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Inderjit Singh

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Inderjit Singh is principal economist in the Socialist Economies Reform Unit of the World Bank's Country Economics Department. This work was undertaken while he was in the Bank's China and Mongolia Department (Country Department II), East Asia and Pacific Regional Office.

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Foreword

This report and its annexes are based on the findings of a World Bank mission which visited China in February and March 1989. In addition to interviews in Beijing, the mission undertook enterprise surveys in Shenyang (Liaoning Province), Chengdu (Sichuan Province), Shanghai (Municipal Region), Wuxi and Suzhou (Jiangsu Province) and met with their supervising agencies. The mission also had access to a series of background papers prepared by the Development Research Center (DRC) in Beijing.

The mission was led by Inderjit Singh (Mission Leader); Peter Harrold initiated and participated in each stage of the study; Choong Yong Ahn (Consultant) was responsible for the work on industrial structures and their projections; Peter Dittus for the work on the state investment system and pricing policies; Gary Jefferson and Gang Zou (Consultants) for organizing and conducting the field work for the enterprise surveys and sectoral studies, and the work on the macroeconomic perspectives on industrial policies; Vladimir Konovalov for the work on fiscal and financial policies and for work on sectoral and regional policies in which he was assisted by Ulrich Zachau. Mr. Chen Kang provided valuable research assistance in compiling and analyzing data sources and projecting industrial structures using a macroeconomic model.

This work was undertaken as part of a collaborative effort with the Development Research Center (DRC) in Beijing under the Structural Change Project financed by a Special Studies Credit to that institution. The reports produced under this project are intended to provide background for the next five-year plan, which is currently being finalized. The mission was conducted in collaboration with a DRC counterpart team including Mr. Wang Huijiong (Executive Director), Madam Li Poxi (Executive Director), Madam Li Shantong (Associate Research Fellow), and Messrs. Li Pei Yu and Ma Jun (Assistant Research Fellows).

The enterprise surveys were arranged through the courtesy of Mr. Lu Xianlin, President, China Investment Bank (CIB). The CIB helped identify and select the enterprises and made arrangements for field visits and in-depth interviews with enterprises and local supervising agencies. The CIB also sent a counterpart team consisting of Messrs. Zhang Zhisheng and Liu Yong Cheng to accompany the mission and give it guidance. In addition, members of the DRC counterpart team spent several weeks in Washington, D.C., assisting with data analysis and gave many constructive comments in early stages of the report. A series of seminars based on the findings of the joint teams was held with senior staff of the major GOC economic and financial agencies in Beijing and selected provinces in February/March 1990.



David Pearce, Acting Director, China & Mongolia Department

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Summary and Conclusions

A. Introduction

i. This report focuses on the framework for industrial policies for the current transitional period of the Chinese economy, rather than on specific industrial targeting, which was regarded in the past as the function of industrial policies. Much of this is designed to foster the growth of the market system and the improvement of planning. It is thus aimed at achieving the Chinese objective of creating a "planned commodity economy," with both the Plan and the market playing their roles more effectively.

ii. There are many interpretations of the concept of industrial policies. In China, many people still tend to understand the concept as being the same as industrial targeting. However, different interest groups at different levels have different priorities, and this has tended to introduce incompatibility in targeting policies. This report takes a broader view of industrial policy, as being a major instrument for achieving the goal of a national development plan. The first chapter reviews structural changes in the Chinese economy, and the role of government. In particular, it reviews those areas that are the proper reserve of government, and those that government should leave to other economic forces. This is in line with the observation of Deng Xiaoping: "Our leading bodies at various levels have put under their control things which they should not take care of, or over which they are unable to exert appropriate controls. These things can be easily dealt with at lower levels." The second chapter addresses the question of effective investment planning and control. The third chapter is concerned with pricing and financial policies. The fourth explores ways to raise the economic efficiency of enterprises by improving the contract responsibility system and by stimulating market competition. The final chapter explores the issue of implementation of industrial policies. It is the view of the authors of this report that these collectively form the basis for the framework for an effective industrial policy.

iii. The many changes brought about by the past decade of reforms in China have left their mark on the country's economy and industrial system. China is now embarked on a transition from a centrally planned economy to a "socialist planned commodity economy," which is aimed at an effective coordination of the planned economy with market regulation. Although many of the measures taken over the last decade have been very successful, they also have created serious difficulties for policymakers. Most of the difficulties stem from the rapid rate of change associated with bold policy initiatives rather than any failure of the reform process. This report focuses on the industrial policies that are required to support China as it moves from a centrally planned economy to a mixed planned and market economy.

iv. Decentralization has been a key element of the reform strategy. In the industrial sector, the process began with profit retention schemes, above quota production for the market, and increased local and enterprise authority over investment decisions and day-to-day enterprise management. While decentralization has facilitated market formation, it is also the case that many local authorities have inherited or intercepted the bureaucratic power and method of the central government, particularly because of the lack of an effective macromanagement system.

v. The positive incentives created by the new, decentralized responsibility system have led to rapid growth of industrial output and investment. With this system, control over investment resources has shifted from the central government to local governments and enterprises, as documented in the report. However, these investments have not always been optimal, as they are not yet supported by fully functional markets. While the economy is in transition the imperfect status of these markets creates structural imbalances, particularly when accompanied by rapid growth.

vi. Since the inception of economic reforms, the central government has responded to structural imbalances by concentrating the remaining investments under its control in a smaller number of priority areas. As a result, it has been able to stabilize the proportion of resources going into the priority energy, raw materials and infrastructure sectors. However, with the continued, needed decline in central government control over specific investment decisions, this makeshift strategy will not hold up over the medium and long-term. The tightening of controls over investment may have been necessary to control aggregate demand and the attendant inflationary pressures, but such measures usually do not represent good instruments of industrial policy for more than a short period.

vii. The concerns of industrial policy-making in the transitional regime fundamentally revolve around three issues: (a) the feasibility and limits of using indirect instruments to achieve policy objectives, given current conditions and constraints; (b) the balance between direct and indirect instruments in the medium term; and (c) the changing role that governments--state, provincial, municipal, and local--and other institutions must play in the process of this transition in the medium term.

viii. A number of Bank reports have highlighted some of the important issues confronting policymakers--problems with the fiscal system, the need for further enterprise reforms, the difficulties being faced by the financial sector, the problems with the system of social security--and have suggested a number of measures designed to improve the system. What is needed now is an overall framework for industrial policies, a framework which integrates direct and indirect measures across sectors and examines strategic objectives and priorities in anticipation of the Eighth Five Year Plan. The purpose of this report is to propose such an integrated framework for selected industrial policies, particularly those that affect industrial investment decisions.

B. The Role of Planning

ix. There is an ongoing debate in China about the proper balance between the plan and the market. There are two prevailing views. The first view is that the government should play a direct role in the detailed management of the economy. This requires central planning of most investment decisions and close government supervision of the production and distribution of most goods and services in the economy. However, given the growing complexity of the Chinese economy with its plethora of goods and services produced and changing consumer preferences, it is difficult to conceive of a central planning system that could be effective.

x. The view taken in this report is that, for effective and efficient planning to be undertaken, it is essential that "government" be treated as a scarce resource and that its use be limited to areas where it can be most effective. The report argues that the government should intervene directly only in key activities in the economy--those that only the government can undertake effectively--and should leave other agents the autonomy to perform the activities that they undertake best. The case for expanding the role of markets and providing greater decision making autonomy to agents such

as banks, enterprises, and households is not based on any ideological preference for markets but rather on practical considerations. This approach thus recognizes that China is likely to remain a socialist economy in which public ownership remains dominant but suggests that more effective mechanisms are available for economic management.

xi. It could be argued that today China does not suffer from too much planning, but planning of the wrong kind. To strengthen the planning process and make it more effective, it is essential that government focus its limited resources on the following set of activities, many of which are being neglected at present:

- (a) Setting up a framework of laws and regulations, and the institutions to administer them, which will allow other agents to perform their functions effectively and efficiently; for example, setting up the legal framework to regulate economic transactions and monopoly and unfair trade practices.
- (b) Providing a consistent and stable macroeconomic framework. This includes the effective use of monetary, fiscal, industrial trade, regional, and technology policies to guide the economy and the behavior of economic agents.
- (c) Planning and undertaking investments in key sectors and regions where other agents cannot or will not invest or where there are market failures; e.g., large-scale projects where capital requirements are very large or where economies of scale dominate; projects with long gestation and payback periods such as for hydroelectric dams, irrigation schemes and transport infrastructure; social sectors including health, sanitation and water supplies; and in backward or poorly endowed regions to ameliorate the effects of unbalanced development.
- (d) Undertaking and regulating investments and activities where major externalities are involved. This includes both the need to prevent negative externalities such as pollution and the need to provide the benefits of positive externalities such as in the case of research and development, manpower training, scientific education, and information services.
- (e) Setting up a system of social security and safety nets including unemployment insurance, old age and retirement pensions and health insurance, or directing other agents to provide these safeguards.

xii. The report argues that an effective system of planning would give first priority to these activities and would delegate other activities to the domain of economic agents. Thus, by and large, markets should be used to set prices and allocate resources; banks should be allowed to carry out financial intermediation and allocate credits to profitable investments; and enterprises should be given the autonomy to combine resources--labor, capital, land and raw materials--in the least cost and most efficient manner to produce goods and services for profit. The government may guide the actions of these agents via indirect policies but it should not intervene directly in the economy.

C. Structural Change and Industrial Policy

xiii. Over the last decade important structural changes have occurred in the industrial economy, and these changes must be considered in establishing industrial policies for the medium term. Among the most critical changes have been: (a) short-term structural imbalances with lagging developments in the energy, raw materials, and infrastructure sectors; (b) dramatic growth in enterprises at the collective, township, and village levels; (c) rapid development of the service sectors in both rural and urban areas; (d) significant changes in the structure of demand as per capita incomes have increased; and (e) a dramatic opening up of the economy to trade and investment opportunities.

xiv. The objectives of industrial policy in the medium term should be to facilitate these underlying structural changes. In the medium-term this requires that: (a) the central government ensure that investments in energy, raw materials, and infrastructure do not lag; (b) high priority be given to developing the service sectors; (c) investments at the provincial and local levels anticipate changes in consumer preferences and demand; and (d) the regulatory environment allow for growth in the dynamic and flexible collective and township and village enterprises (TVEs), as these enterprises provide employment to millions of individuals released from the increasingly productive agriculture sector.

xv. In developing a policy framework for the medium term it also is essential that the choice of policy instruments reflect the constraints imposed by the present transitional regime. For example, in the present regime: (a) a dual pricing system produces many distortions in incentives; (b) due to extensive decentralization of investment and fiscal decisions to the provincial and local governments, central planning and control over investments has been significantly reduced; (c) the process of decentralization has been cut short, because the supervisory authority given up by the central government has been intercepted and captured at the local level, where it continues to limit enterprise autonomy; (d) factor and product markets are thin, fragmented and often oligopolistic, dulling responses to pricing signals or generating unwarranted responses; and (e) there is an absence of clear institutional structures and rules, which creates considerable uncertainty and confusion.

xvi. Recognizing the limits imposed by incomplete reforms in the present regime, this report has tried to adhere to the principles of the "second best" policy choices. "First best" choices simply are not available in the current transitional climate, and "second best" policies are more consistent with long-term objectives. These objectives include: (a) reducing the remaining government price controls and gradually shifting towards market-based pricing; (b) allowing enterprises greater autonomy over decisions to hire, fire, produce, set wages and prices, and invest as they deem fit, by making them operate for profit and by removing their soft budget constraints--steps which would help to separate and clarify ownership and management functions; (c) increasing the autonomy of commercial banks and financial institutions to allocate credit on the basis of profitability while increasing the number and location of financial intermediaries to enhance competition; (d) introducing less distorting and more uniform indirect taxes like the VAT; (e) in conjunction with (b) above, reforming and eventually phasing out the contract responsibility system (CRS); (f) allowing a more equitable separation of state, provincial and local powers for imposing and sharing taxes; (g) permitting a larger number of economic agents access to foreign trade and foreign exchange at market determined prices; and (h) exposing domestic industries to greater import competition, subject to some effective level of protection.

D. The State Investment and Material Supply Systems

xvii. The state investment system is at the heart of Chinese central planning. Since the inception of the reform program, there has been a dramatic decline in central government control over both the level and pattern of industrial investments. The key raw materials under unified distribution are the backbone of the material supply system. This system has slowly given way to allocation through markets, with the "market fringe" expanding steadily as the controls over pricing of above-quota production have been relaxed. In the present context neither an expansion of centrally planned investments nor an expansion of the material supply system is called for. Instead what is needed is to focus the state plan on fewer and fewer key infrastructure sectors and to further promote the market allocation of resources.

Reforming the State Investment System

xviii. Seven measures are recommended for reforming the state investment system. These include:

- (a) Substantially raising public project approval limits at each level of government. For example, central government approval should only be required for key projects of national importance--several times the current limit of Y 30 million. Similarly, provincial approval limits should be raised by a multiple of the current limit of Y 10 million, and the different approval levels based on the type of industry involved eventually should be phased out altogether. Projects below Y 20 million should be left to the banking system, subject to overall provincial credit ceilings. Tightening of the project approval system would not necessarily result in increased investments in priority sectors; this practice has been useful for short-term demand management, but it is not a useful instrument for industrial policy. For very large projects authorized by the State Planning Commission (SPC) or the Provincial Planning Commissions (PPC), the project selection process appears to be well organized. However, project approval could be streamlined to reduce the time needed.
- (b) Phasing out the material supply system over the next five years, with a pre-announced timetable to allow affected enterprises to adjust to the change. The role of this system already has diminished significantly. As shown in chapter 2, most producer goods now are produced for the market. A large and growing share of materials is marketed directly by enterprises; except for steel, coal, and petroleum products, approximately half of SOE production is for the market.
- (c) Separating investment plans from credit plans as much as possible.
- (d) Checking further erosion of budgetary revenues to the central government, although this erosion was a welcome and integral part of the reforms. Before the economic reforms, investments in China were financed through the budget. Since the reforms, fewer and fewer budgetary revenues have been available to finance the central government's investment program.
- (e) Severely limiting and eventually phasing out detailed project-specific targeting. The present system involves setting too many priorities, which is as good as not having any priorities. A small number of general, but clear and consistent, priorities should be set,

guided by a long-term view of China's industrial policy.

- (f) Developing selective targeting based on functional rather than sectoral or regional criteria, making criteria increasingly uniform across sectors and product groups and applying them only for a limited time, with periodic assessments to see if the stated objectives are being achieved. If targeting policies are to be used to encourage the development of specific industries, it is best to target just a few industries with clear, specific functional objectives such as "export promotion" or "technological upgrading." Support to meet these functional objectives should only be granted after certain preconditions are met, such as those pertaining to export performance in Japan and Korea.
- (g) Allowing markets to play a much greater role in achieving targets for certain industries and regions. Where targeting is used to regulate industries and sectors experiencing excess supply or demand, it is unnecessary: the same result can be achieved more simply and efficiently through the use of markets. The experiences of Japan, Korea, and other developing countries do not seem to suggest a rationale or procedure for ranking the development of different industries.

E. Price Reforms and Credit Policies

xix. Multiple-tier pricing of commodities is a major factor in the distortion of investment priorities. However, most collectives and TVEs pay market prices and, as a direct result of the price increases deriving from the dual pricing system, most state-owned enterprises also are paying market prices, at least at the margin. The main problem is the low relative prices of basic raw materials and infrastructural inputs such as energy, transportation, and telecommunications. Adjusting these relative prices is one of the most urgent reforms needed to make other indirect policies effective. It is important that the "announced" intention to raise the prices of key raw materials be enacted as soon as possible and that a phased program to progressively unify the dual pricing system be followed thereafter. Other "prices" that require attention are interest rates and exchange rates. Interest rates affect financial intermediation and the healthy development of the financial sector. While many real interest rates recently have become positive as a consequence of the successful ongoing stabilization program, the structure of interest rates remains distorted. Exchange rates have recently been adjusted, and this will help industry to develop along the lines of comparative advantage.

xx. Short of full-scale price reforms, interim measures can be implemented right away to increase incentives for provinces to invest in priority sectors. These measures include permitting provinces to sell or exchange the outputs of all new investments in priority sectors across provincial boundaries at market-determined prices; and allowing banks to lend to these sectors on a priority basis.

The Role of the Financial System

xxi. After 1989, China began to establish a banking system, although it has yet to play fully its role. Prior to the reforms, China had no banking system to speak of. Resources were mobilized through profit taxes which were drawn into the budget and then distributed according to government priorities. Financial intermediation did not exist. The reform of the financial system implemented in 1984/85 initiated major changes. Banks were to function as banks, supervised by a central bank--the People's Bank of China. Budgetary grants were to be replaced by loans bearing interest charges. Enterprises could retain profits (subject to taxation), and individuals and enterprises could accumulate

surpluses in bank accounts. Banks were to intermediate these funds, and channel them into profitable investments. Increasingly, competition between specialized banks was permitted by allowing overlap in their customer bases. However, the present banking system has contributed little to capital mobility, and the close supervision of local governments has inhibited independent decision-making by banks. Within this framework, the control of credit and the provision of preferential interest rates remain the key instruments of industrial policy.

xxii. If the financial sector is to play a key role in the implementation of industrial policy, several issues will require continued attention. Among these are actions designed to increase the autonomy and independence of the specialized banks; measures to unify the structure of rates, which presently is characterized by numerous variations of little economic rationale; actions to set credit ceilings at aggregate rather than sectoral levels and eventually to phase them out; steps to ensure that of interest rates remain positive; and improvements in project appraisal capability within the specialized banks. Finally, there is a case for giving banks a special incentive to invest in priority sectors. For example, "subsidized" loans could be provided for a limited number of key sectors for which interest rate subsidies have been approved as a matter of policy. The major issues relating to the financial sector are analyzed in depth in another Bank report.^{1/}

F. Enterprise Autonomy and Accountability

xxiii. Price reforms and financial reforms are intricately connected to enterprise reforms, since correct pricing signals will not elicit a correct economic response unless enterprises are equipped to make decisions and bear their full consequences. Further decentralization without some ownership reforms designed to introduce real hard budget constraints are likely to lead to disastrous results. All these reforms must thus be considered together. One of the crucial determinants of enterprise reform is the contract responsibility system (CRS). The CRS has been very useful in effecting the decentralization of supervisory authority over enterprises, but more basic reforms designed to separate enterprise ownership and managerial functions are now required. In its present state, the CRS often is used by various local interest groups--workers, local managers and local governments--to appropriate rents rather than as a mechanism to promote productive efficiency and accountability.

xxiv. In order to promote enterprise accountability, it is recommended that there be a move to after-tax contracting within the CRS, with the result that direct taxes would be taken out of the CRS and be made as uniform as possible, that the adjustment tax would be abolished, and that, over the longer term, indirect taxes would be rationalized by enlarging the scope of the existing value added tax so that it can replace the system of varying product taxes.^{2/} Finally, meaningful enterprise accountability can only be achieved when firms bear the consequences of their mistakes; this in turn requires an end to the enmeshed relationships between enterprise management and their supervisory bureaus or "owners." In this connection, various experiments are under way or being planned in China; it is important that they continue. The challenge in the medium term is to develop a system of taxing and supervising enterprises that is less arbitrary, more consistent, and less subject to negotiations at different levels of government.

1/ China: Financial Sector Review, World Bank Report No. 8415-CHA.

2/ These recommendations reflect those outlined in China: Revenue Mobilization and Tax Policies: Issues and Options, Report 7605-CHA, June 15, 1989, Vol. 1, pp. 78-79, which should be consulted for a fuller discussion.

Measures for Promoting Competition

xxv. The central issues in the development of domestic trade involve problems of industrial organization, industrial restructuring, and interprovincial competition. Interprovincial barriers to trade, barriers to entry, and the need to relocate industries in accordance with their comparative advantage are as important as issues pertaining to enterprise and price reforms. Unless interregional competition is allowed to integrate domestic markets and import pressures are permitted to keep domestic firms relatively efficient, market determined prices will only result in monopoly and monopsony rents. Thus, measures to promote competition are an important factor in making enterprises more accountable. The tendency for provinces and lower level authorities to restrict domestic trade should be discouraged, and the emerging competition in certain final product lines such as consumer electronics should be promoted.

xxvi. In the interests of promoting competition, it is important to continue supporting the growth of TVEs. Apart from being a major source of employment creation, TVEs are an important potential source of competitive pressure for SOEs and they have significant flexibility to respond to changing market conditions. Of course, they should be expected to meet prevailing environmental regulations and pay taxes as well as market rates for inputs and credit.

G. Policy Implementation

xxvii. Given the fragmentation of regional and provincial policies brought about by decentralization, there is an urgent need to coordinate industrial policies at the state and provincial level. This entails either the creation of new bodies or the designation of existing institutions to perform this function. Such bodies would carry out several important functions, including: (a) establishing the medium- and long-term objectives of industrial policy; (b) providing a comprehensive framework for coordinating in the national interest, policies pertaining to investment, tax and fiscal instruments, credit and financial services, tariffs, foreign exchange, foreign investment and trade, technology, and sectoral and regional issues; (c) regulating monopoly practices and promoting domestic competition; (d) monitoring, regulating, and promoting interprovincial trade; and (e) arbitrating interprovincial disputes relating to commerce and provincial industrial policies. There could be similar bodies performing these functions at the provincial level.

I. STRUCTURAL CHANGE AND INDUSTRIAL POLICIES

Introduction

1.1 The past decade of reforms in China has left its mark on the country's economy and industrial system. China is now embarked on a transition from a centrally planned economy to a mixed planned and market economy. Many of the reform measures taken over the last decade to bring about this transition have had enormous success. At the same time they also have presented serious dilemmas for policymakers.

1.2 Many of the present difficulties stem from the rapid rate of change associated with the successful implementation of bold policy initiatives. These initiatives have transformed the system dramatically. The system must now go forward despite the difficulties being faced at present, allowing markets to play a greater role in the economy and employing more indirect incentives to achieve specific policy objectives. The main question is how to integrate the planned and more direct administrative measures with the growing role of markets and the use of indirect policy instruments, to allow this transition to continue. A second question involves the pace at which to phase out the use of planning and direct controls while phasing in the use of markets and indirect incentives.

1.3 Several strategic choices have to be made. Many of them emerge from the structural changes in the economy which call for other institutional and policy-making responses. The formulation of objectives and policies for the medium term will have to take into account these strategic choices.

1.4 A number of World Bank reports have highlighted the issues confronting policymakers in the transition period--problems pertaining to macroeconomic adjustment and inflation in an overheated economy; an extensively decentralized fiscal system; the need for further changes in enterprise reforms; the recent growth of township and village enterprises; the absence of well designed, independent social security systems; and a newly emerging financial sector. These reports recommend a number of policy measures to improve the performance of the economy and further the reforms.^{1/}

1.5 The discussion of policy measures, although extensive, has been rather fragmented and lacking in a central focus. What is needed now is an overall framework for industrial policies which integrates both direct and indirect measures across various sectors, and which examines strategic objectives and priorities in anticipation of the Eighth Five Year Plan (1991-95). Such a framework will need to be continually revised as the situation changes. There is a need to develop the institutional capacity for setting industrial policy objectives, selecting among alternative measures, and then implementing, reviewing, and revising industrial policies in an integrated manner.

1.6 The purpose of this report is to provide a first attempt at such an integrated framework, to guide the discussion of industrial policies for China in the medium term. The rationale

^{1/} Recent World Bank reports dealing with these issues include (1) China: Country Economic Memorandum: Macroeconomic Stability and Industrial Growth Under decentralized Socialism, Report No: 7483-CHA, June 12, 1989; (2) China: Revenue Mobilization and Tax Policy: Issues and Options, Report No: 7605-CHA, June 15, 1989; (3) China: Rural Industry: Overview, Issues and Prospects, Report No: 7267-CHA, June 1988; (4) China: Reforming Social Security in a Socialist Economy, Report No: 8074-CHA, September, 1989; (5) China: Enterprise Management Reforms: Issues and Options, Report No: 7773-CHA, July 1989.

for the report is twofold. First, while there is agreement that the Chinese economy eventually must evolve from a centrally planned system to a mixed planned and market system,^{2/} there is no clear consensus on the policies and institutions required to expedite this process. Second, the economy in transition has developed its own characteristics and dynamics which make it difficult to arrive at sound and rational policies for expediting the change process.

1.7 However, this report is limited in scope and therefore will focus on three primary tasks. The first is to clarify the role that the state investment system is expected to play in managing and guiding the industrial economy over the medium term. This system is and will remain a dominant force in the industrial sector; how it is changing and what can be done to adapt it to changes in the dynamic industrial economy remain major policy questions. The second task is to define the role and limitations of indirect policy instruments in controlling the direction of industrial development. Because markets and market-related institutions are still in their infancy, complete reliance on them is not possible. The question is how to increase the role of indirect policies without reverting to the old system. The third task is to examine what further changes are needed to make industrial enterprises more responsive to the mix of direct and indirect policy measures that will continue to dominate in the medium term.

B. Structural Change and Industrial Policy

1.8 Industry is China's most important productive sector, accounting for nearly 49 percent of GDP in 1987. It is the largest provider of full-time industrial employment in the world today. In 1987, this sector contributed a gross output valued at Y 1.381 billion (\$373 billion at the current official exchange rate of Y 3.7/\$), almost equally shared between light and heavy industry. The sector comprises a vast array of close to one million enterprises. About 80 percent of the enterprises consist of small rural and urban "collectives"; the remaining enterprises are state owned (SOEs). In 1987, the industrial sector provided employment for 93.4 million workers, out of a total labor force of about 527.8 million. About 60 million of the workers employed in the sector resided in urban areas.

1.9 Over the last decade (1978-1988) a number of important features of the industrial economy have been observed in China. Among the most critical are: (a) the relative stability in shares of production, employment, and investment in the industrial sector; (b) the emerging structural imbalances created by differential growth rates; (c) the rapid development of the service and TVE sectors; (d) the changing structure of demand as per capita incomes increase; and (e) the rapid opening up of the economy to trade and investment opportunities.

Stability in Subsectoral Shares

1.10 The most outstanding feature of the industrial structure in China is how little it appears to have changed in spite of the reforms carried out over the past decade. Excluding village enterprises for which data are lacking, the shares of output, employment, and investments associated with different industrial sectors changed very little over the period, as shown in Table 1.1.

1.11 In 1971, the machinery sector had the highest share of gross output value--25 percent. In 1987, a decade and a half later, it still had the highest share--28 percent. Textiles and chemicals,

^{2/} The Chinese use the term "planned socialist commodity economy."

the next two most important sectors, also evidence little change in shares. Indeed, the simple rank correlation of shares of gross output value for the years 1971 and 1987 is very high. This suggests an exceptional rigidity in the system of planned investments. Adding the village enterprises would only marginally change this conclusion since their share in the total is estimated at little less than 10 percent.

Table 1.1: SHARE OF OUTPUT, BY INDUSTRIAL SECTOR
(in percent)

	<u>Share of Gross Output</u>				<u>Share of Employment</u>				<u>Share of Investment</u>		
	1971	1978	1981	1987	1978	1981	1984	1987	1981	1984	1987
Metallurgy	11.1	8.7	8.8	8.0	7.1	6.4	6.3	6.3	11.5	11.9	12.2
Power	3.7	3.8	3.8	3.1	1.7	1.8	1.8	2.0	12.0	12.9	15.3
Coal and Coke	3.3	2.8	2.8	2.2	8.8	8.2	8.2	7.4	10.3	12.5	7.2
Petroleum	4.6	5.5	5.4	4.2	1.0	1.0	1.1	1.3	14.3	15.0	12.5
Chemical	10.9	12.4	11.4	11.8	9.0	8.8	8.8	9.1	9.7	10.6	12.0
Machinery	25.3	27.3	20.9	28.0	30.6	30.0	29.0	27.2	13.3	12.8	13.5
Building materials	2.8	3.6	3.8	4.5	9.3	9.0	9.6	10.9	3.9	4.9	5.8
Forest	1.9	1.8	2.0	1.5	3.9	3.9	3.7	3.5	2.6	2.0	1.2
Food	11.9	11.1	13.3	11.1	5.8	6.2	6.5	6.8	5.7	5.3	7.2
Textile, clothing and leather	n.a.	15.3	20.4	18.1	14.9	16.0	16.2	17.3	12.2	8.0	8.6
Papermaking and cultural articles	n.a.	3.3	3.7	5.1	5.0	5.1	4.9	5.7	2.1	1.5	2.0
Others	n.a.	3.9	3.3	3.5	3.0	3.7	4.0	2.6	2.3	2.6	2.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Including township enterprises but not village enterprises

Sources: (a) Shares of gross outputs are from: China Statistics Press, Zhongguo gongye jingji tongji nianjian 1988 (Industrial Statistical Yearbook of China 1988), pp. 54-57; (b) Shares of employment and investment are estimated based on data from Statistical Yearbook of China, various years

1.12 There are no official data on employment and investment by industrial sector. However, the same data for state-owned enterprises are fairly complete, and make it possible to estimate the shares of employment and investment going to various sectors in selected years. These data also are shown in Table 1.1.

1.13 Data on changes in the shares of employment and investment in China's industrial sectors also reveal stability over time. Throughout the post reform period, investments in various sectors appear to have been allocated on the basis of fixed relative shares. This outcome probably would not have occurred if the investment system had been more responsive to changes in demand or if investments had been based on market criteria. The present investment pattern suggests that there is considerable inertia in the system and that various ministries request and receive investment funds on the basis of past allocations. Thus, in periods of expansion, every sector seems to expand regardless of whether the investment is necessary; the periods of austerity, every sector is proportionally cut back, even those sectors where investments are highly efficient or are needed the most.

1.14 This inflexibility suggests an inherent weakness in the operation of the state investment system. As the underlying structure of demand has changed with rising incomes and the increasing role of markets, the system of planned investments appears to have remained unresponsive. Low-capacity utilization in many sectors is coupled with evidence of rising inventories.

1.15 The relative immobility of capital in China is a major cause of this inflexibility in investment allocations.^{3/} Although the reforms have allowed differential rates of return to guide additional investment in the system, this has produced limited results. The uneven rate of profit between sectors (partly due to price distortions) has led to an unequal distribution of income among sectors, enterprises, and regions. This has put the government under tremendous pressure to even out profit rates even before any significant structural changes can take place.^{4/} The government has employed these equalization measures through a variety of "adjustment taxes."

1.16 Most of the changes in the industrial structure have come about from non-plan investments and investments undertaken by local governments. These investments have favored processing and some basic industries. The major share of investments in "bottleneck" sectors such as energy, transportation, and raw materials continues to come from the central government.

