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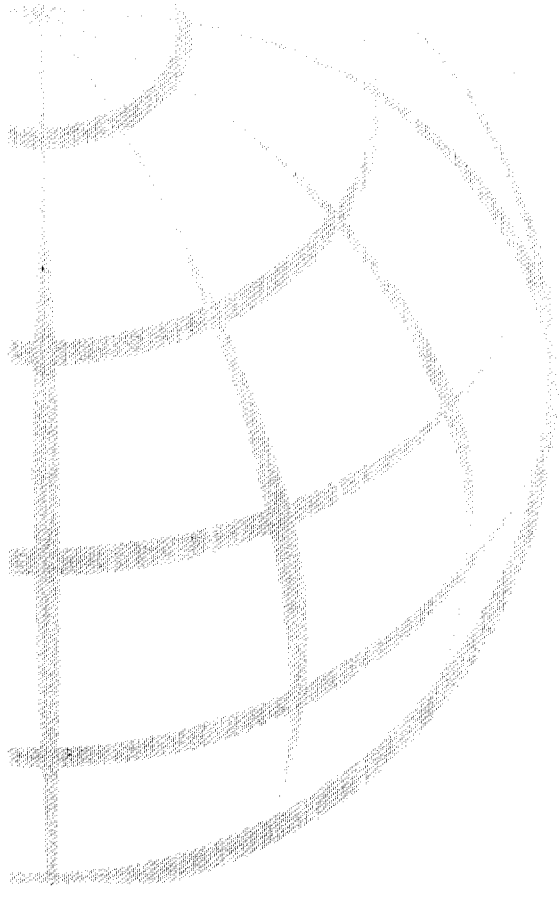
The Role of Government and the Private Sector in Fighting Poverty



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FOREWORD

Governments and the private sector have important roles in fighting poverty and advancing economic development. Recent experience suggests that the most promising innovations in fighting poverty are hybrid formulas which combine the best of both public and private sectors.

Investing in human capital (or, in the social areas such as education, health, nutrition and population) promotes economic growth and reduces poverty.

The traditional approach to investing in human capital (at least in the Western world during the last century) has been for the public sector to assume major responsibilities. But in the past decades, social programs have come under heavy financial pressure. In about half of the countries for which data are available, public expenditures on education and health fell as a percentage of GDP between 1980 and 1985. This trend is likely to persist in many countries given the continuing constraints on public budgets. It is, therefore, imperative that the role of the private sector in financing and providing social services be expanded.

This paper is intended to put together the recent literature on the role of Governments and the private sectors in investing in human capital. Each country, given the initial conditions and background, commands its own optimal and feasible mix of public and private sectors. Recognizing this, the paper can only suggest the rather general sketches of a complex picture. Hopefully, policy makers and task managers will find these sketches herein helpful to them in completing the more detailed picture specific to their countries and/or projects.

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EXECUTIVE SUMMARY

Governments and the private sector have complementary roles in promoting development and in fighting poverty. After decades when government intervention was prescribed as the panacea for all market failures, the world events at the turn of the 1990s led by the demise of central planning have highlighted the failures of government and have shifted the pendulum away from the public sector. Experience now suggests that both the public and private sectors have indispensable roles to play in addressing poverty. Indeed, the most promising innovations in reducing poverty are hybrid formulas which combine the best of both sectors.

The traditional economic justifications for governments subsidizing and delivering social services include: (i) benefits flow not only to individuals but also to society at large (externalities); (ii) small private providers may operate inefficiently (scale economies); (iii) capital markets for the social sectors are not well developed (if not absent); and (iv) public expenditures on social services are used to redistribute income (equity).

These reasons, while valid for some social services, are not without substantial qualifications. For example, strong consumption externalities may characterize primary education but not higher education. There is also no evidence that hospitals in developing countries experience significant scale economies. For example, a comparison of the unit costs of five Malaysian general hospitals of comparable quality indicated no perceptible downward trend in the unit costs of inpatient days as the size of the facilities increased.

For equity purposes, public expenditures on social services have been regarded as a method of income redistribution, particularly if services are financed by progressively collected revenues. Evidence, however, consistent with public choice theory, indicates that progressive redistribution has not always taken place. Uniformly low prices has meant that the most costly services (higher education, tertiary care), consumed mainly by the rich, are subsidized the most. This leaves the poor without access to even the most basic services.

Even in the absence of the capital markets for social services and if social services are characterized by public-good features, this does not necessarily justify having the state monopolize their provision. Indeed, except when substantial scale economies exist or when demand is so low to warrant a natural monopoly, monopoly provision is sub-optimal in efficiency terms. Examples of inefficiencies found in public monopolies include disproportionate expenditure on less cost-effective interventions such as tertiary care or higher education, high unit costs, and an inability to ration according to need.

Selective private sector expansion may be expected to correct current imbalances and government failures, as well as to mobilize additional resources for social sector investment.

This suggests the need for a radical restructuring of the roles of government and the private sector. Specifically, it suggests reducing the role of governments and expanding the role of the private sector in promoting growth and meeting the human resource needs of the population.

However, although private sector expansion may relinquish governments from certain tasks, it also imposes new responsibilities. In particular, it demands that governments develop incentive mechanisms to promote cost control, quality assurance, and access for the poor.

This paper examines the relative roles of the private and public sectors in the implementation of a *two track strategy* to reduce poverty. This is composed of: (i) *sustained broad-based economic growth* that makes efficient use of labor, the main asset owned by the poor; and (ii) *investment in people or human resources* by ensuring access to basic social services of adequate quantity and quality. Evidence suggests that both these tracks have high pay-offs in terms of reducing poverty. Both facilitate employment and raise the incomes of the poor, enabling them to participate in the development of the economy.

The challenge to policy is to come up with an appropriate mix of public and private interactions that can effectively promote development, and, in particular, reduce poverty. Even though the mix will vary depending on the socio-economic conditions of each country, some general guidelines about the roles of government and the private sector can still be developed and presented in this paper.

TRACK 1: SUSTAINING BROAD-BASED ECONOMIC GROWTH

Poverty cannot be reduced by taking a short-term, piecemeal approach. Rather, it requires a comprehensive approach that integrates both macroeconomic and sectoral policies. The first track involves bringing about and sustaining growth, and, in particular, a pattern of growth that reduces poverty.

The experience of the last decade has led to a rethinking of the role of governments and the private sector in promoting growth and development. The emerging consensus favors encouraging private sector initiatives, reducing the presence of government, and allowing market forces to operate; in short, *a market-oriented approach to development.* The consensus is built on evidence that suggests, in general, a strong link between investment in human capital and less government on the one hand and improvements in economic performance on the other.

Brazil is a recent vivid example, having recovered from economic shambles and nearing an "economic miracle". The recovery continues to depend less on government and more on private initiatives, as the government's share of investment has dropped from 30 percent in the 1980s to barely 11 percent in the 1990s. This pattern of development is reinforced by quality investments in human capital. According to one analysis, education accounts for 20 percent of the growth.

The importance of human resources in sustaining economic growth is also demonstrated by the East Asian success stories. A recent World Bank study of economic growth in east Asia found that the single largest determinant of growth was primary education. Another study of 90 countries confirmed the strong and robust positive association between school enrollment and average rates of growth.

Investment in human capital has high returns for society. It raises their productivity, decreases the number of days they are ill and prolongs their potential working lives. Governments and the private sector would focus their efforts on guaranteeing people --especially the poorest-- access to basic social services of adequate quality. This requires that targeting is improved to ensure that programs reach their intended beneficiaries, that adequate resources is provided to meet recurrent costs, and that efficiency of management and responsiveness to local needs be improved.

SOCIAL SAFETY NETS

Promoting growth and the right pattern of growth can take time and some groups of people may suffer in the transition. Various safety nets measures such as compensation schemes, social investment funds, retraining, public work programs, food subsidies, etc., are necessary to protect the vulnerable populace.

These schemes can be funded by private sources (private funds, charitable contributions), a mix of public and private sources (shared by taxation, employers, workers), or public sources (general taxation). Even if governments finance the schemes, the private sector can play a part in delivering the services. Indeed, the success of the drought relief in Botswana in the 1980s was partly due to the fact that private traders and retailers distributed the food. Experience tends to suggest that the private sector could play an increasing role even though this is an area traditionally reserved for the public sector.

TRACK 2: HUMAN RESOURCES DEVELOPMENT

The second track in the strategy to reduce poverty is to invest in people. This not only enriches people's lives (considered and end of development in itself), but also lays a foundation for long-term economic growth (a means of development).

Both government and the private sector have critical roles to play in human resources development. It is useful to make a distinction between provision and financing. The possible combinations of public and private provision and financing can be represented diagrammatically. The table shows that the private sector can function as both the financier and the provider of social services; alternatively its activities can be restricted to either financing or provision.

Three potential advantages associated with increasing the role of the private sector can be identified: first, the private sector may alleviate fiscal or budgetary constraints and mobilize additional resources

for investing in human resources; second, the private sector may improve the efficiency of delivering social services; and third, the private sector may increase equity by releasing public resources to be targeted toward the poor.

These factors suggest reducing the role of governments in meeting the human resource needs of population groups who can afford to pay coupled with more intensive targeting of public resources toward the poor. Cost recovery strategies are especially warranted for services that do not exhibit "public-good" characteristics and for which private demand is strong at current prices.

A. EDUCATION

Education enhances people's productivity and their potential for achieving a higher standard of living.

Public/Private Mix in Social Service Provision and Finance

		PROVISION	
		PUBLIC	**PRIVATE**
FINANCE	**PUBLIC**	Government funding and provision	Government services contracted to private providers
	PRIVATE	Government Services funded (wholly or partly) by direct user fees, insurance, and donor agencies	Private services funded (wholly or partly) by private insurance, direct user fees, and donor agencies

Source: Adapted from WHO, 1991.

It also provides non-market benefits, such as better child health and reduced fertility. As such, it is a great anti-dote to poverty and a stimulant of economic growth. Yet, after decades of remarkable progress, more than a billion adults remain illiterate in the developing world and enrollment rates have remained extremely low in many countries.

The case for involving the private sector in education, like other social sectors, rests on the imperative of: a) sustaining adequate investment in human capital in the face of tight budgets; and b) increasing efficiency and equity in the face of potential government failures.

It may be expected that the more a school depends on private financing, through fees collected from students or contributions from local communities, the more likely the school is to use resources efficiently. When people share directly in the cost of a service, they are more likely to monitor costs

closely and to guard against waste. Furthermore, private financing at higher levels of education may also provide incentives for students to complete their study programs more quickly and behave more like investors in selecting their degree.

Increasing the reliance on the private sector may also enhance equity by releasing public resources to be targeted to the poor. In most countries, excess demand typically exists in higher education and sometimes also at the secondary level. Charging user fees in such circumstances would not substantially reduce demand for education but these private contributions could be used to expand access at all levels. Students from poor families could be protected by loan schemes and scholarships.

These arguments concerning efficiency and equity are supported by empirical evidence. Studies of private and public schools in Tanzania, Philippines, the Dominican Republic, Thailand, and Colombia, found that students from private schools outperform students in public schools in verbal and mathematics tests (sample selection bias and student background held constant), and that the unit costs of private schools are less than those of public schools. Moreover, data from Asia show a negative relationship between the extent of private financing and the share of cumulative public spending on education accruing to the 10 percent best-educated students in a generation.

These factors suggest a policy package composed of three elements:

- *reallocating government spending on education toward those educational levels with the highest social returns --primary education or general education-- and recovering the public cost of higher education;*
- *developing a credit market for education, together with selective scholarships, especially in higher education; and*
- *decentralizing the management of public education and encouraging the expansion of the private and community-supported schools.*

Within this policy framework, the government has an important catalytic role to play in improving the way the market for educational services works. This entails establishing complementary institutional arrangements, such as setting up national assessment systems to generate information about school performance and lifting prohibitions against non-governmental suppliers of education. Governments may also provide financial and technical support to private schools if necessary. For example, the National Education Trust Fund in Tanzania, established by the government, in collaboration with the World Bank and the Norwegian government, has provided funds for private secondary schools to help meet their capital and teacher training costs.

B. HEALTH

Despite marked improvements over the past decades, enormous health challenges still persist. Health care systems in many developing countries are inadequately equipped to meet these challenges. Given that health care costs account for 8 percent of total world product (and about 5 percent for the developing countries) and are rising faster than income in many cases, the immediate policy issue is better spending.

Increasing private sector involvement in the provision and financing of health care can be expected to increase efficiency by creating incentives for cost-sensitive consumer/provider behavior, for competition among providers, and for the decentralization of management structures. For example, a selective user fee policy may deter over-utilization, signal to consumers the relative importance of different types of care, and encourage the appropriate use of different levels of the health system; a dismantling of the state monopoly over drug procurement and distribution may reduce waste arising from theft and spoilage; and competition between different types of providers may create incentives to improve the quality of service provision. In addition, private sector participation may release public funds to extend cost-effective services to underserved population groups.

These arguments are not without empirical support. For example, in Malawi, greater managerial efficiency has led to mission hospitals being designated as district hospitals, and in Zimbabwe, the introduction of by-pass fees at hospitals has reduced over-loading and so increased the internal efficiency of the health system. In Chile, private hospital care has been expanded while government subsidies have been targeted toward the poor.

These factors suggest a policy package of three key elements:

- *fostering an environment that enables households to improve health;*
- *recovering costs for tertiary care and less cost-effective interventions and redirecting government expenditures toward financing a package of public health services and a package of essential clinical services; and*
- *promoting diversity and competition in the delivery of health care services.*

Promoting competition entails the following key steps:

- encouraging the development of social or private insurance (with incentives for equitable access and cost containment) to cover clinical services outside the essential package;
- encouraging suppliers (both public and private) to compete to deliver clinical services and provide inputs, such as drugs, to publicly- and privately-financed health services; and
- generating and disseminating information on provider performance, on essential equipment, on drugs, on the cost and effectiveness of interventions, and on the accreditation of institutions and providers.

Within this policy framework, the government's role as coordinator, facilitator, and supervisor of private sector activities is critical to address six potential problem areas: over-provision; cost escalation; moral hazard and adverse selection; failure to promote public health and equity; attraction of professionals out of the public sector; and poor quality of private medical practice. Government involvement may include the prohibition of certain insurance practices, the creation of incentives for cost-sensitive provider/consumer behavior (for example, capitation payments, co-insurance), training programs, tax relief for private providers located in rural areas, and the subsidization of preventive services.

C. POPULATION

As a whole, the world's population is growing by about 100 million new additions each year. Most of the population increase is concentrated in low-income countries. This poses a serious challenge to developing countries, particularly in terms of their capacity to sustain adequate investments in human capital. Slower population growth will not solve the problems, but it may reduce the pressures and buy additional time to work on solving the problems.

Governments and the private sector have important roles to play in stabilizing population growth. First, it is often argued that population stabilization is a merit good, therefore governments would take initiatives for providing leadership and resources to ensure access to safe services. In effect, women's health and reproductive health services not only helps women reduce the health risks from mis-timed and unwanted pregnancies, it has also been shown to be an efficient means of improving the welfare of the poor, particularly of children. For example, studies of Malaysia show that the decline in fertility between the 1970s and early 1990s was accompanied by a closing of the gap in per-child resources between the lowest and highest quintiles of families.

Second, the private sector may have a lot to offer in terms of improving the quality of services at low cost. For example, an analysis of five Peruvian family planning NGOs found that they were able to deliver high quality services at considerably lower cost than the government, despite having high administrative expenses.

Third, increasing reliance on the private sector may expand overall access to population stabilization services and allow for higher public investments in underserved areas. For example, a Colombian NGO, Profamilia, provides for most of the country's contraceptive needs, freeing the government to focus its effort on the rural poor, and attempts to promote private sector participation through social marketing schemes has expanded overall access in at least 30 countries.

Lastly, private sector involvement in women's health and reproductive health services may enable governments to keep a safe distance from politically sensitive issues, while ensuring adequate provision of services.

These factors suggest a need to restructure the public/private mix in the regulation of fertility. Even though market failures and welfare considerations imply a need for continued government involvement (for example, markets for contraceptives and information may be flawed, depriving groups such as the rural poor of the services they need), government's main responsibility is to promote an efficient public/private mix rather than to deliver and finance services *per se.* A three-part policy is recommended:

- *ensure that population policies are integrated within the country's broad set of social and economic goals;*
- *recover costs for programs that serve those who can afford to pay and target public resources toward the poor; and*
- *promote diversity in the delivery of women's health and reproductive health services programs.*

The latter recommendation involves four key steps:

- incorporating the private sector into strategic planning;
- reforming laws and regulations which inhibit private sector participation;
- promoting women's health and reproductive health services through advertising campaigns and educational programs; and
- providing financial and technical assistance to private sector agencies.

D. NUTRITION

Dietary deficiencies of calories, protein, vitamins and minerals are responsible for low productivity, learning disabilities, mental retardation, poor health, blindness, and premature death. The most vulnerable to these consequences are children under the age of three and pregnant and lactating women. Investments in nutrition can simultaneously eliminate the debilitating potential effects of malnutrition and allow the poor to become more productive.

Malnutrition is, in most cases, a disease of poverty. Hence, the public sector has a role of ensuring access to nutritional services, especially for the poor. However, as in other sectors, government monopoly over the provision of nutrition activities can be sub-optimal in efficiency and equity terms. For example, an evaluation of a government School Milk Programme in Kenya found it to be highly cost-ineffective, mainly due to the monopoly power of the Kenya Cooperative Creameries Ltd. Many other government programs have failed where the private sector has succeeded in terms of targeting resources to the most needy. Hence, actions to increase the participation of the private sector may help developing countries to address malnutrition in the short and the long term.

The private sector, especially experienced NGOs and Community-Based-Organizations (CBOs), have a particularly important role to play in the implementation of projects and the delivery of services. The experience of these organizations with communities places them in a strong position to promote

recipient participation and affect behavioral changes amongst the poorest groups. Indeed, the success of an early World Bank assisted project in Thailand depended largely on the participation of CBOs in the design and implementation of the project.

In terms of food procurement, there are indications that the private for-profit sector may be better equipped to deal with logistics, such as transportation, storage, and distribution. Moreover, it may be more cost-effective to design feeding programs whereby entitlements are determined through public bodies (for example, health clinics or schools) with the actual food acquired in private markets. For example, the Honduras Social Investment Fund chose a food coupon program that was administered through the health system, while the coupons could be redeemed through participating retail food outlets.

A strong complementarity between the public and private sectors is the most effective way to reach the goal of eliminating micronutrient deficiencies and energy-protein malnutrition. Policies could ensure that:

- *nutrition programs are integrated into a broad set of economic and social programs that address both the causes and consequences of malnutrition;*
- *public resources are targeted toward the most cost-effective interventions for women and children most at risk from malnutrition; and*
- *complementarities are forged between the public and private sectors in the delivery and financing of services.*

Within this policy framework, however, governments could establish mechanisms to facilitate and coordinate private sector activities. In the case of the for-profit sector, it could provide incentives to stimulate appropriate provider behavior. For example, legislation that requires micronutrient fortification of basic foodstuffs such as salt could be combined with incentives to encourage compliance (for example, tax relief, import licenses, loans for equipment, subsidies on fortificants, and positive press coverage).

CONCLUSION

The events in the past decade, from the collapse of central planning to the debt crisis in Latin America, have exposed the astounding costs of government failure. The world has learned to rely more on markets and less on government to reduce poverty and promote development.

This is not to insinuate that there is no longer a role for governments. On the contrary, at all levels, there is a need to make better use of existing human, natural, and financial resources currently available in developing countries. Governments, NGOs, local communities, and the for-profit private sector need to work together to make better use of these resources. *Governments could do more of what they do best, and less of what the private sector does better.*

Increasing the involvement of the private sector advances the World Bank's objectives of reducing poverty in many ways. First, it improves economic efficiency. Second, it redirects government efforts away from competing with private goods and services and so frees up tax revenues for funding social programs that benefit the poor. Finally, it simplifies regulations, privatizes, and broadens access to credit through reform of collateral, hence lowering the cost of doing business for small farmers and entrepreneurs where most of the poor are concentrated.

The Bank is supporting developing countries to promote private sector development. The strategy has three themes:

- improving the business environment by supporting macroeconomic stabilization and procedural, regulatory, and legal reforms;
- restructuring the public sector by supporting redirecting public spending and encouraging the private sector to compete in the delivery and financing of services; and
- reforming the financial sector by supporting the development of efficient financial systems that mobilize savings and channel them to the most productive uses.

