in Western countries will primarily affect personnel, while military research and development and equipment procurement are expected to remain stable or even increase. As noted at the outset, any current expenditure on military research and development will eventually ripple through the military budget as new systems currently in the stage of invention or innovation are developed, produced, and used. Moreover, the advanced industrial countries set an example for developing countries; as long as industrial countries continue to modernize their armed forces, developing countries will be hard put to resist current fashion.

Rising technological complexity is not, however, inexorable. It is the outcome of an institutional relationship between the armed forces, on the one hand, and the defense suppliers on the other. Currently, the armed forces in most countries are structured around offensive military roles. With the development of information technologies and the enormous improvement in the accuracy and destructiveness of all munitions, however, the cost of survivable offensive missions has increased exponentially. For the foreseeable future, then, developing countries will never match the technologies of advanced industrial countries; the argument that their acquisition of advanced Western technologies enhances their

9. Proposals to make aid programs conditional on cuts in military spending could help democratic governments when bargaining with the armed forces. But no amount of conditionality can reduce the dangers of violence, authoritarianism, and renewed militarism if governments fail to maintain the living standards of the poorest people, and do not involve underprivileged groups in political processes.

military power is entirely based on distorted psychological perceptions. And in practice, developing countries have difficulty operating such technology, which can always be electronically outwitted by the suppliers (as was the case with Iraq's French-supplied air defense system). But developing countries will continue on a high-technology path to military preparedness unless Western armed forces and defense industries, as well as their own, are restructured along defensive lines with lower technological content. When accompanied by curbs on research and development spending, such restructuring could weaken political pressures to purchase the next generation of costly offensive equipment.

Of course, defensive technologies such as the U.S. Strategic Defense Initiative can be high-tech and expensive, but there are alternatives. Less expensive, modern technologies that have been adopted in Sweden and Germany offer an effective and simple defense that could, at least, slow down an aggressor. In addition, a good political case exists for adopting defensive postures in that they pose no threat to neighboring countries and conform in practice to international law (see Neild 1990).

Supporting Local Conversion Programs

The defense industry has always been considered a national asset and could therefore be said to be politically privileged. It is better able to mount a political resistance to public policies than, say, the steel industry or the textile industry. Moreover, as the dominant customer, the government is more vulnerable to pressure from the defense industry than customers in a more diversified market.

The U.S. assumption that no special measures need to be taken to adjust to lower levels of military spending thus fails to take account of the political position of the defense contractors. Grandiose centralized conversion projects of the Chinese or Soviet type, however, could further entrench the defense industry. The alternative is to build up political constituencies for nonmilitary production. An important way in which this can be done is through local or regional development programs in areas where military production is concentrated.

Italy provides some interesting examples of the decentralized approach. Some trade unions have put diversification clauses into their wage agreements.[10] And in line with the traditional emphasis on local economic systems, several regional governments have begun involving unions, churches, and other organizations in developing civilian products using military technology (Pianta 1990). Support from funding institutions for such efforts could be an important way of dissipating the resistance of the defense industries to cuts in military procurement.

10. Wage contracts at Officine Galileo, in Florence, require the company to increase the share of civilian production to total output from the present 40 percent. At Agusta and Aeromaachi, management must inform the unions about military activity and increase diversification. As part of its response to such agreements, Aeromaachi has entered into coproduction of a small civilian plane with Dornier of Germany.

VI. Conclusion

A security policy that relies on military spending is, by definition, an exclusive policy; it is designed to protect a particular group, be it a nation, a bloc of nations, or a social or ethnic group. In an increasingly interdependent world, the continuation of exclusivist policies is bound to mean a turbulent world—a world in which those who are excluded from political and economic processes have no other recourse but violence, perhaps unorganized and chaotic. That is why an alternative approach to security, of the kind outlined by McNamara, has become a necessity rather than merely a desirable option. But if it is to be achieved, ways have to be found to enfranchise the dispossessed and to strengthen the constituencies for reducing arms spending.

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COMMENT ON "AFTER THE COLD WAR: OBSTACLES AND OPPORTUNITIES IN CUTTING ARMS BUDGETS," BY KALDOR

Geoffrey Lamb

Mary Kaldor has dissected the key political, economic, and technological elements of reductions in military expenditure, and she has placed the problems facing developing countries in a comparative framework with the experience of industrial countries and the formerly centrally planned economies. I will comment on three aspects of the paper: first, the politics of reductions in military expenditure; second, military expenditure and structural adjustment; and third, some of the paper's conclusions.

I. POLITICAL VERSUS ECONOMIC DIMENSIONS

Kaldor rightly points out that political and institutional factors are at the heart of proposals to reduce military expenditure. Military strength is intimately associated with the idea of nationhood—not just with national security. At a more mundane level, powerful groups—including domestic and foreign arms suppliers—oppose reduction, as do industrial producers, and workers and communities dependent on military industries and facilities. The consumers—the armed forces and their political allies—often have great legitimacy and power in the government. And it is inherently difficult for civilians—or soldiers, for that matter—to evaluate the efficiency of military spending, and often even to discover what spending is actually taking place.

I am less sure that she is right to dismiss the economic problems, however. Lower military spending is eventually good for growth, and cutting arms imports is good for the balance of payments (whether immediately good or not depends on the financing). But the economic transition to a lower level of military spending is often difficult, given the "lumpiness" of multiyear investments in weapons systems, and the potentially severe fiscal pressures flowing from the contraction of military industries, or large-scale demobilization, or both. I suspect that a good deal of learning-by-doing is inescapable.

II. STRUCTURAL ADJUSTMENT

The relationship between military expenditure and structural adjustment comes up in several contexts in the paper, albeit somewhat confusingly. Adjust-

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ment programs are linked (exceptionally) to rising military expenditure and a spread of domestic violence, although Kaldor recognizes that military budgets have generally been reduced under adjustment constraints. But she also asserts that unless there is more debt relief, low-level violence could indeed increase and lead to higher military expenditure—not because containing internal violence is militarily expensive (it generally isn't), but because the military gets more political power and thereby some resources in the process. This theory seems dubious: higher military expenditure is not particularly associated with regimes that are dominated by the military. In fact, the forces for military spending that Kaldor correctly emphasizes (acquisition of new weapons systems, rising ethnic and national tensions, and so on) have little or nothing to do with the adjustment progress.

III. How Important is Military Expenditure?

Kaldor's conclusions take some very high ground indeed. She argues essentially that outlays for military purchases play a large role in driving fiscal deficits in the OECD countries and in raising global interest rates, and concludes that the effects are transmitted to the developing and the formerly centrally planned economies via increased debt, capital shortage, and austerity, which "may well contribute to" or are "associated with" violent crime, social and ethnic tension, fundamentalism, and instability.

These are very large claims. It is important to take political advantage of current opportunities to reduce military expenditure in all countries. But at a global level the economic justification is secondary: military expenditure does not matter all that much to world economic growth. Even a 25 percent real reduction in the OECD countries' military expenditure would only free up resources equivalent to barely 1 percent of global gross national product, and would necessarily be spread over a number of years. Clearly this is not driving global economic difficulties, North-South disparities, or the social and economic tensions in developing countries. For particular countries, including some developing countries, the economic and social effects of sharp reductions in military spending would of course be much more dramatic and overwhelmingly positive—and this is where effort should surely be focused. At the global level there is also a good case to expand the scope of other suggestions in the paper. Examples include encouraging a "new security order" (including restructuring security assistance to support nonaggressive defense postures), and supporting more open and accountable institutions of civil society. These attempts offer the best long-term prospect of reducing the influence (and the necessity) of military power in the life of nations.

Military Expenditure, Aid, and Economic Development

Saadet Deger and Somnath Sen

The impact of military expenditure on economic development and the relationships between military aid and economic assistance are important concerns for developing countries and aid donors alike. The paper broadly surveys these issues to show the tradeoffs between military security problems and developmental failures. It emphasizes fungibility and the leakages that can occur between the two forms of aid as foreign assistance filters through the economic system of developing countries. It also analyzes the design of optimal aid programs, which may require stricter defense-related conditionality provisions covering military variables. Incentives in the form of increased economic assistance may also be needed; these could come from the "disarmament dividend," as the major powers reduce their military expenditures. Otherwise, the adverse selection and moral hazard problems inherent in the arms trade and military aid nexus will remain.

With the end of the Cold War, as security needs among the major powers are being redefined, it becomes increasingly important to have a clear grasp of the complex relationships between foreign assistance—both economic and military—and defense expenditure and economic development. How that aid and the resources it releases are allocated between civilian and military sectors matters since military expenditure is generally viewed as "nonproductive" for development. Questions need to be asked about the structure and design of aid programs and their relationship to military expenditure in donor and recipient countries alike and to security, in both its military and economic dimensions. The easing of the international political climate creates the potential for a disarmament dividend that could lead to an increase in official development assistance. But developing countries worry that assistance might decline or stagnate because of the greater demands for international finance and the continuing current account deficits of major developed countries (Sen 1991a). Yet the need

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for assistance remains critical—witness the developmental failures and problems brought on by the debt crisis over the last decade.

This paper analyzes the relationships between defense expenditure and military aid on the one hand and economic development and economic assistance on the other. It shows that the possibility of crowding out between economic and military aid must be taken seriously, while also recognizing the possibility of crowding in—of donors viewing the two types of aid as complements rather than substitutes. The issue hinges on fungibility and the leakages that can occur throughout the economic system of aid recipients as foreign assistance filters through. Even tied economic aid raises the possibility that released resources will be used to finance greater military spending and arms imports. This implies a need to re-examine the specificity of development and security assistance programs, the selection of tied or untied aid, the use of general balance of payments or government expenditure support programs, and the need for conditionality provisions that cover military variables. The links between project and policy reform lending (Kanbur 1990) also take on greater importance in the light of fungibility and leakages between civilian and military sectors.

The basic issues are viewed from the perspectives of both donors and recipients. Donors need to consider whether military and economic assistance should be linked and whether—or under what conditions—the two forms of assistance are substitutable or complementary. Policies must take into account how to prevent leakages from what is essentially a fungible resource and how to construct optimal aid programs and stop adverse selection. Recipients are concerned with maximizing economic gain under lower noneconomic commitments (say by joining military alliances) and reconciling security needs with development needs, given the development conflicts inherent in reallocating resources to the military sector. Policy implications are related to identifying the point at which the demand for military security becomes counterproductive and reduces economic security.

Section I analyzes the relationship between military expenditure and development, showing that military expenditure is unproductive for development. Section II examines the conceptual issues behind the fungibility of aid programs and traces the channels through which specific forms of aid can be diverted to other purposes. Section III focuses on the difficulties of measuring military expenditure in the presence of foreign assistance. Section IV looks at the interactions between military and economic assistance, focusing on aid flows and arms transfers from the perspectives of donors and recipients. Policy issues affecting fungibility and the design of optimal aid programs are analyzed in section V. Section VI concludes with a brief discussion of the implications of changing security needs in the post-Cold War period for the present pattern of relationships between development assistance, military aid, and defense spending. The aim of the paper is to explore the *economic* implications of military aid and expenditure, so the political dimensions are touched on only tangentially.

I. Military Expenditure and Development

To put the issue of aid fungibility and leakages into military expenditure in a broader framework, we need to briefly review the relationship between military expenditure and economic development in the context of the debate about foreign aid.

Extensive literature exists on the effect of military expenditure on economic development, complemented by a smaller number of studies on the effect of developmental variables on defense spending (for surveys, see Chan 1985; Deger 1986; Grobar and Porter 1990; Deger 1990). Many studies have found that military spending has a negative impact on economic growth and development in most countries, but disagreement remains about quantifying the impact, determining its significance, and estimating the effect empirically. Most researchers look at the impact on aggregate growth, using econometric models to estimate the effects. A few have studied the distortions created by a large military sector: through impacts on the labor market, reduced absorptive capacity caused by the growth of domestic defense industries, competition between imports of arms and imports of intermediate goods and other inputs, and budgetary tradeoffs that reduce social expenditures and increase poverty, as well as internal imbalances (budget deficits) and external imbalances (balance of payments) that create macroeconomic instability.

The earliest formal analysis of the impact of defense on development is that of Benoit (1973; 1978), who claimed that his empirical analysis showed that defense spending had a *positive* effect on economic growth. The econometric analysis was simplistic, however, and many of the indirect channels through which military expenditure could adversely affect economic growth were not investigated.

At the aggregate level, there are three channels through which military spending can affect growth. The resource allocation effect transfers potential investment resources to the military, reducing investment and growth. The resource mobilization effect shows that defense spending could reduce the national savings ratio. The household savings ratio falls because expenditure rises as public services are cut back to finance military expansion, the government savings ratio may decline if the additional defense spending is not compensated by higher tax revenues, and foreign savings are dissipated through arms imports. Finally, in countries with human capital constraints, an expansion of military personnel and industrial systems will worsen absorptive capacity.

From an economic perspective, there are also some positive aspects of increased military spending: demand creation in some cases, utilization of excess capacity, and various indirect spinoffs through education, employment, infrastructure, and other services that the military can provide. But in developing countries with supply constraints and a limited technological base, such benefits are not large and they are usually outweighed by the negative economic impact of defense spending.

One aspect of the literature that is of particular interest here concerns the relationship between military expenditure and foreign aid. Based on the results of Benoit (1978), it has been posited that military aid might improve economic development. The economic arguments supporting this claim are not unassailable, however. And even the political economy arguments, which relate aid policy and economic and military security, are not very strong (McKinley and Mughan 1984). The main economic arguments and counterarguments are briefly summarized here.

One claim is that there are technological advantages in using imported arms paid for by security assistance; familiarization with sophisticated weapons may lead to learning by doing or adaptation to domestic uses. In addition, defense industrialization may help civilian industries, particularly those characterized by economies of scale (Neu 1990). This spinoff argument is weak even for industrially advanced developing countries, such as India and the Republic of Korea (see Deger and Sen 1983; Moon 1989). The defense industry uses up high-quality human capital, intensifying the absorptive capacity constraint in developing countries. Modern weapons technology is often too advanced and unsuitable for adaptation to civilian needs. Even for production processes characterized by economies of scale, defense technology is unlikely to help the non-military sectors in developing countries because markets are often too segregated for such links to operate. And domestic military procurement alone is insufficient for optimal scales of production in military industries, so excess capacity and inefficiency are common.

Another argument is that military personnel who receive aid-financed training in industrial countries can transmit the knowledge they gain to others once they return home. Military education, however, may not be the most appropriate form of training for achieving development goals. In any case, the work culture in most organizations in developing countries is not based on the hierarchical and disciplined military model. Thus there are structural problems involved in making soldiers efficient in employment outside the armed forces.

It is also claimed that military and economic security are complements, and that if donors consider military and economic aid to be correlated, one may lead to the other. This argument has some validity in the medium term, but not in the long run. Except for specific periods in a few countries, such as Pakistan during the Afghanistan war, Egypt and Israel in the 1980s, or Cuba after the 1960 missile crisis, there is little time-series correlation between military and economic aid. Developing socialist countries, such as Viet Nam, received both types of aid from the U.S.S.R. over an extended period, but for political reasons rather than because of any fundamental association between economic and military aid.

Proponents of security assistance often claim that military aid and debt forgiveness release fungible resources for development programs. But this effect is not unique to security assistance. All aid releases resources for other purposes, and there are no economic reasons to favor the military component over others in aid programs. Instead, civilian or economic aid, even in the form of goods and services, can more directly free resources for the economy because there is an element of transferability from one use to another. Equally important is that military assistance often serves to *increase* rather than decrease domestic defense spending. The acquisition of foreign assets gives rise to economic burdens and obligations (for maintenance, construction, spare parts, upgrading, research, and the like) that can boost defense expenditure.

Perhaps the most common argument of the proponents of military assistance is that supplying cheap arms to a country that is spending scarce foreign exchange to purchase weapons (because of a perceived security threat) frees the foreign exchange for more productive purposes. The classic statement of the argument is Benoit's (1978, p. 277): "bilateral economic aid of military allies might enable some [developing countries] to expand their defense expenditures while simultaneously increasing their rate of investment." The point is valid, but the argument is essentially a political one that goes beyond the scope of this paper. In addition, the argument applies to bilateral relations between a donor and a recipient. Developing country arms races often have a regional dimension, with several countries involved in competitive arms acquisition. In such circumstances, foreign military aid results in a prisoner's dilemma, where arms procurement by one player could decrease aggregate welfare.

Overall, therefore, it is safe to conclude that both military expenditure and security assistance are, more often than not, an economic burden that reduces growth and causes distortions.

II. Aid and Fungibility: Conceptual Issues

Resource transfers between governments or between multilateral agencies and governments take various forms, not all of them mutually exclusive. The three forms relevant for our discussion are economic assistance, military aid, and arms trade. The degree of concessionality and the proximate objective of the transfer determine the nature of the resource movement. Thus economic aid takes the form of concessionary intergovernmental financial (resource) transfers aimed at promoting economic development. Defense-related aid is the military analog directed at strengthening security and can be distinguished from economic aid by the concessions involved, the services rendered in exchange (basing rights, mutual security by members of an alliance), or the types of goods transferred (weapons systems, military support systems, personnel training). Arms sales are in principle commercial transfers of weapons and support systems from one government to another, but in practice they also involve concessionary elements and the creation of debt (which is sometimes forgiven). The distinction between arms sales and military aid is not clear-cut.

For economic and military aid, there are basic difficulties in separating the uses and effects of each type of resource transfer because the resources are essentially fungible. The design of optimal aid policies requires a good understanding of the channels through which aid passes into the economy and the leakages that can occur. A related issue is the formidable measurement problems in determining the military burden (the ratio of military expenditure to gross domestic product [GDP]) and identifying what constitutes military expenditure. Conceptual problems arise because these two issues need to be tackled simultaneously in practice: to empirically measure the effect of foreign aid and to estimate leakages into the military sector requires that the relevant variables be adequately defined and measured, yet measurement problems cannot be understood without looking at how aid passes through the economic system. Analytically, however, the two issues need to be discussed separately.

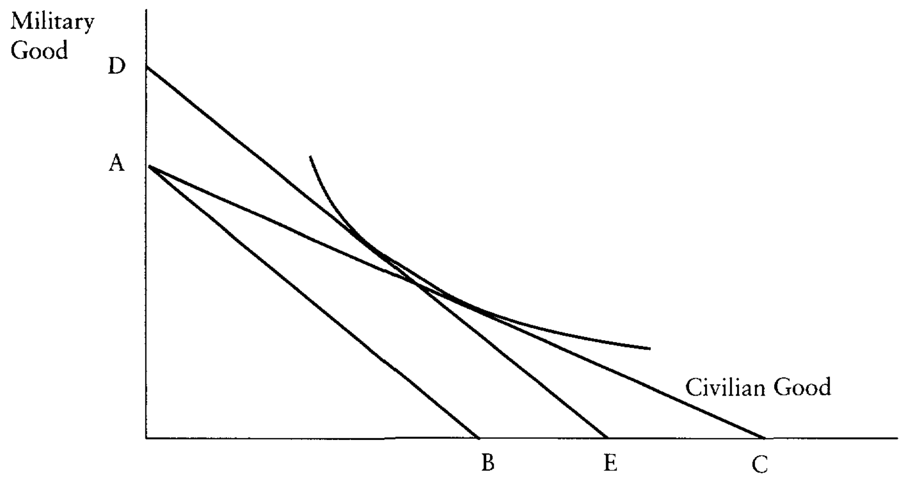
An analytical distinction needs to be made between sector specific aid (military or civilian) and more general aid programs (for government expenditure support). General aid is clearly more fungible. When aid is sector specific, the relevant variable is whether specific goods and services are provided through price subsidies or whether there is a transfer of foreign exchange per se. Again, the latter case exhibits more fungibility. Because fungible aid can be allocated to both military and civilian sectors, before we can determine what share of the aid goes to the military sector we need to distinguish between expenditures financed from a country's own resources and those financed from foreign resources. The military burden will differ accordingly as well. Particularly for arms imports, the allocation between purchases financed by aid and those financed through export revenues and nonmilitary debt creation becomes important. Economic analysis based on the different opportunity costs of domestic and foreign resources requires that this distinction be made.

Generally, perfectly fungible aid is a transfer that shifts the resource (budget) line of the recipient country outward, given the basic macroeconomic identity that states that GDP plus foreign transfers (aid) equal expenditure on civilian and military goods. In this case the income effect is important. When aid is sector specific, or when price subsidies are involved, relative prices are central to the analysis. A very simple stylization is provided in figure 1, where *AB* is the initial expenditure (or linear production possibility) line. The line shifts to *DE* in the case of perfectly fungible aid (income effect only) and to *AC* in the case of civilian aid alone or nonfungible foreign-subsidized transfers that change the relative price of the civilian to the military good. The aid programs are equivalent since the maximum level of national welfare or utility is the same in both cases. This analytical distinction between aid that has an income effect only and aid that has a relative price effect is important to some of the discussion that follows, although, as we argue later, the situation is quite fuzzy in reality.

Channels of Aid to the Military Sector

Any form of aid—economic or military, tied or untied, project or policy-reform oriented—will involve some leakages or diversion of resources from their intended purpose and will directly or indirectly allow fungible resources to be transferred to other purposes. Net foreign transfers create the potential for fungible resources that can be used at will. The extent of the fungibility varies

Figure 1. *Substitution Effects: Tangible and Nontangible Aid.*

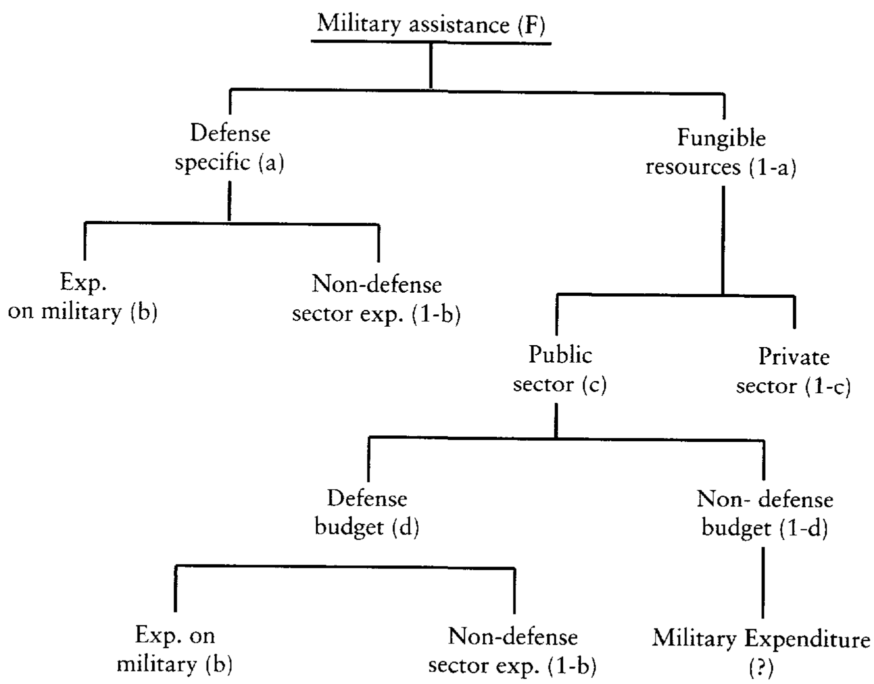


according to the strictness with which the transfer is contracted, implemented, and monitored, and the type of resources released as a result of the aid—domestic resources or foreign exchange. If domestic resources are released, then military personnel costs may be increased after the economic aid is received. If foreign exchange is released, then military imports could rise. The argument cuts both ways, however. Military aid also releases resources for social projects, either directly or through income effects.

What are the conduits through which aid transfers are channeled to defense and nondefense sectors within an economy? Figure 2 gives some indication of this process in the case of an increase in foreign military assistance. The same process can be applied to civilian aid. The bracketed terms represent the proportions allocated to each function and can, in principle, be estimated. By following the channels in the figure, we see that the final amount available to the military (F) is $F[ab + (1-a)bcd]$. Note that the last item, the military component of the civilian ministry's budget, remains a black box (represented by a question mark). Some analysts believe that this amount is potentially quite large (Sen 1990).

Econometric estimates quantifying the amounts for each of the channels shown in the figure are rare. McGuire (1982) estimated a model of the Israeli military spending–foreign aid nexus that takes into account the Middle East arms race. He found that after all interdependencies had been accounted for, about $77 of every $100 in U.S. military assistance went to the military and about $40 of every $100 in economic assistance filtered through to defense spending. Thus, for equal amounts of military and economic aid, about 58 to 59

Figure 2. *Domestic Allocation of Foreign Military Assistance.*



percent of the total is spent on defense and the remainder on the civilian economy.

There is no reason to believe that the case is significantly different for other major aid recipients even though the individual parameters are different. In particular, the share of the defense budget in central government expenditure (*d*) is high in Israel and would be lower in countries that are not involved in military conflict or that receive predominantly economic aid. Similarly, the unidentified parameter ("military expenditure ?" in the figure) is small for Israel but could be quite large for most countries. Our own evaluation from studying military aid programs is that, with exactly equal shares of the two types of aid, more than half would go to the military.

If we consider these levels for Israel to be representative, we can use them to examine the effect of foreign aid from the donor's viewpoint, particularly that of the major powers. For the United States, for example, roughly one-third of total aid is military and the rest is official development assistance. Using the parameter values estimated for Israel and extrapolating them to the aggregate, more than 50 percent of total U.S. foreign aid goes to the defense sector—a far higher share than the 33 percent specifically allocated for military aid by the U.S. government.

Of the parameters shown in figure 2, the initial distribution of military aid between fungible resources ($1-a$) and nonfungible resources (a) is the most significant for the final distribution of aid resources. A similar "fungibility coefficient" exists for civilian aid. McGuire (1982) finds that 82 to 96 percent of military assistance received is nonfungible (strictly limited to the defense ministry) and only 4 to 18 percent becomes fungible in the general sense. He finds the opposite to be the case for economic aid: over 90 percent is potentially fungible while less than 10 percent is strictly tied to the civilian sector.

Leakages from the Civilian to Military Sectors

A recurring difficulty in analyzing leakages of foreign assistance from civilian to military sectors is that even an increase in sector-specific or nonfungible aid can give rise to an increase in defense spending and arms imports. Resources that would otherwise have gone to civilian programs are freed by the foreign transfer or subsidy and can be diverted to military spending. The diversion is easy in the case of general fungible resources, such as policy reform or structural adjustment loans, but even stringently monitored and tied economic aid can, in terms of domestic allocation, be treated as if it were a fungible resource. Even though such assistance does not allow for arms imports directly, it can do so indirectly by alleviating the pressure on the government to supply the aid-induced civilian public good.

This leakage produces the curious situation in which it may be necessary to reduce total aid while increasing sector-specific aid. Such a compensating variation could reduce the resources being provided to the military, thus reducing the military burden. Consider the case in which C and M are, respectively, the civilian and military resources being spent and I is aggregate income (expenditure) including all fungible foreign aid. The indirect utility function, V, depends on the price of the civilian good, P_c, and the military good, P_m. Thus,

$$V = V(P_c, P_m, I). \tag{1}$$

Tied aid for the civilian sector is assumed to occur through a subsidy or reduction in P_c. If P_c is reduced through foreign aid, with no other changes, the substitution effect would favor an increase in C and a fall in M. However, the income effect will push both C and M upward. Since defense allocation is generally found to be highly price inelastic, the implicit increase in resources for the economy after tied economic assistance has been received will invariably increase military allocations. But consider the hypothetical situation in which the objective is to keep V constant through a reduction in I that compensates for the initial change. Then, taking the total differential of equation 1,

$$\mathrm{d}V = 0 = V_{P_c}\,\mathrm{d}P_c + V_I \mathrm{d}I, \tag{2}$$

and noting that $-(V_{P_c}/V_I) = C$, where C is the demand for the civilian good with price P_c, we get

$$\mathrm{d}I = C\mathrm{d}P_c. \tag{3}$$

Written in elasticity form, equation 3 becomes

$$(4) \qquad (\mathrm{d}I/I) = a(\mathrm{d}P_c/P_c),$$

where a is the share of C in total expenditure I. Therefore, a 1 percent subsidy on the price of the civilian good through foreign aid calls for an a percent reduction in total expenditure through appropriate cuts in fungible foreign assistance to maintain the optimal level of utility. Elimination of the income effect implies that military expenditure M will certainly fall. An alternative exercise would be to find the compensating variation in I that would keep M at its original level and allow V to increase after receipt of civilian foreign aid.

While the hypothesized example depicts an extreme situation, its central message is broadly applicable: aid recipients consider military security to be a public "good" whose expenditure allocation should be increased whenever possible. Thus if the objective is to reduce military expenditure and prevent leakages through sector-specific or tied economic aid, it may be necessary to "compensate" by reducing the aggregate amount of aid when sector-specific aid is provided. This compensation implies that military aid must fall by an amount greater than the rise in economic assistance. This result can be formalized and generalized in a dynamic intertemporal optimizing model.[1] That model also shows that when fungible aid is increased, there may be "overshooting" of military expenditure—it may rise above its long-run equilibrium. Such overshooting tends to create instability, as Deger and Sen (1986) show using a dyadic model depicting regional arms races.

III. Aid and Fungibility: Measurement Issues

When a country is receiving both military and economic assistance, measuring defense expenditure and the defense burden becomes difficult. Statistics on military expenditure and the arms trade do not make clear-cut distinctions on such matters as the total level of military expenditure in a country that receives foreign aid, or the breakdown of military financing between a country's own resources and foreign resources. In practice, no data base is strong enough to provide conclusive evidence on these issues. Yet an empirical analysis of the effect of defense on development or of the effect of foreign aid on security and economic growth cannot be conducted without carefully constructed variables.

NATO's definition of military expenditure, which is used by the two institutions that provide arms-related data (the Stockholm International Peace Research Institute and the U.S. Arms Control and Disarmament Agency), attributes foreign security assistance to the donor country's military expenditure; the recipient country's military spending is calculated net of foreign military aid (Sen 1990). But what matters is the domestic opportunity costs of the military sector. International Monetary Fund (IMF) data (Hewitt 1991) measure total resources available to the defense sector, and foreign military aid is included in military

1. A description of the model is available from the authors.

expenditure. None of the data, however, clearly distinguish between grants and loans, and for most developing countries, defense-related debt service data are simply unavailable. Thus, what is aid-financed and what is not is difficult to establish. In addition, some countries do not report foreign purchases of arms in their procurement data or, if they finance arms imports through export earnings, they account for the payment—if they do so at all—in other trade accounts. Therefore, even for the simplest case of perfectly fungible military aid, comparable cross-sectional information is unavailable.

With sector-specific aid, there are other conceptual problems of measurement as well that have to be dealt with in evaluating the impact of a reduction in military assistance, particularly for estimating the military burden. The case of sector-specific aid can be conceptualized by thinking of aid as a subsidy to civilian or military goods that changes their relative prices. If military and economic assistance alter relative prices, then there are at least three ways of measuring the military burden: (1) as the domestic resource cost of the military as a share of GDP; (2) as the total resource cost, including the international price of subsidized military equipment (similar to a purchasing power parity measure); and (3) as defense spending at current cost, under the assumption that arms repayments are postponed to the future (as in debt creation).

Not only do these three military burden ratios differ, but shifts in parameter values also have different effects according to the measure used. For example, if total military aid (defined as the difference between the international price and the subsidized price of the military resource times the amount of the military resource received as aid) as a proportion of GDP rises, then the domestic resource cost measure of the military burden falls while the other two measures rise. Alternatively, if the international price of the military good rises, the first and third measures of the military burden rise while the second falls. Thus careful study of such measurement issues is required, particularly if explicit models are being used to identify optimal policies.[2]

IV. Aid Flows and Arms Transfers

Aid Donors and Arms Suppliers

Levels of official development assistance rose during the second half of the 1980s, and then began to stabilize (OECD 1990). It is difficult to assess whether these aid levels are sufficient to meet the development needs of developing countries. What is clear, however, is that assistance levels are modest compared to "unproductive" expenditures, such as for weapons, and in light of the negative resource transfers on developing countries' long-term external debt.

Actual ratios of official development assistance to GNP for 1989 and optimal ratios under a more benign international political climate, with lower international security needs, are shown in table 1. (The optimal levels were calculated

2. See footnote 1.

Table 1. *Ratios of Official Development Assistance (ODA) to GNP and to Military Expenditure, Selected Countries, 1989*
(percent)

Country	ODA/GNP *Actual*	ODA/GNP *Optimal*[a]	*ODA/military expenditure*
Canada	0.44	0.78	22.0
France	0.54	0.69	15.4
Germany	0.41	0.72	14.6
Italy	0.42	0.53	17.5
Japan	0.32	0.57	32.0
U.S.S.R.	0.24	—	2.2
United Kingdom	0.31	0.62	7.4
United States	0.15	0.82	2.5

— Not available.

Note: Soviet figures are subject to a high degree of uncertainty.

a. The optimal values are derived from Tinbergen (1990), who used a global model to estimate these levels under more peaceful international conditions.

Source: OECD (1990), Tinbergen (1990), authors' estimates, and Stockholm International Peace Research Institute data base.

by Tinbergen [1990], who estimated levels of official development assistance using a global model and alternative assumptions about international security.) To show the importance that major donors place on security relative to development assistance, we also calculated the ratio of official development assistance to military spending.

Aggregate net transfers on the long-term debt of developing countries in the late 1980s were negative and rising, while their aggregate arms imports hovered at $40 billion (table 2). Thus, net transfers from developing to industrial countries plus arms imports are almost 1.8 times the level of official development assistance provided by Development Assistance Committee members and about one and one-half times the level provided by all countries (including socialist and other donors).

Arms trade. The trade in arms to developing countries is highly concentrated on both the demand and supply sides, but that concentration is declining. On the supply side, the United States and the U.S.S.R. contribute more than 80 percent of the world total, but new suppliers (mostly developing countries) are entering the market. The United States and the U.S.S.R. view military assistance as a way of expanding their political influence. In addition, because they main-

Table 2. *Official Development Assistance, Arms Imports, and Net Transfers on Long-term Debt of Developing Countries, 1985, 1987, and 1989*
(billions of U.S. dollars)

Item	*1985*	*1987*	*1989*
Official development assistance	29.4	41.6	46.7
Arms imports	32.5	43.8	39.3
Net transfer on long-term debt	−19.7	−32.2	−42.9

Source: OECD (1990), World Bank (1990), USACDA (1990), and authors' estimates.

tain bases and military facilities across the world, they need to pay basing "fees" in the form of defense aid. Major European countries like France and the United Kingdom also provide some military aid, particularly to their former colonies, but the amount is small. For these and other countries whose arms supply activities are commercially motivated, defense aid is indirect, occurring mainly through subsidies to domestic industries that enable the firms to sell at competitive prices.

On the demand side, the future growth of the market will be constrained by the inability of developing countries to finance purchases of new weapons systems since the newer suppliers are all commercially motivated. The trade in arms to developing countries has already fallen from its peak in 1987. The trade in weapons is highly sensitive to economic constraints. Low growth rates in developing countries have contributed to the fall, but the trend can be reversed if economic constraints ease.

U.S. and Soviet military aid. U.S. military aid is more concentrated on a few countries than U.S. economic aid, with the major share going to Egypt and Israel. Countries that allow basing rights, such as the Philippines, are also important recipients of military aid, as are allies involved in regional security problems, such as Pakistan during the Afghanistan War.

The United States, after a period of cash- and loan-financed commercial transfers of weapons in the 1970s, has moved progressively toward greater grant funding of arms. In 1982 loans accounted for 76 percent of military assistance; by 1988 they accounted for just 16 percent (table 3). In 1989 the total debt owed by developing countries to the United States for economic and military assistance programs (plus other loans, including those from the Export–Import Bank) since the end of World War II amounted to $61.1 billion.

The U.S.S.R. also provides substantial military assistance, but it is usually subsumed (and hidden) under long-term debt, much of it on highly concessional terms. Estimates of Soviet military exports, aid, and debt creation, based on data gathered by U.S. intelligence agencies, are provided in table 4. (The ruble–dollar conversion rate used is that of the agencies themselves, and these figures should be treated with caution.) Recently revealed official figures on Soviet government arms exports show an average of more than 10 billion rubles a year

Table 3. *U.S. Military and Economic Assistance, 1986–89*
(billions of U.S. dollars)

Assistance	*1986*	*1987*	*1988*	*1989*
Military total	5.84	5.10	4.83	4.83
Loans	1.98	0.95	0.76	0.41
Grants	3.86	4.15	4.07	4.42
Economic total	10.79	9.39	8.98	9.86
Loans	1.22	1.14	0.85	0.69
Grants	9.57	8.25	8.11	9.17

Source: USAID (1990).

Table 4. *Estimated Soviet Military Deliveries, Military Grant Aid, Hard Currency Earnings from Arms, and Debt Creation from Arms Transfers, Selected Years, 1982–88*
(billions of U.S. dollars)

Item	*1982*	*1984*	*1986*	*1988*
Total military deliveries	16.0	10.3	15.5	19.1
Military grant aid	6.2	6.1	6.0	7.8
Hard currency arms earnings (includes oil)	4.3	3.8	2.8	3.3
Residual (debt)	5.5	6.5	6.7	8.0

Source: U. S. Joint Economic Committee (1990).

in total sales during the late 1980s—a level not significantly different from that shown in table 4 at official exchange rates. Soviet government figures on total developing-country debt (military and nonmilitary) owed to the U.S.S.R. show a debt stock of about $80 billion as of 1989. That debt is highly concentrated, with ten countries accounting for 80 percent of the total, eight of which are major Soviet clients for weapons and actively involved in regional arms races or conflicts. There seems to be a close connection between debt accumulation and military transfers.

There is also a close connection between Soviet economic aid and arms sales, which are often financed through military grants or loans with very favorable conditions. Of the top ten recipients of Soviet economic aid during 1954–86 (excluding socialist countries) eight are also among the top ten recipients of arms transfers (table 5). (Estimates of Soviet assistance vary considerably [Wulf and others 1986; Smith 1985], but the ranks shown in table 5 generally hold.) This suggests a link between Soviet economic and military aid. However, as the cases of Turkey and Morocco show—they are among the top ten recipients of economic aid but they purchased no Soviet arms—the U.S.S.R. has also given substantial economic aid to some countries without linking it to strategic factors or arms sales.

Table 5. *Ranking of Major Recipients of Soviet Economic Aid and Arms, 1954–86*

Country	*Economic aid ($ billions)*	*Rank: Economic aid*	*Rank: Arms sales*
India	6.55	1	3
Turkey	3.45	2	n.a
Afghanistan	3.40	3	7
Iraq	2.73	4	2
Morocco	2.10	5	n.a
Algeria	1.94	6	5
Syria	1.92	7	1
Egypt	1.44	8	4
Ethiopia	1.30	9	6
Nicaragua	1.27	10	8

n.a. Not applicable (these two countries received no arms).
Source: USCIA (1987), Stockholm International Peace Research Institute data base.

The political economy of military assistance. The level and distribution of military assistance—and its relation to economic aid—are closely linked to the motives of the governments of arms supplier countries, although the relative influence of political and economic factors is controversial (Louscher and Salomone 1987). Is arms trade motivated by political concern ("to win friends and influence people") or by a desire for commercial gain ("the merchants of death")? A simple classification would assign a predominantly political motive to the arms transfers of the two superpowers and a predominantly economic motive to arms transfers by the major commercial exporters, such as France, the United Kingdom, Germany, and China, with political influence as a secondary interest. A third group would contain the remaining arms exporters, small suppliers with no interest in political factors, although some of them, such as Sweden, have strict export controls on weapons.

The importance of predominantly politically motivated suppliers is declining while that of commercially motivated suppliers is increasing. The world market shares of the three groups of suppliers in the early 1970s were 77 percent for the United States and the U.S.S.R., 18 percent for the large commercial exporters, and 5 percent for the small exporters. By the late 1980s those shares had shifted to 62 percent, 26 percent, and 12 percent, respectively. While noting the overlap in motives, Deger (1989) estimates that currently about half of world arms transfers can be attributed to economic and commercial forces.

The question of fungibility is closely related to political-economy factors that influence the relationship between arms sellers and buyers. For the two superpowers military aid takes the form mainly of training and surplus equipment and so is not very fungible. But because of the close political partnership with aid recipients and the desire to maintain stable relationships, U.S. and Soviet conditionality on economic aid is not very strict. This turning a blind eye to the uses of economic aid because of special relationships confers greater fungibility on economic aid and perhaps makes it easier for the recipient country to transfer part of it to military uses. Israel, a major recipient of U.S. assistance, provides a clear example of this process, as the discussion in section II shows. Viet Nam provides a similar example for the case of Soviet aid. In the first half of the 1980s, Viet Nam received more than $1 billion a year in economic aid from the U.S.S.R., double the level of military assistance. But, thanks to fungibility and leakage, Viet Nam has spent far more on the military sector than its domestic economic constraints would have permitted: it maintains the third largest standing army in the world and has been in continuous conflict for the last decade.

Even in the case of commercially motivated arms suppliers, the possibility of fungibility and leakage from their economic aid remains strong, especially for France and the United Kingdom. In addition, arms sales accompanied by compensatory trade agreements (barter, countertrade, transfers of civilian technology, coproduction and developing-country exports of military and nonmilitary products such as components) allow recipient countries to reap economic gains, while offsets based on technology transfer are often useful to buyers as well. The existence of a wide variety of compensatory trade agreements means that the distinction between economic aid and military transfers is blurred, as one is used to help the other. The French government is said to affect the performance of its export sector in several ways, including such indirect means as the boost given to export orders by disbursements of aid in the form of official export credits, tied aid, technical assistance, and training programs (Franko and Stephenson 1980). The British government has used economic aid as an inducement to facilitate arms sales, as in the recent case of Malaysia. Under circumstances such as these, the fungibility of economic aid increases and leakages are more likely.

Arms Recipients

Up to this point, the focus has been on the supply side of military assistance and arms sales. Turning to the demand side, we now consider the issue of supply dependence, which also affects fungibility. For political reasons, arms buyers would like to diversify their supply sources, but they are often forced by technological and economic constraints to maintain close links with only a few suppliers. These links are also important for the sellers—both for defense industries in supplier countries and for their governments, which are motivated by foreign policy concerns and strategic considerations. Military aid and concessional loan programs strengthen the links in this relationship, and there is often a close connection between arms sales and security assistance.

Arms trade concentration indices. Various concentration indices can be constructed to demonstrate the dependence of arms buyers on a few suppliers. Two of them are presented in table 6 for six of the top fifteen arms importers in the developing world during the 1980s. These countries were major recipients of aid from the two largest arms exporters, the U.S.S.R. and the United States. Cuba, India, and Iraq have all received subsidized military and civilian loans from the U.S.S.R. (as mentioned earlier, it is difficult to distinguish between aid and debt creation among Soviet clients). Egypt, Israel, and Pakistan together account for most of the U.S. security assistance provided outside of NATO.

Table 6. *Concentration Indices for Arms Imports, 1984–88*

Arms importers	*Index 1*[a]	*Index 2*[b]
Arms imports from the United States		
Egypt	2.47	0.56
Israel	5.68	1.00
Pakistan	3.39	0.76
Arms imports from the U.S.S.R.		
Cuba	1.86	0.88
India	1.62	0.87
Iraq	1.15	0.62

a. Ratio of U.S. or Soviet arms exports to country *X* to total arms imports of country *X* over the ratio of total U.S. or Soviet arms exports to the total arms imports by developing countries.

b. Ratio of imports by country *X* from its two largest suppliers to its total arms imports.

Source: Authors' calculations from data in USACDA (1990).

Index 1 provides a measure of the arms trade intensity of a recipient country with respect to its major supplier—the United States or the U.S.S.R. Index 1 is defined as

$$(5) \qquad I_1 = (X_{ij}/M_j)/(X_i/MT),$$

where X_{ij} is the arms export of country i to country j, M_j is the total import of arms of country j, X_i is the total arms export of country i, and MT is the total import of arms by developing countries.

If the value of the index is unity, then the share of country *i*'s arms exports to country *j* equals country *i*'s share in aggregate world arms trade. If the value is greater than unity, then the recipient has a larger share of that supplier's arms exports than would be expected on the basis of the supplier's importance in world trade in weapons. Thus, for Egypt, the index implies that its imports of U.S. weapons were about two and half times as great as would be expected on the basis of the U.S. share in total arms sales (table 6). Similarly, Cuba's reliance on the U.S.S.R. for weapons is about twice as high as the Soviet share in world armaments trade would suggest.

Index 2 is a two-country concentration index that measures the ratio of a country's arms imports from its two largest suppliers to its total arms imports (table 6). Israel, for example, imported arms only from the United States during this period, so its index is unity. Cuba imported 88 percent (an index of 0.88) of its total weapons imports from two countries, with the U.S.S.R. the predominant supplier. India received 87 percent of its imported weapons from the U.S.S.R. and France, while Pakistan received 76 percent from the United States and China.

Links between arms trade concentration and aid fungibility. These types of concentration and linkages allow client states to build up long-term relations with the major arms suppliers, but often at the price of an undesirable level of dependence. To help make this dependence palatable, recipients negotiate benefits from the supplier countries that are not necessarily linked directly to the arms trade itself. Recipients may request an increase in the amount of untied economic aid, weaker conditionality, or additional assistance on better terms. Or, to reduce the cost of the arms transfers, they may negotiate barter terms, offsets, or other compensatory trade agreements. In all cases, the fungibility of economic assistance and the possibility of leakages increase.

An indirect test of whether fungibility is increasing is to observe the behavior of defense expenditure (net of military grants) in developing countries at a time when aid is increasing. During the late 1980s the United States increased both the quality and quantity of the total aid provided to a few of its allies that figured prominently in U.S. foreign policy objectives. Aside from Israel, whose case was discussed above, the countries that received the greatest increase in total aid or otherwise benefited substantially are Egypt, the Philippines, and Pakistan. These are also the countries, outside NATO, that received the major share of total security assistance. Since U.S. military aid rose during this period for all three countries, one would expect their domestic defense spending to have dropped. Yet the evidence suggests that military expenditure (net of military grants) actually went up during the second half of the 1980s. Since economic assistance grants also rose (or were maintained at high levels), leakages probably occurred from economic aid to domestic defense spending.

To sum up the discussion thus far, we see that there is strong, though indirect, evidence that fungibility is greater for economic aid than for military aid. Economic aid is often provided as budgetary or balance of payments support. Military aid occurs predominantly through subsidized sales (the commercial motive) or free transfers (the political motive) of weapons. Even when arms transfers have a commercial basis, economic aid may be used as an incentive to smooth the way for weapons sales. Considering these motives, it is not surprising that fungibility would be higher for economic assistance than for military assistance. Thus an aid program that includes both military and economic assistance requires close policy coordination between the two.