Short-Term Sectoral Imbalances and Lagging Infrastructural Development

1.17 Alongside the overall stability in sectoral shares, short-term structural imbalances persist in the industrial sector between energy and raw materials on one hand, and downstream industries on the other. The very high unforeseen growth rates undoubtedly have contributed to some of these key supply constraints despite major improvements in energy efficiency throughout the period.

1.18 The imbalances, as indicated in Table 1.2, show declines at 1980 prices in the output share of energy, electricity, coal and coke, petroleum and raw materials (metallurgy, timber, etc.) between 1978 and 1987. The data on downstream industries such as chemicals, machinery and building materials should show a similar pattern, but Chinese statistics on these sectors tend to lump them into one category, obscuring the separate trends.

**Table 1.2: SHARES OF ENERGY AND RAW MATERIALS
IN GROSS INDUSTRIAL OUTPUT**

Sectors	1978	1980	1986	1987
Energy	12.3	11.3	10.2	9.6
Raw materials	20.3	20.1	18.0	17.8

Note: Energy production includes the production of coal, coke, electricity (both thermal and hydro power), crude oil, fuel oil, and other petroleum products. Raw materials include metallurgical products, basic chemical raw materials, rubber, cement, plate glass, timber, etc;

Source: Zhongguo Gongye Jingji Tongji Nianjian (Industrial Economic Statistical Yearbook of China 1988), p. 18

3/ Deng, Yingtao, and Luo, Xiaopeng, "On the Limitation of Total Quantity Analysis And Policy in China's Economic Theory And Practice," Jingji yanjiu (Economic Research), No. 6, 1987.

4/ An analysis of cross-sectional data on 74 industrial sectors suggests that profits per worker (and worker wages and benefits) are closely correlated with the value of fixed assets per worker. The higher the capital/labor ratio, the higher the per capita profit and tax rates. Since initial capital endowments per worker differ considerably by industry and region, the government attempts to even out growing differences in performance and retained earnings occasioned by recent growth. It does this through the allocation of new investments and by adjusting profit retention rates. For example, in 1985, retained profits per worker in the textile industry were only Y 447, while the same figure in the automobile industry was as high as Y 9,571. Two years later, in 1987, retained profits per worker in the textile industry were Y 425, almost the same as before, but retained profits per worker in the automobile industry had been sharply reduced to Y 956. See Dai, Y., and Li, H., "Wage Swallowing up Profit—a Hidden Danger in the Reform of China's Economic System," Jingji yanjiu (Economic Research), No. 6, 1988.

1.19 The shares of the energy and basic raw material industries have not declined consistently, as shown by this differential growth rate for selected periods between 1972 and 1987. These are shown in Table 1.3. To correct these imbalances, some attempts have been made to increase the share of total investment in the energy and raw material sectors, especially since 1984. However, there are reasons to believe that these shortages may be a short-term phenomenon. First, real industrial growth rates were much higher in the eighties than in the seventies (see Table 1.3), which created bottlenecks in infrastructure, energy, and key raw materials in the early eighties. To some extent these bottlenecks and shortages were eased by increased imports. Second, growth rates in the coming decade are expected to be lower, and if the reforms continue to increase efficiency, resource use will be lowered--also, easing the shortages. Third, in most recent years, investments in power, energy, and infrastructure have accelerated. If the share of investments now going to these sectors is maintained or somewhat increased, if provinces continue to increase their investments in raw materials and energy, and if price reforms adjust the relative prices of these goods upward, the gap between demand and supply will continue to be reduced and these short-term shortages will be eased.

**Table 1.3: GROWTH RATES BY INDUSTRIAL SECTOR
(1972-1987)**

Industries	1972-78	1978-81	1981-84	1984-87
Metallurgy	4.7	4.0	8.3	12.4
Power	8.8	6.3	6.5	11.1
Coal	6.8	1.2	7.4	4.9
Petroleum	10.9	1.7	5.8	9.2
Chemicals	10.6	7.5	12.0	13.6
Machinery	10.4	2.0	17.6	18.0
Building materials	12.1	5.5	13.8	17.0
Forest	7.0	3.7	6.5	7.5
Food	6.9	10.7	7.9	9.9
Textile	9.1	18.0	8.2	11.8
Clothing	8.9	19.1	6.7	10.8
Leather	8.1	19.5	2.0	18.8
Papermaking	7.7	6.0	9.9	14.4
Cultural & office supply	12.8	13.5	7.6	22.2
Misc. manufacturing	5.0	1.2	13.3	12.6
<u>Total</u>	<u>8.8</u>	<u>7.1</u>	<u>10.7</u>	<u>13.6</u>

Source: Calculated from data in Zhongguo Gongye Jingji Tongji Nianjian (Industrial Economic Statistical Year book of China 1988), pp. 54, 55

1.20 The data on growth rates can be misleading, because these growth rates do not necessarily apply to the type and quality of goods being produced in the economy. Thus, for example, a 12.4 percent growth rate for the metallurgy industry during 1984-87 looks impressive, compared with a 4.7 percent rate in 1972-78. However, each year in this period, about two to three million tons of

steel produced were put into inventory because they were unusable. During the same period, China had to import more than 50 million tons of steel to meet the domestic demand. Similar problems occurred in the machinery and building material sectors. General machine tools, low quality cement, bicycles, and some other consumer durables were in excess supply, while special machine tools and high quality cement were in excess demand. Therefore, attention should be placed on improving the overall quality of goods rather than increasing the quantity of output.

Growth of the Collective and TVE Sectors

1.21 Aggregate series data also tend to obscure another major development--the rapid expansion of the collective enterprise sector, particularly in townships and villages. This development has caused a major shift in the size of industrial units, ownership arrangements, and the type of industrial activity being carried out in the economy.

1.22 Being locally managed, collectives also operate outside of the state planning system, which implies a greater degree of flexibility in their operations. They can make what products they choose, and sell directly to the market. Being outside the plan, they do not get input supplies from the material supply system and thus have to obtain their inputs at a higher market rate. They also have more flexibility in setting prices, although the prices they set are approved by the county-level price administration bureaus. The collectives are largely financed through local funds, but they also get funds from higher government levels and most recently have financed their investments via bank loans. The expansion of the collective enterprise sector has translated into expansion in the "outside plan" or more market-driven part of the economy since the inception of reforms.

1.23 In value-added terms, 69 percent of industrial output is concentrated in some 98,000 state-owned enterprises (SOEs), most of which are still classified as large or medium in size, with plants in most large cities covering a wide range of industries including most of the basic raw materials. However, these industries no longer dominate the industrial scene as they used to. The number of enterprises above the township level in China has increased from 377,255 in 1978 to 493,573 in 1987, with much of the increase occurring after 1983 in the collective sector. Below the township level, there are an estimated 500,000 enterprises, mainly in rural areas at the village level. Of the nearly one million enterprises operating in China today, only 9.8 percent are state-owned, while collectives account for nearly 80 percent, and the remainder is found in the "private" sector or other category. Over half of the collectives (48 percent of all enterprises) were located in townships or villages in 1986.^{5/}

1.24 The explosive growth of collective, township, and private enterprises is confirmed by the fact that the share of value generated by state enterprises declined from 81 percent to 69 percent, and that of collectives grew from 18.6 percent to 29.2 percent between 1978-86. Of the collectives, the TVEs have mushroomed and doubled their share of industrial output in the same period (Table 1.4). By 1988, their share in the gross value of industrial output was about 19 percent, compared to 3.2 percent in 1971.^{6/}

^{5/} Data on enterprises, especially those below the township level, are very hard to obtain. Data on both state-owned and collective-owned enterprises are taken from Zhongguo Gongye Jingji Tongji Nianjian, China Statistics Press, 1988, p. 63. Estimates on the total numbers are compiled from the China Industrial Census, 1987, vols. 3 and 9, and from the China Statistics Yearbook, 1966, p. 220.

^{6/} This includes rural non-state (23.1 percent) and urban individual enterprises (0.6 percent). See World Bank, China: Rural Industry: Overview, Issues and Prospects, Report No: 7267-CHA, March 1, 1989; Table 1.6, p. 17.

1.25 There has been a sharp acceleration in overall GVIO growth in recent years. Between 1978 and 1983, GVIO increased by 46 percent, while between 1983 and 1988 it increased by 108 percent. Small enterprises account for at least one-third of total output in four categories of industry--building materials, metal products, arts and crafts, and furniture. Township enterprises are also beginning to make their presence felt in textiles, machine building, and food processing (Table 1.5).^{2/}

Table 1.4: PERCENTAGE OF INDUSTRIAL OUTPUT BY CATEGORY OF OWNERSHIP

Enterprise Ownership	1978	1983	1984	1986	1988
State	81.4	77.0	73.6	68.7	57.0
Collective	18.6	22.0	25.0	29.2	36.0
Of which TVEs	5.2	6.7	7.7	10.5	19.0
Other	0.0	1.0	1.4	2.1	7.0
Gross value in 1980 Y (billion)	421.2	616.4	703.0	902.8	1,283.4

Sources: Statistical Data on China's Industrial Economy, 1949-84; Statistical Yearbook of China, various issues

**Table 1.5: INDUSTRIAL SHARES OF TVEs, 1986
(percent)**

Sector	Township	Village	Total
Building materials	25	22	47
Metal products	19	7	26
Arts and crafts	18	16	34
Furniture	18	15	33
Textiles	10	15	25
Machine building	10	11	21
Food	9	8	17

Source: Statistical Yearbook of China, China Statistical Press, 1987

1.26 Much of the growth of the collectives and TVEs has occurred in the rural nonagricultural sector. Between 1981 and 1987, this sector's share of all rural production increased from 31 percent to over 50 percent, while its share in the "total product of society" nearly doubled

^{2/} See op. cit., Table 1.2, p. 12, and China: Growth and Macroeconomic Stability Under Decentralized Socialism, Country Economic Memorandum, The World Bank, October, 1988, p. 130-131.

from 11 percent to 21 percent. Total employment in this sector also increased, from 25 million to 59 million, and its share of rural employment almost doubled, from 8 percent to 15 percent (Table 1.6).

**Table 1.6: GROSS OUTPUT AND EMPLOYMENT IN RURAL
NONAGRICULTURAL MATERIAL PRODUCTION**

	1981	1982	1983	1984	1985	1986	1987
Gross output (Y billion)	97.9	110.8	136.3	185.3	272.1	354.1	475.6
As share of rural gross output	31.1	31.0	33.3	36.6	42.9	46.9	50.4
As share of total product of society	10.8	11.1	12.3	14.1	16.4	18.7	20.6
Employment (in millions)	25.0	27.0	28.7	39.7	47.7	54.9	59.0
As share of rural employment	7.7	8.0	8.3	11.0	12.9	14.4	15.1
As share of total employment	5.8	6.0	6.2	8.3	9.6	10.7	11.2

Note: Rural nonagricultural material production includes industry, construction, transport, commerce and catering trade

Source: Statistical Yearbook of China, various years

1.27 The growing share of industrial output contributed by collectives and TVEs also implies a change in the ownership and management of industrial enterprises. Although collectives technically are owned by government agencies, these agencies are usually grass roots organizations located in urban, township, village, or rural areas. As a result, they generally are supervised at the locality by the Collective-Owned Enterprise Administration, and their growth has meant a growth in the share of locally managed and supervised industries.

1.28 The employment opportunities opened up by this growth have had important implications for the structure of the labor force. As most of these enterprises have been located in rural or semi-urban areas, employment in these areas has grown rapidly. The nonagricultural labor force in rural areas (industry, construction, transportation, and commerce) increased by 13 percent per annum between 1978-86, representing a total increase of 124 percent. The number of nonagricultural TVE employees--in both urban and rural areas--rose from 22 million in 1978 to 93 million in 1988--an increase of 71 million in less than a decade. This number exceeds the total number of industrial workers in the formal SOE and collective sectors.^{8/} Indeed, without the growth of the service and TVE sectors, it would have been impossible for the labor force to absorb the many workers released from direct agricultural employment when the consumers were disbanded and the agricultural reforms were brought in, in 1978.

^{8/} The data on industrial employment is hard to reconcile because it is difficult to map industrial, ownership, and rural-urban categories in the reported statistics. In 1987, for example, total industrial employment stood at 59.7 million in the SOE and collective sector. In the same year rural employment in nonagricultural categories (industry, commerce, construction and transportation) stood at 59 million. To this must be added the urban individual enterprises to obtain data comparable to that reported in the World Bank Report, op. cit., p. 11.

Development of the Service Sectors

1.29 Concurrent with the development of collective enterprises has been the rapid development of the service sector. Indeed many of the collectives, TVEs and private enterprises are in the service sector. Data to document this are hard to come by in Chinese statistics for several reasons. First, the development of a service sector is of recent origin; until recently, it was considered "unproductive" in socialist terminology; services existed but were generally integrated into "productive" activities and therefore few systematic attempts were made to keep statistics on it. Aggregate data on the service sector in China, are therefore a bit misleading.^{9/}

1.30 A more accurate picture of the growth of services is obtained by examining the share of employment in typical service industries--transport, commerce, banking, cultural activities, utilities, government and other services. These are shown in Table 1.7.

Table 1.7: SHARES OF EMPLOYMENT BY SECTOR
(percent)

Sector	1978	1981	1984	1987
1. Agriculture	70.7	68.2	64.2	60.1
2. Industry	15.2	16.0	16.5	17.7
3. Construction	2.4	2.6	3.7	4.8
4. Transport	1.8	1.9	2.2	2.6
5. Commerce	2.9	3.5	4.2	5.0
6. Banking	0.2	0.2	0.3	0.3
7. Culture	3.9	3.7	3.7	3.8
8. Utility	0.5	0.8	1.0	1.0
9. Government	1.2	1.3	1.5	1.8
10. Others	1.3	1.9	2.7	2.8
Total (4-10)	11.8	13.3	15.6	17.8
Total employment (in millions)	401.5	437.3	482.0	527.8

Source: Calculated based on data from Statistical Yearbook of China 1988, p. 124

^{9/} Many industrial concerns provide services and it is impossible to separate them from the industrial components in the product and employment accounts. As a result, there is a downward bias in the share of output and employment generated by the service sector in China when compared to other countries. For what they are worth, aggregate data show that the share of GNP accounted for by the primary, secondary and tertiary (service) sectors changed very slowly--from 29 percent, 48 percent, and 23 percent respectively, in 1978 to 28.55 percent, 45.7 percent, and 25.5 percent in 1987. Most of the shift has been towards the service sector at the cost of the industrial sector. Similarly, the shares of total employment changed from 70.7 percent, 17.6 percent, and 11.7 percent in 1978 to 60.1 percent, 22.5 percent, and 17.4 percent in 1987. (Source: Statistical Yearbook of China, 1988, pp. 26 and 127).

1.31 Although the recent growth in services has been rapid, industrial employment has not expanded fast enough to absorb all of the growth in the labor force or all of the transfers from agriculture. The service sector in China also has lagged considerably, compared to those of other, more market-oriented LDCs such as Brazil, Indonesia, Mexico, and Korea.^{10/} If the development of these countries is taken as a guide, China is likely to experience further dramatic shifts in employment from agriculture to the nonagricultural sectors, especially toward the service and informal industrial (TVE) sectors.

Changes in Demand

1.32 A main feature of China's economic reform in recent years has been the country's attempt to accommodate people's increasing demand for a greater variety of consumer goods. A sample survey of over 6,132 urban households shows that consumer preferences are quite uniform across income groups, with a high share of expenditures being allocated to high quality foods (37.5 percent), durable goods (14.3 percent), and education, and other expenditures related to rearing children (19.3 percent).^{11/} This shift in consumer preferences from basic needs to consumer durables and high quality foods is being met partly through shifts in domestic production. As a result, the share of light industries in industrial production has increased, from 43 percent in 1978 to 50 percent in 1983. Between 1978 and 1981, there was a distinct shift from heavy to light industry because of a change in government investment priorities which favored the growth of light consumer goods. Thereafter, there has been a distinct shift back towards heavy industry as the emphasis has shifted to producing consumer durables in the heavy industry category.^{12/}

1.33 If the Chinese economy is allowed to continue to adjust to the changing patterns of demand and if market forces are given greater play, these shifts will become more pronounced over time. As a result, the industrial structure will favor even more the downstream consumer goods and consumer durable industries.

Growing Role of Foreign Trade

1.34 Perhaps the most dramatic change brought about by the recent reforms has been the opening up of the economy to international trade and investments. China's total trade (exports plus imports) has grown from around \$21 billion in 1978 to around \$112 billion in 1989. Similarly, its trade participation ratio (ratio of exports plus imports to GDP) has almost trebled, from around 10 percent to over 26 percent in the same period (Table 1.8). This ratio compares very favorably with

^{10/} For example, even in 1965 the share of services in the GDP of these countries was: Brazil (48 percent), India (31 percent), Mexico (59 percent), Indonesia (31 percent), Korea (37 percent). By 1987, the share of services in these countries had increased to: Brazil (51 percent), India (40 percent), Mexico (57 percent), Indonesia (41 percent) and Korea (46 percent). Source: "World Development Indicators," World Development Report, World Bank, 1989, pp. 164-169.

^{11/} Zhang and Research Group on Resident Behavior, "The Consumption Options of Residents and the Growth of the National Economy," Economic Research, No. 1, 1988.

^{12/} The share of light industries in industrial production rose from 43 percent to 52 percent between 1978 and 1981, and then fell to 48 percent in 1987. Source: Statistical Yearbook of China, 1988, p. 37.

the ratios of many of the more open large developing countries like Brazil, India, Mexico, and even with those of Japan and the United States.^{13/}

Table 1.8: CHINESE EXPORTS AND IMPORTS AS SHARES OF GDP
(percent)

	1978	1981	1982	1983	1984	1985	1986	1987	1988	1989
Exports	4.8	6.1	8.2	8.0	8.9	10.4	11.0	13.0	12.6	12.4
Imports	5.4	8.0	7.2	7.7	9.5	13.5	14.3	13.3	14.6	14.0
Total trade (Export + Imports)	10.2	14.1	15.4	15.7	18.4	23.9	25.3	26.3	27.2	26.4
Total Trade (\$ billion)	20.6	44.0	41.6	43.6	53.6	69.6	73.9	82.7	102.8	111.6

Sources: (1) World Bank, China: External Trade and Capital, p. 116, 1988

(2) World Bank, World Development Report, 1988 and 1989

1.35 Foreign investments in China have increased dramatically in recent years. By the end of 1989, Chinese authorities had approved direct foreign investments (FDI) totalling some \$33.8 billion. Actual investments lagged, but by the end of 1989, \$15.4 billion (45.6 percent of investments approved) actually had been invested. Due to the low base of direct foreign investment in China, its share relative to GDP is still small--around 3 percent--but compares very favorably with those of many developing countries. China is becoming a major destination for foreign investments in the world, and now accounts for roughly one-third of all such investments going to Asian developing countries.^{14/}

C. Implications for Industrial Policy

1.36 The analysis of structural changes that have occurred in Chinese industry during the past decade suggests several possible fronts for implementing industrial policies in the transitional regime. These are briefly summarized below.

- (a) Continue to focus state investment priorities on the energy, infrastructure, and raw materials sectors, as in recent years.

^{13/} In 1986, the trade participation ratios for these countries were as follows: Brazil (18.4 percent), India (13.7 percent), Mexico (22.2 percent), Indonesia (37.5 percent), South Korea (67.5 percent), Japan (17.3 percent), and the United States (14.4 percent). Source: World Bank, World Development Report, 1988, pp. 226-227, 243, and 247.

^{14/} For example, the FDI relation to GDP exceeded 10 percent only in Singapore, Malaysia, Hong Kong and Indonesia; in Taiwan, Philippines and Pakistan it varied between 4 percent and 8 percent; whereas in India and Thailand it was only 2 percent. See Klaus Lorch, "Foreign Direct Investment in China and in Jiangsu's Chemical Sector: A Statistical Overview," Draft Paper, AS3IE, November 1989.

1.37 Over time, China's industrial structure has developed short-term compositional imbalances. The most critical of these imbalances are found among the raw materials, energy, and infrastructure sectors such as transportation and telecommunications. To some extent the imbalances have been a natural consequence of high growth in the eighties. Thus, slower overall growth will help to mitigate some of the problems, but continued attention is warranted, particularly for infrastructure. Continued progress on price reforms designed to increase the efficiency of resource use will be critical. Nevertheless, investment priorities in the Eighth Plan need to remain clearly focused on these key sectors.

(b) Give greater priority to the development of the service sector.

1.38 The rapid development of separate service industries of all kinds is an imperative in China. China lags far behind other countries of its size and stage of development in developing services of all kinds: wholesale and retail trade, financial, insurance and banking, real estate and housing, legal services, health and education.

1.39 The need for services will become more acute in the future for two reasons. First, the transformation of the economy from a vertically integrated and centrally planned system into a mixed plan and market one critically depends on the development of the service sector. Second, growth of the service sector is needed to provide a major source of urban and rural employment, as the structure of employment changes and becomes less energy and resource intensive.

(c) Allow investment to anticipate changes in domestic consumer preferences and demand.

1.40 The current restrictions on the production of many consumer durables, enacted as part of the ongoing stabilization program, should be relaxed as soon as possible. If these controls are maintained, structural imbalances are likely to occur because these goods have high income elasticities of demand. Any attempt to limit growth in these sectors, therefore, will run counter to the changes in consumer demand that have been brought about by rising per capita incomes. The inevitable result will be structural shortages of consumer durables of the kind being experienced in the USSR and other East European socialist economies.

1.41 As per capita incomes rise, demand will shift towards higher quality foods and meat products, which are grain intensive, and away from the primary food processing industries that have been growing the fastest. This will place further severe demands on the grain sector. Since the elasticity of supply for grain in China seems to be limited and grain imports already are high, the increase in demand will have to be met through additional increases in grain imports. To meet these increases China will have to export even more or suffer a shortage of high quality processed foods and meat and poultry products by the year 2000.

(d) Continue to support the growth of the collective and TVE sector.

1.42 The rapid growth of collectives and TVEs in China has been one of the most important developments of the past decade. It is even more important to keep this sector growing rapidly over the next two decades, for three reasons.

1.43 First, since most Chinese industries are very capital intensive, the only way to provide productive employment in the labor-abundant economy is to develop the less capital-intensive service and TVE industries. Second, the sector provides a major source of employment for the millions of workers who are being transferred from agricultural to nonagricultural employment, as agricultural productivity increases. Third, the development of a more market-oriented system will have to rely on this sector, because it is inherently more responsive to market signals than are other sectors.

1.44 Without the rapid growth of this sector and services, an employment problem of major proportions will be created in the coming decades, particularly in urban areas. The rural-urban migration accompanying development in China has been restricted in the past but is likely to increase in the future. The TVE sector, being largely rurally based, has the advantage of preventing the urban congestion that inevitably accompanies industrialization. Given China's congested cities and high costs of providing additional urban services and housing, the more people who can be kept productively employed in rural areas, the greater the social gains to the system.

1.45 The objectives of industrial policy in the medium term should be designed in close touch with the underlying structural changes that have occurred in the economy. Both the policies and the structural changes need to be kept under constant review, but it is critical that the policies move in the same direction as these changes and facilitate them.

D. Characteristics of the Transitional Regime

1.46 The structural changes in the economy have left the industrial regime with a number of special characteristics which must be considered in evaluating policy choices in the medium term. These characteristics include: (a) the reduced role of central planning; (b) a dual price regime; (c) thin and fragmented markets; (d) the changing role of enterprise autonomy; and (e) the lack of clear institutional structures and rules. All these characteristics contribute to the existing difficulties and place limits on the usefulness of indirect policy instruments for the medium term.

Reduced Role of Central Planning

1.47 The most important change in recent years has been the gradual reduction in the role of central planning. This is most evident in the decline in the share of total industrial investments that come under the plan; both the share of investments controlled by the State Planning Commission (SPC) and the share of investments in state-owned enterprises (SOEs) financed through the budget have declined dramatically since 1978.

1.48 The role of mandatory planning through production quotas and the use of the material supply system for the allocation of inputs to meet these quotas also have been drastically reduced. The number of key materials allocated through the central material supply system (MSS) and under the control of the SPC and line ministries has been reduced from around 211 in 1978 to 23 in 1988. The system of mandatory planning has slowly given way to the use of a form of indicative planning via the use of direct contractual arrangements with enterprises to meet industrial output targets. Fewer investments are now financed directly through government budgets; the bulk of the investments are now being financed through bank "loans" or retained earnings. Investment approvals are still required, but approval limits have been raised and investment decisions have been decentralized. The decentralization of investment decisions to the provinces has meant a loss of central

control over both the level and types of investments being made. The farming out of tax revenues to provincial authorities also has reduced the share of revenues garnered by the central government.

Dual Price Regime

1.49 Price reforms in the industrial sector have been carried out only partially, by raising the prices of some items and by reducing the share of inputs and outputs covered by mandatory planning for others. Over time more and more output has been allowed to shift from fixed to market-determined prices (see Chapter III). This has meant that, at the margin, most decisions are being based on market prices and reflect relative market scarcities. Still, the prices continue to be fixed for some items like coal, steel and many other basic commodities, and inflation has widened the gap between plan and market prices, offering large opportunities for arbitrage and rent-seeking for some enterprises and tremendous difficulties for others. For example, as rural price reforms have been more complete than urban reforms, distortions have arisen between industrial prices, incomes and wages in rural and urban areas. This has created particular difficulties (and some opportunities) for enterprises operating at the rural/industrial interface. Enterprises that rely heavily on rural inputs and sell in urban/industrial markets (such as agro-based industries) have been particularly hard hit.

1.50 The dual price structure is further complicated by the fact that enterprises bargain and negotiate on both the share of their output quota and the prices they can charge for it. Thus, in addition to fixed plan prices and market prices, an entire range of "negotiated" prices has emerged. Since the shares of outputs and inputs marketed under different price regimes differ by product, enterprise, industry, and province, the system is extremely complex and cumbersome. The rents to be obtained from arbitrage are quite large, and therefore have created a vested interest in maintaining the dual price system. High rents also have diverted the attention of enterprise managers away from efficient resource use. The dualism in the system needs to be removed by unifying prices upward to reflect market scarcity, and not downward to conform to fixed plan prices.

Thin and Fragmented Markets

1.51 China's continental-size economy is divided into relatively autarkic provincial and local economies. This fragmentation is partly due to the limited transport infrastructure and partly a result of political economy. Decentralization and the increasing autonomy of provinces have served to further limit the few nationally integrating functions performed by the central planning authorities. Attitudes towards development and investments at all levels in China still are governed by an emphasis on self-sufficiency, leading to reduced domestic competition and the loss of potential gains from specialization. Regional and provincial fragmentation of industries and markets also has prevented economies of scale and positive externalities associated with the horizontal integration of markets; it has also led to duplication of investments in various provinces without much regard to locational comparative advantage.

1.52 The limited mobility of labor, aided by labor regulations and the provincial preoccupation with material self-sufficiency, obstructs talent, skills, and scarce labor resources from seeking their best use. Capital markets also are underdeveloped, in spite of a recent spurt in the growth of financial and nonfinancial institutions. The Foreign Exchange Adjustment Centers established in special economic zones and certain cities in recent years constitute an important initiative, but these markets remain very thin and not well integrated because only some enterprises are permitted to trade in the centers.

1.53 Land markets are for all purposes nonexistent, as all land is owned by the state, cannot be bought or sold, can be allocated and leased only from the state. Although long-term land leases have been given in the agricultural sector (leases up to 15 years are generally permissible, and the right to lease is transferable to heirs), no such mechanism exists in urban-industrial areas.

1.54 Fragmented product markets with local and provincial monopolies, lack of scale economies and specialization, little mobility of labor, thin and poorly functioning financial markets, and nonexistent land markets are all aspects of the transitional regime that place severe constraints on the use of industrial policies. Although the move from a central planning system to a market-oriented system is desirable, there are limits to what can be accomplished through markets and hence through indirect policy instruments.

Changing Role of Enterprise Autonomy

1.55 Prior to 1978 all enterprises were state-owned and acted in response to the plans and directives laid down by their supervisory bureaus or ministries. These directives covered not only the types and quantities of goods to produce, but also the allocation of materials, prices of goods, labor force and wages employed, and amount and type of investments to be undertaken each year. Any "surplus" profits or other charges were remitted directly to the state.

1.56 Since 1978 the relationship between enterprises and their supervisory bureaus and ministries has been transformed via the contract responsibility system (CRS). Introduced in a handful of pilot enterprises in 1978, the CRS was extended to 10 percent of state-owned enterprises (SOEs) in 1984 and again extended to cover some 90 percent of SOEs today. Under the CRS, enterprise managers are required to sign contracts to meet certain profit targets and their performance is rewarded in wage and bonus payments. However, contract provisions vary considerably from enterprise to enterprise, and various types of contract responsibility systems also are in operation. Thus, the degree of autonomy regarding production, hiring, and investment decisions varies considerably among enterprises.

1.57 There are two issues to note about the CRS. The first is the extent to which it has enhanced the autonomy and discretion available to enterprises. The second is the extent to which it has increased the flexibility and discretion of tax authorities. An exchange of local supervision for state and provincial supervision may actually have decreased the autonomy of enterprises and enhanced the control that local tax authorities and supervisory bureaus have over their enterprises.

1.58 When an enterprise suffers negative consequences from rapidly changing market and price conditions, there is an automatic tendency to seek renegotiation of its contracts; this inevitably undermines its autonomy. It also makes it very difficult to determine how enterprises in various regions and industries will respond to different policy measures, particularly indirect ones. As a result, it is difficult to predict in advance the impact policy measures will have on industrial behavior, introducing additional uncertainty into the use of indirect policies.

Lack of Institutional Structures and Rules

1.59 One of the most problematic aspects of the current regime is the lack of institutions to formulate and implement appropriate policies. Most of the old institutional structures were designed to operate within the framework of the central planning system. Since that system is rapidly changing,

institutions must find a new role in a mixed economy that is moving towards market intermediation. New institutions are proliferating, but they have limited experience and little authority among the older, more powerful holdovers from the central planning regime.

1.60 This situation is aggravated by the fact that while old rules have broken down, new rules have not yet been put in place, or can be negotiated. In practice this means that different rules apply to different provinces, industries and enterprises, depending on the nature of the negotiations--even where uniform rules and regulations have been laid down. This is evident in the constant negotiations that characterize the relationship between economic agents and government agencies.

1.61 These institutional weaknesses need to be kept firmly in mind when discussing the development and implementation of workable policies. For any policy to be effective, it will have to be made uniform and universally applicable, and reinforced by the system through sanctions for any violation of rules.

II. THE STATE INVESTMENT SYSTEM

2.1 This chapter documents the decline in the central government's control over investments in China and discusses the emerging role of the state investment system.

A. Overview of the Investment System

2.2 The state investment system has changed significantly, since the beginning of the economic reforms. In 1978, most fixed asset investment was still firmly under the control of the central government: it approved projects, allocated materials, and controlled financial resources. Since that time, the influence of the central government has declined and that of local governments and enterprises has risen.