Each country has its own range of government and private sector initiatives available to fight poverty. However, the general principle remains that, given a country's constraints, governments can best help reduce poverty by fostering an environment that maximizes the vitality and dynamism of the economy, by providing safety nets and certain required investments, and by letting the private sector do most of the rest. After all, it is the people, not the government, who will, in the final analysis, improve their own welfare.

INTRODUCTION

Governments and the private sector have complementary roles in fighting poverty and in promoting development. This paper discusses each of these roles particularly with regard to reducing poverty.

Despite the remarkable progress made by developing countries in improving the lives of their people over the past few decades, poverty remains pervasive and has even increased in many countries.[1] More than one billion people, one fifth of the world's population, live on less than one dollar a day, a standard of living attained two hundred years ago by the Western industrial countries.[2] Moreover, both the number and the proportion of poor people have increased in various countries in Sub-Saharan Africa, in the Middle-East and North Africa, and in Latin America. Poverty has also increased in the countries of Eastern Europe and the former Soviet Union (Sandstrom, 1993).

The challenge of reducing poverty is, obviously, overwhelming, but by no means impossible.[3] Experience suggests a "two-track strategy" composed of (i) sustained broad-based economic growth that makes efficient use of labor, the main asset owned by the poor, and (ii) investment in people or human resources by ensuring access to basic social services of adequate quality and quantity. Evidence suggests that both these tracks have high pay-offs in terms of reducing poverty. Both facilitate employment and raise the incomes of the poor, enabling them to participate in the development of the economy.

The success of this strategy depends on each and every actor in society. Specifically, both the government and the private sector have indispensable roles to play.

The dichotomy between government and the private sector has influenced policy thinking in the past century. The two sectors have long been regarded as competing paradigms in mobilizing human energy. After decades when government intervention was prescribed as the panacea to all market failures, the world events at the turn of the 1990s led by the demise of central planning have highlighted the failures of government and have shifted the pendulum away from the public sector. As this century is drawing to an end, we are learning how the private sector can contribute to reducing poverty.

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[1]Poverty is commonly defined as the inability to attain a minimal standard of living, interpreted to encompass not only consumption of food, clothing, and shelter, but also access to education, health services, clean water, etc. (World Bank, 1990a).

[2]The estimates are based on data accounting for 80 percent of the population in the developing countries. The head-count index is used to indicate the percent of the population that is poor. It is based on a poverty line in 1985 PPP (purchasing power parity) dollars of $370 per person per year. This level may also be interpreted as a measure of absolute poverty (World Bank, 1990a).

[3]The poverty gap measure suggests a much less intimidating task. The poverty gap indicates the transfer required to raise the incomes of the poor above the poverty line. Expressed as a percentage of total GDP in the developing world, it is only 4 percent.

The challenge to policy is to come up with an appropriate mix of public and private interactions that can effectively promote development, and, in particular, reduce poverty. Even though the mix will vary depending on the socio-economic conditions of each country, some general guidelines about the roles of government and the private sector can still be developed and presented in this paper.

TRACK 1: SUSTAINING BROAD-BASED ECONOMIC GROWTH

Poverty cannot be reduced by taking a short-term, piecemeal approach. Rather, it requires a comprehensive approach that integrates both macroeconomic and sectoral policies. The first track involves bringing about and sustaining economic growth, and, in particular, a pattern of growth that reduces poverty.

No country has succeeded in reducing poverty without sustained economic growth. Economic **growth** (as measured by the growth in mean income or expenditure) is a significant factor in raising the poor's incomes (World Bank, 1990).[4]

Countries that have experienced growth in mean expenditure in excess of 3 percent annually (for example, Brazil, Indonesia, Malaysia, and more recently, China) have substantially reduced their poverty percentage. Countries with very low growth (for instance India and Morocco, which grew at about 1 percent per year) made very modest progress in reducing poverty, and in those countries with negative growth (Colombia and Venezuela), poverty increased.[5]

Box 1

Complementarity Between Macroeconomic Policy and Education in Explaining Growth Rates, 1965-87
(Percent Growth)

	High distortion	Low distortion
High education	3.78	5.53
Low education	3.06	3.79

Note: High distortion reflects a foreign exchange premium of more than 30 percent; low distortion, a premium of 30 percent or less. Education is measured as the average years of schooling, excluding postsecondary schooling, of the population age 15 to 64. High education reflects more than 3.5 years; low education, 3.5 years or less.
Source: World Bank, 1991a

The evidence also indicates that the **pattern of growth** is as important as the rate of growth. Maintaining a pattern of growth that makes efficient use of labor, the main asset owned by the poor, is the most effective way to reduce poverty. Countries that have made great progress in reducing income inequality, instead of relying on cash transfers, have pursued growth policies that provided incentives for using labor effectively, while also providing universal basic social services (World Bank, 1990; Johansen, 1993). This entails taking steps to free up labor markets and maximize employment such as reducing income

[4]Cote d'Ivoire household survey data show that, when incomes dropped due to the deteriorating economy, the poor were forced to cut their spending on education and health care (Husain, 1993).

[5]The econometrics suggest that a 1 percentage point increase in the growth rate of mean income leads to a decline in the rate of change of the head-count index by 0.24 percentage points (Squire, 1993).

and payroll taxes and relaxing employment regulations. Indonesia followed this broad-based growth strategy; the proportion of the population living in poverty fell from 64 to 22 percent in just 17 years.

Government and Private Sector Roles

The experience of the last decade has led to a rethinking of the role of governments and the private sector in promoting growth and development. The emerging consensus favors encouraging private sector initiatives, reducing the presence of government, and allowing market forces to operate; in short, *a market-oriented approach to development* (World Bank, 1991a; Patel, 1994).

The consensus is built on evidence that suggests, in general, a strong link between investment in human capital and less government on the one hand and improvements in economic performance on the other (Barro and Lee, 1994). Recent data in 116 economies from 1965 to 1985 suggest five factors that discriminate between slow and fast growers: the positive effects of investment on GDP; the positive effects of high human capital levels in the forms of educational attainment and health; the negative effects of political instability; and, in particular, the negative effects of large governments and government-induced distortions of markets.

Brazil is a recent vivid example, having recovered from economic shambles and nearing an "economic miracle" (Development News, 05/10/94). The recovery continues to depend less on government and more on private initiatives, as the government's share of investment has dropped from 50 percent in the 1970s to 30 percent in the 1980s, and to barely 11 percent in the early years of the 1990s. A recent analysis of growth in Brazil found, however, that the recovery is also dependent on investment in human resources. According to this analysis, 20 percent of the growth is explained by quality investments in education (Lau et al., 1993).

The importance of human resource development in sustaining broad-based economic growth is also borne out by the East Asian success stories. A recent World Bank study of economic growth in East Asia found that the single largest determinant of growth was primary education (World Bank, 1992a). This finding is reinforced by evidence from a study of 90 countries that confirmed the strong and robust positive association between school enrollment and average rates of growth (Barro, 1991). Survey data also shows that better health is associated with greater productivity, (measured by higher wages). For example, a study of the potential income loss from illness in eight developing countries showed that losses averaged between 2.6 and 6.5 percent of yearly earnings (World Bank, 1991a).

Hence, investment in the health, nutrition, and education of the people has high returns for society. It raises their productivity, decreases the number of days they are ill and prolongs their potential working lives. Governments and the private sector, therefore, would focus their efforts on guaranteeing people --especially the poorest-- access to basic social services (basic education, health care, women' health and nutrition, water and sanitation). Moreover, improving access to the poor and the vulnerable populace requires that targeting is improved to ensure that public programs reach their intended beneficiaries and only these beneficiaries.

In addition to increasing the quantity of human investments, the quality of services needs to be improved. The impact of quality on the returns to social sector investment is well-documented. For example, Card and Krueger (1992) found that improvements in the quality of education for black Americans explained 20 percent of the narrowing of the black-white earnings gap in the United States between 1960 and 1980. Heyneman and Loxley's (1983) study of over 25 developing and developed countries found that the lower the per capita income of the country, the weaker the influence of socio-economic background, and the greater the effects of school and teacher quality on pupil achievement. Quality also affects the demand for services. Studies of health care in Ghana and Nigeria found a strong positive association between utilization rates and quality improvements (Lavy and Germain, 1994; World Bank, 1990c). Similarly, analysis of data from 72 countries demonstrated that the range of methods available in family planning programs (an indicator of program quality) strongly affected contraceptive prevalence rates, even after controlling for level of socioeconomic development and other aspects of program effort (Jain, 1989).

Improving quality entails providing adequate resources to meet recurrent costs, improving the

Box 2

Percent of Countries With Declining Government Social Expenditures As a Percentage of GDP, 1980-85

Percent of countries with declining expenditures Region/Group	Education	Health
Industrial countries	57	45
Central and West Asia	31	63
South Asia	0	50
East Asia	0	33
North Africa	20	67
Sub-Saharan Africa	57	60
Latin America & the Caribbean	54	39
Eastern Europe	57	50
Total	44	48

Note: For purpose of comparability across countries, data are taken only from consolidated budget accounts; countries that report only budgetary central government expenditures are not included.
Source: Derived from World Development Report 1991, page 66.

efficiency of management, and increasing responsiveness to local needs. However, social programs have come under heavy financial pressure in the past decade. In about half of the countries for which data are available, public expenditures on education and health fell as a percentage of GDP between

1980 and 1985. This trend is likely to persist in many countries given the constraints on public budgets. It is, therefore, imperative that the role of the private sector in financing and providing social services be expanded.

Social Safety Nets

Promoting growth and the right pattern of growth can take time, and some groups of people may suffer in the transition. Various safety net measures such as social funds, compensation schemes, retraining, food subsidies[6], and public work programs are necessary to protect the vulnerable populace.[7] Public employment schemes, in particular, have a vital role to play in reducing poverty and, in some cases, in preventing famine. They can be designed to minimize leakages by incorporating self-selection mechanisms (for example, by setting wages low enough to be attractive only to the poor).

These schemes can be funded by private sources (private funds, charitable contributions), a mix of public and private sources (shared by taxation, employers, workers), or public sources (general taxation). Even if governments finance the schemes, the private sector can play a part in delivering the services. Indeed, the success of the drought relief in Botswana in the 1980s was partly due to the fact that private traders and retailers distributed the food.

Another poverty reduction mechanism that is increasingly being adopted in developing countries is the social investment fund, the first of which were introduced in Bolivia in 1986 (Emergency Social Fund or FSE) and in Bangladesh in 1983 (Grameen Bank). This mechanism is based on a public and private complementarity. Resources were made available at concessionary rates by private, public, and international sources; and management and implementation relied heavily on the private sector. For example, Peru's National Fund for Social Compensation and Development (FONCODES), since its inception in 1992, has approved more than 6,000 small-scale community-based projects. Even though government provides the funds, local communities administer the projects while private contractors carry out the plans. The Honduran Social Investment Fund (FHIS) was created in 1990 to alleviate the social cost of adjustment and to improve the lives of the poor. The Fund makes use of a wide array of NGOs and private institutions to prepare and implement projects involving small and medium-size entrepreneurs in poor communities.

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[6]Food policies include general food price subsidies, rationed food subsidies, food stamps, and supplemental feeding programs. General food price subsidies provide unlimited amounts of subsidized food to anyone who demands it. The private sector provides the food. This scheme, although administratively simple, has enormous leakage. A more targeted approach is to ration food subsidies. Food stamps are similar to rationed food subsidies, except that the ration is measured in terms of nominal currency units. Supplemental feeding programs are usually more cost-effective when they are delivered through the health care system as Chile, China, Costa Rica, Cuba, Jamaica, Korea, and Sri Lanka have proved.

[7]Another common safety net mechanism is cash benefits. However, a recent study by the World Bank using household level data in Hungary from 1987 to 1989 found that cash benefits as a whole are not well targeted and do little to reduce poverty (van de Walle, Ravalion, and Gautam, 1994).

The experience tends to suggest that the private sector could play an increasing role in both financing and providing social services even though this is an area traditionally reserved for the public sector. However, safety nets, albeit crucial to any poverty reduction program, must be accompanied by efforts to invest in human resources.

TRACK 2: HUMAN RESOURCES DEVELOPMENT

The second track in the strategy to reduce poverty is to invest in people. This not only enriches people's lives (considered an end of development in itself), but also lays a foundation for long-term economic growth (a means of development). Thus, human resources development is both a means and an end of development.

Both the government and the private sector have critical roles to play in human resources development. The human resource needs of populations are best served by public/private complementarities capable of sustaining quality investments in human capital (World Bank, 1993a).

Box 3

Public/Private Mix In Social Service Provision And Finance

		PROVISION	
		PUBLIC	**PRIVATE**
FINANCE	**PUBLIC**	* Government funding and provision; services free at point of use	* Government services contracted to private providers
	PRIVATE	* Government services funded (wholly or partly) by direct user charges, private insurance, and donor agencies	* Private services funded (wholly or partly) by private insurance, direct user fees, and donor agencies

Source: Adapted from WHO (1991).

It is useful to make a distinction between provision and financing. The possible combinations of public and private provision and financing can be represented diagrammatically. Box 3 shows that the private sector can function as both the provider and financier of social services; alternatively its activities can be restricted to either financing or provision.

This typology provides a useful conceptual framework for analyzing the public/private mix in the social sectors. However, the reality is often more complex, with a multiplicity of different public and private agencies contributing to both the delivery and financing functions.

Private sector agencies can be categorized as for-profit/commercial or nongovernmental/voluntary. These are qualitatively different. Voluntary or nongovernmental organizations (NGOs) tend to be value-driven and oriented toward meeting the needs of the poor, whereas the commercial sector is driven by profit motives.[8] [9]

Box 4

Examples of Private Sector Agencies

Private Sector Agencies	
Commercial Agencies	**Voluntary Agencies**
* Private Insurance Companies * Drug Manufacturing Companies * Private Schools, Universities, Training Colleges * Private Medical Practitioners (modern and traditional) * Pharmacies and Dispensaries * Shops and other Commercial Outlets * Health Maintenance Organizations	* International Non-governmental Organizations (NGOS); e.g. Save the Children * National and Local NGOs; e.g. BRAC, Gonoshthaya Kendra (Bangladesh) * Community-Based Groups (CBGs); e.g. credit or agricultural coops * Mission/Church Organizations * Trade Unions and Professional Organizations

Source: Adapted from Green (1987) and Cernea (1988).

The traditional economic justifications for governments subsidizing and delivering social services include: benefits flow not only to individuals but also to society at large (externalities); small private providers may operate inefficiently (scale economies); capital markets for the social services are not

[8]There is a voluminous literature on the relative strengths and weaknesses of NGOs (Cernea, 1988; Clark, 1994). In recent years, nongovernmental organizations have become increasingly promoted as alternative providers of social services to the state. This is based on the perception that their transaction costs are lower than governments, that they are closer to their clients, that they engender ownership through participation, and that they are more effective in delivering basic services to the poor. However, the reality is more complex. Various studies show that these characteristics are not universal to all NGOs (Tendler, 1984; ODI, 1992), and many NGOs suffer from management inefficiencies and resource constraints (Cernea, 1988). Furthermore, in some cases, NGOs "crowd out" commercial initiatives.

[9]Nongovernmental organizations (NGOs) are generally defined as legally constituted, non-governmental, non-profit organizations working in the areas of relief, development (including delivery of social services), and advocacy. Community-based groups or organizations (CBGs or CBOs) are informally structured and exist for the benefit of their own members and/or communities while NGOs have formal organizational structures and exist to meet needs beyond those of their own members and communities.

well developed (if not lacking); and public expenditures on social services are used to redistribute income (equity).

These reasons, while valid for some social services, are not without substantial qualifications. For example, strong consumption externalities may characterize primary education and family planning but not higher education or out-patient curative care (Jimenez, 1987). There is also no evidence that hospitals in developing countries experience significant scale economies. For example, a comparison of the unit costs of five Malaysian general hospitals of comparable quality indicated no perceptible downward trend in the unit costs of inpatient days as the size of the facilities increased (Heller, 1975).

In terms of equity, the evidence indicates that, consistent with public choice theory, progressive redistribution has not always taken place.[10] Uniformly low prices has meant that the most costly services (higher education, tertiary care), consumed mainly by the rich, are subsidized the most. This leaves the poor without access to even the most basic services (Jimenez, 1987).

Even in the absence of capital markets for the social services and if social services are characterized by public-good features, this does not necessarily justify having the state monopolize their provision. Indeed, except when substantial scale economies exist, monopoly provision is sub-optimal in efficiency terms. Examples of inefficiencies found in public monopolies include disproportionate expenditure on less cost-effective interventions such as tertiary care or higher education, high unit costs, and an inability to ration according to need.

In brief, as a general rule, economic activities are best conducted by private agents because the market guarantees the efficiency of the production and consumption of these activities. In certain cases, particularly when the net social costs differ from the net private costs (a characteristic of a number of social services), government intervention would be necessary unless the expected cost of government failure is greater than the cost of market failure. The public sector has also an important role in the social sectors for equity reasons. The scope of the intervention, however, would be to ensure adequate financing and provision of these services to the poor population, not to directly assume the function of producing and delivering these services. In fact, the public sector would be most efficient in:

1. Providing public goods. The excludability nature of these goods prevents the market (left to itself) from ensuring payment by the user to the provider, resulting in under provision of these commodities by the private sector.

2. Bridging the externalities gap. Externalities (positive and negative) are pervasive, particularly, in the social sectors. Immunization from a contagious disease, the acquisition of education by

[10]Public choice theory is a branch of economic theory that addresses why government action may fail to achieve the socially optimal supply of services with public-good characteristics. It explains outcomes that are not socially optimal as due to politicians seeking to maximize their own advantage rather than social efficiency or equity. The experience of many developing, and developed countries, provides varying degrees of empirical support for the public choice hypothesis (Birdsall and James, 1992).

one agent benefits the whole community. The role of the public sector would be to encourage the provision of positive externalities while discouraging that of negative externalities.

3. Providing information. For many services particularly in health care, private agents are unaware of the true costs and benefits, therefore, are unable to make rational choices. This lends a basis for government involvement in the provision of information (but not in the provision of health care services).

Consequently, an increasing role for the private sector may be expected to address government limitations as well as to mobilize additional resources for social sector investment.

The potential advantages of increasing the private sector's role in providing social services can be summarized as follows:

First, private sector involvement may enhance efficiency[11] by increasing competition, strengthening accountability between providers and consumers, decentralizing management structures, and creating incentives for cost-sensitive consumer and provider behavior. Private providers can use funds more flexibly, reallocating them as necessary to reap the highest value from any given program.

Second, private sector involvement may increase equity[12] by releasing public resources to be targeted toward marginal groups.[13] Private non-profit organizations also often have powerful incentives to target and serve low-income communities. Indeed, their capacity to reach the poor identified as one of their key attributes (Cernea, 1988).

Third, the private sector can mobilize additional resources for investing in human resources. In most developing countries, the government finances a large proportion of total social sector expenditures, and existing financing mechanisms are not designed to capture the "willingness to pay" amongst consumers.[14] As such, social sector spending is largely limited to fiscal resources, which are coming

[11]The term efficiency describes the relationship between inputs and outputs. When output refers to broad societal goals, such as better health, lower fertility rates, and the production of educated manpower for the labor market, the analysis focuses on the external efficiency of the social sectors. When output refers to goals internal to the social sectors such drop-out rates in schools, the focus is on the system's internal efficiency. These aspects complement each other in determining the overall efficiency of the social sectors (Tan and Mingat, 1992).

[12]Equity means different things to different people. However, it is generally associated with distributional fairness and social justice (Mills and Gilson, 1989). This paper will adopt a working definition of equity as "equal access for equal need".

[13] Whether governments reallocate public funds in favor of the poor depends upon political factors. In Brazil, for example, despite the fact that 50 percent of health care expenditures are private, public health funds continue to be spent on public hospital procedures with a large private benefit component for upper-income groups (World Bank, 1988b).

[14]Willingness to pay for some social services, even among the poor, is well-documented (Akin et al., 1987; Gertler and Glewwe, 1989; World Bank, 1993i), and studies suggest that demand increases as the quality of services improves (Lavy and Germain, 1994; World Bank, 1990c).

under increasing strain due to adverse macroeconomic conditions and competition for public funds from other sectors.[15] The resulting declines in social sector expenditures have, therefore, had a negative impact on both the quantity and the quality of social services.

This suggests the need for a radical restructuring of the roles of government and the private sector in human resources development. Specifically, it suggests reducing the role of governments in meeting the human resource needs of population groups who can afford to pay, coupled with more intensive

Box 5

Willingness to Pay for Social Services in Developing Countries

Policy-makers need reliable information on the likely effect of user fees on social service utilization in order to see whether raising fees is an effective method of improving the delivery of social services and recovering costs.