V. Policy Issues

Because the focus of this paper is the relationship between economic and military aid, it has stressed fungibility, which forms the connection between these two types of aid. The chief policy implication of this interrelatedness is the need to design optimal aid programs that reduce the leakages arising from such possibilities for substitution.

First, however, it is necessary to tackle some issues pertaining to military aid alone, since they will affect the design of policies. These issues relate to the high levels of uncertainty in interstate relations in the developing world and the potential for conflict created by the availability of weapons perhaps financed with foreign aid. The political literature on this topic is extensive, but little rigorous economic analysis has been performed. In economic terms, the basic issues concern the moral hazard and adverse selection problems inherent in such relations between agent and principal—buyer and seller, recipient and donor. In addition, optimal policies for military aid that are designed to produce incentive-compatible contracts sometimes give rise to dynamic inconsistency.

Externalities and the International Arms Market

One way to analyze the sale of arms—and the military aid that facilitates these sales—is through a monopolistic competition (or oligopoly) model of the international arms market. To bring in the political factors that dominate these transactions, sellers are viewed as nation-states concerned about the misuse of arms but desirous of transferring arms to dependable allies. The "belligerence" of arms recipients produces a negative externality that is accounted for by a lower level of sales and a higher level of prices than would result from purely economic forces (Sen and Smith 1983; Sen 1991b). Supplier states adjust for the possibility of belligerence by raising prices and reducing the quantities transferred. Foreign military aid provides the major means for enabling dependable allies to pay such high prices while allowing the arms industries in the donor countries to maintain their profitability and survive.

In such a model, markets clear and supplier states allow for the possibility of undesired belligerence of clients through higher prices and lower quantities. In practice, however, official markets often fail to clear, and supplier countries (particularly the United States and the U.S.S.R.) do not meet demand at prevailing prices. The result is frequently illegal weapons procurement, black markets, dual-use technology transfer, and the like. Excess demand equilibria arise because of the presence of adverse selection.

Adverse selection. As the prices of weapons rise, the proportion of weapons sold to the more undesirable or aggressive countries may increase. Countries willing to pay the highest price are usually those with the greatest desire to use the weapons, and therefore those that are most likely to be involved in belligerence—sometimes directed against the supplier, as with Iraq and France, the Islamic Republic of Iran and the United States, and Argentina and Great Britain. To some extent suppliers do discriminate against potential buyers on the basis of political risk. But there are limits to such preselection. Especially in the case of transfers to countries with different sociopolitical systems, the supplier has to contend with considerable uncertainty. Therefore, as in financial markets (Stiglitz and Weiss 1981), adverse selection may make market clearing and allocation by price inefficient, thus giving rise to rationing.

Iraq, before the imposition of sanctions in 1990, illustrates well the case of adverse selection. Financed by security assistance and economic aid from the Gulf countries, Iraq bought massive quantities of arms during the 1980s, making it the largest arms importer in the developing world. According to estimates we calculated at the Stockholm International Peace Research Institute (SIPRI), the value of Iraq's arms procurements during the 1980s may have exceeded that of either Germany or Great Britain. Yet rationing existed to some extent, so Iraq tried to diversify its sources of supply by buying from half a dozen countries. In the case of Iran, the U.S. refusal to sell it arms and an increase in the intensity of adverse selection led to black market sales in the Iran–Contra affair.

Moral hazard. Along with adverse selection, there is a corresponding moral hazard problem. A traditionally peaceful country, having invested substantially in weapons systems, will respond to the new incentives this has created by seeking some return from its investments by becoming more belligerent. These incentives work in a number of ways. The arms transfers strengthen the domestic military establishment, which becomes a more influential pressure group for foreign incursions. The arms, even if not fully paid for, impose a large domestic resource cost, creating a temptation to offset these costs through political or military expansion. Or the transfer may associate the client state too closely with a superpower supplier, dragging it into international rivalries that generate domestic tension and regional hostility. The cases of India and Pakistan illustrate some of the moral hazard problems that are intrinsic to the military aid-arms sales connection.

Dynamic inconsistency. To reduce such problems—and the examples of their empirical importance are many—suppliers use instruments other than price to influence the behavior of recipients. Much of the arms trade takes place in the context of explicit treaties or other agreements that restrict the type of weapons that can be transferred or how and where they may be used. Contracts may prohibit transfers to third parties or may stipulate that the weapons be used only for self-defense. For countries with a poor record on human rights, contracts may prohibit the use of imported arms for internal repression.

The problem with such contracts, whether explicit or implicit, is that they are difficult to enforce. To give them weight, the supplier must be willing and able to impose penalties for noncompliance. This, in turn, involves other complications: the difficulty of establishing such contracts, the supplier's willingness to carry out the threat under various conditions, and the credibility of the threat to the recipient.

One powerful penalty is refusing to resupply—or refusing to subsidize arms purchases—during conflict or at the outbreak of war. But this penalty raises the possibility of dynamic inconsistency. Under what circumstances should the supplier threaten to stop supplying arms and under what circumstances should it actually carry out that threat? Although it may be optimal before the fact to decide not to resupply in the event of conflict, once the conflict has started, it may become optimal to resupply. In other cases there may be incentives before the fact to promise to resupply and other incentives to renege once conflicts have begun. Such dynamic inconsistency may reduce the credibility of both the supplier's threat and its commitment. It is highly probable that time-consistent and optimal plans will diverge, leading either to inconsistent behavior or nonoptimal strategies.

Incentives and Economic Assistance

Having a wide array of instruments available may take care of some of the problems arising from moral hazard, adverse selection, and dynamic inconsistency. Threats to impose sanctions for belligerent behavior may be more effective if both economic and military aid are involved. Incentives in the form of promises of greater economic assistance may neutralize the problem of moral hazard by somewhat mitigating the costs of maintaining larger armed forces. Adverse selection may be reduced by making the arms recipient more dependent on economic assistance and therefore less prone to misuse arms and face general sanctions.

Consider the specific case of dynamic inconsistency in which the supplier decides that it is optimal not to resupply arms to the agent if the latter becomes belligerent or goes to war. The predetermined strategy is to give arms and military aid when there is less belligerence (or peace) and to suspend sales and aid when there is more belligerence (or war). Yet when the agent actually starts a war, a time-consistent plan may be to resupply arms for a variety of reasons, including strategic considerations and the military needs of long-term allies. Suspending economic aid, or making it less fungible or nonsubstitutable, may have the desired effect of achieving peace and yet may not resolve the military problems created by an arms embargo on an ally.

The major military powers, particularly the United States and the U.S.S.R., have attempted to resolve the problem of dynamic inconsistency by using the threat of suspending military assistance (and hence arms resupply) in different ways under different circumstances (Harkavy and Neuman 1985). The United States has often suspended arms resupply and security aid when recipients have gone to war. Morocco found it difficult to acquire U.S. arms during the early phases of the Western Saharan conflict, and the United States abandoned Argentina during the Falklands–Malvinas war even though there were conflicting signals about U.S. strategic interests in Latin America. Yet Israel continued to receive arms in 1973, partly to compensate for Soviet military aid to Arab states. The U.S.S.R. has generally continued to provide military assistance even when faced with client belligerence that threatens regional stability. In 1977–78, when Somalia and Ethiopia both fought with Soviet weapons and in the process changed allegiance, the U.S.S.R. continued to support the more belligerent nation. It also massively increased its military aid to Syria after the war of 1982, partly to offset growing U.S. regional dominance.

Overall, however, both threats and sanctions and incentives and rewards can be more easily applied to economic aid than to military assistance because military assistance has traditionally been much more closely linked to the foreign policy interests of donors and so is less amenable to rapid adjustment. There is a need, then, for some form of "linkage" so that economic assistance can be used to reduce any adverse impact when strategic policy needs require possibly inconsistent and nonoptimal policies for security assistance.

Reducing Leakages from Economic Aid to Military Expenditure

If aid donors are concerned about the harmful effects of the arms race and wish to encourage developing countries to reduce their defense spending, they must deal with the issue of fungibility and leakages in economic assistance, and that requires analysis of income and substitution effects. If substitution effects are weak, then all forms of aid will lead to an increase in military expenditure, although the final impact may be small in some cases. If military aid is reduced while total aid is increased through a larger increase in civilian aid, then domestic defense spending will rise. A decrease in military aid will lead to a reduction in domestic military expenditure only if *total* foreign assistance goes down.

Thus donors must design economic assistance in a way that will change the substitution effect by making aid programs more attractive and rewarding, particularly on a long-term basis. This requires long-term commitment and the absence of the type of dynamic inconsistency problem that characterizes military assistance. Donors' incentives and promises should be credible, with no threat of reneging on commitments. This calls for a precommitment mechanism and the credible promise to reward good behavior by reducing the implicit price of civilian programs even more than suggested by the current subsidy.

Economic aid is generally viewed as an effective means of relaxing resource constraints (budget, foreign exchange, production possibility). What we are suggesting is that it should also be used to change the utility function of the recipients. There has been an implicit belief that military assistance changes the utility function of recipients by making them more responsive to donors' needs. The same logic should now be applied to economic assistance. Formally, following Tinbergen (1990), we can consider the aid-receiving country to have the national utility function

$$U = \log(C+1) + w - (w/z^2)(M-z)^2, \tag{6}$$

where C is the civilian good, and M is the military good. The utility function is additive, with the component $w - (w/z^2)(M-z)^2$ giving the utility attached to national security through military spending. The maximum value this component can reach is given by the parameter w, and this peak is reached when $M = z$. Thus z is the level of military expenditure at which utility attributed to defense spending peaks. The parabolic component, which describes the contribution of the military good M to utility, shows that after M reaches a level z, aggregate utility begins to decline. Specifically, if $M = 2z$, the contribution of the military good to utility is zero. The logarithmic component of the utility function for the civilian good C has the standard properties. Thus the issue becomes how foreign aid donors can influence the level of z—the level of defense resources at which satiety in military spending is reached.

Nonmilitary aid can also increase security within the broad meaning of that term. Economic aid can be used as an incentive to induce hostile parties to reach a peaceful solution. Alternatively, the threat of reducing aid or imposing sanctions may have the same effect. This is particularly likely in countries troubled by persistent internal conflicts, which are often caused by economic deprivation and political repression. Under those conditions, substituting economic aid for military aid can improve security.

The dividing line between internal and external security, threats, and conflict is often thin in developing countries. Of the thirty-two conflicts in the developing world in 1988 classified as major by SIPRI, and the more than one hundred classified as less serious (SIPRI 1989), many sprang from internal upheavals—civil wars or foreign interventions directly related to internal instability. These are obvious cases in which poverty and developmental failures create the conditions for persistent conflict. The case for strengthening nonmilitary security is strongest for such countries, but the obstacles to providing effective economic assistance at a time of strife can be formidable. Multilateral aid institutions may find it impossible to implement development programs effectively under those conditions, and there may be a case for channeling assistance through nongovernmental organizations instead. Practical problems aside, however, these conditions provide the strongest case conceptually for the effective substitution of economic aid for military aid.

It is also possible that leakages from fungible aid are most likely to occur in just those countries that are most in need of economic aid because of severe budget constraints. Chief among them are countries with high ratios of military expenditure and debt service burdens to central government revenues—two of the most unproductive types of government spending since they crowd out both consumption and investment. (The use of revenue shares is appropriate in opportunity cost and burden calculations since expenditures can be artificially increased by running a budget deficit; table 7 provides these ratios for a selected group of developing countries.) But the very urgency of their need to finance defense and debt burdens increases the possibility that economic aid will be misused. Such countries will benefit more if the higher levels of economic aid are accompanied by strong conditionality or are specifically tied to projects with accountable costs and high returns. Donors should consider such nontraditional indicators as defense and debt ratios for assessing the potential benefit of transferring foreign resources from one form to another.

Adjustment lending is potentially the most fungible of all economic assistance and therefore requires strong conditionality. The World Bank has identified five ways of increasing the efficiency of such loans: removing economic distortions, increasing the priority of public sector reforms, promoting investment recovery, linking disbursements to reforms, and monitoring macroeconomic stability.

Many issues related to military expenditure—its overall level, its specific allocation, the use of resources released by additional economic aid to increase defense spending—are also related to the optimal use of foreign aid. Consider these issues in the context of the recommendations for increasing the efficacy of

Table 7. *Military Expenditure and External Public Debt Service as Shares of Current Government Revenue, 1988*
(percentage of current government revenues)

Country	*External debt service*	*Military expenditure*	*External debt service plus military expenditure*
Argentina	22.3	15.2	37.5
Colombia	54.3	16.7	71.0
Chile	19.6	24.6	44.2
Egypt	10.8	18.1	28.9
Indonesia	51.6	12.0	63.6
Jordan	67.1	51.4	118.5
Morocco	26.2	20.5	46.7
Pakistan	20.6	41.8	62.4
Philippines	49.0	9.1	58.1
Sri Lanka	24.7	16.8	41.5
Zimbabwe	22.8	18.1	40.9

Source: World Bank (1990), Stockholm International Peace Research Institute data base, and authors' calculations.

adjustment loans that were identified above. Military industries create distortions in the industrial sector because of their excessively high capital intensity and sunk costs in scarce resources like research and development. Public-sector reforms are weakened if defense allocations are exempt from cost-benefit analysis, as is almost universally the case in developing countries. If military spending crowds out public-sector investment, particularly in agriculture and social programs, investment recovery will be delayed. Macroeconomic stabilization is impeded when defense expenditures cause budget deficits to rise and arms imports worsen the balance of payments.

Military expenditures must be explicitly integrated in a country's financial planning exercise and in the conditionality provisions used by multilateral donors to increase the effectiveness of their lending programs. In addition to reducing the leakages from economic aid, such measures will help to control the overall level of defense spending. The following examples of current practice in developing countries suggest issues about which multilateral institutions might productively raise questions:

- A percentage of total foreign exchange earnings from major exports is sometimes allocated to arms imports. Chile has done this with copper export earnings, and the Gulf states and Libya with oil revenues. This insulates arms imports from any overall adjustments in balance of payments.
- During privatization programs, proceeds from the sale of state assets are partly earmarked for the military. This is particularly likely in the case of the defense industries, as in Argentina, where the proceeds can be used to increase the salaries of military personnel.
- Pensions for military personnel are often substantially higher than those of other government employees. Early retirement at full pension or staff reorganizations with "golden handshakes" are often used to compensate defense personnel, particularly during periods of political instability. Military pension funds are not subject to audit, and so their investment activities are often unknown. Large-scale movements in military pension funds that were not accounted for in defense budgets occurred in Argentina during the military rule of the 1970s and in the Philippines during the Marcos regime.
- Defense expenditures are resilient: When aggregate expenditure falls, the military sector's share rises. Closer investigation at the country level is needed to find out how and why this resilience has occurred, particularly during periods of externally imposed austerity.
- There is some empirical evidence that the impact of changes in military expenditure—and the nature of crowding out—is asymmetric. When defense spending rises, investment falls; but when defense spending falls, it is consumption that gains. Thus reductions in military expenditure may not be growth-inducing unless some precommitment mechanism is in place to ensure that resources released from the defense sector are applied to investment.

- For most arms-importing countries, it is difficult to determine how the trade is being financed—through military aid, debt creation, compensatory trade arrangements (such as offsets), or cash transactions. Military debt-related statistics are particularly useful, but they are unavailable from the debtor's side. Thus lenders have a special responsibility to provide detailed records on defense debt that can help in monitoring the financing of arms transfers. Since official weapons trade is carefully monitored by sellers' governments for security reasons, debt data on official transfers can be readily found. These data should be used regularly in country evaluation.

The Disarmament Dividend

To sum up, we have argued that fungibility creates a problem by allowing economic aid to be used for what some deem inappropriate purposes. Military expenditure and the security it provides have positive marginal utility for the recipient countries but negative marginal utility from the donor's perspective. To stop leakages and prevent the problems caused by the fungibility of foreign aid, stricter conditionality is required since economic aid is more likely to be transferred to defense purposes than military aid is to development purposes.

Clearly, recipients will not welcome such controls or tied aid, so incentives are needed to make the conditions and their monitoring palatable. An impasse will remain unless the volume of aid is increased substantially. It may be possible in the current international political climate to reduce military spending in the major donor countries—which are also the most important defense spenders in the world—and to use the freed resources to expand foreign economic aid programs, but with much stricter controls.

What are the prospects for a "disarmament dividend" and for such structural changes in foreign assistance? For the major powers, which provide the bulk of security assistance, the results could be substantial. (The information in the third column of table 1 can be used to calculate the potential transfer from military spending to official development assistance.) The United States and the U.S.S.R. could increase their development assistance by 40 to 45 percent through a 1 percent cut in military spending. Or looking at the potential change from a more global perspective, consider that during the late 1980s, more than $500 billion (in 1988 prices) was spent on security in Europe (this includes apportioned amounts from the United States, the U.S.S.R., and all European countries). A 10 percent reduction, a modest drop given the political changes of the last two years, would allow a doubling of official development assistance. If used effectively, such an increase in economic assistance could have a large impact on economic security in the developing world, and might improve military security as well.

VI. Conclusion

Historically the major military powers have linked economic and military assistance programs enabling them to serve security and development interests and needs at the same time. The implicit assumption was that both security and growth were important to the welfare of the recipient and should be provided in balanced form.

Today, however, political conditions have changed radically, and the close linkage of military and economic aid, especially for the United States and the U.S.S.R., no longer seems valid. The U.S.S.R. will certainly find it difficult to provide large subsidies on military transfers because of its own domestic economic problems. If the United States also reduces its international security commitments, as it could do if the Soviet threat were credibly reduced, then it will have less need for basing rights and other service exchanges for which military assistance is routinely given.

Severing the linkage means that transfers from military to civilian aid become a strong possibility. At the same time, if defense industries are restructured to produce civilian goods or to diversify away from armaments production, thus reducing overcapacity in the arms industries in supplier countries, public choice theory predicts a lessening of domestic political pressure to provide military aid.

Overall, we have argued that aid programs need to be reevaluated in light of their fungibility and the possibility of using economic assistance for military purposes. There is reason enough to believe that the fungibility of economic aid is relatively high and that the leakage toward military activities is greater than any leakage in the opposite direction. The close relations between arms recipients and sellers, the linkages between economic aid and military aid established by the superpowers, the use of military assistance to finance arms sales, and the provision of economic assistance to facilitate arms transfers—all these forces induce donors to be less than fully vigilant about the misuses of economic aid. And because aid recipients have strong security concerns, they tend to divert resources to military purposes when that is possible.

Optimal aid programs therefore require stricter and more effective conditionality provisions, but such measures will be unacceptable to recipients if the flow of aid remains depressed. Thus the need is to increase economic assistance substantially while making the terms stricter through the addition of "defense conditionality."

Foreign aid arouses passions far stronger than those evoked by the standard economic controversies involved (Little 1982). Bringing military assistance into the picture raises those passions to an even higher level. Although this paper has concentrated on the economic dimensions, the political factors that motivate the economics should not be forgotten. The South Commission (1990, p. 53) reminds us: "The international community has the duty to put in place a framework that would guarantee the security of all nations against external threats, including incursions by mercenaries. Nevertheless, it remains an unfinished task of the countries of the South to work out effective mechanisms for settling international and internal conflicts through peaceful means. These mechanisms, together with the strengthening of democratic processes, can play an important role in curbing military expenditure."

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Comment on "Military Expenditure, Aid, and Economic Development," by Deger and Sen

Michael D. Intriligator

Saadet Deger and Somnath Sen examine the problems posed by the relationships between defense expenditure and military aid and between economic development and economic assistance. They consider three issues: first, the fungibility of aid, or how aid provided for one purpose may, in fact, be used for another; second, how to measure the economic effect of aid; and third, given the fungibility of aid and the difficulties of measuring its impact on the recipient nation, the ramifications for aid policy in terms of the level of aid and the balance between military aid and economic assistance. My comments address these issues and raise four others.

If there is a solution to the fungibility of aid it has eluded policymakers thus far. The fundamental fact is that economic resources are readily transferable, and the real effects of aid may be totally different than what the donor intended. Determining what effect aid has had requires calculating what would have happened if the aid were *not* provided (or provided in a different form, or with certain conditions), and comparing the results. Deriving this counterfactual requires a host of assumptions to reach any definitive conclusions. In that sense the problem can only be considered contingent on certain assumptions.

Measuring the economic effect of aid involves an econometric or computable general equilibrium model of the economy with and without aid. In either case the general economic conditions for the counterfactual alternative must be specified. Given the alternatives there should ideally be a range of possible outcomes for the counterfactual situation and thus a range of differences from the actual outcome in the absence of aid. Indeed, the range is probably very wide.

With respect to aid policy, donor nations and international organizations could decide on policies on the basis of these alternatives. Answers about the balance between military aid and economic assistance, specificity or conditionality in aid, and tied versus untied aid, for example, might be informed by reviewing the results of economic models. But aid policymakers should be informed not just of the mean values of alternative experiments but also of the range of possible outcomes for alternative assumptions regarding national poli-

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cies and the domestic and international economic environment. In some cases there may be such a wide range that the results of the modeling are uninformative. In other cases, when there are narrower alternatives, the modeling may help shape an effective aid program. In any case it is only realistic to recognize that aid probably plays a relatively minor role in the process of economic development, in contrast to the long-term effects of stabilization policies, changes in terms of trade, access to markets and raw materials, and wars and civil disturbances.

Four other issues deserve comment. First, both military aid and economic assistance are related to the notion of security; presumably military aid provides military security and economic assistance provides economic security. But security needs are changing with the end of the Cold War, the sequence of revolutions in Eastern Europe, the Gulf War, the dissolution of the Warsaw Pact, and President Bush's as yet undefined "new world order." Because of these rapid changes, the concept of security is evolving from a national and international focus toward a new view of global security. "Global security" is defined as the absence of threats to the vital interests of the planet. This concept is one in which economic, military, and political factors all interact. Thus it is not possible to separate economic and security factors, as it was in the past, because they tend to be interrelated. International cooperation is increasingly important to achieve the goal of global security. Aid from bilateral and multilateral donors or international financial organizations is an example of such international cooperation.

Second, the basic nature of aid, which is undergoing a structural transformation as a result of the fundamental changes noted above, must be considered. Some of the earlier aid recipients have now become actual or potential donor states. Meanwhile, the socialist world is seeking advice and assistance in the move toward market-based economies. To avoid instabilities that could have adverse regional or global consequences, aid priorities may be shifting from spending for economic growth and military security to ways to promote stable market economies. This transition might involve transfers from countries in the first and third worlds to nations in the second world. The current emergency food aid shipments to the U.S.S.R., for example, include aid not only from the European nations but also from India. Such transfers are likely to be a good investment to avoid much more substantial military expenditure in the future, and may work to counter major instabilities and the possible resumption of the Cold War. New forms of technical and economic assistance to Eastern Europe and to the U.S.S.R. now (and perhaps in the future to such nations as China and Viet Nam), may require a new direction for existing international institutions, or even new regional institutions, such as the recently established European Bank for Reconstruction and Development. Originally, the word "reconstruction" referred to World War II, but it is an accurate description of efforts to rebuild the post-Cold War world.

A third issue concerns trade in arms. The difficulty of converting from weapons production to goods for the civilian sector is well known, but it is particularly complex for a country that is attempting to shift at the same time from a centrally planned to a market economy. As a result there will be enormous pressure to keep up defense production, with its high levels of employment, and to produce for export rather than for domestic use. These incentives are particularly strong in Eastern Europe and in the U.S.S.R. Both face enormous obstacles in converting to civilian production, both are desperately short of convertible currency, and both have few manufactures suitable for export. The result could be a move to commercialize the arms trade, generating intense competition, expanding exports and imports of military items, and destabilizing vulnerable regions. The challenge to global security calls for action now to create an international regime to prevent this scenario. Aid to the former socialist states of Eastern Europe and the U.S.S.R. and conditional military assistance to certain nations could be important parts of this new regime.

Fourth, an underlying premise of the Deger and Sen paper is that military aid and military expenditures are of little—or no—social value. This raises the question of security against external threat and domestic unrest. In such situations, military expenditure may be a good investment, providing greater social value than capital investment. The challenge is to reduce regional and global security risks so that military expenditure can be maintained at a lower—but probably not zero—equilibrium. As Robert McNamara notes in his paper, this involves Security Council guarantees of territorial integrity, regional institutions to promote security, and a substantial reduction in the defense budgets of the great powers to release resources for reconstruction and development.

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A New Paradigm for Urban Development

Akin L. Mabogunje

The standard urban development paradigm recognizes the emerging dominance of capitalism in developing countries, but it assumes away the need to promote and nurture indigenous capitalist institutions. Current urban policies seek to strengthen institutions that deliver infrastructure services rather than those that enable producers and government administrators to be more productively entrepreneurial. The new urban paradigm proposed here is based on a process of "institutional radicalization" that would change the rules, the enforcement characteristics, and the behavioral norms of the institutions that provide the context for economic growth. The new urban paradigm requires a reexamination of the role of the informal sector with respect to the market economy. Urban policy must seek to discourage rent-seeking entrepreneurial behavior while promoting productive and profit-oriented entrepreneurship. The paper describes the policy implications of the new paradigm and the instruments that can be used in a strategy of urban development.

In spite of four decades of planned interventions by governments and donors, the condition of cities in most developing countries remains far from satisfactory. To quote a World Bank (1988) study:

> Despite heavy subsidies, many urban services are underprovided. Most recent estimates indicate that 23 percent of the urban population in developing countries has no potable water within 200 meters; the figure rises to 35 percent in Sub-Saharan Africa. Road congestion is spreading, and escalating transport costs have reduced productivity. Housing shortages are common in many cities. Both sides of the public finance equation—revenue and spending—have contributed to this underprovision . . . . . The problem is aggravated because spending in many cities is not directed toward the appropriate services . . . . . [which] serve a small percentage of the urban population, place a considerable and continuous burden on the cities' financial resources, and displace improvements elsewhere.

This indictment of urban life after the dedicated efforts of so many years prompts several questions: First, why has it been so difficult? Why have the

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numerous programs and projects initiated by governments, international agencies, and multilateral assistance institutions not had the desired effect? Second, what is wrong with the policies that have been pursued so far to deal with the problems of urban development? Is it that the rationale for these policies is inappropriate—in the sense that it does not serve the needs of urban dwellers or involve them in a development process that is sustainable? Or is the challenge more fundamental, relating to the very paradigm that has provided the conceptual underpinning of the strategy for urban development?

This paper argues that although many of the programs and policies designed to address urban issues are unexceptionable—and in many cases necessary—their long-term success is vitiated by their failure to transform the traditional institutions that are relevant to the lives of most urban residents. Such institutions are usually identified in the literature as belonging to the "informal" sector. The failure to pay serious attention to these institutions is also masked by the preoccupation with urban poverty and the somewhat patronizing response that it elicits. As a result, the more challenging task of improving the productivity of urban economies tends to be neglected.

This calls for a new paradigm for urban policy in developing countries—a paradigm concerned with transforming indigenous institutions so that they will be compatible with the demands of a free market economy. This paper briefly examines the weaknesses of the standard paradigm of urban development and proposes a new paradigm that gives more attention to economic activities in urban areas.

The first section of the paper reviews the urgency of the problem and examines the policies that have evolved since 1950. The discussion then turns to the need for a new paradigm based on the concept of "institutional radicalization." The paper examines the critical role of the state in this alternative strategy and considers its costs, policy implications, and prospects for success. The final section emphasizes the importance of encouraging productive entrepreneurship while discouraging the type of rent-seeking activities that have been responsible in part for the present crisis.

I. Accelerating Urbanization

Irrespective of the economic outcome, the regime of structural adjustment being adopted in most developing countries today is likely to spur urbanization. If structural adjustment actually succeeds in turning around economic performance, the enhanced gross domestic product is bound to attract more migrants to the cities; if it fails, the deepening misery—especially in rural areas—is certain to push more migrants to the city. In either case, therefore, these countries face the daunting challenge of confronting urban growth as decisively as possible.

From 1950 to 1970, while the total population of the developing countries increased 57 percent (from 1.7 to 2.6 billion), the urban population rose 151 percent (from 287 million to 673 million), a rate that put urbanization on the global economic and social agenda (UNCHS 1987). In search of a quick fix, governments took a narrow view of urbanization, focusing on such projects as slum clearance, water supply, and sanitation. As it became clear that attempts to restrain the continued massive flow of rural migrants to the cities were doomed to failure, attention turned to industrialization and infrastructure to improve the economic capacity of cities and towns. Despite these measures, deteriorating socioeconomic conditions forced policymakers to give priority to such issues as basic needs, informal sector activities, sites-and-services schemes, and other programs designed for the urban poor.

In the 1980s, while the economic crisis in most developing countries deepened, urbanization continued unabated. From 1970 to 1990, the population of the cities in developing countries not only doubled again (from 0.67 to 1.36 billion), but the proportion living in cities of a million or more increased from just over 30 percent to about 40 percent. Indeed, while in 1970 developing countries had only one of three megacities (those with a population of 10 million) in the world, by 1990 nine of twelve such cities were in developing countries; by 2000 eighteen of twenty-one megacities in the world will be in developing countries (UNCHS 1987).

The regional variation in this pattern of urbanization is particularly noteworthy. In 1990, more than 70 percent of the population of Latin America was urban; by 2025 the figure is expected to reach 80 percent. In Asia and Africa, urban residents accounted for 30 and 33 percent of the population, respectively. These figures are forecast to rise to 42 percent in Asia and 46 percent in Africa by 2025; by that time, 49 percent of African residents, 47 percent of Latin Americans, and 44 percent of Asians will live in cities of more than a million people (UNCHS 1987).

All over the developing world more people are crowding into cities, making do with inadequate shelter, and trying to make a living through ingenious—though not particularly remunerative—activities. Thus as Brian Berry (1973) observes, rapid urbanization has not been accompanied by a rise in economic development, as was the case in Europe and North America, and instead has been associated with unemployment, low levels of life expectancy, poor nutritional status, and low levels of education. Berry concludes that a different perspective is needed—often for reasons of social and economic equity—in developing nations that are beginning to try to control urbanization. A starting point in this strategy is, therefore, to examine the standard paradigm that has informed urban policy and explore its failure to come to grips with the exigent problems of urbanization.

II. The Standard Urban Development Paradigm

Although no single source spells out the standard paradigm, the literature does offer some indications. An early World Bank (1972) paper on urban policy suggests that development for urban areas should emphasize an "incremental approach, based on relatively short-run programs explicitly linked to individual projects, budgets and the political decision process, (particularly) urban transport, housing, and land policy." Although the authors confess that this paradigm reflects an acute awareness of the paucity of knowledge and methodology, a World Bank (1983) review written ten years later still regards the paradigm as valid, and observes that "although the proposed content of these operations may change, particularly in later years, the majority of operations are expected to focus on strengthening institutions responsible for the provision of urban shelter and infrastructure. Urban transport lending is also expected to expand in cities where urban shelter and infrastructure operations are already under way and where urban congestion and transport problems are growing."

The gist of this same paradigm is seen in Linn's (1983) analysis. His diagnosis of the problem emphasizes two interrelated phenomena. First, urban labor supply tends to expand as fast as—if not faster than—demand, limiting the growth of wages and incomes (especially for unskilled workers). This rapid urbanization outstrips the capacity of municipal institutions to provide such infrastructure as schools, housing, water, and transportation, and leads to the second phenomenon—rising prices for urban land and shelter, overcrowding, and shortages of public services. The results are disastrous for the poor. Since the imbalance largely reflects inefficient management, Linn concludes that the efficiency and equity of urban development can be increased by improving the policies that create the instability.

Other studies point to the strength of this paradigm. The United Nations Development Programme (UNDP 1989), in a review of urban development policy for the 1990s, argued that governments will have to find more effective ways to invest in services, facilities, and infrastructure to enhance the economic attractions of cities and towns. Even critics of present urban policies base their judgment on this paradigm. Stren and White (1989), for instance, conclude that the inability of governments to provide critical urban services, maintain infrastructure, and participate in the local administrative and political decisionmaking process are major elements of the crisis.

Not unexpectedly, institutional development and capacity building appear in more recent formulations of the standard paradigm. But it is apparent that these studies refer essentially to existing government departments concerned with the delivery of services and the provision and maintenance of infrastructure. Government agencies are seen as having serious problems of internal organization, financing, and staffing, which must be improved if they are to take on new responsibilities for urban development.

In order to appreciate the inadequacy of the present paradigm, it is useful to consider the emerging dominance of the free market capitalist economy in developing countries. Dear and Scott (1981) describe that economy as "a bipartite system of production relations, comprising commodity producers (capitalist firms, together with an associated constellation of directorial, managerial, and stockholder interests) and workers (blue collar and white collar)." This system of production is structured around a number of institutions, most of which took decades to emerge in the advanced industrial countries. The standard paradigm assumes away the need to promote and nurture indigenous capitalist institutions in developing countries and concentrates instead on the welfare of labor—the other component of the bipartite system. Thus urban policies emphasize strengthening institutions that deliver services—employment, transportation, shelter, education, health, and so on—rather than those that enable "commodity producers" to accumulate more capital and create wealth. One explanation is that the sophisticated capitalist institutions that have been imported by these countries are assumed to be adequate and appropriate to the task. Why is not clear, in view of glaring indications of their inadequacy, especially in regard to the needs of commodity producers in the "informal sector."

Articulating a new and more appropriate paradigm that can assist this important category of producers by bringing their operations into the mainstream thus requires special attention. It is clear that the informal sector's ability to accumulate capital will be critical for change and progress. And yet it is generally recognized that these informal activities thrive because of their ties to indigenous institutions and capacities—albeit adapted and modified. As a first principle, therefore, a new paradigm must go well beyond present strategies and endeavor to bring these institutions into the mainstream; it must propose novel means of aligning their operations with national and international free-market forces. Some aspects of a new and more appropriate paradigm are examined in the following sections.

III. The Concept of Institutional Radicalization

Institutions provide the social context within which virtually all individual activities, productive or otherwise, take place. In a situation in which most urban residents function in an informal context, it is important to understand the conventions that make these institutions function and determine whether they can be modified to enhance social productivity and promote economic growth and technical progress.

For this purpose it is useful to begin with a brief summary of the analytical framework for institutions. To quote Douglass North (1989), institutions are a set of "rules, enforcement characteristics of rules, and norms of behavior that structure repeated human interaction." The "rules" referred to here apply not only to the specific terms of a particular interaction or exchange but also to the relationships incorporated in contracts, common law, statutes, and even constitutions. Thus Van Arkadie (1989) says that institutions "encompass the fundamental rules of the game within which the economic system operates." Because the rules of the game usually confer benefits on particular individuals, it is necessary to ensure—by enforcing the rules—that these benefits are made available to society.

The structure and effectiveness of enforcement is thus a critical aspect of any institution. It usually entails a third party—or agent—such as the police or judicial authorities. At the extreme, enforcement agents include associations, communities, or the state. Enforcement is typically imperfect, however, in part because the interests of principals and agents are not always identical and in part because at the margin the benefit from additional monitoring or policing has to be balanced against the incremental costs. For this reason society invests in ideological persuasion to define the norms of behavior.

Norms are thus constraints on behavior that arise from the formal and informal rules that govern society. They are influenced by ideologies deriving from religious as well as from social and political values. Norms constitute codes of conduct, taboos, or standards of behavior and make it possible for society to insist on accountability in an interactive situation. Thus to the extent that individuals believe in and operate within these norms, they will forgo opportunities to cheat, steal, or engage in opportunistic behavior. Conversely, to the degree that they do not accept the norms, or regard them as unjust or alien, the cost of monitoring or policing (that is, the transaction cost) will increase.

This brief summary is useful in articulating a new paradigm based on changing—or radicalizing—institutions. Changing an institution involves three distinct features—the rules, the enforcement characteristics, and the norms of behavior. In the context of urban policy in developing countries, each will have to change at a different rate. The process of institutional radicalization involves changing the rules that define an institution before changing its enforcement characteristics and norms of behavior. This will ensure some semblance of historical and cultural continuity and minimize the degree of popular disorientation. It will also ensure accountability and commitment.

The concept of institutional radicalization is still a hypothesis. As such, it requires tentative confirmation provided by observed phenomena that the hypothesis helps to explain and that cannot easily be accounted for if the hypothesis is invalid (Baumol 1990). Although it is possible to provide ample empirical data from the history of developed countries that are at least suggestive, if not conclusive, of the validity of this hypothesis, such an effort is beyond the reach of this paper. But the following passage from a study by Walvin (1984) of urban life in Britain in the nineteenth century indicates that institutional radicalization was an issue during that period:

> There is again unmistakable evidence that the new social order which served the urban world (in the nineteenth century) did not so much replace or push aside the older traditional one, but, like the towns themselves, simply grew on top of it. This is then a specific example of a general argument that runs throughout this book and which provides its intellectual core, namely that in a society undergoing the most fundamental of human and social changes, the survivals and continuities with older structures and customs remain among England's most durable and formative characteristics.

Similar observations, no doubt, can be made about many other advanced industrial societies. One suspects this is why, although many of them can be described as capitalist economies, the institutional forms that sustain this capitalism reflect different social and cultural roots. Thus Swedish capitalism differs from German, just as French capitalism differs from Japanese. Each in its own way carries institutional forms and features that relate it to its roots. All of which leads to the proposition that if urban programs in developing countries are to achieve sustainable reforms, the institutions that serve the informal sector (and with which they are familiar), will have to be adapted to changing circumstances.

In a recent article Baumol (1990) calls attention to the fact that the outcome of institutional changes is not neutral; much depends on prevailing social values. Even in societies with a strong developmental orientation, it is possible to distinguish between those that promote entrepreneurship with a strong and automatic bias toward innovation, and those that encourage unproductive rent-seeking behavior (especially among the elite). Typically, both tendencies are noticeable—in tense competition for dominance. The question is: Does a particular paradigm reinforce one outcome or the other? It is often argued that a paradigm that emphasizes government intervention in productive activities, say by establishing numerous parastatal organizations, and that permits the bureaucracy to exercise broad discretionary powers in selecting program or project beneficiaries, is more likely to encourage unproductive rent-seeking than one that does not. For instance, one reason the early sites-and-services schemes achieved less success than was first anticipated may be connected with the decision to give occupants secure title to the land (in a situation where land tenure is not generally secure). Thus an opportunity was created for making a profit (by selling off allocations in the schemes) rather than engaging in productive activities (Mgullu 1978; Morrison and Gutkind 1982).

Consequently, I propose a paradigm based on the concept of institutional radicalization, and directed at fostering, enhancing, and sustaining productive entrepreneurship among the petty commodity producers that dominate the burgeoning informal sector of the urban economy in most developing countries (Moser 1978).

IV. Institutional Radicalization in the Informal Sector

In a recent statement the International Labour Organization estimated that the economically active population in urban areas of developing countries will reach 825 million by the end of the 1990s, and 1.7 billion by 2025 (UNDP 1989). It reckoned that more than 228 million new jobs will be needed during the 1990s alone. Since most of these jobs are likely to be provided in the informal sector, development policy must address changing—or radicalizing—the institutions that promote entrepreneurship in this sector, and gradually integrating these institutions into the free-market economy.

The urban informal sector is not, as Peattie (1987) aptly cautioned, "a category within which to locate the poor." Instead it is a product of the dynamic activities of civil societies and the weak capabilities of the state. A recent study by Midgal (1988) captures the essence of this problem between the state and civil society. The study makes the point that societies remain strong not because they are conservative and attached to old ways, but because they are dynamic and adapt to meet the challenge of survival. On the other hand, the state can be weak if it is trapped by its colonial legacy and committed to preserving outmoded structures rather than to taking new initiatives. In this situation, the state seems unconcerned with the needs of society, and society becomes indifferent to the role of the state.

Clearly, if the urban population is to be mobilized behind new ideas that are critical for development—especially in a free market economy—considerable economies of effort will be achieved by identifying indigenous institutions that can be gradually transformed to bring out entrepreneurial behavior. This model is already evident in a number of scattered instances of spontaneous institutional radicalization, including attempts at meeting popular needs for credit, land, productive organizations, and improved technology. A few examples of such developments are illustrative.

Credit Provision

Cameroon. Haggblade (1978) for instance, reports from Cameroon that an indigenous system of credit mobilization—a rotating fund for savings and credit—was on its way to becoming a modern banking institution. The system was so successful in mobilizing large deposits that the risk of default was a source of growing anxiety. Consequently in 1975 the association decided to register as a formal bank—the Banque Unie de Credit—thus becoming the sixth bank in the country. This success story turned sour, however, four years later (Miracle, Miracle, and Cohen 1980) because the government, which saw the new institution as simply another opportunity for rent-seeking, insisted on appointing the managing director of the bank. Rather than give up its autonomy and capacity for enforcing accountability, the association decided to close the bank and revert to its previous "informal" status.

Nigeria. In Nigeria a recent World Bank lending program was designed to help owners of small taxis buy new vehicles with local bank loans. Instead of requiring collateral, however, a third party—the Nigerian Taxi Owners Union—was introduced into the transaction. The union, an association set up by the taxi owners, was able to bring to bear traditional enforcement characteristics and norms of behavior. Thus it became at once the recommendor, the guarantor, and the loan officer. The story was told of a taxi owner who failed to pay a monthly installment. The union, acting according to local custom, simply seized his taxi until the owner raised the money and discharged his fair obligations.

The enforcement capacity inherited from traditional credit arrangements is a critical element of radicalized credit institutions. Enforcement is vital because credit risk depends not only on the lender's knowledge of the prospective borrower's ability and willingness to repay but also on the sanctions that can be applied in case of default. This function is vital because collateral—especially in the form of land with secure title—is not easily available to informal sector producers. As noted earlier, this is not because people are reluctant to make changes in land tenure practices but instead because the state has failed to recognize the importance of legal ownership to land.

India. In 1925, three promoters in the small town of Manipal, India, established a savings and credit system known as the Syndicate Bank (Bhatt 1988). This institution mobilized savings through "pigmy deposits"—a scheme that involved door-to-door collection of a given amount of deposits at stated intervals from workers, small shopkeepers, vegetable vendors, traders, and so on. The collections and deposits were, however, predicated on the enforcement rules against default sanctioned by the community. Although in time the Syndicate Bank developed other deposit strategies, by 1960 pigmy deposits accounted for as much as 21 percent of the total deposits of the bank. Nonetheless, right up to nationalization in 1969, the central bank of India regarded the Syndicate Bank as a backward rural association and considered its innovations unacceptable.

Land Tenure

Peru. The difficulties encountered in Peru over secure title to property ultimately led to the "invasion" of public and private lands (de Soto 1990). Contrary to expectations, however, the process was orderly; the community operated under extra-legal norms that encompassed informal institutional arrangements and formal rules borrowed from the legal system, offsetting the absence of legal protection, and gradually assured stability and security for owners of the acquired land. The community has maintained a register of land to record ownership, and has its own adjudicating body to deal with land disputes and criminal offenses. Yet in spite of constant conflicts with the government over invasions—conflicts usually followed by some form of retrospective validation of the claim for the land—a system for the orderly provision of titled land is still to evolve in Peru.

Africa. The position in the case of most African countries is hardly better, although it has not taken the form of forced invasion. The colonial administration in most of these countries provided secure title to the land of colonial settlers, but did little to improve the traditional land tenure regime, although land sales were widespread. A World Bank (1983) report on urban development in Cameroon noted that "more than 90 percent of urban residents do not have registered title to the land on which they have built, though they must pay occupation rights to the customary landowners." Similarly, in Conakry, Guinea, a report noted that illegal settlements represented the most frequent form of urban land occupancy, reflecting informal and unregistered financial arrangements. It observed that the same state of affairs was common in Rwanda, where most urban residents have no evidence of tenure status for the land they occupy.

Thus land tenure as an institution is being radicalized. The next step is to formalize the legal process so that title is provided to uncontested owners, with an adjudicating body to determine ownership when there are disputes. Securely held registered land would encourage entrepreneurship (particularly in the informal sector) by providing access to assets that can serve as collateral in the capital market. It will also promote the entrepreneurial capacity of municipal institutions by improving their ability to raise much needed revenue.

Decentralization

Traditional arrangements for consultation, representation, and accountability in the management of urban affairs are overdue for replacement. In traditional African societies, for example, such institutional arrangements take the form of chiefs in the quarters (or neighborhoods) of cities. Even when migrants began to flood into metropolitan areas, they recognized the validity of these arrangements and were encouraged to establish quarters and select their own chiefs. Descriptions by explorers in the eighteenth and nineteenth centuries record such quarters in Kano, Timbuktu, Whydah, and Kumasi. In Lagos, Barnes (1986) found that as new migrants acquired secure title to property (and rented space to other migrants), they formed an association of landlords and selected members to serve as traditional chiefs of the quarters.

During the colonial period grass-roots social arrangements did not receive much attention, and in the subsequent move toward centralized administrative authority, such institutions were largely ignored. Yet in many places these arrangements remain in effect. For example, in Greater Khartoum, a recent study by El Sammani and others (1989) finds that the city is organized into some 367 neighborhoods, each with its own mosque and informal council. These councils provide a mechanism for grass-roots neighborhood development. Their activities are inclined to focus on education and health but they have also financed water projects and provided funds for road construction and rehabilitation. In fact, El Sammani estimates that these councils mobilized a total of several million Sudanese pounds in 1985 for such activities.

In the cities of Latin America, neighborhood organizations also play an important role in mediating the challenges of urban life. De Soto (1990) notes that these organizations initially execute the invasion contract. Eventually they take on responsibility for administering justice, preserving law and order, and resolving disputes over competing rights, breaches of contracts or tenancy agreements, and boundary lines. To protect the value of the property, they also try to provide some of the needed services and negotiate with the authorities. These organizations have a democratic organizational structure (an executive body and a general assembly). De Soto points out that often not even the local government administration functions as democratically as these informal organizations.

By pursuing a strategy to reform, or radicalize, these institutions, they can eventually become part of the formal administration of urban areas. Their experience will complement attempts to register urban land, enhance the technical capacity of the government, and contribute to efficient management. However, this will require preserving the enforcement and accountability characteristics of these institutions.

In short, a new paradigm for urban development requires a reexamination of the informal sector's strength and its capacity for incubating the rules of the game that are compatible with a free market economy. In the absence of a full-blown capitalist transformation with its emphasis on guarantees (collateral or security) and transaction rules, attempts must be made to upgrade institutions that serve the informal sector and can move it in the direction of increasing monetization, greater productivity, and integration with the free-market economy. It would be unfortunate if the trust, knowledge, and accountability of these informal sector institutions were to be jettisoned in the process of development.