2.3 In some areas, notably in agriculture and rural industry, the dividing line between state and private ownership has become blurred. Nevertheless, most investment decisions in the industrial sphere continue to be made by some level of government.

2.4 Total fixed asset investments consist of investments by state-owned units, collectives, and individuals. Investments by state-owned enterprises are further divided into "capital construction," "technical updating," "transformation," and other investments (mainly oil field development and repair of highways).^{1/}

2.5 Another way of looking at investments is by examining their relationships to different levels of government and decision-making. First, large infrastructure projects and major investments within the largest state enterprises, principally those producing basic commodities, are approved and financed directly through the central budget.^{2/} The second category of investments are those for which local/provincial governments assume principal responsibility. These include smaller infrastructure projects and loans to medium and small state-owned enterprises which fall under the authority of local governments. The third category of investments are "outside plan" investments which are largely financed from bank loans and the retained earnings of enterprises.^{3/}

2.6 Within the state enterprise sector, technical updating investments has increased sharply relative to capital construction investments. Technical transformation investments represented 25

^{1/} Capital construction investments emphasize the creation of new enterprises or major expansion of existing enterprises, while technical updating (technical transformation) investments are intended for the modification of existing facilities. Historically, capital construction investment related to projects financed through the budget, whereas technical updating and transformation investments were financed from depreciation funds. The distinction is less clear-cut now that budgetary funds are channeled through banks, and technical updating investments are funded to a large degree by bank loans. Nowadays, the classification has often more to do with evasion of administrative controls than with any economic rationale.

^{2/} These correspond to the "capital construction" investments carried out under the plan and include investments in energy and transport.

^{3/} Most investments made by the collective and TVE sectors and the small private sector are financed outside the plan. Although outside plan investments are principally financed from retained profits or bank loans, many are subject to government approval either because of their size or because they are mixed with state loans.

percent of investments in the late 1970s, 37.6 percent in 1983, and 33 percent in 1987. The importance of this shift is reflected in the manner in which the investment is determined and financed, inasmuch as capital construction and its financing have traditionally been more tightly controlled by government authorities.^{4/}

2.7 During the reform period, there also has been a sharp decline in the proportion of fixed investments in state-owned enterprises financed by the budget. This proportion declined from over 60 percent before 1980, to 35 percent by 1984 and 21 percent by 1987. At the same time, there has been a dramatic increase in the share of investments in state-owned enterprises financed by domestic and foreign loans, and the retained profits of enterprises. This is shown in Table 2.1.

**Table 2.1: SOURCES OF FINANCE FOR FIXED ASSET INVESTMENT IN SOEs
1970-87**

Year	Total (Y billion)	State budget	Self-raised funds	Domestic loans	Foreign loans ^a
1970	36.8	75.3	29.3	0.8	--
1979	69.9	61.4	31.1	3.6	4.0
1984	118.5	35.3	43.4	15.4	5.9
1987	229.8	20.6	38.2	24.6	16.7

^{/a} Data are for state-owned units only and exclude investments made by collectives and individuals. Data include foreign loans allocated through the state budget, which account for the bulk of the total

Source: Statistical Yearbook of China, SSB, 1988, p. 560

2.8 However, considering only investments made by SOEs tends to overstate the share of total investments coming from the budget. A more accurate estimate is obtained when investments by collectives and individuals also are included. In 1987, these investments accounted for 37 percent of total fixed asset investment, and SOE investment accounted for 63 percent.

2.9 It should be noted that investments by state-owned units comprise investments by the central as well as local governments. Economic reform has been characterized by decentralization of financial resources and economic decision-making power. Of concern to the central government is that local governments may not use their newly gained authority in line with national priorities, but may pursue local objectives. Unfortunately, data for SOE investments are not broken down by level of government. The tight approval process for capital construction projects implies that most projects are probably centrally approved, so that capital investments should reflect central government priorities. However, the approval process for many projects tends to be passive, so provincial investments may not conform strictly to central priorities. Provincial governments approve almost all technical updating investments, and lower-level governments decide on most investments by collectives. Individual investment primarily supports the construction of housing.

^{4/} See China: Finance and Investment, World Bank, June 11, 1987, pp. 5-6.

2.10 Table 2.2 below shows the composition of fixed asset investment and its financing. Self-raised funds provide the largest share--40 percent. About 70 percent of budgetary investment is undertaken by the central government, and it puts most of its funds into capital construction investment. Bank financing is an important source of investment for technical updating and collectives (which are defined to include township and village enterprises). Local government promotion for these local investments has been an important factor in the overshooting of credit targets.

Table 2.2: FIXED ASSET INVESTMENT AND ITS FINANCING, 1987

	State-owned units					
	Total	Subtotal	Of which			
			Capital constr.	Technical updating	Collectives	Individual
Value (Yuan billion)	364.1	229.8	134.3	75.9	54.7	79.6
Percentage of total	100.0	63.1	36.9	20.8	15.0	21.9
Source of finance						
Total	100.0	100.0	100.0	100.0	100.0	100.0
State budget	20.8	32.8	50.8	9.2	0.6	0.0
Domestic loans	23.0	24.6	19.0	40.4	40.4	6.3
Foreign Inv.	4.8	7.3	10.3	2.3	1.3	0.0
Self-raised funds	40.2	25.9	10.4	43.3	39.1	82.1
Other	11.2	9.4	9.5	4.8	18.5	11.6

Note: For the financing out of the state budget, budgetary appropriations have been used. Figures by the State Statistical Bureau understate budgetary finance of investment because they use "budget prices" at appraisal, not actual outlays

Source: State Statistical Yearbook, 1988, p. 494

2.11 Economic reforms have devolved control over resources and decision-making to provincial and local governments, as well as to enterprises. Indeed, decentralization has been an important goal of the economic reforms. Its objectives were to allow local authorities more say over local spending decisions, to provide material incentives for local governments and enterprises to pursue growth, as they would be the main beneficiaries of increased incomes. However, since the central government's direct authority over investment decisions has declined,^{5/} it is important that effective investment policy levers now be developed to enable it to carry out its industrial policy objectives.

^{5/} The 1989/90 austerity program has featured a reassertion of control over investment decisions. However, since over time the central government's authority is expected to continue its long-term decline, the development of effective indirect instruments is considered critical.

B. The Declining Influence of the Central Government

2.12 As noted above, decentralization of economic decision-making has been the key element of industrial reforms over the past decade. As a result, provincial and lower level governments have become a major factor in industrial decision-making. Their investment decisions increasingly influence the overall structure of investment, and thus the basis for sustained growth. As in other federal systems, priorities between central and local governments differ to some degree. In China, this divergence is considerable and growing, for three reasons. First, an irrational price structure makes investments in national priority sectors like power and transport less attractive to provincial and local investors. Second, underdeveloped capital markets mean that investment surpluses are often reinvested where they originate, regardless of higher rates of return elsewhere. Third, the uncertainty of legal claims makes investment across administrative boundaries risky. These factors combine to favor investments of suboptimal scale; they also lead to artificial income disparities as localities with higher surpluses tend to have higher investment, leading to still higher growth and incomes.

2.13 The central government is concerned about this investment pattern and is evaluating indirect and direct methods of bringing local investment decisions in line with national priorities. Major indirect instruments include prices, the tax system, and interest rates. The impact of the last two has been limited, and further progress with price reforms has temporarily slowed during the stabilization program. The central government has therefore resorted to using four direct instruments to influence investment decisions by local governments:

- (a) Setting project approval limits for medium- and large-scale projects;
- (b) Controlling financial resources through the command plan and credit allocation;
- (c) Allocating of raw materials through the material supply system; and
- (d) Selecting of priority sectors for investment.

The Project Approval System and Project Approval Limits

2.14 The Project Approval System The importance of the project approval system derives from the possibility it gives the State Planning Commission to impose its preferences on investments financed by the central government, local governments, and enterprises themselves. By nature, the project approval process is a somewhat passive system. SPC generates few new projects itself, but waits for project entities--mainly provincial industrial bureaus and line ministries--to propose projects in response to broad guidelines; SPC's role then is to veto projects that do not conform to its project appraisal criteria. Local planning commissions are also required to report "free limit" projects to SPC; which has 2-3 months to veto the projects.

2.15 Chinese enterprises have little autonomy in making investment decisions. Access to factors such as land, water, electricity, rail transport, and bank finance is limited, and allocation often is determined by arbitrary and extraneous considerations: plans, side-payments, contacts (guanxi). Since most factors are under the control of different bureaucracies, lining up support for investment projects from the agencies that control the supply of factors of production is a tedious task for enterprise managers.

2.16 The project "cycle" in China consists of six distinct phases.^{6/} Small- and medium-scale projects typically are initiated by the enterprises, which after obtaining the support of their relevant industrial bureau submit it to the local planning/economic commission for approval and project preparation. Project proposals and prefeasibility studies are organized by the local industrial bureau and normally are entrusted to a local design institute and include a preliminary financial plan. The project proposal is then sent to the line ministry, the State Planning Commission, and to a State Investment Corporation if its financing is sought for the project. At this stage the financial viability of the project is thoroughly reviewed and the project is assessed for how well it fits into the ministerial and national strategies, including the five year plan.^{7/}

2.17 After the project proposal has been approved by the State Planning Commission, serious work starts on the project. A local or ministerial engineering company is asked to prepare the feasibility study (for projects above Y 50 million, a ministerial engineering company is obligatory); this limit was reduced to Y 30 million in January 1990 as part of the ongoing austerity program.^{8/} The feasibility study is then submitted to the line ministry, the SIC, and the SPC. The line ministries usually call on special institutes to undertake a detailed project review, although at this stage the review usually perfunctory.

2.18 The line ministry then submits the detailed review of the feasibility study along with a recommendation to the State Planning Commission; another recommendation will be made by the SIC. SPC then asks the China International Engineering Consulting Company (CIECC, owned by SPC) to do the final review, which concentrates on a detailed economic analysis of the project according to the SPC manual and its nearly 400 shadow prices. In addition, a "social analysis" is performed, which appears to consider factors such as regional income distribution. CIECC makes a recommendation to SPC, which takes the final decision. Although all the procedures are adhered to, once the SPC decides to go ahead with a project, all the rest is proforma.

2.19 If the project is approved, a plan for implementation is drawn up, which is broken down into annual plans. In the case of large and medium-sized projects, this plan is drawn up by the Ministry, which, together with the SIC, will assure project supervision.

2.20 The passive nature of the project approval process is also its weakness. If projects in priority sectors such as energy, transport, or agriculture appear unprofitable to local governments and enterprises because of state pricing policies or uncertainties, then few projects will be proposed in

6/ The project selection process in China varies widely by locality and size of project. The description here may be taken as a typical case, combining the elements that all of the organizations at the central and local level in China have mentioned to the mission. Obviously, there is enormous diversity in the actual paths a project can take from initiation to implementation. See background paper #4 by Peter Dittus on "The State Investment System" for further details.

7/ From a ministerial point of view, the project need not be financially viable at all costs; more important is that it contribute to "national development." The concerned SIC checks the repayment capacity of the project, and makes recommendations for redesigning it accordingly. In some cases this involves recommendations to change the output prices for a particular project so as to improve its repayment capacity; this contributes to price distortions. Both the line ministry and the SIC send their evaluation to the SPC, who makes the final decision whether or not to let the project enter the feasibility stage.

8/ Bargaining between the enterprise, the industrial bureau, and planning commissions takes place at this stage in order to secure as many inputs as possible at state plan prices. Firm commitments for the supply of key factors of production, especially electricity and transport, have to be obtained. Also, the financing package needs to be finalized and contributions from the local government/enterprise, banks, budget and/or SIC.

these sectors. On the other hand, if projects, for example, in light industry appear profitable from a local point of view but are known to be inconsistent with national priorities, then project entities will try to advance these projects by avoiding the SPC approval system.

2.21 Several bureaucratic strategies are used to avoid central government control. These include: (a) breaking projects down into separate subprojects which are too small to require approval; (b) underestimating project costs and using state plan prices, even if inputs can be expected to be procured at market prices; and (c) "stretching" projects and presenting only the first phase as an investment project.

2.22 If these forces are indeed at work, one would expect two things to occur. First, one would expect the share of SPC-controlled investments in total fixed investments to decline. Second, one would expect to see the ratio of capital construction project to total investments by SOEs decline, as these projects have lower provincial approval limits. These processes are shown in (Figure 2.1).



Figure 1: Declining Central Government Control over Investment

2.23 It is not obvious how to measure the percentage of investments that is controlled by the State Planning Commission. As an approximation, we may assume that SPC has to approve all capital construction investments (which will overstate SPC control), 11 percent of technical updating investments (the percentage approved in 1987), and 60 percent of other state investments (mainly for oilfield exploration). According to this measure, SPC control over total fixed asset investment has declined by 18.4 percent between 1981 and 1988—from 50 percent to 40.8 percent.^{9/} The decline since 1985 has been particularly sharp. Thus, the beginning of the erosion of SPC control coincides with the implementation of urban and financial sector reforms, and the resulting investment boom that has led to increasing macroeconomic imbalances. Central control also has weakened within the category of state investments. In 1981, capital construction still accounted for 66.4 percent of SOE investment; by 1988 this ratio had declined to 57.3 percent.

Project Approval Limits

2.24 In the spirit of decentralization, local authorities (provinces and cities with special status)^{10/} have been granted powers to approve projects locally, subject to a ceiling on total investment. With some exceptions, the provincial approval limits are listed in Table 2.3 below. As shown investments for technical updating are less controlled than investments for capital construction. Provincial governments typically extend this "free limit" approach down to prefectures, cities and counties, by giving them their own free limits.^{11/}

Table 2.3: PROVINCIAL APPROVAL LIMITS FOR INVESTMENT

Type of investment	Limit (Y million)
Technical updating investments	
Energy, transport and raw materials	< 30 ^{/a}
Other sectors	< 30
Capital construction investments	
Productive investment	< 10
Unproductive investment	< 5

^{/a} Was < 50 until January 1990

Source: Provincial planning commissions

9/ This decline was reversed somewhat in 1989/90 as a consequence of the ongoing austerity program.

10/ These are cities with independent status ("jihua danlie") and include the three administrative cities of Beijing, Tianjin and Shanghai, and an increasing number of other large cities, including Shenyang, Wuhan and, more recently, Chengdu.

11/ See I.J. Singh, Gary Jefferson and Gang Zou, CHINA: World Bank Enterprise and Agency Survey, Vol. I, pp. 2-64, for detail on the operational evidence of implementing the SPC's approval limits.

2.25 Investment projects exceeding these limits must be submitted to the central government (and now to the State Council) for approval.^{12/} At the subnational level, however, project approval limits vary extensively between locations, sectors, state-owned and collectively-owned enterprises, and even enterprises of similar make-up and function.^{13/}

2.26 Again, the incentives to skirt these project approval requirements often cause enterprises to break up large investment projects into smaller projects. Other reasons for the miniaturization of investment projects include the scarcity of large-scale investment funds and the anticipated reluctance of bureaus to make substantial material supply commitments to large projects.^{14/}

2.27 Apart from projects above these approval limits, the SPC must approve all projects that receive central government funds and allocations of materials. In practice, these projects are likely to be medium- and large- size provincial projects, most of which already are covered under the approval system. In reality, the SPC only controls about 42 percent of total fixed asset investment (see para. 2.42) through the project approval system--an amount equal to Y 4,154.2 billion in 1987. This means that, based on project approval data, 58 percent of total investment is not directly controlled by the central government, an estimate broadly consistent with that made on the basis of aggregate investment statistics (para. 2.24 above). Disregarding individual investment, which is mainly for rural housing, about half of the remaining fixed investment is controlled by the central government and half is controlled by local governments and enterprises.

2.28 Because of the lower approval limits get for set for it, a significant proportion of capital construction investment appears to be decided by the SPC. However, of technical updating

^{12/} With the recent campaign to reduce aggregate demand, central control has been tightened. "Unproductive social infrastructure" projects now all have to be approved by SPC, regardless of this size. All projects above the provincial approval limits must be submitted to SPC for approval; projects that are proposed for "key state project" status have to be approved by the State Council.

^{13/} For example, the Shenyang Steel Pipe Factory must submit projects in the range of Y 10-30 million for local approval while the Shenyang Steel Rolling Mill is authorized to carry out projects in this range without approval. Also, while state-owned steel factories in Chengdu can implement small projects independently, the local collectively-owned Specialty Steel Pipe Factory must submit all projects, regardless of size, for local approval.

^{14/} Review procedures and undeveloped capital markets also bias investments toward small-scale projects. Enterprises sometimes break up projects into smaller components in order to simplify project review and approval procedures. Large investments also encounter the difficulty of requiring large material allocations from the central government or a local government, which governments are reluctant or unable to make. Alternatively, getting outside plan supplies for large projects is exceedingly difficult. Underdeveloped capital markets make it difficult to finance large-scale projects through domestic bank loans. Retained earnings in the form of production funds and depreciation allowances accrue in small sums. Budgetary lending at the local level generally is dispersed over many small projects, in part due to local political pressures and in part so that local authorities can assert more authority over the investment decisions of enterprises. The result is incremental additions of machinery and buildings, including small units of machinery of different vintages cabled together into production lines.

One instance of a choice to break up of an investment program to facilitate review and approval was made by the Chengdu Polyester Factory. The project was constructed in two stages. If it had proceeded in one stage, it would have required approval of the SPC. However, it was split into two projects of Y 30 million each. These smaller projects only required approval of the provincial Planning and Economic Commission.

investments over Y 30 billion, the SPC approves only Y 8.7 billion, or 11.5 percent.^{15/} Of technical updating investments over Y 50 billion, the SPC still controls Y 11.1 billion, or 56 percent--most of it for oilfield development.^{16/}

Control Over Financial Resources

2.29 Investment and credit plans are linked together through mandatory loans. Aggregate annual plans for capital construction and technical updating investments are broken down by sector and province. The mandatory plan covers key projects, projects approved by SPC, and projects financed partly by the central government. All other investments are included in the guidance plan, which is the principal means of communication between the SPC and local planning commissions and between provincial governments and state-owned enterprises.^{17/} Each province also is given a maximum amount of investment for each year. These provincial investment ceilings appear to cover total fixed investments, including investments by collectives and individuals.

2.30 During 1985-88, actual investments exceeded planned investments by significant margins, and the difference was considered a major source of inflationary pressure on the economy.^{18/} For example, in 1988, the aggregate target for fixed investment was Y 330 billion, whereas actual investment was Y 449.65 billion (according to the investment department of SPC). Since capital construction investment is fairly tightly controlled, the pressure is caused primarily by technical updating, collective and individual investments. In 1989, however, actual investment dropped to a level of Y 400 billion as a result of the austerity program.

2.31 Projects that are approved by SPC are included in the mandatory investment plan, which forms the basis for the mandatory credit plan. The SPC will ask banks to finance some of the projects in the investment plan through credit, and banks have little choice whether or not to extend the loans. As a rule, the banks already have been consulted early in the project preparation stage. They are required to carry out a financial and economic analysis for medium- and large-scale investment projects, and sometimes use this to bargain with SPC in an effort to minimize the costs of financing unprofitable projects. In the end, however, it is SPC that decides which bank is going to finance which project as part of the mandatory credit plan.

2.32 Projects that are undertaken by provincial governments under guidance planning are included in the mandatory provincial plan. The important point here is that the mandatory provincial investment plan becomes mandatory also for the banks. As in the case of the central government

15/ State Statistical Yearbook, 1988, p. 563.

16/ The breakdown of this SOE investment is given by the State Statistical Yearbook, 1988, p. 571.

17/ Before 1988, the SPC and local planning commissions were responsible for drawing up capital construction plans, and the State Economic Commission and local economic commissions were responsible for drawing up technical updating plans. With the reorganization of 1988, planning has now been integrated with the SPC and local planning commissions.

18/ For a detailed analysis of the macroeconomic implications of this and recommendations for stabilization policy, see The World Bank, Country Economic Memorandum, 1989, Chapters II and IV.

mandatory plan, the banks have little say in the way credit is extended for mandatory investments. They can bargain but they cannot refuse to extend the credit.^{19/}

Government Revenues

2.33 The percentage of GNP the government draws into its budget is an important determinant of the scope of its active investment policy. Since 1978, government revenues as a percentage of GNP have declined by 47 percent, from 35.4 percent in 1978 to 19.6 percent in 1988. Further, from this declining share of GNP, the central government has disposed of smaller and smaller amounts. In 1981, expenditures by the central government represented 54 percent of central and provincial budgetary expenditures. In 1988, these expenditures represented only 38 percent of budgetary expenditures.

2.34 The erosion of locally collected taxes used to finance central government expenditures is a telling sign of the progress of economic reforms and the shift in power between central and local governments. At the start of the decade, 58 percent of central government expenditures were funded by transfers from the provinces. In 1985, 16 percent of expenditures were funded by these transfers. As of 1986, the central government began making significant net transfers to local governments.

2.35 Although these figures point to the declining financial means of the central government, they actually understate the degree of control over resources that has been exchanged between the central and local governments. The mirror image of declining tax ratios has been an increase in retained earnings by enterprises, most of them under the control of local governments (73 percent of the GVIO of SOEs is controlled by local governments).

Financing State Investments

2.36 Reduced revenues have translated into reduced budgetary financing of state investments. Budgetary financing of SOE investment has declined from 73.2 percent in 1978, to 29 percent in 1988 (Figure 2.2).

2.37 However, the average budgetary financing of SOE investment for 1988 masks important differences between capital construction and technical updating investments. Budgetary financing of the former declined from 90.2 percent in 1978 to 46.2 percent in 1988. Budgetary financing of the latter declined from 22.5 percent to 7.1 percent. The different financing pattern between the two types of investment can be explained by the constant 70 percent of budgetary investment that has come from the central government primarily for capital construction investments. Most technical updating investment is under the control of local governments, which rely more on the banking system to finance their projects.

^{19/} Information gathered by the mission suggests that mandatory loans, determined by SPC and local planning commissions, may account for 80 to 90 percent of PCBC's and ICBC's lending. These banks are free to make small loans amounting to 10 percent to 20 percent of their total lending, mainly to collectives, including township and village enterprises.

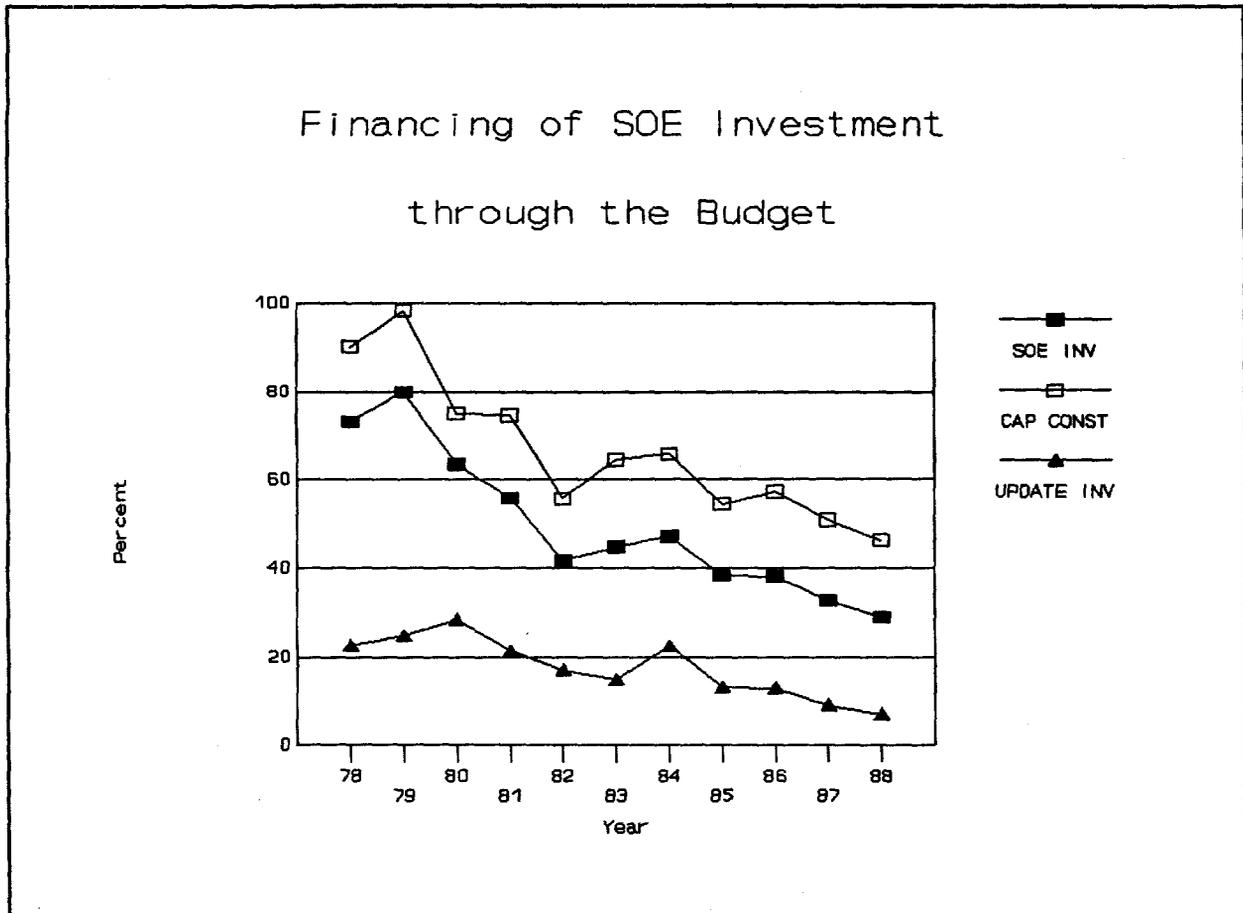


Figure 2: The Budgetary Financing of State Investment

2.38 The decline in budgetary financing of state investments should not necessarily be equated with a loss of financial support to state investments from the central government. In fact, some of the decline in budgetary financing has been compensated for by including credit allocations for projects in the mandatory credit plan by SPC and local planning commissions. This means, in effect, that government use of deposits has been partly substituted for taxation. Another method that has been used increasingly by the central government is to require mandatory matching funds from the local government for central government projects that are located in the province.^{20/} This makes it difficult to judge how much of the decrease in budgetary financing for state investments signals a loss of central government influence over state investments; it seems unlikely, however, that all of the decrease could have been compensated for by use of mandatory bank loans and matching funds from local governments.

^{20/} This is similar to grant systems used in other federal structures, especially when the project is initiated at the ministerial or local level. See Working Paper No. 8, CHINA: Sectoral Case Studies of Industrial Policy - Iron and Steel, Household Durables and Chemical Fibers Industries, by Gary Jefferson and Gang Zou, prepared for this report.

The Material Supply System

2.39 As in the case of the financial system, the material supply system (MSS) is not used as an independent instrument to influence the pattern of investment, but rather to reinforce and add weight to the mandatory investment plan of SPC. All projects included in SPC's investment plan receive allocations of key raw materials through the material supply system. According to the State Statistical Bureau, about 40 percent of goods were centrally allocated in 1988--50 percent of finished steel, 42.3 percent of coal, 24 percent of timber, and 10 percent of cement.

2.40 The allocation of raw materials through the material supply system is important for two reasons. First, the highest quality materials are distributed through the material supply system and; sometimes it is impossible to procure inputs of sufficient quality for investment projects outside the material supply system. For example, most cement for structural components is produced by central government enterprises and is distributed through the material supply system.

2.41 Second, the goods are distributed at state plan prices, which are much lower than market prices. This tends to underestimate state and central government investments and provides a major source of subsidy for projects that the central government wishes to impose on provincial authorities. For example, key projects generally receive priority allocations of raw materials, and most of these materials actually arrive at state plan prices at the project site. For other state fixed investments there appear to be significant leakages into gray markets. By adjusting the amount of raw materials supplied through the material supply system, the central government in effect can force provincial governments to go along with its projects. Given the importance of this system, it is worthwhile to examine how it operates in some detail.

2.42 China's distributive system is divided into two main categories: materials (wuzi), roughly equivalent to raw materials and producer goods, and commodities, basically consumer goods and agricultural products. The production and distribution of consumer items, though carried out in large part by local government-owned enterprises, has been left increasingly to market forces. In this process collectives, including township and village enterprises, have become more and more important.

2.43 Materials are distributed through a three tier system, consisting of: (a) materials under unified distribution; (b) materials under central ministerial distribution through specialized ministries and the Ministry of Commerce; and (c) residual materials distributed through provincial authorities.

2.44 About 20 to 30 key raw materials and 230 producer goods are distributed under the unified distribution system. These items are directly administered by the State Planning Commission on behalf of the State Council, and day-to-day operations are delegated to the Ministry of Material Supply.

2.45 The key raw materials under unified distribution are the backbone of the material supply system.^{21/} These materials are distributed, or sold to enterprises at state plan prices, according to a positive list of industrial policies and planned investments. Central government investment projects receive allocations of raw materials at state plan prices. In addition, provincial projects for which the central government grants budgetary financing or makes bank loans available also receive allocations of raw materials--mostly in the form of quotas according to investment volume or central government contribution. Overall targets for these raw materials are decided in biannual national planning conferences and are approved by the State Council.^{22/}

2.46 The producer goods consist primarily of machinery and equipment which is handled under the state contract order system. Under this system a contract for the production of equipment is given to an enterprise, which in turn receives the raw material inputs. However, about 70 percent of production and distribution actually is determined by demand and is negotiated on market-related terms, under the guidance of the Ministry of Material Supply.

2.47 The central ministerial distribution system allegedly handles some 580 goods, although it is difficult to judge how many goods it covers in actuality. The production and distribution of some goods, such as cotton or chemical fibers, is tightly controlled. However, if other parts of the material supply system are any guide, most of the goods are probably subject to the invisible hand of market forces. The distribution of authority among different ministries makes it difficult to examine how this system works. Specialized ministries control the production and distribution of goods under their jurisdiction; the ministry of textiles, for example, controls chemical fibers. Goods that transcend ministerial boundaries are handled by the Ministry of Commerce; cotton, for example, would fall under agriculture as well as textiles, and therefore is handled by the Ministry of Commerce. Materials in the residual categories are under the control of local governments.

2.48 As in other areas of policy-making in China, the organization of the material supply system on the central government level is mirrored by corresponding organizations on the provincial and local levels. Materials under the unified distribution system are handled by provincial and lower level planning commissions and material supply bureaus; the ministerial distribution system has its equivalent in local industrial bureaus. One task of the local supply system is to carry out allocations determined by the central ministries. In addition, however, provinces have their own provincial key enterprises and provincial key projects, for which they assure the distribution of materials from local production.