Most of the user fee debate has focused on the price elasticity of the demand for services. However, the ultimate effect of fees on utilization depends on how the funds raised from these fees are used. A growing body of evidence suggests that, if fees are used to improve quality and enhance access to services, they may encourage rather than deter utilization.

One study of rural Peru used household data to estimate the likely impact of instituting user fees on secondary school attendance (Gertler and Glewwe, 1989). This found that, as fees are raised, demand becomes more elastic, particularly amongst lower-income groups. However, using the principle of compensating variation, the study also found that households are willing to pay for the operating costs of a new school if it reduces travel time from 2 to 0 hours. Significantly, these results apply to all households, even those from the lowest quartile of the income distribution.

Similarly, a study of health care financing in Orgun State in Nigeria concluded that higher fees would not significantly discourage potential users, provided that the revenue was used to purchase supplies, maintain equipment, and build an adequate inventory of drugs. Indeed, usage would be likely to increase (World Bank, 1990c).

targeting of public subsidies toward the poor. Cost recovery strategies are especially warranted for services that do not exhibit "public good" characteristics and for which private demand is strong at current prices.

Experience suggests that a variety of patterns of public/private complementarities have been successful in meeting the social sector goals of efficiency, equity, and, in some cases, cost recovery. Government monopoly over the finance and delivery of social services may significantly crowd-out the potential contribution of the private sector. The most promising innovations in human resources development

[15] Evidence shows that the social sectors are more vulnerable to cuts in recessionary contexts relative to other sectors; resources tend to be allocated in favor of sectors with shorter lead times and more immediate benefits (Reimers, 1991).

are those that develop hybrid formulas capable of combining the best of both the public and the private sectors.

The following sections will review the education, health, population, and nutrition sector experiences with public and private sector provision-financing. It is noteworthy that, although private sector expansion may mean that governments no longer have to perform certain tasks, it also imposes new responsibilities on them. In particular, it requires that governments develop and maintain incentive mechanisms to control costs, maintain quality, and ensure access for the poor. However, so as not to inhibit private sector growth, a careful balance between "carrot and stick" mechanisms needs to be found (Bennet et al., 1994).

EDUCATION

Issues

Education enhances people's productivity and their potential for achieving a higher standard of living.[16] T.P. Shultz (1994) found that, for males in Cote D'Ivoire, an extra year of schooling is associated with a 12.4 percent increase in earnings, after controlling for other factors. A recent World Bank study of Latin America found that one of the most important factors explaining variations in income distribution among workers was their level of educational attainment (Psacharopoulos et al., 1994). Education also provides non-market benefits, such as reduced fertility and better child health (Cochrane, 1979; Caldwell, 1979). As such, it is a great antidote to poverty and a stimulant of economic growth.

Developing countries have made remarkable gains in literacy in the past few decades. Even in low-income countries, primary gross enrollment rates rose from 38 percent in 1960 to 76 percent in 1987 (World Bank, 1991a). However, more than a billion adults are still illiterate in the developing world (UNDP, 1991). Enrollment rates have stayed extremely low in many countries (Burkina Faso, Ethiopia, Guinea, Mali, Niger, and Somalia) and even dropped in some others (Tanzania and Zaire in the 1980s). Wide gaps in quality persist among countries (Psacharopoulos and Nguyen, 1993). Moreover, within countries, wide gaps persist between male and female groups, between majority and minority groups, and between urban and rural areas.

Government and Private Sector Roles

The case for involving the private sector in education rests, first of all, on the imperative of sustaining adequate investments in human capital. Over the last two decades, governments have become increasingly unwilling to raise the share of public expenditure spent on education. In some cases, this reflects increasing frustration about the educated unemployed. In others, declining educational expenditures are simply a necessity dictated by economic conditions. Meanwhile, both population rates and the demand for education have continued to grow. As a result, gross enrollment ratios (GERs) in many countries have declined or stagnated. Also, many schools lack basic materials such as textbooks (World Education Report, 1993), and, in view of the positive correlation between student achievement and textbook availability (Fuller, 1985), this has serious implications for the internal efficiency of schools.

Colclough (1993) estimates that, in many West and Central African countries, achieving universal primary education at present cost levels would require that public expenditures on primary schooling

[16]Critics of the concept of human capital have argued that education may identify productive capacities without necessarily enhancing them (screening hypothesis). However, Cohn, Kiker, and Oliveira (1987), using US data, found no empirical evidence to support this. Moreover, Bossiere, Knight and Sabot (1985) found strong support for the human capital hypothesis in explaining earnings differentials in Kenya and Tanzania. See Psacharopoulos and Woodhall (1985) for a more detailed discussion.

reach between 3 and 7 percent of GNP. This is rather high a proportion for most of these countries to bear. Hence, sharing the burden with the private sector is urgently needed.

Private sector expansion can also be justified on efficiency grounds. Low educational achievement (measured in terms of GERs and completion rates) is often largely attributable to inefficient distribution and use of public resources rather than a shortage of funds per se. Public spending tends to be channeled to schools according to standard funding formulas that do little to encourage efficient use. Staffing rules, pay scales, and allocations for other school inputs are fixed so that school principals have little budgetary leeway. Also, often too little is spent on these other inputs relative to teachers' salaries. This is the case in many African countries (for example, Mali, Ethiopia, Mauritania, and Burkina Faso), where teachers salaries are typically 10 times the average per capita income (Colclough, 1993).

However, it may be expected that the more a school depends on private financing, through fees collected from students or contributions from the local community or both, the more likely the school is to use resources efficiently (that is to provide services in demand at least cost): when people share directly in the cost of a service, they are more likely to monitor costs closely and to guard against waste. Such vigilance by students and families promotes greater efficiency by making school managers more cost-consciousness and by creating pressures to make them more accountable. Furthermore, private financing at higher levels of education may also provide incentives for students to complete their study programs more quickly and behave more like "investors" in selecting their degree.

Even when public institutions charge no fees, the incentive for greater efficiency can be generated by allowing fee-charging private institutions to emerge and survive. Such institutions promote competition in the system and generate information for judging the performance of public institutions. Even if no explicit comparison is made, outright wastefulness and inefficiency in public institutions are less easily concealed from public scrutiny (Tan and Mingat, 1992).

Box 6

Educational Investment Priorities and Sources of Finance

Investment area	Source of finance
By level of education	
Primary	Mainly public
Secondary	Public/private mixture
University	Mainly private
By type of curriculum	
General/academic	Mainly public
Vocational/technical	Mainly private/ employers mixture
By beneficiary group	
Low income/rural	Mainly public
High income	Mainly private
By type of activity	
Primary school access	Mainly public
Quality inputs	Public/private mixture
Teachers' salaries	Public/private mixture
School construction	Public/private mixture

Source: Psacharopoulos, 1990.

Increasing the reliance on the private sector in education may also enhance equity by releasing public resources to be targeted to the poor[17]. In most countries, excess demand typically exists in higher education and sometimes also at the upper secondary level. Charging user fees in such circumstances would not reduce the demand for education but these private contributions could be used to expand access at all levels. Students from poor families could be protected by loan schemes and scholarships. One study found that, in 12 West African countries, if fees were introduced to cover operating costs and living allowances in higher-level institutions, the savings could then increase the primary education budget by 40 percent. In Togo, the figure is as high as 90 percent (World Bank, 1986).

In terms of equity, data for Asian countries show a negative relationship between the extent of private financing and the share of cumulative public spending on education accruing to the 10 percent best-educated students in a generation (Mingat and Tan, 1992). This suggests that private financing tends to reduce the public financing's bias in favor of the elite. The data also confirm a positive relationship between the extent of cost recovery at higher levels and overall coverage of the education system.[18]

Evidence on the effects of private sector provision on efficiency is scanty since data are lacking. However, a review of studies of private and public schools in Tanzania, Colombia, the Dominican Republic, the Philippines, and Thailand, found the following results (Jimenez, Lockheed, and Paqueo, 1991):

- When student background and sample selection biases are held constant, students in private schools outperform students in public schools on verbal and mathematics achievement tests.
- The unit costs of private schools are less than the unit costs of public schools.

Policy Issues

In view of the theoretical and empirical evidence reviewed above, a policy package composed of three elements is recommended (Psacharapoulos, Tan, and Jimenez, 1986):

- Recovering the public cost of higher education and reallocating government spending toward those educational levels with the highest social returns (primary, then secondary education).

- Developing a credit market for education, together with selective scholarships, especially in higher education.

- Decentralizing the management of public education and encouraging the expansion of private and community-supported schools.

[17]Three complementary types of analyses for assessing equity in education are those that (i) evaluate difference in access to specific levels or types of education; (ii) compare the distribution of benefits among people with different education; and (iii) assess who pays for and who benefits from education (Tan and Mingat, 1992).

[18]The relationship between per capita GNP and extent of private financing is weak, hence this pattern is not only a reflection of countries' differences in per capita GNP (Tan and Mingat, 1992).

Specifically, the policy package recommends that public financing would favor primary education over secondary or higher levels, general/academic education over vocational/technical training, and low-income area schools over high-income area schools. In other areas, the private sector would be encouraged to step in to meet the increasing demand for education and provide educational loans and scholarships. There may also be scope for expanding of the private sector at primary and secondary levels in the form of community-supported schools.

Within this policy framework, the government has an important catalytic role to play in improving the way the market for educational services works. This entails setting up complementary institutional arrangements and mechanisms. These include lifting legal prohibitions against non-governmental suppliers of education, easing regulations relating to the setting of fees,[19] and establishing national assessment systems to generate information about school performance and costs.

The public sector also plays an important role in facilitating and financing private sector activities, setting teaching standards and curriculum requirements, and providing financial and technical assistance where necessary. For example, the establishment of the National Education Trust Fund (NEFT) in Tanzania by the government, in collaboration with the World Bank and the Norwegian government, has provided funds for private secondary schools to help meet their capital and teacher training costs. In China, central authorities have provided grants to local communities to help meet the extra costs of educating minority groups (Colletta, 1991).

Examples

There is a long tradition of private sector involvement in education in developing countries. The private sector typically provides as much as 50 percent of educational investment funds, and helps to deliver a host of different types of educational services.

Private Finance and Private Provision

The schools established in the first half of the century by Chinese immigrant communities in Southeast Asia (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) prove that private financing and provision of education is feasible for children of all age groups, sexes, and income levels (Roth, 1987). In some countries, such as Singapore, the government provided financial assistance to these schools. However, in most, they were privately financed. These schools offered a double curriculum, teaching the Filipino curriculum in the morning and Chinese in the afternoon. The quality of education provided can be gauged by the fact that graduates were eligible to enter either Filipino or Taiwanese universities. Although, the political changes in mid-1976 made the future of these schools uncertain, their existence for decades demonstrates that education at the primary and secondary levels that is privately financed and provided in the context of widely available free public education is academically and financially viable.

[19]For example, in Cameroon and Colombia, the governments determine the fees charged by private schools (Schieflen, 1985).

Another remarkable example of private financing and provision of education is the Harambee School Movement in Kenya. Since Kenya's independence in 1963, the movement has taken on the responsibility for both the financing and provision of education through self-help groups. Local communities provide most of the resources for the schools: local materials, voluntary labor, cash, professional assistance, and the personnel to run school committees (Anderson, 1973).

The private sector also plays a particularly important role in providing and financing higher technical education in developing countries. It offers a wide array of institutions ranging from multi-disciplinary schools, such as the Asian Institute of Technology in Bangkok, to more specialized institutions, such as the El Zamorano agricultural school in Honduras. Private sector vocational training is also widespread. The schools range from a small typing school in Ibadan, Nigeria or the Nigerian Drivers and

Box 7

Education Expenditure by Source of Funds in Selected Developing Countries 1991.

Country	Public Sources	Private Sources
South Korea	70	30
Taiwan	83.4	16.6
Indonesia	50	50
Venezuela	73	27
Haiti	20	80
Kenya	62.2	37.8
Uganda	49	51

Note:Figures for Uganda are for 1989/90; Kenya 1992/93.
Source: World Bank, 1994e.

Maintenance School in Lagos, Nigeria to more sophisticated schools such as the Pilots' Training Center and Aviation Maintenance School in Addis Ababa, Ethiopia.

Public Finance of Private Provision

In Chile, the introduction of a voucher system in 1980 has enabled the private sector to expand at primary and secondary levels with government financing. Since the 1980 reforms, the share of students in subsidized private schools has continuously grown and currently represents one third of total enrollments. By tying school revenues to school enrollments, the government has provided incentives for both municipal and private schools to compete for students and so to increase efficiency by setting high standards of educational attainment, which influence school choice (Winkler and Rounds, 1993).

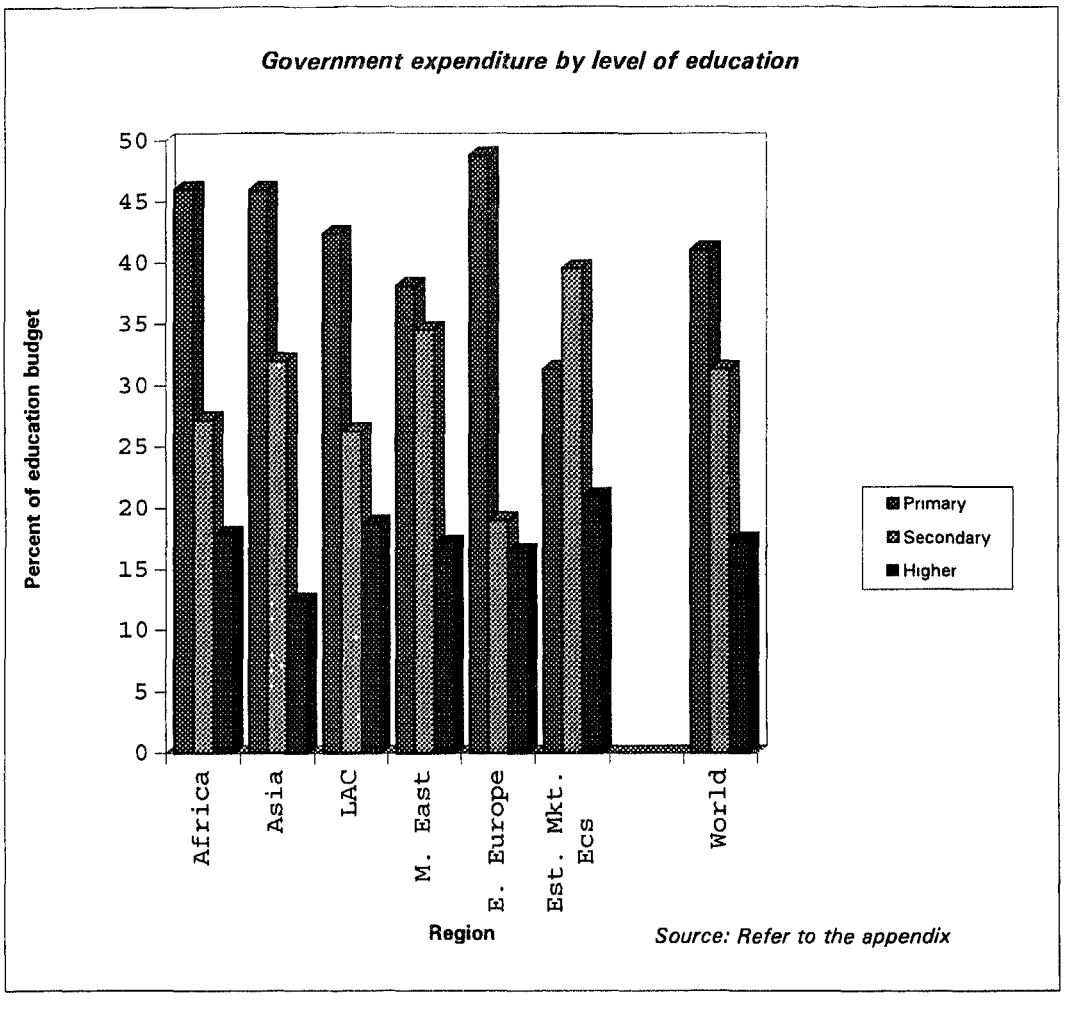
Belize also has a system of grant-maintained private schools, with denominational schools providing 75 percent of primary places and 50 percent of secondary places. In fact, the government's partnership with the churches has been declared the centerpiece of its education policy (World Bank, 1993j). However, this type of public/private venture is more common in Africa. In Lesotho, churches own and operate 97 percent of the primary schools and 86 percent of the secondary schools, but the government trains, appoints, and pays teachers. A similar system operates in Mauritius.

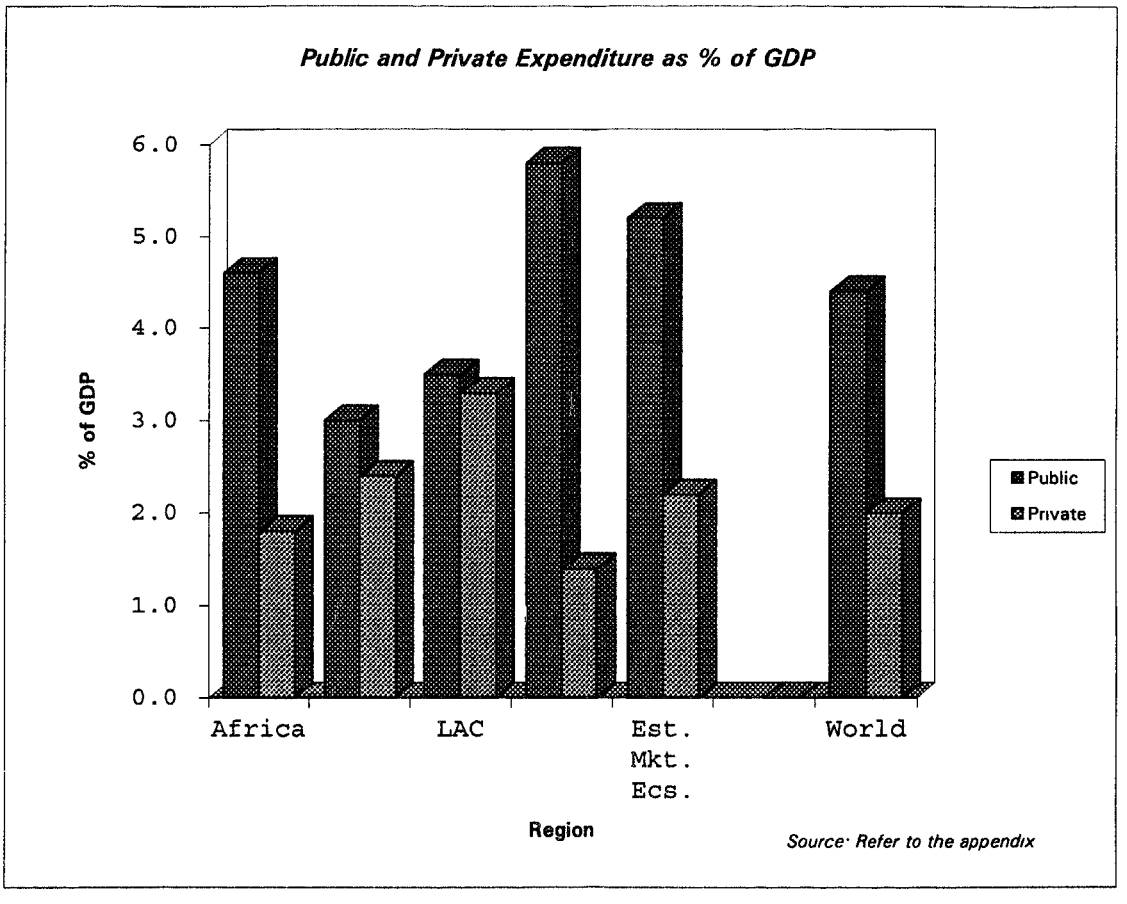
Private Financing of Public Provision

Private financing of government schools and institutions is also becoming increasingly commonplace. Private contributions include tuition and other fees, endowments and other donations, and resources generated from income-earning activities such as school production and fund-raising events (Tan and Mingat, 1992). Experience suggests that the lack of a monetized economy need not be a barrier to mobilizing private resources for education as users can pay for educational services in kind. For example, in the Plateau Province of Nigeria, principals accept foodstuffs from parents who cannot pay their children's fees in cash.