V. The Role of the State

However much society is striving to change its institutions, the final legitimization and integration can only come through the intervention of the state. This intervention enables the state to penetrate society and determine the use of resources; it also enhances its capacity to govern (Midgal 1988). To quote Pospisil (1974):

> [In advanced industrial societies] the law of the State (is) the primary, almost omnipotent standard to which the individual looks for protection and with which he tries to conform in his behavior. Only within the framework of this basic conformity, we tend to think, may there exist additional controls of the family, clique, association and so on. In other words, in the West it is assumed that the center of power controlling most of the behavior of citizens of a modern nation lies on the level of the society as a whole.

Thus the state must become productively entrepreneurial—apart from promoting entrepreneurial initiatives. This issue goes to the very heart of the renewed interest in capacity building, especially for countries in Sub-Saharan Africa. If governments are to improve productivity, they must move away from simply financing the training (and over-training) of professionals from developing countries who return home to try to operate an apparatus that is at sharp variance with the proclivities of the local society.

The new urban paradigm requires promoting a sense of community and self-reliance. This entails more than administrative decentralization. Urban communities need to become responsible for infrastructure and other amenities based on democratic consultation and realistic financial projections. A situation in which cost recovery is imposed for municipal services without consultation with the community cannot be regarded as appropriate. Governments must devolve centralized decisionmaking to local authorities and must support efforts by municipalities and neighborhood (or ward) units to provide basic services.

Freeman (1968) discusses the importance of local responsibility in Britain in 1835 when the Municipal Corporation Act prompted efforts to tidy up the spatial organization of cities, boroughs, and municipal corporations. Commissions were set up to define suitable ward boundaries and town limits. Ward boundaries were drawn to include approximately the same number of electors comprising both rich and poor. The commissioners also recorded information on housing, commerce, and other concerns—information that enabled the municipalities to democratize their system of governance, improve health services and environmental conditions, and enhance their revenue-generating capacity.

Legislation to give legitimacy to reform efforts is equally important. In Nigeria, for example, the government is trying to introduce a new credit system for small-scale producers and traders in urban and rural areas (Federal Republic of Nigeria 1990). Based on the familiar community development association—or improvement union—a network of community-owned banks was established in 1990. Because these associations have a track record in mobilizing funds and using them for construction projects and water, road, and electricity schemes, the expectation is that they can provide accountability and enforce high levels of repayment by local borrowers. The government insists that equity capital be raised by the community (although the level of capitalization required is below that of normal merchant and commercial banks) and offers substantial matching loans payable over a five-year period. The community banks have very limited functions: they can accept deposits, provide credit, and supply nonbanking services to promote grass-roots development. Oversight is handled by a Community Bank Implementation Committee that trains appointees for the boards of directors and managers of the banks. The central bank is considering a special branch to license, regulate, and monitor the new banks' activities.

It is too early to form any definitive judgment on this attempt at institutional radicalization, but the response has been tremendous. Within the first two months some 700 communities had raised the equity capital needed. How well these banks will serve the needs of the informal sector remains to be seen; for now, this institutional link is a reassuring development.

Of perhaps equal significance would be state intervention in urban land. In Africa, more than in any other developing region, facilitating the development of a land market could be critical. The appropriate strategy will require a detailed cadastral survey of urban property rights, an efficient mechanism for issuing land titles, and an effective procedure for land adjudication. Because the information needed to validate land rights resides with traditional authorities in most countries, the state will need to penetrate these institutions, radicalize them, and mold them to the design of an enhanced land management information agency.

When the state intervenes to transform indigenous institutions, the objective must be to make it easier for the informal sector to improve its productivity.

Legal recognition of organizations that are responsive to informal producers, and mechanisms to promote contractual relations by making the procedures less complex and more transparent will help. But more than anything else, the state can monitor programs and policies that are designed to reform institutions to make sure that they work.

Clearly, the search for a new paradigm does not imply a yearning for less government intervention; instead it is a quest for a more discriminating type of intervention. As Polanyi (1944) observes, one of the paradoxes of the transition from a precapitalist to a free-market economy—with all its claims to laissez-faire—is that, far from requiring less state intervention, the situation tends to call for a great deal more.

> The road to the free market was opened and kept open by an enormous increase in continuous, centrally organized and controlled interventionism. To make Adam Smith's "simple and natural liberty" compatible with the needs of a human society was a most complicated affair. Witness the complexity of the provisions in the innumerable enclosure laws; the amount of bureaucratic control involved in the administration of the New Poor Laws which for the first time since Queen Elizabeth's reign were effectively supervised by central authority; or the increase in governmental administration entailed in the meritorious task of municipal reform. And yet, all these strongholds of government were erected with a view to the organizing of some simple freedom—such as that of land, labor or municipal administration.

VI. Policy Implications

With the state expected to play a strategic role, what are the policy implications of this new urban development strategy? First, the emphasis on alleviating poverty should be reappraised. Urban policies that provide subsidies or favored treatment tend to encourage rent-seeking behavior among both the bureaucracy and the poor. Moreover, a policy that seeks to improve overall urban capacity is bound to have more impact on the poor than one that treats them as an enclave.

A second and equally important policy implication is that attention should focus on the entrepreneurial development of the informal sector. Its contribution to the urban economy in developing countries is based on the high proportion of the active population that it employs. The more efficient this sector becomes, the greater its contribution to national productivity; the more its operation is aligned with the free-market economy, the more dynamic the economy will become.

A third policy recommendation is to identify the informal sector institutions that have active rule-enforcement capabilities that are acceptable to the relevant producers. The new paradigm places considerable premium on a new round of urban research to understand how urban society in developing countries copes with modern economic life, what institutions it has forged, and how these institutions can be enhanced for urban development.

Fourth, the new urban paradigm requires new rules (particularly in Africa) to free urban land from the trammels of the precapitalist tenure system and make it a more functional asset of the economy. This is an area that requires deliberate policy intervention by the state. Every town and city in developing countries should commission a cadastral map of individual properties as well as a register of the ownership, boundaries, size, value, and other attributes of land and buildings.

Doebele (1983) and many other writers argue that cadastral systems are as important as roads, electricity, or any other component of infrastructure. Their points may be summarized under the following generalizations:

- Cadastration brings a vastly enlarged supply of urban land on the market.
- It drastically reduces the transfer costs of land transactions.
- It provides accurate information to the market, expediting a rational disposition of the metropolitan area.
- The development of the market improves liquidity and enlarges total construction activity while providing an economically and socially useful outlet for savings.
- Secure tenure releases pent-up demand for construction and other beneficial uses of land.
- Ownership permits the government to collect taxes based on the value of the real estate as well as on the cost of government-provided services.
- Land registration provides an excellent information base for urban management.

The process of cadastration must take into account details of carrying out the survey as well as the adjudication of conflicting ownership claims. Fortunately recent developments in aerial photogrammetry and satellite imaging as well as in computer storage of data have enormously enhanced the survey process and added to the techniques available for dealing expeditiously with this problem (Porter, McMains, and Doebele 1973; Falloux 1989). A second aspect of adjudication, however, is extending the concept of radicalization to another institution of the urban environment: the neighborhood.

An important policy implication is that the new paradigm invests neighborhoods with greater visibility and authority in urban management. As noted earlier, the leadership in neighborhoods created through land invasion maintains a register of who owns what land. Officials working on details of land title can work closely with these officials. Similarly, in most African cities, neighborhood leaders who have enough information on local ownership of land could be recruited to assist officials in the process of land adjudication.

In general, more attention to the neighborhood structure can serve many other vital management purposes. It can enhance revenue collection for urban services, provide useful data, and improve delivery of urban services. It can also increase residents' participation in city administration and encourage a high standard of environmental quality. To assist neighborhoods in this crucial role, some real decentralization of power is essential and can be expected to contribute to greater transparency and accountability in government. It is thus of some interest that a few of the new World Bank urban development projects—notably for Conakry, Guinea, and Addis Ababa—emphasize neighborhood organization. The expectation must be that these neighborhoods can improve the effectiveness of urban administration.

These policies are intended to stimulate and sustain productive entrepreneurship even for the municipal or metropolitan authorities. For instance, there is a need to explore the range of technological options for providing various services that users can afford. This is particularly important not only in the provision of water, electricity, and roads but also in housing and transportation. Countries could examine how some of these services are currently being provided for the informal sector and consider ways to penetrate these schemes to ensure greater efficiency and safety standards. In one case study in Nairobi, the local "matatu" transport service was integrated into the mass transit system. After an initial period of adjustment, standards of service delivery improved (Lee-Smith 1989). Such innovative models represent productive entrepreneurship at the level of the municipality.

In short, the major policy implication of this paper is the need to obviate the prevailing duality that underlines daily life in the cities of developing countries and that constitutes perhaps the greatest drawback to urban development. This duality enables a minority that operates according to modern rules of the game (or is empowered by law to operate within free-market institutions imported from the advanced industrial countries), to enjoy enormous and disproportionate access to national resources. In contrast, the vast majority of the population, although anxious to participate, is effectively constrained by the institutions within which it has to live and operate. One of the principal weaknesses of development planning is that policies are based on an implied assumption that "attitudes and institutions, though not fully *adapted* to the development process under consideration, are adaptable without intentional and direct policies" (Myrdal 1968).

The cost of a policy of institutional radicalization can vary from as little as what it takes to draft and implement an appropriate bylaw to as much as the millions of dollars needed to mount an effective cadastration of a city. Whatever the cost calculation, it is critical that the benefit is not estimated simply in terms of welfare but also in terms of increased productivity so that the beneficiaries can pay back the cost of the service and still enjoy an appreciable and sustainable rise in their economic well-being.

VII. Conclusion

The process of urban development in developing countries has been likened to building a house from the roof down. All the institutions of modern urbanization are in place—the banks, the factories, the legal system, and the unions. But they remain—as it were—suspended over societies that have no firm connection to them and whose own indigenous institutions (even when oriented in the right direction) lack the necessary scaffolding to connect them to their modern surrogates. Or, as Berry (1973) puts it:

> In the Third World, institutional settings which are the products of modern economic growth have preceded the process of growth. The political institutions of democracy, for instance, often preclude the exploitation of the proletariat for the purpose of growth, a feature which was not uncommon in the initial stages of growth in the West. Welfare measures like minimum wages, regulation of hours of work, prohibition of child labor, all are institutions which in certain ways do not make for economic development of the sort that took place under early Western capitalism.

Yet no one would want to wish away the tremendous humane advances that societies in developing countries have adopted. Although these programs cover only a small part of the working population, their enlargement is important for all residents of cities in developing countries. The role of the World Bank and other multilateral agencies to explore varied technological options to achieve this objective must continue.

What is important, however, is that all this is possible only if the population of the cities is made more productive and more entrepreneurial. It is thus of considerable importance that the World Bank's (1990) new urban agenda call attention to the need to remove those critical constraints that have inhibited rapid economic development. Among the key constraints are infrastructural deficiencies, the regulatory framework governing urban markets for land and housing, weak municipal institutions, and inadequate financial services for urban development. Although the agenda also highlights the environment and problems of urban poverty, it is significant that it emphasizes the need for research on urban productivity and macroeconomic performance. This new emphasis is expected to inform the decisionmaking process by private and official donor agencies.

In the closing years of the century, urban growth is expected to be perhaps the single most important social phenomenon in developing countries. There can be no doubt that because of the vast improvements in communications technology, these metropolitan areas will want the same lifestyles as their counterparts in the industrial countries. Even if this goal is deferred, administrators of these cities need to invest in major urban infrastructure for reasons of health and environmental quality. For this, ample resources must be mobilized locally. Enhancing the capacity of individuals and municipal authorities for such resource mobilization constitutes perhaps the most pressing challenge of the state. The structural adjustment programs in most developing countries present the right climate for such initiatives. A new paradigm of urban development based on the concept of institutional radicalization is vital to promote productive entrepreneurship, especially in the informal sector. It is through creative policy initiatives directed at these enterprises that a new era of productive and prosperous urban development will dawn.

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Comment on "A New Paradigm for Urban Development," by Mabogunje

Johannes F. Linn

It is a great pleasure to comment on Dr. Mabogunje's paper. In doing so, I will address three points: First, my support of his view that urbanization will be a critical issue in the future; second, his proposed new paradigm of "institutional radicalization;" and third, an alternative paradigm that focuses on the proper role of the state as it applies to urban development policy.

I. The Importance of Urbanization

Dr. Mabogunje stresses the importance of urbanization in developing countries by referring to some salient demographic facts. The following observations reinforce his point: From 1970 to 2000, the urban population in developing countries is expected to grow more than 3.5 percent overall (more than 4 percent in South Asia, 5 percent or more in Africa, and almost 7 percent in East Africa). The total urban population was about equal in absolute terms in the industrial and the developing countries in 1970; by 2000, the urban population in the developing countries will be twice that of the industrial countries. At the same time there can be little doubt that the core of economic growth and modernization in developing countries is in urban areas, especially the large cities. Finding ways to make urban centers function efficiently and equitably is therefore a critical concern of development policy. In looking for a paradigm for urban development policy it is critical to ask what is unique about urban—as distinct from general—development policy.

II. The Paradigm of Institutional Radicalization

What is the meaning of the proposed new paradigm? I take for granted that the meaning of the term "radical" as used in the paper is grounded in the Latin word "radix"—meaning "root." Thus Dr. Mabogunje tells us that we need to go back to the institutional roots of a society to foster development. We need to build on traditional indigenous institutions—whether public or private, individ-

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ual or communal—to achieve modernization and development, rather than superimpose imported institutional structures and mechanisms.

Is this a particularly urban paradigm? I would answer "no." Dr. Mabogunje does not explain why the paradigm does not apply to development policy in general rather than to urban policy exclusively. Still, it is a potentially useful development paradigm even if not especially "urban" in content.

What are its strengths? So far the hypotheses underlying the paradigm have not been adequately tested, but the paradigm has a lot of intuitive appeal and is consistent ex post with various observed phenomena. Further qualitative support might be added to the evidence in the paper. One could point, for example, to the many difficulties of transplanting institutions to developing nations, including the difficulties the World Bank has encountered in its efforts to support institution building in Africa, Latin America, and the Middle East.

The successes of indigenous institutions associated with rapid growth in East and Southeast Asia (the Republic of Korea, Taiwan (China), Thailand, and so on) also support the hypothesis as does the resilience of some antiquated institutions, such as the Indian city import duties known as "octroi," which remain in force despite decades of effort—indigenous and external—to eliminate them. Even the failure of communism—representing as it does an external ideology and institutional set of norms imposed on traditional behavioral norms in many developing countries—could be cited in support of Dr. Mabogunje's thesis.

In the urban context the paradigm may explain the difficulty of crafting Western urban institutions to fit developing-country societies, whether they are representative local government, property taxes, or traffic management. It might also explain the difficulty of transferring successful institutions from one developing country or city to another—for instance, the land readjustment scheme of Korea and Taiwan (China); the valorization system of Colombia; the area licensing scheme of Singapore; even the successful *kampong* improvement program of Jakarta. We must be cautious about giving the impression that institutional successes are easily transferable. The successes are often based on unique factors, including strong roots in local institutional traditions, that are not replicable elsewhere.

What are the weaknesses of the paradigm? Its usefulness in policymaking remains to be proved. Dr. Mabogunje gives little indication of what parameters would help determine in advance what institutions are likely to work and how they can work better. The paper refers to informal credit schemes, informal land markets, and enterprises but does not address the question of how to support them or how to transform them into indigenous modern institutions. The principal policy prescription in the paper appears to be: don't interfere with indigenous private initiative. This sounds remarkably like a spinoff from the "invisible hand" of market capitalism. The one clear example that the paper gives for a prescriptive public policy proposal—the recommendation regarding land tenure and the introduction of a cadastral registration scheme—represents conventional recommendations made under the traditional urban policy paradigm that Dr. Mabogunje seeks to replace.

III. Is There an Alternative Paradigm?

Dr. Mabogunje touches on an important question for urban areas: What is the appropriate role of the state? The now widely accepted general paradigm for development—reliance on private initiative in competitive markets—may need some fine-tuning when applied to urban areas.

A core theme of the old urban paradigm, which Dr. Mabogunje dismisses at the outset, is the need to get the government out of certain areas and rely instead on private initiative and competitive markets. For example, in the early 1970s the World Bank stressed the critical role of the private sector in urban housing, transportation, and employment, at a time when the now-fashionable private sector paradigm had not yet gained general prominence.

The old urban paradigm, nonetheless, still advocated excessive government intervention in the provision of urban social and physical infrastructure while neglecting private sector involvement; it did not sufficiently highlight the possible problems of regulation and control—although the evils of excessive urban land and transport regulation were recognized quite early. The old paradigm also emphasized local public finance rather than alternative private financing of urban services.

In pursuing a new urban paradigm, however, it is also important to remember that the urban economy, because of its high population density, is characterized by a high incidence of externalities, positive and negative, and significant natural monopolies. These characteristics make a strong case for certain types of public sector involvement in public service provision, land-use planning and regulation, transport management, and so on. Identifying the appropriate areas for state intervention in urban areas, and maintaining and improving the quality of government—particularly local government—is the big challenge. A new urban policy paradigm, if there is to be one, must therefore be built on an appropriate role for the state and the need to improve the quality of urban institutions—whether indigenous or new—based on successful models in other settings.

Comment on "A New Paradigm for Urban Development," by Mabogunje

Michael Cohen

I would like to express my admiration for Dr. Mabogunje and his excellent paper. During his visits to the World Bank he has continually presented new ideas and stimulated us to probe new areas of inquiry and reflection. This paper represents an important contribution to current thinking about urban policy on both the theoretical and operational levels.

I. Urban Policy

I would like to comment briefly on five points raised by the paper: (1) The origins of what Dr. Mabogunje calls the standard urban paradigm; (2) some past efforts to move beyond it; (3) the characteristics of the new paradigm as proposed; (4) the concept of institutional radicalization; and (5) the implications for the World Bank.

The Standard Urban Paradigm

In 1949 Kwame Nkrumah advised his followers: "Seek ye first the political kingdom and all things will be added unto you." That early expression of what would now be called a supply-side bias represents the inflated expectations of the public sector and its predominant role in addressing the problems of development. By the late 1960s the concern with the postcolonial state—and by the 1970s with policy itself—contrasted sharply with the earlier anthropological bias of the study of urbanization. If the informal sector was described by Keith Hart and the International Labour Organization in the 1970s, it did not become a major part of the urban paradigm. As Dr. Mabogunje states, both policymakers and would-be helpers from the industrial world focused their attention on strengthening the capacity of government institutions to finance and deliver urban infrastructure and services. By the time "basic needs" arrived in the late 1970s, the dominant urban paradigm in the international community had already settled on improving this supply side—not just in Africa, but throughout the developing world.

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Past Efforts

Let me turn to some of the relatively unsuccessful efforts to go beyond this supply-side orientation. In 1974 I remember the lengthy discussions over D.C. Rao's chapter on urban poverty in Hollis Chenery's book *Redistribution with Growth* (1974). The chapter contended that "asset creation" would be important in generating urban income and employment. Although it did not go into the details of supporting indigenous capitalist institutions, Rao argued that providing services for consumption alone would not go far enough in alleviating urban poverty; the paper is not unlike Dr. Mabogunje's in that regard.

Although the concern with asset creation was reflected in efforts to mobilize savings for housing, until the 1980s most international—and indeed most national—efforts in the developing world focused on projects rather than on financial systems for the capital formation that Dr. Mabogunje describes as necessary for self-sustained urban development.

Perhaps more significant were the myriad efforts to support small- and medium-scale enterprises in cities in developing countries. With hindsight these efforts proved to be too small and powerless in the face of macroeconomic and financial policies that encouraged capital- rather than labor-intensive activities. Financial flows into what we now call "directed credit" did not adequately reflect the cost of capital in these economies. As the paper points out—correctly, I believe—the financial institutions imported by the developing countries were inadequate and insufficiently linked to local economies and, in fact, imposed costly distortions on economic activity.

These efforts failed to address the real demand side of the urban economy. What was the productive base of individual urban economic activities? What did people produce, exchange, and consume? How were these goods and services priced? How was wealth rather than just income created? Why did predictions of the level of housing investment by individual households repeatedly underestimate actual expenditures? Kyu Sik Lee's work (1988) on how infrastructural deficiencies affect manufacturing productivity has helped move us closer to the demand side, but I would agree that we have not made either the intellectual or operational commitment to go as far as the paper implies.

The New Paradigm

I agree with the paper's contention that understanding the urban context is a multidisciplinary task. Dr. Mabogunje has urged us to focus on institutions. I would agree, but not just with the limited definition of institutions used by economists or practitioners of public administration or institutional development. Dare I say that even sociology and anthropology have something to contribute in understanding institutional structures as patterns of informal and formal behavior?

Thinking about institutions prompted me to go back to Sir Arthur Lewis's *Theory of Economic Growth* (1955), published not long after Nkrumah's exhortation, and his extraordinarily clear analysis of economic institutions. He included the importance of incentives, trade and specialization, economic freedom for individuals and markets, and even the role of such institutions as religion and the family. In his view the most important characteristic of institutions is the "freedom of maneuver which they permit" (p. 57). If they allow people to seize economic opportunities, growth can occur, cumulatively reinforced by change.

Institutional Radicalization

Radicalizing institutions in the contemporary world requires expanding the room for maneuvering of people living and working within the institutions as well as those that are affected by them. I agree with the paper's emphasis on the duality between the few beneficiaries of resources and public policies and the majority (previously misunderstood as "marginals" in the 1970s), and the need to bridge this gap. It is in part for this reason that the World Bank's recent urban policy paper (World Bank 1991b.) focuses on the need to think of the city as a whole rather than just as neighborhoods. Because urban institutions (broadly defined to include local governments, markets, and participatory social structures) operate at the city level, it is important to understand and change them at that level. This is not to say that we must not address the needs of communities and neighborhoods but instead that the policy environment—institutions in Arthur Lewis's terms—will have important consequences for the efficacy of public and private investments, and indeed—as recent work in the *World Development Report 1991* shows—even on the rate of return of individual projects.

Implications for the World Bank

What are the operational and research implications of the new paradigm for urban assistance? The paper argues that the old paradigm for urban development was based on assumptions that did not apply to developing countries. By starting with the roof and neglecting the walls economists were unable to build a sustainable model. Indeed, experience with the old paradigm convinces me that urban policy is too important to leave to architects and planners. The urban economists have not been particularly insightful in understanding the demand side and the productive process in urban areas. Nor have they been flexible in moving to new questions as conditions have changed. Dr. Mabogunje presents a powerful argument for economists to learn more about what is actually on the ground—about behavior, incentives, and the importance of institutions in shaping the future.

The stakes involved in understanding these issues are very large. The urban policy paper echoes the concern that what happens at the urban level has important consequences for macroeconomic performance through three types of linkages: fiscal, financial, and productive. We identify three substantive areas that will require attention in the 1990s: improving the productivity of urban economic activities, alleviating growing urban poverty, and improving the management of the urban environment. We also add a fourth item to this agenda:

improving our understanding of urban issues, because paradoxically, as this issue has become more important, research on urban policy has actually diminished during the 1980s in the developing world. The absence of an empirical basis for policymaking is itself a policy issue. As Larry Summers said in his important keynote address, there is an urgent need for new ideas. I believe that Dr. Mabogunje has pointed us in the right direction.

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Floor Discussion of the Mabogunje Paper

Mabogunje acknowledged that Linn (discussant) had correctly interpreted the term "radicalization" as implying a return to the roots. Linn was right to speak of hypotheses, he said, because we know very little about what people are doing for themselves. By way of explanation he offered the example of a village in Ibadan where the rules worked out among the small producers were enforced far more powerfully than any the Nigerian government might impose.

Everybody knows the case of cadastration in the city, he said, but in Africa less than 0.02 percent of the urban land has been marked—and the proportion of land for which titles exist is even smaller. Modern financial institutions ask potential borrowers if they have collateral—but if the answer is no, it is not because people don't have property. They do own property, but the state doesn't record ownership. The state should do its own thing properly instead of forming parastatals for marketing, he opined.

The few people who can handle the highly developed financial institutions in Nigeria have made a killing, Mabogunje continued. But most of the population seems to be trapped. If we want to release economic actors from entrapment we must rethink the framework in which these financial institutions operate. The policy environment is not just physical infrastructure but institutional infrastructure as well. We must help the state appreciate its role in rescuing the people who are trapped in limited institutional frameworks.

A participant said that Mabogunje had articulated what one senses is happening in India and Latin America. Rather than call it "radicalizing" institutions, however, he would call it "endogenizing the institutional response to rapid city growth." Radicalizing institutions means going to the roots; it is more useful, he said, to talk about developing these institutions in an endogenous fashion. A recent World Bank study on urbanization found that what works best is to observe endogenous institutional—and even governmental—responses. What are people doing automatically? He gave as an example the informal land markets—neither legal nor illegal—prevalent in Bogota and in many other Latin American cities. Policymakers must find out, the participant contended, how these "extra-legal" activities—whether they involve urban transportation, housing, or land markets—become legal, but not necessarily formalized. Policymakers also need to determine how formal agencies respond to rapid growth, he said.

This session was chaired by Hollis Chenery, Thomas D. Cabot Emeritus Professor of Economics at Harvard University.

A participant argued that what might be described as a fear of cities could explain why the obvious need to develop local institutions had not been met. He hypothesized that it is no accident that cities don't work, and said that it occurred to him when he was struggling to set up a project in Bangkok that the political system deliberately kept urban areas inefficient because opposition to the group in power was most likely to come from these areas.

East Africa, in the colonial period, had strong traditions of local government, but in the years since independence local governments had been virtually destroyed because of the central government's desire to maintain power. If cities are to meet the needs of their people, he said, local government is essential. Yet the political system often does not have the maturity and confidence to let this happen.

Mabogunje said that central governments found it difficult to accept the fact that local governments wanted to make decisions on local affairs. Central governments have been able to get away with this for a long time because the resources they saw themselves as dispensing were available at the national level. And, in fact, he said, the multilateral agencies strengthened the image of the central government doing its best for the local people. When people develop the habit of saying, "Government, come give us a road, give us schools, give us water," they don't talk about how they are going to pay for it.

It was not an accident, he said, that this group was talking about governance. If people are to move forward, they have to determine what they want and agree to pay for it. He said he is convinced that we are entering a period when there will be more democratic governance and better local mobilization of financial resources, and the two go together. He recalled that, unlike the American colonies, whose battle cry was "no taxation without representation," the Nigerians wanted people to believe in representation without taxation.

A World Bank participant agreed about the need for policymakers to consider endogenous organizational structures more than they have in the past, but pointed out that indigenous mechanisms for dealing with property rights and contract and credit relationships were developed in face-to-face transactions among people who knew each other within small economic spheres. He wondered how this new paradigm would deal with transactions that were anonymous and at arm's length.

He also asked how the new paradigm would help us think about issues of urban environmental decay in the next decade. We have technical solutions for the catastrophic urban environmental problems expected in the 1990s, but economic and institutional structures in developing countries are ill-suited to adapting these solutions.

Another participant had three comments. First, we use demographic projections to estimate the number of new entrants into the work force or the number of job opportunities we need to create. But the government's ability to create jobs in the past thirty to forty years has been extremely limited and will be even more so in the 1990s and beyond. He suggested that we make a distinction between job opportunities and work opportunities, because many people will find work in the informal sector. This should help us reorient our management allocation priorities.

Second, he said, the development of relatively inexpensive transport and better roads might provide an alternative means of accommodating the growth of population and of the labor force. And third, we are often concerned about the poor quality of urban housing, but conditions in the hinterlands are no better—so why do people not move to urban areas in greater numbers than they do? Sociological and anthropological insights into rural-urban migration might help us design better urban development strategies.

Linn (discussant) found the point well taken that the efficiency of cities might be purposely limited in order to limit their political threat. That might help explain why urban policy research, which flourished in the 1970s, declined in the 1980s. One could talk about urban models and policies but there was nobody around to implement one's recommendations because, except in Singapore and Hong Kong, there were no effective urban governments. People lost interest because they had no leverage.

Linn shared the participant's interest in what cities would do about environmental problems under the new paradigm. The range of public sector responses to these problems would give many opportunities for mistakes, but perhaps also for corrective responses.

Cohen (discussant) complained that we define urban economic activities in terms of housing and residential infrastructure—emphasizing consumption rather than production. If we think about infrastructure as an intermediate good for production, and if much or most production is occurring in cities, perhaps we should have more urban infrastructure to support production. If the state would get out of the business of building housing and other things it doesn't do very well, said Cohen, and would think about a framework for managing the urban commons and environment, we might get more effective responses to environmental problems.

On the question about how to adapt a face-to-face culture to arm's-length transactions, Mabogunje said that his paper was suggesting bringing these institutions into the mainstream so they could evolve and become more robust.

In his final remarks Mabogunje expressed fear of the buzzword "decentralization," which often means decentralizing public sector operations without giving local people more power. If there is a lesson in his paper, he concluded, it is that government has a primary duty not to compete with the private sector but to release people's energy so they can function in the free-market economy. He hoped the next round of urban development policy would make this more likely to happen.

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Urban Efficiency, Productivity, and Economic Development

Edwin S. Mills

Cities are crucial for economic development. Their size and density permit economies of scale and scope that are prerequisites to growth. The best jobs and highest earnings are found there. The growth of urban areas makes efficient production possible and encourages the adoption of new technology. The development of modern industrial, service, and nonprofit sectors takes place there.

In order to attain their full potential it is important that cities operate efficiently. Observers sometimes attribute urban problems in developing countries to the private sector's limited scope and autonomy. Overregulation is seen as slowing growth and impairing production. The efficient operation of private markets requires government to specify property rights and provide for land ownership and transfer. City governments must also invest in physical infrastructure to provide services that are essential to residents. Infrastructure planning and provision should, for the most part, be locally planned and financed after careful cost-benefit analysis. User fees can be valuable in financing needed infrastructure and in reducing the temptation of local governments to overbuild. The need to finance local government spending from local sources is an incentive to authorities to act in the interest of their beneficiaries.

The efficient and productive functioning of cities in developing countries is essential to support economic growth. Because most of the concern of national and local governments (and international agencies) is on managing large cities, this paper focuses on those areas. Although the precise size is not important, a population of a million or more people is a good cutoff. In this paper, I take city size as given and ask how these urban areas can be helped to function better.

The paper first explores the functions of cities and focuses on four areas in which cities in developing countries face problems: infrastructure; pollution and congestion; housing and land markets; and local government financing. I discuss some of the reasons for these failures and suggest changes in national and local government policies to help cities attain their full potential for production and economic development.

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I. The Functions of Large Cities

Every production or service activity is subject to economies of scale and scope. Thus a large producer enjoys lower unit costs—given fixed input prices—than a small producer, and can produce a variety of related commodities or services at lower cost than several units, each of which produces only a few commodities or services. A large hospital, for example, can offer a range of health services more cheaply than many small hospitals, each of which offers only a few services. Equally important, non-land inputs, mainly in the form of tall buildings, can be substituted for land in cities where scarcity and resulting high costs lead to the need to economize on land. The high density of production activities and their proximity permits cities to produce and exchange a wide range of commodities and services at low transportation and communication costs.

These functions are prosaic but powerful; they apply to all large cities but they are especially important in developing countries where transportation outside of urban areas is slow and uncertain. In industrial countries manufacturing plants located 100 or 200 miles from a large city can easily ship goods to the city. In many developing countries, however, such distances may mean that a plant is not viable; businesses must be close to each other, to workers, and to consumers. Moreover, a large share of the gross national product of most developing countries originates in the international sector. Large cities tend to be located on fine natural harbors where traded goods can be loaded and unloaded. Producers of export goods and services and users of imports tend to cluster at ports to minimize the transportation and communication costs associated with foreign trade. In small developing countries the only large city is likely to be on its best harbor.

The attractions of cities are not restricted to activities in for-profit sectors. In most developing countries the best educational and cultural institutions are located there, as are the largest and most diversified financial institutions. Government agencies usually find the city desirable for the same reason. Cause and effect run in both directions regarding government agencies; proximity facilitates interaction with commercial firms and other government organizations, but it is equally important for private businesses to be close to government agencies to obtain licenses, loans, and so on. The more centralized and interventionist the central government is, the more important it is for businesses to be located in the national capital.[1]

Wage rates in cities may be two to four times higher than in rural areas, whereas living costs are generally only 10 to 25 percent greater. Evidence from industrial and developing countries indicates that total factor productivity increases 4 to 6 percent with a doubling of city size (see Henderson 1988; Shukla 1988). In many developing countries cities generate a disproportionate share of

1. India is one of the few exceptions to the rule that the national capital is the country's largest city. In India the states have considerable autonomy and the national capital is less of a magnet for businesses. Both Calcutta and Bombay—the two largest Indian cities—are important ports.

national and local taxes. They are gateways to domestic and foreign technology. Cities are the vehicles by which millions of low-income migrants from the countryside improve their living standards and those of their children. All of these benefits relate fundamentally to the city's size, density, diversity, and location. Economic development is probably impossible without large cities.

This characterization of cities differs dramatically from most people's perceptions. The general view is that large cities—especially those in developing countries—are chaotic, congested, and burdened with millions of poor people in a deteriorating environment. There is merit in both views. Cities certainly share in the poverty that afflicts developing countries. More than that, most of them operate well below their potential, fueling frustration and hostility. Available resources and technology define a production possibility frontier for each city, but achieving that frontier requires a careful balance between business and government.

In moving cities to their production possibility frontiers, governments must establish conditions that enable the private sector to function efficiently. This paper analyzes four areas in which a private sector thrust is essential to solve urban problems. Housing is the most obvious example. Infrastructure is primarily a government responsibility, but appropriate investment and management could make cities more productive. Pollution and congestion are classic market failures involving both private and government-owned enterprises. And finally, financing local government, an investment that depends on a political commitment to the interests of the local population. These issues are discussed more fully below, and in Lee (1989).

II. Housing and Land Markets

Housing constitutes between 25 and 50 percent of the produced stock of fixed assets in the few countries for which data exist. Housing is a smaller share of total investment—usually 15 to 30 percent—because it is more durable than other produced assets and a smaller investment is needed to maintain it. After food, housing accounts for the largest share of consumers' budgets in all countries, and home equity is the largest asset of most households. Housing largely defines an individual's social status, well-being, and to a considerable extent, self-image.

Few people are satisfied with the housing situation in developing countries. The most common complaint is that housing is scarce and expensive, especially in large cities. Dissatisfaction with the housing conditions of the lowest-income urban residents is especially strong. In most developing countries housing is privately built and owned. The urban housing of the poorest 10 to 20 percent of the population is largely self-built and lacks plumbing, privacy, or protection from the weather. It is typically illegal, unsanitary, and dangerous.

It should not be necessary to say that the common view that housing is an unproductive investment, crowding out scarce funds needed for industrial development, is misguided. Access to basic infrastructure is a goal of economic development. Macroeconomic policy should seek to enable markets to produce and allocate assets so as to equate marginal rates of return in alternative investments. If housing investment is restricted in favor of industrialization, the returns to housing will exceed those in other sectors. Yet many governments have assumed a strong responsibility for housing and have overregulated the private housing market. Governments rarely have enough money to build adequate housing stock, so the backlog of housing needs keeps growing.

There are several powerful advantages to a private housing market. Most important is the incentive it provides. People are simply willing to provide more money for housing than governments are able to mobilize, so privately owned homes are better maintained. And owner–occupiers make important investments of time and money to improve their homes. A second advantage is that home equity accumulation is an important incentive for many residents to save. And finally, housing tends to be built more quickly and more economically by the private sector than by governments.

Housing Policy

Better management of the housing sector would help developing countries reap the benefits of private housing markets. First, governments must establish property rights that define ownership and establish legal instruments for the purchase and sale of urban land. The private sector will not invest in housing unless it can benefit from the investment. The failure of governments to define property rights to agricultural land on the periphery of cities has been an important constraint on urban growth in some developing countries. To encourage residential development, the legal framework to allow housing construction on such land must be in place. Of course, streets and other infrastructure facilities must be provided.

Basic land-use controls should be adopted that permit housing to be built on specific tracts. Such controls are necessary because the government has an obligation to provide physical and social infrastructure to residents. Yet land-use controls are often excessively detailed and cumbersome in many developing countries. Residential housing is frequently built well away from urban commercial centers, which causes long and expensive commutes for households of modest means. Low-density, high-quality dwellings are required by law in some countries. Low density also entails excessive transportation requirements, and quality guidelines price moderate-income households out of the market for decent housing.

Many developing countries have no legal provision for self-built housing—the only dwelling the poorest people can afford. It is not desirable to permit the urban poor to squat anywhere; they must have legal title to their houses and plots of land, and they must be served by at least minimal infrastructure. Legalization and sites-and-services programs have resulted in increased residential development in some countries during recent decades.

A second way to improve housing policy is for governments to launch new institutions (whether public or private) to finance housing purchases. Funds can be mobilized by drawing on the savings of middle-income households. Financial institutions must pay interest rates that attract adequate amounts of savings and must lend money for mortgages on terms that home buyers can afford.[2] Such institutions must be mainly self-financing, because governments lack funds to do the job.

Savings institutions can be important in increasing the savings rate of households that formerly had no access to investments that provided adequate returns. Loans must be rationed to borrowers with good repayment prospects. Large down payments will lessen the risk to the lending institution. It is crucial that the lending institution have legal title to the property in the event of default (see Buckley 1989).

Should governments subsidize housing? There can be no objection in principle to housing subsidies that are carefully targeted to the poor. The issues are practical. Targeting is difficult in most developing countries because data are not adequate to identify the poorest people. Governments never have enough money to subsidize many people, so poorly targeted subsidies are not much help. If targeting is possible, the argument is strong for income—instead of housing—subsidies. Finally, subsidies are difficult to police and may lead to political favoritism and corruption. The benefits of even a carefully targeted subsidy program are likely to be small compared with the benefits of efforts to form an efficient private housing market.

Rent control (common in most developing countries) is among the most destructive interventions in housing markets. Although rent-control programs vary greatly, their basic purpose is to keep housing rents below market-clearing levels to help low-income tenants at the expense of landlords. Hundreds of papers have been written on this subject, but the essential effects of rent control are captured by simple supply and demand analysis. If controls keep rents below equilibrium levels, less housing is supplied than is justified. In the short run, repair and maintenance are neglected. In the long run, fewer dwellings are built. In extreme cases, controls are so stringent that private rental housing markets cannot function without demoralizing criminal activities. Rent controls should be abolished, but abolition is pointless unless governments permit the market to increase the supply of rental housing.

III. Infrastructure

Infrastructure refers to predominantly government-owned capital that provides vital services to residents and businesses, including water supply and waste

2. In most developing countries, borrowing and lending rates must be indexed to the rate of inflation or to some interest rate correlated with the inflation rate. In Thailand, 75 percent mortgages for ten or fifteen years with interest rates three or four percentage points above the government borrowing rate have been found to be viable. With an inflation rate of about 5 percent, interest rates amount to about 11 percent.

disposal systems; transportation systems (roads and public transit systems); health and education facilities; and utilities (gas, electricity, and telecommunications). Not all such facilities are government-owned; there are private schools, universities, and health care facilities. But ownership is not the key issue. What infrastructure facilities have in common is that they provide people with services of great direct importance, and that the services must be provided on an integrated basis over a large area, such as a city. Some, but not all, are "natural monopolies," services such that scale or scope—or both—dictate a single provider over a city or other large area. In sectors that are natural monopolies, services must be either provided or regulated by the government.

Infrastructure development is controversial because the services provided are vital and the amounts charged rarely cover their full costs. As a result everybody wants more; especially if it is paid for by someone else. Infrastructure provision is also controversial because governments are often accused of investing in excessive infrastructure in cities at the expense of small towns and rural areas. Lipton (1976) claims that discrimination against rural areas in infrastructure provision is a major reason that standards of living are higher in cities than in developing countries. Lewis (1978) claims that the high cost of infrastructure in cities is an important reason to favor the development of small urban areas where land is less expensive. However, Becker, Williamson, and Mills (1992) do not find underinvestment in rural infrastructure in India.

Data on infrastructure are notoriously inadequate, so allocation questions cannot be settled definitively.[3] But the basic criterion for infrastructure investment should be that investments must be made in quantities, types, times, and places so that marginal benefits are at least as great as marginal costs.[4] The costs of a project include land, construction, and the present value of operating costs during the project's lifetime. The benefits are calculated by the recipients' willingness to pay. Future costs and benefits should be discounted using interest rates that are at least as great as government borrowing rates (and perhaps somewhat greater to reflect the fact that similar private projects are taxed, and to reflect any unusual risks). All inputs should be valued at market prices. Governments normally require cost estimates that take these elements into consideration before projects are approved.

Although many assume that high land values make infrastructure more expensive in large cities, the conclusion does not follow. High land values provide the

3. Real asset data are not as difficult to compile as their scarcity suggests. Investments must be added over the number of years equal to the average lifetime of the asset. Value data for the year the investment is made must be raised to account for inflation rates in intervening years. Gross asset data are obtained by adding adjusted investment data over asset lifetimes. Net asset data are obtained by applying an appropriate real depreciation rate to the gross data. Government national income statistics normally contain private investment data that can be added to get asset values. If governments keep capital investment accounts, asset data are no more difficult to compile for government infrastructure assets than for private assets.

4. Some modifications of this rule are needed to the extent that projects interact. See, for example, Just, Hueth, and Schmitz (1982).

means of financing needed infrastructure. If infrastructure is justified on the cost-benefit criterion, land rents can be taxed to finance infrastructure without distorting the allocation of resources. Take city streets for example. User fees—in the form of fuel taxes—cannot be levied differentially depending on land values. Fuel may be bought in one place and used in another. But an appropriate allocation of land to streets increases the productivity and value of property in the city. Some of that value can be taxed to finance street construction and maintenance. In this case, an appropriate tax on land rents closely approximates a user fee for the service provided.

A second reason that urban infrastructure is considered so expensive is the misperception that large cities require infrastructure that would not be needed in small towns. For example, Lewis (1978, p.40) believes that large cities require a better educated population than small towns and rural areas. He cites as evidence the fact that more education per child is provided in large cities. But research supports the belief that it is economic development that requires an educated population, and more education is provided in large cities because people can afford the taxes to pay for it and because the best economic opportunities for educated people are there.

Education aside, it is true that large cities require some infrastructure not required in smaller cities. Elaborate public transportation facilities are the best example. But once again, the investment is justified because it increases land values enough so that taxes can partially finance the investment.

In fact, infrastructure services are typically less expensive in large cities than elsewhere because high city densities reduce the cost per user. Rural education and health care are expensive because facilities of optimum size require people to travel long distances, and the transportation system is likely to be poor.

User Fees

Road construction can be funded by fuel taxes on vehicles, because fuel use is roughly proportional to road use. Fuel taxes will cover the average right-of-way costs in sections of cities where values are high, but there is no way to charge for the use (or avoidance) of a specific road or a specific time of day (when congestion is more or less severe). Thus fuel taxes cannot be used to vary charges for the use of certain roads within a city.

Willingness to pay is more difficult to estimate. Some transportation services are sold to users, so market prices can provide information. Bus and subway services are good examples. In fact, an important argument for the use of user fees that cover at least a substantial part of the costs is that they provide important data on project benefits. For many proposed infrastructure investments, the fact that no set of users is willing to pay fees that cover a substantial fraction of the costs is evidence that the project is not worthwhile.

In some cases user fees are not an appropriate measure. Most people probably believe, for example, that elementary education should be provided to all children at no cost. Nevertheless, resources must be allocated to education infrastructure, and cost-benefit analysis can help. Sample or census data that relate earnings to education are available in many countries, and carefully designed surveys can be carried out to evaluate the results of investing in education. Such data permit estimates of private returns to education in the form of higher earnings. Such private benefits are the lower bounds to the benefits of education. Other benefits, which accrue to society as a whole, can be estimated (see King 1980; Knight and Sabot 1981). Studies conclude that both private and social returns to education are high in developing countries. Private returns are high in that earnings rise rapidly with educational attainment. Social returns refer to the fact that some products of education have the characteristics of public goods in some degree. The generation, adaptation, and adoption of new technology are the best examples. In addition, the government sector can perform better if government employees are well educated. In relatively low-income developing countries, elementary education has the highest returns. In middle-income countries, where literacy rates are typically high, the highest returns to additional educational investment may be in secondary and higher education.

Government Policy

Everyone believes that exceptions should be made to the cost-benefit rule so that the poorest people are served by education and basic health care schemes. Such a view would support the provision of these benefits to all rural residents, despite possibly unfavorable cost-benefit comparisons, because so much poverty is found there. Moreover, in rapidly urbanizing countries many youths from rural areas migrate to the cities where education is even more valuable.

Each country must decide how much to subsidize infrastructure services for the poor. It is patently possible to overinvest in infrastructure. Although it is difficult to judge the optimum investment without detailed data, it is almost certain that expenditures by some countries in their national capitals are disproportionate to infrastructure investments in other cities and rural areas. In Indonesia, Mexico, and Thailand, for example, all the best high schools and universities, the best hospitals, the most efficient water supply and waste disposal systems, and the best roads and (highly subsidized) public transit systems are found in the capital cities. Such countries are almost always characterized by highly centralized governments that levy taxes uniformly throughout the country. The result is that much of the cost of the infrastructure in the national capital is paid for by people and businesses located elsewhere. The outcome is that the national capital, with better living conditions and better jobs, attracts migrants, and the government decides to control growth by limiting rural–urban migration. The right solution is to improve local infrastructure services to enhance their viability and reduce the incentives for migration.

Overinvestment in urban infrastructure is an important aspect of a deeper problem: an excessively centralized government structure. Economic growth requires a better balance between national and local government infrastructure investment. In most cases it would be better if decisions about infrastructure investments were made locally.

IV. The Urban Environment: Pollution and Congestion

All production and consumption activities generate wastes that are discharged to the air, water, or land. Waste disposal is polluting to the extent that it impairs the value of the discharge medium for use by others. Pollution is the classic example of an external diseconomy, in that producers and consumers lack the ability or motivation to take into account the costs their discharges impose on others. Government intervention is required.

Pollution problems in developing countries are somewhat different from those in high-income countries. Most pollution problems have an aesthetic aspect, a consideration that may be a higher priority in wealthy countries. But every important pollution problem also has a health aspect, and health is a high priority in all countries.

In many developing countries waterborne diseases are the most serious environmental and public health problem. Such diseases raise the morbidity rate, and are particularly dangerous for infants and children. In the early decades of the Industrial Revolution, life expectancy was shorter in large cities than in the countryside as a consequence of such public health problems. That has not been true in recent decades because governments have invested in water supply, waste disposal, and waste treatment facilities. Life expectancy appears to be longer in cities than in rural areas, in part because of pollution control programs, and in part because urban residents have higher incomes, better nutrition, and better health care.