^{21/} These goods include coal, pig iron, steel products, copper, aluminum, lead, zinc, tin, scrap steel and iron, sulfuric acid, caustic soda, soda ash, rubber, tires, cement, plate glass, timber, motor vehicles, petroleum, gasoline, diesel oil, lubricants. This information was provided by the Ministry of Material Supply. The recent country economic memorandum estimates, based on different sources, that by 1987 only 20 goods were allocated by the material supply bureau.

^{22/} The precise matching of supply and demand within the broad categories is done at lower administrative levels. Mismatching of precise requirements at the local level is common; it leads to widespread barter trade, and also feeds supplies for the provincial raw material markets. Only for key state projects (205 projects in 1989 with an investment volume of Y 42 billion) is the supply of raw materials planned in detail with regard to product specification and timing of delivery; these key projects are planned, in effect, with a level of detail and sophistication that would be expected in a centrally planned economy. However, these projects absorb only about 10 percent of the supplies under the material supply system; most of the remainder is distributed according to a crude quota system that often requires supplementary trading by recipients.

2.49 At the local level, the material supply system sometimes is used as a substitute for taxation. This is done by establishing local mandatory plans for enterprises to deliver output at state plan prices, without providing inputs at state plan prices. In this manner local governments impose additional profit taxes on enterprises.

Declining Importance of the Material Supply System

2.50 Over the past decade, the proportion of materials under central allocation has declined substantially. This decline has been due to two factors. First, the production of materials by collectives, including township and village enterprises, has increased rapidly, and their production is not covered by mandatory plans. Second, state-owned enterprises have been allowed to market above-quota production on their own, and production above the mandatory plan has increased steadily.

2.51 Unfortunately, detailed data on the central allocation of production materials are scarce; only data for finished steel, coal, timber and cement have been published in the past.^{23/} The central allocation of these materials is shown in Figure 2.3. Between 1980 and 1988, the central allocation of steel declined from 74 percent to 50 percent; of coal, from 54 percent to 42.3 percent; of timber, from 81 percent to 24 percent; and of cement, from 36 percent to 10 percent.

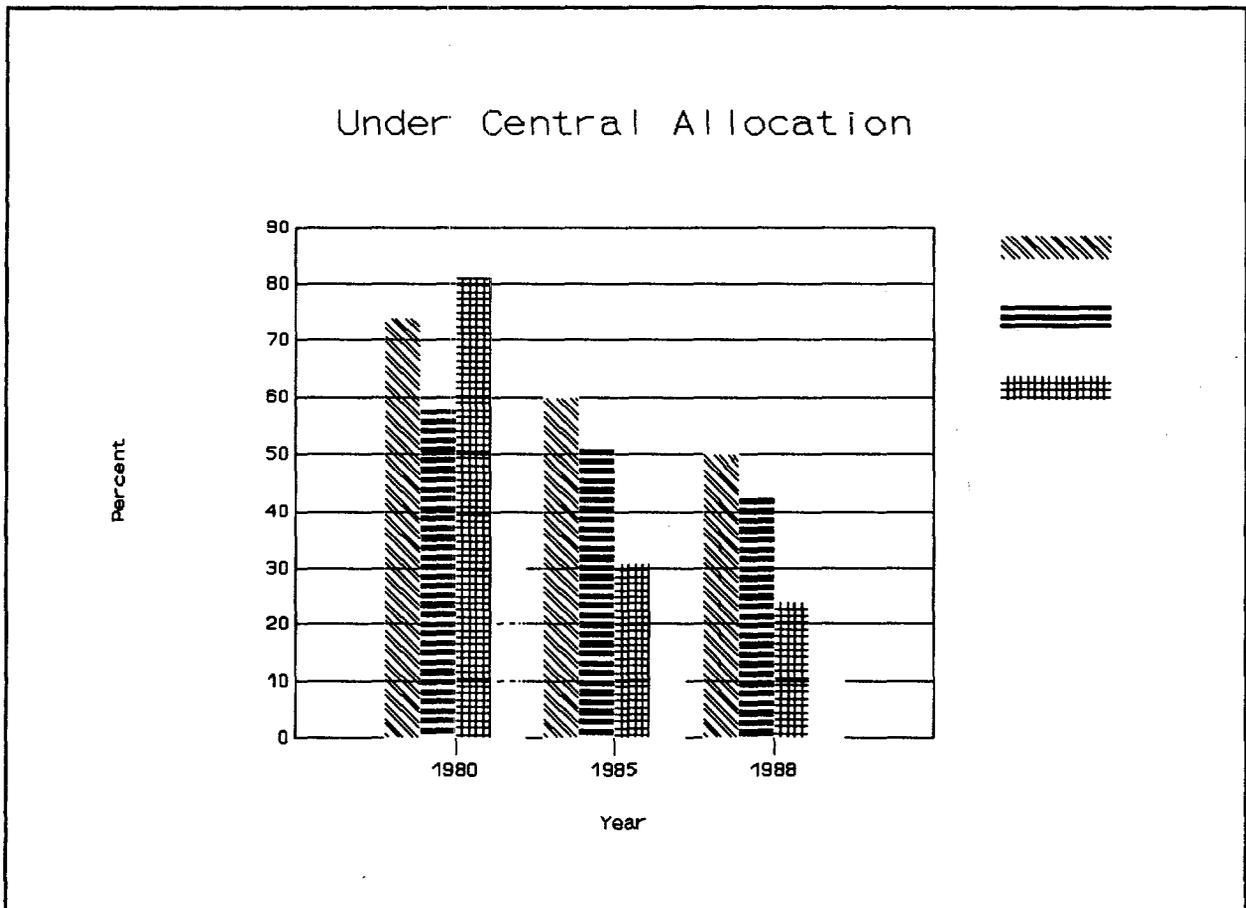


Figure 3: Central allocation of key material, 1980 to 1988

^{23/} Through 1988, data on the central allocation of these materials were published in the Statistics on Socioeconomic Development by the State Statistical Bureau; the 1989 publication does not list these figures any more. The data used here were provided by the State Statistical Bureau.

2.52 This decline has occurred even in the capital goods sector. The percentage of capital goods subject to the state mandatory plan has been reduced from more than 80 percent to only 20-30 percent.

Table 2.4: ALLOCATION OF KEY MATERIALS, 1987

Goods	Centrally distributed	Locally distributed	Enterprise sales
<u>Excluding TVEs</u>			
Steel	47.0	35.5	17.5
Coal	42.3	37.3	20.4
Lumber	26.0	41.3	32.7
Cement	16.0	31.5	52.5
<u>Including TVEs</u>			
Steel	45.8	34.6	19.6
Coal	27.7	24.4	47.9
Timber	17.6	27.9	54.5
Cement	11.5	22.7	65.7

Sources: State Statistical Yearbook, 1988, pp. 406ff, 302, 650, 652; Statistics for 1987, Socioeconomic Development, State Statistical Bureau, February 23, 1988, and information given to the mission

2.53 The relinquishing of central control over the production and allocation of these four materials does not equate with a corresponding expansion of market transactions. As in other areas of policy-making, the control has been intercepted by provincial governments, and markets have expanded more slowly than is suggested by declining central control. Recent data on the proportion of self-marketed output by state-owned enterprises ^{24/} provide a view of the proportions of these goods distributed by central and local governments, and markets, in 1987 (Table 2.4). Unfortunately, time series data are not available. The figures in the table are derived by using total production by state-owned enterprises, adjusted for exports and imports. The percentage of central distribution is known, as are the self-marketed quantities. The proportion under local control is calculated as the residual. Two alternative measures are presented, one excluding the production of township and village enterprises, the other including it. In either case it is clear that local governments control a sizable proportion of the production and distribution of materials.

24/ State Statistical Yearbook, 1988, p. 406ff.

**Table 2.5: PROPORTION OF CAPITAL GOODS DISTRIBUTED UNDER THE PLAN
(percent)**

	1980	1986	1987	1988
Steel	74.3	53.1	46.8	45.0
Cement	35.0	16.2	15.6	15.0
Timber	80.9	30.0	26.2	n.a.
Coal	57.9	n.a.	47.2	n.a.

- Sources:
- (1) Liu, Suinian, "Deepening the Reform of Material Allocation System", *Zhongguo wuzi liutong* (Material Circulation in China), No.1, 1989
 - (2) Zhong, Huiran, "Transformation of the Functions of Administrative Units of Material Allocation", *Wuzi guanli* (Material Management), No.7, 1987
 - (3) *China Statistical Abstract 1988*

2.54 Nevertheless, the "market fringe" has expanded steadily, especially since 1985, when control over pricing of above-quota production was relaxed. State-owned enterprises now have to market a significant proportion of their output on their own, although the prices for this output are supervised by the price bureaus.^{25/} Table 2.6 clearly shows the importance of the market, even for goods under the unified distribution system. Two measures of the production for the market are presented. One shows the proportion of SOE output that is self-marketed; the other shows the proportion of total domestic production that is self marketed by SOEs and collectors. As discussed above, most producer goods now are produced for the market; 70.7 percent of SOE of metal-cutting tools, for example, are produced for the market, and 75.2 percent of all metal-cutting tools are produced for the market. A significant part of SOE production of materials also is marketed directly by enterprises; except for steel, coal, and petroleum products, approximately half of SOE production is for the market. These figures indicate more than just a "market fringe"; the production that is sold directly by enterprises clearly has become significant. At the same time, the role of the material supply system has diminished, and now appears to be primarily a means of distributing rents and supporting the central government investment program.

^{25/} Until recently, prices for above-quota output were determined by demand and supply. However, in order to help bring inflation under control the government is again overseeing the pricing of this output.

Table 2.6: MARKET SALES OF KEY PRODUCER GOODS AND MATERIALS, 1987

Goods	Self-marketed output of major enterprises	Percentage of market sales to production
Finished steel	22.5	25.0
Coal	20.0	47.3
Timber	37.8	60.0
Cement	52.4	65.7
Plate glass	58.1	61.4
Caustic soda	27.5	27.5
Soda ash	49.3	52.4
Outer tires	42.1	42.2
Gasoline	12.6	12.1
Diesel fuel	12.2	13.3
Trucks	57.9	57.9
Metal-cutting tools	70.7	75.2
Large/medium tractors	37.1	37.1
Small tractors	55.2	55.2
Power generators	79.9	81.8

Source: State Statistical Yearbook, 1988, pp. 300ff, 406ff

C. Changing Investment Patterns

2.55 Since the economic reforms, the central government has exercised less and less control over both the level and composition of investments. It is important to examine these changes carefully, because future growth potential is influenced by both factors.

2.56 This section will look at the changing composition of investment since 1981, the first year for which consistent time series are available for fixed asset investment. Of particular interest is whether the decline in central government control has led to an investment structure which no longer corresponds to national priorities. The focus is placed on the key infrastructure sectors, energy and communications, which appear to be bottlenecks to industrial production. According to some estimates, industrial production is 20 percent to 30 percent below capacity because of electricity shortages, and some provinces are believed to have as much as 50 percent excess demand for rail transport. The agriculture sector also is included in the analysis. This sector is now considered of highest priority for investment because of the historical importance of grain production to the stability of China and its strategic positioning and because of the comparative neglect to agricultural investment over the last decade.

2.57 The analysis focusses on total fixed asset investment, not just capital construction or state investment.^{26/} Figure 2.4 looks at fixed asset investments in priority sectors. The pattern revealed there supports the view that shortages in priority sectors may have been a short-term phenomenon. Despite the alleged worsening structure of investments, the ratios of investments important to industrial policy--those for energy and communications--have not declined. On the contrary, the ratio of investment in the energy sector to total fixed asset investment has remained constant (14.2 percent in 1981 versus 14.3 percent in 1987), while the ratio for communications actually has increased from 7.1 percent to 8.5 percent. Only for agriculture has the ratio of investment declined considerably, from 6.3 percent to 2.6 percent between 1981 and 1987. This probably is due to a combination of decollectivization, which has reduced organized investments in irrigation, and the uncertainty surrounding land use rights by peasants, who have tended to invest their surpluses in housing.

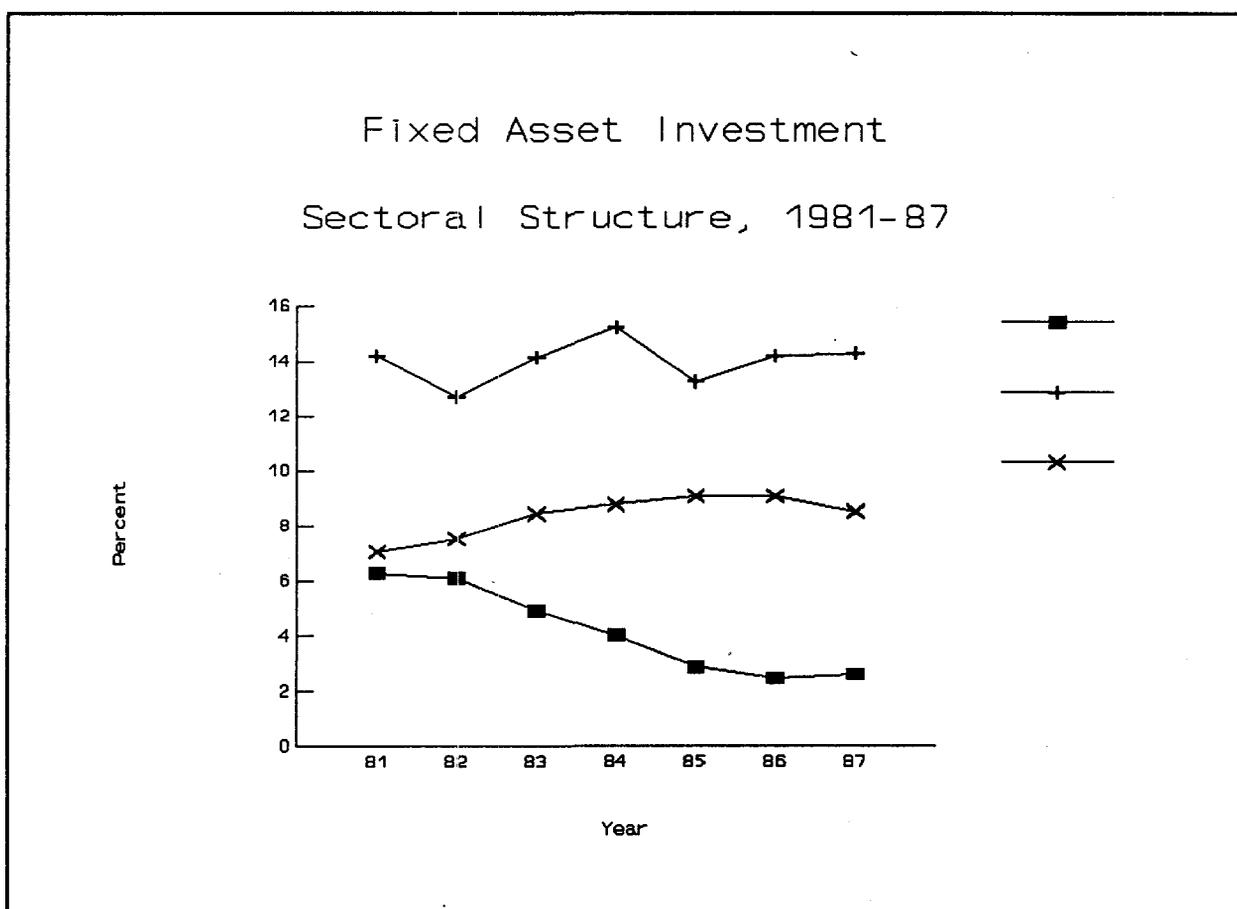


Figure 4: Sectoral Structure of Fixed Asset Investment, 1981-87

^{26/} The problem with a wider sectoral analysis is the availability of data. Already the sectoral breakdown of technical updating investments is limited; details for collective and individual enterprise investments are even more scarce. Therefore, some assumptions had to be made. For technical updating investments, it is assumed that investment in the energy sector is in a constant ratio to investment in the communications sector; this allows the projection of a sectoral breakdown for 1987 backwards. Sectoral investment of collectives has been calculated by assuming that the 1987 ratio of sectoral investment to sectoral GVIO is the same for all past years; in effect, this amounts to assuming a constant ICOR. Total investment by collectives includes township and village enterprises, and has been calculated by adding the investment of rural and urban collectives. A sectoral breakdown of individual investment is not available, but most of it is used for construction of housing and therefore does not support priority sectors.

2.58 Although investment in industrial infrastructure has not declined, policymakers may still be concerned about the structure of investment because of the central government's inability to significantly increase investment in priority sectors. In 1987, 4.7 percent of GNP was invested in energy (3.7 percent excluding oilfield development) and 2.8 percent of GNP was invested in communications. These ratios appear quite respectable by international standards, but the wide gap between supply and demand in the two sectors suggests that an additional investment effort is needed in China--even if further measures can be taken to reduce demand.

2.59 A breakdown of investment for capital construction, technical updating and by collections is presented in Table 2.7 for three priority sectors in question: agriculture, industry, and communications. The increase in capital construction investments makes it clear that the central government has attempted to increase investment in priority sectors. Between 1981 and 1988, these investments in energy increased from 21.4 percent to 24 percent and in communications, from 9.1 percent to 14.1 percent. Recent efforts to increase capital construction investment in agriculture also are apparent.

Table 2.7: SECTORAL BREAKDOWN OF INVESTMENT, 1981-88

	1981	1982	1983	1984	1985	1986	1987	1988
Capital construction	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	6.6	6.1	6.0	5.0	3.4	3.0	3.1	4.6
Industry	48.8	46.9	47.5	46.0	41.6	45.2	50.8	NA
Energy	21.4	18.4	21.5	22.3	19.0	22.5	24.5	24.0
Communications	9.1	10.3	13.1	14.6	15.9	15.4	14.1	14.1
Technical updating	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	2.6	2.2	2.1	1.7	1.4	1.2	1.3	NA
Industry	73.2	70.0	71.3	72.9	78.2	77.4	77.1	NA
Energy	13.0	12.6	13.0	13.1	10.4	10.3	9.8	NA
Communications	11.2	10.9	11.2	11.3	9.0	8.9	8.5	NA
Collectives	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	22.5	20.2	18.5	13.3	9.3	8.4	8.1	NA
Industry	72.0	70.2	69.0	67.5	62.1	63.2	63.4	NA
Energy	1.0	1.0	1.0	1.0	1.0	1.0	0.9	NA
Communications	2.4	2.5	2.3	2.0	1.3	5.2	5.4	NA

Note: Technical Updating investment in energy has been calculated by assuming the ratio of energy to transport investment in 1987 throughout. Sectoral investment ratios for collectives assume that the ratio of sectoral investment to sectoral GVIO is the same as in 1987 for all years

Sources: State Statistical Yearbook, 1988, pp. 258, 277, 493, 503f, 543, 545f, 571, 573, 579; State Statistical Bureau, Statistics for 1988 Socioeconomic Development; Beijing Review, March 6-12, 1989; and World Bank estimates

2.60 In contrast, the development of the other category of state investment, technical updating investment, shows a very different pattern. The composition of this investment is determined primarily by provincial governments. Here the ratio of investment in energy drops from 13 percent in 1981 to 9.8 percent in 1987, and in communications from 11.2 to 8.5 percent. Investment in energy by collectives has remained roughly constant, but is negligible in absolute terms; however, their investment in communications has increased, from 2.4 percent to 5.4 percent. This increase in communications investment primarily reflects the dynamic response of collectives to insufficient state investments in rail transport and consists largely of small trucking and passenger transport companies.

2.61 While the increase in small trucking and passenger services has alleviated the shortage of rail transport, it has put additional pressure on the highway system. The unavailability of rail transport often causes enterprises to truck coal, materials, and merchandise over distances of 2,000 kilometers and more, when rail transport is the preferred mode for distance haulage. Since state investment in communications and roads has lagged behind the growth in demand, highways have become more crowded and maintenance problems have become more acute. Nevertheless, the development of collective transport enterprises should be further supported, since trucking goods over long distances preferable to no transport services at all while state transport investment remains insufficient. The costs associated with the increased use of highways could be met through gasoline taxes and/or registration fees.

2.62 The breakdown of investments presented above helps to explain why the government is concerned about the sectoral composition of investment. The ratio of energy investment to total fixed asset investment has been held constant only because the central government has concentrated its investment in this sector. This pattern will be difficult to sustain over the medium term, if present trends continue. Technical updating investment becomes a larger part of state investment every year, and its composition is determined by local governments, who are likely to invest less in energy than the central government. To maintain a constant ratio of energy investment to fixed asset investment would require an increase in capital construction investment for energy.

2.63 Until now, the government has relied heavily on its "state key projects" program to achieve the necessary shift of resources into priority sectors. This program consists of large projects in priority sectors which have been assigned "key project" status by the State Council. These projects are financed through a combination of budgetary resources, mandatory bank loans, and voluntary "cost sharing" arrangements with the province in which the project is located. The importance of this program derives from two factors. First, the supply of materials to these projects is planned with a degree of sophistication and precision to be expected only from a centrally planned economy. Second, most of the materials are made available at state plan prices, so the nominal size of this program understates its real importance. In recent years, the program has concentrated on a smaller number of sectors and as a result has been able to more than meet targets under the five year plan. The development of the program is shown in Table 2.8.

2.64 From 1982 to 1987, the number of projects included in the program increased from 50 to 206. Over the same period, the program grew from 1.3 percent to 3.3 percent of GNP, and from 7.5 percent to 15.7 percent of state investment. Since then, the program has stabilized, but its nominal size in relation to GNP has fallen. However, this does not necessarily indicate a decline in the importance of the state key projects program. Inflation has been especially pronounced for

materials since 1987 (exceeding 20 percent in 1988). Since key projects are budgeted at state plan prices; the nominal size of this program does not increase in line with inflation.

Table 2.8: STATE KEY PROJECTS, 1982-89

	1982	1983	1984	1985	1986	1987	1988	1989
Number of Projects	50	70	123	169	190	206	203	205
Percent of GNP	1.3	1.7	2.4	2.4	3.0	3.3	2.9	2.3
Percent of SOE Investment	7.5	9.9	13.4	11.8	14.1	15.7	15.6	NA

Sources: State Statistical Bureau, Statistics on Socioeconomic Development, various years; and State Planning Commission, Investment Department

2.65 As technical updating and collective investments assume a larger share of total investments, the gradual shift away from investment in energy, communications infrastructure, and agriculture will continue. Present discussions on industrial policy center on methods of channelling more investment resources into these priority sectors. The following section evaluates the role that sectoral policies play in achieving this objective.

D. Sectoral Investment Priorities

2.66 In China, the practice of selecting priority state investments and targeting certain sectors and industries is well established. In the 1950s and 1960s, for example, priority was given to industry and, within the industrial sector, to heavy industries, particularly machinery and steel.

Recent Developments

2.67 Due to the recent surge in prices and the urgent need to control inflation, the central government has reimposed controls on investment, largely through the allocation (or restriction) of credit to priority (nonpriority) sectors. These controls have been introduced under the guise of "industrial policy."

2.68 The SPC is in charge of implementing and coordinating this "industrial policy." It has drawn up a list of priority sectors as well as a list of industries to be restricted, discouraged or banned. (See Tables 2.9 and 2.10.) The purpose of the lists is to identify areas where investments can be cut in the short run in order to cool off the overheated economy and rectify the current structural imbalances between sectors. The investment retrenchment lists are meant to serve as an instrument of stabilization policy for 1989 and 1990, and perhaps beyond.

**Table 2.9: LIST OF PRIORITY AND RESTRICTED SECTORS
FOR CURRENT PRODUCTION**

Priority Sectors (Industries and products to be given priority)	Restricted Sectors (Products to be strictly controlled (except for export))
1. Agriculture and related industries.	1. Motor vehicles and motorcycles.
2. Light and textile industries.	2. High energy consumption products. (e.g. air conditioners, cold and hot air blowers, electrical cooking appliances and vacuum cleaners)
3. Basic facilities and industries. (Including transport, telecommunications, energy, raw materials, steel, iron, nonferrous metals, and basic chemicals)	3. High grade consumer products using raw materials in short supply in the country (e.g. aluminum, copper and chemical fiber products)
4. Machinery and electronic industries.	4. Products whose production methods are backward and which cause waste of resources and serious pollution (e.g. coking with indi- genous methods, power generation with gasoline or diesel, smelting of nonferrous metals and extraction of sulfur with indigenous methods).
5. High technology industries.	5. Poor quality products (e.g. white wine, leather, ordinary artificial fur, etc.).
6. Products that can earn foreign exchange.	

Source: "Outline of China's Industrial Policies," The State Council of China, People's Daily, Beijing, February 14, 1989, pp. 1-5

Table 2.10: LIST OF PRIORITY AND RESTRICTED SECTORS FOR INVESTMENT PROJECTS

A. Capital Construction.

(Industries and products to be given priority.)

1. Basic Industries.
(Including agriculture, transportation, energy, and raw materials such as steel, iron, nonferrous metal, chemicals and petrochemicals.)
2. Equipment Industries.
(Including large power generating equipment and relevant transmission transformer equipment, integrated circuits, and telecommunications equipment.)
3. Light Industry.
(Including paper, sugar, and salt.)
4. Products that can earn foreign exchange through export and yield better economic results, especially manufactured goods.
5. Social public facilities.
(Including water supplies and drainage, pollution control and public transport).

B. Technological Updating Investments.
(Industries and products to be given priority.)

1. Agriculture and Forestry.
2. Light and textile industry.
3. Machinery and electronics.
4. Transport, Communications, Energy and raw Materials.
5. Energy saving projects.
6. Projects that yield good economic returns and earn foreign exchange through exports.

C. Capital Construction.

(Products to be suspended or strictly controlled).

1. All those for which current production is controlled.
2. products for which there is insufficient supply of raw materials.
(i.e. (a) in light and textile industries: woolen fabrics, cotton fabrics, long polyester fibers, PPL fibers, chemical fiber carpets, silk, ordinary plastics, fans, mechanical watches, refrigerators, washing machines; (b) in chemical industries: heterotrophic tires, universal chemical reagents, (c) in nonferrous industries: copper, aluminum, tungsten, tin and antimony; (d) in building material industries: marble, granite boards, plastic doors & windows, and aluminum alloy doors; (e) in machinery and electronics industries: motor vehicles, motorcycles, color TV sets made by unauthorized plants).
3. Small size plants that do not conform to requirements of economic scale, yield poor economic returns, and cause serious pollution. (In iron and steel, nonferrous metals, ferro-alloys, chemicals, oil refineries, building materials, paper making).

Source: Ibid

2.69 Despite their supposed short-term orientation, the investment priority and restriction lists have larger term implications. The manner in which these lists are compiled and the seriousness with which they are negotiated suggest that they are to serve as more than tools of the short run austerity program. For example, the list of priorities is so extensive, covering such a large segment of value added in industry, and the sectors are defined with such specificity it is unlikely they will be used merely to target sectors for government support or restrictions. It is more likely that the lists will be used to closely define medium-term investment programs, as was done in the past under the central planning system. If this is the intention, the lists represent a step backwards toward more central control over investment decisions and are a direct contradiction of the stated policy of using more indirect instruments to influence growth in the economy.

2.70 There also is a problem with implementing the priorities specified on the lists, since a large share of direct investments now are in the hands of provincial governments. It is not clear what instruments will be used to make sure that the provincial governments honor these priorities. If

direct controls over credit allocations are used, then very detailed sector and region specific targets will have to be set for lending operations. Even then provincial bank branches may not comply with these priorities and restrictions, exacerbating the current problem of uncontrolled credit expansion. If they did comply, the growth of the banking sector would be inhibited.

2.71 Administrative controls and sectoral guidelines for lending may be acceptable in the short run and in the context of the austerity program. However, in the medium term, they will retard the development of a banking sector more responsive to market forces. A better alternative in the medium term would be to restrict credit using interest charges and let investments flow into those sectors where the real rates of return are the highest. (This issue is treated in greater detail in the next chapter.)

2.72 Finally, even if provincial governments were to fall in line, a growing share of investments being undertaken by enterprises themselves fall outside of the purview of direct government control. Again, it is not clear what instruments will be used to impose these lists on enterprise decision making. If credit allocations and restrictions are used, as for the provincial governments, very detailed targets will have to be spelled out. The enormous burden of administering such a detailed plan render it impractical even if it could be justified on any other grounds.

Problems with Present Sectoral/Targeting Policies

2.73 There are major problems with the way in which sectoral priorities are being set and sectors targeted for increased credit and investment. Multiple and inconsistent criteria are being used to determine sectoral priorities. The plethora of criteria proposed by the various institutions involved in targeting industries under industrial policy confuse short run concerns of inflation and longer run structural problems in the economy. The major short run criterion, largely achieved by the end of 1989, was the need to curb consumer goods activities which were placing undue pressure on the basic industries.^{27/}

2.74 There are four main problems with the current targeting policies. First, the policies adversely affect small-scale collective and private enterprises. Second, in the present system of setting priorities targeting is the rule rather than the exception, resulting in too many contradictory lists circulating among the agencies. Third, targeting biases investments in favor of large enterprises. Fourth, the process of targeting tends to be self-perpetuating.

2.75 The most troubling of these problems has been the uneven treatment with respect to the allocation of credit to small-scale collective and private enterprises. Light and collective industries were hit hard by targeted credit restrictions in late 1989; a policy which was quickly reversed when the adverse employment impact became apparent. It is true that these enterprises often operate on a small, inefficient scale and that this growth has put extra strain on raw materials. The TVEs also have contributed to increased pollution in the rural areas and have made it difficult for state-owned enterprises to compete successfully for inputs. However, the TVEs are producing goods which satisfy consumer demand, and this indicates that they have an important role to play, particularly in the early

^{27/} In particular, investment projects that are highly energy intensive are to be discouraged. Likewise projects such as hotels are considered "nonproductive" and investment in them is to be reduced, thereby easing demands on inputs of construction material.

stages of an emerging market-oriented economy. In this case industrial policy is used against a class of enterprises for reasons that have little to do with their economic or financial profitability. If the objective is to prevent the operation of uneconomically sized plants, the way to do it is not to restrict investments but to allow greater competition among regions and to reform the price system so that such "uneconomic" investments also become unprofitable.

2.76 Several other criteria are used to target investment and credit to certain industries. These criteria include the industry's ability to establish forward and backward linkages, ability to earn net foreign exchange, requirements for imports, degree of excess capacity, management capabilities, production of high quality products, and ability to save energy, lower raw material inputs, and reduce the need for additional transportation equipment. However, it is difficult to see how this criterion can be translated into a coherent plan for developing industries, as it overlooks the demand side of economic activity. This approach too often results in a plan to encourage heavy and capital intensive industries--the very industries targeted under the old discredited planning system.