Korea is an example of a country that charges user fees in education that simultaneously minimizes the "crowding out" effect of public finance and maximizes equity and efficiency in the distribution of government spending on education. Fees are not charged for primary schooling, but 34 percent of recurrent costs are recovered at the secondary level and 46 percent at the university level. The extra resources mobilized from the private sector have enabled the country to achieve very wide coverage at all levels of education. Similarly, Ghana's education sector adjustment program has succeeded in creating a more cost-effective and equitable system by increasing the reliance on fees, particularly at higher levels (World Bank, 1992b).

Finally, the Barbados experience shows that student loans can work in developing countries. In 1977, the Student Loan Revolving Fund was established with the help of the Inter-American Development Bank. Between 1977 and 1982, some 118 loans were provided to students for higher education or post-secondary training. A tracer study conducted in 1982 shows that 80 percent were from families with annual incomes below US$9,000; after completing their studies, 65 percent earned more than that. The student loan program is considered a success since arrears are low and, in 1982, interest payments by graduates covered all administrative costs (World Bank, 1986).


Government expenditure by level of education
Percent of education budget
50
45
40
35
30
25
20
15
10
5
0
Africa
Asia
LAC
M. East
E. Europe
Est. Mkt. Ecs
World
Region
Primary
Secondary
Higher
Source: Refer to the appendix


Public and Private Expenditure as % of GDP
6.0
5.0
4.0
3.0
2.0
1.0
0.0
% of GDP
Africa
LAC
Est. Mkt. Ecs.
World
Region
Public
Private
Source: Refer to the appendix

HEALTH

Issues

Despite marked improvements in the health of people in the developing world over the past decades, enormous health challenges still persist.[20] Child mortality is ten times higher in the developing world than it is in established market economies, yet over half of this difference (which is related to diarrheal and respiratory illnesses) can be prevented. Every year, conditions that could be inexpensively prevented or cured account for 7 million adult deaths. Maternal mortality in developing countries is 30 times higher than that in the high-income countries.

By the year 2000, the increasing death toll from acquired immune deficiency syndrome (AIDS) in developing countries could reach 1.8 million deaths annually, erasing decades of hard-won reductions in mortality. Moreover, the aging of the world's population will place increasing demands on health care systems.

Health care systems in many developing countries are inadequately equipped to meet these new and continuing challenges. Health care budgets have declined dramatically in some developing countries over the last 15 years. However, given that health care costs account for 8 percent of total world product (and about 5 percent for the developing countries) and are rising faster than income in many cases, the immediate policy issue is better spending. If the quality of spending is to be improved, several key issues need to be addressed.

- First, government spending is biased toward care of low cost-effectiveness (such as surgery for most cancers) at the expense of highly cost-effective services which, incidentally, also benefit the poor the most (such as immunization and the treatment of tuberculosis and sexually transmitted diseases).
- Second, vast sums are wasted because brand-name pharmaceuticals are purchased instead of generic drugs, health workers are badly deployed and supervised, and hospital beds are underutilized.
- Third, public spending goes disproportionately to the more affluent consumers in the form of free or subsidized care in sophisticated tertiary hospitals and tax subsidies for health insurance, while the poor lack access to basic care.
- Fourth, existing financing and delivery mechanisms do not provide incentives for consumers and providers to behave in cost-sensitive ways, resulting in their choosing the most expensive (and not necessarily the most cost-effective) options available.

[20]In 1950 life expectancy in the developing countries was forty years. By 1990 it reached sixty-three years. During that same time span, the percentage of children who died before age five dropped from 28% to 10%. Small pox, responsible for 5 million deaths in the early 1950s, has been eradicated entirely. Vaccines have significantly reduced the occurrence of measles and polio.

Box 8

Policies for Improving Health Care

To better meet the challenge of improving health care in the developing countries, the World Bank Annual Report 1993 proposes a three-pronged approach to government policies.

First, recognizing that the household, and nobody else, makes the ultimate decision to allocate its resources to various ends which include health care, government needs to provide a framework that guarantees and enhance the effectiveness of that decision making. This policy is built on exploiting the complementarities between the macroeconomy, education, and the health sector; and includes:

1) growth policies to increase the poor's income and to reduce poverty;
2) increased investment in schooling, particularly for girls; and
3) policies to promote the rights and status of women through political and economic empowerment and legal protection against abuse.

Second, focus health spending on correcting for market deficiencies, on more cost-effective programs that are used more extensively by the poor. This implies the following public spending directions.

1) Reduce emphasis on specialized care in tertiary facilities, specialist training, and interventions that provide little gains relative to the money spent.;
2) Finance and ensure delivery of a package of public health services that would be undersupplied by the market due to externalities. This package generally includes preventive and primary care measures such as control and treatment of infectious diseases and malnutrition; prevention of AIDS, environmental pollution, and certain risky behaviors such as drunk driving.
3) Finance and ensure provision a package of essential clinical services. The comprehensiveness and composition of the package is determined by each individual country given the epidemiological conditions, preferences, and income.
4) Improve management and government health services through such approaches as decentralization of administrative and budgetary authority and contracting out of services.

Third, promote greater diversity and competition, especially by enabling and encouraging the private sector in the financing and delivery of health services. This includes:

1) Encourage the private sector to finance and provide insurance (with adequate cost containment incentives) for all discretionary services. Whenever, possible, encourage the private sector to deliver the essential clinical services.
2) Encourage suppliers (both public and private) to compete in both delivery of clinical services and provision of inputs, such as drugs, to publicly and privately financed health services. Domestic suppliers would not be protected from international competition.
3) Monitor the private insurance markets in order to ensure incentives for wide and equitable coverage and cost containment. Monitor the privately delivered health services to ensure safety and quality.
4) Generate and disseminate key information conducive to the efficiency of the private sector. These include information on provider performance, on essential equipment and drugs, on the costs and effectiveness of interventions, and on the accreditation status of institutions and providers.

Government and Private Sector Roles

The case for private sector involvement in health, as in other social sectors, rests on the need to: (i) sustain adequate investment in human capital in the face of tight budgets; and (ii) increase efficiency and equity.[21]

Increasing private sector involvement in the provision and financing of health care can be expected to increase efficiency by creating incentives for cost-sensitive consumer/provider behavior, for competition among different types of providers, and for the decentralization of management structures. For example, a selective user fee policy may deter over-utilization,[22] signal to consumers the relative importance of different types of care, and encourage the appropriate use of the different levels of the health system;[23] the dismantling of the state monopoly over drug procurement and distribution may reduce waste resulting from theft and spoilage (see Box 9); and competition between different types of providers may create incentives to improve the quality of service provision to attract fee-paying clients.

Furthermore, although it may appear that free health care makes it easier for the "poor" to afford services, the reality is that the non-poor are usually the main beneficiaries. Sixty to eighty percent of public funds are absorbed by urban, hospital-based care. Even if services are available in every area, the rich inevitably enjoy more of the subsidized care since they are more able to afford the travel and time costs (World Bank, 1987; Nguyen, 1996). A policy combining selective user fees with privatization policy may enhance equity by releasing public funds that can then be used to extend services to underserved population groups and by removing much of the inequitable subsidy inherent in free care for the rich.

Government financing of public health services is warranted on the grounds of market failures (for example, consumption externalities). However, private financing of certain kinds of preventive and curative care, such as in- and out-patient treatments and drug sales, may be appropriate. In these cases,

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[21]It is argued that governments are unlikely to perform as effectively in the future as in the past. This is because, while past public sector successes in reducing mortality came about via programs providing "public goods" (for instance, vector control), further health improvements depend more upon public expenditures being targeted toward the poor. Evidence suggests, however, that governments tend not to target the poor, but to fund services with a high benefit component to higher-income groups (Birdsall and James, 1992).

[22]A study of the impact of user fees on utilization in Swaziland found that a user fees policy may deter "non-frivolous" rather than "frivolous" use (Yoder and Herman, 1985). However, in theory, pricing structures may be designed to help patients differentiate between essential and non-essential expenditures.

[23]Any move toward greater use of fees in the health sector, however, must address the question of how to protect the poor. Options for targeting subsidies to the poorest include; (i) sliding fee systems (Philippines) with social worker verification; (ii) central certification systems (Thailand); and (iii) targeting through self-selection and price discrimination (Singapore). The latter involves the provision of different levels of inpatient services at hospitals that are clinically equivalent but have different amenities. The obvious trade-off for each method is between the cost of the test and the amount of leakage it allows (Griffin, 1992).

positive externalities are negligible since most benefits accrue to the individual. Furthermore, willingness to pay for these goods is well-documented (Akin et al., 1987; World Bank, 1990c).

Box 9

Improving the Selection, Acquisition, and Use of Drugs
The Roles of the Private and Public Sectors

Pharmaceuticals play an important role in health care and the treatment of illnesses in both industrialized and developing countries. Consequently, developing countries spend more than a quarter of all health expenditures on pharmaceuticals, about US $44 billion (both public and private spending) in 1990 or US $11 per capita (Saxenian, 1994).
The impact of this spending, however, has been greatly restricted due to shortages, theft, and spoilage; inappropriate drugs being prescribed and purchased; and unnecessarily high prices being paid by governments and consumers. In particular, state monopoly of drug procurement and distribution has proved to be inefficient and wasteful. Increasing the efficiency of pharmaceutical spending is imperative to increase the availability of essential drugs and to reduce costs.

There are plenty of opportunities for governments to rationalize drug expenditures. Policy options include the promotion of: (i) essential drugs lists; (ii) quality controls; (iii) generic drug substitution; (iv) education and training for prescribers and consumers; (v) cost controls.

In addition, significant efficiency gains may be generated by lifting protectionist policies which shield national pharmaceutical producers from international competition, and by restructuring public/private roles in the procurement and distribution of drugs.

To support competitive procurement, several elements need to be instituted: (i) competitive tendering intended to attract as many potential suppliers as possible; (ii) a drug registration system that permits new products that meet the country's quality standards to be easily registered; and (iii) the development of specialized procurement and pharmaceutical technical skills in order to carry out the first two elements.

Source: World Bank, 1993a

These arguments are supported by existing empirical and anecdotal evidence.

For example, in Zimbabwe, the introduction of by-pass fees at hospitals reduced over-loading and so increased the internal efficiency of the public health system. In Jamaica, costs declined and service quality improved when housekeeping and food services at a public hospital were contracted out to private firms (Griffin, 1989).[24] In Malawi, greater managerial efficiency in mission hospitals has led to their being designated as district hospitals (Gilson et al., 1994), and several Tanzanian surveys have found that NGO-run facilities function more effectively than those run by the government. In

[24]In some cases, however, the contracting out of non-clinical services has increased rather than reduced costs due to an absence of competition between private firms, for example, in Lesotho (Bennet, 1992).

particular, drugs are more readily available at NGO facilities and the voluntary sector staff tend to have greater technical skills (Andersson-Brolin et al., 1991; Kanji, 1992; Mujinja et al., 1993).[25] In Tunisia, governments have reaped efficiency gains by converting public hospitals into semi-autonomous foundations or private enterprises. These foundations are less restricted by public sector procedures in managing their budgets and in hiring and firing staff. Finally, in Chile, private hospital care has been expanded while government subsidies have been targeted toward the poor (Griffin, 1989).

Policy Issues

The experience of the past decades suggests the need for a three-part approach to improving the health of people in developing countries.

- *fostering an environment that enables households to improve health;*
- *recovering costs for tertiary facilities and less cost-effective interventions and targeting public resources toward a package of public health services and a package of essential clinical services; and*
- *promoting diversity and competition in the delivery of health care services.*

Promoting competition entails three key steps:

- encouraging the development of social or private insurance (with incentives for equitable access and cost containment) to cover clinical services outside the essential package;
- encouraging suppliers (both public and private) to compete to deliver clinical services and provide inputs, such as drugs, to publicly- and privately-financed health services.
- generating and disseminating information on provider performance, on essential equipment and drugs, on the costs and effectiveness of interventions, and on the accreditation and status of institutions and providers.

Within this policy framework, the government's role as facilitator, and coordinator of private sector activities is critical.[26] The World Bank's 1993 World Development Report on Health recommends that attempts to promote competition in the health sector would be accompanied by efforts to strengthen the regulatory capacity of the public sector. In particular, six potential problem areas that should receive greater attention include:

[25]A fourth Tanzanian survey (Gilson, 1992), however, identified weaknesses that included too few outreach activities.

[26]Other agencies or groups that may play a role in regulation include professional bodies, insurance agencies, and consumers (WHO, 1991).

Box 10 **Government and Private Sector Roles in Water Resources**

Nearly 1 billion people in developing countries do not have access to clean water, and 1.7 million lack access to sanitation. This has major implications for the health and quality of life of these people. In particular, it accounts for 200 million cases of schistosomiasis, 900 million cases of hookworm, and 2 million child deaths from diarrheal diseases each year.

For decades, governments have resorted to public funds to invest in and upgrade the quality of water and sanitation services. As sensible as it may seem, this government-monopolistic approach has been problematic due to institutional weaknesses, distorted policies, and misguided investments (Briscoe, 1992). Operating efficiency tends to be low (for example, in Manila, almost 60 percent of water produced by the utility is not accounted for) and government subsidies tend to benefit the non-poor disproportionately (for instance, in the Dominican Republic, the poorest 20 percent of the population receive a subsidy that is one-third less than that received by the richest 20 percentile).

The above experience suggests the need for a new approach to water and sanitation - specifically, a switch from a supply-driven strategy to one in which households (rich and poor) are offered choices by different types of providers. This entails the decentralization of management and delivery structures, greater reliance on pricing, and more participation by beneficiaries and the private sector (both for-profit and non-profit).

Evidence suggests that the private sector (including community organizations) is more efficient in delivering services. For example, in Bogota, Colombia, the unit costs of the components in the billing system contracted out to private companies are one-fifth of those provided by public providers (Briscoe, 1992). In Pakistan, the performance of the 200,000 private tubewells has far surpassed that of the 13,000 government tubewells. Higher quality service motivates users to contribute to maintenance and operating costs, opening up new sources of private capital for water resource development.

In urban areas, various different types of public/private complementarities exist. Under **concessionaire contracts**, government facilities are leased to private operators who contribute investment capital and who operate and maintain the facilities for a fixed period. For example, in East Java, Indonesia, a major construction project has been contracted to the Bromo Consortium. The concession agreement includes the construction of a 65 km pipeline and its operation for 15 years. **Management contracts** allow the contractor to assume overall responsibility for operation and maintenance, whereas **service contracts** entail the contracting out of specific operational services such as meter reading, billing, and pipe maintenance. EMOS, the water utility for Santiago, Chile, has promoted competitive bidding for a host of operational activities and has reduced public employment and costs and shortened response time as a result.

In rural areas, Water User Associations (WUAs) are assuming an increasingly prominent role in the management, operation, and even financing of supply systems. For example, in Colombia, by 1980, 80 percent of the rural population had access to safe water, largely attributable to complementarities between the National Institute of Public Health (INS) and community organizations. The INS provides design standards, instruction materials, and technical assistance for maintenance problems. The community participates in designing the project, elects the Administrative Committee, raises funds through social activities, and provides materials, labor, transport, and cash for construction.
Source: World Bank,1993h

(i) Over-provision Private providers tend to respond to financial incentives by increasing the quantity of care they provide instead of ensuring that they provide the best possible care to the patient (supplier-induced demand). This is a manifestation of information asymmetries between providers and consumers - a market failure endemic to the health sector (Mills and Gilson, 1988; Nguyen, 1994).[27] In Uganda, new small private clinics and commercial pharmacies have created a culture in which patients associate good care with the availability of injections and other drugs, regardless of whether these treatments are appropriate (Askmwe and Lule, 1993). In Thailand, the expansion of the private sector has led to excessive investment in high technology equipment to attract fee-paying patients, and this equipment has had to be over-used to cover the costs of acquiring it (Nitayaramphong et al., 1993).

(ii) Cost escalation Private providers also tend to respond to profit incentives by raising their prices when demand is inelastic. For example, researchers found overcharging to be rife among Bombay private practitioners (Yesudian, 1993). In the U.S., competition among hospitals contributed to a costly "technology arms-race" (Nguyen and Derrick, 1994).

(iii) Moral Hazard and Adverse Selection in Insurance Markets Both overutilization and cost escalation tend to be exacerbated in countries with extensive health insurance.[28] Clients who are covered by insurance may respond to incentives to over-use health care services (moral hazard). Alternatively, people may opt to join a scheme only when there is a high probability that they will require treatment (adverse selection). For example, a Prosauld pre-payment scheme in Santa Cruz, Bolivia, had to be phased out due to over-use by participants (Fiedler, 1990), and an evaluation of the CAM pre-payment scheme in Burundi found that people were unwilling to join the scheme until they fell ill (Hanson et al., 1993).

(iv) Failure to promote Public Health and Equity Public health is concerned with preventing disease and promoting health. Concern with profits leads private practitioners to fail to promote preventive practices (maybe, because these would reduce morbidity and, hence, the number of consultations). For example, in Malaysia, the private sector concentrates on hospital care, with little participation in less lucrative preventive activities (WHO 1991).[29] The for-profit sector also allocates

[27]Lal (1994) challenges the notion of "market failures" endemic to the health sector, arguing that there is no essential difference between health care and many durable goods markets. However, while it is true that other markets also suffer from market failures such as imperfect information (for example, the used car industry), this does not invalidate the point that there are special characteristics that distinguish health care from other goods. These include the irreducible uncertainty of the health market and the lack of a natural limit on costs. Lal also argues that the dangers of imperfect information are minimized in the health sector by the "trust" involved in the doctor-patient relationship. However, this is not borne out by experience. The incentives for over-subscription that were created by the introduction of a user fee policy in the Boga health zone, Zaire, is a case in point (Goodman et al., 1993).

[28]Theoretically, health insurance rotates the demand curve for health services toward being more price inelastic. For example, the rapid growth in health care expenditure in South Africa has been partly attributed to an increase in the number of people covered by health insurance (Bennet et al., 1994).

[29]It is also well documented that community financing schemes tend to lead to a curative bias in health care consumption (Abel-Smith et al., 1988).

health care goods and services on the basis of ability to pay. As a result, for-profit providers tend to be located in urban areas and to serve higher income groups. This pattern is sharpened by insurance schemes that tend to cover only those who work in the formal sector.

Box 11

Proportions of Health Sector Expenditure by Public and Private Sectors in Selected Countries

COUNTRY	PUBLIC	PRIVATE
Malaysia	77%	23%
Chile	56%	44%
Sri Lanka	53%	47%
Iran	63%	37%

Notes: Dates of country data: Malaysia 1983, Chile 1990, Sri Lanka 1987, Iran 1991 estimates.
Source: WHO, 1991

(v) Attraction of professionals out of the public sector Large differences in income between public and private workers are common and may lead to a "brain drain" to the private sector. For example, in Zimbabwe, two thirds of the physicians and state registered nurses work in the private sector. Alternatively, personnel may undertake activities in the private sector in addition to public sector work, possibly resulting in the neglect of their public duties.

(vi) Poor quality of medical practice Private for-profit providers often work under isolated conditions where they are not subject to peer reviews of their work. Such isolation may erode medical skills and endanger professional ethics. For example, one evaluation of prescription patterns in Bombay showed that few private practitioners knew that the World Health Organization had recommended drug therapies for tuberculosis and leprosy (Uplekar, 1989).

Government interventions may include monitoring private sector charges, inspecting private health facilities, prohibiting certain insurance practices (such as cream skimming and denial of insurance due to preconditions), introducing a "bonding" period for professionals trained at public expense, and controlling quantity and distribution of health care through payment mechanisms (for example, capitation/co-payments) and tax incentives. For example, Mexico, Malaysia, and Pakistan offer tax relief to encourage providers and insurers to locate in rural areas, and Nigeria and Iran have provided incentive payments to encourage private practitioners to offer preventive services (WHO, 1991). Some countries, such as Thailand, Nepal, and Pakistan, offer financial incentives to retain public sector

staff; others have introduced training schemes to maintain the standards of care. A training program for pharmacists in Nepal appears to have been quite successful (Kafle et al., 1992).

Examples

The private sector has a long and extensive involvement in the financing and provision of health care in the developing countries. Tables A and B show that, in some countries, a high proportion of total expenditure on health already comes from the private sector, and private agencies may provide as much as 31 percent of hospital beds. The private sector has also become increasingly involved in tackling specific problems such as drug abuse and HIV/AIDS.