Transportation

A carefully planned transportation system is crucial for the efficient functioning of a city. The basic planning should be the responsibility of local government, and must be tailored to the individual needs of each city.

Cities are crowded. A city transportation system may be slow and expensive for many reasons, but congestion is part of the problem. Tall buildings and only small amounts of uncovered land are the characteristic configurations to economize on valuable land. Urban transportation systems must economize on land by accommodating large numbers of vehicles per unit of roadway. In addition, roads are used by pedestrians, bicyclists, and animal-drawn vehicles. In very poor countries, private cars are viewed as luxury travel and high fuel taxes are designed to favor travel by buses and other cheaper modes of transportation. Buses and fixed-rail commuter systems economize on road space and are more efficient than large numbers of private vehicles. Indeed, subways use almost no surface level land and have enormous carrying capacity. In Tokyo they can move nearly 100,000 people an hour. But the costs are enormous and subway construction is disruptive in crowded cities.

Bus systems have attractive cost advantages for most cities at most stages of development. First, they require no special right of way; they use the same roads as other vehicles. Second, they are very efficient. After rail systems, buses can carry the largest number of passengers. Third, they are inexpensive relative to other systems that are comparably fast. Fourth, they are flexible. Routes can be initiated, abandoned, or modified at little cost as conditions change, unlike fixed-rail systems. And last, it is possible to have considerable competition among private bus companies in a given city. Bus companies have long been competitive in Seoul, for example. Competitive private companies not only improve the quality and efficiency of service but also relieve hard-pressed governments of the costs of acquiring, maintaining, and operating vehicles.

Government Policy

Environmental priorities in developing countries are different from those in industrial countries, but the criterion is the same: to aim for projects whose benefits are largest relative to their costs. Although benefits are typically difficult to estimate, good approximations are possible. Programs that have important public health benefits are the strongest candidates. Most possibilities entail substantial investments in infrastructure.

Solid waste disposal. Solid waste disposal problems are less severe in developing countries where there is less industrial production, less waste generated, and fewer products to be disposed of. And because wages are lower, residents in developing countries typically recycle many manufactured products. But waste disposal will become increasingly pressing, especially in densely populated countries, as development proceeds. Incineration and landfills are the only practical disposal techniques. Site selection is important, but most of the cost of disposal is for the collection and transportation of waste. Governments have experimented with programs to motivate recycling efforts, but no satisfactory incentives have been found.

Air and water pollution. Environmental discharges into the air have also been associated with an increase in morbidity and mortality from a range of diseases, although research on the extent and the strength of the relationship is ongoing.[5] For example, fossil fuel combustion causes a massive discharge of carbon dioxide, that may or may not have a global "greenhouse" effect.

There is evidence that sulphurous discharges from burning soft coal have adverse effects on health (see Lave and Seskin 1977). Sulphur can be filtered out of smokestacks, but it is uncertain whether the benefits exceed the costs, especially in low-income countries. Substituting cleaner fuels or relocating downwind residents or production facilities (especially coal-fired generating plants) may be cheaper solutions. Most airborne discharges from motor vehicles are

5. There have, of course, been accidental episodes of highly toxic gaseous discharges, as at Bhopal. Safe production techniques are at issue, not direct abatement programs.

unpleasant and although they are not known to have serious health consequences, 50 percent of the pollutants can be eliminated with minor engine design modifications that add almost nothing to production costs.

All organic and many inorganic waterborne discharges have adverse effects on people, fish, and animals that ingest the polluted water. Most organic discharges can be removed from water using inexpensive and conventional treatments, although some inorganic wastes are expensive or impossible to treat. Collection (by pipes or trucks) is a large part of total costs.

Some low-income countries have yet to install their first primary sewage treatment plants. Careful cost-benefit analysis is needed to make rational choices, and health benefits must be weighed against other investments in health.

Transportation. Optimizing the use of crowded city roadways is a planning problem. No solution is ideal, but there is hardly a city in the world in which careful planning could not improve transportation considerably. Many possibilities exist that are much cheaper than constructing new roads or fixed-rail systems in densely populated areas.

No simple rule specifies city sizes and characteristics that justify subway systems. Whether they are justified in large cities in developing countries is controversial. (They are energy efficient, but not superior to buses if the energy used in construction is included.) The main disadvantage of bus systems is that they tend to be slow on roadways that are crowded with other vehicles. If there were more buses carrying more riders, there would be fewer other vehicles on the roads. High taxes on fuels used by motor vehicles other than buses will induce people to use buses. Improved traffic control, careful planning, and a variety of devices that give preference to buses can help. Express buses on reserved rights-of-way or lanes can be used in some situations.

Like any other commodity, city transportation systems will be overused and congested if charges for their use are too low. Public transit systems are priced by fares, so underpricing can be avoided with adequate political will.

V. Financing Local Government

The responsibilities of local governments vary greatly among developing countries. In some, such as the Republic of Korea, they are simply agents of the national government; officials are appointed and revenues are provided (or the amounts and sources of revenues are stipulated by the central authorities). In a few countries, such as India, local government officials are elected and have considerable autonomy to raise and spend revenues. Local governments also tend to get revenues from fees (on transportation, utilities, licenses, and so on) and from taxes on sales of commodities and real estate.

Typically, local governments build and operate local infrastructure (schools, transportation, water supply and waste disposal, and some public utilities) and administer a variety of regulatory programs (land-use controls, licensing, and private transportation). Although they often have little or no autonomy in infrastructure planning, governments are responsible for managing infrastructure services at the local level. Many of these services (for instance elementary and secondary education), cannot—or should not—generate substantial revenues. The cost of these services must be offset by taxes, either local or national. But money is scarce for local governments the world over. They are required, or pressured, to keep taxes and charges down and at the same time to provide services to residents. The result is that the gulf between needs and services in urban areas is large.

Government Regulation and Responsibility

Overregulation is endemic in cities but it is especially costly in developing countries where the business sector is often only marginally profitable. The costs of overregulation are virtually invisible—lost employment and earnings possibilities—but they can be large. Land-use and related business controls are the worst offenders. Often zoning controls segregate residential areas from industrial and commercial locations, and make excessive commuting necessary. Building codes often require standards of construction that can be afforded only in higher-income settings. Although some segregation between housing and business areas is justified, the goal of government intervention should be to encourage as much employment as possible in every city.

Because local governments understand local needs, more autonomy for these jurisdictions is desirable. If infrastructure is tied to the local economy by the need to raise revenues at the local level, it is more likely that the most urgent problems will be addressed. For instance, if the urban population accounts for 10 percent of the country's residents, and programs are financed by national taxes, city dwellers will support programs that will cost them no more than 10 percent of their costs. If the local government is autonomous, however, and 100 percent of the cost must be financed locally, then local residents are motivated to favor the project only if its benefits are at least 100 percent of its costs. That is the appropriate cost-benefit criterion. There is a similar incentive to favor high-priority infrastructure improvements.

Moreover, if national taxes are cut x percent, reducing national spending (whose benefits are mainly local) by the same amount, local residents can finance their share of the programs assigned to local governments with no additional financial burden.

Government Policy

Government services whose benefits are local should be financed by local real estate taxes. In large cities land—rather than buildings—should be taxed. Judging from fragmentary data, city land values are 50 to 75 percent of urban incomes in most countries. Annual land rents are on the order of 10 percent of land values, at least in countries with moderate inflation rates. A real estate tax that is half of local land rents can easily raise annual revenues equal to 3 percent of annual personal income in cities. That is adequate to finance education and some other infrastructure costs. Property taxes on land are also somewhat progressive, especially in developing countries, and need not significantly distort resource allocation.

Land-oriented property taxes cannot be used unless real estate property rights are well defined. Even if they are well defined, most city land has structures on it. Properties may be sold only rarely, and accurate sale records must be used to interpolate among properties and among years. Sales of uncovered land are even less common in cities. The temptation is to impute a conventional fraction, say 20 percent, of the price of the real estate to the land; however, that defeats the purpose of land-oriented taxes. Their basic purpose is to tax land, not structures, and thus properties that underutilize land relative to its value should be taxed more heavily than other properties. Unless good data on land values are available, it is better to have a simple real estate tax, say 2 or 3 percent of the property's estimated market value, based on annual assessments.

Programs with predominantly local effects can be decentralized to local governments. In most countries, decentralization needs to be gradual, so that local governments can develop the expertise to administer the programs. Education, health care, and most local infrastructure investment programs can be assigned to local governments. Although real incomes are higher in cities than elsewhere (see Mills and Becker 1986), the urban poor are always at risk. National and provincial governments will need to help finance local projects in poor communities.

If local governments are to assume additional responsibilities, they must have the authority to raise revenues locally. User fees can raise large amounts of needed funds. Fares can pay for bus systems, whether the bus companies are owned by the local governments or by private businesses. Local governments can be assigned a share of fuel taxes to pay road costs. Utility costs can be financed with fees from sale of services. Certain health care costs can be financed with fees. Elementary and secondary education, however, cannot be financed predominantly with fees. On equity grounds, education should be free to ensure that poor children have access to schooling. In addition, it is politically difficult to charge people for a service (education) that the law compels them to consume.

Regulatory controls imposed on markets for goods and services, as well as on housing and land, have an adverse effect on urban development. Some of these regulations are imposed by national and provincial governments, although local governments are responsible for administering them. In such cases, policies to reform the regulatory structure must start at higher levels of government. Regulation requires a bureaucracy. The salaries of these officials can be saved by reducing the amount of regulation. A contraction of regulatory activity is one way to reduce the financial pressure on local governments and improve the functioning of the urban economy.

VI. Conclusion

Cities in developing countries function better than many people—especially scholars and government officials—believe. Even residents tend to see the disadvantages and to forget that the relatively high wages they earn depend on the productivity of the city. Nevertheless, well-designed policies to remove economic constraints would enable cities to function considerably better than they do. These policies would include:

- Carefully defined private property rights and less stringent controls on land use.
- Greater emphasis on mobilizing local savings to finance home construction and purchases, and, as a corollary, the elimination of rent controls.
- Cost-benefit analysis to establish priorities for pollution abatement.
- The development of city transportation systems to improve efficiency and reduce pollution.
- Decentralized infrastructure planning and financing by municipal governments that are autonomous and responsible to local residents.
- A tax structure based on high land values to finance justifiable infrastructure.
- Reduced regulation to permit more efficient spatial patterns of commercial and residential land.

During the late 1970s and early 1980s, there was an outpouring of research on urban problems, much of it sponsored by the World Bank (Lee 1989; Linn 1983; Shukla 1988). These studies improved our understanding of the ways cities function and shed important light on specific applied and policy-related subjects. Because of the importance of cities in fostering economic development, it is unfortunate that this momentum has been allowed to dissipate. Research is still needed on the ways urban transportation systems interact with the employment and housing sectors; the benefits and costs of transportation reforms that could improve linkages among urban sectors; and ways to measure the benefits of reforms of land-use controls and housing finance. Applied research on the environment should go beyond the basic economics of pollution and pollution-abatement policies to assess the costs of alternative pollution-abatement programs. Lessons can also be learned from the analysis of urban infrastructure investments (see Becker, Williamson, and Mills 1992). The most vital—and difficult—challenge is to study the improvements in resource allocation that might result from increased local government autonomy.

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Comment on "Urban Efficiency, Productivity, and Economic Development," by Mills

Russell J. Cheetham

Professor Mills is concerned with the efficient and productive functioning of cities in developing countries. He tells us that the basic function of cities is to economize on transportation and communications costs while permitting production at an efficient scale and scope. Some will be concerned that this is an unduly restrictive definition.

He takes city size as a given and then asks how cities can function better. Judged in these terms, he asserts that the efficiency of most cities in developing countries can be improved. I have no difficulty with the idea that urban efficiency can be improved. The questions are what to do and how to do it.

As a manager of World Bank lending operations, I confess to some disappointment with parts of the analysis. Although I agree with the proposals for deregulating housing and land markets, and the need for cost recovery, Professor Mills does not offer substantial new insights. In housing development and land markets for example, who would argue with the importance of establishing property rights, or the need to develop private sector institutions to finance housing? Who would disagree with the idea that in deciding on new investments, marginal benefits should be at least as great as marginal costs? Although these ideas may be new for some policymakers in developing countries, in some respects the paper restates conventional wisdom—at least within the World Bank.

We can look at the problem of improving the efficiency of a city of a given size in a somewhat different way. Of the four billion[1] people in developing countries today, about one and a half billion are in urban areas. Of these, 25 percent—or about 350 million people—live in absolute poverty. A much larger number has inadequate access to basic services. According to a recent study, more than 40 percent of the urban population does not have adequate sanitation (World Bank 1990).

How do we raise the productivity of this existing urban population and improve urban productivity in a more general sense? I don't find much guidance in the paper on this point. The fact is we do not know enough about the location

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1. A billion is 1,000 million.

and characteristics of many of these people and as a result, we have difficulty in formulating meaningful interventions. We should study these issues to try to understand how we can resolve them.

To what extent is there scope for increasing efficiency in urban areas through interventions that lower the costs of production? A World Bank paper on poverty policy (World Bank 1991) had some interesting anecdotal evidence on this point, but we need to know more about this aspect of urban efficiency. What research is needed here?

A final point about efficiency concerns the physical stock of capital. There is evidence of poor utilization of capital stock in developing countries—from the inappropriate design of highways to insufficient attention to operating and maintenance expenses. How do we make more effective use of this stock? Can modest additional investments yield substantial gains? Or when all is said and done, can we hope for an improvement of, say, no more than 5 percent? Not a very attractive proposal. If this is the case, the burden should shift to new investment rather than getting more out of what exists.

Let me turn to a second point. By restricting the analysis to the extent to which efficiency gains can be obtained for cities of a given size, Professor Mills has not confronted the other fundamental problem we face in urban policy and development—the implications of rapid population growth.

The reality is that over the next two decades, the urban population of developing countries is expected to double from one and a half billion to three billion people. Some of this growth will come from adjusting urban boundaries. But we cannot escape the fact that cities will have to have the capacity to provide services for a very large number of these additional people. Even at today's average standards of service this task will pose enormous challenges—quite apart from improving these standards for various groups. Just adding the 350 million people who are inadequately serviced today means that an additional two billion people will need access to basic services over the next two decades! Can these needs be met with the current approach? Here, neither Professor Mills (nor, may I say, current World Bank analysis) provide much guidance.

In the keynote address to this conference, Lawrence Summers told us that developing countries will account for 95 percent of the projected increase in the labor force over the next two decades. What he did not say was that a very high proportion of this increase will be in urban areas.

He also said that developing countries will account for less than 15 percent of new capital investment. This says something about current expectations about the productivity of new capital investment in developing countries, particularly in urban areas. Can we afford to accept this view? If it is correct, the implications are troublesome—to say the least.

What do these forecasts of a doubling in urban population mean for future efforts to raise the productivity of labor and capital in these areas? What about mobilizing savings for new urban investment? Where will the funds come from? If we accept the notion that there is a scarcity of capital for urban investment, should central governments continue to bear the brunt of these investment decisions or should they transfer these responsibilities to local governments? Or must we become much more aggressive in promoting private investment in urban services in the hope that the private sector will use capital more efficiently?

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The Macroeconomic Dimensions of City Growth in Developing Countries: Past, Present, and Future

Jeffrey G. Williamson

This paper surveys the sources of developing-country city growth in historical perspective and notes the slowdown since the first OPEC *shock. It then quantifies the sources of city growth, first in small, open economies with modest government regulation, and second in a rather closed, large economy with extensive government regulation—India. By using computable general equilibrium models, the paper identifies the role of technological progress, population pressure, world market forces, foreign capital, fuel scarcity, the urban bias, and various policy choices. The paper concludes with projections for the 1990s and into the next century.*

Why does city growth speed up in the early years of development and slow down in later stages? What role does migration play in the process? Are rural emigrants driven primarily by conditions pushing them from the countryside or by conditions pulling them into the cities? Are there too many migrants rushing to the cities? Are developing countries overurbanized? Do government policies and institutions create a pro-urban bias?

Speculation on these questions has never been in short supply. Writing in 1845, Friedrich Engels (1971) thought that Manchester's booming growth—and the associated urban decay—could be readily explained by the rapid development of manufacturing. Later, scholars like Ravenstein (1885; 1889) and Redford (1926) wrote that rural-to-urban migration was conditioned instead by Malthusian forces in the countryside, a scarcity of agricultural land, and land enclosure policies. Writing in the early 1860s, Mayhew (1861) agreed. He documented low-wage, informal-sector labor in London, driven there in search of employment of last resort. In short, while Engels favored pull, Mayhew, Ravenstein, and Redford favored push.

Despite a century and a half of debate, we are still uncertain about the sources of the urban transition: can it be influenced by policy, and *should* it be influenced by policy? Although successful industrialization always fosters urbaniza-

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tion, has it been faster in developing countries based on past standards? If so, what accounts for that rapid growth?

Two principal hypotheses have been advanced, and they sound very much like the debates over the first industrial revolution in Britain: either rapid population growth in the face of limited farm acreage pushes landless labor into the cities; or unusually strong economic forces pull migrants into the cities. Most demographers favor the first hypothesis. Exploding numbers of people must be employed, and a marginal agriculture with quasi-fixed arable land cannot offer sufficient employment for the Malthusian glut created by the demographic transition. Marginal survival may be the fate of a population glut, and squalid urban living conditions associated with such gluts have been an attribute of early industrialization since Engels first wrote of Manchester.

The demographer, writing in the shadow of Malthus, is therefore likely to favor a causal sequence running from population boom, to labor pushed off the land, to city migration, and to rapid city growth under squalid living conditions. This view has also had a profound influence on economists' thinking about development. It is central to Lewis's (1954) labor surplus model—a model that also worked well for the classical economists constructing their growth paradigms during the first industrial revolution. It is also central to the Todaro (1969) thesis that rising migration to the city is associated with high and ever rising rates of urban unemployment.

Most economists now tend to favor the second hypothesis—that economic forces contribute to urban pull. But before we follow suit, we need to place recent city growth in developing countries in historical perspective to appreciate what's new and what's not.

I. A Historical Perspective of City Growth in Developing Countries

From 1950 to 1975 the sixteen largest developing-country cities surveyed by Sinclair (1978, p. 15) recorded annual growth rates ranging from 2.4 percent (Calcutta) to 8.3 percent (Seoul). The average growth rate was a high 5.4 percent. Such rapid growth implies rising density, congestion, pollution, and a scarcity of urban land. Not surprisingly, urban rents rose, living conditions often seemed to have deteriorated, and delivery of public services was problematic at best. By the end of the 1960s, slums and uncontrolled settlements housed a large share of most urban populations. Migration to the cities played a key role in the process throughout the 1950s and 1960s, accounting for about 58 percent of city growth in the eleven largest cities in Sinclair's study, although it later fell to about 40 percent by the early 1970s. As it turns out, migration was of equal importance during the first industrial revolution—accounting for about 59 percent of city growth from 1776 to 1811, and 46 percent from 1811 to 1846 (Williamson 1990, p. 28).

Although such detailed demographic accounts are useful, there are more than 800 cities in developing countries with populations in excess of 100,000, so aggregation is necessary if we hope to emerge with some generalizations. Furthermore, given the common alarmist view that these countries have overurbanized, a brief look at the past might be an effective antidote. The most comprehensive assessment can be found in United Nations (1980), written by Preston, as well as in his own summary of the volume (Preston 1979).

City growth in developing countries is not a new phenomenon. Although the urban share of the population rose sharply between 1925 and 1950 (from 9.3 to 16.7 percent), it had been on the rise since 1850. And while the share increased even more between 1950 and 1975 (from 16.7 to 28 percent), the trend over the past century has obeyed the usual laws of motion tracing industrial revolutions: it starts slow, accelerates as the industrial revolution hits full stride, and then slows down as the transition to modern industrialization approaches its completion. The point of inflexion in this case was the decade or so just prior to the first OPEC shock. As table 1 indicates, city growth rates trace out a similar regional pattern, although there is considerable variation in timing: Latin America and West Asia reached a peak rate of city growth in the mid-1950s, East Asia (excluding China and Japan) in the late 1960s, Southeast and South Asia in the early 1970s, and Africa in the late 1980s. As a group, however, cities in developing countries achieved peak rates of growth in the early 1970s, close to the first OPEC shock.

We now know that urbanization in developing countries has been fairly conventional by historical standards. Over the quarter century 1875–1900, for example, the urban share of the population in industrial countries rose from 17.2 to 26.1 percent. Urbanization has been faster in developing countries, but not that much faster: over the quarter century 1950–75, the urban share of their population rose from 16.7 to 28 percent.

While the rate of urbanization and city migration has not been exceptional, however, the rate of city growth has. Between 1875 and 1900, the population of cities in the industrial countries increased about 100 percent; between 1950 and 1975, it rose 188 percent in developing countries, a little less than double the late nineteenth-century rate of growth. Table 2, which provides more detail,

Table 1. *Rates of City Population Growth in Developing Countries, 1960–2000*
(average annual percentage increase)

Period	*Africa*	*Latin America*	*East Asia (excluding China)*	*Southeast Asia*	*South Asia*	*West Asia*
1960–1965	4.32	4.39	5.18	3.77	3.53	5.71
1965–1970	4.37	4.02	5.28	3.82	3.66	5.25
1970–1975	4.44	3.87	4.63	4.12	4.10	4.97
1975–1980	4.85	3.59	4.43	3.89	3.95	4.35
1980–1985	4.83	3.34	3.90	3.87	3.80	4.07
1985–1990	4.92	3.03	3.22	3.84	3.75	3.89
1990–1995	4.85	2.71	2.75	3.79	3.76	3.66
1995–2000	4.74	2.40	2.14	3.62	3.64	3.37

Source: United Nations (1987, table A-4).

Table 2. *A Comparative Assessment of City Population Growth, by Country*

Countries	Peak rate of growth reached 1800–1850	1850–1900	Post-1900	Peak growth rate (percent per year)
England & Wales	1821–1831			2.50
France	1830–1850			1.58
Germany	1830–1850			3.43
Austria		1880–1900		2.10
Belgium		1880–1900		1.95
Denmark		1880–1900		3.22
Finland		1880–1900		4.00
Italy		1880–1890		1.86
Norway		1850–1870		2.94
Sweden		1850–1900		2.91
Netherlands			1900–1910	1.93
Spain			1900–1910	1.82
Switzerland			1900–1910	3.22
Europe[a]		1880–1900		2.58
Developing countries[b]			1960–1970	4.21

a. Excluding England and Wales.
b. Excluding China.
Source: Williamson (1990, table 1.1)

shows when the industrializing European countries reached their maximum rates of city growth and the rates achieved at those peaks. In contrast, peak rates in developing countries in the 1960s were a little less than double the rates recorded in the industrializing European countries.

What accounts for the variety of experiences in city growth? Why did growth peak around the first OPEC shock? Why has it slowed almost everywhere in the developing countries since?

II. What Drives Migration and City Growth in Developing Countries?

Regardless of the model of migration preferred and one's view as to how labor markets work, the central question is the quantitative importance of the fundamental forces pushing and pulling migrants to the city. While these questions have provoked intense debate, until recently the literature has provided little guidance to the policymaker as to which of the contending economic and demographic forces has played the biggest role in the recent past and thus which of them will matter most in the 1990s.

There is certainly no shortage of hypotheses as to what those fundamental forces are. Each can be classified under one of three headings: first, the endogenous "limits" to city growth; second, exogenous external events; and third, exogenous internal events.

Based on the belief that the structure of an economy—including urbanization levels—can influence subsequent economic performance, macroeconomic models have stressed sectoral detail from the outset. In the classical labor surplus version, in which the economy is poorly integrated into both world commodity and capital markets, urbanization augments aggregate output both through short-run efficiency gains and long-run growth effects. In the short run, labor is shifted from low to high marginal productivity employment. In the long run, accumulation rates are raised because saving rates are higher in modern urban sectors. Hence city migration leads to higher savings, investment, and output growth. Rising urban accumulation implies an increasing rate of modern-sector job creation, a rural-to-urban migration response, and further urbanization. Thus rising output and city growth are the likely outcomes of the labor surplus model, and neoclassical versions make the same prediction (at least in the medium term).

What forces tend to inhibit the rate of city growth in these simple models? In the very long run, city growth rates slow down as they approach asymptotically the national population growth rate. In the medium term, however, increasing labor scarcity is typically the only source of retardation in the rate of urbanization, even when such models are expanded for demographic–economic simulation (Sanderson 1980). The rise in the real wage serves to choke off the rise in the domestic saving rate, reduce the rate of urban capital accumulation, and retard the rate of increase in new urban job vacancies, thus limiting urban growth. Agriculture is the ultimate source of the limits to urban growth in models of this sort, either through the disappearance of a rural labor surplus or through the rise in the relative price of agricultural products—the key wage good in such models.

Nowhere in this account are competing—and potentially voracious—public social overhead and private housing investment demands on the national savings pool considered. In addition, while inelastic agricultural land supply ensures an eventual constraint on city growth through rising food costs and real wage increases (at least in relatively closed economies), nowhere is the effect of inelastic *urban* land supply on city rents—another key wage good—or urban living costs considered. Nor, for that matter, is there any concern with inelastic urban land supply on density, crowding, and urban disamenities. Such models say nothing about the costs of urbanization, and they are equally silent on the possible limits to city growth generated within the expanding urban sector.

More insight into the limits of urban growth might be gained by examining various urban costs that influence the migration decision, on the one hand, and the rising requirements for urban investment that compete with the accumulation of industrial capital, on the other. I have already mentioned the effect of inelastic urban land supplies. What about city-building investment requirements? In the short run, such investments, in residential housing, for example, may increase the demand for unskilled labor and thus attract more migrants to the cities. In the long run, however, investments of this type, which do not create the capacity for future employment, may take priority over forms of accumulation that do create this capacity (Coale and Hoover 1958). In any case, city-building investment requirements compete directly with the accumulation of industrial capital. That is, there is the potential for crowding-out effects. Any model of urban growth must deal explicitly with these issues, because new city-building investments may serve to check urban growth. Unless the economy faces an elastic supply of foreign capital, it must choose between two options: it can satisfy demands for city housing and social overhead investment, in which case industrial accumulation is partially crowded out, urban job creation slows down, migration tends to dry up, and city growth stalls. Conversely, it can forgo investment in city housing and social overhead, in which case rents will rise and the quality of urban services will fall, discouraging rural-to-urban migration for different reasons. City growth has its limits.

External Events

External events over which the economy typically has little control drive migration and city growth as well. Three of these forces have attracted a great deal of attention: the demand for foreign capital, the price of traded goods in world markets, and the increase in the price of energy.

The demand for foreign capital. Because of the capital intensity of city economies, urban growth breeds a dependence on foreign capital, and the availability of foreign funds may become a significant determinant of urban growth (Lewis 1977). Generous foreign capital inflows to developing countries up to the early 1970s (about 3 percent of the recipients' gross national product [GNP]), must have played a critical role in accounting for rapid city growth. It follows that the greater austerity in world capital markets since then must have contributed to a slowing of city growth in the 1980s and will continue to do so in the 1990s.

The price of traded goods in world markets. The relative price of traded goods in world markets should matter. While the relative price of urban manufactures drifted downward in the last three decades, the decline was far less dramatic in the 1960s and early 1970s (when city growth in developing countries was especially rapid). We need a clearer understanding of the influence of these world price shocks on migration and city growth to forecast what the 1990s will be like.

The increase in the price of energy. Because cities are energy-intensive, the rise in the relative price of energy in the 1970s and early 1980s should have contributed to a slowdown in urban growth. How much of the rapid expansion of cities in developing countries in the 1960s and early 1970s can be explained by cheap oil? Growth performance is likely to be even more sensitive to expensive oil in the 1990s since most cities have become even more energy-intensive.

Internal Forces

Another set of forces driving migration and city growth include internal events that all but the most comprehensive models would take as exogenous. Two of these—a scarcity of arable land and an urban bias—are, I believe, less important, even though they are always mentioned in the debate. Has a scarcity of agricultural land played an important role in pushing labor to the cities? Conventional wisdom in the 1950s held that such shortages generated a powerful push and accounted for heavy rural migration to the cities (Hoselitz 1955; 1957). If the price of agricultural products remains unchanged (as in the small open economy), then the economics is obvious: land scarcity breeds redundant labor, rural emigrants flee to the city, and urban slums are degraded by these push forces.

Even though the qualitative result is obvious, it is not at all clear how important scarcity of agricultural land has been in accounting for city growth in developing countries. Furthermore, suppose the price of agricultural products rises in response to land scarcity in an economy less open to trade? If the demand for agricultural products is price inelastic, the scarcity may induce a decline in the marginal physical product of farm labor, but the greater rise in price will serve to increase the value of the marginal product of farm labor. Thus land scarcity can, at least in theory, create rural pull—not push.

Second, there are Engel Effects to consider (Mohan 1979). The conventional wisdom has it that as an economy grows, the proportion of income spent on food declines, increasing the relative demand for nonfood products produced in the cities. Presumably, the faster the growth, the more rapidly demand shifts toward urban-based activities. While this theory makes sense, one can still doubt its empirical relevance for open economies in which world demands and domestic supplies are far more critical in determining structural transformation and urbanization.

A more important force is urban bias. An enormous literature argues that urban bias has strongly favored city growth in developing countries over the past three decades (Lipton 1976; Kefitz 1982), just as it did in the OECD countries in the late nineteenth and early twentieth centuries (Lindert 1989). There is no shortage of policies that can have that effect: if domestic terms of trade are twisted against agriculture, rural-to-urban migration is more pronounced than in the absence of such policies. Tariff and exchange rate management may serve to protect urban industry at agriculture's expense. Capital market intervention may favor urban-based industrial investment. And social overhead may be allocated disproportionately to the cities, offered at less than user cost, and financed from general tax revenues rather than from urban land taxes. It is easy to list the sources of urban bias and its magnitude (Little, Scitovsky, and Scott 1970; Bale and Lutz 1981; Agarwala 1983), but it is quite another matter to establish the effect of this bias on developing-country urban growth (Montgomery 1985).

An even more important internal event is technological change. New technology is typically introduced more rapidly in modern urban industrial sectors than in traditional rural sectors. (Traditional service sectors also tend to lag [Baumol, Blackman, and Wolff 1989].) The size of the bias and the magnitude of the imbalance vary, but they have been important since Britain's first industrial revolution (Williamson 1985; Williamson and Lindert 1980).

While such technological supply-side forces are likely to be at the heart of city growth, demand is hardly irrelevant (although it is price elasticities that matter, not income elasticities and Engel Effects). After all, if output demand is relatively price elastic, then total factor productivity growth by sector tends to generate an elastic supply response rather than a relative price decline. This distinction is important because cost-reducing innovations will be passed on to users by falling prices in the case of inelastic demand. Thus the rise in the marginal physical product of factors used in a technologically dynamic sector will be partially offset by price declines, so that products of marginal value rise by less and shifts in resources (including labor) to the technologically dynamic sector may be less dramatic. If, on average, urban sectors tend to have relatively high rates of total factor productivity growth, and if the demand for urban output is relatively price elastic, then final demand shifts toward the dynamic sectors, the derived demand for urban employment is augmented, urban job vacancies are created, migration responds, and cities expand. The higher the price elasticities of demand for urban output, the greater the growth of modern sectors. The more open the economy to foreign trade, the more likely it is that those conditions will be satisfied.

Finally, we have Malthusian forces to consider. Popular accounts often suggest that high rates of population growth lie at the core of the problem. Indeed, in the mid-1970s a World Bank team asserted that "the increase in population growth in the twentieth century is the single most important factor distinguishing present and past urbanization" (Beier and others 1976, p. 365). Plausible assertions have a nasty way of collapsing under the weight of evidence, as we shall see. This assertion deserves our attention because it implies that policy, global markets, and technological forces have played a much more modest role than demography. This view of recent history also suggests that because the demographic environment is unlikely to change very much in the 1990s, city growth is therefore unlikely to change very much over the next decade as well. I think this view is mistaken, as we shall see.

III. A Framework for Analysis

Two computable general equilibrium models have been used recently to address these issues. One was constructed in collaboration with Allen Kelley to confront the typical city-growth experience of a group of forty developing, oil-importing, relatively open economies during the 1960s and 1970s (Kelley and Williamson 1984a; 1984b). The other was constructed in collaboration with Charles Becker and Edwin Mills to confront city growth in India, a relatively closed economy (Becker, Mills, and Williamson 1986; Becker, Williamson, and Mills 1992). Both studies project into the next century. They differ significantly in many dimensions, making it possible to isolate the role of policies that were outlined in the 1991 *World Development Report* (World Bank 1991): the policies of openness, deregulation, and liberal reform.

These models join a rapidly growing family of such models applied to currently developing countries (Dervis, de Melo, and Robinson 1982), to developing countries in the past (Williamson 1985); including their experience with city growth (Williamson 1990), and to contemporary problems in public finance and trade (Shoven and Whalley 1984). These two multisectoral models are unabashedly neoclassical and contain considerable price endogeneity. Optimizing behavior, however, faces real-world constraints: migrants incur costs when they move, firms face capital scarcity, mortgage markets are absent, factor markets are imperfect, and governments obey rules that often appear to conflict with optimal resource allocation. Much of the novelty of the two models lies with the inclusion of spatial variables likely to influence city growth, variables that have been omitted from all previous such models, including squatter housing, more formal urban housing, and other location-specific nontradables.

This is not the place to elaborate and defend these models, but it does seem appropriate to summarize how they are used. After the models are estimated and the social accounting matrix identified empirically, the models are used to simulate the urbanization process over the 1960s and the 1970s. The data are not yet quite adequate to extend the exercise to the 1980s except by projection. Five groups of variables are taken as exogenous, and they simply replicate the historical trends observed. Each of these has its correspondence with the sources of city growth discussed in the previous section. The first group contains the prices of four types of commodities that enter world trade: imported fuels (we ignore the oil-producing nations), imported raw materials not produced at home, manufactured goods, and exports of primary products. By comparing simulations based on pre-OPEC trends in fuel prices with those based on post-OPEC trends, for example, we are able to assess the contribution of cheap fuel to rapid city growth in the 1960s. The second exogenous variable is growth in arable land stock, making it possible to assess the role of land scarcity as an alleged source of significant push to the cities. Third, rates of total factor productivity growth by sector are treated as exogenous, but we can change them to assess their effect on the past. Thus we are able to identify the role of productivity advances that favor urban activities, the effect of the green revolution, the effect of lagging productivity in formal and informal service-sector activities, and the effect of a slowdown in industrial productivity. Fourth, the aggregate rates of growth in population and in the labor force are taken as exogenous, making it possible to vary the Malthusian burden so as to assess its alleged "single most important" influence. For example, we can use the models to ask whether city growth would have been slower given modest rates of population growth. Finally, we can also explore the effect of various economic reforms.

Given the historical trends (or projections) in these exogenous variables, these two models determine the rate of capital accumulation, the investment in dwellings, skill development, the patterns of resource allocation, income distribution, the rate of industrialization, rural-urban migration, and city growth. Where the historical data base is adequate to test the ability of these models to track the experience of developing countries across the 1960s and 1970s, they do quite well, especially for the migration and city growth experience that motivated the construction of the models in the first place. The Indian model captures that country's dramatic slowdown in city growth from very early in the 1960s. The forty-country model captures the acceleration in city growth that occurred almost everywhere (with the exception of Latin America, West Asia, and India) in the early 1970s. It also captures the subsequent slowdown—except in Africa—that has taken place since then.

Having successfully replicated the past, these models are then equipped to sort out the sources of growth and to use the insights obtained to forecast urban growth in the 1990s.

IV. What Drives Migration and City Growth in Small, Open, Deregulated Economies?

City growth is a correlate of the industrial revolution, but what happens when the economic or the demographic environment changes? It turns out that city growth can be retarded or accelerated by changes in that environment, sometimes subject to policy control and sometimes not. One way to illustrate the point is to explore the sources of the slowdown during the 1970s. Was it the result of some endogenous limit to city growth? Or was it the effect of changes in the environment?

Slowed City Growth: A Changing Economic Environment

Table 3 uses the forty-country model to simulate the post-OPEC slowdown in city growth from 1973–79, a result that roughly conforms with the historical evidence summarized in table 1. To identify the effect of various exogenous events, we have employed counterfactual assumptions: What if conditions had been different from those that actually prevailed?

Column 1 presents rates of urban growth for the "actual" set of environmental conditions during the period (that is, those used to replicate city growth during 1973–79); column 2 shows what growth would have occurred if environmental conditions had not changed at all. The basic conclusion of the model is that all of the observed slowdown in city growth can be attributed to the changed environment. The question to be answered is which change contributed most to the slowdown?

The Unimportance of Scarce Arable Land

Was a scarcity of arable land an important quantitative ingredient in the slowdown? The answer is unambiguously no. The annual contraction in the growth of arable land from about 1 percent in the pre-OPEC period to 0.5 percent during 1973–79 altered the rate of urban growth only trivially: had the more buoyant expansion of arable land persisted after 1973, the annual rate of city growth would have been 4.61 percent rather than the 4.65 percent actually achieved. City growth in the developing world would not have been much different between 1973 and 1979 even if the stock of arable land had failed to grow at all. Indeed, slower growth in the stock of arable land should have raised growth, not lowered it.

Table 3. *Simulated Annual Urban Growth Rates in Developing Countries under Varying Economic Scenarios, 1973–79.*

		"OPEC watershed" counterfactuals					Other counterfactuals		
Year	"Actual" 1973–79 (1)	Total pre-OPEC environment (2)	Pre-OPEC fuel abundance only (3)	Pre-OPEC world prices only (4)	Pre-OPEC land expansion only (5)	Pre-OPEC population pressure only (6)	Population growth rate equals that of developed countries (7)	Stable world prices (8)	Technological slowdown (9)
1973	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72
1974	5.10	5.75	5.35	5.59	5.09	5.06	4.46	5.95	5.10
1975	4.48	5.92	4.91	5.67	4.51	4.50	4.03	6.46	4.27
1976	5.03	6.03	5.28	5.90	4.95	4.96	4.37	6.51	4.60
1977	4.52	6.14	5.13	5.91	4.47	4.48	3.72	6.64	4.22
1978	4.47	6.23	5.05	5.96	4.36	4.36	3.68	6.63	3.93
1979	4.29	6.16	4.83	5.79	4.27	4.28	3.57	6.76	3.82
Average	4.65	6.04	5.09	5.80	4.61	4.60	3.97	6.49	4.32
Assumptions about underlying exogenous variables (annual growth, in percent, except as indicated)									
Relative price of fuels and raw materials	5.2	$\boxed{0}$	$\boxed{0}$	5.2	5.2	5.2	5.2	5.2	5.2
Relative price of manufactures	−1.6	$\boxed{-0.7}$	−1.6	$\boxed{-0.7}$	−1.6	−1.6.	−1.6	$\boxed{0}$	−1.6
Agricultural land stock	0.5	$\boxed{1.0}$	0.5	0.5	$\boxed{1.0}$	0.5	0.5	0.5	0.5
Labor force	2.7	$\boxed{2.5}$	2.7	2.7	2.7	$\boxed{2.5}$	$\boxed{0.9}$	2.7	2.7
Foreign capital inflow (annual percentage share of GDP)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Economy-wide total factor productivity	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	$\boxed{1.0}$

Note: Boxed figures in columns 2–9 indicate the counterfactual departure from the "actual" environment underlying column 1. In the headings to columns 6 and 7, I have taken poetic license by referring to "population growth." The underlying experiments, as the text indicates, actually refer to changes in the growth of the labor force.

Source: Kelley and Williamson (1984b, table 5, p. 435).

The Importance of World Prices

What about world markets, domestic price policy, scarce natural resources, and the cost of imported fuel? Here we have isolated some of the central determinants of city growth in developing countries. Not only is the small, open model very sensitive to the terms of trade between primary products and manufactures as well as to the relative price of imported raw materials and fuels, but it appears that past, present, and future trends in those prices matter a great deal. Most of the 1973–79 contraction can be attributed to the reversal of unusually favorable price trends in the 1960s and early 1970s (see table 3). Furthermore, had the unfavorable price trends of the late 1970s continued throughout the 1980s, the slowdown—at least in small, open developing-country economies—would have been even more pronounced.

But which relative price trends mattered most? Here we have some surprises. It turns out that the terms of trade between urban-based manufactures and rural-based primary products (column 4) have been and will be a more important determinant of urban growth than the relative price of imported fuels and natural resources (column 3), in spite of the fact that urban-based activities are more fuel- and natural resource–intensive than are rural-based primary products. Indeed, had the terms of trade between manufactures and primary products remained stable after 1973 (column 8), the annual growth rate would have been 6.49 percent rather than 4.65 percent.

Technological Change and Productivity Growth

It comes as no surprise that technology is a central factor in urban development. The problem, however, is that our estimates of total factor productivity growth are too weak to assign them a quantitative contribution to the observed slowdown. We can, however, pose some plausible counterfactuals to get some feel for the likely magnitudes. Table 3 asks how growth would have responded to an economy-wide decline in total factor productivity growth from 1.8 percent (see column 1) to 1 percent (see column 9), a decline not unlike that in the OECD countries. The data suggest the magnitude of the effect would have been dramatic, with city growth rates reaching 3.82 percent in 1979 rather than the actual 4.29 percent recorded in that year.

Although this experiment confirms the role of supply-side productivity advances, it understates the case. Space does not permit me to dwell on it here, but experiments with both the forty-country and the Indian models show that an imbalance in technical innovation is a more important determinant of urban growth than is the economy-wide rate of technical progress. Industrial productivity is the main engine of city growth, and where that engine sputters, growth stalls.

Population Growth: It's Not as Important as We Thought

Popular accounts of "explosive" urban growth suggest that it reflects historically high population growth rates. To put it mildly, this is an overstatement.

This explanation certainly cannot account for the decline referred to earlier because there was scarcely any change in population growth. (Table 3 uses economy-wide growth of the labor force as a proxy for population growth.) Even if the developing countries recorded the much lower rates of population growth that prevailed in the industrial countries (column 7), urban growth would still have been about 4 percent a year, far in excess of late nineteenth-century historical standards. It is not demography but technical change and the price environment that account for most of the increased urbanization in developing countries.

V. Migration and City Growth in Large, Closed, Regulated Economies: The Case of India

The economic history of India since the 1950s does not fit the stylized facts of the previous sections very well. Until very recently, and despite an impressive investment effort, the growth of manufacturing output in India was poor compared with the rest of Asia. Indeed, employment growth in the sector fell short of the national (much less urban) rate of population growth from 1965 to 1979. Although formal-sector employment grew slowly, the urban population grew nearly twice as fast as the rural population. Furthermore, city growth contracted after the boom years in the early 1960s, falling from 6.4 percent during 1960–64 to 3.6 percent thereafter. Manufacturing was not an "engine of growth" for India's cities, and thus policymakers, economists, and demographers were uneasy about the rising level of urbanization in the late 1970s and early 1980s.

India's experience in the 1960s and 1970s is certainly surprising. It appears to offer a counter-example to the engine of growth thesis, since significant—albeit slower—city growth coexisted with low and falling rates of employment in the manufacturing sector. Why?

The question is complex, and simple answers are suspect. We have seen that in small, open, deregulated developing economies, policy, technical progress, and world market conditions matter, while demographic patterns and foreign lending are somewhat less important. But what about developing economies that are not small, open, and deregulated? To examine urban growth in India we use, as before, a computable general equilibrium model. But the model is different in at least two dimensions. First, government is omnipresent; that is, the economy is heavily regulated. Second, it is taken to be relatively closed to trade so that domestic demand is important, and world market conditions have less effect.

Productivity growth. One of the side benefits of this analysis is that it produces estimates of total factor productivity growth by sector from 1960 to 1981 (table 4). While the most striking long-run productivity event seems to have been the negative rates registered in manufacturing between 1965 and 1971 (as well as the absence of any productivity growth between 1972 and 1977), there were other notable characteristics as well. One of these was the instability in agri-

Table 4. *Estimated Growth in Total Factor Productivity in India, by Sector, 1960–81*
(average annual percent)

	Rural			*Urban*			
Period	*Agriculture*	*Services and manufacturing*	*Public services*	*Manufacturing*	*Modern services*	*Informal services*	*Public services*
1960–64	0.18	3.07	3.19	3.56	−0.40	3.23	−0.38
1965–71	−0.19	−0.25	3.59	−0.76	0.45	1.07	0.13
1972–77	1.43	0.91	1.17	0.07	3.43	2.34	0.90
1978–81	−0.85	1.38	5.28	1.00	1.28	1.32	1.45

Note: Total factor productivity in agriculture for 1978–81 includes the effect of drought. For all other years, a rainfall index was used in the model. The index was unavailable for 1978–1981, thus productivity change was understated.

Source: Becker, Williamson, and Mills (1992, table 3.2).

cultural productivity—slow in the 1960s, fast up to 1977, and slow again in the late 1970s. Another was the slow increase in productivity in the modern urban service sector in the 1960s, followed by rapid rates in the 1970s. Yet another was the impressive advance in productivity in informal urban services, a sector that conventional wisdom has always characterized as technologically stagnant.

These changes had a significant effect on the relative rate of urban migration, job creation, and city growth and urbanization. For example, the early 1960s seem to conform to the stereotypical pattern of rising productivity: manufacturing leads, agriculture lags, and (modern) urban services show little gain. This pattern is repeated in the late 1970s and early 1980s. In between, however, it disappears. Indeed, between 1965 and 1977 productivity in agriculture far exceeded that in manufacturing. The point here is not simply the economy-wide gain in productivity implied by these sectoral rates, but the imbalance in levels of productivity. When productivity advances favored manufacturing, urban migration and urban employment climbed. The growth of productivity in manufacturing disappeared, however, from 1965 to 1977.

The economic and demographic environment. India's economic environment was far from stable between 1960 and 1981. Technological change occurred in all sectors, but the pace was uneven. Like the forty-country sample, relative prices of internationally traded goods varied: the rise in oil prices was the most dramatic, of course, but the terms of trade between agriculture and manufactured goods also changed sharply, favoring manufacturing in the 1960s and agriculture in the 1970s. Capital inflows declined steeply after the early 1960s, and were negative during the emergency period in the mid-1970s. Typically, the early 1960s were also years of plentiful rainfall, high rates of public savings, and large capital inflows from abroad. All these events define various epochs over two decades and suggest that the economic environment was unusually favorable to the growth of cities in the early 1960s. These conditions disappeared soon thereafter.

India's slow rate of urbanization reflects both changes in the environment and the gradual emergence of a scarcity of urban labor. About a third of the slowdown can be attributed to relatively unfavorable economic conditions; world price trends and slower productivity advances were roughly of equal importance and both were about twice as important as declining capital inflows. The remaining two-thirds, however, reflects the rising cost of urban labor. Although this was partly the result of urban labor market policies, it was primarily the result of rising prices for agricultural goods, something that is more likely to happen in closed economies than in countries more open to world markets. In the latter, trade offers a more elastic supply of foodstuffs, a key wage good for urban workers.