2.77 The criterion of supporting industries that earn net foreign exchange also contradicts the policy toward TVEs and collectives. The criterion of encouraging efficient activities, as measured by their financial profitability, overlooks the distorting effects of irrational prices and is inconsistent with the objective of developing basic industries. Instead of setting detailed industrial priorities and targeting sectoral investments and credits, industrial policy in the transitional period should set a few key sectoral priorities and assure that adequate investments are available to meet them. Banks should be allowed to undertake investments based on financial and economic considerations after these few sectoral investments have been satisfied. However, it is critical that such a devolution of responsibility be accompanied by a hardening of the budget constraints on both banks and their client enterprises to ensure that they bear the economic consequences of their decisions.

2.78 The present system of setting priorities allows for the development of long, detailed lists of industries to be promoted or restricted in the numerous agencies operating in the industrial sector: the SPC, SRC, all the line ministries, MOFERT, the State Science and Technology Commission, the Material Supply Bureau, the investment corporations and banks which are to implement targeting policies, and most of the corresponding local authorities and institutions. Even within one organization a variety of lists can be drawn up, each reflecting different perspectives, covering different kinds of projects, and using different classifications.^{28/}

2.79 The targeting lists of the SPC and the line ministries share two general features. First, they have an explicitly short-term time horizon of about two years. Second, as an outcome of the traditional planning process, many of them show an enormous detail of planning even at the industry and product level. The line ministries generally have longer and more detailed positive lists than the

^{28/} For example, according to the SPC the industries to be promoted include the following: agriculture (grains, cotton, pottery, edible oil, and tea); transport, coal, electricity and important raw materials such as iron and steel or cement. Less emphasis is to be given to light and processing industries; but within light industry priority is to be given to the textile industry, and within the consumer goods sector to the industries producing daily necessities. The SPC also envisages a neutral group of products to be left to the market. This list includes bicycles, refrigerators, and watches. The corresponding general list of industries to be discouraged simply consists of those producing energy intensive, low-quality, or technologically backward products. The list of products to be restricted includes color TV tubes; computerized telephones, aluminum cans; tobacco; small-scale oil refineries; energy-intensive electric rice cookers, and air conditioners.

SPC, while the SPC generally has a more extensive negative list. However, the lists are not always consistent. For example, according to the SPC, bicycles and watches are to be treated neutrally and leather products and pianos are to be discouraged. According to the Ministry of Light Industry all of these products should be encouraged.

2.80 The Ministry of Foreign Economic Relations and Trade (MOFERT) appears to have adopted a more general, strategic view of China's future industrial development. MOFERT believes that the share of industry in exports should increase, while the shares of agriculture and raw materials in exports should be reduced. Specifically it believes that emphasis in the short run should be placed on light and textile industries and food processing as major export industries. Within light industry, it favors home electric appliances, ceramics, toys, packaging products, and traditional Chinese health and medical food products as promising export products.

2.81 In the long run, MOFERT gives priority to machinery and electronics, as these industries provide higher value added and have a large growth potential. Currently they account for 8-10 percent of all Chinese exports, but only 0.4 percent of world trade. According to MOFERT, the crucial bottleneck to promoting machinery and electronics in China is the low level of scientific and technological knowledge and the lack of skilled labor. MOFERT estimates that it will take at least ten years to overcome these obstacles.

2.82 It is interesting to note the way in which targeting biases investments toward large industries. Sector-specific interventions often have an intrinsic bias in favor of incumbents over entrants and of large over small and medium-sized enterprises. This is because incumbents and large firms are better known to the relevant decision makers than are potential entrants. They also pose a smaller risk. In addition, favoring incumbents and large firms helps administrators to build constituencies more than encouraging new entrants and small firms.

2.83 Sectoral policies are very susceptible to distortions from lobbying efforts. This is a significant factor in the administrative allocation of resources. Each industry, and correspondingly each line ministry, has its own interests and constituency. Similarly, each county and province is interested in promoting and protecting its own local industries. In a political system where decisions tend to be reached implicitly through consensus and bilateral negotiation, this will almost inevitably lead to an industrial policy that is overwhelmingly concerned with seeing to it that no one is harmed too much. The length of the existing targeting lists in China supports this view.

2.84 The idea that targeting is self perpetuating is supported by the overall stability of industrial output and investments noted in Chapter 1. This often also is supported by the difficulties all countries experience in removing trade restrictions that originally were imposed to protect certain sectors. These difficulties can be aggravated by the strength of lobbies and by the inability of administrators to recognize why targeting measures fail and take appropriate action.

2.85 While the comparative advantages and economic conditions of countries will change over time, targeting tends to be inflexible. This is partly because economic policy decisions usually rely on the base year method, basing next year's projections on this year's figures, and because changing a decision is often equated with making a mistake--and politicians are reluctant to be viewed as making any mistakes.

2.86 Sectoral targeting is always done at the expense of untargeted sectors. Given the general shortage of any form of capital in China, most investment plans by enterprises should be encouraged regardless of whether or not they apply to a targeted priority sector. If priorities must be set for some sectors, the implicit negative effect on other sectors must be taken into account.

E. Reforming the State Investment System

2.87 The recommendations for reform of the state investment system follow mainly from the evidence presented above. These recommendations include:

- (a) Raise project approval limits at each level of government;

2.88 SPC approval is required for all projects that receive central funds and allocations of materials, and PPC approvals are required for provincial projects above specified limits. These limits are too low. They provide an incentive for fragmenting project submissions and increase the number of suboptimal investments.

2.89 The system should be changed to require approval only for very large key state projects (several times higher than the current limit of Y 30 million) and a few projects of national importance. For the rest, any funds going to provincial governments should be given through a system of "state grants" based on objectives tied to regional policy. Similarly, provincial approval limits should be raised by a multiple of the current limit of Y 10 million, and the different approval levels based on the type of industry involved should be abolished. Projects below these limits should be left to the banking system, subject to overall provincial credit ceilings and subject to the hardening of budget constraints both on banks and enterprises.

- (b) Phase out the material supply system except for a very few key commodities;

2.90 It would be desirable to phase this system out as quickly as possible, with a preannounced timetable to allow affected enterprises to adjust. The role of the material supply system already has diminished considerably. Most producer goods now are manufactured for the market. A large and growing share of material is marketed directly by enterprises and nearly half of SOE production is sold on the market. This trend should be continued. The material supply system now appears to serve primarily as a means of distributing rents and supporting the central government's investment program.

- (c) Separate investment plans from credit plans as much as possible.

2.91 Projects that are approved by SPC are included in the mandatory investment plan which forms the basis for the mandatory credit plan. At the state level, SPC decides which bank is going to finance which project as part of the mandatory credit plan. Similarly, the provincial mandatory investment plan becomes mandatory also for the banks. The fact that investments now are being financed via bank loans tends to obscure the source and nature of these commitments. The system should be replaced by one in which the SPC and PBC make up the guidance plan and except for very large key projects, leave the allocation of credit to the banks.

- (d) Check and reverse the erosion of budgetary revenues to the central government;

2.92 Before the economic reforms, investments in China were financed through the budget. Since that time, budgetary revenues have not been sufficient to finance the central government's investment program, and the government has had to resort to mandatory bank loans and--more or less--voluntary contributions by provincial governments. In assessing the adequacy of government resources, two factors must be distinguished. One is the absolute level of government revenues as a percentage of GNP; the other is how the tax ratio develops over time. As discussed in Chapter 3, the tax ratio in China has declined dramatically over the past decade. This decline reflects a shift in the terms of trade against industry (which in 1978 accounted for 75 percent of state revenues through the transfer of profits to the government) as well as adjustments in the tax contract responsibility systems that were introduced in 1986/87. Generally, these tax contracts fix provincial obligations, although the contract increase in nominal terms over time. In times of high and accelerating inflation, these contracts lead to a very low revenue buoyancy. This trend towards a lower and lower tax ratio needs to be checked, possibly by changing the contracts when they come up for renewal in 1990/91. The central government needs to keep control over the development of the tax ratio in order to plan its expenditures. It also needs to preserve and improve the budget as a planning tool. Declining revenues have been partly compensated for by using administrative powers over banks, and extrabudgetary revenues. If these practices continue, the information content and usefulness of the budget for planning and macroeconomic policy will decline.

2.93 The central government's ability to finance key investments in energy, transportation, and telecommunications has been impaired. This imbalance needs to be redressed. The various options for reforming center-provincial fiscal relations have been set out in the Bank's tax report and should be carefully considered.^{29/}

- (e) Detailed product-specific targeting should be restricted to a very few sectors where technological gains or export promotion objectives can be clearly identified, and targeting should become the exception rather than the rule; detailed targeting for a large number of sectors should be phased out;

2.94 At present, China appears set for two additional years of austerity and investment retrenchments designed to curb demand and inflation. It is imperative that this period of stabilization be used to turn the current process of detailed short-term industrial targeting into a practice of setting a small number of general, but clear and consistent, priorities guided by a long-term view of China's industrial policy. At the same time, emphasis should be placed on building the institutions that will be needed to increase the scope of markets in the period following the retrenchments. Examples of these institutions include a reformed, unified tax system; sound banking institutions with portfolio autonomy; and a rediscounting mechanism.

2.95 While the use of targeting lists like those of SPC and the various ministries is consistent with the administration's current approach to industrial policy, these priority lists cannot form the basis for long-term sectoral policies. Both the number and the length of the lists should be cut substantially to more clearly reflect the priorities for China's future industrial development. Since

^{29/} The report considers several "models" for central-local fiscal relations. These models include limited tax sharing, balanced tax sharing, base tax sharing, and an option to "patch up the present system." See China: Revenue Mobilization and Tax Policy: Issues and Options, op. cit. pp. 114-122.

the existing lists are meant to guide investments in construction and technical upgrading, they will have a long-term impact despite their nominal two-year time horizon.

- (f) *Selective targeting* should be developed using functional rather than sectoral or regional criteria, should be made more uniform across sectors and product groups, and, should be granted only for a limited period of time.

2.96 If targeting policies are to be used to encourage the development of specific industries, it is far better to target by functional categories than by sectoral ones. Functional targeting refers to basing special incentives on broad classifications such as "export industries," "technology-intensive industries," or "labor-intensive industries." Generally, the indirect benefits from technological developments across a whole spectrum of existing industries tend to be much more important for industrial development than the direct benefit of targeting certain sectors for technological development. Singling out "leading-edge" sectors and promoting them individually will not automatically improve the overall level of technology and widen the range of industrial activities.^{30/} This example puts the potential benefits of targeting technology-intensive industries into perspective. Similar benefits would accrue from targeting export industries and labor-intensive industries.

2.97 Functional targeting tends to be superior to sectoral targeting for several other reasons. First, functional interventions cause fewer distortions in the market because they are less specific. Second, they generally are less susceptible to lobbying manipulations and can be more easily applied for a limited time period. Third, they do not inhibit structural change when the comparative advantage of an economy changes.

2.98 Targeting should be granted for a limited period of time, with a "sunset clause" to permit periodic assessments of objectives and results. Time-limited targeting would have two effects. First, it would strengthen government control over targeting funds and put favored industries under performance pressure. Second, it would allow industrial policy to remain flexible as changes occur in the economy and industrial structure.

^{30/} Cf. OECD, Structural Adjustment and Economic Performance, Paris, 1987. p. 255.

III. PRICE REFORMS AND CREDIT POLICIES

A. Introduction

3.1 The previous chapter examined the role of direct government intervention in industrial policies through the state investment plan. This chapter looks at more indirect ways for the government to pursue its industrial policies. Two types of indirect policies are considered. The first type includes incentives and relative prices, and their affect on investments and enterprise performance. The second type includes credit allocations and interest rates.

3.2 The effectiveness of indirect policies is somewhat limited by the underdeveloped condition of markets in China during the transitional regime. For indirect policies to be most effective the following conditions have to be met: (a) prices and other incentives have to be in place; (b) economic agents must have the autonomy to respond to these incentives and must be accountable for making incorrect decisions; (c) the factor and product markets through which these responses are exercised must be competitive and functioning reasonably well; and (d) government interference in both markets and agent autonomy must be kept to a minimum. These conditions will take many years to fully materialize in China. In the meantime, many incentives still can be made to work as long as markets are allowed to assume an increasing role in the system.

B. The Role of Prices and Industrial Investments

3.3 The most persistent problems with China are caused by the dual pricing system that exists for state plan and marketed goods. This system creates distortions in the allocation of resources to their best uses and encourages the development of corruption and rental payments. The system has particularly serious consequences for the long-term pattern of industrial development, especially since the government's ability to correct these distortions has been reduced through decentralization and declining revenues.

3.4 The use of purely administrative credit and investment controls to correct distortions may be straightforward but deceptively so. During the period of austerity, they may be viewed as the only available instruments for reducing aggregate investments. However, they will not be very effective in changing the composition of investments or correcting the misallocation of resources. Furthermore, the use of only administrative measures threatens to undo the changes of recent years and retard the role that markets are expected to play in a mixed economy. Ultimately, many of the problems with the existing regime will not be resolved without confronting the issue of price reform directly.

The Price Regime and Provincial Investment Priorities

3.5 Many investment decisions now are made at the provincial level. Provincial governments do not want to invest in priority sectors unless they can capture the benefits of doing so directly, because the prices of services and materials under the material supply system are set at artificially low levels. A province will capture the full value of investments in these sectors only if benefits accrue to an industry within the province, or if output can be sold at market prices to other provinces.

3.6 The previous chapter noted the declining role of the central and provincial material supply system and the increasing role of markets in distributing resources. The role of markets also has increased for many of the key commodities handled by the central unified distribution system. However, reduced government controls over the production and allocation of raw materials has not always led to a corresponding expansion in market activities, because the power of control has been intercepted by local governments. This is very much the case where investments in light industry are concerned.

3.7 In discussing the impact of distorted prices on the structure of investment, one needs to distinguish carefully between two arguments. One argument is that the availability of cheap inputs has made possible the rapid growth of light industry, and that price reform is needed to bring relative prices more in line with economic opportunity costs. The other argument is that the rapid growth of investment in light industry has little to do with distorted relative prices, but is a consequence of a rapid increase in incomes. According to the second argument, investment in light industry has been a demand-driven phenomenon, with relative prices more or less in line with market prices. These two arguments are examined in greater detail below.

3.8 Before the economic reforms, investment activity, industrial growth, and consumption were closely linked through the annual plan for the real economy, and were synchronized with monetary policy through annual cash and credit plans. From the foundation of the PRC through the 1960s, emphasis was placed on heavy industry. In the latter half of the 1970s, light industry received somewhat more support. However consumption continued to be the residual factor and was purposely kept low to free resources for an ambitious investment program. After 1978, this situation changed. Greater autonomy for enterprises meant diminished government control over wages and consumption funds. These funds expanded rapidly and increased the demand for consumer goods. The shifting of the terms of trade in favor of agriculture also helped to increase the demand for consumer goods. An expansive monetary policy after 1982 provided the monetary envelope for rapid demand growth.

3.9 On the supply side, state-owned enterprises used their increased autonomy and newly gained authority to market part of their output themselves in response to consumer demand. They were greatly aided by local governments which were quick to realize the profit and tax potential of producing consumer goods. Collectives, including township and village enterprises, emerged to satisfy the rapidly growing consumer demand. This development occurred mostly in the light industrial sector, where autonomy has been considerable, control over prices limited, and few investment funds required. In contrast, the heavy industrial sector continues to be more regulated in terms of production and pricing, and many investments are lumpy and require sums that are not easily mobilized.

3.10 Based on these considerations, one would expect that light industrial growth has been more demand determined since the inception of the reform program, and that heavy industrial growth has been limited more by the supply of investment funds than by market forces. A regression

analysis was used to investigate this hypothesis.^{1/} Regressions were carried out for heavy and light industrial growth, for the periods 1954-78 and 1978-87, in order to detect changes introduced through the economic reforms. The results are presented in Table 3.1

Table 3.1: INFLUENCE OF STATE INVESTMENT ON INDUSTRIAL GROWTH
(Regression Analysis of State Investment)

Indep. Variables	<u>Regression I: Heavy Industry</u>				Signific. (**=5% ***=10%)	
	<u>Coefficients (t-Statistics)</u>				<u>1954-78</u> <u>1978-87</u>	
	<u>1954-78</u>		<u>1978-87</u>		<u>1954-78</u>	<u>1978-87</u>
Constant	6.18	(3.68)	0.82	(0.016)	***	
Investment	0.49	(7.44)	0.54	(4.12)	***	***
Retail sales	0.12	(0.69)	0.21	(0.40)		
R ² , [DW]	0.93	[1.37]	0.75	[2.01]		

Indep. Variables	<u>Regression II: Light Industry</u>				Signific. (*=1% **=5% ***=10%)	
	<u>Coefficients (t-Statistics)</u>				<u>1954-78</u> <u>1978-87</u>	
	<u>1954-78</u>		<u>1978-87</u>		<u>1954-78</u>	<u>1978-87</u>
Constant	7.26	(4.85)	2.52	(0.66)	***	
Investment	0.36	(6.11)	-0.09	(-0.91)	***	
Retail sales	-0.37	(-2.41)	0.82	(2.03)	**	*
R ² , [DW]	0.79	[2.43]	0.37	[1.46]		

Source: Statistical Data on China's Industrial Economy, 1949-84

3.11 The results clearly indicate a shift. However, by itself this shift does little more than confirm the hypothesis that the economic reforms have had a significant impact on the economy.^{2/} More interesting is the evidence that state investment had a clear and strong impact on the growth

^{1/} The simple model used assumes that industrial growth is determined by supply and demand factors; in any period, production is either constrained by demand, or by capacity constraints. Industrial growth is measured by annual growth rates of gross industrial output value. The easing of supply constraints is represented by annual growth of state investment (results for capital construction investment, more directly controlled by the central government, are similar). Demand factors are approximated by using annual growth of retail sales. The series data for nominal growth have been deflated by an inflation index to arrive at real growth. Annual growth rates were used to minimize the problems of serial correlation that normally are found with time series data. Ordinary least squares were used for the estimation, although there could be some simultaneous equation bias introduced through the relationship between industrial growth and retail sales. The sample for 1978-87, however, is too small to apply the consistency properties of more sophisticated estimators.

^{2/} For the period 1954-78, for growth of both heavy and light industry, the intercept is significantly different from zero; for the period 1978-87, the hypothesis that the intercept is equal to zero cannot be rejected at the 1 percent level.

of both light and heavy industry. In recent years this has not been the case. As expected, state investment is still a key determinant of heavy industrial growth.^{3/} In several key sectors--cement, steel, fertilizers, petroleum, chemical intermediates--where lumpy investments are required, outputs are underpriced, resource mobilization for investment is a problem, and excess demand is the rule. It is not surprising, therefore, that investments in the key sectors should have remained the limiting factor for heavy industrial growth. The results are different for light industry. Before 1978, state investment was a significant determinant of light industrial growth; after 1978, state investment appears to have had little impact on the growth of this sector. On the other hand, retail sales remain significant.^{4/}

3.12 The declining impact of state investment on light industrial growth can be explained by two factors. First, the reforms have turned many markets for light industrial goods from sellers' to buyers' markets, so that demand has become a more limiting factor than supply. Second, light industry is the sector where relatively more investment has been undertaken by collectives and individual enterprises, and the analysis above considers only state investment. Clearly, state investments are no longer the most important determinant of light industrial growth. To some policymakers, this growth appears to have developed a life of its own.

3.13 Distorted prices would have a major impact on the investment structure if light industries, as a rule, had access to materials and energy at state plan prices. The difference between the state plan price and the average price in 24 provincial markets for key materials is shown in Table 3.2. Generally, market prices are two to three times higher than state plan prices, and the differences are especially high for goods in great demand which are needed for the production of consumer goods, such as thin plate steel and aluminum. If most enterprises had access to these materials at the state plan price, this would indeed be a powerful incentive to invest in light industry.

^{3/} The coefficient for state investments is positive and significant for light industry in the first period, but not after that; the coefficient is significant and positive for both periods in the case of heavy industry.

^{4/} Though only at the 10 percent level. The lower significance is likely to be the result of the shorter time series (only 10 observations). In addition, retail sales is probably a worse proxy for total consumption for the second period than before, due to rapidly increasing exports of light industrial goods, and especially textiles.

Table 3.2: STATE PRICES VERSUS MARKET PRICES
December 1988

Material	State price	Market price	Ratio
Wire rod	610	1,680	2.8
Thin plate steel	870	4,602	5.3
Medium thick plate	570	1,804	3.2
Pig iron	293	752	2.6
Aluminum	4,000	16,077	4.0
Cement (No. 425)	90	193	2.1
Soda ash	390	1,192	3.1
Caustic soda	640	2,986	4.7
Truck (Jiefang)	29,800	39,004	1.3
Timber (Pine)	119	636	5.3

Note: Prices are per ton, except for trucks (piece) and timber (m³). Market prices are posted prices, not market clearing prices. Transactions can take place at different prices. For a detailed discussion, see Bill Byrd, "Market Prices for Industrial Producer Goods in China: Structure, Trends, and Efficiency", a paper presented at the AEA annual meeting, 1988

Source: China Price, 1989, No. 1

3.14 In this discussion a distinction must be made between the state-owned enterprises that are included in the central or provincial plan, and the collectives and township and village enterprises operating outside the plan. The latter have been major contributors to the increased production of consumer goods. These enterprises seldom have access to materials at state plan prices and seem to operate very much in a market environment--buying their inputs at market prices and selling their output at market prices. For them, the incentive to invest clearly has little to do with price distortions; it is determined by market demand. Wages generally are low, and social overhead, a major burden on state enterprises, almost absent. They do not provide employment guarantees either, since their owners, township and village governments, cannot not afford them. However, all of these are advantages that small scale enterprises enjoy in most countries, advantages which secure them a place the in industrial structure.^{5/}

State Plan Prices

3.15 The situation is different for state-owned enterprises. At least part of their production is included in the mandatory plan, either on a central or provincial level. This means that the enterprises are supposed to receive allocations for inputs at the state plan price, and must deliver their output at the state plan price, also. Production and investment decisions are based on what occurs at the margin. If the last unit of input purchased is at the market price, and the last unit of

^{5/} For a fuller discussion of TVEs and their operating environment, see World Bank, China: Rural Industry: Overview, Issues, and Prospects, 7267-CHA, and Bill Byrd and Lin Qingsong (eds.), China's Rural Industry: Structure, Development, and Reform, forthcoming.

output sold is also at the market price, then decisions will be made as if the enterprise were fully operating in a market environment. The plan component of production would simply constitute a lump sum tax, or a lump sum profit transfer--depending on the relative price difference between state plan inputs and outputs--and would not affect production and investment decisions. If, for example, average energy prices are low, but the price of additional supply is high, then an enterprise that is expanding has a strong incentive to conserve energy in its existing production in order to escape the higher marginal prices. Above quota production and two-track pricing derive their economic appeal precisely from the idea of leaving existing rents and transfers untouched, while imposing economic prices at the margin. Because most enterprises are expanding their production, economic rationality could be assured without attempting a full-fledged price reform.

3.16 It appears, indeed, as if many state-owned enterprises face high marginal costs for their inputs. For example, an increasing number of state-owned enterprises rely on trucks to transport their raw materials and products, and prices for trucking goods are ten times higher than for rail transport. Another sign is the number of enterprises that bridge the power cuts of one or two days a week with their own generators, at a cost that they recognize to be about six times the state plan price. Even enterprises that do not buy their own diesel generators seem to face high marginal costs for energy, in the form of "additional payments" or mandatory contributions to the local electricity bureau for investment in electricity distribution. This contribution has little relationship with the economic cost of power supply and is often negotiated on the basis of the consumer's willingness to pay. An example of this practice is presented in Box 3.1. As the example shows, marginal supplies of key inputs can be quite costly, even though the enterprise continues to pay the state plan price officially.

Electricity Prices for the Jiafeng Cotton Mill

The Shanghai Jiafeng Cotton Mill, located in Jiading county, is one of the privileged enterprises in China that gets its power supply seven days a week, without interruptions. The price of electricity is fixed by the price bureau at 9 Fen per kWh.

The effective price for marginal additions to electricity is, however, much higher than it appears. The Jiafeng Cotton Mill used to get power only five days a week. But the factory manager calculated that two additional days work per week would yield an additional \$400,000 annually in foreign exchange earnings alone, given that its output is of high quality and is easily exported through the Shanghai foreign trade corporation. He proposed to the county electricity bureau to split the additional foreign exchange earnings 50:50 with it. This proposition was accepted by the county electricity bureau. In addition to the 9 Fen per kWh, Jiafeng Cotton Mill now pays the electricity bureau \$1,900 per day for the additional electricity.

The Jiafeng Cotton Mill is expanding its productive capacity by adding a second workshop that will soon go into operation. In order to get this investment approved, it had to show that it would be supplied with electricity for the second workshop. The manager asked the Shanghai electricity bureau for additional supply. Since electricity is scarce at state plan prices, the electricity bureau asked the factory for a "contribution towards investment in electricity infrastructure", without which an additional supply of electricity would be "difficult to obtain". While the size of the lump sum payment was not revealed, it is clear that marginal supply with electricity comes at a high cost to the Jiafeng Cotton Mill, although it continues to pay the official price of 9 Fen per kWh.

Box 3.1 Electricity Prices for the Shanghai Jiafeng Cotton Mill.

3.17 The marginal cost of inputs also can be high for materials allocated under the mandatory plan through the material supply system. In principle, these materials are supposed to be supplied to final users at state plan prices. In practice, this does not always happen. Materials may not be

supplied directly to end-users, but to provincial and local supply bureaus. Some of these materials then are diverted to other enterprises or projects considered to have a higher local priority. Other materials are sold at the much higher market prices or are supplied after extracting a premium to guarantee timely delivery.^{6/}

Relationship between Market and State Plan Prices

3.18 There is evidence that the difference between market and plan prices has narrowed for consumer goods, and whereas until 1989, it increased for certain controlled raw materials. Until 1989, the difference between market and plan prices for agricultural inputs also increased, primarily because market prices for these inputs increased at a much higher rate than state plan prices (Table 3.3). For example, in 1984, state plan prices for basic raw materials in Shanghai have increased 7 to 400 percent compared to 40-1,500 percent for market prices.^{7/} This lends additional support to the idea that the supply of basic raw materials has lagged behind demand.

Table 3.3: MARKET PRICE INDICES
(State Plan Price = 100)

Products	1983	1984	1985	1986	1987
Consumer goods in urban markets	148.0	142.8	124.4	117.1	106.6
Consumer goods in rural markets	147.8	142.6	132.3	116.7	121.3
Agricultural inputs	140.1	145.5	158.7	n.a.	n.a.

Source: Statistical Yearbook of China, various issues

3.19 Although real plan prices seem to have been adjusted upwards, the adjustment did not increase supplies enough to keep up with the pressures of demand, forcing up market prices during

^{6/} Due to the illegal nature of this leakage, direct information is hard to come by. However, visits by the mission to enterprises suggest, as a first approximation, a "rule of the three thirds": of the allocated quota, one-third actually arrives at state plan prices; one-third needs additional payments which bring the total price in line with market prices; one-third never arrives and has to be procured at market prices or through barter deals, for which the real terms of trade are close to market and international prices.

^{7/} For Shanghai, in 1984, plan prices increased as follows: nonferrous steel (118 percent), other metals (406 percent), pig iron (44 percent), timber (43 percent), and coal (7 percent); the market prices for the same commodities increased by 500 percent, 1,500 percent, 277 percent, 200 percent, and 40 percent respectively. Source: Hu, Changnuan, "The Effects of Raw Material and Energy Supply Price Hikes on the Cost of Shanghai's Processing Industry's Products," Zhongguo shehui kexue (Social Science in China), No. 4, 1986.

In one factory in Jiangsu the plan price of lead for making batteries increased from Y 2,130/ton in January 1988 to Y 2,640 by June, the market price had increased from Y 2,650 to Y 4,500 in the same period; the ratio of market to plan price had gone from 1.24 to 1.7 in a mere 6 months. Source: Du, Haiyan and others, "The Behavior of State-owned Enterprises under Inflation", Jingji Yanjiu, (Economic Research), No. 2, 1989.

1987/88. As a result, enterprises that cannot obtain an adequate supply of inputs at plan prices through the material supply system must buy more and more inputs at market prices. With the broadening of the role of the free market, the impact of plan prices on investment and resource allocation decisions is decreasing, even where raw materials are concerned, because market prices prevail at the margin. Yet it is still too often the case that enterprises make decisions on the assumption that their supply quota will be raised. As the gap between plan and market prices widens, enterprises with quotas will tend to spend increasing amounts of energy and influence to modify these quotas; they will also tend to use whatever input they can get at plan prices, irrespective of whether the quality and sourcing of those inputs makes economic sense.

3.20 Plan prices primarily have distributive effects on enterprise profits and hence on the real incomes of workers and rents in the system. In enterprises which obtain materials at plan prices but sell their output at market prices, record profits are being made and workers' wage incomes are rising quickly. In these cases there is a great incentive to hide these super profits from the local authorities, and in some cases, from the central government the collusion of local authorities. It is not known how much of this is actually going on.

3.21 In other enterprises, where state allocations are minimal but the prices of output are still subject to some bureaucratic controls, losses are being recorded. In these cases the provincial and state authorities are left picking up the tab. The mounting losses of state-owned enterprises in the coal sector support the notion that this is occurring with greater frequency.

3.22 Finally, where enterprises have little or no access to state allocations, but are allowed to sell their output at market prices, as in the case of collectives and TVEs, there has been a boom in investments because the financial rates of return are much higher. Double digit growth in these enterprises has increased their demand for raw materials and put them in direct competition with state-owned enterprises to obtain the materials. This competition for raw materials has been a major force behind efforts to rein in the development of collectives and TVEs.

3.23 The development of market prices for key producer goods in the Shanghai market is shown in Table 3.4. The different rates of increase show how the market reacts to demand pressures. The highest price increase is for thin plate steel, a necessary input for the production of consumer durables such as refrigerators and washing machines; the demand for this input has increased greatly over the past few years. The price for medium thin plate steel, on the other hand, has remained fairly stable, as there is an excess supply of this product. The price of building materials such as cement and timber has increased significantly, due to the construction boom since 1985. The posted prices on the Shanghai market and their equivalents in other provinces may not be perfect guides to transaction prices, but they demonstrate how prices react to the market situation. These market prices have become guides to inter-enterprise transactions, whether they be through the medium of money or barter.^{8/} Their importance in resource use and investment decisions has been increasing over time.

^{8/} The State Price Bureau uses these prices in analyzing the inflationary impact of price reform.