The *for-profit* private sector typically includes the individual practices of modern physicians, uncertified "quack" doctors, traditional practitioners[30], hospitals, pharmacies. The *non-profit sector* includes mission/church-based organizations, NGOs, and different types of employer-based or specialist groups (Green, 1987). The latter play a particularly important role in health care delivery. For example, it is estimated that mission/church organizations provide around 50 percent of total services in Uganda and 30 percent in Zambia and Ghana (Bennett, 1992). NGOs also play a predominant role in providing care for the elderly, the disabled, and the terminally ill.

Private Finance of Private Provision

In most developing countries, for-profit services are financed by out-of-pocket payments, in the form of user fees or contributions in kind such as voluntary labor or materials. Voluntary organizations, however, are increasingly depending upon out-of-pocket payments to survive.

The Boga health zone in Zaire, run by the Anglican church, finances 75 percent of its recurrent costs through a user fee system. Exemption mechanisms exist, however, and evaluations indicate that no client is turned away if he/she cannot pay. The remaining costs are met through other community contributions and the Church Health Services (Goodman et al., 1993). Prosalud, a non-profit network of 17 community-sponsored health centers in Santa Cruz, Bolivia, is 91 percent self-financing. It cross-subsidizes preventive care and free services for the poor with revenue generated from more lucrative services, such as gynecological and dental examinations (Fiedler, 1990).

Outside Latin America, private insurance coverage in developing countries is generally limited. Health insurance does exist in Asia and Africa, but the largest plans (China, Korea, the Philippines) are financed by obligatory payroll taxes and thus should not be considered part of the private sector.[31] Critics of insurance schemes argue that, due to the difficulty of providing coverage in rural areas and in

[30]Traditional practitioners occupy an important role in providing health care in developing countries, particularly in Africa and Asia (Claquin, 1981). The ratio of traditional to modern health practitioners has been estimated at nine to one in Sri Lanka, seventeen to one in Indonesia, twenty-five to one in Ghana, and twenty-eight to one in Nigeria. Furthermore, evidence suggests that the traditional sector is flourishing in urban areas (Heggenhougen, 1988).

[31]Social security may be considered part of the public sector. Even if governments only make a small contribution to the scheme, it endows the social security agency with the power to tax.

the urban informal sectors, insurance schemes may exacerbate existing inequities in access and quality (Vogel, 1990). However, a number of innovative community insurance schemes demonstrate that these difficulties can be overcome.

The well-known National Dairy Development Board program in India illustrates the efficiency of a private community insurance scheme. Started in the mid 1940s, it now comprises more than 4,500

Box 12

Proportion of Beds in Public and Private Sectors in Selected Countries

COUNTRY	PUBLIC	PRIVATE
Chile	74%	26%
Malaysia	88%	12%
Mexico	78%	22%
Iran	83%	17%
Nigeria	69%	31%

Notes: Public includes beds belonging to social security institutions. Private includes beds owned by NGOs.
Dates of country data: Chile 1990, Malaysia 1990, Iran 1991, Nigeria 1989.
Source: WHO, 1991.

cooperatives with over two million members (NICH, 1984). In the 1970s, the Board created a health insurance program whereby the co-op system provided basic prepaid health care to its members, especially to mothers and infants. By 1982, 82 villages had signed up for maternal and infant care insurance and 30 villages had supplementary feeding programs for malnourished children under the age of five. In China, cooperative medical insurance for those who live in rural areas covers about 80 percent of the population. The main beneficiaries of these services are poor and lower-middle class peasants.

Public Finance of Private Delivery

Some governments have attempted to incorporate aspects of market systems into the public sector through "contracting out" arrangements. This policy option is useful in countries where a limited income base makes the private financing of services difficult. For contracting out to be a feasible option, however, the public sector must have the managerial capacity to handle the contracting process. It is also desirable that there would be a number of potential contractors who compete against each other (WHO, 1991).

Examples of countries that have experimented with contracting out are Chile, Malaysia, Mexico, Nigeria, Zimbabwe, Colombia, and Malawi. Malaysia contracts out certain clinical services such as radiotherapy, CT scans, and X-rays, and, in Colombia, the Social Security Institute contracts for beds in private hospitals. In Zimbabwe, the Ministry of Health contracts out to a mining hospital to provide

Box 13

Private Sector Responses to the HIV/AIDS Pandemic

An estimated 9 million people worldwide carried the AIDS virus in 1990; as many as 26 million could be infected by the year 2000. More than 80 percent of those infected live in developing countries (World Bank, 1993b).

Because the HIV/AIDS pandemic primarily targets the most productive members of the labor force, it has profound economic implications. As the epidemic advances, changes to the population profile will exacerbate existing skill shortages and create new ones, thus threatening productivity. In addition to the loss of skilled labor (which takes years to replace), absenteeism because of illness, caring for the sick, and mourning the dead will also affect productivity in a profound way.

In the face of these challenges, private companies in developing countries are beginning to take steps to help contain the epidemic. In some cases, this stems from genuine humanitarian concern, in others, from "enlightened self-interest".

In Thailand, where the infection prevalence rate has reached an estimated one in fifty, business representatives are active members of the National AIDS Committee and corporate logos appear on AIDS information posters, leaflets, and television/radio spots. A beverage company, Krating Daeng, prints AIDS information for distribution with its popular soft drink, and Kodak provide slide shows for factories, schools, and villages. Companies such as Robinson's Department Stores have initiated AIDS prevention programs for their staff, fearing increases in medical costs and loss of middle-management skills.

In Brazil, Companhia Vale do Rio Doce (CVRD), an international company comprising mining industries and operating in nine states, has also initiated a AIDS prevention campaign. This consists of training "monitors" to familiarize small groups on HIV/AIDS. Their efforts are supported by the production of education leaflets, printed T-shirts, key-rings, badges, and a video library with films on AIDS. CVRD has also organized events such as "A Day for Life" and "A Week for Life"; the latter brought together 700 people in Rio de Janeiro. Some 13,500 people have been reached, including both employees and people in the wider community.

Source: The Panos Institute, 1992.

care for the general population, and, in other countries, such as Malawi, mission facilities are designated district hospitals. There has also been a move toward the contracting out of non-clinical services to the private sector. For example, in Malaysia, laundry, catering, security, and garbage disposal are all contracted out to private companies.

In other instances, no formal contract exists, yet governments provide support for the private sector in the form of subsidized materials, trained personnel, transport facilities, financial grants, and social

security contributions. For example, in Tanzania, a government subsidy of 7,500 Tanzanian shillings per bed is provided to all eligible mission and NGO facilities, and, in Uganda, government staff are seconded to church facilities. In Brazil, services financed by the social security fund may be purchased from the private for-profit sector. This has fostered an enormous expansion of health maintenance organizations. Between 1961 and 1979, more than 200 HMOs were organized. Similarly, in Chile, those who choose the public social security scheme can opt to receive private health services through a voucher system (World Bank, 1987).

More covert forms of government support are provided through tax subsidies and exemptions: in Ghana, members of the Christian Association of Ghana (CHAG) are exempted from paying import duties on drugs, dressings, equipment, and other items and, in Nepal, some NGOs receive tax exemptions for goods and services on the recommendations of the national NGO coordinating body.

Lastly, in Africa and Asia, where traditional medicine remains an important part of the health care system, governments have begun to finance training schemes and programs that promote the use of traditional practitioners to complement modern health care. Successful examples include using healers to screen for malaria and distribute anti-malarial drugs in Thailand, to promote modern contraceptives in Kenya, and to distribute condoms in Zimbabwe and Uganda. Traditional birth attendants have also been enlisted by the government to improve pregnancy outcomes in Bangladesh.

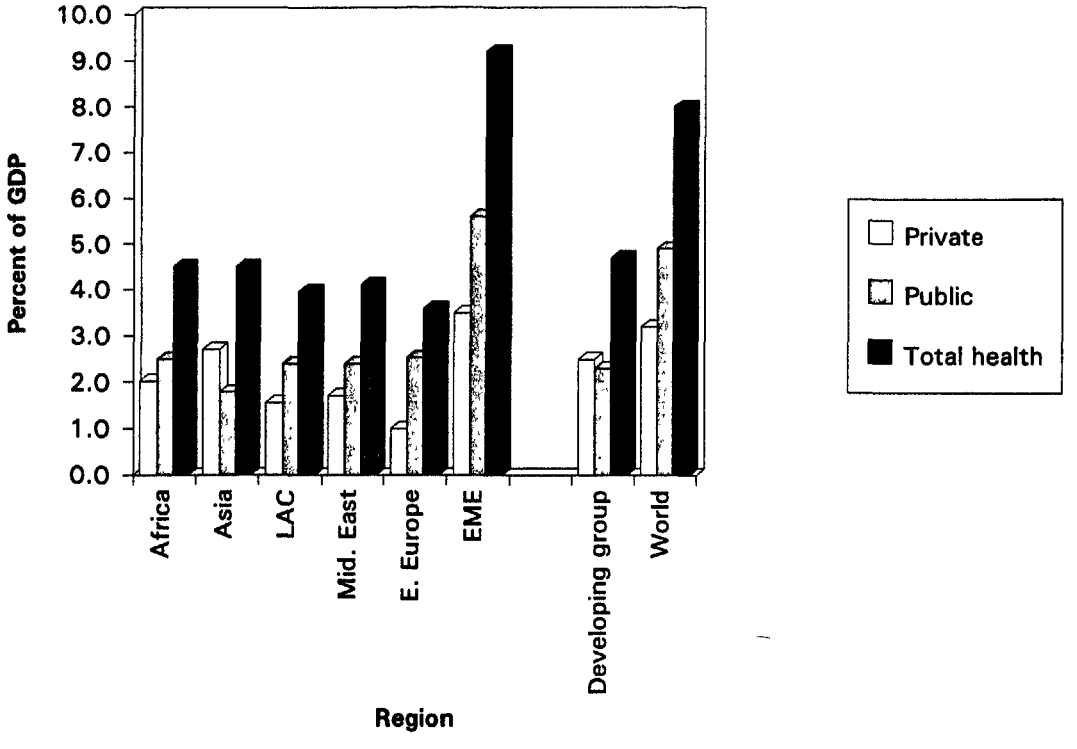
Private Finance of Public Delivery

Private finance of public services may take the form of private insurance, user charges, and contributions in kind. The provision of private care in public facilities is also increasingly commonplace. For example, in Mozambique, government medical staff run "special" clinics in urban government facilities outside of normal working hours (WHO, 1991). The resources generated from these clinics help meet the operating costs of the public facilities.

Examples of successful attempts to mobilize private resources to finance the public sector include the Thai Health Card Program and the Guinea Bissau Community Insurance Scheme. Both are pre-payment schemes that have succeeded in extending insurance coverage to rural areas. The Thai scheme, established in 1983, now covers 30 percent of the rural population. Cards are provided free of charge for those who cannot afford to pay, and moral hazard is avoided by the implementation of a carry-over scheme, which rewards people for not using curative services by charging less for their health cards the following year (Nitayaramphong, 1991). The Guinea Bissau scheme provides pre-paid essential care for villagers, and, by 1991, it had achieved almost universal coverage. Payments are made annually by villagers into a collective fund known as the "abota". Adverse selection is avoided by levying a fine on those people who decline to make a contribution until they became ill (Chabot et al., 1991).[32]

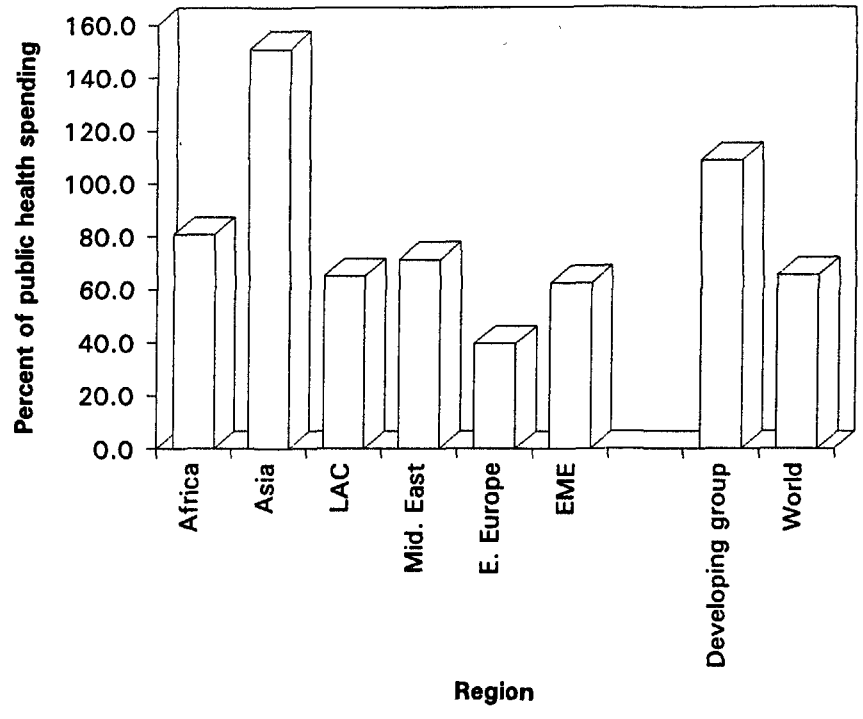
[32]The future of this scheme is now in question, however, due to drug price inflation (Hanson et al., 1992).

Public and private health expenditures, 1990



Sources: World Development Report 1993 and Government Finance Statistics Yearbook 1992

Private health spending as a percent of public health spending, 1990



Sources: World Development Report 1993 and Government Finance Statistics Yearbook 1992

POPULATION

Issues

Rapid population growth in the world's poorest countries is a matter of considerable concern because of its effects on efforts both to reduce poverty and to preserve the environment. In particular, the effects of population on economic development is an issue of fierce debate.[33] The evidence tends to suggest that countries experiencing fertility declines have been able to improve the quality of education and increase access to underserved groups. At the household level, large families invest less in their children (in per capita terms), especially less in girls, hence perpetuating the cycle of low education, high fertility, and low income (World Bank, 1993d).

As a whole, the world's population is growing by about 100 million new additions each year (World Bank, 1992b). Most of the population increase is concentrated in low-income countries. In some countries, such as Rwanda and Yeman, total fertility remains at around eight children per woman (World Bank, 1993i). Current rates of population growth pose a serious challenge for developing countries, particularly in terms of their capacity to sustain adequate investments in human capital. Developing countries have found that limited resources for public social spending, especially on primary education and basic health, can reach only so many people before the quality of those services begins to erode. Where population grew more rapidly in the 1980s, the deterioration in the quality of schooling, as measured by rising student-teacher ratios, was greater, the faster the population growth (Birdsall and Sabot, 1993). Slower population growth will not solve the problems, but it may reduce the pressures and buy additional time to work on solving the problems.

In terms of policy design, the relative importance of the "supply" and "demand" factors for family planning has been debated for over two decades. On the one hand, there is a strong body of evidence that links fertility declines with educational attainment, improvements in the economic and social status of women, and other factors such as urbanization and the spread of mass communications. On the other hand, however, evidence also suggests that fertility stabilization is possible in less favorable socio-economic conditions given strong and effective interventions. Thus, it seems likely that the best

[33]Nowhere was the disagreement more vocal than at the first World Population Conference held in Bucharest in 1974 (For a treatment of both sides of the debate, consult Finkle and Crane, 1975; Teitelbaum, 1974; Simon, 1981; Eberstadt, 1986; World Bank, 1984). The disagreement occurred at two levels: first, whether the population issue is significant; and second, if it is, then whether it is undesirable. At the first level, common ground was reached relatively easily; it is now recognized that although population growth is not the only (or even the primary) cause of low standards of living, rapid growth does have a significant negative effect on countries' efforts to better their quality of life. At the second level, the disagreement persists until today. On the one hand, it has been argued that population growth is an essential factor of economic development because larger populations provide sufficient demand to generate favorable economies of scale in production (Clark, 1969), because free markets will always adjust to any scarcities, and because human ingenuity will solve any problems created by population pressures (Simon, 1981; Eberstadt, 1986). On the other hand, it has been argued that population growth is a cause of poverty and environmental degradation and is a consequence of unmet needs for family planning services (Brown, 1974).

approach to the regulation of fertility is a balanced approach that combines interventions with broader socio-economic development.

Government and Private Sector Roles

The role of governments and the private sector in population stabilization rests on the need for both broad socio-economic development, and, in particular, "more" and "better" program spending.[34]

First, it is often argued that population stabilization is a merit good, and therefore governments should take initiatives for providing leadership and resources to ensure access to safe services (Cochrane et al., 1990).[35] In effect, family planning not only helps women reduce the health risks from mis-timed and unwanted pregnancies,[36] it has also been shown to be an efficient means of improving the welfare of the poor, particularly of children. For example, studies of Malaysia show that the decline in fertility between the 1970s and early 1990s was accompanied by a closing of the gap in per-child resources between the lowest and highest quintiles of families.[37]

Second, the private sector may have a lot to offer in terms of improving the quality of services at low cost. For example, an analysis of five Peruvian family planning NGOs found that they were able to deliver high quality services at considerably lower cost than the government, despite having high administrative expenses (Foreit, 1992). Quality is a key determining factor in fertility stabilization.[38] For instance, the Matlab project in Bangladesh achieved contraceptive prevalence rates of over 40 percent, compared to the government record in an adjacent area of 11 percent. This remarkable success is attributable to the high quality of the services provided, in particular, the intensive counseling

[34]Increasing the quantity of spending alone will not necessarily translate into better results. This is borne out by country experiences. For example, although Korea's successful program received a relatively large proportion of the government health budget, less successful programs in South Asia have also received large shares of up to 15 percent or more (World Bank, 1993i).

[35]In preparation for the 1994 Population Conference in Cairo, the United Nations Population Fund has estimated that, at the global level, a doubling of expenditures (from around $5 billion to just over $10 billion in 1993) will be required to meet family planning needs, plus an additional $5 to 7 billion to address broader reproductive health needs such as the prevention of HIV/AIDS and management of abortions (UNFPA, 1994).

[36]All pregnancies and births carry some health risks to the mother and child. However, the risks are higher when pregnancies come too early or too late in a woman's reproductive life, when they are too closely spaced or are unwanted, and when they occur to high-parity women (for example, those who have already had four or more babies) (World Bank, 1993b).

[37]In many countries, the issue for government is no longer whether or not to take the initiative, but how to ensure access to safe services and adequate counseling. In many Latin American countries, for example, contraceptive prevalence began to rise long before governments became actively involved in promoting family planning, and the private sector now covers large segments of the market.

[38]Evidence shows that client-focused programs, adequate method mixes, and counseling services, are more likely to affect reproductive behavior and improve reproductive health than approaches devised and imposed by central authorities (World Bank, 1993i).

of clients, the broad choice of methods available, and the follow-up home visits by village workers (Nag, 1990).

Third, increasing reliance on the private sector may expand overall access to family planning and allow

Box 14

The Indonesian Private Sector Family Planning Program 1990s

The public sector has been the predominant source of family planning services in Indonesia since the inception of BKKBN (the National Family Planning Coordinating Board). The private sector share of family planning clients is low relative to other countries (Lewis and Kenney, 1988) and relative to the private sector share of clients in the Indonesian health sector as a whole (Meesook, 1984). In an attempt to increase private sector participation, the BKKBN has been working on several special programs, aiming to decrease the share of clients using public sector sources from an estimated 80 percent in 1988 to 20 percent in the year 2000.

BKKBN's multi-faceted private sector program includes the following major dimensions:

a) training programs, supplies and equipment for doctors and midwives to enhance their capability of providing high-quality clinical family planning methods in their private practices;

b) a multi-media "Blue Circle" campaign aimed at making potential family planning clients aware that private doctors and midwives offer family planning services in private practices and to encourage those who can pay private sector prices to refrain from using free public services (the "Blue Circle" sign will signal the availability of family planning services from private practitioners);

c) the introduction of socially marketed pills, IUDs, and injectables under the "Blue Circle" logo at prices that are approximately one half the current commercial prices and, later, the launching of "Blue Circle" condoms, implants and spermicides;

d) management consulting and technical assistance aimed at increasing the management, fundraising, and organizational capacities of NGOs, and improving disbursement and oversight of mechanisms at BKKBN; and

e) support to family planning programs in the "organized" sector (plantations, industries, business).

Source: World Bank, 1990b

for higher public investments in underserved areas and marginal groups. For instance, a Colombian NGO, Profamilia, provides most of the country's contraceptive needs, freeing the government to focus its provision of services to users in rural areas. Also, Social Marketing schemes have expanded overall access to contraceptives in at least 30 countries.

In addition, private sector involvement in family planning may enable governments to keep a safe distance from politically sensitive issues while ensuring adequate provision of services.