India's cities grew at an annual rate that was perhaps as much as 1 percentage point less than that of the other developing countries. What accounted for this gap? Would it have made a difference if India's economic and demographic environment had been similar to that of the more successful developing countries during the 1960s and 1970s? Much to our surprise, it turns out that the increase in growth rates would have been only 0.3 of a percentage point faster. Thus, the relatively unfavorable environment in the 1960s and 1970s—including the alleged government-induced drop in productivity in manufacturing—account for only about a third of the differential in city growth.

The moral seems clear. Some of the slowdown can be explained by relatively unfavorable economic and demographic conditions, but a much larger portion remains unexplained. I wish I could tell you more about which structural and institutional features make Indian cities less responsive to favorable conditions than the rest of the developing world, but surely these features include policies that serve to choke off urban unemployment.

Urban Policy in India

Many alternative growth strategies used elsewhere in Asia were never pursued in India, and vice versa. To what extent would radically different policies have mattered, especially those that might have altered the alleged urban bias? The model explores five counterfactual policy regimes: (1) direct intervention in labor markets to restrict the inflow of rural workers; (2) a major sites-and-services urban housing program; (3) public investment in sectors where the marginal product of capital appears to be highest; (4) IMF-style liberalization reforms; and (5) a heavy buildup of industry. Here we survey the first three scenarios.

Restricting urban migration. Economic policy aimed at protecting the economic interests of the resident urban labor force and restricting the migration of newcomers to the cities is hardly new to India. However, I am unaware of any attempt to estimate the quantitative importance of such policies even if they were politically feasible. The Indian model explores the consequence of policies designed to lower the rural-to-urban migration rate of unskilled workers by about 40 percent, a policy motivated by concern about urban poverty or congestion and the quality of life. The results confirm that such restrictions are inefficient because they exacerbate the rural-to-urban wage gap, thus generating deadweight losses. And they are inequitable since all but the established urban unskilled lose, especially the rural poor who are partially excluded from urban labor markets. The policy is also inconsistent with the push toward an open economy because export-oriented manufacturing suffers most. Not only does the policy strike hardest at India's potentially most dynamic sectors, but it also discourages capital formation. Furthermore, the magnitudes are large.

Sites-and-services programs. The point of the previous paragraph is that adding more market distortions to an economy already beset with many is not a desirable means to what otherwise might be viewed as a laudable goal. What about an alternative regime that is also motivated by an attempt to improve the living conditions of the urban poor: heavy public investment in low-quality urban housing? The counterfactual sites-and-services program involves an approximate doubling of new low-quality housing construction. What is the effect? Urban unskilled real income rises substantially both because of additional employment demands (generated by labor-intensive construction) and a decline in quality-adjusted living costs (generated by completed sites-and-services programs). Urban migration is, of course, stimulated by the added employment effects, but there are some unintentional consequences for foreign trade. The housing boom makes workers better off primarily by reducing their living costs—not by raising their nominal wages. In fact, urban nominal wages decline, thereby raising the profitability of labor-intensive urban activities, including manufacturing, India's main export sector.

Capital allocation. Some economies allocate capital more efficiently than others, and some do it better at one time than at another, but no economy has been able to allocate capital efficiently all the time. Indeed, simulation with the Indian model reflects what observers have claimed all along: rate-of-return differentials have been pronounced in the recent past. This seems to have been a result, at least in part, of public investment decisions that were motivated by considerations other than conventional rates of return. Suppose these policies had been replaced by others that allocated public investment in such a way as to maximize the current rate of return on capital? The analysis focuses on two periods: 1960–64, a period in which the cities were still starved for capital while the rural sectors had a glut; and 1978–81, a period in which an asymmetric distortion had developed in factor markets—labor's marginal product was far higher in the city, while capital's marginal product was far smaller.

There was an anti-urban bias in India's public investment policy from 1960 to 1964. But the surprising result from the model is how small the deadweight losses (which the counterfactual policy removes) are, and how little urban growth results. This finding appears to be consistent with the literature, which has shown deadweight losses to be far smaller than the stress on factor market failure would have suggested. It also reaffirms the importance of productivity in urban sectors in driving city growth.

From 1978 to 1981 the results are even more interesting. First, a counterfactual regime of efficient investment allocation would have caused a shift of capital to rural areas, but the de-urbanization effect would have been trivial. There may have been a pro-urban bias in Indian public investment policy in the late 1970s, but it did not play the quantitative role that Lipton (1976) or Schultz (1964) assigned to it.

VI. Projections for the Future

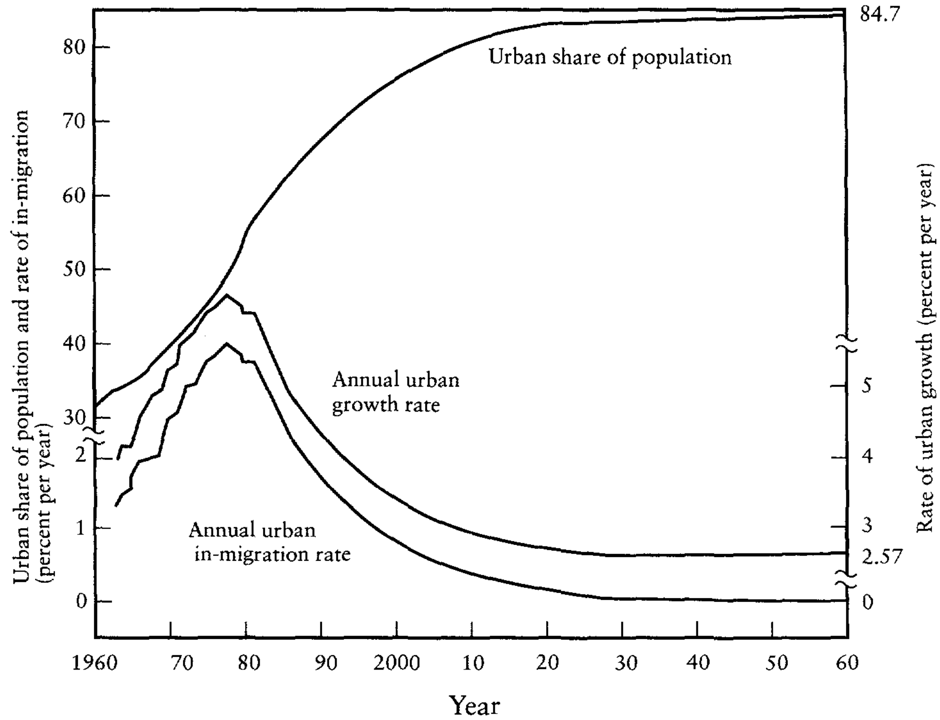
The 1980s looked rather different for India than the late 1970s. Agricultural output improved a bit, services continued to grow, and the growth of industrial output more than doubled. Even more striking was the accompanying rise in capital inflows. Furthermore, the government deficit increased sharply. While the effect on capital accumulation was small, government expenditure as a share of gross domestic product (GDP) rose considerably. Because governments mainly purchase urban goods and services, the rise should have increased urban growth. Price movements were also quite favorable for cities, because the relative prices of fuels and nonfuel primary products fell even more rapidly during 1980–86 than they did during the early 1960s. In short, the economic environment was far closer to the favorable conditions of the early 1960s than to those that prevailed in the decade and a half that followed.

While the economist is unlikely to predict the environment of the 1990s any better than the demographer, the economic model can tell us what will happen given various guesses about that environment. If the conditions of the early and mid-1980s persist in the 1990s, India's cities will grow about 3.2 percent a year, about midway in the projections offered by most demographers (see Becker, Williamson, and Mills 1992, table 8.4). However, these projections are probably overestimates given the likely decline in aggregate population growth rates in the 1990s. When these more conservative estimates are plugged into the exercise, annual growth is closer to 2.9 percent, well below previous demographic projections save that of Mohan (1985, table 11, variant I). For those who fear rapid urban growth, these forecasts indicate only a slight contraction in the 1990s, but they also suggest that a speedup is most unlikely.

The forty-country, open-economy model offers the same interpretation. Figure 1 plots the urban share of the population, the city growth rate, and the city in-migration rate for the "stable" case: that is, the favorable pre-OPEC environment persists to 2060. Thus the stable environment illustrates the stylized patterns of urban change in the absence of shifting macroeconomic and demographic conditions. The model predicts a continued decline in urban growth from the peak rates in the 1960s and 1970s to about 3.5 percent a year by the end of the 1990s. The urban transition will be largely complete by the year 2000, at least for the representative economy in the forty-country sample of successful developers. The equilibrium urban share is about 85 percent (the United States' "urban limit," from which it now appears to be retreating). Our representative economy will almost reach that level by 2020 and the urban migration rate will be close to zero in 2030.

The important point is that our representative successful industrializing country will have completed about 85 percent of the urban transition by 2000. Thus problems of city growth will be less severe by the end of the 1990s. Presumably we will hear fewer complaints from urban planners. The much-abused term "overurbanization" may disappear from our lexicon, and pessimists' stress on urban environmental decay will lose some of its urgency. Far slower rates of urban growth will make it easier to cope with the accumulated problems associated with decades of rapid urban expansion, just as cities in the industrial world are beginning to clean up the environmental problems created by rapid city growth in the nineteenth century. The projections in figure 1 suggest that many of the developing countries will have a chance to clean up the mess sooner. It

Figure 1. *City Growth and In-migration: "Stable" Projection for Sample of Forty Developing Countries with Open Economies, 1960–2060*



will all depend on whether the technological climate and world trade conditions remain favorable.

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Comment on "The Macroeconomic Dimensions of City Growth in Developing Countries: Past, Present, and Future," by Williamson

Rakesh Mohan

It is a rare privilege to share this side of the podium with my gurus and to have this opportunity to reflect on the advances that have been made in the understanding of urban growth through rigorous modeling.

It is useful to recall the original KWC (Kelley, Williamson, and Cheetham 1972) two-sector model of dualistic development in order to appreciate the distance Professor Williamson has traveled in twenty years. My own insights into the operation of a developing economy were gained from the careful specification of both the supply and demand sides and the results of their equilibrium clearing in that model. Both it and the later Kelley and Williamson (1974) application to Japan were vital in the development of my own three-sector model (Mohan 1977, 1984). The Kelly-Williamson work was particularly educational in the expert use of stylized facts distilled by an economic historian for use as inputs for model calibration.

This places in perspective the diminishing returns that set in once one advances beyond the relatively simple models that are also intuitively understandable. I find that the more complex a model is, the more difficult it is to trace causality, and we descend into a "black box" syndrome. How much have we learned from the new BMW model that Professor Williamson has bought relative to the KWC Model T he traded in long ago (see Becker, Mills, and Williamson 1986, and Becker, Williamson, and Mills 1992)?

But first the historical perspective. The pace of urbanization in the developed countries in the last century was comparable to that recorded today in the developing countries. This historical regularity is seldom remarked on, but indeed, the pattern of urbanization has been very regular and the critical phase of urban growth has always been very rapid. Whereas it may take millenia for the urban growth rate to climb from 5 percent to 25 percent, it typically takes only forty to sixty years to go from 25 or 30 percent to the 60- to 70-percent level.

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But there are two critical differences between urbanization today and earlier episodes. First, the volume of the shift in population is an order of magnitude larger than in previous episodes. Second, large cities in the developed world appeared only after high levels of income and urbanization had been achieved. In developing countries, by contrast, they have emerged at extremely low levels of income and overall urbanization. I wonder whether the BMW model can explain or illuminate the economic consequences of these differences? Presumably they would have an effect, particularly on resource allocations.

I. What Drives City Growth?

I am a little disappointed that Williamson's discussion continues the confusion about the influence of push and pull effects on migration. The BMW should operate without pushing and pulling. A more interesting approach would consider the simultaneous operation of economic forces that contributes to urbanization in the presence of income growth rather than coming back to the partial equilibria approach that leads to pushing and pulling migrants. In this I feel he does his model an injustice.

I am also confused about the competition between city-building investment and industrial investment. I would have thought that it would be more correct to designate them as complementary and use the model to suggest what might be the optimal mix. Do the modeling techniques give us some idea of the relative proportions that roughly equalize the returns to the infrastructure investment?

A more important question is whether a failure of capital markets explains the shortage of funds for building cities. Without adequate investment in these activities the BMW will sputter to a stop. Why is there a problem? Is it because we have not adequately analyzed the productivity of infrastructure and therefore have given the wrong signals to providers of capital? Appropriate financial intermediation should be available to channel savings into city-building investment because industrial production is crucially dependent on the productivity of cities. Have we measured the productivity of city-building investment appropriately? Does the new model have any insights to offer on this issue?

And what is this red herring of inelastic urban land? I would have thought that urban land is the one asset that is in the most elastic supply. But it needs investment to produce it, and governments typically make it impossible to do so; governments are inelastic and wooden-headed—not urban land. It is, however, relevant to demonstrate the effects of government policies that encourage this result.

Finally, I would have liked to see more analysis about the interaction of agricultural productivity growth, additional food supplies, increased incomes and wages, the simultaneous release of labor from agriculture and its absorption in nonfood activities, and the effects of the relative elasticities of substitution in rural and urban activities as a contribution to understanding the structural causes underlying urbanization.

II. The Use of Models

I suspect that the BMW has overheated in the short stretch and will perform better in the long run. The explanations of the post-1973 slowdown seem a bit forced. First, where were the annual data on urban population obtained? Even a decennial census has problems. Can one really say with confidence that urbanization slowed after 1973? The data on urban population are simply not sensitive enough to posit this as a phenomenon to be explained—and then to be used to find explanations. Second, can one really believe in the almost instantaneous response of urban growth to price changes? A more useful exercise would be to trace the long-term changes in economic magnitudes in response to exogenous (or endogenous) changes in such variables as prices of key factors or commodities rather than forced explanations of implausible short-term changes. Attempting to show the strong impact on urbanization within a couple of years of the 1973 oil price changes is surely a misuse of such a model. I would argue that it would be more convincing if the model demonstrated effects over a decade or two.[1]

There seems to be some spurious correlation as well. Latin America and East Asia were going through the demographic transition (itself a dramatic event in need of explanation) during the 1970s. With urban levels approaching 60 to 70 percent, the slowdown was demographically inevitable. The crucial point is that we need to know the economic consequences of the demographic transition in terms of its effect on wage rates, demand for labor, and so on.

I am surprised that India has urbanized more slowly than it might have. According to Mills and Becker (1986), India seems to lie right on the regression line (if a relationship is sought) between the level of urbanization, gross national product per capita, and other usual explanatory variables. These projections are close to my calculations (Mohan 1985), which come within 2 million of the actual figures for the total population in 1991 (see footnote two).

And I am puzzled by the assertion that urbanization slowed in the 1970s in India. The data show a significant acceleration (Mohan 1985). How can one conjecture about the pace of urbanization within a decade when there are no annual data to support these figures? Censuses are held only once in ten years. What is the relevance of the discussion on annual population trends and intra-decade trends when there can be no possibility of verification?

1. The results of the 1991 population census of India have now become available. The recorded population of 217 million is approximately 15 to 20 million less than my 1983 projection and the government of India's official projection. The level of urbanization was expected to be on the order of 27 to 27.5 percent. This slowdown is particularly surprising since the total population in 1991 was at expected levels and there has been no significant drop in the rate of population growth.

Thus the slowdown in urban population is even greater than that projected by Professor Williamson. The model may have captured well the medium- to long-term effects of the oil price shocks of 1973 and 1979–80. If the causation posited by the model is correct, the effects of the oil price rise have been much greater than predicted. My point about modeling instantaneous structural changes resulting from key price changes remains.

III. The Future

A slowdown in the rate of urban population growth is likely, but the growth in the level of urbanization should accelerate, given the demographics of the two giants, China and India. The urban population in these countries will climb from today's 500 to 600 million to 1.5 billion[2] by 2030–40, an increase of about 1 billion. That is equal to the total population of Japan, the U.S.S.R., the United States, and Latin America today.

How will this surge be managed and financed? We need to give serious thought to sources of capital, models of governance, the role of technology, and so on. The issue of resources is critical.

Professor Williamson's efforts to model urbanization provide a framework for viewing urbanization as an economic phenomenon (Kelly and Williamson 1984). He deserves to be congratulated for his continuing efforts in this direction. But I think the need now is for less complex modeling and more insight. Thus I am content to keep my conceptual framework running with the old KWC Model T. I am not buying the new BMW.

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2. A billion is 1,000 million.

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Governance and Development: Issues and Constraints

Edgardo Boeninger

This paper presents a framework for the analysis of governance as it affects sustained development, incorporating economic growth with social equity and human rights. The paper suggests that governance has several dimensions—political, technical, and institutional. It identifies the essentials of governance, including the capacities for exercising authority, solving problems, resolving conflicts, and implementing programs and policies.

From this perspective it examines two contemporary megatrends: the rise of open market economies and the advance of pluralist political systems. Evidence indicates that these are winning strategies for development, although their evolution will vary between countries based on historical factors. Establishing an environment to complement these megatrends calls for a business-labor coalition for development, and a committed political consensus.

Populism and political regression are discussed as they relate to rapid political changes. These changes must be addressed by the establishment of an enabling environment for both the public and the private sectors, the strengthening of key institutions to assure a concern for social equity, and a commitment to the rule of law.

The paper illustrates the nature of the problems with specific cases, many of them related to the author's own experience in Chile.

One of the principal issues in the analysis of development is the extent to which it is influenced by the state. This paper presents a framework for analyzing governance as it affects sustained development, incorporating economic growth, social equity, and human rights.

In what follows I describe governance as the good government of society. The quality and effectiveness of government enhances the state's capacity in strategic areas that are vital to the process of development. The just exercise of authority is one. A capacity for problem-solving and conflict resolution is another. And the efficient performance of its functions based on the involvement of a societal coalition for development is another.

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I. The Dimensions of Governance

Broadly, governance has three dimensions: political, technical, and institutional. Establishing objectives and exercising leadership clearly come under the political dimension. The constraints imposed by natural resources, levels of education, manpower skills, and installed industrial capacity represent the technical dimension, and the ability to get things done involves the institutional and managerial dimension.

A political awareness of—and respect for—the limits on viable policy is an essential element of governance. But politicians often have little understanding of the rules or logic of economics and are always tempted to extend the scope of political decisions to economic affairs, especially if "technical realities" are not well understood. In economies with a high degree of intervention by the state, the rules of politics tend to dominate. Market economies based on free enterprise do not operate effectively under such rules. Most economic proposals—at least at the macroeconomic level—are tinged with subjective elements of an ideological-valorative nature. It is therefore no surprise that very often opposing ideological views and policy proposals are supported by technocrats—including economists—of equally high professional status. These technocrats are in fact taking on a political role. The distinction between the technical and political dimensions is valid but somewhat blurred, and politicians are not always to blame for the ensuing confusion.

What factors influence the state's ability to operate this apparatus to promote equitable development?

- *Authority.* The political and institutional prerequisites for establishing authority should not be taken for granted. Political conflict often results in strategies explicitly designed to hinder the exercise of authority. Society cannot function without impartial rules for all citizens. At the same time legal limits to authority must be set to avoid the risk of arbitrary action.
- *Problem-solving.* Identifying problems and issues, formulating options to solve them, and mobilizing resources through the tax system call for suitable institutional channels that respond to conflicting demands.
- *Conflict resolution.* Political and social conflicts can adversely affect—or even paralyze—development. What is needed at the level of strategic planning and political action is the ability to channel and resolve such conflicts. This calls for sustainable institutional channels and a framework of viable options.
- *Implementation.* Economists and politicians tend to take it for granted that once decisions are made, they will be effectively translated into operational realities. In fact, however, administrative bottlenecks in the government and the private sector may jeopardize government programs. The constraints may involve a lack of managerial know-how or deliberate political obstruction; this phase of the policymaking process provides ample opportunities for impeding and delaying public policies. Private sector initiatives, too, may be blocked for

ideological reasons. Without effective implementation capability, a stalemate ensues, or unintended effects frustrate the government's development goals.

The Challenge of the Megatrends

Two great megatrends are emerging at the international level: the rise of market economies and the advance of political pluralism. Thus the conventions governing the relevance of development policies should be examined in light of their contributions to providing a suitable setting for these two great processes. The economic and social context of governance is embodied in the challenge of managing this transition.

We are witnessing a vigorous advance toward the internationalization of the world economy and a parallel trend toward the formation of a few large economic blocs. Most countries will, in the foreseeable future, opt for an open, free-market economy, dominated by the private sector. The progress of this megatrend is not automatic or inevitable, however; countries are free to try out different economic strategies, and this is what they have done. But evidence suggests that virtually all the winning strategies—those pursued by the industrial countries and the Southeast Asian nations—have relied on free-market economies, with variations in content and sequence. The collapse of the centrally planned economies was the final spectacular demonstration of a phenomenon that was already indisputably clear.

The second megatrend is democratization. The dominance of the culture and values of the industrial democracies has put increasing pressure on societies that do not have the same social traditions. A corollary effect has been the gradual assimilation of these values by large sectors of those societies. Equally important is the fact that the development process produces social diversification and leads to multiple power centers in societies that were historically hierarchical. Social diversification is accompanied by the spread of wealth and education, generating a demand for participation that finally finds political expression in forms of organized opposition. As social pluralism leads to political pluralism, conventions restricting participation are abandoned, and human and civil rights become associated with national goals, broadening the definition of development.

The final result of this process may not be the kind of conventional democracy we recognize. The possibility of political change is too closely linked with culture, tradition, and historic circumstances. But the emerging political framework will assume at least some of the trappings of democracy. This choice has all the features of a winning strategy, and in some respects it even seems inevitable. Indeed, countries that decide to postpone the transition to a market economy and political pluralism run the risk of ending up as losers.

II. The Setting for Good Governance

The question of how governance promotes development cannot be considered in the abstract; the social milieu that provides the setting in which the state operates is crucial. A corollary to this influence is that local conditions are central to sorting out the challenges, constraints, and priorities for political and economic reform.

This background allows us to analyze the political setting and the interaction of economic and ideological forces most appropriate for development. Of course, the situation varies greatly between countries, and any attempt to consider the question by taking into account all possible alternatives would be excessively complex. Consequently, my aim here is to examine the generic conditions for good governance, given the existence of the megatrends.

An Overview of Country Diversity

The position of the developing countries relative to the megatrends obviously influences the pursuit of national development. These countries can be grouped in the following categories:

- *Countries emerging from totalitarian regimes.* Most of the countries in this group include those in Eastern Europe, the U.S.S.R., and some Asian and African nations that are shifting to a democratic political system and market economies with private ownership.
- *Authoritarian regimes undertaking political liberalization.* The open-market economies of Southeast Asia stand out in this group. The demand for political liberalization, social equity, and human and civil rights is driven by the diversification that has already been achieved.
- *New or unstable democracies.* These countries, including most of Latin America, the Philippines, Turkey, and some African nations, have democratic traditions—albeit weak political institutions—and mixed-market economies led by an interventionist state. They—and a limited number of stable democracies, such as Costa Rica, Venezuela, Colombia, India, and Botswana—are anxious to strengthen and modernize their political institutions and stabilize their economies.
- *Countries at the nation-building stage.* Many African nations, as well as some other countries, are characterized by ethnic and religious conflicts, low social differentiation, and an incipient level of development. Severe cultural stress stands in the way of an advance of the megatrends.
- *Countries with a long authoritarian tradition.* These are regimes whose political and economic policies reflect arbitrary authoritarian control.

Adding to the complexity, recent developments demonstrate that pluralism tends to reveal previously submerged regional or ethnic conflict and may challenge national governments. These issues will have to be settled, either by a consensus or by a political divorce, before more effective governance can be achieved. Indeed, the megatrends may hardly be applicable in some cases for a long time to come.

A Societal Coalition for Development

Effective governance requires social support associated with the recognition that the rules of the game apply to all citizens. This means recognizing the legitimacy and the authority of the government. To channel popular support for the government such institutions as trade unions, business associations, and political parties are important (Huntington 1968). Social legislation (labor laws, for example), public sector officials (elected and appointed), and government agencies play supporting roles. Without effective mechanisms of this type, the opposition may choose disruptive actions that lead to social and political instability and weaken the status of authority.

In authoritarian environments mere acquiescence may be sufficient, but in most countries it is increasingly difficult to obtain compliance without consensus—except for short periods and in times of crisis. The state can, however, demonstrate a commitment to curb the power of vested interests, establish the rule of law, and involve local organizations and communities at the grassroots level in the construction of a social coalition consistent with the goals of the state.

Centrally planned economies in the process of democratization face the dual challenge of creating free institutions for political action and social representation while at the same time resolving economic insecurity. In this context, there is no substitute for participation. The *International Herald Tribune* (1990) noted that: "In each country where economic change has been successful, the key has been a national consensus for change. The governments of Poland, Hungary, and Czechoslovakia have been able to build on such consensus, even though there are signals that it is getting weaker. In Romania and Bulgaria, no consensus exists."

Establishing a coalition for development when adjustment policies are involved is a formidable task. It is important to ensure that hardships are equitably shared and that the necessary social support is obtained in those sectors that are affected in the short term. In the developed countries—even those most wedded to conservative policies, such as the United Kingdom and the United States—government intervention to meet social objectives is routine, so it is no surprise that people in developing countries are demanding security, protection, and a larger share of the national pie. These demands exceed the capacity of developing economies.

Business-Labor Relations

Traditional demands for job tenure, minimum wages, and collective bargaining collide head-on with the requirements for labor market flexibility and competitiveness that characterize an open-market economy. This dilemma poses a classic question of governance. How can workers be protected given available resources? This question will be even more difficult in the countries of Eastern Europe that are in transition to a market economy. Workers in such countries, despite mediocre or low standards of living, have historically enjoyed high levels of security in exchange for restricted participation in economic decisions. Similarly, the protection of workers is a sensitive issue in countries with a tradition of labor confrontation and political arbitration, as in some Latin American nations. In contrast, authoritarian regimes that have made economic progress and are now liberalizing are in a better position to provide security to workers.

Social recognition of the contribution of private enterprise is important to establish economic cooperation. Free markets welcome private initiative, but political agreement is needed to forge social support for the private sector. This will mean persuading labor leaders (and political officials) that they have a stake in economic growth, and that entrepreneurs are a vital component of it; educating entrepreneurs that workers are important actors in the social process; establishing a legal framework to underpin labor relations; and promoting organizations and incentive systems to reward performance and enhance the dignity and self-respect of workers to compensate for the delay in improved living standards.

It is useful to look at Chile's experience in responding to this challenge. When the military regime enacted new labor laws, the workers rejected the legislation both because it had been imposed by force and because it was seen as biased in favor of the business community. When the present democratic government introduced labor reform legislation, the sustained effort to enlist labor's participation in the preparation of the reforms was a factor in the acceptance of the legislation.

Obviously, the improvement in labor relations was preceded by several years of debate among academics, union leaders, businessmen, and politicians. And to some extent the climate reflects the fact that senior union representatives are now in key government positions. In their new capacity these former union officials are working to persuade the unions that reducing inflation is more effective in protecting real incomes than compensatory wage increases.

Building a Political Majority

A competitive market economy in which the private sector plays a key role requires what the economic literature refers to as an "enabling environment." To achieve this goal government must reduce the uncertainty that results from sudden changes in direction, say because of elections. (In an authoritarian setting uncertainty is a function of how much confidence economic agents have in the government.)

One factor is whether opposing ideologies have a real possibility of gaining power (through election, revolution, or a coup d'état). In this respect the dominance of the megatrends has led to a convergence of political views so that countries no longer face totally polarized options. Generally, middle-of-the-road parties have the confidence of the population, particularly in countries that are moving away from centrally planned economies and totalitarian political regimes. The convergence of economic views is particularly significant. Historically, political polarization in many countries largely reflected the confrontation between capitalism and socialism. Today socialism "as a political doctrine of class conflict rooted in a rejection of private property and a faith in social control—that is, political control—of the means of production is finished" (*International Herald Tribune* 1990). No country looks to socialism—so defined—as a model for development. The peaceful reconstruction of democracy in Chile has been possible, despite the confrontational nature of a seventeen-year authoritarian interregnum, because the capitalism versus socialism dilemma that polarized Chilean politics no longer exists.

Is the advance of the megatrends a guarantee of a political consensus for development? An opportunity has been created but it requires certain conditions to become a reality. It requires a political majority that can define and apply policies for growth, equity, and human and civil rights, and it requires the legal authority to ensure a level playing field. Institutional factors can assist or constrain this pursuit.

Political parties and elected legislative bodies serve as mechanisms to support the government's goals and programs. Success in converting the emerging political movements in Eastern Europe into formal political parties is considered vital. Present difficulties in the U.S.S.R. are not unrelated to the fact that new parties have not yet emerged, while the Communist Party, although divided internally, is still the only institution capable of holding the country together peacefully.

The formation of a stable government majority is simpler with only two major parties. Consider the political engineering that was undertaken to achieve this result in Nigeria. President Babangida "promises democracy by 1992 [and] has banned all parties but the two he created himself, each equipped with a constitution and a manifesto. They are to compete on the basis of policy—but not economic policy: the President is too sensitive about his free-market reforms to allow dissent on that" (*The Economist* 1990a). Nigeria's crude dirigisme is not suitable for imitation. A system of parties with real roots in society tends to reflect the national alignment and to reproduce the degree of fragmentation in society. Consequently in many countries the real situation is, and will continue to be, represented by a multiparty structure.

Such a structure raises the problem of how to form a majority coalition. This subject is too complex for argument here, but the issue is how the institutional framework can oblige the parties to form a majority coalition as a condition for gaining access to government. And the corollary question is: Is it possible to reduce fragmentation (for example, by requiring parties to obtain a certain percentage of the vote in order to be represented in parliament)?

Another challenge is to ensure that the political parties are actively committed to development and to understand the constraints of reality. These factors unfortunately are often secondary to political competition at the electoral level. One approach to strengthening and modernizing political parties includes setting up advisory think tanks for party officials, and instituting courses and seminars directed to young leaders and party cadres.

Finally, political parties must be responsive to the aspirations and demands of their constituents. A similar criterion should be applied to the bargaining process among the parties in the governing coalition. The bargaining process ensures that the solution will be politically viable. Such a compromise may seem inefficient or expensive because it incorporates social and political variables. But the likelihood is that the "right" solution would not be sustainable because of political opposition.

Chile's experience illustrates some guidelines for building majority support for governance in a transition period. The authoritarian regime was forced to liberalize in response to mass protests led by strong social organizations (labor unions, professional associations, and the like). The freedom thus obtained enabled the political parties to rebuild a viable opposition to challenge the regime at the polls. When the government fails to initiate reforms, peaceful transition requires the leadership of political parties (supported by a societal coalition).

Elite Leadership

In countries facing serious conflict, collective behavior is decisively influenced by the ruling elite. In these countries a possible strategy for governance would be to support the institutions and elites that can best develop national identity and legitimacy, including the military. This recommendation, however, is subject to the warning that the army is ill-suited to such a role, and alternative civilian leadership should be substituted as early as possible.

The problem of a civil service based on merit is too complex for discussion here. But the public sector's need to attract and retain a nucleus of high-level professional technocrats is critical. The first problem is assuring the bureaucracy's loyalty, trustworthiness, and commitment to the government's program. Public institutions also need continuity, and it is realistic to distinguish between a thin layer of top political appointees and the permanent government professionals who should be subject to normal civil service regulations.

The next problem is determining the salary levels of senior government officials. In practice the salaries of technocrats will be higher than those of the rest of the public sector. At the same time, however, if the gap between the two is too large, it will give rise to irresistible political pressure for an increase in wages for all civil servants. Consequently, depending on each country's situation, it will be necessary to supplement these salaries. Even so, the income of public servants will never be competitive with that of the private sector, and the situation will tend to get worse as the private sector expands and prospers. Ultimately, the recruitment and retention of high-level professionals will be decisively influenced by considerations of vocation for public service, political commitment, and the professional status of the civil service. It is an essential condition of governance to further such values by strengthening the commitment to service and providing nonmonetary rewards for effective performance.

Recruiting high-level personnel has been a distinctive feature of the civil service in the Republic of Korea. Ohm (1989) says, for example, that many academics have been appointed to major posts in economic ministries. Systems that rotate professional personnel between the public and private sectors have also been used with relative success. (This formula suffers from some limitations as far as the loyalty and commitment of the staff, however.) Another drawback of such schemes is that they operate on a small scale and are always vulnerable to the suspicion that public policies are being manipulated by private interests.

Finally, a word of caution. Countries often are tempted to resort to foreign advisers on a large scale, but personnel from abroad cannot substitute for domestic employees. Foreign experts are often resented by local officials, particularly when they have decisionmaking powers. Such opposition brought about the failure of an international group entrusted with comprehensive administrative reform in Peru. The Harvard Law School team of tax experts working for the Indonesian government on tax reform was careful to associate its efforts with local counterparts; Indonesian officials were able to present the government with a series of reforms that they considered their own (Mansur and Tamsir 1989).

III. Populism and Political Regression: Traps to Avoid

The events of the 1980s have shown the strength of these two megatrends. What is the role of the state in the transition to democracy and open markets? Two acute economic and political problems have become obvious: the demand for social services and the related issue of structural adjustment. In a world of instant communication and abundant information, the awareness of higher standards of living is in sharp contrast to the modest level of economic progress that is possible. Often demands are fomented by political or social leaders to generate popular support. To deal with these pressure groups, governments may take a number of approaches. The most desirable is to channel demand through appropriate institutions and seek a solution within the limits of what is possible. The alternatives—to give in to demands or crush the opposition—lead to populism or political regression. A final option—doing nothing—risks eroding the legitimacy of the political system and alienating the population; it will be interpreted as ineptitude or a lack of commitment.

The Populist Temptation

Populism has been an endemic evil in Latin America, although it is by no means unknown elsewhere. This naive attempt to deal with problems by trying to avoid conflict is difficult to eradicate and may undermine the process of development. Pro-populist sentiment persists, however, for several reasons. Sheer technical incompetence is one. The inability of the political system to channel the demands of organized vested interests is another. And weak political and government leadership is a third. Without the support of a political coalition, officials tend to avoid making unpopular decisions. Because competition among political parties is keen, a loss of support could mean defeat in the next election.

A solid political coalition can serve as an effective buffer against populism. As the key agent of this process, the head of the state must have a general understanding of the economic policy options and particularly of what policies would create macroeconomic disequilibrium, such as indiscriminate increases in wages or social security benefits. The following actions will directly affect the success of the government's efforts:

- Well-designed campaigns to educate the population and ruling elites on the rudiments of economics and the consequences of populism.
- A legal framework to ensure the autonomy of the central bank and to prohibit public sector indebtedness (particularly by regional or provincial governments) to the domestic banking system.
- Strategic sequencing of government actions. By spreading out the timetable for reform, short-term pressures and conflicts can be reduced and positive expectations extended to cover an administration's entire term. (Although there is admittedly no guarantee that gradualism will work.)
- There is a relationship between elections and stability. Frequent elections at short intervals, especially by-elections, exacerbate political sensitivities and encourage instability.
- Key sectors should be rewarded in ways that are compatible with economic policies. Ready solutions include setting up consultation and participation machinery, strengthening organizational infrastructure, and accelerating social sector programs that are already in the pipeline, such as educational or health facilities.
- Steps to decentralize political and administrative responsibility help transfer prerogatives and resources to territorial and functional authorities. Such steps may improve operational efficiency and defuse conflicts by moving them to the grass-roots level. From another viewpoint, decentralization generates a greater awareness of what is possible and what costs are involved, while reducing the paternalism of the state that is so common in the developing world.

These observations suggest that although it is easy to say that "correct" economic policies will eliminate the problem, the issue is much more complex and more often than not is mainly of a political and institutional nature.

Political Regression

In countries in transition to political pluralism, or in unstable democracies, many groups blame the ills of society on freedom—or on politicians. Elected officials have been overturned by authoritarian governments many times in the past, and no doubt will continue to be rejected in the future. The difficult situation in the U.S.S.R. and Eastern Europe is by no means free from this risk, and in recent decades such pluralist countries as Chile, Greece, and Turkey have installed restrictive regimes.

Political regression can only be viewed as the transitory response to a serious crisis, or countenanced as the outcome of a violent confrontation. Although political liberalization is irreversible in the long term, this does not mean that economic reform may not take place in an authoritarian regime—as indeed it has in some cases. But modernizing authoritarian regimes do not represent useful options with regard to governance for development. First, they cannot be planned: they just happen. Second, it would be extremely risky to believe that—even if an authoritarian regime started off with the best of intentions—its repressive political features and instinct for perpetuating its power would not ultimately have a negative effect.

A closer look at the authoritarian regime's market-oriented reforms in Chile reveals two salient facts. First, Chile had a substantial business class and was never a centrally planned economy. But more importantly, the democratic coalition that successfully challenged the authoritarian regime was committed to an open-market economy. Considering the strength of the mandate it received at the polls, the coalition could have reverted to intervention and a high degree of protection. It had the full support of a majority of the population. The open-market economy is in place only because it now reflects a broad social and political consensus.

IV. The Role of the State

The strategy to pursue economic growth and broader development objectives "means a changed (usually diminished) role for the public sector and a greater reliance on the private sector" (Israel 1990). But the author cautions that despite the consensus on the need for change, substantial controversy remains about the appropriate role of the state (laissez-faire or promotional). Governments in developing countries have a long tradition of control over—or intervention in—the micromanagement of the economy. These interventions include wage- and price-fixing, control of credit, marketing, and restrictions on foreign investment and profits. What is needed now is the preservation of macroeconomic stability, clear rules governing the economy, and the establishment of conditions that favor investment. Macroeconomic management implies the capacity to undertake analysis, provide coherent policies, and issue timely signals. The effective discharge of this function calls for skilled economic technocrats.

An Enabling Environment

Israel describes the state's responsibility for an enabling environment. He suggests that this calls for the privatization and liquidation of public sector activities that compete unfairly with the private sector, the elimination of restrictions on competition, the elimination of controlling and licensing functions, and the dismantling of the public agencies that perform those functions. It also means providing a level playing field for the private sector.

Recent policy decisions such as the Pacto de Solidaridad in Mexico and a similar program in Bolivia are meaningful steps in this direction. Except in the most extreme cases of laissez-faire, it is recognized that the state has a leading role in such areas as manpower training, technological innovation, stimulation of small- and medium-scale businesses, and export promotion. These are matters in which the state can contribute to growth and equity, with corresponding opportunities for generating political consensus.

What is often overlooked is that the public sector, too, requires an enabling environment. To be effective public service must be endowed with dignity and enjoy social recognition. The pendulum often swings too far. Putting private enterprise on a pedestal tends to lead to the denigration of public service, making it difficult to recruit qualified personnel for the bureaucracy and impairing the efficiency of the state. Israel points out that a second aspect of this environment is the ability to efficiently operate those enterprises that will remain in the public sector. Thus, for example, it is necessary to avoid any temptation to operate the enterprise to achieve multiple objectives, such as improved income distribution and increased employment.

Any development strategy will combine a number of objectives, including the state's commitment to reduce poverty, ensure equal opportunity, and provide social services. Social policy should never be privatized. Reducing disparities is a crucial aspect of the political dimension of governance and reflects attempts to resolve political and social conflicts. This task is fully compatible with private sector participation, which will vary according to the circumstances of each country. The existence of a number of different technical options will permit governments to choose institutional and operational formulas that take into account cultural patterns and sociopolitical preferences.

The feasibility of a broad coalition committed to an open-market economy may hinge on the recognition of the state's key role in assuring the welfare of the entire population. A firm commitment to policies simultaneously stressing growth and social equity has decisively enhanced the strength of the coalition supporting Chile's present government.

An effective rule of law is as fundamental for a free market as it is for the effective exercise of human rights. The rule of law assures that governments are truly accountable. Barongo (1990) makes the point that when there is no way to enforce accountability, the result is autocracy and widespread corruption. Similarly, Mkandawire (1990) warns that the lack of accountability is at the center of the failure of the African states to chart viable paths for development.

Corruption is the most serious problem. Joseph (1990) observes that in some African countries, "The tendency to treat public office as a private means of enrichment has now spread through every level of government." In autocratic environments the minimum conditions for entrepreneurial development do not exist. Authoritarian regimes that have succeeded economically have maintained the effective rule of law in economic matters, accepting in practice certain levels of accountability. This has been, in fact, a step toward liberalization. Poorer countries will have to find a way to establish a pact between the governing authorities and society. This means obtaining unilateral concessions that guarantee certain minimum levels of accountability. Conditions imposed by multilateral agencies may provide decisive support to local reformers in achieving progress in this area, thus contributing significantly to political liberalization.

The importance of this issue is reflected in the uncertainty generated by the "war of laws" between the U.S.S.R.'s central government and the Russian federation (and some other republics).

Strengthening Key Institutions

The evolution toward an open-market economy calls for a state that is smaller but stronger and more efficient than its interventionist or autocratic predecessor. If the state is to serve as the agent of authority and the problem-solving arm of governance, strong institutions are essential.

Economic and political institutions. The economic and political institutions that administer the tax and social security systems, and the regulatory institutions that oversee banks, supervise corporate entities, and preserve and promote competition figure prominently in discussions of economic reform. The list should also include institutions for strategic planning (both political and economic) and macroeconomic analysis. And finally, it should include agencies that promote communication and consultation with the private sector, labor organizations, and other important interest groups.

Institutional weakness can jeopardize reforms even when the government has firm political support. In Bangladesh, "the overall lack of financial discipline encouraged noncompliance with contractual obligations incurred in the process of privatization. The problem was compounded by the failure of the institutions responsible for enforcing such obligations, and in particular for paying the government and its agencies" (Chowdury 1989). Mansury and Tamsir (1989) note that the lack of professional competence in the government agency responsible for collecting taxes was an obstacle to tax reform in Indonesia. Intensive training programs have since attempted to increase tax collection to encourage compliance by taxpayers.

On the political side, the most important organization in governance for development is the political party and the legislature, whose significance tends to rise as the process of political change toward pluralism becomes more intense. Modernizing the political parties, strengthening their roots in society, and creating technical support structures to improve their performance are essential conditions for good governance in a pluralis environment. The existence of a strong party system contributed heavily to the recent peaceful transition to democracy in Chile, as well as to democratic stability in such countries as Venezuela and Costa Rica.

In weak democracies and in authoritarian environments undergoing modernization, more effective performance by legislative bodies should be furthered by providing technical assistance to legislators, assuring communication between the legislature and the bureaucracy, and establishing operating rules that enhance the legislative function and prevent the institution from becoming a hotbed of populist initiatives. When defining priorities for institutional development projects, multilateral organizations should keep in mind the legislature's potentially crucial contribution to good governance.

An independent judiciary. A quotation from Ladipo Adamolekun (1990) illustrates the enormous importance of this issue:

> The rule of law is normally based on an independent judiciary. The legal order that is established on this foundation (with a system of courts) serves to regulate relations between individuals and groups within society as well as between citizens and the State. It also provides the regulatory (legal) framework for both the institutions of governance and those of economic development. Regarding economic institutions, the legal order provides the rules that define property rights, contracts, and liabilities. It is significant that the adequacy and appropriateness of existing legal frameworks are major concerns in a majority of the institutional reform programs (especially those focused on the civil service and public enterprises) being implemented in Sub-Saharan African countries.

Private voluntary organizations. Growing social differentiation implies strengthening civil society through a network of social organizations, ultimately reducing the power of the state, and increasing the independence of local authorities. Opportunities for such development usually reflect community traditions, or alternatively, the inability of an autocratic state to exercise power at the grass-roots level.

A host of nongovernmental organizations and multilateral institutions have given high priority to attempts to create local government organizations. Frequently training, technical assistance, and small-scale enterprise development programs include elements of institution building. Efforts of this type that enable nongovernment actors to contribute to development and at the same time directly increase pluralism are indisputably valuable. Such initiatives are also essential to ensure the necessary coherence, complementarity, and communication between central and local governments.

The office of controller-general. The accountability of public officials is complemented by the office of an independent controller-general. In countries at an early stage of development, the office is needed for the rule of law and the establishment of a civil service. In countries with a long legal and bureaucratic tradition, however, the problem is different. Often the office is incompatible with quick-moving, flexible, and effective management. In these cases it is necessary to simplify procedures, eliminate excessive restrictions, and replace administrative actions with selective ex-post checks. But this may be difficult. Existing staff and leadership may interpret modernization to mean more computers, a larger staff, and better salaries. It is possible that they will see it as a way to augment their institutional power.

Information, Analysis, and Advice

The importance of this function is summarized in the following quotation (Boeninger forthcoming):

> Analysis is a crucial ingredient of policymaking. It serves various purposes: anticipating outcomes, giving decisionmakers a medium-term perspective, supplying criteria for problem solving, and helping to strengthen the exercise of leadership and authority by adding technical legitimacy to political decisions. By giving the participants in the decisionmaking process, as well as the people affected by the policy, a common background of processed information, analysis can contribute decisively to a national debate and to consensus-building, and thus prevent confrontation and resolve conflicts.
>
> The anticipatory function of analysis involves throwing light on the probable macroeconomic effects of policy options, attempting an estimate of their costs and benefits, and alerting policymakers to eventual side effects on other sectors or economic variables. It also involves indicating the political and social consequences of proposed policy, notably by identifying winners and losers.

Analysis brings together technical and political factors. (In practice, specialized economic matters will remain the preserve of experts.) Governments anxious to integrate political and technical considerations, therefore, should begin with an analytical phase in which problems are debated by economists, social scientists, and politicians. In Chile we use a three-tiered mechanism: first, economic ministers and officials consult with political and nongovernment leaders; second, ministers of the political area meet with the Economic Commission of Ministers; and third, an interdisciplinary political advisory group convenes in the office of the president.

If the analysis function, which is primarily an instrument for decisionmaking, is well organized, it can be a powerful source of policy advice. It can also provide the population with clear and timely information through the mass media. According to Boeninger:

> Analysis should satisfy three criteria. First, it should balance short-term and long-term considerations. Second, policy analysis needs to combine independence with loyalty. Third, it should give attention to political and social issues. Lack of attention or of sensitivity to issues such as the distributional impact of policy recommendations can make politicians resistant to analysts' advice. Attitudes inculcated during their professional training and a predilection for market solutions may also contribute to the neglect by economists of critical institutional and managerial aspects of policy decisionmaking.

Government think tanks are indispensable for integrating the findings of analysts and increasing the awareness of officials. Nongovernmental think tanks, however, can afford to be more critical, thereby ensuring objectivity. To provide analysts with data, it is essential to develop information systems capable of providing systematic, timely, and reliable statistics. But developing countries should resist the temptation to create systems whose sophistication exceeds existing processing capacity.