Table 3.4: MARKET PRICES FOR MATERIALS IN SHANGHAI, 1984-88

BIANNUAL	ALUMINUM	CEMENT	MTPLATE	TPLATE	WIREROD	PINELOG
1984 II	4,464.3	-	-	-	1,408.3	-
1985 I	5,100.0	105.0	1,371.4	1,514.4	1,609.1	-
1985 II	5,844.6	147.5	1,566.7	1,695.4	1,749.3	337.0
1986 I	5,818.1	147.7	1,512.1	1,722.6	1,603.4	318.6
1986 II	6,353.5	150.1	1,513.7	1,822.9	1,510.2	317.5
1987 I	6,391.9	149.1	1,495.7	1,882.1	1,438.1	412.0
1987 II	6,687.2	150.6	1,473.4	1,988.6	1,400.0	421.0
1988 I	7,590.0	160.0	1,489.0	2,488.0	1,459.0	560.0
1988 II	11,000.0	279.0	1,580.0	4,642.0	1,526.0	580.0
Average Annual Price Increase	25.3	23.7	0.3	39.9	2.0	19.8

Note: The biannual data have been calculated as averages from monthly and weekly data. Most of the data were made available by Bill Byrd. Prices are per metric ton, except for pine (m³)

Source: Wuzi Shangqing, various issues, and China Price, 1989, No.1

Recent Price Changes

3.24 Plan prices for many key products, such as grains, kerosene, coal, and chemical fertilizers, have been adjusted in recent years, but these have barely kept pace with the general retail price index. As a result, real prices have not changed much (Table 3.5). Energy prices were especially low until 1987, but have begun to increase since then. The price of coal—the main fuel—has been adjusted particularly slowly. Coal prices increased mostly because of the broadening of the free market. Electricity prices have not increased yet in spite of a "new plant, new price" policy aimed at meeting debt service requirements because this policy applies to plants commissioned after 1987, which still contribute a small fraction of the power output. The prices of raw materials such as timber, cement, and steel have increased fairly rapidly in recent years. Further price increases in rail passenger fares and freight were also announced in late 1989 and early 1990. Grain prices remain low (even though modest increases were introduced in 1989) compared to the prices of agricultural inputs such as chemical pesticides and fertilizers. The prices of food and consumer durables increased quite rapidly in the mid-1980s. Finally, since the fall of 1989, the prices of consumer durables have dropped considerably, reflecting excess supply as a consequence of the austerity program.

Table 3.5: PRICE INDICES FOR SELECTED GOODS (1984 = 100)

Product	1984 unit prices	1985	1986	1987
Cameras	Y 142.4/unit	105.2	112.4	233.7
Fresh vegetables	Y 178/ton	144.4	159.0	214.6
Timber	n.a.	118.1	135.0	165.8
Chemical pesticides	Y 2,987/ton	131.7	144.4	164.6
Refrigerators	Y 826.7/unit	120.9	127.1	160.1
Washing machines	Y 238.5/unit	120.3	137.4	158.6
Cement	n.a.	114.7	143.0	157.0
Pork	Y 228.2/100 kg	120.5	132.4	153.4
Fresh eggs	Y 236.4/100 kg	114.0	124.7	149.4
Steel	n.a.	116.8	130.1	141.6
Coal	Y 38.8/ton	108.0	98.2	139.4
Chemical fertilizers	Y 322/ton	114.8	118.4	132.8
TV sets	Y 642.9/set	110.1	133.8	130.8
Grain	Y 371/ton	111.5	117.2	123.7
Kerosene	Y 712/ton	100.3	105.3	111.9
Freight traffic (Railways)	Y 18.2/'000ton-km	106.6	111.0	111.5
Passenger traffic (Railways)	Y 17.9/'000person-km	105.0	107.8	109.5
General retail price index		108.8	115.3	123.8

- Notes: (a) Figures for consumer goods such as cameras, fresh vegetables, refrigerators, washing machines, pork, fresh eggs, TV sets and grains are calculated from "mixed average retail prices", which are obtained by dividing the value of retail sales of each commodity by the quantity sold. Therefore, any fluctuation of prices or changes in consumption patterns will influence this average retail price
- (b) Figures for chemical pesticides, chemical fertilizers, coal and kerosene are also calculated from mixed average retail prices. Therefore, the relative prices of coal and kerosene listed here may be understated because wholesale prices are not included
- (c) Figures for timber, cement and steel reflect the price indices used by state-owned construction units to calculate material costs (See *Statistical Yearbook of China 1988*, p. 485)
- (d) Figures for railway traffic are calculated from prices obtained by dividing total revenues by total volumes of traffic

Source: Calculated from data in *Statistical Yearbook of China*, various issues

Domestic and International Prices

3.25 Price distortions also may be measured by comparing domestic prices to their international border prices. This is done in Table 3.6 for key commodities in Jiangsu. Three facts emerge from the data. First, market prices are 40 to 50 percent above state plan prices. Second, the differences between plan and market prices tend to narrow as one moves from the least competitive, monopolist markets for raw materials such as petroleum, to more competitive, oligopolist markets for intermediate goods such as PVCs and viscose filaments, to fairly competitive markets for finished products. The largest dualism in prices is found in the raw materials sector, where prices have been controlled and competitive prices do not exist. Third, while domestic prices are far below their border price equivalents for raw materials, they are far above their border price equivalents for

intermediates.^{9/} This reinforces the view that it is the prices of raw materials that need to be adjusted upwards in order to restore some rationality to the pricing system. Any effort to reform prices will first have to tackle the problem of relative raw material prices.

Table 3.6: JIANGSU: SELECTED PRICES OF RAW MATERIALS, BASIC INTERMEDIATES AND BULK FINISHED PRODUCTS - 1988

Product	State price (Y/t)	Market price (Y/t)	Border price (\$/t)	% of market to state	% of market to import at exchange rate of Y 3.72 per \$1	% of market to import at exchange rate of Y 5.5 per \$1
A. Raw and Materials						
Crude oil	100	500	127	500	106	72
Coal	60	200	65	333	83	56
Phosphate ore	80	n.a.	59	n.a.	n.a.	n.a.
Pyrites	130	200	55	154	98	66
Sulfuric acid	280	400	130	143	83	56
Calcium carbide	600	1,200	500	200	67	43
Caustic soda-solid	1,500	2,000	600	147	99	67
Average Markup				246	89	60
B. Intermediates						
PVC	3,600	7,000	1,300	194	145	98
Polyethylene	4,000	9,000	1,300	225	186	126
Caprolactam	10,150	14,000	2,000	138	188	127
Nylon Chips	14,000	17,000	2,200	121	208	140
Viscose Filaments	18,000	30,000	1,300	167	622	420
Average Markup				169	270	182
C. Finished Products						
SSP Fertilizer	180	200	n.a.	111	n.a.	n.a.
Synthetic Fatty Alcohol	7,000	7,000	1,800	100	104	70
Vitamin C	42,000	50,000	0	119	n.a.	n.a.
Penicillin	200,000	300,000	n.a.	150	n.a.	n.a.
Mesacycline	380,000	450,000	n.a.	118	n.a.	n.a.
Average Markup				120		

Source: Statistical Annex, Jiangsu Chemical Sector Report, AS3IE

C. Enterprise Response to Dual Pricing and Material Allocations

3.26 The stated purposes of introducing the dual pricing system were: (a) to stimulate production and alleviate the pressure of excess demand by allowing enterprises to produce and sell products outside of the government system; (b) to encourage material and energy conservation and improved resource management; and (c) to generate signals which would motivate capital, labor, and other inputs to seek out their highest rates of return. In addition to these economic advantages common to most price systems, the dual pricing system also was supposed to have the specific strategic advantages of: (d) representing a compromise that preserves planned allocation while drawing

^{9/} That is, at the official exchange rate of Y 3.7/\$. If the more realistic exchange rate of Y 5.5/\$ is used, the prices for raw materials would be even lower, while the prices of intermediates would be closer to the border prices as shown in the table.

incremental output into a market system; and (e) softening the risk of economic reform by "changing a big earthquake into several small tremors."^{10/}

3.27 At first glance, many of the stated objectives of the dual pricing system appear to have been achieved. Enterprises have been motivated to expand outside plan production in the most profitable areas, and extrabudgetary investments have moved to areas that promise high returns. However, the continued distortion of prices both inside and outside the plan is critically undermining the benefits of other parts of the price reform program, such as the increased mobility of capital and labor.

3.28 Enterprises can raise profits by eliciting a high input quota and a reduced output quota, instead of improving managerial skill and reducing output costs. On the one hand, enterprises attempt to hide their production capacity so that they will get lower production quotas from the state; on the other hand, they strive to claim as large an allocation of material as they can from the state. Enterprises do not always honor their contracts under the state plan, and allocated (rationed) materials tend to leak at higher prices to the open market for profit. As a result, enterprises try to maximize their requests for such quota allotments. This inflated demand for quota allotments from the state material supply systems is particularly clear in the case of permission to engage in investment projects, the number of which generally is limited. As long as investment authorization is expected to be limited in future periods, each enterprise will seek to maximize its access to investment resources in the current period, even if it would otherwise not choose to engage in investment in that period.^{11/}

3.29 From the perspective of the central government, compulsory deliveries are instituted precisely because the price system does not adequately reflect economic priorities. However, by maintaining low plan prices for these priorities, the government creates incentives for diverting resources out of priority uses and regions into the free market. Thus, for example, it is less profitable for enterprises to supply materials to central government investment projects (which are high priority) than to provide them for small-scale decentralized investment projects, and such central government delivery plans regularly go unfulfilled.^{12/}

3.30 Price restrictions also result in the diversion of resources away from localities and enterprises where prices are administered, toward those where goods can be sold freely. In some instances, larger state-owned enterprises have set up cooperative enterprises in regions where price administration is relatively limited or lax.^{13/}

^{10/} Much of this section is drawn from "The Dual Pricing System in China's Industry," by Wu Jianlian and Zhao Renwei, Journal of Comparative Economics, No. 11, 1987, pp. 313-314.

^{11/} See B. Naughton, op. cit. Footnote 21, 1988, pp. 4-5.

^{12/} See B. Naughton, op. cit.

^{13/} For example, two enterprises within the survey sample reported having set up cooperative enterprises in Guangdong Province in order to take advantage of the relaxed price regulation in the province.

3.31 The realization of profits from reselling allocated materials in the open market has led to the formation of many enterprises which function exclusively to provide arbitrage goods between plan allocations and the market.

3.32 Even when they are within the same sector, enterprises that produce products of the same classification often face substantially different input and output prices and different degrees of within plan production and material allocations. As an example, Table 3.7 shows the comparative prices and profitability of two enterprises which both produce steel pipe--the Chengdu Specialty Steel Pipe Factory, a small-scale collective enterprise, and the Changzhou Iron and Steel Factory, a medium-size state enterprise in Jiangsu Province.

Table 3.7: COMPARATIVE PRICE STRUCTURE OF TWO STEEL PIPE PRODUCERS

Item	Chengdu	Changzhou
Unit cost (Yuan)	2,109	1,978
% within plan (%)	39.8	46.8
Planned price (Yuan)	1,948	1,750
Negotiated or market price (Yuan)	3,124	2,450

Source: See I.J. Singh, G. Jefferson & G. Zou, *ibid*

3.33 Administered prices also have distorting effects on the composition of supply, particularly scarce raw material inputs. Artificially low prices and profits for one product typically will encourage enterprises to shift production capacity toward some more profitable downstream product. The resulting reduction in supply, coupled with the increased demand for inputs to the downstream product, imposes even greater pressure for price adjustments. Since new investments are predicated on the availability of inexpensive raw material inputs which are becoming more scarce, imports tend to expand to meet input requirements. The growing shortage of iron ore and pig iron in China's iron and steel industry and the resulting increase in imports demonstrate the effect of these price and profit distortions.

3.34 Administered prices also distort the relative profitability of sectors across various provinces because provinces that specialize in heavy industry have lower profit rates. These differences can affect the entire industrial orientation of a city or province. Table 3.8 demonstrates why various provinces are determined to increase their share of light industrial investments. In terms of profits and taxes per unit of output, heavy industry is marginally more profitable. However, in terms of returns to capital, light industry is quite a bit more profitable than heavy industry. It is understandable provincial and city governments would give priority to expanding light industry. These

governments provide substantial investment funds for local enterprises and want to maximize their return to these funds in terms of taxable profits.^{14/}

Table 3.8: RELATIVE PROFITABILITY OF HEAVY AND LIGHT INDUSTRY
(Percent)

	<u>P & T/output</u>		<u>P & T/fixed K</u>		<u>P & T/total K</u>	
	1982	1986	1982	1986	1982	1986
Light	n.a.	20.09	56.53	38.55	46.31	36.39
Heavy	n.a.	24.11	14.91	15.09	16.77	19.67

Note: P & T = profits plus taxes; output = Y 100 of gross output in current prices; fixed K = Y 100 of original value of fixed assets (OVFA); total K = Y 100 of OVFA and circulating capital

Source: China Industrial Economic Statistics 1987

3.35 Finally, high prices and profits in certain industries have attracted investments in small, inefficient enterprises which have been able to corner scarce inputs. The development of a large number of township enterprises has served important purposes, including increasing production, creating jobs for the rural population, and complementing or supplementing the output of state-run enterprises. However, it also has led to competition with the large state-owned enterprises for scarce raw materials and energy. The large enterprises have been unable or unwilling to pay market prices for inputs and their output prices also are controlled.^{15/}

D. Recommendations for Price Reforms

The Case for Price Reforms

3.36 Changing the structure of relative prices is one of the most important elements of industrial policy reforms in the medium term. In the short term, the focus of policymakers seems to be fixed on getting inflation and aggregate demand under control, and there are good reasons to indicate this is a prudent course. However, in the medium term it will be difficult to overcome the problem of unbalanced investments without further price reforms.

3.37 The production of certain priority goods such as energy and key materials still takes place under the plan, so a large proportion of this output will have to be sold at state plan prices. As a

^{14/} For example, during meetings with the delegation, representatives from Liaoning Province and Shenyang City expressed their concern that the Province and City rely excessively on heavy industry while possessing an insufficient light industry base. As a result of the reforms, both enterprises and local governments have become much more concerned about financial performance. Liaoning Province does have a comparatively high concentration of heavy industry—70 percent in 1987, compared to 51 percent for the country and 37 percent for Guangdong Province.

^{15/} Many of the best equipped rolling mills or steel mills are reported to be standing idle, while energy consuming small township enterprises have been setting up steel rolling mills.

result, heavy industry production generally will be less profitable than the production of consumer goods. As long as the additional production of materials or energy benefits the locality or province that invests, additional levies can be imposed on local enterprises to finance the investment. It is more difficult to do the same with production that will be sold to other provinces. This is because it is difficult to skim off rents (the difference between the market price and state plan price multiplied by total production) at the production stage. It is much easier to do it at the final distribution stage, where industrial bureaus and enterprises are locked into a long-term close relationship of bilateral monopoly. Underpricing of raw materials, transport, and energy thus leads to a funding problem for projects that make national, but not provincial sense.

3.38 Adjusting the prices of these key goods upward would increase the funds available for large lumpy investments, the output of which would serve several provinces. In this way price reform would contribute to a more rational structure of production and investment. In addition, it would largely eliminate opportunities for rent seeking. According to this argument, the impact on the marginal costs of enterprises would be small, but the redistribution of rents, from the local to central government would be quite large. This redistribution may be desirable, but it could limit the possibilities of building a coalition to undertake price reform.

3.39 In sum, the underpricing of key inputs for the production of consumer goods has not been a major cause of excessive investment in light industry, but it depressed major, lumpy investments in heavy industry that would serve more than one province. Price reform therefore is an important step in stimulating the production of materials for interprovincial trade.

Recent Announcements on Price Adjustments

3.40 In conjunction with the current austerity program, the Central Committee has indicated its intention in 1989 to allow upward adjustments in the prices of energy, transport, and grains. These adjustments constitute an important step in bringing relative prices in line with scarcity values, reducing state and provincial subsidies, and increasing the efficiency of raw material resource use. As part of the measures in 1989, passenger railway fares were increased by 120 percent. In March 1990, freight charges were also increased. However, prices in the transport sector have lagged considerably behind demand and, until the recent increase, had not been raised since the early 1950s: the sector had been losing money constantly and the infrastructure of railways, seaways, and roads has suffered as a result. The increases in passenger railway fares are expected to provide some Y 6 billion for reviving the sector finances.

3.41 In the energy sector, a 50% hike in plan prices for coal has been postponed for late 1990, but already coal prices to power plants in most of the coastal provinces are approaching market prices. The "new plant, new price" policy for electricity is now applied in a way which avoids the creation of multiple price tiers; it is anticipated that by 1995, this policy could push average electricity prices at/or above the long run marginal cost of generation.

Policy Recommendations

3.42 Short of a full-scale price reform, several measures can be implemented immediately to increase the incentive of provinces to invest in priority sectors. These measures include:

- (a) Complete the "announced" price adjustments as soon as possible.

3.43 As stated, these upward price adjustments will help to bring up relative prices in key sectors to reflect relative scarcities. They also will help to reduce the price dualism in these sectors.

- (b1) Permit provinces to sell or exchange the output of new investments in key sectors of national priority across provincial boundaries at prices the market will bear;
- (b2) Permit banks to lend to these sectors on a priority basis, and at subsidized but positive real rates of interest. (see below).

3.44 These measures will increase provincial funds for large, lumpy investments, the output of which will serve several provinces. This type of "implicit" price reform also will contribute to a more rational structure of production and investments in the medium term, in that these highly profitable projects will actually pay close to the scarcity cost of capital--thereby avoiding capital intensity and overinvestment. During the transition, subsidized interest is an acceptable policy provided it is strictly limited to a few key industrial and social sectors. These subsidies make sense as long as price distortions persist and financial markets remain underdeveloped. In the longer run, these subsidization should be made directly on those sectors output and financed from the state budget so as to make their costs in the system explicit.

- (c) Eliminate price dualism by gradually raising the prices of key basic raw materials, energy, transport, and telecommunications as soon as possible to bring them in line with efficient prices.

3.45 Although the need for price reform in China is clear, there is disagreement about how it should be carried out. The major objection to price reform stems from the sensitivity of the Chinese system to inflation and the need to bring inflation under control. During the transition period, this need is often seen as the first priority. Some policymakers also consider a return to more rigid, centralized price controls the only way to solve the problems presented by the dual price regime. There is a fear that any price liberalization will be inflationary.

3.46 There are two rejoinders to this argument. First, it is not obvious that the current inflation during 1987/88 had been caused by price reforms exclusively. Indeed there is some evidence to show that had complete price reforms been undertaken early in 1987, when the pressure of aggregate demand was low, industrial prices would have increased by no more than 50 percent over a period of two to three years.^{16/} By 1988, however, this pressure was greater and price controls were instituted to prevent further price increases. Monetary policy would have been a more effective means of controlling aggregate prices at that time. It could be argued on the contrary that the continuation of heavy subsidies may have an adverse impact on public finances and monetary policy; by contrast, as preliminary studies indicate, price reform would likely reduce fiscal requirements; this in turn could permit a reduction and a rationalization of tax rates which would bring financial relief to some of the enterprises most affected by the reform.

3.47 The second rejoinder and more fundamental point is that, "implicitly" price liberalizations have already occurred, and will continue to occur. A reintroduction of price controls

^{16/} This is evident from the research work of Tian Yuan, Director of the Price Bureau, Development Research Center in Beijing.

and the material supply system that augments them represents a major regressive step. The report provides ample evidence to confirm this: (a) a larger and larger share of nonpriority goods, particularly consumer durables, are now selling at market prices instead of at plan prices; (b) the "official" ratio of market to state prices is anywhere from two to five; (c) the market prices of many key materials have already risen between 20-40 percent a year over the last four years; (d) by 1987, one-fifth to two-thirds of enterprise sales of key raw materials were sold outside the plan at market prices; (e) more and more enterprises and provincial authorities are making barter arrangements or unofficial commodity swaps for energy and other scarce resources at close; (f) many TVE, collectives, and state-owned enterprises already operate at market prices on the margin; and (g) the contract responsibility system is being regularly manipulated to avoid the difference between plan and market prices, and this creates incentives for diverting resources out of priority uses and regions.

3.48 In parallel with the price liberalization of commodities for which efficient markets have been developed, price adjustments have also occurred for the output of monopolies like railways and electricity (para. 3.41). These improvements are aimed at bringing prices more in line with the resources cost of these outputs and causing producers and consumers to behave on the basis of marginal supply costs as is the case on competitive markets. The movement towards efficient but nonmarket-based prices is a necessity to alleviate the distortions and endemic shortages in those key sectors dominated by natural monopolies. In sectors like coal where competitive markets could exist but are hampered by production and transportation bottlenecks, price controls would have to be kept for some time although, in the long run, only the full play of markets would bring about an efficient and viable price system.

3.49 The movement to bring the relative prices of grain, raw materials, energy, transport, etc. to their efficient level should be continued. Price adjustments should take place though price decontrol wherever possible (e.g., consumer durables) or otherwise through changes in regulated prices (e.g., energy). Some adjustments, such as for coal, will be substantial, trigger important income transfers among sectors and provinces; ultimately, they may lead to recasting the system of fiscal transfers and a renegotiation of the agreements signed under the CRS. Changes in the price structures for a few commodities like electricity will call for technical upgrading. In several cases, demand-price elasticities are large but unknown so consumer response cannot be predicted. For all these reasons, time-phase action plans are preferable to a one-time full swoop for basic commodities.

3.50 For all its difficulties, the acceleration of price reform should take place now at the start of the eighth five-year plan when inflation has abated and imbalances in the bottlenecked sectors have been reduced from their high level of 1988/89. This is a golden opportunity which should not be missed. Inaction would perpetuate distortions and thus entrench the rent-seeking behaviors and inefficiencies in resources allocation associated with the multitiered price system. The longer the next stage of price reform is delayed, the more difficult and costly it will be to root out inefficiencies, correct sectoral imbalances and get any system of indirect instruments to regulate the "planned commodity economy."

3.51 To be effective, price reform will have to be: (a) announced in advance to allow enterprises time to adjust; (b) part of a general "income policy" that allows some upward wage adjustments tied to productivity, possibly backed by imports to absorb demand pressures; and (c) followed

up by a policy of industrial restructuring when those that cannot adjust fall along the wayside (that means enforcing bankruptcy provisions) and preparing for the employment fallout.^{17/}

E. The Role of the Financial System

3.52 The role and reform of the financial system that supports the industrial sector is a critical component of industrial policies during the transitional period. Two World Bank reports outline the problems and issues facing the financial sector and make recommendations for its reform.^{18/} A brief summary of the key issues in the industrial sector is provided in this section; for a fuller discussion, readers should refer to reports noted below.

3.53 Before 1984, China had no banking system to speak of. The existing specialized banks served as bookkeepers of the central and local governments, disbursing budgetary grants for fixed asset investment and working capital. The cash and credit plan, instruments of monetary control, were, in principle at least, derived from planned investments and planned consumption. Resources were mobilized through profit taxes, which were drawn into the budget and then distributed according to the government's priorities. There was no financial intermediation.

3.54 This changed with the financial system reform in 1984/85. Banks were to function as banks, supervised by a central bank, the People's Bank of China. Budgetary grants were replaced by loans with interest charges. Enterprises could retain profits (subject to taxation), and individuals and enterprises could accumulate surpluses in bank accounts. Banks were to intermediate these funds, and channel them into profitable investments. Increasingly, competition between the specialized banks was allowed by allowing overlap in the customer base. China had begun to develop a deepening, more articulated financial system.

3.55 Since 1984, progress has been rapid. Banks now channel savings deposits into investments and have begun to compete with each other. They have created financial companies to escape central bank control and they have started to critically appraise the projects they are asked to finance. Despite rapid progress over the past five years, however, a functioning banking system with a minimum of autonomy and subject to hard budget constraints has yet to emerge.^{19/} Most loans by the specialized banks, the People's Construction Bank, and the Industrial and Commercial Bank in the industrial sphere are covered by the mandatory plan. This means, in effect, that the State Planning Commission and local planning commissions assign investment projects that have been approved by the planning system to banks for financing. It is difficult to estimate what percentage

^{17/} To do this effectively requires an integrated approach to the study of price reforms that examines both the macroeconomic and microeconomic implications of price reforms in the medium term. This type of approach is urgently needed in China.

^{18/} Recommendations for long-term reform of the financial system are outlined in: World Bank, China: Finance and Investment, Report No. 6445-CHA, June 11, 1987. Medium term policy measures that could be implemented in the transitional regime are spelled out in: China: Financial Sector Review: Financial Policies and Institutional Development (8415-CHA) dated April 3, 1990.

^{19/} This should not be surprising. In Europe, it took centuries for the modern banks of today to evolve. This development will be much faster in China, but to build up financial expertise and to gain independence from government will necessarily be a slow process.

of the portfolio is determined in this way, but information given to the mission suggests that at least 80 percent of PCBC's and ICBC's channeled funds are not within their control.^{20/}

3.56 While the central and provincial authorities clearly exercise important allocative roles, the banks still have some say in the decision of what investments to finance. Normally, banks are involved in an early stage in the project approval process; they can raise issues and object to the financing mix, and their input can lead to a redesign of the project so as to improve the financial rate of return. Banks can refuse to sign the final assessment plans, and if banks strongly disagree, sometimes the project will not get financed even though it is in the plan. If there are disagreements over some large plan investments, in theory the decision can go up to the State Council.

3.57 In this type of system any loss of access to credit rights is seen as a loss of real resources, and any additional credit that can be obtained is seen as a gain of real resources. This calculation underlies many of the macroeconomic difficulties that have become apparent over the past years. Local governments do not like to see local banks remit excess reserves to the next level in the hierarchy, or to see banks lend excess reserves to other banks--even if from the same bank--in other localities. The rule of the game is to keep deposits within the local boundary, and to try to annex resources by attempting to force the hand of the central bank.

3.58 Regional financial markets have grown dramatically since the beginning of the 1980s, and the diversity of sources available for capital formation also have increased. Self-financed lending, inter-enterprise loans, bank loans, money markets, issues of stocks and bonds, and a rapidly developing interbank lending market are now commonplace.^{21/} In several locations, rudimentary stock markets have begun to develop.

Interest Rate Policies

3.59 The control of credit and the provision of preferential interest rates are key instruments of industrial policy. A recent statement on industrial policy by the State Council directed the banking system to align lending and interest rates with the priorities of industrial policy. (See chapter 2) The banks are to join the SPC and the Ministry of Finance in drawing up a priority list of fixed asset investment loans and activities to receive subsidized funds. In the short run, investment demand is to be controlled by way of directed credit and credit ceilings. In the longer run, differential interest rates and loan guarantees are to be used more to guide the allocation of resources.

^{20/} Actually it is very hard to determine the ratio of total funds that is channeled and tied to planned investments. The PCBC balance sheets in 1986/87 for example, show total assets of around Y 339 billion, and Y 172 billion (or 51 percent) for "government investments." But this is not a good measure of what investments are tied to planned investments. All that can be said is that it is higher than this ratio.

^{21/} Since 1987, there has been an interbank lending market in operation. There is a regional pattern to the flow of funds. Generally, the coastal provinces such as Guangdong and Jiangsu have greater investment opportunities and experience more capital shortages which the interior provinces like Sichuan and Yunnan have fewer investment opportunities and more capital surpluses. In these cases the provincial PCBCs negotiate a transfer of capital at a fixed rate. So some capital mobility has started. The extent of the funds that move through it is unknown, but it remains small given the size of total funds used for investments.

3.60 The financial markets have a number of major shortcomings as they currently operate. First, the cost of capital may still be below market-clearing levels in some cases, even though the general level of rates is now substantially positive in real terms. Second, because capital is cheap for certain state enterprises, enterprise demand for investment funds substantially exceeds supply. Third, there are very substantial and seemingly arbitrary differences in the cost of capital for different sectors and types of enterprises. Fourth, markets remain fragmented, which makes it difficult to raise funds for large investments while the proliferation of inefficient, small-scale projects is encouraged.

3.61 As the government's ongoing stabilization program has brought inflation under control, real interest rates have risen. Annualizing the rate of inflation for the first quarter of 1989 (about 7 percent), then the average rate would be 3.5 percent for loans.^{22/} Given light of the high Chinese savings rate, this average is more than appropriate; however, it hides the wide dispersion of rates across the various sectors and purposes of the loans. Some priority sectors within the plan continue to receive a significant portion of their financing at negative real rates. Negative real rates of interest have had two adverse consequences. First, they make extensive administrative rationing for investment decisions necessary, allowing interference by officials at all levels. Second, they make highly capital-intensive investments become feasible, with unwanted labor-displacing effects. The prevalence of inexpensive capital also makes highly capital-intensive projects feasible. This bias is further reinforced by the desire of enterprises and officials to obtain state-of-the-art technologies embodied in equipment that has been designed in industrial economies which have higher labor costs.^{23/}

3.62 The financial system thus includes many distortions that lead to different real costs of capital for different sectors and enterprises. These are an amalgam of different rates of interest, different provisions regarding the deductibility of loan repayments from taxable income, and different depreciation rates. With respect to the latter, the depreciation rates that apply to SOEs and urban collectives are fixed by the Ministry of Finance while the rates for TVEs are set by the local provinces. Not only are depreciation rates for TVEs higher than those for SOEs and urban collectives, but TVEs are also authorized to establish repair funds as a part of their costs.^{24/} The larger depreciation allowances that accrue to TVEs give them a proportionally larger source of self-financed investment funds.

3.63 With decentralization, local governments have been receiving a larger share of enterprise profits and taxes, and now also exert considerable influence over bank lending. The excess demand for investment funds and resulting need for administrative rationing have created excessive opportunities for bureaucratic intervention in bank lending decisions. Since the regional structure of the

^{22/} See China: Financial Sector Review: Financial Policies and Institutional Development, Report No. 8415-CHA (dated April 3, 1990).

^{23/} The Bank mission encountered several enterprises in which manufacturing processes had been imported wholesale, the result being relatively few workers assigned to comparatively sophisticated equipment with exceptionally high levels of labor productivity. One such example is the Chengdu Polyester Fiber Factory, which reports a work force of 1,000 and an average level of labor productivity of Y 90,000, the highest in Chengdu. This polarization of labor productivity and wide dispersion of wage levels complicates efforts to develop effective labor markets.

^{24/} In Jiangsu Province, the effective depreciation allowance for TVEs consists of two parts, the actual depreciation rate of 7.4 percent and a "repair fund" equal to 4.8 percent of the enterprise's asset value. The total effective depreciation rate is therefore 12.2 percent, substantially higher than the 6 to 7 percent allowed SOEs and urban collectives.

banking system often places bank officials at the mercy of local officials for a variety of supporting facilities including housing for the bank staff, local officials can use a number of indirect controls over lending decisions. In addition, studies have found that profit retention contracts are often violated, with local officials arbitrarily requisitioning enterprise funds for investment in local infrastructure facilities, development of new products, or support of local welfare services.^{25/}

Directed Credits and Credit Ceilings

3.64 The PBC possesses a number of instruments for controlling the supply of money and domestic credit. These instruments include: (a) reserve requirements; (b) PBC credit; (c) ceilings and other limitations to credit expansion; (d) interest rates; and (e) interventions by the PBC in the interbank market. The imposition of credit ceilings has been the most important instrument for controlling the supply of domestic credit to date.