These factors indicate a need for restructuring public/private roles in population stabilization programs. Even though market failures and welfare considerations imply a need for continued government involvement (for example, markets for contraceptives and information may be flawed, depriving groups such as the rural poor of the services they need),[39] governments' main responsibility is to promote efficient public/private mix rather than to deliver and finance services *per se*.

Policy Issues

A three-part policy is recommended:

- *ensure that population policies are integrated within the broad set of social and economic goals;*

- *recover costs for programs which serve those who can afford to pay and target public resources toward ensuring access to information and services amongst the poor; and*

- *promote diversity in the delivery of population stabilization programs.*

The latter recommendation involves four key steps:

- Incorporating consideration of the private sector into strategic planning. Many governments continue to omit private providers from national family planning strategies and programs. Specifically, governments need to assess the potential impact of expanding public family planning services on private sector producers, distributors, and providers to avoid "crowding out" commercial initiatives.[40]

- Reforming laws and regulations, including medical restrictions. In most countries, private as well as public programs are hampered by various regulations that, for example, make some methods illegal, restrict their distribution, and impose various impractical or inconvenient requirements on potential users. Although some regulation is needed to curb abuses, many restrictions drive up the cost of family planning, limit the client's choice of method, and are likely to discourage some clients altogether. The kind of policies that need to be reviewed include import duties on family planning supplies, foreign exchange controls that raise the price of contraceptives, tax policies, price controls that drive suppliers out of the market, restrictions on advertising, and prescription requirements that limit over-the-counter sales.

- Promoting program assistance. Even in the absence of legal restrictions, given public sensitivities, for-profit firms are unlikely to undertake advertising campaigns for family planning.

[39]It has been suggested that only a small minority of users understand the possible side effects of contraceptives or know how to use methods correctly, and methods that require a medical backup such as the IUD or surgical sterilization will not be provided in situations where health infrastructure is generally lacking.

[40]In the Piaui Community-based Distribution (CBD) program in Brazil, the net effect of the program was to "crowd out" the commercial sector share of the market with free, donated supplies, rather than to raise overall contraceptive prevalence (Foreit, 1992).

Voluntary organizations might be willing to fill this role because of the high priority they place on public education, but they may not have the funds to support it. It is no coincidence that commercial suppliers of contraceptives have flourished in Korea, Mexico, and Thailand, where governments have launched powerful advertising campaigns.

• Providing financial and technical assistance. A variety of forms of direct support for the private sector are possible including: funding and technical assistance to voluntary organizations and private providers; access to capital for clinical facilities; tax breaks to employers, voluntary organizations, and health insurance schemes that cover family planning; and provision of subsidized commodities through social marketing schemes. The training component of government assistance may be particularly critical to the success of policies to promote the private sector. In Jamaica, Korea, Nepal, and Thailand, governments have provided training to commercial suppliers in how to dispense oral contraceptives and how to advise clients to use them properly (World Bank, 1993b)

Examples

The private sector has already demonstrated its potential to provide family planning goods and services. It is estimated that individual expenditures on family planning in developing countries amount to between 35 and 55 percent of the total, and more than half of all users in many countries of Latin America and Africa rely on private outlets for family planning services. In Asia, where there are well-established government programs, private outlets serve 20 percent of users. The relative importance of the voluntary sector, however, varies from country to country. In Latin America, NGO coverage ranges from less than 1 percent to 52 percent of modern method users; in Sub-Saharan Africa, from less than 1 percent to 49 percent; in Asia/North Africa from less than 1 percent to 5 percent (World Bank 1993i).

The segmentation of the family planning market between the public and private sectors, and between the non-profit and for-profit sub-sectors, is influenced by several factors.

The first factor is government policies. For example, Asian governments have shown a strong commitment to reducing population growth and hence the public sector has played a major role in family planning. The second factor is levels of demand. In many Sub-Saharan African countries, low levels of demand, coupled with low government commitment, has led to an NGO monopoly of the field. Third, the extent of government regulations can influence the extent of private sector involvement. In Brazil, government restrictions on sterilization have inhibited private sector activity.[41] Fourth, what kind of family planning methods and facilities are available is an important factor. Pharmacies and other commercial outlets may distribute "resupply" methods such as pills and condoms, yet private sector provision of temporary clinical methods (such as IUDs or implants) and female sterilization depends upon the ownership of existing clinical infrastructure. Hence, in Mexico between 1982 and 1987, private sector coverage declined as use of the IUD and female sterilization, available

[41]Women in Brazil, however, have learnt that they can pay an obstetrician on-the-side for an "informal sterilization", which often takes the form of a cesarean section delivery accompanied by an unreported tubal ligation (World Bank, 1994b).

only in public facilities, increased in relation to the use of the pill (Foreit 1992). Fifth, secondary school enrollment, urbanization, and per capita GDP have an effect. Studies have shown a strong positive correlation between these factors and for-profit sector use (Cross et al., 1991; Kenney and Lewis, 1989).

Private Finance of Private Delivery

Most for-profit providers are financed by out-of-pocket payments. Private, for-profit physicians generally charge high fees to a limited clientele. However, worldwide, one in five couples using family planning buys the method at a pharmacy. In addition to accessibility, pharmacies and shops offer clients confidentiality, anonymity, free information, and prompt service. The voluntary sector is also increasingly dependent on fees to survive. For example, Profamilia, a NGO in Colombia, has moved away from depending on donor support to relying on individual fees for payment. The Community Distribution Program recovers approximately 75 percent of its recurrent costs through user fees (Amadeo et al., 1991).

Box 15

Sources of Contraception among Users of Modern Methods in Selected Countries with Contraceptive Prevalence over 30 percent.

Countries	Contraceptive Prevalence Rates	Public Sector	Private Commercial	Private Voluntary
Uganda	2	49	13	36
Liberia	6	31	18	49
Sri Lanka	40	85	8	2
Thailand	66	82	14	1
Colombia	55	25	40	32
Brazil	56	28	69	1

Source: World Bank, 1993i

Health insurance coverage is limited in developing countries as a whole, and is even more limited in its coverage of family planning. In a survey of all major Peruvian health insurance companies in 1990, none reported covering either prenatal care or family planning, although hospital delivery was included (Foreit, 1990); likewise 17 out of 28 Brazilian HMOs reported that they did not offer family planning (Foreit, 1987).

However, employer-supported family planning programs exist in more than 20 developing countries, in enterprises ranging from sugar and bauxite manufacturing in Jamaica to coffee farming in Colombia (Lewis and Kenney, 1988). Recently, the U.S. Agency for International Development (AID) has

begun to underwrite organized efforts to enlist employer support for family planning through two world-wide assistance projects, Technical Information on Population for the Private Sector (TIPPS) and the Enterprise Program. A central feature of the A.I.D. employer-based initiatives is the financial argument that the costs to the employer of providing family planning to employees and dependents can be more than offset by savings arising from averting maternity-related service costs (Foreit, 1992). Labor unions have also been involved in promoting family planning as an employee benefit in India, Turkey, and Sri Lanka.

Public Finance of Private Delivery

Perhaps the most successful example of this type of public/private mix is social marketing. This is the subsidized provision, without prescription, of contraception through commercial outlets such as pharmacies, shops, street hawkers, and bars. The first social marketing scheme was in India, selling subsidized "Nirodh" condoms. Almost all countries with such schemes sell condoms, and at least 17 sell oral contraceptives. Social marketing makes subsidized family planning more accessible by increasing the number and variety of outlets through which contraception can be obtained. In Sri Lanka, some 6,000 commercial outlets sell subsidized condoms and pills - more than five times the number of government family planning outlets. In the late 1970s, social marketing schemes accounted for more than 10 percent of total contraceptive use in Jamaica, Colombia, Thailand, and Sri Lanka. In Bangladesh, the social marketing program supplied about one quarter of couples who used contraception in 1983 (World Bank, 1993b).

Community-based distribution is another delivery mechanism that relies on "private" agencies to provide subsidized contraceptives. This uses local residents who have had a few days of training to distribute contraceptives within communities. Community distributors generally do not have a fixed salary, although they may be allowed to retain a percentage of their sales, and often receive non-monetary incentives. The effectiveness of community-based distribution in increasing contraceptive prevalence, particularly from low levels, has been amply demonstrated in countries in several different regions, including Bangladesh, Egypt, Mexico, Morocco, Rwanda, Sudan, Tunisia, Zaire, and Zimbabwe. Furthermore, studies in Kenya, Mexico, and Thailand demonstrate that community-based distribution is safe. A 1982 study in Matamoros, Mexico, compared women using pills distributed in the community, women using pills from other sources (mainly pharmacies), and women who had never used contraception. Interviews and clinic examinations determined that those who depended on community distribution were as healthy as other users, and healthier than those who had never used contraception.

Although government subsidies to the commercial sector are usually provided for contraceptive supplies only, some governments also subsidize IUD insertion, abortion, and sterilization by private physicians. In Korea, more than 2,300 physicians have been trained and authorized by the government to provide family planning services. The government pays the entire cost of sterilization, but the cost of IUD insertion is shared with the client.

Complementarities between governments and the non-profit sector are also increasingly commonplace, and have been instrumental in expanding access to contraceptives in a variety of different settings. For example, the NGO sector in Thailand acts as an extension of the government's rural health service, and

in Kenya, a new government project is financing the creation of family planning services in at least 30 NGO health facilities. In other countries, such as Peru and Honduras, governments have allowed NGOs to operate after-hours family planning clinics in Ministry of Health facilities (World Bank, 1993i), and, in Honduras, ASHONPLAFA[42] utilizes some MOH personnel in its CBD program. These partnerships have significantly increased program coverage (Foreit, 1992).

Private Finance of Public Delivery

There are few examples of concerted attempts to mobilize private resources for use in the public sector. Government maternal and child health services are typically provided free at point of use in all regions. However, user charges in programs that serve those able to pay are desirable. The charges would be reasonable and linked to quality, and some of the revenue could be kept at the facility to provide an incentive for better performance. Changes in user charges would best be gradual, predictable, and occasionally downward, since price decreases stimulate the use of contraceptives (World Bank, 1993i).

[42]ASHONPLAFA is an affiliate of the International Planned Parenthood Federation (IPPF).

NUTRITION

Issues

Malnutrition is primarily a result of insufficient dietary energy (calories) and protein, often in combination with some form of infection, and a lack of micronutrients (especially iodine, iron, and vitamin A).[43] [44] The outcomes are poor health, stunted growth, blindness, mental debilitation, and likely early death. Those who are most vulnerable to these consequences are children under the age of three - a critical period of growth - and pregnant and lactating women who have special nutrition needs. In poor countries, one third of child deaths annually are due, in part, to malnutrition, and a sizable majority of pregnant women in developing countries suffer from iron deficiency anemia, with the consequent higher risk of death in childbirth.

Investments in nutrition aimed at vulnerable groups can lessen and, in some cases, eliminate the debilitating and potentially fatal effects of malnutrition. Simultaneously, the same investment can begin to address the underlying causes of poverty and malnutrition by allowing the poor and malnourished to be more productive and to benefit more from education, both important stimulants of economic growth.

Strategies to address malnutrition must be built upon the synergies between the macroeconomy and the various human resource sectors. Raising income allows people to buy a more balanced diet;[45] broader access to education, especially for women, helps people to make better nutrition choices; and strengthening the health sector makes it possible to target more public resources toward the prevention and treatment of nutritional deficiencies.

Government and Private Sector Roles

Actions to reduce malnutrition include: an overall improvement in income and in health system management; programs to train and monitor medical personnel to prevent and manage micronutrient deficiencies; programs to reach groups left out of the health care system; control of infectious diseases and intestinal parasites; nutrition education, micronutrient fortification of food, micronutrient supplementation or capsules, food supplementation, and food price subsidies.

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[43]According to World Health Organization standards, there are about 780 million people estimated to be energy deficient. In addition, the population of virtually every developing country suffers from a deficiency in vitamin A, iodine, or iron that is large enough to constitute a public health problem (World Bank, 1993c).

[44]The 1990 Summit for Children endorsed three micronutrient goals: to eliminate deficiencies of both iodine and vitamin A and to reduce iron deficiency anemia in women by one-third. These goals were reiterated in the 1991 Ending Hidden Hunger conference and the 1992 International Conference on Nutrition.

[45]Food security studies in Africa show that nutrition is also affected by who controls the money in the household. This is because a woman's income is more likely to be spent on better nutrition. See Tripp (1981) on Ghana.

Malnutrition is, in most cases, a disease of poverty. Hence, the public sector has a role of ensuring access to nutritional services, especially for the poor. However, as in other sectors, government monopoly over the provision of nutrition activities could be sub-optimal in efficiency and equity terms. For example, an evaluation of a government School Milk Programme in Kenya found it to be highly cost-ineffective, mainly due to the monopoly power of the Kenya Cooperative Creameries Ltd. (World Bank, 1993k). Actions to increase the participation of the private sector may help developing countries to address malnutrition in the short and the longer terms.

In particular, the private sector has an important role in implementing programs and providing services. The kind of private agencies that may be enlisted to perform this task include experienced NGOs and Community-Based-Organizations (CBOs). The experience of these organizations with communities, or with community groups, place them in a strong position to promote recipient participation and, hence, affect behavioral changes amongst the poorest groups.[46] The success of an early World Bank-assisted project in Thailand, for example, depended largely upon the participation of CBOs, in this case village cooperatives, in the design and implementation of nutrition programs. These included growth monitoring and supplements projects. Mixtures of rice, mung beans, groundnuts, and sesame seeds were produced by the cooperatives, with excess production sold and reinvested in the nutrition programs.

In terms of food procurement, the evidence suggests that the private for-profit sector may be better equipped to deal with logistics such as transportation, storage, and distribution. Indeed, the evaluation of the Kenya School Milk Programme found that one of the key reasons for the low coverage of the program was the logistic difficulties arising from inadequate transportation; 50 percent of the government vehicles used to distribute the milk were more than 10 years old, requiring expensive and frequent maintenance (World Bank, 1993k). If private companies were encouraged to compete for contracts to distribute the milk among the schools, the inefficiencies arising from the government's monopoly could be lessened.

In other instances, experience suggests that it may be more cost-effective to design feeding programs whereby entitlements are determined through public bodies (for example, health clinics or schools) with the actual food acquired in private markets. For example, the Honduras Social Investment Fund chose a food coupon program that was administered through the health system, while the coupons could be redeemed through participating retail food outlets. This system eliminated the need for bulk purchase and increased possibilities for targeting (Levinson, 1993).

[46]Involving communities and recipients in the design, planning, and implementation of nutrition programs can generate enthusiasm for such activities, increase knowledge about nutrition, and increase the likelihood of long-lasting effects (World Bank, 1992a).

Box 16 **Actions To Reduce Malnutrition**

Actions to reduce malnutrition include: an overall improvement in income and in health system management; control of infectious diseases and intestinal parasites; nutrition education, micronutrient fortification of food, micronutrient supplementation, capsules, food supplementation, and food price subsidies.

Chronic malnutrition is a consequence of poverty, and raising income goes a long way toward a solution. In Indonesia during 1984-87, higher incomes thanks to broad-based economic growth led to reduced malnutrition in nearly all 52 regions in the country. In many cases, however, chronic food insecurity for the poor is often worsened by seasonal fluctuations in availability and prices. A combination of public and private sector actions is necessary to ensure that food is available in famine areas (through both market in non-market mechanisms) and to sustain the incomes of the vulnerable populace (through social safety nets for instance).

Controlling infectious disease can be as important as ensuring more food intake, in particular for those with a barely adequate diet. Diarrhea, in addition to low energy intake, is a major cause of low growth among young children. For older children, control of parasitic worms can help improve nutrition. Control of malaria has led to reduction in anemia. The role of government is to finance and even provide (as part of the public health package) measures to control these infectious diseases. The private sector may take the lead in supplying medicinal intakes.

Nutrition education enables families to improve their diets even without additional income. Probably the most valuable nutrition education is the promotion of breastfeeding. Breastfeeding improves the child's health, and benefits the mother as well by conserving iron stores (because menstruation is suppressed), better spacing of births, reducing the risk of breast and ovarian cancer. Such action requires education of both mothers and health professionals (who often discourage breast feeding).

Fortifying the foods people eat increases micronutrient intakes without requiring a change in diet. Brazil's national salt iodination program decreased substantially endemic goiter. Iron fortification of infant formula milk greatly reduced anemia. Fortification of monosodium glutamate in Indonesia cut child mortality by 30 percent.

Micronutrient supplementation (separately from food) requires regular contact with the target population. This may make supplements more costly than fortification of foods. However, providing supplements in school-based deworming programs can be quite cost effective.

Programs that provide food instead of micronutrient supplements or food fortification often require better targeting from suppliers and a change in eating habits from recipients. For those reasons, food supplementation tends to be most effective when used to motivate mothers to care for their children's health, when concentrated within a short period (during pregnancy, for example). In many countries, free meals for schoolchildren may have humble effect on their nutritional status but improve school attendance and performance.

Food price subsidies to needy households can, in theory, increase intake of particular foods. In practice, difficulties in targeting and inefficiencies in administration can wipe out the potential benefit. In Brazil, one large urban government program has often sold food for about the same price as the private sector despite a nominal 20 percent public subsidy.

Policy Issues

A strong complementarity between the public and private sectors is the most effective way to reach the goal of eliminating micronutrient deficiencies and energy-protein malnutrition.

Governments could ensure that:

- nutrition programs are integrated into a broad set of economic and social programs that address both the causes and consequences of malnutrition;
- public resources are targeted toward the most cost-effective interventions for women and children most at risk from malnutrition;
- information about local foods rich in vitamin A and iodine be accessible to the general public; and
- complementarities are forged between the public and private sectors in the delivery and financing of services.

Within this policy framework, governments could establish mechanisms to facilitate and coordinate private and public sector activities. In the case of the for-profit sector, it could provide incentives that stimulate appropriate provider behavior. For example, legislation that requires micronutrient fortification of basic foodstuffs such as salt could be combined with incentives to encourage compliance. Some of these that have been used in effective fortification programs have been tax relief, import licenses, loans for equipment, subsidies on fortificants, and positive press coverage. In India, producers of iodized salt get preferential rail car allotments to move salt from production centers to markets across the country. Within this framework, the private sector would have the incentives to compete within itself and with the public sector in the provision of nutritional activities.

Examples

The private non-profit sector has traditionally played a predominant role in both the provision and financing of nutrition services. Indeed, NGOs and multilateral outlays already make up a large proportion of the total resources allocated to nutrition. For example, in Kenya, more than 80 percent of the resources for direct programs come from external sources and international agencies, including WFP, UNICEF, DANIDA, USAID, Action Aid, CRS, the Freedom from Hunger Council, and the National Council of Churches. In Malawi, the nutrition problem is being tackled almost exclusively by UNICEF, WFP, and foreign NGOs. However, a growing proportion of nutrition projects are built upon public/private complementarities.

Private Finance of Private Delivery

NGOs typically finance their programs through external sources. There are examples, however, of projects run by CBOs and NGOs that have become self-financing, in particular, credit schemes that provide loans for income-generating activities aimed at boosting household food security. For example, a joint venture, initiated by the Freedom From Hunger Foundation and a Malian NGO, extends credit to people through village credit associations. These credit associations provide loans to individuals who have organized themselves into mutual guarantee groups of five or six borrowers each. Each village credit association accumulates and invests its own funds derived from fees, savings, and interest paid by members. After three to five years, donor funding is discontinued and credit associations manage their own funds (Levinson, 1991).

Public Finance of Private Delivery

Governments are increasingly attempting to use private delivery mechanisms as a more efficient means of reaching their nutrition goals. For example, government resources may be channeled through Social Investment Funds, which then channel resources to small, community-based projects administered and implemented by the local community groups and private contractors. This method of delivery is most developed in Latin American countries. For example, the Bolivia Emergency Social Fund, created to protect low-income groups during the implementation of an economic adjustment program, has initiated over 300 nutrition projects (including school breakfasts, soup kitchens, and food for institutionalized children), which have been implemented by mothers' clubs and other community groups (Levinson, 1993).

In other instances, governments have contracted directly to NGOs to provide training for agricultural extension and nutrition workers, and have subsidized the fortification of foodstuffs by industries. Some governments are also considering experimenting with the social marketing of vitamin/mineral supplements through private pharmacies and other retail outlets.

Private Finance of Public Delivery

This type of public/private mix is uncommon. Most government nutrition services are provided free of charge at point of use.

CONCLUSION

The events in the past decade, from the collapse of socialist economies to the debt crisis in Latin America, have exposed the astounding costs of government failure. The world has learned to rely more on markets and less on government to reduce poverty and promote development.