Organization for Decisionmaking

Policymaking entails a tension between authority and consultation, between a highly controlled top-down process, and a much messier matter of political arbitration and compromise (Boeninger forthcoming). The first alternative corresponds to the technocratic ideal (or illusion) and to the approximate reality of authoritarian regimes; the second corresponds to real life.

Of course, the cabinet is the formal body for collective decisionmaking. My impression, however, is that with few exceptions, the model is not very encouraging. In many developing countries, commentators have pointed to the largely symbolic function of cabinet meetings, their preoccupation with immediate political issues, and the short shrift given to policy discussions. In practice, cabinet meetings tend to become either a series of bilateral exchanges between the head of state and individual ministers, or a continuing effort by the former to mediate in conflicts between ministers. Only rarely is effective policy coordination practiced by the cabinet. To overcome these problems governments may use the following mechanisms:

- The head of government may hold one or more of the decisive ministerial posts: finance, defense, or foreign affairs. The best choice in the context of governance for development is the key economic ministry. This approach is only viable, however, in countries that are at an incipient level of development.
- A key leadership role may be given to a prominent minister (usually in the economic sphere). This formula may be desirable as an indication of the priority the government gives to development, but it depends on the relationship between the head of government and the appointee. Moreover, this option raises the risk of isolating the economic minister and giving economic policy a technocratic bias that may prejudice the government's political support.
- The office of the head of state may be strengthened, in what might be called the "White House staff model." This option permits a choice between the recommendations of the cabinet and those of the direct advisers, but it generates competition and can be the source of conflict.

The Chilean model. The decisionmaking model that has developed in Chile may apply to other countries as well. The coordination of resources is carried out by the budget department of the ministry of finance. A political ministry headed by the secretary-general of the president's office is responsible for program coordination. The minister, who has no decisionmaking power of his own, serves as a mediator. As instruments for the follow-up, and for keeping the country informed, a set of ministerial goals is available that presents in either qualitative or quantitative terms the aims of the most significant programs of each ministry and agency. This information does not merely paraphrase the budget—a mechanism that has been tried in a number of countries with only relative success. It is instead a complementary but different mechanism that permits the appraisal of public management in substantive terms and with a political criterion.

Interministerial committees deal with matters that affect more than one ministry. Currently there are five committees—macroeconomic, political, economic and social, production development, and infrastructure. Together they cover the whole cabinet, but some ministers serve on more than one committee. The committees meet on a regular basis with other key high-level officials also in attendance. For instance, the macroeconomic committee is joined by officials of the autonomous central bank, thus making possible—without any loss of autonomy—a working majority for macroeconomic policy. Agreement is by consensus and is implemented by the appropriate agency. In the event of disagreement, an effort is made to arrange mediation through the ministry responsible for program coordination. If the disagreement persists, the matter is subject to the final decision of the president.

Political coordination is sought primarily through the permanent attendance of ministers from the political area. From the standpoint of governance for development, it is important to have a close and supportive relationship between the key ministers of the political and economic arms of the government—an alliance that protects economic policy against the potential populist excesses of major parties, social organizations, and members of the cabinet. Above all, it is essential to guard against isolating the minister of finance when the government is trying to gain acceptance of the austere measures associated with economic adjustment.

Coordinating the functions of information and consultation, political strategy, and crisis intervention is the responsibility of the political committee of ministers chaired by the minister of the interior. This committee is in daily contact with the president. The ministers representing economic and social agencies meet periodically with the members of the relevant commissions of the congress who belong to the government coalition. These commissions ensure that the members of parliament are consulted. Finally, we pay careful attention to maintaining public support for the government's economic policies through systematic consultations with major social organizations. These organizations on occasion even co-write particular initiatives or agreements.

Policy implementation. Problems in implementation are as important a cause of policy paralysis or reversal as a sudden economic or political crisis. The managerial ability of state agencies is frequently overestimated by politicians and public decisionmakers. Furthermore, it is not generally susceptible to significant improvement in a short time, as witnessed by the failure in many countries of repeated attempts at administrative reform. Thus it is more prudent to expect only marginal advances in the operational capacities of the state.

Administration-intensive programs are particularly vulnerable to limited managerial and operational capacity, as highlighted by a study in Sri Lanka. To quote Pieris (1989):

> When it became clear that the country could no longer sustain the burden of providing free rice to its population, a new scheme increasing the minimum level of income for eligibility was introduced with the declared purpose of reducing the number of beneficiaries by three million people. However, processing income declarations proved to be an unsurmountable administrative bottleneck. At the same time pressures from those who were to lose their food stamps could not be defused. The outcome was predictable: the government reversed its decision and the number of beneficiaries is virtually at the same level as before.

In practice, when policy reforms require organizational change, political authorities are often tempted to create new institutions—presumably because it seems less contentious than altering the functions of existing organizations. But experience shows that this option should be avoided if possible, as it frequently leads to an increase in the number of government employees, administrative duplication, and difficulties in coordination.

Successful implementation also requires strong political support. Local politicians may jeopardize the implementation of administration-intensive policies. Corruption can undermine the effectiveness of institutions. Implementation will improve if procedures are transparent, opportunities and incentives for fraud are reduced, and officials are held accountable.

V. Strategies for Reform

The megatrends discussed here notwithstanding, there is no single answer to the question of whether democracy precedes development or vice versa, or whether development is a function of some particular political system. I maintain that the simultaneous reform of the political and economic spheres is viable with a sufficient national consensus. When such consensus does not exist, the hypothesis, which still requires empirical confirmation, suggests giving priority to economic reforms, because in the medium term "market economy, private property, and economic freedom breed political freedom" (Nelson 1990). Progress toward a market economy creates social differentiation and forces some degree of liberalization, in turn creating pressure for subsequent political reform. But without some degree of prior political change, economic reform can hardly be expected to make sustainable progress. Perhaps a zigzag course (political and economic reforms taking turns) would be the most viable strategy.

For countries at the nation-building stage, the primary goal of governance should be to strengthen national unity by supporting the consolidation of elites or institutions with the will to further national integration. This involves looking for promising openings: a task giving multilateral institutions such as the World Bank opportunities to make external support conditional on specified reforms.

In authoritarian regimes in the process of political liberalization, the viability of economic reforms depends on the perception that such processes are taking place in a context of equity. The concept of "embedded liberalism" describes a political strategy that is effective in such circumstances (Nelson 1990). It involves compensating for harsh adjustment measures by providing benefits (such as training, education, and health facilities) for "losing" sectors. This approach is also important in weak or incipient democracies facing economic adjustment. Here it is better not to try to attain utopian objectives in the short term; caution and gradualism do not necessarily imply less effectiveness. Clearly a societal coalition and the implementation of compensatory measures play a key role in any winning strategy for reform.

In authoritarian regimes in the process of liberalization, the challenge is to create channels of social and political participation while at the same time persuading the new players not to reject the advances already achieved simply because they are associated with the previous repressive political system. The strategy pursued by the present government of Chile may also offer some useful insight into the issue of reform sequencing. The governing coalition's platform included numerous political and economic institutional changes. The administration first implemented those reforms that produced either uncertainty or cost increases (tax reforms and changes in labor legislation). Officials were then able to turn to the political agenda and work on institutional changes. In this way the risk of overloading the public agenda was avoided.

Experience suggests that no government will renounce its ability to exercise authority. When radical changes threaten this ability—as in the U.S.S.R.—there is a risk of political regression. In such situations strong authority may be needed to accomplish economic reform. Everything possible should be done to make sure the political regime operates within the rule of law and according to the principles of accountability.

"Reform packaging," an approach designed to highlight the benefits of policy changes and "mask the extent of losses" (Nelson 1990) is a crucial component in any strategy of change. One example of this approach is the tactic of "desubsidization by stealth," which occurs when the real values of subsidies fall because they are not nominally adjusted to fully take inflation into account. An exchange rate adjustment in Pakistan provided a striking example of good political packaging. In that case, "delinking the rupee from the dollar was presented as an assertion of national independence in economic policy formulation" (Hamid forthcoming).

Market economies based on private enterprise should recognize that coherence, clear signals, and continuity of policy are critical in creating trust and generating positive expectations among economic actors. When a political transition is under way (or in traditionally unstable environments), the private sector's potential contribution to development will only be effective if a confidence-building strategy designed to counter uncertainties and fears is consistently pursued. The present Chilean government, whose faith in the market was initially suspect for understandable historical reasons, has invested in entrepreneurial trust, both by language and by deed, conveying signals that have contributed to creating the perception that an enabling environment for private enterprise does in fact exist.

In general terms I share the prevailing skepticism about ambitious attempts at comprehensive reform, given the systematic failure of these projects in the past. From the standpoint of the World Bank's contribution to governance, it is more promising to take advantage of opportunities for small steps forward, while creating conditions for additional reforms later.

Research Needs

Because of the need to improve the data to provide a better foundation for policy, research should be considerably strengthened along the lines suggested by operational experience thus far. Future research and analysis should explore what influences the pace of the megatrends, drawing implications for donors and multilateral agencies. Case studies should focus on success stories of political democratization and the shift to private sector-based market economies. Other topics for consideration include the sequencing of political and institutional reforms, the effectiveness of the results of adjustment under different conditions, the role of multidisciplinary think tanks and strategic analysis units, and ways to reconcile the importance of short-term popular support with the need for sound policies. Future research might also address labor relations in periods of stress and approaches for improving coordination between the political and economic branches of government. Finally, it would be useful to evaluate how governments package policies and communicate them to build political support.

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Comment on "Governance and Development," by Boeninger

Joan M. Nelson

Prevailing ideas about the links among democracy, good government, and economic growth have come almost full circle over the past thirty years. In 1960 it was widely believed that democracy and development went hand in hand. That idea was part of the inspiration for the Alliance for Progress. By 1970 as the East Asian "tigers" burgeoned economically and as military coups replaced elected governments in much of Latin America, the reluctant belief emerged that authoritarian governments might be necessary to avoid populism and promote efficiency and growth. By 1985 ideas had taken another turn. What was crucial for growth was the degree of government rather than the kind of government: governments in general got in the way of growth, and therefore, that government was best that governed least. By 1990 that view had given way to a more moderate judgment: although bad government is indeed a key obstacle to growth, good government is indispensable. How do we promote good government? The answer is reminiscent of 1960: we need to create pluralist political institutions, whether or not they take the precise forms familiar in North America and Western Europe.

This account of a thirty-year intellectual trajectory is a bit of a caricature, but it is accurate enough to spotlight a basic question: what do we really know about the links between democracy, good government, and growth? The links between elements of good government and economic growth are plain. Clear laws, predictably enforced, reliable information, reasonably efficient expansion, maintenance of infrastructure and basic services, and no more than moderate corruption are clearly growth-promoting; their opposites clearly hamper growth. But how do pluralist politics relate to either good government or economic growth? There is a strong correlation between high levels of economic wealth and democratic forms of government in the long run. But there is no clear link between democratic government and economic growth in developing nations. Efforts to test that relationship empirically have been inconclusive or contradictory—or both.[1] Democracy is also obviously no guarantee of good

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1. For a useful recent survey of such studies, see Larry Sirowy and Alex Inkeles, "The Effects of Democracy on Economic Growth and Inequality: A Review," *Studies in Comparative International Development*, Vol. 25, No. 1, Spring 1990.

government. There are all too many democratic governments (as well as many authoritarian ones) that are neither honest nor efficient nor growth-promoting. No consistent relationship exists between broad categories of political systems and an equitable distribution of income.

Democratic institutions have the great advantage of providing for moderate change, and empirical evidence shows that democracies are less prone to violent upheavals than nondemocratic systems.[2] The freedom of association, expression, and participation inherent in democracies are values in and of themselves, independent of their instrumental value as means to other goals. Finally, when democracies are working well—an important caveat—they create strong incentives for accountability. But we should not be facile in linking renewed recognition that good government is important for growth to the post-Cold War surge of enthusiasm for democracy. Contrary to the views of 1960 (except in the long run), there is little reason to believe that all good things go together.

I. Democratization, Market-oriented Reforms, and Consensus

Edgardo Boeninger's paper eloquently describes the two dramatic megatrends of the 1980s and 1990s: the move from various kinds of authoritarianism to more pluralist politics, and the move from high degrees of state intervention to more open, market-oriented economic systems. In the past many countries made these transitions sequentially. Venezuela, Costa Rica, and India, for example, established democratic politics several decades ago, and recently have begun to liberalize their economic systems. The Republic of Korea, Taiwan (China), and Chile followed the opposite sequence: they established flourishing market economies and then turned or returned to democracy. What is particularly striking, in 1991, is that a great many countries—all of Eastern Europe, much of Latin America, and a growing number of countries in Sub-Saharan Africa—are attempting these two transitions simultaneously.

Boeninger's paper suggests that these transitions reflect a new consensus on fundamentals, a new faith in the winning strategy of democracy and markets. I am more skeptical about the degree of political consensus underpinning the dual transitions. In most countries attempting simultaneous economic and political transformations, there is a more limited consensus that the old systems have failed, and (importantly) that the old political system is deeply implicated in the failure of the economic system. Hence the calls for democracy in unexpected parts of the world, and the calls for attention to "governance" in the international development community

But how clear is the consensus on what should replace the discredited systems? The megatrends have certainly narrowed the parameters of debate regarding both economic and political strategies and designs. Economic strategies widely advocated in 1980—import-substituting industrialization as an engine of

2. Samuel P. Huntington, "The Modest Meaning of Democracy," in Robert A. Pastor, ed., *Democracy in the Americas: Stopping the Pendulum* (New York, Holmes and Meier, 1989), pp. 23–25.

growth, and the importance of state control of the commanding heights of the economy—are now off the agenda. And on the other end of the ideological spectrum, even the most enthusiastic advocates of "getting prices right" now agree that the state has important functions in promoting development, and that some positive action is needed to protect the poor in the course of adjustment. In the political realm, such old formulas as "guided democracy" sound both suspect and archaic.

But the extent of agreement should not be exaggerated. Within those narrowed parameters of debate, a great deal of room remains for argument—indeed for bitter conflict—over the pace and sequencing of change, and the design of political and economic reforms. This is true even in those Central European countries where almost everyone accepts the model of Western European mixed economies. Elsewhere there is not even consensus on the broad model. Conflicts over the pace and degree of trade liberalization, the design of electoral systems, or the division of power between national and subnational authorities are not arguments over technical details. These are fundamental conflicts about the rules of the new economic and political game, in which contending groups regard their vital interests as at stake.

Even in Chile, with its long democratic history and its sequenced transition, consensus required energetic and sensitive engineering. Boeninger provides a brief but intriguing glimpse of the process of building trust among mutually suspicious interest groups in the last few years before General Pinochet was voted out of office.

On this point, it seems to me, he tells only the last chapter in a far longer tale. The current consensus in Chile rests on at least twenty-five years of experience, between 1960 and 1985, before the drive for democracy that began to accelerate in the mid-1980s. Throughout this quarter century, Chileans engaged in a wide-ranging debate about their social, economic, and political goals. Consensus on political fundamentals grew out of a long democratic history compounded by the bitter experience of the Allende and Pinochet years. Consensus on broad economic strategy was encouraged by the impressive economic performance after 1985. In Spain an even longer learning process preceded the democratic transition of the early 1970s. In contrast to Chile, Spain did not start its return to democracy with the advantage of an already proven economic strategy, but the models of Western Europe and the desire to join the European Community played a similar role. In most double transition countries, the initial consensus is not as well-defined.

II. The Megatrends: Mutually Reinforcing or Conflicting?

The megatrends pose a paradox. Each is crucial for the other. But the processes of political democratization and market-oriented reform also conflict in many ways.

Political reforms are often crucial for credible economic restructuring because the old political system is viewed as part and parcel of the old economic mismanagement. Moreover, since many of those that benefitted from the old system—both inside and outside the bureaucracy—will resist reforms, political change is needed to empower new groups to counterbalance old vested interests. Conversely, effective economic restructuring is crucial for the consolidation of democratic reforms. The public may patiently endure economic hardship for a fairly brief grace period, but signs of economic improvement are increasingly important to maintain the fragile legitimacy of new political institutions and procedures.

Despite this interdependence, conflict exists. Broadened political participation heightens demands on governments at the same time that stabilization programs and the disjunctions of structural reforms lead to a decline in production. As people realize that they are free to organize politically, old regional, ethnic, or religious divisions predictably flare, further disrupting economic restructuring. Demands for justice against former oppressors, and anger at old insiders and foreigners who often seize the opportunities opened by economic reforms further complicate the dual transitions. Much of the population understandably distrusts the new and rapidly changing political and economic rules: Uncertainty over each undermines confidence in the other.

In short, governments attempting a dual transition are engaged in an immensely difficult balancing act. As Boeninger points out, they often tend to veer either too far in response to political pressures at the expense of economic reforms (the trap of populism), or too far in support of economic reforms at the expense of consolidating democracy (the trap of repression).

Boeninger's paper offers a rich menu of tactics and approaches for steering between the traps. The suggestions are drawn mainly from Chilean experience, but most of his thoughts apply to dual transitions as well as sequenced cases. Yet in highlighting tactics and approaches, Boeninger gives the (perhaps unintended) impression that skillful management can usually strike the needed balance. In some countries, however, there may be such great tensions between the dynamics of political opening and the requirements of economic restructuring that it is virtually impossible to pursue both simultaneously.

III. Implications for External Agencies

Despite the difficulties and the very real possibility of failure, the megatrends Boeninger describes are real, and the space for constructive economic and political change is probably greater now than at any time since the beginning of the Cold War. External agencies are eager to support such changes, and indeed to nudge them along where they are lagging.

The surge of interest in governance is a return to a realistically holistic way of looking at development. A short half-dozen years ago, prevailing voices in development circles were emphasizing a few important economic reforms to the exclusion of all other factors influencing growth. Yet now we may be about to go to the other extreme. Better governance, we are now recognizing, requires efficient and honest institutions staffed with well-trained people, enforcing the rule of law impartially and effectively. In order to have honest agencies that serve the public interest, transparency is crucial (including collection and dissemination of much fuller information, and a free press). So is accountability (including ways to throw the rascals out). The channels for transparency and accountability require a broad array of vigorous nongovernment associations. A well-developed civil society, in turn, requires not only strong associations but good communications and channels for conflict resolution and growing trust among the varied groups. The list of interlocked and indispensable requirements is formidable—and daunting.

The explicit reassertion of broad goals of development is an immense improvement over the blinkered approach of the mid-1980s. But it carries the clear risk of overloading both aid agencies and the governments struggling with double transitions. Strategic priorities tailored to each country's circumstances are crucial.

A second implication for external agencies concerns their choice of instruments and tactics. The growing role of policy-based lending in the 1980s paralleled (with a lag) the growing recognition of the importance of "ownership" for effective reform—that is, the key role of conviction within the borrowing country and government—that the policies agreed upon with external donors were feasible and desirable. In the 1990s as many countries seek to open not only their economies but also their political systems, ownership will become still more important. At the same time, the task of persuasion may become more complex and demanding because a wider range of actors has entered the political arena. More than ever, conditionality will has to be accompanied by flexible, patient, and sensitive dialogue (perhaps with a broadened range of groups within countries), networking, joint research, and analysis—all in a climate of heightened urgency for results. The challenge is immense. So are the opportunities.

Comment on "Governance and Development," by Boeninger

K. Sarwar Lateef

Edgardo Boeninger's paper is a useful handbook for democrats in developing countries and provides rich insights into Chile's experience. Although I find myself in agreement with much of the paper, I am struck by the powerful optimism that pervades the essay. That optimism is undoubtedly influenced by the remarkable peaceful democratic revolution in Chile and the key role that Dr. Boeninger has played in that revolution.

I must confess that I found his optimism—while highly refreshing—a trifle unrealistic. He may disagree; his paper has all the necessary caveats and qualifications that warn the reader of the counterargument. But the underlying optimism shines through all the qualifications.

The paper defines governance rather more broadly than the World Bank does. Governance is defined as the "good government of society. Good government guides the country along a course leading to the desired goal—in this case, development." Development itself is defined broadly to include the concepts of equity, social justice, and the effective exercise of basic human rights. Governance, therefore, is implicitly equated with democracy, and the two words are used interchangeably. The World Bank defines governance more narrowly as the "manner in which power is exercised in the management of a country's economic and social resources for development." Thus the term is more neutral and applies to different forms of government.

In his paper Boeninger explicitly assumes a pluralist political regime and a market economy. Thus its relevance as a framework for other regimes may be somewhat overstated.

Why do I find the paper optimistic? First, I question the certainty with which Dr. Boeninger embraces the two megatrends. As for the first, the internationalization of the world economy, the parallel formation of large economic blocs, and the emergence of market economies "open to the exterior and dominated by the private sector," there is undoubtedly a strong trend in this direction. But are we perhaps seeing a classic dual economy emerging, with the developed world, the newly industrialized countries, and a sizable middle class in the developing world constituting one global dynamic market-oriented economic entity, and

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several hundreds of million people in rural Africa, South Asia, China, and parts of Latin America largely untouched by this transformation?

The second megatrend requires a belief in the "inevitability of democracy" argument: Social pluralism leads to political pluralism, and the "growing dominance of the culture and values of the industrial societies," resulting in an assimilation of those values in the developing world. And, indeed, the many countries that are currently in some form of transition to Western style democracies would seem to support Boeninger's thesis. But I would also argue that the culture and values of the mature democracies are derived from centuries of struggle between the rulers and the ruled. Accountability and the rule of law were grudgingly conceded and hard won. In this information age there is no need to assume that it will take quite so long as it did in the West, but it cannot be assumed that the overnight changes we are witnessing will be sustained. By transferring what are essentially alien institutions into social structures and value systems that are vastly different from those in the West, do we not provide new vehicles for tensions to surface and impede the consensus needed for market economies to function? Although I welcome the movement toward democracy in the developing world, I would tend to be cautious about the eventual outcome. Much of what we are seeing is highly fragile and reversible, rather than what the paper sees as "a winning strategy for development."

I also question the certainty behind the pronouncement that the advance of the megatrends has produced an agreement on fundamentals—a political consensus necessary for governance for development. It is certainly true that the collapse of Communism in Eastern Europe has dealt a heavy blow to those political parties and movements in the developing world that owed their ideologies and ideas to Marx and Lenin. There is confusion in their ranks, but it is much too early to write them off. Their underlying strength has not lain in their ideology per se, but in their ability to identify with the poor and the downtrodden. The numbers of the poor are still very large in the developing world, and the distribution of incomes and assets is still highly skewed. The struggle for resources remains intense.

While there is undoubtedly a narrowing of differences on the role of the state, the political consensus in many countries is being shattered by ethnic and religious strife. In most poor countries there is as important a fundamental divide between modernism and tradition as between the haves and the have-nots. Democracy in many cases allows an outlet for long-suppressed ethnic strife. The outcome of the resulting conflicts in the nascent democracies is far from certain, but it does mean that one precondition assumed for the success of this experiment—political stability—cannot be taken for granted.

Dr. Boeninger's optimistic outlook is revealed in at least two other ways. First, there is an unstated assumption of the existence of an elite that is pursuing its own enlightened self-interest. The paper urges labor leaders to take a positive view of the contribution of entrepreneurs, political leaders to value the contribution of entrepreneurs, and political parties to commit themselves to development. As a checklist for the essential preconditions to a well-functioning democracy this is both useful and fascinating. It can also explain why the outcome is uncertain, because it is a formidable agenda. Where is the hidden hand to undertake this agenda? Dr. Boeninger is right to place a strong faith in university education. In its desire to see a shift in resources to the poor and to primary and secondary education, the Bank tends to understate the value of tertiary education to the success of governance for development. There may well be a strong case for a critical minimum level of effort in university education.

The paper also overstates the role of external funding agencies and conditionality in good governance. Progress must come from within; if it is externally imposed, it may erode the ownership and sustainability of such progress.

I would also ask whether Dr. Boeninger agrees that democracies are better at handling incremental change than major adjustments. And yet, the very process of democracy can sometimes result in a barely perceptible deterioration over time that has a cumulative impact, and requires a significant policy response. It then becomes difficult to establish the political consensus to deal with the resulting crisis, as for example the fiscal deficit in India—or in the United States, for that matter.

The experience of India illustrates the difficulties facing even flourishing democracies. It also illustrates that no clear relationship exists between the form of government and the attributes or dimensions of good government: accountability, predictability, and the rule of law. Accountability exists in the formal sense in India: We have the option to "throw the rascals out," and frequently do. But accountability is eroded by the lack of true choice for voters; the high cost of elections, which makes elected representatives dependent on the corporate sector and is at the heart of much of the corruption in government; the cynicism of the elite; the nexus between criminals and politicians; a vast bureaucracy pursuing its own agenda; and over-centralized political structures that put a distance between the rulers and the ruled.

Similarly, the rule of law is eroded by overloaded courts; litigation over issues that should be resolved by the political process; and the lack of access of the poor to the legal system.

To make democracy perform better requires wise and effective leadership with a clear vision and a strong sense of commitment, a point underscored by Boeninger. Democracies do not automatically throw up such leadership. Nor should one forget the size of the problem that governance constitutes in a country like India. Perhaps the problem is too large for even the most outstanding leadership. And yet for countries like India, democracy is perhaps the only viable form of government.

Let me end by saying that the paper should be essential reading for democrats throughout the developing world. Democracies can only work when you have faith in them. That requires optimism. Chile is clearly in good hands.

Floor Discussion of the Boeninger Paper

A participant from the World Bank began the floor discussion by asking Boeninger what it takes for efficiency to become of value in a governing system, particularly in a bureaucracy. He noted that the system in India, for example, is set up to respond to problems of famine, law and order, and even inflation—but not perhaps to problems of efficiency and growth. The internal value systems of East Asian bureaucracies, on the other hand, are structured with a different agenda. The participant asked if Boeninger, in his long experience in Chile, had seen the implicit value system shift from one set of preoccupations to the other and whether he could associate that shift with any general social and cultural trends.

What is it in the development of societies, he asked, that produces the shift from "patronage politics" to "issue politics"? Clearly something happened in Eastern Europe so that the decentralized form of patronage politics practiced in the communist system was no longer functional. Something created a sense that a more pluralist political system was necessary to unshackle society's productive forces. One senses that in Latin America, too (say, in Argentina), patronage politics are being replaced by more modern politics. The participant's own hypothesis, which he could not verify, was that something about the way political parties aggregate power is associated with some of these developmental trends—so that it is easier to see a transformation in the basis of political parties when per capita income reaches, say, $1,000 or $1,500—perhaps at the level of India or China.

Nelson (discussant) responded briefly to the question about why the East Asian governments placed a premium on efficiency. She said that one obvious consideration in the agenda of the Republic of Korea and Taiwan (China) under totalitarian rule was the overriding imminent external threat. They jolly well had to be efficient, she said, and the influence of that factor should not be underestimated.

As for what produces the shift from patronage to issue politics, Nelson said the question brings up some fascinating theoretical issues for the long run, but that in the short run, certainly in Eastern Europe and probably in much of Sub-Saharan Africa, economic collapse removed the patronage. The systems couldn't provide a flow of patronage that would keep at least the middle and upper-

This session was chaired by Ojetunji Aboyade, Chairman of PAI Associates International, Nigeria.

middle strata happy. The collapse of confidence in the economic systems reflected that breakdown.

Nelson also said that good governance requires a strong civil society, including strong nongovernment institutions that can articulate discontent and provide mechanisms for access to government. She agreed with the remarks about the problems of democracy, and noted that if the only access to government is through political parties, there is a tendency toward populism, when what is desperately needed is a forum for debating issues that don't involve power, but rather what people want.

Lateef (discussant) added that when World Bank economists talk about an enabling environment for the private sector, they tend to mean industry and trade. There should also be an enabling environment for nongovernment organizations and other agencies—but that environment is often fairly restrictive.

One participant criticized Boeninger's paper for focusing largely on economic change and development, when governance also has to manage political and social change.

Another participant expressed concern that technocratic prescriptions for growth and economic reform ignore issues of equity. In Southeast Asia, she said, macroeconomic stabilization was followed by real sector reform until the economy was hit by problems involving distribution—the old tradeoff between growth and equity. Is there a sequence in which you can think of economic reform and development policies at the same time as equity policies, she asked, so that the process doesn't just stop? In Southeast Asia, inequities are being blamed on deregulation. There is little understanding of this tradeoff.

A participant asked if the group could hear from the chair, Ojetunji Aboyade, who had been involved in arranging for the Nigerian military to hand power back to the civilian authorities in a democratic system. Aboyade made several points. He agreed on the need for more case studies of good governance and good government. He also drew a link between governance and resource utilization—issues of public finance. Good governance, he said, has been defined as a combination of good economics and good politics. And grass-roots institutions should form the building blocks for effective governance. We don't just deregulate and go home. Effective deregulation may mean more regulation—but in different directions, perhaps using different (certainly monetary) instruments.

Boeninger agreed that more regulation was needed under deregulation, and said that a reduced role for the state did not mean a less significant role. In answer to a query about the future of nation-states as independent actors, Aboyade replied that in fact they are very limited in their power to act independently.

In his concluding remarks, Boeninger took up the hot potato of optimism or pessimism about the democratizing of the reforming economies, saying that the difficulty lies in the mere scope of the subject. He had mentioned that some countries include in development the concepts of equity, social justice, and human rights. But trying to examine how good government can promote development by taking account of all possible alternatives would be too complex. Boeninger had the feeling that, considering what is happening today, the countries whose cultures are most alien to Western pluralism are under such heavy cultural and material pressure that they will change faster than one might believe.

How would Boeninger bring about this change? In countries that have no substantial elites with a nationwide legitimacy or constituency, whom do you bet on? The developed world would probably try to strengthen the groups or institutions that appear to favor Western modernization, he said. This could be a lengthy process. Lateef had discussed his own country's deficiencies and yet he acknowledged that "for us there is no option but democracy—for political, social, and economic progress."

Boeninger agreed with most of the comments by Nelson (discussant), particularly that the relative disappearance of the capitalism-socialism dynamic lessened the degree, or narrowed the parameters, of conflict in the world. This is not the end of conflict or ideology, he said, but extreme polarization is less likely and agreement is easier—which gives countries a way to build consensus. This is the case in Chile, he said, which certainly does not live in an idyllic consensual state. It still has day-to-day conflicts, but the conflicts are of a different sort.

In response to the question about what comes first, Boeninger said there is undoubtedly a need for simultaneous change. But perhaps you go further in economic reform at one stage and later you catch up with political reform, or vice versa.

Boeninger concurred with Kaldor's statement about developing civil society. The organizations of civil society produce the roots on which you can build the rest, he said. Without those roots, there is no way you can have pluralism, democracy, or even a market economy. He doubted that a top-down process could impose profound, socially acceptable change. Socially accepted change always involves prior cultural change, which requires the parallel growth and strength of civil society.

As to the earlier question about valuing efficiency and the change from patronage to issue politics, Boeninger admitted that there was no easy answer. It is a question obviously of culture, of historical context, and of organization, he said. And there are different levels and kinds of patronage. In Chile, for example, a more modern method of patronage operates: interest groups ask the Finance Ministry for budget support. State subsidies for the business community in the form of protection are another example.

It is a cumulative process, Boeninger said. You take some steps and a certain change takes place in people's attitudes. New values develop slowly but surely with the recognition that private enterprise does contribute to the development of the economy. That in itself makes people think, "Well, what is it that makes enterprises work?" And the whole question of efficiency and competitiveness appears. In Latin America, for example, people see that to grow you have to export, and to export you have to be efficient and competitive. They didn't realize this until thirty years ago.

Governance and the External Factor

Pierre Landell-Mills and Ismaïl Serageldin

The design and functioning of governmental systems is currently much debated. Aid agencies are increasingly preoccupied by how governance influences the effectiveness of aid and promotes economic growth. Nondemocratic governments are coming under increasing pressure to reform. A corollary to this view is a widespread conviction that centrally controlled economies are inefficient and that liberal market policies offer better prospects for rapid growth. This paper provides a framework for analyzing these issues. It attempts to define the core characteristics of good governance that enjoy wide acceptance internationally and examines how such characteristics may be legitimately and effectively fostered in developing countries by external agencies.

Inspired in part by the remarkable success of the Marshall Plan, development economists in the 1950s and 1960s were confident of their ability to bring about sustained improvement in the welfare of poor nations. Many saw progress as almost inevitable. This somewhat naive optimism has given way to a sense of failure and self-doubt. Development is now viewed as an uncertain process and, by inference, highly correlated with the quality of governance (North 1990). A renewed attempt is being made to link the roles played by political science, institutional economics, and neoclassical economics to create a coherent theory of development management (Eggertsson 1990).

While by no means a new topic in the literature on economic development (see Myrdal 1968), the growing focus on issues of governance has been given new impetus by the collapse of the totalitarian states in Eastern Europe, by China's prodemocracy movement, and by the popular call for multiparty democracy in Africa and Latin America.

Public debate has centered on five underlying themes: the perceived success of market economies in contrast to the failure of central planning; the abuses of authoritarian regimes; the inefficiencies of state enterprises and public agencies; the widespread corruption that is siphoning away domestic and foreign aid resources; and a resurgence of ethnic conflicts. These issues have greatly complicated the task of nation building and can no longer be suppressed.

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Moreover, increased attention is being given to issues of human rights and democracy in the context of a new world order. The growing awareness that better governance is crucial for effective development has sparked a debate about making aid conditional on improvements in governance.

This paper examines the role of external agencies in promoting good governance and attempts to clarify the basis for their intervention in such a politically sensitive area. The paper is intended as a contribution to the debate on the efficacy and modalities of different external interventions; there is no *a priori* presumption that such interventions are either desirable or effective.

I. The Meaning of Governance

"Governance" is not a word that has been used extensively in the past by political scientists, and its recent appearance in popular usage has not been very rigorous. It has become in many ways both all-embracing and vague. According to the Oxford Dictionary, governance means "the act or manner of governing, of exercising control or authority over the actions of subjects; a system of regulations." In essence, therefore, governance may be taken as denoting how people are ruled, and how the affairs of a state are administered and regulated. It refers to a nation's system of politics and how this functions in relation to public administration and law. Thus the concept of governance includes a political dimension.

The World Bank (1989) report that raised the issue in the context of Sub-Saharan Africa defined governance as the "exercise of political power to manage a nation's affairs." This is the interpretation used here. It encompasses the state's institutional and structural arrangements, decisionmaking processes, and implementation capacity, and the relationship between government officials and the public. It implies that public authorities play an indispensable and potentially creative role in establishing the economic environment and in determining the distribution of assets and benefits. Conversely, it also implies the possibility that the government may be "captured" by a self-seeking elite intent on plundering the nation's wealth. From time immemorial, societies have struggled to establish governments that promote the public interest, only to find that public resources have been diverted to private benefit and that power is being retained by violent and arbitrary means. (See, for example, Huntington 1968; Hyden 1983; Chabal 1986.)

In most societies, social and ethnic divisions—and the tensions they generate—may make compromise inevitable. Consequently not all the conditions for good governance can be achieved even by a competent and well-intentioned government. The sheer lack of capacity also limits the ability of public authorities to fulfill their responsibilities. But too often problems are deliberately exaggerated to mask the rapacious and exploitative actions of the ruling elite and its supporters.

There is also the more profound issue of the precise relationship between the different components of governance and development, and beyond that the question of what is meant by "development." Thus while it can be argued that freedom of expression, institutional pluralism, transparency, accountability, and the like (all seen as key ingredients in the process of democracy) are important aspects of good governance, there is no convincing evidence that multiparty democracy, which is being urged on developing countries by some donors, is necessary for social and economic development (Huntington and Nelson 1976). The performance of the Republic of Korea, Taiwan (China), and Singapore in the 1960s and 1970s and Chile in the 1980s stands out not only in terms of economic growth but also as regards social indicators and poverty reduction. In these economies, spending on education and health was higher and the poor benefited to an increasing degree at the expense of the rich (World Bank 1990).

There are, of course, numerous examples of economies ruined by dictators, but there are also inept or corrupt democratic regimes. Examples can be found, too, of well-run democracies, such as Botswana, Malaysia, and Mauritius. The best that can be said is that the evidence is mixed. Benevolent dictators are rare, but on the other hand democracies have an unfortunate tendency to degenerate into a crude populism that is equally inimical to good governance and sustainable development.

Economic and social progress is not the only objective of development. Freedom from fear and arbitrary arrest, free speech, free association, and the right to run for and hold political office can all be viewed as important elements in living a fuller and more meaningful life (Sen 1989, 1990). It is therefore arguable that actions in these areas can and should be subsumed under a broadened heading of development well-being. (For a discussion of this issue see Sen 1979, ch. 9, and Sen 1984, parts 4 and 5.) Indeed, despite the economic success achieved by Chile's military regime in the 1980s, the regime was voted out of office in the first open elections because of its systematic transgressions against human rights. The Chilean people have thereby unambiguously indicated their "utility function" and their perception of well-being.

Although in general terms the notions of freedom, transparency, participation, and accountability are key ingredients for good governance, in practice country situations are never identical. Moreover, significant improvements in some areas may be accompanied by failures in others. The "acceptable" level of deviance from an ideal remains a subjective matter (Spirer 1989; Grosenick 1984). Conceptually, it is almost impossible to reduce the complex social, cultural,[1] political, legal, economic and other interactions that make up a modern society to a single measure of good governance—or even to a number of such indicators. The interpretation of the selected indicator poses problems too, except when measured linearly against itself (that is, whether the country is improving or deteriorating) and only by that particular yardstick.

1. The cultural dimensions of development have received recent attention from Serageldin (1990) and Etounga-Manguelle (1991).

Individual country circumstances make judgmental approaches inescapable. Is a government repressing its citizens by the use of force, or is it defending itself against destabilization efforts launched abroad? In practically every instance, there is a little of both, and judgments as to the legitimacy of the government, its representativeness, the adequacy of its policies, and the appropriateness of its actions are all inescapable.

A further complication is that governments frequently perform well in terms of one set of indicators and badly in others (the Chilean experience noted earlier is an example). And since there is limited ability, at least at present, to bring together the various elements of this complex social, cultural, political, legal, and economic reality, moving from this confused conceptual situation to an operational one is fraught with difficulty. The United Nations Development Programme (1991) report on human development represents an important first step in resolving these issues.

The Characteristics of Good Governance

Given the conceptual complexity noted above, the only viable approach to guide intervention by external actors is to identify and foster those aspects of governance that are least controversial. Thus, while there are many different views about what constitutes good governance, some important aspects of which are culturally determined, the central thesis of this paper is that we can agree on a minimum core of characteristics. In large measure these derive from, or are related to, the Universal Declaration of Human Rights, adopted by the United Nations in 1948. This declaration has been signed by the vast majority of countries and thus may be taken as representing the moral consensus of the international community of nations. These fundamentals include the following:

- The political rulers and government officials are both held accountable to the ruled for their actions through clearly formulated and transparent processes, and more particularly that the legitimacy of a government is regularly established through some well-defined open process of public choice such as election, referendum, and so on. (Article 21).
- The safety and security of citizens is assured (Articles 3, 5) and the rule of law prevails, such that contracts can be fairly enforced both among private operators (individuals or enterprises) and between a private operator and the state. Moreover, citizens should be legally protected from arbitrary or capricious actions by public authorities (Articles 7, 8, 9, 10, 11, 28).
- Public agencies are responsive to the needs of the public, and social and economic development is promoted for the benefit of all citizens in an equitable manner (Articles 22, 23, 24, 25).
- The ready availability of information that will permit accountability to be practiced, laws to be correctly applied, markets to function, and people to be creative and innovative (Article 19).
- Freedom of association and expression of opinion (Articles 19, 20).

These general principles were subsequently articulated in two covenants ratified by the United Nations General Assembly.[2] Their relevance to international institutions as well as to governments has since been the subject of scholarly study (see Shihata 1991).

In applying these principles, it is important to note that governance consists of two distinct but intimately intertwined dimensions: one is political (and relates to the commitment to good governance), and the other is technical (and relates to issues of efficiency and public management). Both must be addressed. Without political commitment little can be achieved, even with an efficient public administration. And without an efficient public administration, no government can be effective, however benevolent. Thus the performance of government depends on the role assigned to the state, the competence of public agencies, and the extent to which there is an enabling environment that facilitates and encourages growth-promoting activities by private citizens and honest behavior by public officials (Killick 1990).

The trend toward disengaging the state from productive activities, while emphasizing the state's role in providing social and infrastructure services, will have a major impact on issues of governance. A distinct through related trend is the parallel move toward decentralization and the empowerment of local communities (Bates 1988). In what follows we discuss how accountability can be built into these processes, but neither empowerment nor accountability will assure better governance unless public agencies are made more competent. This brings to the fore issues of technical management and skill acquisition. It also highlights the need for institution-building in the broadest sense. A competent and accountable government dedicated to liberal economic policies will not alone ensure development unless public agencies simultaneously invest in infrastructure and human resource development (World Bank 1989). When this is done, most elements are present to create an enabling environment where private operators can flourish. This then is the challenge of good governance.

II. Sovereignty and Interdependence

Because the present international order is based on the concept of sovereignty, it can be argued that the quality of a nation's governance is not a legitimate concern of foreigners. This proposition merits careful examination, particularly because the quality of governance is usually raised by industrial countries in relation to developing countries. Yet accountability and bureaucratic failure must be central concerns for external agencies.

The concept of sovereignty underlies all aspects of the international order. It implies reciprocal noninterference in internal affairs and respect for territorial integ-

2. The International Covenant on Economic, Social, and Cultural Rights (General Assembly Resolution 2200 A [XI] of 16 December 1966) entered into force on 3 January 1976. The International Covenant on Civil and Political Rights, adopted and opened for signature, ratification, and accession by General Assembly Resolution 2200 A (XI) of 16 December 1966, entered into force on 23 March 1976. (Cited in Shihata 1991).

rity and internationally recognized borders. The corollary of sovereignty is the recognition abroad of governments that exercise what Webster's dictionary defines as the "supreme power over a body politic" and a "controlling influence" over the affairs of society with "freedom from external control." In a word, autonomy.

All undertakings that commit societies, economically, militarily, politically and even on issues such as cultural exchanges and human rights, are entered into by national governments, not by some undefined society at large. While idealists may posit a more perfect world based on a stronger international order, we must accept as our starting point the reality of a world made up of sovereign states.

The principal justification for building a world order of sovereign states is found in the recognition of the differences between societies, and a belief in the inalienable right of self-determination. This sentiment was the basis of decolonization, independence, and accession to full membership in the community of nations. It also raises issues about the rights of minorities to secede from existing states, questions that are clearly beyond the scope of this paper.

More pertinent is the fact that sovereignty is subjected to some internationally recognized constraints, enshrined in international conventions (such as the Universal Declaration of Human Rights and the Vienna Convention). There are also questions about the legitimacy or representativeness of existing governments that leads to issues of *de facto* and *de jure* recognition of governments, usually as a result of a change of authority. In one case, the Republic of South Africa, the legitimacy of the government was impugned by the U.N. General Assembly because of its systemic (not just systematic) violation of human rights. There is, however, no question about South Africa's sovereignty *per se*. Diplomatic and economic sanctions were debated and adopted within the existing international framework.

In this case we see the legitimation of collective action for dealing with individual situations and establishing a process for conflict resolution. States are bound together in an international community by a web of international, multilateral, and bilateral agreements that create mutually binding obligations within an established system of international law. We live in an increasingly interdependent world, in which each state must take into account the effect of its actions on others.

Developing countries are particularly vulnerable to events in the rest of the world and have come to depend heavily on the international community for financial and technical assistance. Donor agencies—and the public—are increasingly aware that whether or not assistance is used to promote development depends on the quality of governance in the recipient country. Consequently they are concerned to promote conditions conducive to good governance and have become more proactive in this regard—although in a positive rather than a punitive way.[3]

3. On this point see the record of December 3–4, 1990 Development Assistance Committee Meeting; French President Mitterrand's speech at La Baule, France, June 20, 1990, and British Minister Douglas Hurd's June 6, 1990, Overseas Development Institute (London) speech.

In this context the role of the international institutions is an expression of the will of the international community. But at the same time—and for this very reason—their mandate is strictly circumscribed and must conform to existing statutes (see Shihata 1990). An acceptable role is defined in terms of several key issues. First, is the role of international institutions to provide support to those governments whose policies and programs the international institutions feel are consistent with their mandates, or do the international institutions have a responsibility to take an activist role in getting governments to adopt such policies and programs? Second, if the international bodies are to pursue an activist agenda, what is the content of this agenda, and how does it relate to the statutes governing international institutions? Third, who determines the agenda? In the case of the World Bank, is the agenda determined by the member states? By consensus or simple majority? Would that "politicize" the agenda and poison the working atmosphere at the Bank? Clearly, the role of the international institutions is a function of the sovereignty of the member states and the mandate they have given to the international institutions.

Yet another question is what is the *modus operandi?* Ultimate authority (at least in the international financial institutions) rests with the representatives of the government. Staff members can only make proposals; the governing body and the government representatives must approve them—not nongovernmental organizations (NGOs), not the opposition, not the intellectuals, but the officially designated representatives of the government.

While the ultimate beneficiaries may be "the people" or "the poor," given that international institutions are constructed as associations of member states, the channel of communication remains the government concerned. This does not imply that international institutions do not have the right to contact others in the country. The World Bank, for example, is obliged to form an independent judgment in deciding on an investment, and this calls for contacts with persons other than govenrment officials and for field visits as well. Thus while this requirement gives the Bank some leeway to avoid excessive restrictions by governments of member states, it does not fundamentally affect the role of government or the sovereignty of its member states.

Because poor countries generally have fragile polities and weak systems of accountability, with few autonomous institutions and little power to offset that exercised by the central government, external agencies are potentially key political players, capable of exerting considerable influence. This brings out an important point: In raising the issue of governance, the external agency is calling into question the government's performance. This intervention goes further than a critique of a particular program or project—which is generally regarded as a legitimate concern—and touches on the ability of a regime to govern effectively in the interest of its citizenry.

Beyond these considerations there is the fundamental issue of the link between the government and the governed, between the state and society. This issue is both culturally and politically sensitive. Few development questions are merely technical; typically they involve political judgments that are inherently hostage to cultural and social particularities. Moreover, there are no accepted means of arbitration between competing views. This is an issue on which the government is likely to be defensive; the intrusion of external judgments may well be counterproductive.

Thus actions by the development community, if they are to be effective, must convince as well as assist countries to improve their governance without intruding on their sovereignty. If the partnership between external agencies and beneficiaries is to be successful, a frank recognition of interdependence is essential.