3.65 The overall credit ceiling is determined within a planning framework and takes into account projected growth and inflation, although the end result generally involves a compromise between the SPC and the PBC. The PBC sets aside about 5 percent of the global quota for distribution by its own branch network and allocates the rest to the main financial institutions. The PBC determines the level of credit to be granted to the banks partly on the basis of their historic shares in lending. Another consideration is that the banks have to cover the borrowings of enterprises undertaking Plan investments. The commercial banks in turn apportion quotas to their own provincial branch networks. The resources of the commercial banks comprise primarily savings deposits and funds from the PBC. However, the major constraint on the amount each bank can lend is the credit ceiling. The PBC checks commercial bank lending every month and lending by local PBC branches every 10 days. The domestic credit funds granted by the PBC also extend to the government to finance the deficit.

3.66 Domestic credit growth is largely determined by lending to enterprises. Loans to industry account for almost one-half of the growth in total lending. Lending to agriculture and rural industries makes up another quarter of the total and is characterized by greater swings in the pattern of loans. However, credit controls only operate on a part of enterprise spending. About 40 percent of fixed investment is financed through retained funds and 25 percent is financed through the budget. Thus credit controls operate on about one-third of capital spending plus working capital.

3.67 In the past, the authorities have had difficulty in controlling credit because decentralization has intensified demand and has allowed provincial authorities undue influence over branch banks. The typical pattern has placed the most severe credit restrictions on peripheral borrowers: collectives and TVEs. This pattern was repeated in the current round of austerity. The central government wishes to limit the growth rate of rural enterprises, which expanded by about 30 percent in 1988, to 15 percent. However, the austerity measures have an uneven impact because TVEs also rely on local fund raising activities outside the State banking system.

3.68 The current structure of interest rates for credits is outlined in Table 3.9. As shown in the table, interest rates were increased marginally in September 1988. The key lending rate on fixed

^{25/} See "Between Plan and Market: The Role of the Local Sector in Post-Mao China," by C. Wong, Journal of Comparative Economics, No. 11, 1987, pp. 385-98.

asset loans of one to three year's maturity was increased to 10.8 percent. This interest rate was significantly negative in real terms during 1988 and 1989.

Table 3.9: INTEREST RATES ON LOANS, 1987-90
(Percent per annum)

	1987	Sep 1988	Feb 1989	Mar 1990
State industrial and commercial loans				
Working capital	7.92	9.0	11.34	10.08
Fixed assets loans				
One year or less	7.92	9.0	11.34	10.08
One to three years	8.64	9.90	12.78	
Three to five years	9.36	10.80	14.40	
Five to ten years	10.80	16.20	19.26	
Over ten years				
Loans financed by issuance of ICBC bonds	10.80	10.80		
Credit in place of appropriations <u>/a</u>		3.60		
Agricultural loans				
Loans for collective crop production	7.92	9.0	11.34	10.08
Loans for collective crop investment				
One year or less	5.76	9.0	11.34	10.08
One to three years	6.48	9.90	12.78	
Three to five years	7.92	10.80	14.40	
Over five years	7.92	13.32		
Loans financed by issuance of ABC bonds	10.80	10.80		
Households				
Agricultural production loans	7.92	9.0		
Individual industrial and commercial loans		9.0		
Loans for township enterprises				
Working capital	8.64	8.64		
Fixed assets loans	10.08	10.80		

/a PCBC credit financed by on lending of budgetary funds

- Notes:
- (1) On February 1, 1989, the People's Bank of China raised interest rates on loans by 26 percent except for the production of grains, cotton and edible oils, and for export-oriented production and high-priority projects, which remain unchanged or even lowered.
 - (2) On March 21, 1990, interest rates on loans were cut by 1.26 percentage points, in order to moderately increase loans to solve the problem of low industrial growth.

Source: People's Bank of China

3.69 The rate structure outlined here represents theoretical levels, as there are many variations in rates reflecting industry policy objectives. Lending is classified into two main categories: technical renovation and capital construction. It is in the category of capital construction that ex-ante interest rate preferences are granted.

3.70 As of February 1989, credit preferences applied to 16 activities. These activities included agriculture, infrastructure, and basic materials (such as oil and coal).^{26/} In general these activities are characterized by long lead times for investment and a limited ability to repay loans. Repayment ability is limited because many of the activities are subject to price controls which depress returns. The interest rate preferences formally can be between 10-30 percent, depending on the product. In other words, the formal subsidy is 10-30 percent times the amount borrowed. In practice the preference is often larger and can result in interest repayments as low as 5 percent.

3.71 The above credit preferences apply formally and before the fact. However, the financial system also is saddled with a high proportion of bad loans, representing up to 10 percent of all loans. Poorly performing enterprises often are provided with assistance, including the rescheduling of their debts. The banks are instructed to maintain their lending to these enterprises and the bad loans provide an indication of the soft budget constraint on enterprises. The banks now have the power to seek a formal declaration of bankruptcy from poorly run enterprises; however, this power has seldom been invoked to date.

3.72 There are some production activities for which the banking system will not provide loans in accordance with directions from the SPC. Initially, there were only about 10 activities on the negative (or restricted) list. These activities included very small paper factories, oil refineries, and the production of tobacco and liquor. This negative list was subsequently formalized and expanded in the March 15, 1989 statement on industrial policy (See Chapter 2).^{27/} Enterprises which are refused loans are required to borrow in the curb credit market at floating interest rates of up to 30 percent.

Recommendations for Financial Policies

3.73 The efficiency of the financial system is a major factor in the efficiency of the real sector of the economy. Over time, the financial system will be called upon more and more to allocate resources in response to changing market opportunities. Four key areas of reform need to be addressed before the financial sector can effectively fulfill this role. These areas include: (a) rationalizing the level and structure of rates; (b) hardening the budget constraint for banks and enterprises, which implies a separation of management and ownership functions; (c) using credit ceilings; and (d) increasing the autonomy of the PBC and commercial banks. These points are briefly discussed below.

3.74 Six discrete steps may be taken to further the autonomy of the financial system. These steps include:

^{26/} See Chapter 6 on the sectoral priorities specified in the 1989 Industrial Policy Statement.

^{27/} See Chapter 6 for the restricted list in the 1989 Industrial Policy Statement.

- (a) Establishing vertical chains of command within the specialized banks, so that the heads of local banks are responsible only to their headquarters. This would reduce the influence of local government on the local banks.
- (b) Locating the decision-making power for projects one or two levels--according to project size--above the level of government that undertakes (or approves) the project. This would make sure that the project is considered in a wider regional context.
- (c) Giving banks an incentive to invest in priority sectors by making it profitable to do so. At present, loans for priority investments with low interest rates are assigned to local banks, and represent a drain on their resources which they try to avoid. Generous refinancing terms for such loans could be made available in the transitional regime, through the central bank, for example, through discounting. However, these terms only should apply to a few key sectors, for which interest rate subsidies have been approved as a matter of policy.
- (d) Maintaining the average positive real interest rates of 2 to 4% that were obtained in late 1989, abolishing differential rates of interest for construction and technological upgrading investments, and making the structure of rates more uniform.
- (e) Setting credit ceilings at aggregate rather than sectoral levels, and eventually phasing them out.
- (f) In the longer term, enhancing the autonomy and accountability of the financial sector, by requiring enterprises to pay back all their loans on a timely basis and allowing banks to refuse to lend to enterprises in default on their loans.

IV. ENTERPRISE AUTONOMY AND ACCOUNTABILITY

A. Introduction

4.1 This chapter takes a microeconomic perspective, examining policies as perceived and acted upon by industrial enterprises. The objective is to identify what further changes are needed to make state-owned enterprises function more effectively. The analysis focuses on the regulatory and institutional environment as it affects the behavior and responses of industrial enterprises. The policy concern is how to make enterprises more autonomous and accountable for their decisions.

4.2 Three major policies are examined in this chapter: (a) the contract responsibility system; (b) enterprise taxation policy; and (c) methods of increasing domestic competition. The first policy is mainly an administrative matter. The second policy has the potential for regulating enterprise behavior indirectly, though in its present form it is also used as a part of the administrative-command system. The above two policies also have links to labor policies, because of their relationship to wage payments and bonuses. The third policy involves using domestic competition to make enterprises more accountable. Much of the material in this chapter is based on enterprise surveys and interviews with local agencies.^{1/}

B. The Contract Responsibility System

4.3 The contract responsibility system is the principal instrument used by the government to directly control behavior of enterprises. The intention of this policy innovation was to provide the enterprise manager, through a mutually-agreed upon contract, with a broad set of performance targets and the incentives to achieve or exceed.

4.4 The contract responsibility system as it presently operates has two principal drawbacks. First, the case-by-case implementation of the system results in similar enterprises being subject to very different profit, tax, profit allocation, and investment requirements. Second, the negotiable status of the system's provisions enable both enterprises and bureaucracies to manipulate the after-tax profitability of specific activities independent of their underlying efficiency.

4.5 Because these contracts are prepared by supervisory bureaus in accordance with local regulations, the scope of the contracts varies substantially among industries and regions. Moreover, since the contracts are negotiated between the supervisory bureau and each of the enterprises for which it is responsible, the specific content of the agreement may vary considerably among very similar enterprises. As a rule, however, the larger the participating enterprise, the greater the scope of administrative control exercised by the supervisory bureau.

1/ The survey was carried out during February and March 1989 and included 21 enterprises. It consisted of an initial data survey followed by an on-site interview with the factory director and staff. The sample included 16 state-owned enterprises, 3 collectives, and 2 TVEs distributed principally over the iron and steel, consumer durables (color TV, refrigerators, and bicycle), and chemical fiber sectors. The 21 enterprises were located in Shenyang (6), Chengdu (6), Shanghai (5), Wuxi (2) and Suzhou (2). See background paper No. 9, CHINA: A Survey of Selected Chinese Enterprises and Their Agencies - 1978-88 (in two volumes: Vol. 1, Enterprise and Agency Field Reports, and Vol. 2, Firm Level Data and Questionnaires), by I.J. Singh, Gary Jefferson, and Gang Zou.

4.6 Table 4.1 presents the results of a field survey of 16 enterprise responsibility contracts carried out by the Bank mission.^{2/} The type and incidence of the provisions indicate several important changes in the regulatory environment and behavior of enterprises during the reform period. One of these is the general shift of emphasis from physical targets to financial targets. The emphasis on profits, profit distribution, and taxes contrasts sharply with the earlier system in which almost exclusive attention was given to physical quantities of inputs and outputs.

Table 4.1: VARIATION AMONG PROVISIONS SPECIFIED IN ENTERPRISE RESPONSIBILITY CONTRACTS

Item	SOEs (11)	COEs (3)	TVEs (2)
Gross output	1	1	2
Gross profit	10	3	2
Product innovation	8	0	0
Fixed assets	8	0	0
Income tax	3	0	0
Amount	3	0	0
Rate	6	0	0
Profit remittance	4	0	1
Marginal tax rates	-	-	-
Loan repayment	-	-	-
Categorical fees	0	0	2
Growth of bonus fund	8	0	1
Distribution of excess profits to manager	9	1	2
Penalties for nonfulfillment of contract	6	2	1

Notes: (a) Number in each group subject to specific provisions.

(b) Categorical fees sometimes imposed upon TVEs include the following: (1) educational, (2) social, (3) agricultural construction, (4) maintenance, (5) social welfare, (6) land occupancy

Source: CHINA: World Bank Enterprise and Agency Survey, by I.J. Singh, G. Jefferson and G. Zou, Vol. I, pp. 2-64

4.7 The connection between profits and rewards to managers is particularly noteworthy. Nine of the eleven SOE contracts report specific provisions for distributing profits in excess of profit

^{2/} Eleven of the contracting enterprises are state-owned, three are collectively-owned, and two are township-village enterprises.

targets to the responsible managers. A number of the contracts also include penalties for not fulfilling critical contract targets, particularly the profit target.^{3/}

4.8 An intrinsic feature of the contract responsibility system is the negotiable status of the enterprise's tax, profit remittance, and loan repayment obligations. The amounts and rates implicit in these agreements determine the relationship between the enterprise's before- and after-tax profits, which in turn determines the amount of retained earnings available for bonus payments and reinvestment. In principle, after accounting for the adjustment tax, after-tax profits should be an increasing function of before-tax profits. The survey revealed that this is not always the case.

4.9 The basic shortcoming of the responsibility contract is its emphasis on fixing quantitative targets, particularly gross profit targets. Within a highly uncertain economic environment and a complex bureaucratic environment, the fixing of targets invites violations and pressures to renegotiate specific provisions. For most enterprises, input prices and supplies and product prices are set by a complex array of government bureaus, regulations and market forces. Even at the margin, output prices are often controlled by ceilings, bands, formulas, etc. Under such conditions, input supplies and prices often deviate significantly from those implicit in gross profits and other quantitative specifications.

4.10 In practice, most contracts cover a period of three years. However, the existing uncertainty limits the ability of supervisory bureaus and enterprises to negotiate effective provisions for periods of more than a year or two. Concern that directors will maximize short-term profits or worker benefits at the expense of making productive long-term investments has (as shown in Table 4.1) resulted in the incorporation of annual investment or fixed asset targets, targets which taken over all enterprises contribute to a dispersion of inefficient small-scale investments. The alternative of negotiating long-term contracts, say over a period of seven years, results in agreements that become, for reasons described above, increasingly unrealistic and unenforceable. Hence, an inherent inconsistency of the contract responsibility system is that short-term contracting motivates short-term profit-maximizing behavior while long-term contracting leads to the specification of arbitrary and unenforceable targets.

4.11 One recurrent feature of the contract responsibility system is the built-in tendency to renegotiate and revise the agreements for a variety of reasons. These include: (a) substantial increases in raw material input prices; (b) losses associated with the start-up or expansion of exports; (c) unexpectedly high profits; and (d) changes in tax regulations of the central government. When profits fall below their expected levels, in addition to renegotiating the profit, tax obligation, and loan repayment provisions of the enterprise's outstanding responsibility contract, enterprises attempt to restore profitability by manipulating administered input and output prices or adjusting the "within plan" share of production and input purchases. This combination of bureaucratic responses to falling profits that have no direct bearing on enterprise efficiency substantially "softens" the enterprise's budget constraint.

^{3/} In a recent survey of 20 industrial enterprises in Wuhan, 9 factory directors reported that their performance and the rewards they receive are "closely related," 6 indicated "somewhat related," and 6 reported that performance and rewards were "unrelated." See "The Impact of China's Economic Reforms on Enterprise Structure and Performance: A Survey of 20 Industrial Enterprises," by G. Jefferson and W. Xu, 1989.

C. Enterprise Taxation Policy

4.12 The current tax regime in China has been examined at length in a recent Bank report.^{4/} Many of the issues and problems with this regime do not need to be repeated here. Instead the discussion will focus those taxes that are the most relevant for industrial enterprises and behavior.

4.13 The tax "lever" does not work within a coherent industrial policy framework. Most of the leverage comes from industrial bureaus at the provincial level and from the provincial authorities responsible for tax administration. The central authorities play a limited role in directing resources through differential taxes. Moreover, dispersion in tax treatment leads to rent-seeking behavior and reinforces the symbiotic relationship between bureaus and enterprises.

4.14 The current delineation of tax powers between the central government and provinces, together with the limited autonomy of enterprises, facilitates the use of tax policy to soften the budget constraint. Political economy is at the heart of the problem--provincial government leaders feel responsible for enterprise performance and prefer to exempt enterprises from taxes rather than have many explicitly loss-making enterprises on the books. The dispersion in rates also results from the use of taxes to offset the effects of distorted prices and the lack of capital change on historically allocated capital. The authorities have shown a preference for using taxes and subsidies to control demand and supply, rather than allowing the price system to more efficiently achieve the same result.

4.15 Tax rates also vary considerably among products within the same product group, and the differences in rates often cannot be explained by differences in measures of economic performance or calculated supply and demand elasticities. In one factory, rates on products within the same product group ranged from 5 percent to 25 percent even though the two products at the top and bottom end of the tax range reported identical pretax profit rates.^{5/} Factory officials themselves, at times, do not understand the underlying economic rationale for differentials in product tax rates. These rate differences therefore can also lead to distortions of relative supplies and critical shortages.

4.16 Product tax rates are used as sectoral policy instruments with the intention of influencing the relative profitability and mix of production. However, in some instances a factory's product mix also may be influenced or controlled by other policy instruments. These include the administration of input and output prices and proportions of within plan inputs and outputs, and the use of the responsibility contract to directly fix the enterprise's product mix.^{6/} In such cases, the set of instruments used to affect supply is overdetermined and the product tax is redundant.

4/ See World Bank, China: Revenue Mobilization and Tax Policy: Issues and Options, Report No. 7605-CHA, June 15, 1989.

5/ Within the Shanghai Petrochemical Company (SPC), product tax rates range from 5 percent to 25 percent. According to representatives of SPC, these rates have not changed during the past 5-6 years. Among five products within the same chemical fiber product group, the correlation coefficient of the gross profit and product tax rates is -0.23. Polyester filament and low density polyethylene, which have identical gross profit rates, are subject to the lowest and highest profit tax rates, respectively.

6/ In the case of the Shanghai Petrochemical Works, all three instruments are used--the product tax, administered input and output prices, and a specification of product mix in the responsibility contract.

4.17 The cascading nature of the product tax makes the effective tax burden on different enterprises very hard to calculate. It is particularly hard to calculate for industries such as electrical power, coal and coke, petroleum, heavy chemicals, construction materials, and heavy forestry industries, where prices are very distorted and cascading effects are higher than within processing industries. These cascading effects also undermine the effectiveness of indirect taxation as an instrument of industrial structuring. On the other hand, the Government enjoys the revenue-generating effect of the cascading nature of the product tax.^{7/}

4.18 When used mainly to tax windfall profits, the adjustment tax creates many problems. This is mainly because it is difficult to determine the extent to which profit differentials result from different price structures or different levels of technical efficiency. To the extent that they result from the latter, this mechanism undercuts, the motivation of both managers and workers; over time, large increases in profits associated with successful enterprise operation tend to be taxed away through the adjustment tax. However, evidence suggests that this tax has become less important in recent years, since the advent of the contract responsibility system.

Implications of Enterprise Taxation Policies

4.19 A notable development in government revenue collection has been the steady decline in direct taxes on enterprises. Direct taxes accounted for 38 percent of budget revenues in 1988--80 percent of which came from state enterprises--while in 1978 they accounted for 62 percent of total revenues. On the other hand, indirect taxes have become a more important source of revenue since 1978. Their share of total revenue increased from 35 percent in 1978 to 46 percent 1988. Within indirect taxes there has been a shift away from product taxes to value added taxes.

4.20 There also have been major changes in the way enterprises are taxed. Prior to 1978 all surpluses were handed over to supervisory authorities and all deficits were met from government budgetary resources. Beginning in 1978 a unified profit tax system was introduced. The shift to this system has been complicated, however, by a number of other ad-hoc taxes levied from time to time--an "adjustment tax" (relatively minor), a bonus tax, a construction tax and, more recently, a value-added tax in certain sectors, as well as extra budgetary levels. Here, as elsewhere, the profit tax rates have become a subject of negotiation and bargaining between enterprises and their supervisory authorities and other government agencies. What makes the system even more complicated is that these profit rates are part of the contract responsibility system and hence are constantly renegotiated as part of the contract adjustment procedure. As a result, no unified system of enterprise taxation is in place at present.

4.21 In theory, there is a framework of direct taxes on profits that applies to state industrial enterprises. This framework comprises a flat tax of 55 percent on taxable profits for large- and medium-sized enterprises. Smaller enterprises pay taxes according to their income, and the rates range from 7-55 percent. Taxable profits are calculated from enterprise income minus costs including depreciation, and interest and principal paid on bank loans. The income tax is collected by local authorities but generally is remitted to the level of government which owns the enterprise.

^{7/} The evidence on the effects of tax cascading is provided in World Bank report, China: Revenue Mobilization and Tax Policy: Issues and Options, Vol. 1, p. 46, June 1989.

4.22 There are three features of interest in tax system as it operates at the enterprise level. These are shown in Table 4.2. First, tax rates differ significantly by sector, not only for the VAT, but also for the profit and adjustment taxes. Second, there is no apparent relationship between the profit and adjustment tax rates and the profitability across sectors. Third, these rates differ from enterprise to enterprise even in the same sector.^{8/}

Table 4.2: TAX LEVIES IN SAMPLE ENTERPRISES - 1988
(In Percentages)

Ratios	Iron and steel	Household durables	Chemical fibers
VAT & Product Tax/GVIO	8.3	7.1	5.6
Profit & Adj. Tax/Total Profit	26.0	46.2	3.3
Net Profit/GVIO	5.7	3.4	10.2

Source: CHINA: World Bank Enterprise and Agency Survey, by I.J. Singh, G. Jefferson and G. Zou, 1989, Vol. II, pp. 15-20 & 139-220

4.23 Direct taxes vary considerably between enterprises. In the group of enterprises surveyed by the mission, direct taxes were highest on enterprises in the household durables sector--they paid direct taxes, in terms of output value, that were 50 percent higher than those levied on enterprises in the steel sector. Enterprises in the chemical industry paid very low direct taxes as a result of their small size and the fact that a number of them recently undertook major investments. Consequently, they were able to deduct relatively large amounts of principal and interest repayments from taxes.

4.24 The above discussion points to another problem with the tax system. The provision that allows interest and principal on bank loans to be deducted from pretax income prevents state-owned enterprises from bearing the full cost of capital investment. Assuming a 55 percent marginal income tax rate, then the government is picking up about half the cost of capital investment due to the generous treatment of principal. However, collectives must pay half the principal before tax and half after tax.

4.25 The generous treatment of borrowing for tax purposes should be viewed in its historical perspective. Before the reforms, all enterprises--including their expenditures and revenue--were owned by the state. Since the reforms, enterprises have been required to borrow from banks and to use retained earnings for the purposes of investment. At first, borrowings were relatively minor and retained earnings were low, the government assumed a large part of the investment risk by allowing the deduction of interest and principal from taxes. However, since then the situation has changed and a larger part of investment is being financed from retained earnings and borrowings.

^{8/} The ratio of the standard deviation to the mean for all these ratios is high in the sample data for each sector. (Data not shown in table).

4.26 The authorities are considering changing this tax provision, and some experiments are taking place in Chungching. The practice there has been to allow enterprises a tax at 35 percent (in lieu of 55 percent) if they pay the principal on bank loans after tax. The reform initiative has, not surprisingly, met with opposition, but it is planned to extend the experiment to several other cities. In general, under this tax initiative capital-intensive activities will lose out to labor intensive ones.

Enterprise Taxation and the Contract Responsibility System

4.27 For many enterprises income taxes are made redundant by the contract responsibility system. Contracts are signed between state enterprises and the Finance Department and cover items such as profit or tax delivery, investment, innovation, and wage policy. Profit deliveries are frequently calculated after the enterprise has developed a future investment plan in consultation with supervisory agencies. Thus the contract is intimately related to an agreement on performance which closely binds the enterprise to supervisory agencies. The contract usually covers a period of three to five years. The most common variant of contracting is the contract responsibility system, which is used in 60-70 percent of all medium- and large-scale enterprises. In this variant a state enterprise is obliged to deliver a tax quota in lieu of income and adjustment taxes. A quota is set for a base year and then is increased annually, usually by 7 percent. However, this marginal rate varies across enterprises.

4.28 In practice, the tax obligation under the contract responsibility system is subject to all sorts of bargaining and few penalties are imposed for breaking the contract. Taxes are made to fit specific enterprise circumstances and obligations may be reduced, for example, if an enterprise has a large interest rate payment due to an investment expansion. In this way the tax preference effectively reduces the cost of capital. Alternatively, contracts may be broken due to poor performance or unfavorable price changes. The tailoring of taxes to specific enterprise circumstances is another way in which the soft budget constraint is manifested in the economic system. Typically the Finance Ministry makes up for any shortfall in revenue.

4.29 In a more general manner, the price system also may be seen as an implicit form of taxation. Many state enterprises are allowed to sell incremental output at market prices. However, in setting the proportion of output that must be sold to the state at controlled prices, the authorities take into account the profitability of the incremental sales. If the profitability is thought to be very high, the fixed quota is increased in the following years. This could be seen as an implicit tax on profits.^{9/}

4.30 The taxation system, of which the contract responsibility system is an integral part, has five principal shortcomings. First, the negotiable status of the enterprise's tax package softens the enterprise's budget constraint. Second, case-by-case negotiation results in effective tax rates that lack horizontal equity. Third, as an incentive device, the product sales tax often is inefficient and redundant. Fourth, the very power to negotiate taxes and profit remittances confers on local agencies the power to intervene excessively in enterprise decision-making. Fifth, the financial responsibility

9/ Selling on the free market can be very lucrative. For example, an iron and steel company visited by the mission was entitled to sell one-third of its output at market prices--which were more than twice as high as the fixed state price. However, in recent years the authorities have increased the proportion of output to be sold to the state which has lowered the profitability of the enterprise.

system, which defines the tax obligations between the central and local governments, creates incentives for evasive tax behavior.

4.31 Because profitability can be manipulated by ad hoc bureaucratic negotiations, the incentive for managers to avoid unprofitable decisions is compromised. Among the enterprises surveyed, the mission found repeated evidence of renegotiated and reduced tax obligations and renegotiated prices as a means of adjusting to declining profits. Because loan repayments result in proportional reductions in local government resources, these tend to be used less frequently than tax reductions or price adjustments. Tax reductions are shared with the central government and the costs of price adjustment are spread throughout the economy.

4.32 Enterprise-by-enterprise negotiation of after tax profits results in negotiated tax outcomes that are inconsistent with the principle of horizontal equity. Whether rates are fixed or progressive, after-tax profits should be an increasing function of before-tax profits. The negotiable status of the tax package, however, violates this principle.^{10/}

4.33 The prevailing fiscal system implicitly encourages tax evasion by local governments. Under the financial responsibility contract with the central government, the city is obligated to make a base tax payment and convey a portion of tax revenues in excess of a negotiated limit to the central government. By shifting the enterprise's obligation to the repayment of loans rather than the payment of taxes, the city is able to reduce the increment in its tax revenue and thereby reduce the potential payment to the central government. Moreover, by reducing its overall tax revenues, the city is able to reduce the pressure to increase the base when the financial contract is renegotiated with the central government.

4.34 Both local governments and enterprises report a measure of satisfaction with negotiated tax arrangements under the responsibility contract system. This is not surprising. Financial bureaus benefit from the receipt of predictable revenues whose growth is expected to be stable. Enterprises like the system because the marginal tax rates specified or implied in the contracts are very low. Thus, there are vested interests in retaining the present contract responsibility system in spite of its many flaws.

D. Labor Policies

4.35 Wage bonuses were first introduced to provide incentives for increased productivity. Since then, however, the link between bonuses and profits has been found to be highly tenuous.^{11/} More recently the "optimal labor composition program" was introduced to allow managers some latitude in reallocating labor. This program has been difficult to implement, and since it only allows labor to be reallocated within enterprises, the opportunities for reallocation across enterprises have been quite limited. In principle, managers have the authority to lay off workers, but their ability to use this power is severely circumscribed. The absence of labor and housing markets and a government-supported social insurance program make layoffs and labor mobility all the more difficult.

^{10/} Within the sample of 20 enterprises surveyed for this report, the rank order of after-tax profits relative to before-tax profits changed in many cases.

^{11/} Although wage bonuses in the aggregate and over time have moved in line with profits, the link between bonuses and profits is much weaker from year to year at the enterprise level.

4.36 Another consequence of the absence of labor markets is that wage payments are not subject to market discipline. That is, enterprises operating under three-year contracts are maximizing short run returns, causing a bias toward rewarding labor rather than reinvesting in productive assets. Ultimately, factor payments are determined by government regulation and negotiation with enterprises, rather than being regulated by competitive factor markets. However, since payments to labor include a wide range of pecuniary and in-kind payments, it is difficult to determine if labor's share of factor payments is consistent with its technical contribution to production.

4.37 At various times in the past, the government has expressed concern about rapid growth in wages and bonuses and this effect on demand. As a substitute for market discipline, the government has attempted to develop various guidelines and regulations concerning rewards to labor. According to principles proposed by the State Council, the enterprise's wages and bonuses per worker are expected to represent a fixed proportion of labor productivity. To implement this principle, the Ministry of Labor specifies an annual rate of increase in the total wage fund for each sector. (In practice, local governments may implement salary increases for up to 20 percent of the workforce within their jurisdictions.) Since bonus payments are limited to four and one-half months of the basic wage fund, for enterprises that are distributing the maximum allowable bonus, wages and bonuses in principle grow together.

4.38 According to these guidelines, if the average wage plus bonus payment and labor productivity remain in fixed proportion, the ratio of the wage fund to gross output also will remain fixed. Published figures indicate that the actual practice of cash remuneration has been largely consistent with these guidelines. The wage fund as a share of gross output of state-owned industry was 6.14 percent in 1978, 7.29 percent in 1985, and 7.75 percent in 1987.^{12/} Although, as a share of gross output, these proportions are comparatively low, they do not include the value of many other in-kind payments and services.

4.39 The ratios cited above do not provide a good test of whether annual changes in enterprise labor productivity drive wage and bonus payments. These relationships are explored in a regression analysis of the 20 enterprises surveyed, and the results are reported in Table 4.3. The statistically insignificant constant terms suggest that the trend rates of growth in wages and bonuses have not been independent of growth in labor productivity over the period 1978-88. In addition, since the estimated coefficients are elasticities, the results indicate that bonuses are growing at about the same rate as labor productivity, whereas wages are growing somewhat more slowly than productivity.^{13/} On average, both wages and bonuses appear to be highly responsive to changes in labor productivity; however, factors other than labor productivity play an important role in the determination of bonuses. While the productivity of labor is able to "explain" 84 percent of the year-to-year variation in the average enterprise wage, productivity explains only 49 percent of the variation in bonuses.^{14/}

12/ Statistical Yearbook of China, 1988, p. 181 and p. 310 and Statistical Yearbook of China, 1983, p. 215.

13/ It is not possible to reject the hypothesis that the productivity coefficient in the bonus equation is one; but for the wage equation, the productivity coefficient is significantly less than one.

14/ "Explained" in the sense of the R² statistic.