This is not to insinuate that there is no longer a role for governments. On the contrary, at all levels, there is a need to make better use of existing human, natural, and financial resources currently available in developing countries. Governments, NGOs, local communities, and the for-profit sector need to work together to make better use of these resources. This implies at least two principles: (i) government could do more of what it does best and less of what the private sector does better,[47] and (ii) government and the private sector would seek to exploit fully the complementarity effects between the efficiency of the economic system and human resources development, as well as the complementarity effects among the social sectors.

In fact, the experience in the last decade suggests that investment in human capital and an efficient economic system are complements and exert significant positive interactions. Investment in human capital alone would not bring about prosperity to an inefficient economic system. On the other hand, without adequate human capital, a good system would not achieve sustainable growth. However, both elements together would produce much greater effect than the sum effect of either component.

In addition, human resource sectors are intimately inter-connected, and fortunately, often, their benefits spill-over each other in a positive manner. For example, better nutrition not only improves health status, but also enhances learning ability, which, in turn, can improve school performance and attainment, which has further good effects on health. Better health reduces child mortality which, in addition to better education for girls, lowers the fertility rate (see Box 17).

Increasing the involvement of the private sector advances the World Bank's objectives of reducing poverty in many ways. First, it improves economic efficiency, producing broad gains in living standards. Second, it redirects government efforts away from competing with private goods and services and so frees up tax revenues for funding social programs that benefit the poor. Third, it simplifies regulations, privatizes, and broadens access to credit through reform of collateral, lowering the cost of doing business for small farmers and entrepreneurs where most of the poor are concentrated.

[47]Government is to pursue a policy framework conducive both to sustained economic growth and to the development of the employment-generating power of the private sector. This is probably one of the most important roles of government. After all, it is the private sector that will absorb most of the entrants to the labor force in the long run.

The Bank is supporting developing countries in their efforts to promote private sector development.[48]

Box 17

Exploiting the Complementarity Effect between Education and Health
The Case for Educating Females

Expanding access to education for women has been shown to be a very effective tool in reducing poverty; fostering economic growth; raising households' productivity and choices; and reducing fertility, child malnutrition, and infant mortality.

Public policy can foster an environment more conducive to expanding girls' enrollment in basic education. Many countries have been making tremendous effort at providing universal primary education. This policy would lead a long way toward achieving this goal. However, the lack of equal access to education for girls, often, is due to a multitude of barriers including economic, social, and even cultural. In these cases, public policy will have to tackle these barriers simultaneously in order to be effective.

Some specific policy measures, however, could include (World Bank, 1993g):
. placing schools closer to homes, in particular, building smaller but more numerous schools with closer ties to the community;
. having more female teachers;
. building sanitary facilities and boundary walls;
. waiving or subsidizing student fees; and offering scholarships contingent upon performance.

Other complementary actions might also be necessary: establish child-care centers, implement flexible school hours; revise curricula and textbooks and make them more gender neutral when necessary.

The strategy has three themes:

- improving the business environment by supporting macroeconomic stabilization and procedural, regulatory, and legal reforms;
- restructuring the public sector by supporting redirecting public spending, and encouraging the private sector to compete in the delivery and financing of services; and
- reforming the financial sector by supporting the development of efficient financial systems that mobilize savings and channel them to the most productive uses (World Bank, 1991c).

Each country has its own range of government and private sector initiatives available to fight poverty. However, the general principle remains that, given a country's constraints, governments can best help

[48]In its lending operations in support of the private sector, the Bank has relied on SALs to support broad reforms affecting growth and private sector development and on SECALs to support policy changes affecting individual sectors.

reduce poverty by fostering an environment that maximizes the vitality and dynamism of the economy, by providing safety nets and certain required investments, and by letting the private sector do most of the rest. After all, it is the people, not the government, who will, in the final analysis, improve their own welfare.

Box 18

The Relationship between Macroeconomic Policies and Human Resources Development

The experience in the last decade suggests that investment in human capital and an efficient economic system are complements and exert significant positive interactions. Investment in human capital alone would not bring about prosperity to an inefficient economic system. On the other hand, without adequate human capital, a good system would not achieve sustainable growth. However, both elements together would produce much greater effect than the sum effect of either component.

An efficient macro context would, at the minimum, include a clear assignment of the roles of government and the private sector with an increasing participation of the latter, particularly, in the face of increasing public budget constraints; stable fiscal and financial policies; a flexible and adaptable labor market; an efficient system of social safety nets commensurate with the wealth of the economy; and an appropriate regulatory framework that ensures an effective incentive structure, promotes domestic and international competition, and protects legal and property rights.

Box 19 **Exploiting the Synergies among the Social Sectors**

A comprehensive human resource development strategy would seek to exploit fully the positive linkages among the different kinds of human capital. This is because the different sectors are all inter-connected, and fortunately, often, their benefits spill-over each other in a positive manner. For example, better nutrition not only improves health status, but also enhances learning ability, which, in turn, can improve school performance and attainment, which has further good effects on health. Better health reduces child mortality which, in addition to better education for girls, lowers the fertility rate.

The complementarities among human resources sectors can be analyzed based on the choices that families make. These household level choices could stipulate a cumulative growth process characterized by high incomes, low fertility, small family size, substantial investments in human capital and continuing growth. Alternatively, the choices could result in an equilibrium pattern of low per capital incomes, high fertility, and inadequate investment in human capital. The policy challenge is to detect which intervention would most likely ignite the chain reaction of human capital investments and growth.

Mortality reductions (particularly adult mortality) becomes one instrument by which countries can make the transition from the low-income equilibrium to a higher-income one (Becker, 1994). As people expect to live long and healthier, they have more incentive to invest in education and other productivity enhancing activities. This would raise income and break the poverty cycle. In fact, the higher the adult mortality, the lower the subsequent rate of growth in the developing countries.

Declining mortality can also lead to slower population growth (Meltzer). Cross-country growth evidence suggests that declining mortality discourages fertility, and is associated with higher subsequent growth. In particular, child mortality at the beginning of the period is negatively related to growth.

Education is another instrument that breaks the cycle of poverty. Education is probably the most important variable that affects the individuals' health and life expectancy (Becker, 1994). Not only does education pay-off through its rate of return (Psacharopoulos, 1994), the education and training of parents, especially that of mothers, is also significantly related to low birth rates and small family size. The less the number of children, the more attention and resources the parents would be able to provide to each child. As each child receives more human capital investment, the higher the probability the child will grow up better-off. The gap between the education of sons and daughters are also smaller when parents (particularly the mother) have more education.

Countries concerned about population growth and high levels of mortality can take important indirect steps by encouraging education (primary and secondary), especially for women. The modern economic environment, the nature of the products being produced and processes being used appear to place an increasing premium on education and training and other sources of knowledge.

Policies designed to make use of these two instruments to reduce poverty would have to take into account as many as possible the inter-relationships among the various elements of human capital and between human capital and poverty reduction. In addition, there is also a need to clearly define the roles of government and the private sector in financing and making investments in human capital.

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APPENDICES

APPENDIX A: The role of governments and the private sector in human resources development.

APPENDIX B: Data tables on education and health expenditures

APPENDIX A

The Role of Government and the Private Sector in Human Resources Development

PRINCIPLES & SECTORS	PUBLIC SECTOR ROLE	PRIVATE SECTOR ROLE
General principles	. Ensure a stable macroeconomy based on labor-intensive growth . Ensure provision of social safety nets. . Ensure access to and the quality of human resources services especially for the poor . Promote, rather than inhibit, the private sector through measures such as vouchers, tax relief, and technical assistance . Improve efficiency and management of public institutions . Establish an appropriate balance between "carrot and stick" mechanisms to influence private sector activities and guard against market failures without inhibiting private sector growth	. Compete in delivering and financing social services . Take advantage of consumers' willingness to pay for more services and better service quality

PRINCIPLES & SECTORS	PUBLIC SECTOR ROLE	PRIVATE SECTOR ROLE
Education	. Provide compulsory education (for a minimum level of education determined by country conditions) . Reallocate spending toward the level with the highest social returns (lower levels of education, general/academic training) . Ensure school readiness by implementing early childhood development programs, particularly in low-income and rural areas . Provide or finance school accreditation process and evaluation of school performance . Subsidize credit/loan schemes for students . Decentralize the management of public education . Encourage the expansion of private and community-supported schools	. Provide government-financed services in order to give parents and students more choice . Provide for fee levels and types of education households are prepared to pay for but governments cannot finance . Finance student loan and scholarship programs, especially in vocational training and higher education
Nutrition	. Ensure food distribution to the most vulnerable populace (especially women and children) . Finance and/or provide programs that control infectious diseases (malaria) and parasitic worms . Finance and provide information about local foods rich in vitamin A and iodine . Finance micronutrient fortification of food and micronutrient supplementation	. Compete in carrying out government-financed nutrition programs including nutrition education, control of intestinal parasites, micronutrient fortification of food, micronutrient supplementation, and food supplementation

PRINCIPLES & SECTORS	PUBLIC SECTOR ROLE	PRIVATE SECTOR ROLE
Health	. Focus spending on correcting for market failures and toward more cost-effective programs used by the poor . Reduce emphasis on specialized care and tertiary facilities . Finance and ensure delivery of a package of public health services . Finance and ensure delivery of a package of essential clinical services . Contract out publicly-financed services . Encourage the private sector to finance and provide supplemental services . Encourage the development of private insurance markets . Provide information on performance and costs of facilities . Develop regulation and incentive structures to influence private provider behaviour	. Compete in financing and delivering services . Finance and provide supplemental insurance services
Population	. Ensure that population policies are integrated within a set of broad social and economic goals . Protect human rights and respect individual preferences toward reproductive behavior . Disseminate information on fertility services and remove obstacles to private delivery of services . Offer family planning services in cases of unmet demand	. Provide family planning services financed (wholly or in part) by government . Develop mechanisms for private financing and cost recovery aimed at those who can afford to pay

APPENDIX B

Data tables
Public and Private Expenditures on

- **Education**
- **Health**

Government Education Expenditure (1990) and Private Education Expenditure (latest available years)

Region and economy	Government Expenditure /a /b						Private Expenditure	
	as % GDP	as % total budget	Pre-primary & primary ed	Secondary education	Higher education	Higher to primary ed exp ratio	Private education expenditure as % of GDP	/c Year
			as % of education budget					
Sub-Saharan Africa *	3.5	14 2	46.0	27.2	17.8	0.4	1.7	
Angola	...	10 7	96.3 /d	...	3.7	...	...	...
Benin	...		...	...	...	...	...	...
Botswana	7.7	15.9	31.1	48.8	12.2	0.4	...	
Burkina Faso	2.2	17.5	41.7	25.8	32.1	0.8	...	...
Burundi	3.5	16 7	46 8	29.1	22.0	0.5	...	...
Cameroon	3.3	19 6	70.5 /d	...	29.5	...	...	...
Central Afr.Rep.	2.7	19.8	52.7	14.6	21.5	0.4	...	...
Chad	...	...	47.2	20.9	8.2	0.2	...	...
Cote d'Ivoire #	...		40.2	42.7	17.1	0.4	...	...
Ethiopia	4.9	9.4	53.9	28.1	12.1	0.2	...	...
Ghana	3.1	24.3	29.2	34.3	11.0	0.4	1.1	78
Guinea	1.6	21.5	23.0	19.3	31.0	1.3	...	...
Kenya	6.9	16.7	57 3	19.4	14.5	0.3	4.6	92
Madagascar #	...	...	42.3	26.5	27.2	0.6	...	...
Malawi	3.1	10.3	42.1	13.3	30.3	0.7	...	...
Mali #	2.1	17.3	48.4	22.6	...	...	...	...
Mozambique	5.5	12.0	49.8	15.7	9.9	0.2	...	...
Niger	...	...	...	...	...	...	...	...
Nigeria /i	1.9	. .	..	...	...	...	...	...
Rwanda	4.1	25.4	67.7	14.1	16.2	0.2	...	...
Senegal	3.5	24.1	39.3	21.0	22.9	0.6	...	...
Sierra Leone #	1.6	17.5	30.4	27.0	25.4	0.8	3.0	89 /e
Somalia	...	...	...	...	...	...	...	...
South Africa	3.8	...	...	...	...	...	0.2	91
Sudan	...	...	...	...	...	...	0.7	83 /e
Tanzania	6.0	11.4	41.6	32.1	17.1	0.4	...	...
Togo	5.2	24.7	30.4	25.8	29.0	1.0	...	...
Uganda	1.6	22.5	20.1	60.6	12.9	0.6	2.1	89/9
Zaire	1.0	6.4	54.5	22.3	22.5	0.4	...	...
Zambia	3.1	8.7	31.7	34.5	17.3	0.5	0.9	73
Zimbabwe #	8.7	16.0	56.8	31.0	22.5	0.4	2.9	87

Government Education Expenditure (1990) and Private Education Expenditure (latest available years) continued...

Region and economy	Government Expenditure /a /b						Private Expenditure	
	as % GDP	as % total budget	Pre-primary & primary ed	Secondary education	Higher education	Higher to primary ed exp ratio	Private education expenditure as % of GDP	/c Year
			as % of education budget					
India	3.6	11.2	41.8	29.1	17.0	0.4	1.2	90
China	2.3	12.4	32.7	34.4	18.6	0.6	...	
Other Asian and Pacific countries and islands	2.8	13.9	45.9	32.0	12.4	0.3	2.5	/j
Bangladesh	2.1	10.3	45.6	42.2	8.7	0.2	...	...
Cambodia	...	...	...	...	...	...	...	...
Fiji	4.7	15.4	50.5	37.0	9.0	0.2	2.5	90 /e
Hong Kong	2.9	17.4	29.8	40.7	28.8	1.0	0.7	90
Indonesia /f	3.1	...	46.0	28.0	13.0	0.3	3.1	90 /k
Korea, Rep.	3.4	22.4	44.4	34.1	7.4	0.2	7.0	90 /e
Lao PDR #	1.3	6.6	...	...	...	...	...	...
Malaysia	7.2	18.8	37.9	37.7	14.9	0.4	0.3	83
Myanmar	...	..	85.6 /d	...	13.0	...	...	...
Nepal #	2.7	10.8	35.2	31.0	19.7	0.6	...	...
Papua New Guinea /h	6.8	16.0	44.8	18.0	27.5	0.6	...	...
Philippines	3.0	10.1	73.1 /d	...	15.1	...	1.9	80
Singapore	3.4	11.2	28.7	36.5	30.7	1.1	0.5	90
Sri Lanka	3.0	8.1	84.3 /d	...	13.4	...	0.9	90
Thailand	3.7	20.0	56.2	21.6	14.6	0.3	0.3	90
Viet Nam	1.1	6.5	...	...	...	...	1.5	93 /l

Government Education Expenditure (1990) and Private Education Expenditure (latest available years) continued...

Region and economy	Government Expenditure /a /b						Private Expenditure	
	as % GDP	as % total budget	Pre-primary & primary ed	Secondary education	Higher education	Higher to primary ed exp ratio	Private education expenditure as % of GDP	/c Year
			as % of education budget					
Latin America and the Caribbean *	3.4	17.9	42.4	26.3	18.8	0.4	3 0	
Argentina	...	...	...	...	...	...	...	...
Bahamas	...	...	...	...	...	...	. .	...
Barbados	7.7	...	37.5	37.6	19.2	0.5	...	...
Bolivia	3.0	20.1	56.2	10.1	23.2	0.4	0.3	88
Brazil #	3.3	17.7	52.3	7.2	17.6	0.3	...	...
Chile	3.5	...	56.4	15.3	21.6	0.4	...	..
Colombia	2.9	21.4	32.1	27.6	20.6	0.6	1.1	90
Costa Rica	4.5	20.8	31.0	17.1	35.8	1.2	.	...
Cuba		12.8	25.7	39.0	14.4	0.6		...
Dominican Rep. #	1.6	10.0	45.1	18.4	19.7	0.4	...	...
Ecuador	2.5	19.1	41.9	32.0	13.6	0.3	...	...
El Salvador	1.8	...	...	...	...	...	...	. .
Guatemala	1.5	11.8	...	...	...	...	...	...
Guyana #	7.7	8.1	38.8	23.8	17.8	0.5	...	..
Haiti	1.6	20.0	53.1	19.0	9.1	0.2	6.4	91
Honduras	5.3	15.9	53.8	19.4	20.7	0.4	1.7	86 /e
Jamaica	5.6	12.9	37.4	33.2	21.1	0.6	0.2	88
Mexico	3.8	...	...	...	...	...	3.5	90 /e
Nicaragua #	6.4	12.0	39.7	18.3	16.0	0.4	...	...
Panama #	5.4	14.3	39.3	25.0	22.4	0.6	...	...
Paraguay #	1.5	16.7	36.6	29.7	23.8	0.7	...	.
Peru	3.2	...	34.8	20.4	...	...	6.9	88 /e
Suriname #	9.1	22.8	60.5	14.7	7.7	0.1	...	...
Trinidad & Tobago	3.6	11.6	42.5	36.8	11.9	0.3	...	...
Uruguay	3.0	15.9	37.5	30.3	22.6	0.6	...	...
Venezuela #	4.3	21.1	20.0	4.0	28.0	1.4	1.2	87

Government Education Expenditure (1990) and Private Education Expenditure (latest available years) continued...

Region and economy	Government Expenditure /a /b						Private Expenditure	
	as % GDP	as % total budget	Pre-primary & primary ed	Secondary education	Higher education	Higher to primary ed exp ratio	Private education expenditure as % of GDP	/c Year
			as % of education budget					
Middle Eastern Crescent *	5.2	20.2	38.2	34.5	17.1	0.4	0.6	
Afghanistan	..	...	87.6 /d	. .	12.4	.	...	
Algeria	9.0	27.0		...	...	...	...	...
Armenia	3.9	..	...		...	...		...
Azerbaijan	3 9	..	...	..	...	.	...	..
Cyprus	3.7	11.3	38.5	50.3	3.8	0 1	1.1	90
Egypt	7.2	...	70 2 /d	...	29.8	...	..	...
Georgia	3.9	.	...	.	...	...	...	...
Iran	5.5	22.4	33.2	39.2	13.6	0.4	1.1	90
Iraq #	.	6.4	49.4	27.8	20.6	0.4	...	.
Israel	5.8	10.4	41 1	32.3	18.9	0.5	1.7	90
Jordan	5.9	13.3	64.4 /d	...	33.0	...	2.0	86
Kazahkstan	3.9	...	...	...	...	...	..	...
Kyrgyzstan	3.5	...	...	...	...	..	...	..
Libya	.	...	...	...	...	.	...	...
Morocco	5.2	26.1	34.8	48.9	16.2	0.5	...	...
Pakistan	3.8	...	36.5	33.2	18.1	0.5	...	..
Saudi Arabia #	9.0	16.2	44.8	29.3	24.0	0.5	...	...
Syrian Arab Rep.	3.4	17.3	46.4	27.7	23.4	0.5	...	...
Tajikıstan	3.9	...	...	...	...	...	...	...
Tunisia	5.6	14.3	39.8	36.4	18.5	0.5	...	..
Turkey	..	...	...	...	...	...	...	...
Turkmenistan	3.9	...	...	...	...	...	. .	...
Uzbekistan	3.9	. .	...	..	...	...	...	. .
Yemen	5.7	23.5	47.6	17.4	3.9	...	...	...

Government Education Expenditure (1990) and Private Education Expenditure (latest available years) continued...

Region and economy	Government Expenditure /a /b						Private Expenditure	
	as % GDP	as % total budget	Pre-primary & primary ed	Secondary education	Higher education	Higher to primary ed exp ratio	Private education expenditure as % of GDP	/c Year
			as % of education budget					
Formerly socialist econ. of Europe *	3.7	10.7	48.8	19.0	16.4	0.3	...	
Albania	...	11.1	...	..	...	...	...	.
Belarus	...	...	57.7	16.2	14.4	0.2	...	..
Bulgaria	3.9	. .	70 7 /d	...	13.9	...	...	...
Czechoslovakia (former	5.1	8.2	49.6	18.1	15.8	0.3	...	...
Hungary	7.2	7.8	53.5	21.9	14.2	0.3	...	...
Lithuania	3.5	...	...	...	...	...	...	...
Moldova	3.9	...	...	...	...	...	...	...
Poland	5.4	14.6	42.8	17.5	22.0	0.5	...	...
Romania	3.6	7.3	52 1	22.1	9.6	0.2	...	...
Russian Federation	2.6	...	...	...	...	...	...	...
Ukraine	3.9	...	69.9 /d	...	15.1	...	...	...
Yugoslavia (former)	5.4	...	75.2 /d	...	17.0	...	...	..