While the government of a sovereign state has every right to resist the initiatives of donors, bilateral agencies representing sovereign states have an equal right to condition their assistance on measurable progress to improve the quality of governance. There is a growing appreciation among donors that improved governance is central to achieving development goals and that external aid will never yield lasting benefits unless concrete steps are taken to tackle the systematic causes of poor governance. But the right—and the willingness—to be proactive does not in itself ensure effectiveness. Modes of intervention that seem both justifiable and promising need to be explored.

One other issue must be addressed: How can donor agencies be held accountable by the international community for actions that will affect the welfare of millions of people? It can be argued that there are already established mechanisms for the control and supervision of the international institutions through their governing bodies. However, there is no comparable constraint on the activities of bilateral agencies, which are subject to considerable pressure from their own interest groups. To some extent accountability could be achieved through the reinforcement of Consultative Group processes in which donors explain their actions as an integral part of the policy proposal. In addition, the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD) encourages self-regulation and has done much to improve donor practices. Although peer pressure does, to some extent, constrain the blatant exercise of national self-interest by donors, it is a weak mechanism that needs enhancing. This topic merits further study.

Fostering Good Governance

It may be concluded that good governance depends on the extent to which a government is perceived and accepted as legitimate, committed to improving the public welfare and responsive to the needs of its citizens, competent to assure law and order and deliver public services, able to create an enabling policy environment for productive activities, and equitable in its conduct. In discussing the ways in which external agencies address these facets of governance, it is important to bear in mind the distinction between the political and technical dimensions noted earlier and the need to address the operational capacity of government at the central, regional, and community levels. These correspond roughly to the macro, meso, and micro levels in economic analysis.

Given the risk of ethnocentric and cultural bias, external agencies need to be very cautious in proposing specific solutions or advocating particular arrangements. Through dialogue and analysis, options can be examined, but ultimately it is the responsibility of the state to determine its home-grown solutions. For their part, external agencies have a right (within the legal limits of their statutes) to judge whether the solutions proposed appear credible, to assist and to monitor their implementation, and to modulate their financial assistance accordingly.

Not all facets of good governance are conceptually independent nor invariably complementary. Conflicts may arise, at least in the short run. Open, participatory processes may make governance less predictable and less efficient. Nonetheless, over the long term, homegrown solutions are likely to be more realistic in practice, because processes imposed on beneficiaries are generally less sustainable than those developed through a participatory process.

In practical terms, how can the development community encourage countries to perform better according to the criteria of good governance? For these conditions to be fostered, it is a necessary—though not sufficient—priority to have credible arrangements for political and bureaucratic accountability (Lonsdale 1986), freedom of association, an objective and efficient judiciary, freedom of information and expression, and efficient public institutions.

Political accountability. Ostensibly, governments exercise power for the purpose of promoting the well-being of the populace. In practice, there is a constant danger that political leaders and government bureaucracies will manipulate the power of the state for their own benefit unless constrained (Bayart 1989). The purpose of an electoral process is to ensure political accountability by stipulating limited terms of office. This does not necessarily mean a multiparty system. Nor does a system of democratic elections necessarily lead to good governance. But there is a wide consensus that some system of popular choice is essential to legitimize a government, make it responsive to popular demands, and create an environment in which public agencies devote themselves to development rather than to suppressing popular discontent.

External agencies can assist, and indeed are assisting, in this effort. First, there is room for conflict resolution, such as that attempted by the Carter Center (in Ethiopia and Sudan) and encouraged (as yet rather ineffectually) by various regional organizations (for example, the Organization of African Unity and the Organization of American States) and by the United Nations. Second, assistance can be given in organizing and monitoring elections, as was done recently in Eastern Europe, Namibia, Zambia, and Nicaragua. An example of group decisionmaking occurred in early 1990, when donors withheld financial support from Benin because the government had lost popular support to the point where it could not govern effectively.

While there should be no question of imposing a particular democratic system on any country, it would seem reasonable for the international community to withhold assistance from a government that cannot demonstrate that it enjoys some minimal level of popular support or that does not require those holding the highest political offices to submit themselves periodically to some transparent process of popular choice. The willingness of some donors to continue to deal with regimes that lacked popular support (such as that of Bokassa in the Central African Empire or Amin in Uganda) was largely ineffective in promoting development and arguably may have delayed rather than promoted good governance.

These matters are inevitably judgmental. To move more effectively toward a policy of aid sanctions will require a cautious, consensual approach that develops an internationally agreed-upon framework for collective action and that involves the key OECD bilateral agencies as well as the developing countries.

Freedom of association and participation. Closely allied to the above concern is the question of whether citizens enjoy the freedom to organize according to specific interests. Institutional pluralism can be seen as an important mechanism for diluting and disseminating exclusive central political power (Aké 1990; Hyden 1990; Korten 1990). But it is not always conducive to stability. As demonstrated recently in Africa and Eastern Europe, where people have shown a strong tendency to organize along ethnic lines, pluralism can be socially and economically disruptive. This is not a reason to oppose freedom of association, but it involves certain risks that may call for special counter measures.

At the national level, freedom of association means the freedom to establish religious groups, professional associations, women's groups, and other private voluntary organizations to pursue political, social, or economic objectives. Donors can provide valuable financial and technical assistance to empower groups that are otherwise marginalized within the existing political and economic system. Surprisingly little has been done in this sphere, not so much because of official opposition as simply because this aspect of institution building has not attracted significant donor attention.

The situation is different at the local level. Considerable assistance has been provided by donors to grassroots community organizations and cooperatives that directly address the needs of the poor (often channeled through NGOs). The success of such initiatives is evident from the political impact that local NGOs have in a number of developing countries. The risks, openly acknowledged, are that the leadership of NGOs and community associations may be captured by local elites that are not responsive to the needs and interests of ordinary members (see Nelson 1989). The involvement of foreign NGOs may mitigate these risks, but ultimately systems of accountability must be built into the institutional design of each organization. For instance, cooperatives in the Cameroon are self-policed through cooperative unions (World Bank 1989).

This leads to the broader role of external agencies in promoting the active participation of the ultimate beneficiaries of development programs in both the design and the implementation of projects. (See, for example, Salmen 1990 and Korten and Klaus 1984, pp. 176–88.) There is now a wide consensus in the development community on the desirability of such participation, and few governments would openly oppose the concept. Nonetheless, even regimes that are not notably repressive frequently regard such grass-roots "democratic" initiatives as potentially threatening. This makes it important for external agencies to seek effective and genuine participatory arrangements, while giving due attention to the possibilities of local abuses. And by deliberately supporting the development of plural institutional structures, external agencies can help to create an environment that will tend to constrain the abuse of political power.

A sound judicial system. There are few aspects of governance on which consensus is more firmly established within the development community than the need for an objective, efficient, and reliable judicial system. In achieving this goal, the emphasis has been on creating a strong and independent legal profession, capable of defining and imposing professional and ethical standards. This suggests that it is essential to institute a process for the selection of judges based on professional criteria and to guarantee a specified period of tenure. An essential concomitant is the creation of honest law enforcement agencies that effectively carry out court decisions and a court administration that ensures that cases are dealt with expeditiously and at reasonable cost to the plaintiff.

Public acceptance of a legal system is in part a function of a perception about fairness not only in the administration of established laws but also of the laws themselves. Who enacts the laws and whom do they benefit? Achieving the rule of law is inseparable in a fundamental sense from the issue of political legitimacy (Kuitenbrouwer 1986).

Typically, development aid agencies have been reluctant to assist in strengthening judicial systems, because the link to development is seen (incorrectly) as indirect. The involvement in law enforcement is seen to risk association with inequitable or unjust law enforcement. While very real, these risks can be exaggerated. The urgent need for solid legal training and technical assistance in improving court administration poses no risks. Nor does assistance in publishing and disseminating a country's body of laws. Often no up-to-date, comprehensive record is available to the general public, and the official government gazette may be published irregularly. These are simple matters that are nonetheless a prerequisite for the efficient administration of justice.

Ignorance of the laws, unpredictable legal administration, delays in handling court cases, and a failure to enforce court decisions all tend to increase business costs, discourage private investment, and obstruct development. And most seriously, they imply considerable injustice and inequity. Moreover, there can be no legal accountability (a prerequisite for effective political and bureaucratic accountability) without a sound judicial system (Paul 1990).

Inefficiencies in the judicial system can be systematically tackled by a committed government, and improvements can easily be monitored. Governments unwilling to address these problems may be viewed as lacking commitment to good governance and hence may be justifiably penalized by external agencies whose financial assistance is being sought.

Bureaucratic accountability. To be fully effective, measures to achieve political and legal accountability need to be accompanied by arrangements to make bureaucracies accountable. The performance of public agencies and officials requires monitoring, and an effective system must be put in place to correct bureaucratic abuses and inefficiencies. The issue is how to design arrangements that are not subject to political interference or manipulation by the officials whose behavior is being controlled. This is in part a technical question, but equally a political, social, and cultural matter. The political commitment to establish honest and effective systems of bureaucratic accountability can only be achieved through an effective system of political accountability and a sound judicial system. Without strong political commitment, an effective system of bureaucratic accountability cannot be achieved. And even with it, success is not an easy technical matter because much depends on the social and cultural environment that underlies the behavior of bureaucrats. Nonetheless, considerable experience suggests that bureaucratic systems must incorporate an incentive system that is compatible with local social values. Japan provides a model; it has adopted Western technology, yet has successfully kept its institutions Japanese in spirit.

A critical dimension of accountability is transparency, which implies making readily available for public scrutiny all public accounts and audit reports (including those of all parastatal organizations), a practice that most governments strongly resist for obvious reasons. There can be little justification for secrecy, and any exceptions need to be carefully circumscribed. Even secrecy about military expenditure is hard to justify and is almost always a cover for abuse. This is not a question of sovereignty, but simply a matter of good governance. Every citizen, as well as every donor, can and should insist on it.

At the core of bureaucratic (and political) accountability is the need for rigorous systems of financial management and procurement, with swift and tough penalties for malfeasance. Sound methods of accounting and auditing, and of customs duty and other revenue collection, are readily available, and there can be no excuse for laxity. The same is true for procurement. External aid agencies have been extraordinarily tolerant of financial abuse and indeed have at times indirectly shown complicity in corrupt practices by responding to improper pressures from their own suppliers. The practice of export credit agencies financing "commissions" paid to individuals for securing a contract is but one example (Pean 1988).

There is a considerable technical literature on other aspects of accountability. Much of it has focused on monitoring inputs rather than outputs, although the latter is equally important. As Paul (1990) has recently stressed, there are in essence two ways to promote accountability in the production of goods and services: exit and voice. Where the supposed beneficiaries have a choice, as is the case with competitive markets, expenditure switching (exit) effectively disciplines the suppliers. In the case of public goods and monopolies, however, the only way for beneficiaries to protect their interests is by making their voice heard—ultimately through elections, but on a day-to-day basis through special interest organizations, such as parent associations and trade unions. As noted, donors can play an invaluable role directly or through local NGOs in building mechanisms that give beneficiaries an effective voice in the delivery of public services. Here again vigilance is needed to discourage powerful interests from capturing these mechanisms for their own benefit.

Fostering markets and helping to create quasi-market mechanisms is also useful. Contracting out the provision of such services as refuse collection or road maintenance through competitive bidding procedures fosters accountability, and donors can help arrange for this. Other instruments that can be considered include the appointment of an ombudsman, watchdog committees, public hearings, and public opinion polls. Loosening controls and simplifying the regulatory framework, if it facilitates competition, will also increase opportunities for exit. Less regulation, however, may increase monopolistic abuse, and much care must be taken in designing arrangements to fit specific circumstances. Neverthless, there is a happy coincidence in that depending more on markets and less on administered systems is likely both to improve economic efficiency and to reduce the opportunities for rent seeking.

Freedom of information and expression. The free flow of information is crucial for accountability. Efficient markets depend on good information—as does the exercise of "voice." The need for the free dissemination of information goes well beyond facilitating accountability. Vital data on national accounts, trade, balance of payments, employment, cost of living, and household expenditure are frequently withheld from the public. Yet such information is essential to permit public debate about the performance of a government and its public agencies. Informed policy discussions lie at the heart of a healthy political process. And good social and economic data are important for efficient management of the economy; without them businesses find it hard to plan.

External agencies can assist in the collection and dissemination of economic and social data and other information needed for informed public debate, but up to now their efforts have been remarkably slight. Building a national capacity for data collection and dissemination and encouraging public debate by financing seminars and public information programs are complementary efforts. It is not enough for the information to be available; analysis and research are also needed, and this exercise should not be a monopoly of the state. Donors can contribute by funding independent research organizations and by supporting the autonomy of universities.[4]

Capacity building. Good governance requires competent public agencies. Aid agencies have been active in this area for many years, but the results have been negligible, in part because of the lack of political commitment, and in part

4. The African Economic Research Consortium, sponsored by the Rockefeller Foundation, the Swedish International Development Agency (SIDA), and several other bilateral donors, is a good example of donor-sponsored research.

because the interventions have been poorly designed. This is not the place for a detailed review of public management reform, but it is clear that much more imagination and determination will be needed. Two aspects merit attention: first, capacity building is a long-term venture and external agencies need to create approaches that will enable sustained, long-term support programs to be adopted. Second, external agencies cannot be fully effective unless they collaborate with the governments involved. An acceptable role is to help governments define clearly a single comprehensive program of administrative reform and capacity building supported by the bureaucracy and the citizens.

The Differing Roles of External Agencies

External actors, depending on their varying missions and mandates, have a distinct role in fostering better governance. External agencies generally can more easily address the technical aspects of governance, for example, but by no means exclusively. Thus it is important to discuss the possible contributions of different categories of external agencies. Most of what is set out below has already been tried, but in most instances rather half-heartedly. Only by pursuing these opportunities more energetically will progress be made.

International and multilateral institutions. Because the statutes of international and multilateral institutions (with the exception of the new European Bank for Reconstruction and Development) expressly rule out political considerations, actions must focus on the technical aspects of governance. Thus the World Bank and the U.N. agencies have worked to strengthen public administration (including the judiciary), to reform public sector enterprises, and to build institutional capacity. This is entirely the right focus, although much more could be done to improve effectiveness and sustainability. In addition, there has been increasing effort to promote institutional pluralism by fostering local government, NGOs, and grassroots organizations (see Salmen 1990), with the objective of mobilizing local human and financial resources to provide community services. There is no reason why this support for institutional development cannot also be extended to a whole range of NGOs, including professional associations and chambers of industry and commerce. Institutional organizations are already a major (and sometimes the only authoritative) source of basic social and economic data. This invaluable service could be expanded.

Bilateral agencies. Although international agencies have a particularly strong role to play in the areas noted above, bilateral agencies can also contribute significantly in similar ways. In addition, bilateral agencies can use their influence to promote political accountability and respect for human rights, particularly by encouraging the rule of law. Helping to organize fair elections by furnishing resources and observers is another possibility. Support for particular political parties, however, clearly calls into question the motives of the donor.

Important opportunities exist for bilateral donors to promote honest government by channeling funds in ways that reduce the chances of corruption. These include untying aid, insisting on open competitive procurement procedures, and outlawing bribes or payments of "commissions" by suppliers. The United States has taken the lead here, but other OECD countries have so far been reluctant to follow.

Nongovernmental organizations. Industrial-country NGOs can promote better governance in two ways. First, they can support their counterparts in developing countries. Such interventions by small agencies can be more effective at the community level, where they are less constrained by their relationship with central government authorities. This distance gives them more credibility with the groups they are assisting. Second, they can address human rights abuses in a manner that is seen to be completely apolitical. Amnesty International's strong reputation for professionalism and objectivity has been rewarded with considerable moral authority in international affairs. It is not unimaginable that a comparable institution—perhaps called Integrity International—could be established to expose major corruption. Such an organization would need to be evenhanded in its treatment of industrial and developing countries and would address the practices of both public officials and transnational corporations.

NGOs can also play an active role in conflict resolution, as discussed earlier, as well as engage in various other humanitarian actions to relieve suffering and reestablish civil order in war-torn zones. Another role is to set up twinning arrangements or networks between groups with common concerns, for example, professional associations, trade unions, chambers of commerce and industry, and other special interest groups.

Conditionality. The issue of conditionality is often raised, on the one hand by representatives of some external agencies that believe an element of coercion is needed to counterbalance the private agendas of the ruling elites, and on the other hand by developing country officials and many others who view coercion as either counterproductive or an unacceptable infringement of sovereignty. As a general principle, institutional reforms are not likely to be sustained unless underpinned by a genuine political commitment. Thus it is evident that a collaborative approach is likely to be more effective than coercion in the long run. However, setting a timetable for specific actions (that are considered crucial for achieving program objectives) linked to the release of external funds has been found useful in the context of structural adjustment lending. But conditionality should be regarded as a judgmental matter depending on the circumstances and the actions being sought.

Conclusion

While the world order remains strongly anchored to the principle of the sovereignty of nations, external agencies can contribute significantly to fostering good governance in countries seeking their assistance. Let us reemphasize that we are talking about governance and not a specific form of government. Without better governance, aid resources are likely to be largely wasted. While concerted action among agencies would achieve the desired results sooner, not all agencies have the same role. Bilateral agencies can press for political accountability, and nongovernmental and some international agencies can address issues of human rights abuse and conflict resolution. The international financial institutions have a mandate to promote only the narrowly defined development aspects of governance. But all agencies can insist on more effective systems of bureaucratic accountability and can provide more targeted assistance programs aimed at strengthening the capacity of public and private institutions. A pluralist institutional structure, better information flows, the rule of law, and a more participatory development process are likely to result in more political accountability.

At one extreme, donors will confront governments committed to improving their effectiveness. At the other extreme, entrenched elites will resist reform. The majority will be somewhere in-between. The goal is not to attain some theoretical ideal but to further painstaking and systematic improvements. To this end it would be useful to set benchmarks for each country with respect to each of the components of governance discussed above against which progress could be measured.

The effectiveness of these interventions will reflect their sensitivity to local conditions and the degree of popular participation. Although close coordination among agencies is a prerequisite for a concerted and coherent approach, success is likely to depend less on coercion and more on persuasion, and on progressively changing the internal power structure through education, income growth, and pluralist institutional development.

Good governance is a fragile plant that will need sustained nourishing. It will require a fundamental change in mentality and social expectations that will change only gradually. But the pace of change is likely to be strongly influenced by economic circumstances. Economic crises can precipitate radical political changes and lead to a rapid change in the perception of what is and what is not possible. We are living in such a period.

The possibilities for action by external agencies do not mean that more research into the conceptual and cultural issues related to governance would not be fruitful. Some efforts are already under way, for instance, the governance program at Emory University and the United Nations Development Programme's (1991) follow-up to the first Human Development Report. In the context of such thinking, the complex matters raised in this paper—the relationship between the state and society, and the link between governance and effective development—should be the subject of further inquiry. Thus more thorough and complete analysis by scholars, combined with pragmatic and collaborative operational initiatives by donor agencies and recipient governments, should make it possible to achieve significant improvements in governance.

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COMMENT ON "GOVERNANCE AND THE EXTERNAL FACTOR," BY LANDELL-MILLS AND SERAGELDIN, AND "THE CULTURAL DIMENSIONS OF GOVERNANCE," BY MARTIN

Jacques Diouf

My comments concern two points raised by Martin, and by Landell-Mills and Serageldin in their excellent papers on governance. First, the issue of governance is basically political and therefore has an important cultural dimension (although technical management, of course, requires capacity building). Second, while external actors can have only a marginal effect on governance because they are not accountable to the governed, external action can be very useful if it is properly targeted and initiated.

Why is the debate on governance essentially political? To answer this question we need to define the end purposes of governance. In the economic sphere, for instance, which investments will generate growth? How will the results of the economy be shared among the different economic actors in society? Who will bear the cost of the sacrifices needed in the early stages of development?

All of these questions will find an answer in the balance of power within a given society. The motivations of those who act or react individually and collectively to change the economic process reflect that society's value system—the very root of its culture.

Why then was this subject, so far from the rationale of economic models, given such importance in the annual conference on economic development? I could say that political problems are too serious to be left to politicians, but there are more fundamental reasons. As long as the World Bank dealt with project financing and the International Monetary Fund was concerned with temporary balance of payments deficits, the question of governance did not arise. But in coping with the challenge of structural adjustment programs, both institutions face problems at the national level.

What policies affect consumption and investment, the exchange rate and the balance of trade, wages and prices, monetary and fiscal matters, the public and private sectors, the role of the government, and the environment for investment? These questions cannot be dealt with by simply calculating the internal rate of return or the marginal value of specific aggregates. The process of decision-

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making in each country will provide the answers to these questions. But decisions vary depending on the form of government, the conditions under which the government came to power and is using that power, the arrangements for its possible replacement, its interests, and its ethics.

Yet institutions, which by their very nature are not supposed to take political factors into consideration, find themselves in a paradoxical situation. They are convinced that projects or programs, no matter how carefully prepared, cannot produce effective results without a viable institutional framework, and that the most important dimension of this institutional framework is political. Those institutions that do not embody a political dimension have to perform semantic high-wire acts to resolve the dilemma, using the sophistic technique of distinguishing between the whole and its constituent elements. Thus they define governance in general terms: accountability, efficiency, transparency, and so on. But identifying the attributes of a subject effectively defines it. The form of governance that the Bretton Woods institutions are encouraging looks suspiciously like a pluralist democratic system that de Tocqueville would not find distasteful.

These institutions insist that they do not make value judgments about political regimes. They limit themselves strictly to the technical aspects of governance, allowing private enterprise to flourish and fuel growth. Other factors could explain this ambiguous attitude.

In a world that has become a planetary village, the winds of liberty blowing not only in Eastern Europe but all over the world are bound to affect the international community. In this situation, value judgments are made about political regimes based on ideological and even philosophical norms.

For these reasons governance is an eminently political subject in the Platonic sense of "how to govern the city." This leads to the underlying question: What form of government will be most efficient in achieving the goals of development? Experience shows that there is no direct correlation between economic and political achievement in the early stages of growth. But in the long term, Winston Churchill's reminder that democracy is the worst form of government except for all the others rings true.

Governance is exercised in the name of the people who benefit from or support it. Suppose an external agency (using financial tools or Clausewitz-type diplomacy) imposes a policy that fails. If the government is overthrown, none of the advisers in international organizations will be affected. The residents of the country and their families will bear the consequences. Yet international institutions have a professional and moral responsibility to ensure that resources intended for development are indeed used for economic and social development.

How then do the recipient countries perceive the influence of external factors? Their attitude is positive when they can choose from diverse bilateral or multilateral interests to achieve national goals. They are less enthusiastic when they are asked to adopt measures which, though economically justified, are introduced at an inopportune moment, and they are hostile to measures that negatively affect political and social equilibrium or that have not been tried in the particular national or regional context. Overall, their attitude depends on two factors:

- The degree of coherence between the means, strategies, and goals of the country and the international organization.
- The strength of the relationship between them.

It is important to remember that economic considerations are only one aspect of behavior. Other forces interact, particularly social and political constraints, and they must be reckoned with. As long as the Bretton Woods institutions continue to encourage research and substantive interaction with the developing countries on the ways and means for improving the efficiency and effectiveness of government operations, there is hope for better governance for development.

The Cultural Dimensions of Governance

Denis-Constant Martin

Good governance cannot be based on precisely the same foundations in all societies. It must be based on the distinctive local culture and the unique history of "modern" state institutions. A careful study of both factors is a prerequisite to any investigation into the possibilities of making governance more effective. Investigations of cultural and governance questions may be complicated by the "moral pluralism" typical of many developing societies, particularly in Africa. Nonetheless, inquiry into the core ethical values of local cultures may help to relate matters of the state's accountability more closely to the locally predominant idea of "good." This paper suggests five questions relating to the cultural and ethical dimensions of governance that may help in assessing such core values.

The modern state is the product of a protracted evolution that began in Europe at the end of the Middle Ages. The state did not remain confined to Europe, however; over several centuries, it spread beyond the Continent through various processes, including colonization. Consequently, the state has become the only internationally recognized instrument for governing human societies. All contemporary developing countries are organized in states, and the governments of nation–states have become the central source of power.

Recent discussions about the conditions for good government once again raise questions about the structure and functioning of the state, its relationship to society, and its actual and potential role in promoting development. The state does not exist in a vacuum: It operates within an environment in which people share certain beliefs and values, compete for some objectives and associate for others, and differ in their ideas about power and how it should be exercised. The rules with which people comply are set by the central organs of government, but they also devolve from explicit or implicit cultural agreements about what is acceptable and desirable. Thus the state cannot be separated from culture, and governance cannot be considered without reference to its cultural context.

Governance has been defined in different ways. To avoid confusion, note that I am following Landell-Mills and Serageldin (1991, p. 3), who describe governance as "the use of political authority and exercise of control over a society and

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the management of its resources for social and economic development." Landell-Mills and Serageldin observe that "this broad definition encompasses the nature and functioning of the state's institutional and structural arrangements, decisionmaking processes, policy formulation, implementation capacity, information flows, effectiveness of leadership, and the nature of the relationship between rulers and ruled."

Culture also should be defined. I begin with the general definition proposed by Leiris (1969, p. 39): "Culture must be understood as including the whole of a more or less coherent ensemble of ideas, mechanisms, institutions and artifacts that—explicitly or implicitly—guide the behavior of people belonging to a given group."[1]

The "ensemble of ideas" included in cultures essentially constitutes a code through which the ethical orientation of a particular society relates to its institutions and its structure of authority. This ensemble, it should be added, is neither static nor closed. Culture is better understood as a loose and evolving framework that establishes the bases on which groups act and interact in society. It changes in response to the internal dynamics of groups, the external influences on them, and the interplay between these factors (Amselle 1990, pp. 52–55). In other words, the quality of governance derives from values that may vary from one culture in the society to another and from one period to another.

A full exploration of the preconditions for good governance would require comparative research into the specific cultural ethics of societies that is clearly beyond the scope of this paper. Moreover, to suggest that governance has cultural dimensions, as I have defined them, implies that there is no universal conception of governance. Thus it also would be difficult—if not paradoxical—to present a general survey of the cultural dimensions of governance.

Yet this does not mean that general consideration of culture as a factor in development and development strategy is useless. On the contrary, particular cases or development projects involving issues of governance can be seen as embodying certain universal problems: What do people see as "good"—including morally good—for themselves? What are they ready to do to reach these objectives?

This paper considers the problems and processes of universalization and "indigenization" of the modern state. On the one hand, the contradictions between them explain, at least in part, the poor performance of the state and the resistance demonstrated in many regions to social engineering and the implementation of development programs. On the other hand, historical study of the diffusion of the modern state in some non-European settings suggests that because the state has now become a more integral part of local cultures, there

1. "La culture doit donc être conçue comme comprenant, en vérité, tout cet ensemble plus ou moins cohérent d'idées, de mécanismes, d'institutions et d'objets qui orientent—explicitement ou implicitement—la conduite des membres d'un groupe donné."

should be ways and means to mobilize cultural resources to allow for an improvement of governance within the state.

As a prelude to a discussion of these questions, it is necessary to consider the historical processes that led to the universalization of the modern state and to its inculcation in specific settings.

I. The Invention of the Modern State in Non-European Societies

The modern state that coalesced in Europe after the Middle Ages had several distinctive features. First, it manifested a centralization of power and the capacity to exercise authority within a specific territory (clearly separated from other political territories by borders) and over people inhabiting this territory (Badie and Birnbaum 1982). Second, it exhibited the progressive dissociation of political power from religious power and of political interests from family interests (Badie 1986). Third, it was characterized by the emergence of an individualistic ideology stressing the primacy of the relationship of humans with things over the relationship of humans with other humans. Therefore, it signified the autonomy of the individual and the individual's relative freedom from the community (Dumont 1977).

The European modern state was but one historical type of political and social organization, however. Other forms of political organization ranged from the so-called acephalous societies of Africa and Polynesia to the full-fledged monarchical states of Asia, Africa, and pre-Colombian America. Virtually all of these societies have shared with the European model a tendency toward a centralized but limited authority.

In most respects, however, European and non-European societies have been quite divergent. For example, for many non-European societies the notion of borders was alien. Societies developed in "open" spaces and were held together by more or less organized relationships between "chains" of subgroups that were not clearly or permanently separated. The coherence of these societies rested not on territorial demarcations but on family relationships or familial ideologies that united groups. This was notably the case in Africa (Amselle 1990).

Similarly, in most cases, the secular and the sacred remained confused in non-European conceptions of power: to be a legitimate ruler, one had to entertain a special relationship with supernatural entities (Badie and Hermet 1990).

Finally, European and non-European societies have differed markedly in their conceptions of individualism. In Europe, individualism evolved as a central value, from the individualization of salvation epitomized by the Reformation, to political-ideological change that established individual liberty as a natural right, to economic transformations that generalized the holding of private property and defined human labor as the only producer of economic value (Dumont 1977).

The European evolution toward individualism has had no indigenous parallel in other cultures. In Asia and in Africa the individual has never been totally freed from the community. The ideological permanence and power of links between people and communities in many non-European societies cannot be underestimated, and they undoubtedly influence the ethical orientations of those societies (has one member of a community the moral right to behave as an individual? Is it "good" to do so?). The evolution toward individualism (in the classical Western sense) should not be automatically identified with development, however. Japan appears to offer an apt counterexample—a developed society where the autonomy of the individual is extremely circumscribed (Van Wolferen 1990).

If non-European societies did not develop autonomously along European individualist lines, by the nineteenth and twentieth centuries they had adopted the European model of the state. In some cultures the European state model was adopted out of fascination (Turkey) or following pressures from outside (Japan). In many other cases the European model was imposed (for example, in the colonized territories of Africa and Asia).

The development of a modern state apparatus became an almost universal symbol of modernity, yet the grafting of a political organization that was a result of a unique historical evolution onto cultures that had not experienced that evolution was neither simple nor without contradictions. "Europeanization" was not marked by a straightforward transposition of the European state model but instead by a series of adaptations of the model to local cultures. In colonial situations in particular, the contradictions of these adaptations were acute because the cultural and traditional differences were compounded by the discrepancies between the ideal model of the state and the type of state that was implemented in the colonial situation. Thus, in the colonial context, power was often of an absolute authoritarian type, and checks and balances were almost nonexistent; space was arbitrarily closed; European religions seemed to be intertwined with colonial authority; and finally—the influence of the Enlightenment notwithstanding—colonizers refused to consider the "natives" as individuals.

The results of this contradiction-laden transfer of European ideologies and institutions into the colonial context were paradoxical in at least two respects. First, the transfer proceeded without totally erasing preexisting social values and preferred modes of social organization. That is, the experience of colonialism provided a structure, the modern state, amenable to exercising authority on a larger and more systematic scale, but it did not completely replace traditional ideologies or supplant traditional units of social organization. In many non-European societies, for example, the right to preside over the state had to be legitimated by supernatural forces. Similarly, the supreme task of exercising political and economic power was to ensure the security and the prosperity of the ruled; power ought to be redistributive.

Second, brutal though the transfer of institutions was in practice, its principles aroused new aspirations among non-European peoples. Exposure to metropolitan ideologies reinforced indigenous conceptions; it therefore implied that the state had the responsibility to reapportion public wealth. Nationalist movements, inspired by these ideologies, drew on them to oppose the excesses of the colonial state. Nationalist movements, for example, reproduced metropolitan forms of organization (associations, parties, trade unions, cooperatives) to confront colonial powers. Nationalists claimed the right to participate in politics as individuals, not as undifferentiated "natives." They fought, then, not to destroy the state colonization had brought, but to control it themselves, according to an ideology that fused European and non-European values.

Hindu nationalism in the nineteenth and twentieth centuries provides an interesting example of "strategic syncretism" (Jaffrelot 1989). That is, it borrowed its structuring elements from dominant cultures (Islam and English Christianity) in order to transform a loose belief system into an organized religion that then could serve as a platform to launch associations and later genuine political parties.

Many African nationalist movements operated along similar syncretic lines: that is, they used both European and non-European religions, beliefs, and symbols to mobilize people to demand democracy (such movements were prominent in Algeria, Zaïre, and Zimbabwe, and are still common in South Africa). Some African nationalist movements even tried to evade the "closed spaces" or national borders imposed by colonization and attempted to build regional political organizations as a prelude to the realization of the Pan-African ideal (such efforts included the Rassemblement Démocratique Africain in French Western Africa and the Pan-African Movement of East, Central, and Southern Africa in the British colonies. These groups largely failed, however, and a weak Organization of African Unity was all they could eventually achieve.

In most territories independence was hardly a revolution; it meant the takeover of an existing state. This was perhaps nowhere better exemplified than in the Caribbean. The turning point there was not so much independence as self-government, and under the leadership of Norman Manley, Grantley Adams, and Eric Williams, Caribbean states sailed rather easily from colonial status to sovereignty. Transformations of the state apparatus were deeper in Africa and India. But even there independence merely accelerated a process of "indigenization" of the colonial state that had begun with political reforms in the 1940s and 1950s.

In terms of development the preservation of a state built on a European model but pervaded by the perpetuation of familial and redistributive conceptions of power had severe consequences. For although redistribution by the state was eventually supposed to benefit all classes of the population (not only a minority of settlers and privileged "natives"), no radical change in the production process was considered at the start. The "fruits of independence" (*matunda ya uhuru*, in Swahili) were at hand and could simply be harvested by everyone. Ideological mobilization (be it *harambee* in Kenya or *investissement humain* in Guinea), as a local complement of foreign aid, was thought to be sufficient to ensure the growth of production. These mobilization campaigns failed in large part because of social expectations regarding the redistributive functions of the state and because they lacked incentives for the most hard working.

But if we explore further the comparison between Africa, Europe, and India, it may be interesting to relate the difference in peoples' responsiveness to mobilization for production to more general ideological conceptions of society. Dumézil (1958) found in the myths and beliefs of Indo-European peoples, stretching back to the earliest recorded history, a common representation of social organization that is unknown to non-Indo-European peoples. This representation is structured around three basic social functions performed by three categories of individuals. *Priests* are the recipients of authority and the keepers of beliefs, law, and science; they represent power and knowledge. *Warriors* defend the community; they represent strength and brutality. *Peasants* and *workers* of all classes ensure the wealth and fecundity of the community, and represent peace, beauty, and abundance.

The ideology Dumézil described means, from the viewpoint of development, that Indo-European peoples have always clearly separated the domains of power and production: A class of producers has ideologically been separated from the rest of the society and has been given the task to work for the prosperity of all. Moreover, because producers are symbolically associated with beauty and peace, their function, although subordinate and ranking third in the mythological hierarchy, is highly valued.

This separation and valorization of a class of producers is obviously foreign to African societies; it runs contrary to their most common conceptions of power. A tentative hypothesis then might be that the European state, as the latest manifestation of this "trifunctional" ideology, was contradictory to African culture and could not promote production unless accompanied by a radical transformation of the local conceptions of power, a total modification of the structures of the state, or both.

Such an accommodation is not intrinsically impossible, however. Von Wolferen's (1990) analysis of Japanese power describes a system that realizes the symbiosis of private corporations and the state, against the background of a familial ideology supporting an "ethic of submission."

II. The State and the Foundations of "Moral Pluralism" in Africa

In Japan power is diffuse: In the symbiotic relation that unites the state and the leading economic decisionmakers, it is impossible to isolate one central place from which political and economic policy decisions are made. In India the size of the territory and the federal character of the state limit the effective power of the central government. In Africa, on the contrary, the tradition of centralization and authoritarianism inherited from the colonial state has made the government the heart of the country—the more so since colonial centralization also implied economic interventionism.

In Africa, because most economic decisions were exercised by colonial governments, when independence came the prevailing conception was that political power was the best way to gain access to economic power. This did not mean that there was no possibility of accumulation outside of the state but instead that accumulation on a large scale—and also personal enrichment—were made easier and quicker in Africa if one could secure political influence (Bayart 1989).

Yet despite the centrality of the state, the institutions of public administration in Africa have an extremely ambiguous status. In the modern state public administration provides, or should provide, an essential line of communication between state power and citizens. Public administration, among many tasks, is supposed to implement government policies. But the superimposition of European administrative systems upon African societies has caused the state to be considered foreign by African citizens. Concomitantly, public administration in Africa is "ambiguous" (Darbon 1991) because although it still provides a link between the state and the people, it has come to be seen, within and without, as a tool of domination and extraction (Bugnicourt 1977).

Another area in which European and indigenous norms clash relates to the persistence of the family as the focus of daily social and economic life in Africa. As is well known, African populations live in economies of scarcity, in material conditions that are generally appalling. At the same time, Africans are very much aware that they belong to a universe of conspicuous wealth: television programs and advertising, migrant workers' stories, tourism, and the way of life of their own privileged strata permanently display the realities of the good life. Their aspirations are shaped in many respects by these icons of prosperity. Yet their daily social and economic lives remain centered around the family group (whatever differing definitions of "the family" are given in different cultures).

The strength of family bonds must be understood because of its unique implications for demographic trends in Africa. Africa does not conform to the previous models of demographic transition that have been designed from the study of Europe, Asia, Latin America, and the Arab world. The decline in mortality rates has not yet been matched by a decline in fertility rates; consequently, the population continues to grow at a very rapid pace, which is likely to last until 2003. In addition to its economic consequences, the African exception to the demographic transition model also has far-reaching social implications, for high rates of growth are accompanied by the persistence of large families as well as of polygamy (Tabah 1989; Tabutin 1988). This means that family or quasi-family bonds are not likely to be loosened in the next fifteen to twenty years; that the social fabric of African countries will continue to be woven by family groups; and that conceptions of society—including the political system and the rights and obligations of political power—will basically remain under the influence of familial ideologies.

In addition to the distinctive role it plays in African social-demographic matters, the family plays an important part in African political discourse. In Africa, and probably in many other regions, power relationships are often portrayed in the idiom of the family (Martin 1991a). Thus the obligations of those who hold power within the state are viewed as similar to the obligations of one who is responsible for a family; conversely, the authority of state leaders demands the same respect and obedience as the authority of family leaders. The ideology of the modern state imported by colonization challenged this notion of mutual obligation by introducing the idea of competition for political power.

Nationalist movements used the European notion of competition for political power to claim the right to participate in elections. After independence a few African regimes continued to organize regular elections, some of them under a one-party system. Other regimes suppressed, or tried to suppress, all avenues for political competition, while still referring to the ideology of the democratic state as an ideal that could not be made a reality in the short term. But factional rivalry continued and the inclusion of the military in political factions led to several coups d'état. Competition was there to stay.

As a result of their contradiction-laden development, African contemporary societies now accommodate unique balances between individuals and communities, between competition and solidarity. Competition was never foreign to African or other traditional cultures; however, it was commonly bridled by the moral prevalence of solidarity. Colonization brought a new valorization of competitiveness, both in the economic and in the political fields. But contrary to what happened in European history, competitiveness—stimulated by economic scarcity—became part of Africa's culture before a general legitimization of individualism. The result was that competition was alloyed with solidarity, producing unique struggles for power, communitarian mobilizations, and segmentary redistribution of the benefits of power.

In such a context, ethical orientations become quite fuzzy: there is no clear-cut opposition between the individual and the community or between competition and solidarity. Instead an immense potential exists for combinations of moral values that will legitimize, according to the case: the use of solidarity networks in the realization of individual aspirations, the use of individual positions for the benefit of the group of one's origin as well as for private enrichment. Almost any mixture of individualism and solidarity can form the underpinnings of competition.

The mixture of moral reference points typical of contemporary African and some other developing country cultures may be described by the term "moral pluralism."[2] Moral pluralism, it must be emphasized, is in no way synonymous with amorality. The plurality of norms available to social actors does not mean that there are no norms, that there is neither "good" nor "bad." On the contrary, it means that there exist various conceptions of "good" and "bad" that can be referred to according to the situation. In that perspective, competition, individualism, and solidarity can be both "good" and "bad."

2. The expression moral pluralism is coined as a parallel to the anthropological concept of legal pluralism (*pluralisme juridique*; see Rouland 1990, pp. 39–41). The moral pluralism that characterizes many developing societies may not be typical of Japan because in Japan a coherent set of social norms emerged some two hundred years before Japan's dramatic confrontation with Western civilization, a fact that allowed Japanese society to assimilate external inputs and integrate them more smoothly with the local culture (Van Wolferen 1990). Such assimilation was far more difficult when the context of contact was through slavery and colonization.

The apparent irrationality of behaviors in situations of moral pluralism has been described in different settings (for Nigeria, see Wilson 1988; for the Indian civil service, see Dwivedi, Jain, and Dua 1989). Its drawbacks and dangers have been stressed. It allows for the "cannibalization" of the state and government, for "beat the system" strategies, for survival efforts potentially leading to violence (graphically rendered in Jamaican English by the word *scuffling*). But it must be kept in mind that moral pluralism also facilitates adaptation to changing conditions and, above all, that it offers an escape from absolute cynicism and preserves an ideal of social "good" that could possibly be relied upon in development operations.

III. Political Culture and Resistance to Social Engineering

The concept of moral pluralism must be related to that of political culture. The African political cultures that emerged after independence retained the same blends of competition, individualism, and solidarity in differing proportions according to the country.

In the political context citizens use ethical orientations not only to judge the performance of their rulers but also to assess what they can get from them and to see how they can avoid their obligations toward the state. The orientations are expressed in symbolic political idioms, the most common of which are the idioms of law and religion, the idiom of tradition, the idiom of witchcraft, and the idiom of family (Martin 1988; 1991a). The study of these political idioms in various countries has led to the tentative suggestion of an ideal type of the conception of power that lies at the heart of most African cultures, and possibly in other regions too: *power is exchange (even if only symbolically so)*. Legitimacy is gauged by the ability to redistribute wealth, power, goods, and so on. Expectations toward state power are consequently extremely high. Generally speaking, this conception of power appears to be contradictory: on the one hand, authority, as such, deserves the expression of respect, but expression of respect does not suggest the obligation to comply with orders, since, on the other hand, authority always arouses suspicion (Martin 1991a; Chazan 1978).

The characteristic conceptions of power and legitimacy in Africa—the suspicion in which governments are held and the expectations that they are to distribute wealth—help to explain some aspects of governance in Africa that appear paradoxical. Leaders' rhetoric may stress "development for the benefit of all," but their first goal is to secure political quiescence. Thus as Bates (1988a) has argued, "While political elites are behaving in ways that are economically irrational, they are behaving in ways that are politically rational. The process they chose may therefore represent optimal solutions to political problems, [but] quite clearly they impose economic costs of sufficient magnitude to retard development" (p. 244).

The same line of argument runs through Coussy's (1991) analysis of economic and development policies in Africa since independence. In Coussy's view rulers have been primarily concerned with urban dwellers who are closer to the centers of power and also usually more petulant. Consequently, leaders have slighted the residents of rural areas in implementing development programs, tending to rely on authoritarian practices, supported by scorn for "illiterate, backward peasants." Because of the already pervasive suspicion of state power, it is no surprise that resistance against governmental policies and social engineering is widespread, as it was during colonial times.

Many African public administrators in rural settings have behaved in authoritarian ways and exacerbated the estrangement of the citizens from the state by a propensity to enter into self-serving alliances with local "big men" (Bates 1988b, p. 342), worsening urban-rural relations. Family structures and the "economy of affection" (Hyden 1980, 1983) provided not so much ways out of the system as networks to circumvent its most unpalatable manifestations[3] while allowing one to re-enter whenever loopholes or changes in policies make it worthwhile (Lemarchand 1989).

One of the main stumbling blocks on the road to good governance lies in the suspicion of power that is rooted in ancient conceptions that were reinforced during colonization and after independence. Counterexamples—societies that have notably succeeded in adopting European state structures and developmental paths—may not offer ready-made solutions, but it may be interesting to consider two non-African cases.

I have cited Van Wolferen's analysis of Japanese power. There, a coherent ensemble of moral norms emerged two centuries ago. The framework of the modern state was adopted and largely emptied of its European content to accommodate a "system" where power is diffuse. The acceptance of the system and of the social constraints it has imposed to achieve rapid economic growth is based on an ethic of submission, which appears to be symbolically linked to familial organization. Japan's historical trajectory thus has been clearly different from that of African and most other developing countries.

Barbados provides another example. Although it cannot claim the economic and technological achievements of Japan, it offers the picture of a peaceful society that has started its demographic transition and has not known until recently the most horrendous levels of poverty. It is a democratic state where parties alternate in power and where freedom of expression is relatively large. Its very particular colonial history must of course be taken into account, but it was not devoid of confrontations and violence. A homogeneous political culture was nevertheless built after World War II that ensured, and still does, the legitimacy of rulers. Authority is symbolically enshrined in the British Crown; it is remote and respected by a majority. Elective procedures, partisan alignments, and an executive cabinet are accepted as features of the nation. Rulers, whatever their affiliations, have maintained a form of welfare state close to state paternalism.

3. Family and neighborhood networks act as shock absorbers for the individual. From such a base the individual can retreat from the authority of the state if incentives are absent, and later return to the market when new incentives, say an increase in agricultural prices, are provided.

And the small size of the island makes it easy to consider politics as a family affair (quite literally—witness the dynasty of the Adams family as prime ministers).

Two other factors were probably decisive in stabilizing the political culture of Barbados: the permanence of a strong trade union active in politics and able to pose as a voice of the people that political leaders could not ignore; and the "exit option" offered by emigration to the United Kingdom or the United States. Although there are social inequalities, political competition can be fierce; mudslinging is common, as are accusations of corruption. Barbados stands in the developing world as a political success story (Martin 1991b).

In Japan and Barbados economic growth has allowed the attainment of standards of living that make the acceptance of power easier. In both cases management of the state is not catastrophic, and links with the base of society exist, even if they are not primarily of an administrative nature (military police in Barbados have taken over that function after the decision to dispense with local governments; in Japan corporations and their networks of subcontractors apparently play the same role). In both cases we find a coherent ensemble of ideas and a general agreement on certain ethical values, and the law constitutes (in very different ways) a permanent source of moral references. Finally, it is interesting to note that the Barbadian equivalent of the Japanese "ethic of submission" would instead be an "ethic of claiming." Thus in nondictatorial systems, stable political cultures can be built around totally opposed moral values and they can accommodate more or less centralized forms of power.

IV. Five Questions: The Quality of Governance and Culture

Because Barbados and Japan are so different they provide convincing support for the hypothesis that transfer and acculturation of the European modern state can be relatively successful. They also confirm that there are "alternative modernities . . . emerging outside the post-industrial West in ways that would not have been predicted by earlier theories of modernity or modernization" (Appadurai and Breckenridge 1990, p. 78)—forms of non-Western modernities that can now constitute assets used in negotiations with the West.

In other words, no standard formula exists for fostering an acceptable level of state management and good governance. If there is an indispensable and irreducible prerequisite for good governance, it would appear to be the need for all social and political actors to refer to—not necessarily to comply with—a shared ensemble of ethical values.

Even in cultures characterized by moral pluralism it should be possible to investigate the possible compatibilities of moral pluralism with effectiveness of the law and accountability. In Japan and East Asia, "successful marriages of organizational and cultural practices take place around a core of value imperatives. In this view, effective organization is an amalgam of organizational imperatives and variables, value-based imperatives, and cultural practices which either already are, *or can be made*, compatible with them" (Blunt 1990, p. 308;

present author's emphasis). That is, even in societies that contain many ethnic groups and that are characterized by moral pluralism, there is nonetheless some core at which some basic values converge.

Research thus should zero in on that core of shared cultural values to identify, in each society, how culture preconditions the emergence of good governance, and how it may be possible to use the actual and popularly perceived power of the state to develop the quality of governance. It must be clear that answers cannot be derived from preconceived ideas brought in from outside. Instead, one can formulate a series of questions that might serve as a basic guide for further research, as suggested below.

What do people consider "good"? All cultures hold some conception of honesty. It may be related to religious beliefs, to social and economic constraints in situations of scarcity, or both, but honesty is always "good." Conversely, bribery and corruption are universally condemned, and there are always a few people around ready to play "Mr. Clean" (Klitgaard 1988). It seems that one of the first tasks of those interested in good governance should be to look for the idea of "good" particular to the culture, to discover the symbols and rituals expressing this idea, and to study how they relate or how they could be related to political and economic practices.

How "good" is the law? Good governance cannot be separated from the effectiveness of laws; it demands that laws be perceived as fair and be understood by everyone. The entire population must have a minimum level of confidence in the law and in the legal profession. Law already serves as a moral lever in the denunciation of political abuses: lawyers have played and still play a key role in the campaigns for democracy and economic transparency This is true in Africa, the Caribbean, and India, for example (Somjee 1982, pp. 56–57).

Yet the belief that law is an expression of "good" can probably be strengthened. That is, an "adaptive law" may be produced by getting rid of "legal mimesis" and by drawing on "popular law,"[4] which though unofficial, is possibly the most widely respected. Thus formalizing the innovations introduced by popular law will make a new law of development possible that will take more accurate account of indigenous mentalities. If it really does so, it will assist in curtailing the monopolistic pretenses of the state and will broaden the autonomy

4. *Adaptive Law*: the new official laws (voted in parliament or approved by government) cannot be integrally implemented immediately; they represent—rather than an obligation—a *model* of what the future society could become, and are likely to be modified in the process of the country's social transformation (Rouland 1990, pp. 118–19).

Popular Law: unofficial laws that are more respected than official regulations; they consist of sets of rules that people invent to enforce the cohesion of the groups they have decided to form in order to achieve a particular goal; these laws are not "traditional" (although they may borrow from traditional norms and values) but essentially innovative (Rouland 1990, p. 91).

Legal mimesis: adoption of the unaltered laws of one state (often the metropolitan or former metropolitan state) by another state without taking into account the indigenous culture of the latter (Bugnicourt 1977; Darbon 1991).

of old and new communities (Rouland 1990; Henry 1982). Law should be given more plasticity; it should also be written and uttered in styles and languages allowing everyone to use it. To embody the idea of "good," law must be available in the vernacular.

What are the most trusted and effective types of social organization? Informal groupings or communities are already putting popular law into practice. The interaction between participants in these communities makes them another forum in which the idea of "good" is given a concrete meaning. Therefore, an important goal of research should be to investigate the organization, functions, rituals, goals, and mechanisms of coherence and commitment of such informal community structures. For it is here, in these communities, that the essential linkage takes place between effort and reward; between individual and collective interest (Popkin 1988). Here the interplay of competition, individualism, and solidarity may be witnessed in the context of changing cultures.

Very often these informal community organizations are influenced by family structures (that is, they may be based on actual families or use symbols and mechanisms inspired by a particular model of family). Given demographic trends in Africa, it is likely that the family, as a structure and a source of symbolism, will remain an inspiration for social and economic organizations in the coming decades.

Communitarian structures based on the family have been observed outside Africa. Such structures are notable in China, for example (FPH 1989, pp. 70, 81). In Vietnam, too, spontaneous small cooperatives have sprung up that are based on alliances between families (FPH 1989, p. 94). Elsewhere, as in Peru (FPH 1989, pp. 157–58), communitarian endeavors, whether based on families or not, demonstrate that internal democracy is a precondition to their success.

Communitarian-cooperative structures are also found in Africa. A successful grouping of this sort, known as TWIMA, operates in the Uluguru mountains of Tanzania. TWIMA is an unofficial cooperative whose members cultivate fruits and vegetables (notably cabbage) on a family basis, with technical assistance from French and Tanzanian experts operating from the Agricultural University of Morogoro (the regional capital). The "cooperative" deals with stocking, commercializing, and even transporting the crop, which is bought by traders who sell it in Dar es Salaam.

TWIMA is run by a "parliament" where all 170 members sit. Decisions are not always made easily and quickly. Moreover, common work, such as building a structure for crop storage, is not accomplished without difficulties. Nonetheless, all problems have been collectively overcome, and villagers have been able to see the advantages of TWIMA; from this flows their continued commitment (Delobel and Lassale 1990).

Other studies of unofficial economic groupings in Africa convey similar evidence: informal savings associations, for example, set solidarity in motion on the basis of a personalization of relationships. In addition to their economic functions, and despite differences in their organization and internal rules, informal savings associations have proved efficient as instruments of social integration in all the countries where they have been surveyed (Eboué 1987). The case of tontines (rotating credit associations) among the Bamileke of Cameroon in particular shows more precisely how "traditional" solidarities can be selected to promote both individual and collective interests and confirms the weight of ethics, manifested in particular rituals, in the commitment of members (there is almost no defaulting in the repayment of loans; Warnier and Miaffo 1990). Official support for informal groupings that have proved beneficial in the eyes of their members should be considered as long as they remain free to invent their own forms of organization, of course within the rules established by an "adaptive law."

How should those who seek good governance deal with the pervasive distrust of power and the state? TWIMA operates outside of the official Tanzanian state, is not officially registered as a cooperative, and deliberately evades public commercialization. Similarly, tontines and informal savings associations have no legal standing. Yet it seems impossible to do away with the state in development matters.

The adoption of an "adaptive law" may allow for more autonomy at the grass-roots level and may help avoid the systematic suffocation of all innovative attempts. But law has to be implemented, and here it encounters problems. A principal obstacle to the growth of people's initiatives has been local administration. Thus, bringing the state back to the people will require not only adaptive law but also an adaptive administration that recognizes and builds upon the positive conceptions of power dominant in a given culture. A bottom-up strategy will probably be in order, for reforms have to start at the micropolitical level to stand a chance (Robert H. Bates, cited in Gordon 1988).

Political competition, factionalism, and clientelism will not disappear overnight, whatever legal and administrative innovations are put into place. But as a first step, local administration and local government should be redesigned and rooted more deeply in local communities and cultures, with full scope for participatory management.[5] In addition, local civil servants should be trained to become "local-level catalysts" and "change agents" (Conyers and Kaul 1990). The tendency of local administrators toward elitism, and their inclination to use their position to secure personal privileges, implies that local accountability must be based on mutual checks exercised by local administrative offices and local councils where elected representatives sit.

Freedom of expression and channels for interpellation by ordinary citizens may offer a solution but not a panacea. Self-organization is the only way concerns and demands can be forwarded to the top of the state. Trust in the system is a consequence of being listened to.

5. Specific recommendations for a reorientation of local administration may be found in Ould Daddah (1983).

What will serve as the basis of local ideas of accountability? Political accountability existed in precolonial African societies, but colonization destroyed it at the level of the supreme government of society—that is, at the level of the "modern" state (Chabal 1986). Since then, accountability and state government have been dissociated. Cultures of political accountability must be recreated. Mechanisms of "invention of tradition" can be used, but only insofar as they are congruent with systems of accountability actually working within spontaneous groupings and based on a common idea of "good"; management and conflicts about management must be part of a moral domain that encompasses past, present, and future (Lonsdale 1986).

The construction of accountability may well begin with the idea that leaders should not behave badly and should be responsible. This notion has brought people into the streets in many African countries, and in a few of them it has launched a process of political change. In Haiti, for example, a priest representing the people's church (*ti-l'église*) was elected president because he was seen as an incarnation of "good." Regardless of the precise shape of institutions, freedom of association is essential, and channels of communication can be as numerous as cultural idioms.

In addition, it must be held in mind that accountability begins at the grassroots level. It is in spontaneous organizations that people concretely acquire a notion of the importance of accountability because it is there that their interests are directly at stake, and individualism and solidarity can start to play in harmony.

The political turmoil in Africa may generate an atmosphere more conducive to good governance. What will follow is to be monitored with extreme attention, for it is most unlikely that good governance can be introduced from outside.

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Comment on "The Cultural Dimensions of Governance," by Martin

Robert Klitgaard

Consider a list of cultural traits and try to guess the country to which they refer:

Hypocrisy	Lack of public spirit
Factionalism	Immaturity
Groupism vs. individualism	Persistently childlike
Fond of festivals	Not logical but intuitive

Here is a hint: The list comes from a book titled *The Anatomy of Dependence*, written by a distinguished psychologist from the country in question. Before I tell you the answer, consider a second question: What sort of "governance" do you think this country has?

To many people, the list sounds like a classic description of an economically and politically backward society, whose "culture" or personality somehow prevents—or at least inhibits—"development." But the country is Japan (Doi 1973). And Japan is a thriving democracy, an economic powerhouse, a country where the average IQ score is thought to have increased by at least 11 points since the Second World War (Lynn 1982). Its culture has clearly not prevented development.

This raises the first question about culture and governance: So what?

Economists are usually suspicious of cultural factors. Careful studies often show that supposed "cultural barriers to development" turn out not to be necessary or sufficient conditions. Those who admire scholarly rigor may worry that culture becomes a catch-all, a name for a residual in a regression equation. No carefully specified model of cultural variables exists (to my knowledge). Finally, we may worry that cultural relativism will invade our research program like a computer virus—"What do you mean, *development*? What do you mean, *democracy*?" Indeed, as this generation of anthropologists-as-culture-critics keeps reminding us, "What do you mean, *culture*?"

There is another reason. Suppose one grants that cultural factors are important in determining or shaping a given problem of governance. This does not

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imply that the most feasible or desirable solutions are cultural, nor that a problem cannot be dealt with through policies that make no reference to culture. Consider three examples.

First, take the crisis in public sector incentives in many developing countries. When pay is low and not linked to results, it is no surprise to an economist that inefficiency and predation ensue. Several colleagues have told me that incentives are a cultural problem. In Kenya, one explained, the absence of incentives is due to an egalitarian, or at least a jealous, culture. Yet many developing countries have discovered dramatic improvements in the performance of the public sector. After its objectives and key tasks are identified, information is provided to employees, and the information is linked to tangible rewards for public officials (Klitgaard 1989).

Second, consider corruption. Some authors "explain" corruption in Africa in terms of a combination of colonial centralization, local systems of lineage, and an ethic of redistribution (Bayart 1989). Tradition is used to explain corruption in the Philippines and Mexico. Yet this did not stop President Carlos Salinas de Gortari from launching a successful campaign against corruption in Mexico; and in the Philippines under President Ferdinand Marcos, Judge Efren Plana cleaned up the Bureau of Internal Revenue (Jenkins 1991). I have studied several anticorruption efforts that worked (in the sense of reducing corruption, though never eradicating it). Each case can be analyzed in economic and managerial terms. For example, changing incentives, raising the probability that corruption will be discovered and punished, and reducing monopoly power.

Third, consider decentralization. Most observers agree that governments in developing countries are overly centralized. Some scholars have offered cultural explanations—for example, the hierarchical nature of Latin cultures (Veliz 1982). Perhaps these factors do operate. Yet one can analyze successful cases of decentralization in terms of the principal-agent model of economics, again with an emphasis on information and incentives (Klitgaard 1991).

Let me clarify the point. Cultural explanations do not mean that what might be called noncultural remedies are out of place. It is crucial to separate causes from cures, to focus on the size of treatment effects instead of the percentage of variation explained. By analogy, myopia is 100 percent genetically determined, but we have an excellent nongenetic treatment for it—eyeglasses.

Many economists and practitioners are skeptical of culture. Yet experience tells us that something like it does matter, especially for governance. A forthcoming book on Italy's political development since 1970 finds that the best predictor of which states had the most effective governance was not any measure of economic development but of civic culture—indeed, the civic culture measured a hundred years before. Those regions where local choral groups and mutual aid societies were most abundant in 1870 were almost precisely the same regions characterized by civic involvement in 1970. And although these regions were not distinctively prosperous a century ago, they have steadily outpaced the less civic regions in economic performance and (at least since the advent of regional government) in self-governance (Putnam, Leonardi, and Nanetti forthcoming).

Economists, too, are turning to variables like culture. Stiglitz (1989) and North (1990) argue that standard economic models cannot explain persistent differences in economic welfare and growth—nor, I would add, intranational differences. North asks whether cultural variables might help. Theoretical work on concepts akin to culture proceeds along several lines. In their study of the foundations of economic behavior, theoretical economists are turning to culture, ideology, and norms. Unfortunately, however, theoretical research on culture rarely touches economic development. We are all familiar with the statement that such and such a policy failed because it didn't take the culture into account. But the problem is that when one asks "How do we take culture into account?" There is no ready answer.

I have been struck by the way anthropologists and experts on political culture have retreated from operational questions. Fifty years ago, scores of anthropologists were working on ways to apply their knowledge to improve governance. Nowadays, many of those with the deepest knowledge of theory and detail in cultural studies seem content, at the practical level, to issue warnings against oversimplification and to ask that we critique our own culture first. The new approach is to multiply the questions rather than to help with the answers.

I. Practical Questions

Practical help is what we need. Africa's economic crisis and the wave of democratic and free-market reforms now sweeping the world bring cultural dimensions to the forefront. Countries are asking not for blueprints or turnkey projects, but for help in learning from the mistakes and successes of others, for help in thinking through the adaptation of institutions and practices to local conditions. What have we learned, for example, about administering criminal justice systems? Staffing representative assemblies? Promoting popular participation? Making administrative decisions more transparent and accountable? Improving incentives in the public sector? Controlling corruption? Decentralizing power? In thinking through these practical questions, can we do 10 percent better by taking culture into account?

These aspects of governance probably interact with cultural variables. The task is to understand how. To do so, we must go beyond the debate between cultural relativists and economic reductionists. Yes, we know that governance adapts to culture and vice versa, that governance changes culture, that culture changes by itself (or for other reasons), that valuations of governance (among other things) are shaped by culture. We also know that these issues are not binary, that necessary or sufficient cultural conditions are not in the cards. And so it is time to get down to questions of degree in a multivariate, recursive framework. Practical questions should not be submerged. What have we learned about various processes and policies under cultural and other conditions—with what probabilities and at what cost?

I emphasize processes as well as policies. "Taking culture into account" means, in part, enabling different cultures to choose for themselves. The spread of democratic institutions, of market choices, of participatory management is to be welcomed on this ground, among others.

But process is not an answer to the problem of cultural relevance. Many different kinds of processes are possible; the choice itself may need to be culturally attuned. Are some mechanisms and procedures better suited than others for different cultures and environments? And once the participatory process is in place, wouldn't people making decisions profit from the knowledge of what has worked elsewhere and what has not, under various cultural and other conditions?

At the end of his stimulating paper, Martin poses five questions. Consider also a sixth: What would we do if we knew the answers? What are the possible misuses of cultural information in policymaking?

The promise and dangers are quite general (Hirschman 1962). If one adapts policies, programs, and processes to different individuals or cultures, does one forgo important possibilities of change? If, instead, one tries to change them, does one not make dangerous presumptions of cultural superiority and risk unforeseen consequences? Neither extreme is free from criticism; the art of governance is to decide what features of the status quo to adapt to, and what features to try to change. Cultural variables must be considered in this calculus.

II. What About the Social Sciences?

Ethical and political issues are clearly salient in taking culture into account. Can the social sciences help? Consider several equations:

(1) $U_{Ci} = U_{Ci}(G, E, S \ldots)$

(2) $G = G(O, Pol, Env, C \ldots)$

(3) $C = C(G, E, S; O, Pol, Env \ldots)$

The first equation says that the social utility function under cultural conditions *Ci* has many dimensions—governance, economic conditions, social conditions, and others. The functional form depends on the cultural conditions. Governance, according to the second equation, is a function of organizational choices (type of democracy, degree and type of decentralization, and so on), public policies (economic strategy, many others), the environment (natural resources, international markets), and cultural variables. I have been discussing ways to specify equation (2), particularly the $O \times C$ and $Pol \times C$ interactions. (For a good discussion of methodologies for doing so, see Snow 1989.) I will simply note that, short of a full-scale statistical treatment, case studies of success—in changing policies and processes to take advantage of cultural interactions—would be a welcome start.

The third equation says that the cultural sector itself is a function of many things—the system of governance, economic and social conditions, the organization of government, and public policies of many kinds. Culture is not static but subject to change. Some changes are planned, many are unplanned. Some can be avoided, slowed, or accelerated; others cannot. The interesting questions are empirical.

Notice the recursive nature of the problem; simple regressions will mislead. Culture is at once a dependent variable, an independent or moderating variable, and a giver of meaning—in the sense that utility functions themselves depend to some degree on the culture. These complications would cause difficulty even with a world of data and careful statistical analyses. When one overlays the practical problems of measurement, the absence of models to specify equations (1) to (3), the emotional content of the issues, and the possibility of the misuse of such information if we had it, we can see why questions of culture and governance have remained so long in the domain of rhetoric.

May they not so remain. Around the globe huge changes in governance are under way. Can those undertaking and undergoing change do 10 percent better by taking culture into account? This is the practical challenge. Martin is right to urge us to be humble and to get to work on the practical questions. The fact is that we do not have a usable scientific theory of culture, nor do we have well-specified models of culture by policy interactions—and for reasons as related to politics and academic cultures as to scientific complexity, we are not likely to have them in our lifetime. This need not paralyze us; let us have more modest goals. We need analytical frameworks about culture, process, and policy that will help citizens and decisionmakers solve problems and learn from experience. We need to find and study success stories. And we need to rub our faces in the dangers of the misuse of cultural variables in policymaking and international assistance.

Culture is mushy and risky and unfamiliar to many of us. This is no reason to ignore it, not if we can do 10 percent better on questions of education, freedom and participation, sustainable development, and the emergence from dependency to affirmation.

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Floor Discussion of the Landell-Mills and Serageldin, and Martin Papers

A participant opened the floor discussion by thanking Joan Nelson (discussant) for clarifying the meaning of governance, a term that often seems vague. Nelson had distinguished between three elements of governance: democracy, good government, and development. The participant reported that in an earlier session, one discussant had traced the U.S.S.R.'s economic problems to the breakdown of government, populism, failure to collect revenues, nonenforcement of laws, and so forth. But Jeffrey Sachs, speaker in another meeting, had made a cogent argument for getting privatization done very quickly in Poland because, God forbid, a democratic government was coming on board that would be against good government and economic development, as he saw it. So Nelson's comments were useful.

Commenting on the Landell-Mills paper, a participant speculated that questioning whether a multilateral institution has any business getting involved in the relationship between good government and economic development is really asking whether a bank has any business getting involved in it. But multinationals regularly carry out political risk analysis because they want to know whether their investment will be paid back. Government could be analyzed for the same reason.

The participant observed that economists (Marxist or otherwise) often look at the effect of development in terms of socioeconomic groupings, but what drives politics and government in most societies is more likely to be groupings by race, ethnicity, and nationalism. He asked for Martin's comments on that observation.

A World Bank participant compared the views of Landell-Mills (who believes we must do something about the problem of governance, but only with the cooperation of the home countries and the involvement of the people) and Diouf (who says this is the business of these countries, not of the international community). "To whom do we speak?" he asked Landell-Mills. To the people in charge, who are benefiting from possibly bad government structures? Isn't this subversive? Do they have any reason to have much to do with what we say on the subject?

Another World Bank participant asked Landell-Mills and Diouf how far the international organizations and bilateral donors should go in expressing concern

This session was chaired by Martin Doornbos, Professor of Political Science at the Institute of Social Studies, The Hague.

about the political side of government (the technical side being relatively clear). One of the key ways democracy has come about is through a bargaining process between the government and its citizens about raising resources: for example, no taxation without representation, and the right to levy taxes. If a donor gives a government *x* amount of resources—whether it is 5 or 10 percent of gross national product (GNP)—it dramatically changes the balance of power in the country and reduces the government's need to bargain with the people about resources. If donors are tipping the balance of power in this way, do they have a corresponding responsibility to assure that the government becomes more responsive?

One participant observed that in pursuing the goals of development, we should probably defend cultural diversity as being as important to the survival of humanity as biodiversity. He also proposed a third megatrend: scientists and economists, who once believed in the right answers and the best solutions, now see themselves as *managing uncertainty*. How then, he asked, do we relate development to this cultural dimension, within the constraints of environmental problems? Should each culture define its development, not in terms of managing economics but in terms of political management—that is, defining an objective and finding a way of life consistent with that objective?

A World Bank participant played devil's advocate to Diouf, saying that the assumption underlying external involvement in economic development seems to be that no values are involved. But, like the rule of law, he said, bureaucratic accountability is derived not from values an institution makes up, but from the international acceptance of certain human rights. Unless a society progressively absorbs the values implicit in the Universal Declaration of Human Rights, the institutions of that society will not reflect universal concerns.

Another participant, who spoke from the vantage point of his experience in Côte d'Ivoire, said that people in different cultures sometimes experience conflict because of differences between the country's economic policy and their cultural conditioning—a conflict, for example, between cultural values of solidarity and imposed values of competition. In the old days, there was often a clash between economics and political sociology in policymaking by international agencies. Now it is easier to integrate the two fields and measure the influence of cultural problems on such economic issues as consumption and saving.

Doornbos (chair) asked about two dimensions that were missing from the discussion. First, if you are talking about developing countries raising their standards of governance, should you also ask to what extent the international community can provide an international environment that enables better governance? Second, policymaking in developing countries is conceptualized in many different institutions, both in the domestic and in the international community. To what extent, he asked, does this influence policymakers in the developing countries and allow them room to maneuver?

Robert Klitgaard (discussant) proposed that instead of spending so much time thinking about the transition to a market economy or what the transition might mean, universities and international institutions should spend more time developing practical knowledge about how good governance works and how we make the transition. We can spend a lot of time thinking about how to measure correlates between public attributes and economic development or how to measure corruption, but suppose somebody says, "Listen, we would like some help in improving our government." Do we know how to do that? Do we have five interesting case studies of how people cleaned up corruption or improved the administration of law? Do we have interesting analytical frameworks that would be useful for seminars in which we could share experiences—not presuming we have a blueprint, but presuming that there are relevant experiences? I don't think we do, he said.

Diouf (discussant) hastened to correct the impression he had given that governance is the concern only of the country. He meant, rather, that the primary responsibility for governance is the country's, but that its partners—the international donors and institutions that provide resources for a specific goal—get involved in policymaking, and that policymaking has a political dimension.

Taking up the challenge posed by Klitgaard and speakers from the floor, Martin said that, to be practical, you should provide a concept that conforms to reality. The concept may be temporary but the only way to know that it is temporary is to test it against reality. He said that as a sociologist, he was used to testing concepts against reality. If the concepts don't fit the reality, we don't change the reality; we change the constraints and try to understand how the reality changes. The idea of a normative mix—of permanent normative concerns—is totally foreign.

That being said, he urged that researchers test programs against reality to see if they work, and then try to understand why they don't work. He also proposed devoting more time to neutral research—possibly project-oriented research, to be practical. And finally, he urged more empirical research to identify how people who are involved in development at the grass-roots level understand the idea of "good," because good can be expressed in many different ways.

Doornbos (chair) gave the final word to Landell-Mills, who found a recurring theme in all the questions: What is the rationale for, and legitimacy of, external agencies' concern about governance, and how can they be most effective? He agreed with Klitgaard (discussant) that some of the premises on which we operate are not universal and reflect different views. But ultimately, he noted, we are responding to a demand from clients—and there is no way an external agency can do anything if the country doesn't want it to. The problem is that what the country wants may be ambiguous. What some political leaders want is to maximize the flow of aid because their cut is an important source of revenue to them, and if they can't keep aid flowing they may have a problem buying their next villa in Cannes. There are also many political leaders genuinely committed to development. Indeed, he suggested, "Some of the people who are anxious to build villas are also—in their spare time, at least—quite devoted to development." Despite the ambiguity about what countries want, certain concerns seem universal: people want more income and better health and education.

The problem we run up against, Landell-Mills said, is that many efforts don't work. Money doesn't get to the right places, and when it does, it can't be dispensed because of inefficient mechanisms. Everyone agrees on why we are trying to promote development, and everyone agrees that we are not achieving it. The question is, how can we actually achieve it?

He agreed with Klitgaard that it is absolutely critical that we develop case studies and other practical material on what works and what doesn't.

We must take a new approach to countries that come to us with requests for help, Landell-Mills continued, because we are operating in an area that we don't understand very well—and may never understand—because it is not something that can be learned in a university. At a recent training course held by the International Monetary Fund and the World Bank in Ghana, he said, the participants reviewed problems caused by the collapse of domestic financial systems. The attendees expected the lecturers to provide the answers, but the point was that the participants were the only people who could make the system work: they knew how the system was supposed to work, and they knew what the World Bank meant by prudential controls. If the concepts that worked in other countries didn't seem to work in theirs, they had to invent a system that would work.

International agencies can create an environment in which these questions are raised, he said, and can work with countries to define the answers, but without answers, development won't succeed.

ROUNDTABLE DISCUSSION:

Is Economic Growth Sustainable?

The roundtable discussion traditionally scheduled for the end of the conference was structured this year as a debate. The speakers were Lester Brown of the Worldwatch Institute, Washington, D.C., and Theodore Panayotou of the Harvard Institute for International Development and the Department of Economics, Harvard University. The speakers' comments, taped at the conference and condensed slightly, have been reviewed for publication.

Lester Brown

The question "Is economic growth sustainable?" is the most important issue facing the international community. And my sense is that as this decade progresses, it's going to become even more so. My reason for accepting this invitation is not particularly to win or to lose a debate, but to spend an hour or so discussing the issues and trying to sharpen our thinking on exactly what it is we want—what our vision is and where we want to go.

The brief for this presentation asked each of us to sketch out the conceptual framework, so that we could see as clearly as possible what our similarities and differences are. I'd like to sketch a simple model of the world, a way to think about the environment and development. I'm going to talk about two activities: photosynthetic activity and economic activity.

Photosynthesis, as you know, is the process whereby plants, using sunlight for energy, convert carbon dioxide and water into carbohydrates—into biochemical energy. All life on earth depends on the energy produced by this process. Photosynthesis is also the source of all materials used in industry, except for minerals and materials derived from fossil fuels. For example, the wood in this table is a product of photosynthesis, as is the cotton in this shirt, and the wool component of this suit.

Economic activity I will refer to as that which is measured in national economic accounts—the sum of goods and services produced. These are the two activities I'd like to look at, and the indicators I would like to use are the scale of these two activities: the photosynthetic product and the gross world product, if you will—the sum of gross national products.

The photosynthetic product of the planet has been declining slowly for some time now, although probably at an accelerating rate. It declines as a result of soil erosion. It declines as a result of acid rain, for example, degrading the forests of Western Europe. It declines as ranchers convert tropical rain forests in the Amazon into wasteland. It declines as a result of air pollution. A joint study by the U.S. Department of Agriculture and the U.S Environmental Protection Agency indicates that the U.S. crop harvest is now down by at least 5 percent, perhaps as much as 10 percent, because of air pollution, principally ground-level ozone. Desertification, obviously, reduces the photosynthetic product of the planet. Overgrazing in Africa reduces the photosynthetic product of the planet. The photosynthetic product of the planet is slowly going down.

The economic product—those activities that we measure in our national economic accounts—is rising. From 1950 to 1990, it grew rather rapidly, probably closer to 4 percent than 3 percent a year. According to the International Monetary Fund report of a few days ago, it's expected to expand by 1.2 percent this year and by 3 percent next year.

Question: Can the economic product of the planet continue to rise if the photosynthetic product continues to decline? The answer: No. If the photosynthetic product continues to decline, eventually there will not be enough biochemical energy to support even the life of this room. That's not a debatable point.

I'd like to discuss the question of whether economic growth is sustainable. I'm not going to use the term "growth," because of measurement problems, so let's say, "Will the existing economic system sustain progress?"

Can an economic system that is destroying 17 million hectares of forest each year sustain progress? What about an economic system that's adding 90 million people a year—or even 50 million people a year in countries where demand on basic biological systems—whether grasslands, forests, seas, or soils—is exceeding the sustainable yield? Will an economic system that's pumping six billion[1] tons of carbon into the atmosphere each year from the burning of fossil fuels sustain progress? Will an economic system that's destroying something like a fifth of all plant and animal species in the world every twenty years or so sustain progress? Will an economic system that's converting six million hectares of productive land into desert each year sustain progress?

A different kind of question: Can we design an economic system that will sustain progress? I think the answer is yes. We can apply the principles of ecology to the design of an economic system that can essentially last forever.

Those principles of ecology that would govern the design of that system are as real as the principles of aerodynamics. If you want to design an aircraft that will fly, you not only have to satisfy *some* of the principles of aerodynamics that govern flight speed and thrust and lift and so forth—you have to satisfy every one of them. If an aircraft doesn't satisfy all those conditions, it literally will not become airborne.

I won't describe in detail an environmentally sustainable economic system—that is, one shaped by the principles of ecology—but we can see now what it would look like.

1. A billion is 1,000 million.

For example, we can now see how, using existing technologies, we can phase out fossil fuels and turn to renewable energy resources. The technologies now exist, and the economics are within range.

The question then is: How do we create an environmentally sustainable economic system? And now we come back to economics. First, we need to look at the externalities. What are the costs of air pollution, of species loss, of land degradation, of rising temperatures, and so on? These are not easy costs to estimate, obviously, but making some estimate is better than ignoring them. Then we can begin to think about how to integrate those costs back into the economic system.

In the last chapter of this year's *State of the World* (Worldwatch 1991), we recommend that we do this by partially replacing income taxes with environmental taxes. You can make a list of fifty such taxes, but in this country we look at six or eight of these environmental taxes: one for carbon emissions, one for the use of pesticides, one for the use of virgin materials rather than recycled materials, one for the generation of hazardous waste, and so on.

Together these eight taxes would generate something like $130 billion, permitting a reduction in income taxes of at least 30 percent. And these taxes would begin to steer the economy in an environmentally sustainable direction. A carbon tax that began to reflect the costs of burning fossil fuels—for example, the costs of climate change, air pollution, and acid rain—would make investments in efficiency and in renewable resources much more attractive.

We can now see how to create an environmentally sustainable economy. But we need a vision—a sense of what we want. Until now, we've been very much on the defensive, whether in the environmental community or in the World Bank itself. We are always looking at projects and what is wrong—why we can't build this dam, why we can't build that road—but not dealing with the more fundamental question: What would an environmentally sustainable development strategy look like in country *x*?

Once you get that in place and you can see what that looks like—and this is where I think the World Bank has a role to play—then identifying projects begins to take care of itself.

THEODORE PANAYOTOU

An unresolved theological controversy concerns how many angels can dance on the head of a pin. It turns out that the answer depends on the size of the pin relative to the size of the angels. Or does it? What if more and more angels can squeeze in less and less space? After all, angels are squeezeable—they can take up an infinitesimally small space.

Similarly, the answer to the question of how much economic output we can squeeze out of finite resources does not depend simply on the amount of resources we are left with and the current resource use per unit of output. Resources are limited, but resource use is infinitely squeezeable—well, almost infinitely. Antigrowth advocates will have us convinced that economic growth is not sustainable, that the limits to growth have already been reached, that further growth will reduce sustainability, and that we should put a cap on growth and seek greener pastures in qualitative development, self-sufficiency, and other utopian pursuits.

There is little doubt that somewhere there are limits to exponential growth. There is also little doubt that some of these limits have been approached rather rapidly, but this does not mean that growth, *per se*, is the cause. The correlation between growth and environmental degradation may simply be a spurious one, as indicated by the fact that nongrowing or declining economies of Africa and Eastern Europe suffer the same—or far worse—levels of environmental degradation as the rapidly growing economies of East Asia.

It is rather the inefficiency and waste that accompanies certain growth and nongrowth paths that is responsible for environmental degradation and for the rapid approach of ecological limits. Those who advocate zero growth as the only way of ensuring sustainability either don't understand sustainable growth or believe in a static world of linear relationships and fixed proportions.

As the improvement in energy efficiency during the past fifteen years demonstrates, it is possible to produce more with less—that is, using fewer resources and generating less pollution. Such has been the shift from steel and coal to fiber optics and electronics, and from gas-guzzling couriers to the fax machine. Moreover, sustainability is not attainable without economic growth. Sustainability requires alleviation of poverty, a decline in fertility, the substitution of human capital for natural resources, effective demand for environmental quality, and a responsive supply. These cannot come about on a sustainable basis without growth. They are contingent upon the attainment of higher levels of income.

Developing countries that are struggling to escape poverty and meet the growing aspirations of their still-expanding populations find the concern for sustainability an added burden on what is already a Herculean task. If sustainability means Spartan living by the current generation of the poor so the next generation of the poor will have a better standard of living, where is intergenerational justice? If, on the other hand, sustainability means that future generations should be able to enjoy the same level of poverty as the current generation, why sustain poverty? Clearly, sustainable development is meant to benefit both current and future generations. It is not simply a matter of temporal tradeoffs and intergenerational transfers. It is a matter of sources and patterns, of cost and efficiency, rather than the rate and speed of growth.

The alarmist prediction that continued economic growth, no matter how well managed, would lead us to an ecological disaster, or that sustainability will eclipse growth, and the utopian prescription to ban growth or change people's values, derive from the preoccupation—I will even say the fixation—with the physical manifestations and symptoms of environmental degradation: hectares of forest lost, tons of soil eroded, species endangered, tons of pollution generated. The way to attain sustainable growth is to dispense with our preoccupation with the symptoms of environmental degradation, and look for causes—root causes, not proximate causes.

Why are increasingly scarce resources being used inefficiently and wasted, instead of economized and conserved? Why are valuable resources being put to inferior uses, when superior uses exist? Why are renewable resources being mined rather than managed for a perpetual stream of benefits, when careful management would generate a higher net present value? Why is highly profitable investment that enhances both current productivity and future sustainability not being undertaken, while scarce funds are being wasted on marginal investments? Why is a larger amount of effort and cost expended, when a smaller amount would generate more profits and less damage to the resource? Why are resources and byproducts not recycled, when recycling can generate both economic and environmental benefits? Why are local communities and tribal groups displaced and deprived of their customary rights to resources, when by virtue of their physical presence and intimate knowledge they would be the most cost-effective managers of the resources? And last, why are unique habitats and species becoming extinct without compelling economic reasons to counter the reversible laws of uniqueness, diversity, and the loss of future options?

The answers to these questions are to be found in the dissociation between scarcity and price, benefits and costs, rights and responsibilities, actions and consequences.

The prevailing configuration of markets and policies leaves many resources outside the domain of markets—unowned, unpriced, and unaccounted for—and more often than not it subsidizes their excessive use and destruction despite growing scarcities and rising social costs. This shortsightedness results in an incentive structure that induces people to maximize their profits not by being efficient or innovative but by appropriating other people's resources and shifting their own costs onto others. Common and public property resources such as forests and fisheries are being appropriated without compensation. The cost of growing scarcity is diluted through subsidies paid by the general taxpayer. And the cost of ultimate depletion is borne by the poor, who lack alternatives, and by future generations, whose interests are sacrificed in favor of short-term political expedience.

Preventing prices from rising in line with growing scarcities and rising social costs distorts the signals that in a well-functioning market would have brought about increased efficiency, substitution, conservation, and innovation to restore the balance between supply and demand.

The source of environmental degradation and sustainability is not growth at all. It is policy and market failures. To put it simply: You get what you pay for, and you lose what you don't pay for. If you subsidize waste, inefficiency, resource depletion, and developmental degradation, that's exactly what you get. If you and everybody else have free and open access to a scarce resource, write it off. It won't be a resource for long. Show me a depleted resource or a degraded environment and I will show you a subsidy or a failure to establish the basic conditions that would enable the market to function efficiently. Let us admit it: A market failure is nothing but a policy failure, one step removed.

Economic growth generates many benefits: higher standards of living, better education, health, and longevity, better working conditions, and reduced hours of work. Economic growth also has costs: resource depletion, environmental degradation, ecological disturbance, and widened inequalities, especially during the takeoff stage.

How can the costs of growth be minimized and fully paid for? They must be borne by those who generate them, not by the general taxpayer, foreign lender, or future generation. The principle that the polluter or beneficiary pays is not only fair, but efficient and sustainable as well.

How do we get polluters and resource users to pay the social and developmental costs of their growing wealth? First, by eliminating all direct and indirect subsidies, giveaways, and public projects that promote environmental degradation or resource depletion. Second, by establishing the institutions necessary for the emergence and efficient functioning of environmental and resource markets—institutions such as secure, enforceable, and transferable property rights. Third, by internalizing externalities and mitigating any other market failures through a consistent structure of market-based economic incentives and disincentives rather than a patchwork of bureaucratic command and control regulations. Fourth, by subjecting all public projects to rigorous scrutiny and environmental assessment.

Will there be growth if the full environmental costs of growth are paid for? The answer depends on the sources of growth. If the growth is derived from free-riding, it won't continue. If it is derived from increased efficiency and productivity, it will continue. In fact, empirical studies show that the single most important source of growth is increased efficiency.

There is tremendous scope for decoupling economic growth from expanding energy and resource use and advancing environmental degradation. The classic example is Japan, which produces twice 1973's output with the same amount of energy. As Larry Summers told us yesterday, a 0.2 percent increase in total factor productivity would do more for the living standards of the developing countries than an additional $100 billion of capital investment at the going rate of return.

Thus the quest for sustainability can be made into a potent force for efficiency, productivity, innovation, and growth—if we don't squander it on knee-jerk responses, such as outlawing what we don't like and instituting inefficient commands and controls. The road to sustainable development passes through an undistorted, competitive, and well-functioning market.

Floor Discussion

In opening the floor to comments, Larry Summers observed that both speakers agreed on the desirability of environmental taxes. Summers asked Brown if he thought serious evaluations (which are now often lacking) and consistent application of appropriate fiscal policies (taxing externalities) would be adequate, or if he sensed the need for a transcendentally different view of the world.

Brown said that the present economic accounting system had served us well, and that many people would consider it a major shift to restructure the system to take into account environmental costs. Whether taxing externalities represented a paradigm shift, he didn't know, but it would go a long way toward converting an environmentally unsustainable economic system into one that was sustainable. It would allow an innately efficient, intelligent marketplace to continue operating, with tax policy as a steering device to get us from where we are to where we want to go. But, he said, it would not be enough. Other remedies, including regulations, were also needed.

Addressing Panayotou's emphasis on tax instruments as a way of controlling environmental degradation, Summers observed that some people think the economic approach to environmental problems is what has brought the world to its current state—that the preservation of species, for example, which could be of enormous value in the long run, might strike economists as having limited net present value.

Panayotou replied that tax measures represent only a quarter of the instruments he proposed. The main cause of environmental degradation, including the extinction of species, is subsidies, which like other distortionary policy instruments, should be removed. He had also proposed three other sets of policies: first, establishing the foundations for efficient market functioning, including secure, enforceable, well-defined property rights for all resources, whether private, corporate, communal, or public; second, subjecting all public and all large private projects to rigorous assessment of environmental impact; third, making new fiscal instruments part of a consistent, integrated economic structure that gets incentives right.

As for the destruction of species, Panayotou continued, errors are irreversible, so we must err on the conservative side—keeping options open, using a minimax approach to avoid large losses, and calculating not only the existence value but also the bequest and option value of any species. When you are not sure, it is better not to destroy a resource—it is better to postpone development until you have full information. For one thing, the demand for environmental amenities for species will increase as income increases, because environmental amenities or commodities are income-elastic. For another, ecological progress can make environmental commodities more productive but does little to reproduce natural environments.

A participant asked for the panelists' views on population expansion. Brown replied that economists and ecologists view population issues through different lenses. Economists see an economy growing at 5 percent while the population grows at 3 percent and are content because the 2 percent surplus will raise incomes. An ecologist looking at the same situation will want to know how the existing population will relate to the sustainable yield of natural systems, whether those be grasslands, croplands, forests, or fisheries. One problem is that we don't gather nearly as much data on what is happening to natural systems as we do on overall economic activity. We must look at a system's natural carrying capacity. A World Bank study of West Africa suggested, for example, that the capacity of Africa's dryland ranges is pretty much fixed; there are no known technologies for making them more productive. In Brown's opinion, we should bring world population growth to a halt at about 8 billion; 10 or 14 billion is unrealistic; those numbers are beyond the support capacities of local systems.

If societies want to, he said, and have the right leadership, they can quickly slow population growth. But for many developing countries, the options are either to slow population growth quickly or to watch death rates rise, as is beginning to happen in some African countries.

Panayotou countered that although population growth creates problems, it is not without redeeming value if a country invests in education and human capital. In fact, it can result in both innovations and economies of scale. Moreover, development itself brings about an endogenous decline in fertility. You cannot sustain a reduction in population without development; when people are poor, their demand for children remains high. Population growth is particularly a problem in African countries where development efforts have failed, markets are badly distorted, and growth has slowed to a standstill. There, family planning efforts are by no means a second-best—much less the best—solution. The best solution is to straighten out the markets, promote sustainable economic growth, and provide education and job opportunities for women. That will do more to slow and sustain slow population growth than providing condoms will.

Brown saw this as circular reasoning. It's true, he said, that it is easier to slow population growth when economic and social conditions are improving, but investing in education and improving job opportunities for women is difficult when you have the high dependency ratios that accompany high population growth. World Bank data show that forty countries ended this decade with lower incomes than they had at the beginning; under such circumstances, it is difficult to slow population growth. Yet those are probably the countries in which the relationship between population size and local support systems is deteriorating most rapidly.

Returning to Summers's question about whether we need a paradigm shift, one participant said that macroeconomists deal with models in terms of production and consumption, where things are pulled out of a hat and then disappear, without taking into account that materials are transformed in enterprises and in the household and don't go away. The standard multifactor measure of productivity growth compares growth of an index of outputs with growth of an index of inputs, but the laws of conservation of matter and energy say that physically inputs and outputs grow at the same rate. Economists generate a rate of productivity growth by ignoring unmarketed inputs and outputs. How many of our tax models take into account how the tax structure might affect the generation of externalities? How many macroeconomic models take into account the consequences of depleting such assets as natural resources? In evaluating country policy and country performance, how many of the World Bank's macroeconomic models deal adequately with the effects of degrading natural resources?

Summers asked Brown if he knew of any forecasts that, in retrospect, were wrong because they failed to account for environmental damage. Africa is the first example that comes to mind, Brown said. In recent years, Bank projections seemed to suggest that things were going to improve toward the end of the century, although environmental systems were clearly deteriorating and per capita food production had begun to decline. Now, though, most people working in Africa don't see Africa's prospects in the 1990s as promising.

Summers asked Brown and Panayotou to look at the flip side of the question: the costs of addressing environmental concerns. For example, when the price of oil went up a relatively modest amount (compared with the environmental taxes some propose), the World Bank treated it as a major disaster for people living near the edge of subsistence. Are there proposals directed at environmental problems that go too far? he asked. And if so, how can the balance be drawn?

Brown agreed that at times environmental issues were clearly inflated beyond their real importance. But at the same time, it's usually poor people who are most seriously affected by environmental degradation. For years Ethiopia has been losing as much soil each year as the United States lost in the entire Dust Bowl period, and that is taking a terrible toll now. In another example, infant mortality rates in some communities near the Aral Sea—where cancer levels are epidemic because so much pesticide has accumulated in the region's underground water supplies—are higher than in Africa.

Observing that Panayotou had emphasized optimizing resource allocation while Brown had emphasized the effect of scale, one participant expressed the opinion that scale is at the center of the issue of whether growth is compatible with sustainability. Can we actually make a distinction between the growth of output and the growth of input? Can present technologies and social organization realistically be expected to deliver the productivity that would allow the growth we want without stressing the environment?

Panayotou said that he had studied the relationship between energy subsidies and inefficiency, and found that where energy was subsidized, energy throughput didn't improve much. But in Japan and Germany, where users were not protected and had to bear the full costs, throughput was reduced tremendously.

On the issue of population and scale, Brown responded that a number of countries have had population growth of about 3 percent a year, which represents a twentyfold increase in a century. He said no country can sustain that kind of growth for many decades, and, unfortunately, several developing countries already have a few decades of it behind them. He doubted that they will get many more.

A participant from Ethiopia discussed the link in his country between poverty and environmental degradation. A third of Ethiopians, he said, live in an area that has been completely degraded environmentally, and the problem is getting worse, because although the World Bank warns poor people not to cultivate these areas, they have no alternative, so they keep on farming. And the degradation intensifies. How can you say that getting prices right will take care of the problem? Prices will not restore the environment. What policy should Ethiopia adopt? Subsidies are not a possibility because the government has no money, nor can it create alternative employment. They will remain destitute, surviving on handouts from the international community. What Panayotou is saying would make sense in industrial countries, but in eastern Africa, particularly around the Horn, the message would be taken lightly.

Panayotou replied that for some countries it might be too late, and that Ethiopia might need outside assistance. In Indochina, Nepal, and India, for example, a great deal of money is being wasted daily in subsidizing inefficient industries. Those industries should be removed and that money should be used to give poor people education and job opportunities—or even short-term food assistance. The solution is not just prices; we must get the incentive structure right; property rights above all must be well-defined and secure. If he had to present the solution in one sentence, it would be this: All resources should have titles, and all people should have entitlements. There are people begging for entitlements to assets, employment, and education, and there are untitled resources begging for owners. There is a demand and there is a supply. We should match them.

Another participant asked for practical, real-world examples. Panayotou said he could point to several: land entitlement policies had increased productivity up to 30 percent; eliminating pesticide subsidies, he said, saved Indonesia's rice crop, and integrated pest management halved the costs; in Brazil, ranching subsidies were eliminated; in Thailand, an industrial environment fund has been established with industry contributing presumptive charges based on the amount of waste produced. And finally, in a project in Sulawesi, Indonesia, farmers pay for water and the fees are used to protect the watershed, which has been declared a national park. This assures a steady flow of water while at the same time preserving forests and species. Thus farmers have water to improve their yields, which increases their income, which allows them to pay their fees, and so on, in a sustainable system. This is not an academic discussion, said Panayotou. These approaches improve efficiency and economic growth as well as the environment. That is sustainable development.

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