Government Education Expenditure (1990) and Private Education Expenditure (latest available years) continued...

Region and economy	Government Expenditure /a /b						Private Expenditure		
	as % GDP	as % total budget	Pre-primary & primary ed	Secondary education	Higher education	Higher to primary ed exp ratio	Private education expenditure as % of GDP	/c	Year
			as % of education budget						
Established market economies *	5 2	12.8	31 3	39 5	20.9	0 7	2.3		
Australia	5.2	14.8	59 6 /d	.	32.0	..	1.0		90
Austria	5.1	7.6	23.7	46 6	19.1	0 8	0 2		90
Belgium #	4.6	14.3	24.9	46 6	17 6	0 7	4 2		88 /e
Canada	7.0	15.6	62.2 /d	...	28.6	.	1.7		90
Denmark	6.7	13.0	67.9 /d	...	15.7	...	0.9		90
Finland	5.5	15.9	27.9	39 4	23.9	0 9	5 4		90
France	5.0	...	27.3	40.7	13 8	0.5	0 4		90 /e
Germany (Fed)	4.9	8 6	18.0	47 5	22.4	1.2	5.5		90
Germany (Dem) #	...	...	66 6 /d	...	24 3	.	...		...
Greece #	3.1	7 5	36.5	42.6	19.8	0 5	0.4		88
Ireland	5.1	10.2	38 2	40 8	19.4	0 5	0.6		90
Italy	4.5	...	30.5	46.5	13 6	0.4	0.5		89
Japan	5.1	16.2	29.3	32.2	22.5	0.8	5.6		90 /e
Netherlands	6.0	.	19.1	31.2	29.5	1.5	0.2		90
New Zealand #	5.1	20.9	31.7	26.6	30.7	1.0	5.0		88 /e
Norway	7.4	14.6	64.2 /d	..	15 2	...	0.2		90
Portugal	4.7	...	44.6	32.5	16.3	0.4	0.9		86
Spain	3.7	9.7	32.8	44.4	13.5	0 4	1.2		88
Sweden	7.1	13.8	67 3 /d	.	13.2	..	0 1		90
Switzerland	4.8	18.7	75 /d	...	19.7	...	5.6		90 /
United Kingdom	5.8	...	29.1	44.5	19.4	0 7	0.5		90
United States	5.3	12.4	38.4	37.2	24.3	0 6	1 6		90

Sources:

Government spending data from Unesco 1991 and 1993, World Education Reports. GDP percentages supplemented by World Bank 19 World Tables 1994 for Albania, Azerbaijan, Belarus, Fiji, Georgia, Kazahkstan, Kyrgyzstan, Lithuania, Moldova, Nigeria, South Africa Tajikistan,Turkmenistan, and Uzbekistan, World Bank 1987b and 1988c for Papua New Guinea, World Bank 1993l for Indonesia, World Bank 1993m for Uganda, and World Bank 1993o for Vietnam. Level percentages supplemented by World Bank 1993n for Venezuela and World Bank 1993l for Indonesia. Private spending data from United Nations 1991, National Accounts Statistics. Main Aggregates and Detailed Tables, and United Nations 1981, Yearbook of National Statistics.

Percentages computed using annual average exchange rates and GDP figures from World Bank 1994, World Tables. Private spending data supplemented by World Bank 1993l for Indonesia, World Bank 1994c for Kenya, World Bank 1993m for Uganda, World Bank 1994d for Vietnam, World Bank 1993n for Venezuela, and World Bank 1994e for Haiti. Weighted averages calculated using GD

and population figures from World Tables 1994 Supplemented by World Development Reports 1991 and 1993 where necessary.

Notes:

/a Budget % for primary, secondary, and higher education does not include undistributed monies.

/b Expenditures as % of GDP and total budget are total expenditures. Level expenditure percentages (primary, secondary etc...) include current expenditure only.

/c Private expenditure includes the final consumption expenditure of resident households on education and excludes the expenditure of private non-profit institutions, unless otherwise noted

/d The figure for pre-primary and primary level also includes secondary level education.

/e Figures include household final consumption expenditure on recreation, entertainment, and cultural activities, as well as education

/f Figures include government expenditures from April 1, 1990, to March 31, 1991.

/g Figures exclude pre-primary expenditure.

/h 1986 figures

/i 1985 figures

/j Population figures for Vietnam 1993 were unavailable. 1992 figures from World Bank 1993, World Development Report, used to calculate population weighted average for Asia.

/k Private expenditure data available for public institutions only.

/l Estimate based on reported household expenditures from the Vietnam Living Standards Survey 1992-93.
Percentage computed using December 1993 exchange rate, obtained from Vietnam Country Team, World Bank.

/m Figures include household final consumption expenditure on recreation, entertainment, culture, restaurants, cafes, and hotels, as well as education.

1988 figures

.. Data not available

* Averages are population weighted.
World and Asia averages exclude India and China.

Table 2: Regional Averages: Government Education Expenditure 1990 and Private Education Expenditure (latest available years

Region and Economy *	Government Expenditure /a /b						Private Expenditur /c/d/e
	as % GDP	as % total budget	Pre-primary & primary ed	Secondary education	Higher education	Higher to primary ed ratio	Private education as % of GDP
			% of education budget				
Africa	3.5	14.2	46.0	27.2	17.8	0.4	1.7
Asia and Pacific	2.8	13.9	45 9	32.0	12.4	0.3	2.5
LAC	3.4	17.9	42.4	26.3	18.8	0 4	3.0
M.East	5.2	20.2	38.2	34.5	17.1	0 4	0.6
E. Europe	3.7	10.7	48.8	19.0	16.4	0.3	...
Estab.market ecs	5.2	12.8	31.3	39 5	20.9	0.7	2.3
World	4.0	14.8	41.0	31.3	17.3	0.4	1.8

Sources:

Government spending data from Unesco 1991 and 1993, World Education Reports. GDP percentages supplemented by World Bank 19 World Tables 1994 for Albania, Azerbaijan, Belarus, Fiji, Georgia, Kazahkstan, Kyrgyzstan, Lithuania, Moldova, Nigeria, South Africa Tajikistan,Turkmenistan, and Uzbekistan, World Bank 1987b and 1988c for Papua New Guinea, World Bank 1993l for Indonesia, World Bank 1993m for Uganda, and World Bank 1993o for Vietnam. Level percentages supplemented by World Bank 1993n for Venezuela and World Bank 1993l for Indonesia. Private spending data from United Nations 1991, National Accounts Statistics: Main Aggregates and Detailed Tables, and United Nations 1981, Yearbook of National Statistics.

Percentages computed using annual average exchange rates and GDP figures from World Bank 1994, World Tables. Private spending data supplemented by World Bank 1993l for Indonesia, World Bank 1994c for Kenya, World Bank 1993m for Uganda, World Bank 1994d for Vietnam, World Bank 1993n for Venezuela, and World Bank 1994e for Haiti. Weighted averages calculated using GD and population figures from World Tables 1994. Supplemented by World Development Reports 1991 and 1993 where necessary.

Notes:

/a Budget % for primary, secondary, and higher education does not include undistributed monies.

/b Expenditures as % of GDP and total budget are total expenditures. Level expenditure percentages (primary, secondary etc...) include current expenditure only.

/c Private expenditure includes the final consumption expenditure of resident households on education and excludes the expenditure of private non-profit institutions, unless otherwise noted.

/d Private expenditure averages weighted to 1990 population figures.

/e World Average for private education expenditure excludes Eastern Europe for which no data is available.

* Averages are population weighted averages. World and Asia averages exclude Asia and China.

Public and Private Health Expenditures, 1990

Region and economy	Total health/a expenditure per capita (official exchange rate dollars)	Health expenditures as a percentage of GDP			Private spending as % of public spending	Development assistance/d for health as a percentage of total health expenditure
		Total	Public/b sector	Private/c sector		
Sub-Saharan Africa	24.0 w	4.5	2.5	2.0 w	80.8 w	10.4
Angola	..	..	..	..	..	..
Benin	17	4.3	2.8	*1.6*	58.2	41.8
Burkina Faso	24	4.3	7.0	*1.5*	21.6	19.4
Burundi	7	4.3	1.7	1.6	94.7	42.7
Cameroon	24	4.3	1.0	*1.6*	160.0	13.4
Central Africa Rep.	18	4.3	*2 6*	*1.6*	61.1	35.8
Chad	13	4.3	*4.7*	*1.5*	32.0	43.0
Cote d'Ivoire	28	4.3	1.7	*1.6*	95.3	3.4
Ethiopia	4	4.3	2.3	*1.5*	65.8	18.8
Ghana	14	4.3	1.7	1.8	107.1	14.2
Guinea	19	4.3	*2.3*	*1.6*	70.2	23.8
Kenya	16	4.3	2.7	1.6	61.0	22.3
Madagascar	7	4.3	1.3	1.3	100.8	21.5
Malawi	11	4.3	2.9	2.1	71.7	23.3
Mali	15	4.3	2.8	2.4	87.4	27.7
Mozambique	5	4.3	4.4	*1.5*	34.5	52.9
Niger	16	4.3	3.4	*1.6*	46.8	34.0
Nigeria	9	4.3	1.2	*1.6*	137.9	6.4
Rwanda	10	4.3	1.9	*1.6*	84.7	39.5
Senegal	29	4.3	*2.3*	1.4	61.7	16.9
Sierra Leone	5	4.3	1.7	0.8	44.6	33.0
Somalia	8	4.3	*0.9*	*0.6*	67.4	45.6
South Africa	158	4.3	3.2	2.4	73.8	..
Sudan	12	4.3	0.5	2.8	540.4	13.0
Tanzania	4	4.3	3.2	*1.5*	46.4	48.3
Togo	18	4.3	2.5	*1.6*	64.7	21.0
Uganda	6	4.3	1.6	1.8	112.5	48.4
Zaire	5	4.3	0.8	*1.5*	178.6	26.7
Zambia	14	4.3	2.2	1.0	44.1	4.9
Zimbabwe	42	4.3	3.2	3.0	95.0	10.0

Public and Private Health Expenditures, 1990 (continued)

Region and economy	Total health /a expenditure per capita (official exchange rate dollars)	Health expenditures as a percentage of GDP			Private spending as % of public spending	Development assistance /d for health as a percentage of total health expenditure
		Total	Public /b sector	Private /c sector		
India	20.9	6.0	1.3	4.7	361.5	1.6
China	11.4	3.5	2.1	1.4	69.6	0.6
Other Asia and islands	61.2 w	4.5	1.8	2.7 w	150.8 w	1.4
Bangladesh	7	3.2	1.4	1.8	131.2	17.9
Cambodia	..	..	..	..	..	..
Hong Kong	699	5.7	1.1	4.6	412.6	..
Indonesia	12	2.0	0.7	1.3	200.0	7.4
Korea, Dem. People's Rep.	..	..	..	..	..	..
Korea, Rep.	377	6.6	2.7	3.9	143.0	0.2
Lao PDR	5	2.5	1.0	*1.5*	150.0	22.7
Malaysia	67	3.0	1.3	1.7	129.8	0.2
Myanmar	..	..	..	..	..	..
Nepal	7	4.5	2.2	2.3	106.8	23.6
Papua New Guinea	36	4.4	2.8	*1.6*	56.3	4.9
Philippines	14	2.0	1.0	1.0	100.0	7.8
Singapore	219	1.9	1.1	0.8	71.6	0.1
Sri Lanka	18	3.7	1.8	1.9	104.4	8.6
Thailand	73	5.0	1.1	3.9	369.8	0.9
Viet Nam	2	2.1	1.1	1.0	90.1	15.9

Public and Private Health Expenditures, 1990 (continued)

Region and economy	Total health /a expenditure per capita (official exchange rate dollars)	Health expenditures as a percentage of GDP			Private spending as % of public spending	Development assistance /d for health as a percentage of total health expenditure
		Total	Public /b sector	Private /c sector		
Latin America and the Caribbean	105.1 w	4.0	2.4	1.6 w	65.0 w	1.3
Argentina	138	4.2	2.5	*1.7*	67.3	0.2
Bolivia	25	4.0	2.4	*1.6*	66.1	20.3
Brazil	132	4.2	2.8	1.4	51.3	0.4
Chile	100	4.7	3.4	1.4	41.2	0.7
Colombia	50	4.0	1.8	2.2	119.9	1.6
Cuba	..	..	..	..	..	..
Dominican Rep.	37	3.7	2.1	*1.6*	75.8	4.1
Ecuador	43	4.1	2.6	1.6	59.8	7.0
El Salvador	61	5.9	2.6	3.3	125.4	13.9
Guatemala	31	3.7	2.1	*1.6*	76.2	11.1
Haiti	30	7.0	3.2	3.8	121.2	17.0
Honduras	26	4.5	2.9	*1.6*	54.8	15.1
Mexico	89	3.2	1.6	1.6	99.4	0.9
Nicaragua	35	8.6	6.7	*1.9*	28.4	20.0
Paraguay	37	2.8	1.2	*1.6*	136.8	6.4
Peru	49	3.2	1.9	1.3	71.7	2.7
Puerto Rico	..	..	..	..	..	..
Uruguay	124	4.6	2.5	2.1	82.8	1.4
Venezuela	88.5	3.6	2.0	1.6	83.7	0.1

Public and Private Health Expenditures, 1990 (continued)

Region and economy	Total health /a expenditure per capita (official exchange rate dollars)	Health expenditures as a percentage of GDP			Private spending as % of public spending	Development assistance /d for health as a percentage of total health expenditure
		Total	Public /b sector	Private /c sector		
Middle Eastern crescent	77.3 w	4.1	2.4	1.7 w	71.3 w	1.2
Afghanistan	..	..	..	..	..	..
Algeria	166	7.0	5.4	1.6	29.9	0.1
Armenia	152	4.2	2.5	*1.7*	68.8	..
Azerbaijan	98	4.3	2.6	*1.7*	65.6	..
Egypt	18	2.6	1.0	*1.6*	161.6	12.1
Georgia	152	4.5	2.8	*1.7*	61.2	..
Iran	54	2.6	1.5	1.1	75.9	..
Iraq	..	..	..	..	..	..
Israel	494	4.2	2.1	2.1	102.4	0.1
Jordan	48	3.8	1.8	2.0	109.4	12.4
Kazakhstan	154	4.4	2.8	*1.7*	61.4	..
Kyrgyzstan	118	5.0	3.3	*1.6*	49.4	..
Libya	..	..	..	..	..	..
Morocco	26	2.6	0.9	*1.6*	170.2	3.0
Pakistan	12	3.4	1.8	1.6	89.1	5.4
Saudi Arabia	322	4.8	3.1	*1.7*	55.6	..
Syrian Arab Rep.	23	2.1	0.4	*1.6*	372.1	7.1
Tajikistan	100	6.0	4.4	*1.6*	36.8	..
Tunisia	76	4.9	3.3	*1.6*	50.1	3.0
Turkey	76	4.0	1.5	2.5	172.4	0.5
Turkmenistan	125	5.0	3.3	*1.7*	51.1	0.4
Uzbekistan	116	5.9	4.3	*1.6*	37.6	..
Yemen, Rep.	19	3.2	1.5	1.7	117.8	11.6
Formerly socialist economies of Europe (FSE)	141.9 w	3.6	2.5	1.0 w	39.5 w	..
Albania	26	4.0	*3.4*	0.6	17.9	..
Belarus	157	3.2	2.2	*1.0*	45.7	..
Bulgaria	131	5.4	4.4	*1.0*	22.9	..
Czechoslovakia /e	173	5.9	5.0	0.9	17.9	..
Hungary	185	6.0	5.0	0.9	18.5	..
Lithuania	159	3.6	2.6	*1.0*	38.8	..
Moldova	143	3.9	2.9	*1.0*	34.4	..
Poland	83	5.1	4.1	*1.0*	24.6	..
Romania	63	3.9	2.4	1.5	62.6	..
Russian Federation	157	3.0	2.0	*1.0*	49.5	..
Ukraine	131	3.3	2.3	*1.0*	43.5	..
Yugoslavia /f	205	3.0	4.0	*1.0*	25.0	..

Public and Private Health Expenditures, 1990 (continued)

Region and economy	Total health /a expenditure per capita (official exchange rate dollars)	Health expenditures as a percentage of GDP			Private spending as % of public spending	Development assistance /d for health as a percentage of total health expenditure
		Total	Public /b sector	Private /c sector		
Established market economies (EME)	1859.8 w	9.2	5.6	3.5 w	62.4 w	..
Australia	1,331	7.7	5.4	2.3	43.7	..
Austria	1,711	8.3	5.5	2.8	50.5	..
Belgium	1,449	7.5	6.2	1.3	21.2	..
Canada	1,945	9.1	6.8	2.4	35.0	..
Denmark	1,588	6.3	5.3	1.0	18.8	..
Finland	2,046	7.4	6.2	1.2	20.1	..
France	1,869	8.9	6.6	2.3	34.9	..
Germany	1,511	8.0	5.8	2.2	37.8	..
Greece	358	5.5	4.2	1.3	31.5	..
Ireland	876	7.1	5.8	1.4	23.4	..
Italy	1,426	7.5	5.8	1.7	28.8	..
Japan	1,538	6.5	4.8	1.6	34.0	..
Netherlands	1,500	7.9	5.7	2.2	37.8	..
New Zealand	925	7.2	5.9	1.3	22.4	..
Norway	1,835	7.4	7.0	0.3	4.5	..
Portugal	383	7.0	4.3	2.7	62.2	..
Spain	831	6.6	5.2	1.4	27.5	..
Sweden	2,343	8.8	7.9	0.9	12.0	..
Switzerland	2,520	7.5	5.1	2.4	46.0	..
United Kingdom	1,039	6.1	5.2	0.9	17.9	..
United States	2,763	12.7	5.6	7.0	124.6	..
FSE and EME	1339.8 w	8.7	5.4	3.4 w	63.0 w	..
Demographically developing group	41.3 w	4.7	2.3	2.5 w	108.7 w	1.9
World /g	323.2 w	8.0	4.9	3.2 w	65.3 w	..

Notes:

/a Health expenditure includes outlays for prevention , promotion, rehabilitation, and care; population activities; nutrition activities; program food aid; and emergency aid specifically for health. It does notinclude water and sanitation.

/b Public sector expenditures include government health expenditures, parastatal expenditures, and foreign aid. Information on government health expenditures is from OECD for established market economies and Turkey; the IMF's Government Finance Statistics; various World Bank sector studies; and the ILO for health-related social security and social insurance programs.

/c Private sector expenditures for the established market econonies and Turkey are from OECD. For other countries, the information is based on household surveys carried out buy the ILO and other sources, supplemented by information from the United Nations National Income Accounts, World Bank and other studies.

/d Information on official development assistance comes from the OECD and from the Advisory Committee for the Coordination of Information Systems. Estimates of development were also prepared by the Harvard Center for Population and Development Studies.

/e Refers to the former Czechoslovakia because of data necessity.

/f Refers to the former Socialist Federal Republic of Yugoslavia because of data necessity.

/g World averages exclude India and China because these countries are very influential in any population weighted calculation.

w denotes population weighted averages.

Sources: World Development Report 1993, and Government Finance Statistics Yearbook 1992.

Public and Private Health Expenditures, 1990
Regional Averages

Region	Total health per capita spending ($)	Health spending as % of GDP			Private exp as % of public exp	Aid as % of total health exp Foreign aid
		Total health	Public	Private		
Africa	24.00	4.5	2.5	2.0	80.8	10.4
Asia	61.19	4.5	1.8	2.7	150.8	1.4
LAC	105.10	4.0	2.4	1.6	65.0	1.3
Mid. East	77.32	4.1	2.4	1.7	71.3	1.2
E. Europe	141.94	3.6	2.5	1.0	39.5	
EME	1,859.81	9.2	5.6	3.5	62.4	
Developing group	41.25	4.7	2.3	2.5	108.7	1.9
World	323.21	8.0	4.9	3.2	65.3	

Notes:

/a Health expenditure includes outlays for prevention , promotion, rehabilitation, and care; population activities; nutrition activities; program food aid; and emergency aid specifically for health. It does notinclude water and sanitation.

/b Public sector expenditures include government health expenditures, parastatal expenditures, and foreign aid. Information on government health expenditures is from OECD for established market economies and Turkey; the IMF's Government Finance Statistics; various World Bank sector studies; and the ILO for health-related social security and social insurance programs.

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