Table 4.3: THE IMPACT OF CHANGES IN LABOR PRODUCTIVITY ON WAGES AND BONUSES, 1978-88

	Constant	Productivity	R ²
Wages	0.026*	0.726**	0.840
Bonuses	0.124*	0.914**	0.486

Note: * Not significant at the 10 percent level
 ** Significant at the 1 percent level

Source: CHINA: World Bank Enterprise and Agency Survey, by I.J. Singh, G. Jefferson & G. Zou, Vol. II, 1989, pp. 21-36 & pp. 139-220

4.40 Most enterprises pay bonuses out of retained profits, providing a link with overall economic performance. However, although in the enterprise sample the growth of wages and bonuses is broadly in line with the growth of enterprise revenues, the specific year-to-year link between bonuses and net profits is less certain. Where retained earnings decline, there is no significant reduction in the growth rate of wages and bonuses; the reduction comes entirely from product development funds. Thus, workers are still shielded from the impact of declining profitability.^{15/}

4.41 Evidence from enterprise surveys indicates that even as net profits fall, the bonus fund continues to increase, although not as rapidly as when net profits rise. While a decline in profits does lead to a cessation in the growth of the welfare fund, virtually all of the burden of adjustment to declining profits falls upon the production fund.^{16/} These findings suggest that bonuses do tend to grow with labor productivity and with profit growth over long periods, but they continue to increase even when profits (and most likely labor productivity) are stagnant or declining. Thus, they are not really related to profits and productivity, as they exhibit a downward inflexibility. This is as one would expect in a socialist system.

4.42 In computing effective rewards to labor, it is necessary to include in-kind payments and services to employees. These nonmonetary payments include housing for most employees of state-owned industrial enterprises, health care, and pension rights. In addition, since one-third of retained profits can be allocated to the bonus fund and the welfare fund, additional in-kind payments such as fruit and consumer durables can be distributed to workers out of the welfare fund. Table 4.3 indicates that, in the survey sample, when profits are growing, presumably due to regulated ceilings

^{15/} See "Industrial Decision-Making in China," by B. Naughton, a background paper prepared for the World Bank, 1988, pp. 9-10.

^{16/} See Gary Jefferson and Zou Gang, "China: Industrial Policy in Microeconomic Perspective," a background paper prepared in the China Department for the mission.

on the growth of bonuses, distributions through the welfare fund can substantially exceed those made directly in the form of bonuses.

4.43 China's industrial employment system has not changed significantly in spite of new hiring forms such as contract labor and temporary hiring. Most permanent workers are hired under the contract labor system which allows enterprises to recruit new workers under contractual arrangements. The contracts typically last three years. Although factory directors in principle can choose not to renew an employee's lease, in practice the worker's status is as secure as that of a fixed laborer under the old system.^{17/} However, it should be noted that significant layoffs of some workers have taken place during the 1989/90 recession and may point to more flexibility for the future.

4.44 Within the relatively few enterprises that have implemented the "optimal labor composition program," there is some evidence to suggest that the program is achieving its objective of raising efficiency by improving the motivation and allocation of labor. The ability to reallocate labor among activities within the enterprise and to "lay off" redundant workers for purposes of retraining or to form a reserve pool for motivating the core workforce is, in the view of some factory directors, improving labor efficiency and discipline. Larger enterprises may have some advantage in implementing this reform due to the wider set of opportunities associated with enterprise scale and the greater possibility of creating viable subordinate enterprises.^{18/}

4.45 Some reform groups in the government have advocated freeing up the urban labor market. They have taken polls to show that a large share of enterprise employees would like to change jobs and would be willing to take the responsibility for finding a new job.^{19/} Labor within the urban collective sector, the township village enterprise (TVE) sector and individual service sector is able to move from job to job. However, in the mid-1980s regular employment in state enterprises was still permanent and governed principally by administrative rather than market rules. Notwithstanding regulations which allow managers to recruit, hire, and promote on the basis of merit, state-owned enterprises continue to operate essentially as isolated, internal labor markets. Many jobs, for example, continue to be inherited by the children of workers who have retired.

E. Some Conclusions

4.46 The following conclusions may be drawn from the discussion of the contract responsibility system and enterprise taxation:

^{17/} The authority to layoff workers is seldom used, partly due to the fierce resistance of workers and sympathetic colleagues and partly due to the severe consequences of dismissing workers from the enterprise. In the context of a fledgling labor market, a virtually non-existent housing market, and a limited experimental unemployment insurance program, firing a worker in China is a much more severe measure than it is in western industrial economies. The latter have well-developed labor and housing markets and a comprehensive, publicly-administered set of social insurance programs. Jefferson and Xu (1989) found in their survey of 20 enterprises in Wuhan that during the past three years most enterprises had not laid off a single worker and where such layoffs had occurred, even in medium-size enterprises with a thousand or more workers, they seldom exceeded one or two. Such layoffs generally required egregious behavior, such as workers not showing for work for months at a time. See Jefferson and Xu, *op. cit.*

^{18/} For example, the Shenyang Steel Rolling Mill was able to establish five new service enterprises which absorbed 412 redundant employees and during 1988 were able to generate profits and taxes equal to Y 500,000.

^{19/} See Reform in China: Challenges and Choices, ed. by B. Reynolds, M.E. Sharpe, Inc., New York, 1987.

- (a) Negotiations, especially when they are embedded in the contract responsibility system, make it very difficult to implement indirect policies and to make them effective.

4.47 Most rules and regulations are now negotiable and have become enterprise-specific. The result is an extremely uneven playing field for different sectors, enterprises, and even enterprises of the same type within the same sector. The enterprise's budget can be manipulated in too many ways, most notably through the adjustment of tax and loan repayment obligations and by administrative changes in input and output prices and within plan shares of inputs and outputs.

- (b) Many rules and policy regulations are routinely evaded by local authorities.

4.48 Rules and regulations set by the central government are used to compensate for market failures that result from other government regulations. They are perceived as arbitrary and are regularly avoided by local governments and enterprises. These rules and regulations include administered prices, enterprise formation and import licensing powers, and investment review and approval procedures.

- (c) The dual pricing regime aggravates existing problems, and renders the contract responsibility system and enterprise taxation ineffective in guiding enterprise behavior at the local level.

4.49 The dual pricing system sustains prices that are inflexible, distorted and irrational. The results include excess demand, corruption, unequal treatment of similar types of enterprises, and an excuse for maintaining a system which fosters special bargaining arrangements and subsidies for enterprises. Capital is too cheap, creating excess demand for investment resources, a tolerance for capital intensity, and a rationing system that is awkward, evaded and abused.

- (d) The wage and employment system under which enterprises operate remains one of the least reformed aspects of China's industrial economy.

4.50 Within the enterprise, the rational allocation of labor is limited and the links between productivity and performance are very weak. This is due to the inherent pressures of egalitarian doctrines as they operate at the workplace and the way in which wage and bonus policies are implemented. The rational allocation of labor between enterprises, industries, and regions is hampered by the limited mobility of labor. This immobility of labor is caused by the absence of social security supports for workers outside the domain of individual enterprises and the still existing norm of lifetime employment in one enterprise.

4.51 The challenge in the medium term is to develop a system of taxing and supervising enterprises that is more consistent and less subject to negotiations at different levels of government.

F. Recommendations for Further Reform of the Contract Responsibility System and Enterprise Tax Policies

4.52 The reform of the fiscal system is a critical component of industrial policies in the transitional period. A major World Bank report discusses the issues facing the fiscal system in China

and makes major recommendations for its reform.^{20/} Below is a summary of the recommendations that relate to the contract responsibility system and enterprise taxes.

- (a) Take direct enterprise taxes out of the contract responsibility system.

4.53 The central issue here is the relationship between direct enterprise taxes--the profit tax and the adjustment tax--and the contract responsibility system. Any recommendations for reforming the direct tax system must make a distinction between the state as tax collector and the state as owner of fixed assets. Therefore, profit taxation should be used as the instrument of the tax collector, while the contract responsibility system should serve the needs of the asset or resource owner. This distinction requires that direct taxes be excluded from enterprise contracts, which in turn reduces the ability of industry bureaus to grant tax exemptions.

- (b) Abolish the adjustment tax.

4.54 The contract responsibility system should be made to focus on any rent (or surplus) which flows from the historic endowment of "costless capital" from the state. It is this surplus which should be subject to negotiations. In the medium term, there would be no need for a separate adjustment tax, so it should be abolished. These changes still leave considerable room for discretionary treatment of enterprises, since at present there is no rational valuation of assets. Nevertheless they would introduce a more transparent treatment of enterprise taxes and impose rules in place of discretionary attention. Moreover, they would pave the way for further enterprise reform.

- (c) Make direct tax rates as uniform as possible and strictly limit exemptions from the uniform rates.

4.55 The basic 55 percent tax rate should apply to all enterprises. This is essential to remove the distortions in financial rates of return and investments which arise when after tax profits do not reflect economic performance. Over time, this rate can be reduced uniformly to improve incentives and to meet the changing revenue needs of government. Exemptions to the uniform rate for purposes of meeting sectoral or regional priorities should be strictly limited. The incentive effect of the contract responsibility system on enterprise performance then would be reflected in the enterprise's after-tax profits, and managerial incentives could be attached to these after-tax profits. These changes also should facilitate increased enterprise autonomy. In addition, the amortization of bank loans should be disallowed, which will increase revenues and dampen investment demand. Given that tax exemptions will be significantly reduced this will also strengthen the budget constraint on enterprises.

4.56 The role of differential taxes in a mixed planned and market economy is still in question. In general, any public policy intervention should be based upon a careful assessment and should take into account possible negative side effects. Interventions using the tax system are unlikely to be the first best option. Other measures including direct budget subsidies and adjustment assistance are likely to be more effective in achieving the objectives with fewer negative side effects. In practice, incentives overload tax instruments with multiple objectives, which soon complicate the tax structure

^{20/} See World Bank, China: Revenue Mobilization and Tax Policy: Issues and Options, Report No. 7605-CHA, June 15, 1989, Volume I, pp. 78-79.

and prompt unproductive efforts to obtain their benefits. Moreover, if incentives are small, the economic benefits are limited, yet if they are large tax revenues are compromised.

4.57 The actual implementation of these reforms will require considerable effort and further study in many cases. Moreover, since the structure of taxes is closely related to price and enterprise reforms tax reform must go hand in hand with other reforms in the system.

G. Measures for Promoting Competition

4.58 This section examines the role that increased domestic competition can play in making enterprises more responsive and accountable in the medium term. There are two reasons why measures to increase domestic competition should be given high priority in formulating industrial policy. First, competition increases the pressure on enterprises to perform better in terms of product quality and reduced prices and makes them more accountable through the threat of losing market share. The power of competition will become more important as market forces become more prominent in the economic system.

4.59 Second, other reforms will not be able to produce their desired results in the absence of domestic competition. The removal of price controls while markets remain monopolistic or oligopolistic will not improve industrial efficiency but merely increase profits to specific firms. Only where competition is extensive and excess capacity has emerged is there evidence of market prices falling over time. If oligopolistic markets are allowed to operate without government intervention, freeing market prices will only lead to higher cost outputs which will be passed forward to consumers, reducing their welfare.

Competition in the Domestic Market

4.60 The growth of competition in the processing and downstream consumer industries and in some consumer durable industries is evident in their proliferation and in the rapid growth of their investments and output. The growth of these industries has been fueled by high financial profits. At the same time, however, the provincial emphasis on processing activities has led to protectionism of markets and enterprises. This trend has become more marked since 1983, when the decentralization of powers to the provinces was instituted. Barriers to interprovincial trade are most evident in the raw materials sector, where inland provinces have restricted trade in an attempt to build up local processing activity. One example of this is the development of textile production in Sichuan based on local cotton. The resulting reduction in traded cotton within China has forced textile producers in Shanghai to turn to imports to keep their factories working.

4.61 There is extensive evidence that the structure of industrial economies is strikingly similar across provinces. This similarity is partly attributable to long-term policies of self-sufficiency.^{21/} Most provinces produce iron and steel products and consumer durables in addition to basic foodstuffs and materials. This type of self-sufficiency has strictly limited the role of interprovincial trade in the past.

^{21/} See the evidence presented in Li Poxi, Li Yong, Ma Jun, Deng Zhitao, "China's Regional Policy," Development Research Center of the State Council, Beijing, May 24, 1989.

4.62 Table 4.4 presents interprovince export to output ratios for 10 industrial sectors in 8 provinces.^{22/} The ratios are quite low for most industrial goods except coal and petroleum, which are resource based products distributed primarily through the material supply system. Moreover, the ratios did not change significantly over the four-year period to 1984. Although the data cover a short period of time, they do support the view that domestic competition is limited and industries are not developing along the lines of their regional comparative advantage.

**Table 4.4: INTERPROVINCIAL TRADE DEPENDENCE OF
TEN INDUSTRIAL SECTORS, 1980-84
(Percentage)**

	1980	1984
Metallurgy	13.2	15.0
Electricity	14.6	14.7
Coal & coke	36.4	40.1
Petroleum	23.2	22.9
Chemicals	3.6	4.6
Machinery	6.5	6.5
Building materials	13.9	13.1
Food production	10.5	14.2
Textiles	21.4	18.1
Papermaking	15.0	15.9

Source: "China Regional Comparative Advantages," Gang Zou and Wang Zhigang, in *Comparative Advantage under Open Economy*, eds. Sai Feng, Gang Zou and Wang Zhigang, People's University Press, Beijing, 1989, p. 103

4.63 However, the question of competition in the final goods market is more debatable. In the past, distribution was controlled by the Ministry of Commerce through a network of wholesale and retail outlets. In this setup it was relatively easy for provincial authorities to protect local producers from competition by instructing distribution outlets not to purchase certain goods from outside the province. Now, however, enterprises are free to sell their goods under the old system or in any other way they can. Thus, enterprises may enter into long-term contracts or they can rent counters directly from retailers. The SRC estimates that only 20 percent of retail goods are purchased through the state network. Most of the goods are purchased through direct contacts between retailers and enterprises. In general, producers use the state network for goods that are in excess supply.

4.64 In some product lines--TVs, consumer electronics, and processed foods--competition within and between provinces is emerging despite attempts by local authorities to restrict it.

^{22/} The provinces include Shanxi, Jilin, Shanghai, Jiangsu, Hunan, Sichuan, Shaanxi, and Ningxia.

However, this competition is not always based on prices or product quality, is often unfair, and at times even illegal. Enterprises with poor quality goods can compete via contacts (guanxi) or side-payments (bribes) to purchasers. The extent of these restrictive practices varies with the degree of control by the supervising agency, the extent of excess capacity in an industry, and from product to product. Except for high transportation costs which impede this trade, it is very difficult to prevent products from moving across provincial lines. Provincial trade thus is emerging as a major factor in increasing domestic competition in most industries, because all provinces produce most products. This is a healthy development that should be encouraged.

Collectives, TVEs and Increasing Competition

4.65 A second and even more important factor behind the increasing competition in many product lines is the rapid growth of the collective and TVE sector documented earlier. These collectives produce a vast range of products, use a variety of technologies, and have considerable flexibility in responding to changing market demand. Since they are under local control, they operate under fewer regulations and constraints than most state-owned enterprises. They are not part of the state planning system, and although their investments are still subject to approval from the next higher authority, they can produce whatever product they like and are free to sell it where they can. They usually pay higher market prices for their inputs as they are outside the material supply system, but they also are free to sell their outputs at higher market prices. Their workers also have fewer benefits than those in state-owned enterprises, so they have lower costs.

Scale Diseconomies and Inefficient Investments

4.66 Although the growth of small collectives and TVEs has helped to stimulate competition, this growth also has resulted in a proliferation of inefficient small-scale plants and a drive for self-sufficiency without regard to comparative advantage, pollution, or waste of resources. These problems are not confined to collectives and TVEs; state owned enterprises also contribute to them.

4.67 The proliferation of inefficient small-scale enterprises in China has been well documented. Field surveys of three sectors investigated by the Bank mission--the steel, consumer durables, and chemical fibers industries--confirmed this. In Sichuan, for example, officials estimate that the province includes 70 state-owned iron and steel enterprises, of which just one is large-scale and 60 are small scale. Among the small-scale enterprises, ten are reported to be making losses. This pattern appears to hold across the industry. One study concludes that 95 percent of the more than 1,300 enterprises within the iron and steel industry are operating at below minimum optimal scale.^{23/} Similarly, the consumer durables industry, including refrigerators, color TV assembly and bicycle production, has an excess number of small, inefficient plants. The refrigerator industry, for example, includes more than 100 assembly plants nationwide. Finally, in the chemical fibers industry, three small polyester enterprises were established in Chengdu, all at the same time. The combined capacity of these three plants is close to the estimated minimum optimal scale for polyester production.

^{23/} This estimate is based on a minimum optimal scale of net output of Y 70 million. Officials within the Ministry of Metallurgical Industry have suggested that this estimate is, if anything, too low. See G. Jefferson, *op. cit.* Footnote 11.

4.68 Provincial, municipal, and county officials also strive to establish integrated, self-sufficient industrial plants under their control. This impulse reflects a desire to minimize dependence upon a national transportation system which has not kept pace with the demand for freight traffic. The quest for self-sufficiency also reflects the desire of local industrial planners to secure control over the many goods needed for the within-plan allocations which make locally-administered SOEs financially viable. These allocations include, for example, steel for local investment projects and polyester used in local apparel production. Controlling these goods makes local governments less dependent on the central government for implementing their investment programs and providing key material inputs for local manufacturing.

4.69 At the same time, the entry and growth of enterprises under the supervision of other units of government is sometimes restricted by industrial bureaus which have an anticompetitive bias in investment planning. Under the Enterprise Registration Regulation, the approval of several local agencies is required to establish an enterprise or carry out a merger or divestiture. Local governments tend to use these regulatory powers to block the entry and growth of enterprises from other provinces. The intention is to protect local enterprises and the tax and profit revenues that accrue from the enterprises directly under their supervision.^{24/}

4.70 In an effort to override these provincial and local constraints, various forms of enterprise groups have been developing in China. These groups are appearing in the industrial system, where they are assuming functions previously held by government agencies. One form of enterprise group is the sectoral pricing group, which exists within the electronics industry. In this sector, the Hong Ming Electronic Components Factory, a large state-owned enterprise in Chengdu, leads a national group of electronic components producers for the purpose of proposing pricing policy to the Ministry of Electronics. The result is a uniform price ceiling for all industry producers. In 1988, the group organized a conference which included TV assembly customers, components suppliers, and representatives from the Ministry of Electronics. The purpose of the conference was to discuss pricing policy and its implications for the distribution of profits between suppliers and users. Hong Ming, as the leader of the pricing group, conducts market forecasts.

4.71 Other types of enterprise groups have been established for the purpose of assuming some or all of the powers of supervisory bureaus. Examples include the Chengdu Seamless Steel Tube Company (SSTC), which has become the agent of the Chengdu Metallurgical Industrial Company. The SSTC comprises the medium-sized state-owned Seamless Steel Pipe Factory and 13 other smaller SOEs and COEs. SSTC is managed by representative from each of the participating enterprises. The company coordinates sectoral production plans, allocates within plan quotas, investment targets, and tax obligations for the member enterprises as a whole, and serves as a clearinghouse for excess raw material allocations and investment resources. The advantage of this institutional innovation is that factory directors engage directly in the sectoral allocations and arrangements that previously were negotiated separately with each enterprise. This enhances allocative efficiency within the enterprise group.

4.72 Yet another form of enterprise group is designed to rationalize industrial organization, promote product innovation, and anticipate market developments. One example of the group is the Xiangxuehai Electronics Equipment Company in Suzhou, consisting of 39 member factories. The

24/ See China Enterprise Management Report: Issues and Options, mimeo, World Bank, 1988, p. 3.

company was established by local authorities to promote a number of functions including develop new lines of household appliances such as refrigerators, air conditioners, and washing machines (the company supports a product development institute responsible for this task); facilitate product and component specialization; achieve scale economies among the member enterprises, and avoid competition with factories in the same geographic region.

4.73 In a similar vein, the Ministry of Light Industry has established the Bicycle Association. In 1986, this association included 169 producer members. The association organizes conferences to discuss issues such as economic integration within the industry; technology transfer; and steps to develop the association. Furthermore, brand enterprise groups such as Feige (Flying Pigeon), Yuanjiu (Forever), and Fenghuang (Phoenix) are transforming the organization and management style of the bicycle industry. These groups transfer their brand names to other factories that agree to meet uniform product design and quality standards, in exchange for a product surcharge. Participating enterprises include assembly factories, component factories, and commercial outlets.

Barriers to Entry

4.74 Major barriers to entry exist for enterprises wanting to start up or expand their operations in certain industries. The most formidable of these barriers is the approval of provincial industrial bureaus. The bureaus tend to block enterprises that would threaten the profitability of existing enterprises. They also create monopolies which they try to enforce by putting up barriers to interprovincial trade, although this effort has not been successful to date. The greatest barriers are imposed against enterprises from other provinces. Provincial authorities find it more difficult to control the entry of enterprises from within the province. In other words, just as provinces attempt to set up processing industries, so do counties within provinces.^{25/} Authorities at the provincial level are unable to control the duplication of facilities, and the excess capacity becomes a drain on resources because rationalization is inhibited by a soft budget constraint.

4.75 Barriers to entry would not be expected in sectors that have been declared of national priority. Nevertheless, investments in raw materials, energy, and infrastructure are obstructed by two factors. One is administrative boundaries in combination with a rudimentary legal framework and underpricing of materials. Another is the uncertain course of economic policy-making in China.

4.76 Administrative fragmentation is one of the most powerful impediments to provincial investment in priority sectors. Most investments in these sectors are lumpy and require considerable resources. However, as a result of the economic reforms, most of the investible surpluses from profits are under the control of small local governments and their enterprises. The resources of these entities generally are too small to produce the economics of scale associated with investment in priority activities. The situation is aggravated by a tax system which reduces incentives for local governments to share taxes with higher levels of government.

4.77 Scattered resources have resulted in local solutions to national bottlenecks. Small-scale fertilizer plants have sprung up all over the country. Small coal mines have been used to alleviate

^{25/} For example, there are 35 sugar refineries in the northeastern provinces. Their total capacity is about 5 million tonnes of sugar, yet total output of sugar beet is only 3 million tonnes. In 1988, two new refineries commenced operation and two were under construction.

the coal shortage. Small steel mills provide local governments with products they would have difficulty procuring elsewhere. Small power stations are found nearly everywhere, and some counties even have their own grid, which allows them to charge prices higher than state prices. Most well-managed enterprises now appear to have their own diesel generators to cover unpredictable power cuts. Enterprises in Sichuan truck their own coal supply from Shaanxi for lack of rail transport, and local trucking companies provide transportation up to distances of 2,000 kilometers.

4.78 Although, this local initiative has helped to alleviate bottlenecks in some priority sectors, it also has fostered the development of many activities of suboptimal scale. The small-scale local solutions are a response to three major constraints. First, the distribution of revenues is biased towards lower level governments and leads to a wide scattering of resources. Second, the underpricing of materials reduces the incentive for local governments to invest in capacity that exceeds local needs. Third, legal uncertainties and the absence of institutional arrangements make it difficult for local governments to pool their resources on behalf of larger investments.

4.79 The distribution of revenues among different levels of government appears to be a major problem. This raises the question of how best to distribute means and tasks in a federal system, and further study is needed in this area. In the meantime, raising the share of resources for the next higher levels of government might help to encourage a more balanced structure of investment.

4.80 Pricing is a major issue. As long as state-owned enterprises have to sell a significant portion of their output at state plan prices, any production that exceeds local requirements will not be profitable. Local governments will continue to focus on supplying their enterprises and will avoid subsidizing enterprises in other jurisdictions.

4.81 The pooling of resources among different local governments could be aided by financial intermediation from the banks. However, the banks would have to be given the autonomy to move funds where they could get the highest returns, and distorted prices limited this approach also. An alternative would be to allow local governments to effectively pool their resources. Part of the problem is legal security--how to enforce agreements across local and provincial boundaries. At present it would be difficult for one local government to enforce its claim on a local government in a neighboring province. An alternative way of pooling resources across administrative boundaries would be to allow more widespread ownership of shares in joint stock companies. Shares could be owned by different levels of government and by governments in different provinces. This approach is already being encouraged to some degree, but needs to be given a further impetus. Allowing bank financing for such stock ownership and passing legal statutes that imbed such ownership in state laws would serve this purpose.

4.82 The uncertain course of economic policy is difficult to address in the medium term. Given a high degree of uncertainty, investments in capital-intensive projects with long payback periods appear much less attractive than investments that can be recouped in a few years, as many investments in light industry are. It is normal for uncertainty to be high in a socialist country attempting to carry out major systematic reforms that have failed in other socialist countries. In the medium term, capital intensive priority investments with long payback periods will increasingly have to be undertaken by the state government and, wherever possible, through collaborative undertakings with provincial governments.

Industrial Restructuring and Exit Policy

4.83 The continued operation of unprofitable enterprises in certain sectors is a striking feature of industrial organization in China. Unhealthy enterprises detract from economic flexibility and dynamism. Restructuring is essential in order to allow the expansion of more competitive and productive enterprises.

4.84 The problem of loss making enterprises in China is serious and growing. At present, these losses are being covered by budgetary and bank sources. While the phenomenon may be largely transitory, reflecting the sharp slowdown in the economy, recent data show that out of outstanding bank loans of Y 1,000 billion, about 10 percent are now long overdue and another 10 percent are in default from state-owned enterprises.^{26/} This inevitably has had serious repercussions for the financial sector. Many banks are likely to become financially unviable as a result of these loan defaults.

4.85 The problem of loss making enterprises has several specific characteristics. (See Table 4.5.) First, a large part of the problem relates to raw material industries, which are subject to price controls. Second, state enterprises figure prominently as the major source of losses, in terms of value. Third, there is a regional dimension to loss making enterprises. Excluding coal, losses as a proportion of net income tend to be higher in inland regions. State enterprises account for about 75 percent of total losses made in China. In turn, state enterprises producing coal account for over 40 percent of all losses in the state sector. Although the middle region of the country is the main producer of coal, its losses as a proportion of net income from coal are the lowest in China. The next highest loss making activities are food processing and machine building. In general, losses tend to increase as a proportion of net income from east to west.

4.86 The difference in performance between regions is partly attributable to differences in their industrial structures. In the established industrial centers of the east, equipment tends to be older although there is a base of technical and marketing know-how. In the west, state enterprises tend to be larger and they have newer equipment, but they lack entrepreneurial and marketing skills. However, there is complementarity between the regions, and some mechanism is needed to facilitate adjustment in the structure and product lines of enterprises in the west. Removing budgetary supports for loss making enterprises and allowing them to go bankrupt may have to be postponed until social security mechanisms can be established outside of enterprises. A viable alternative is to encourage mergers and consolidations between healthy and loss making enterprises. This is a good second best solution in the present circumstances, and is already being followed.

4.87 In general, mergers between state enterprises require that the purchasing enterprise pay back the existing debt of the target enterprise. In the past year, merger activity took place in 25 provinces and 1,799 enterprises took over 2,087 other enterprises--80 percent of which were loss making. Most mergers take place between enterprises with similar structures--in other words, state enterprises merge with other state enterprises, and so on. It is difficult for a collective to merge with a state enterprise due to the unclear definition of property rights and differing staff entitlements to pensions and housing. The valuation of enterprises poses an additional problem. In addition, mergers require the approval of industry bureaus, which generally are loathe to lose enterprises.

^{26/} See a précis of the National News Summary reported in the China Development News, December 5, 1989, p. 3.

Thus, most mergers to date have taken place in similar sectors and have been confined to particular provinces. In this way, industry bureaus impose barriers on the flow of capital across provinces and impede structural adjustment.

4.88 Progress on social welfare and labor retraining will take some time to accomplish. In the meantime, more can be done to harden the budget constraint of loss making enterprises, for example, through the bankruptcy law. After all, industrial exit does occur at a significant rate among rural enterprises which do not enjoy access to unlimited subsidies.

4.89 The constraints on labor mobility will be partially alleviated through the labor contract system and plans to transfer the welfare system to local or provincial governments. However, the problems of urban development are likely to place severe limits on interregional mobility. The key issue is to facilitate the relocation or subcontracting out of labor-intensive functions to areas with surplus labor as part of the restructuring process.

4.90 The absence of administrative barriers to entry and growth is essential for competition. Duplication at the provincial level can best be overcome by hardening the budget constraint and strengthening provisions facilitating exit through bankruptcy or merger. Tax and price reform by themselves cannot ensure competitive behavior among enterprises. A new legal framework that removes barriers to and actually promotes competition is needed.

4.91 New forms of ownership and corporate structure are central to the notion of creating incentives to foster competition. In recent years the central government has transferred many SOEs to provincial, municipal, and local governments. However, the issue of ownership rights and the appropriate company laws that are needed to support them remain unresolved.^{27/} Some progress has been made with the establishment of a separate State Property Management Board. This board is responsible for: (a) establishing a system of investment companies; (b) preparing regulations and laws to govern their operation; and (c) monitoring and reviewing their performance.

4.92 A large number of experiments with share companies has taken place in reform cities over the last several years, with mixed results. By and large, these experiments have failed to identify the interest of the owner (the State) or establish new ownership norms. The outer forms of ownership are being established, as evidenced by board of director and annual shareholder meetings. However, the key issue remains unsolved--who owns the assets and the return to those assets. Unless this question can be resolved the present experiments with new ownership forms and corporate structures will remain merely experiments.

H. Recommendations for Promoting Competition

- (a) Tax collectives and TVEs and charge them the same interest rates as state-owned enterprises, but do not stifle their growth by denying them their fair share of credits and material inputs; this will not solve the problems of scale diseconomies or pollution; instead it will create problems of unemployment.

^{27/} The discussion here draws upon the Bank report: CHINA Enterprise Management Report, Issues and Options, February 1989. For a detailed discussion of these issues the reader is referred to that report.

4.93 The primary competitive pressure on state-owned enterprises has been provided by the growth of the collective and TVE sector in competing product lines. This sector has greater flexibility to respond to changing market conditions, pays market prices for its inputs, and sells at prices dictated by demand. The "unregulated" growth of enterprises in this sector has led many state-owned enterprises to call for special restrictions on them. State and provincial authorities severely cut back on bank credit to the enterprises during the initial phase of the 1989/90 austerity program.

4.94 The actions to ease this credit squeeze in early 1990 was welcome as, apart from providing competition, the collective and TVE sector is the major source of employment growth in the economy (Chapter 1). If its growth is stifled, there will be an enormous growth in open and disguised unemployment in urban, semi-urban, and rural areas. Furthermore, collectives and TVEs are not exclusively responsible for the problems of scale diseconomies. The phenomenon of small-scale plant proliferation is the result of several conditions, including: (a) the absence of efficient capital markets which limits the availability of large-scale investment finance; (b) bureaucratic ceilings and onerous approval procedures for larger-scale investments; (c) the reluctance of planning bureaus to make the material allocations required for large investments; and (d) the dual pricing system that gives small outside-plan producers substantial pricing advantages over their larger counterparts.

4.95 The problem of scale diseconomies and inefficient investments can be tackled in two ways. The first is through administrative controls, which have included: (a) negative lists for investments in "prohibited" sectors; (b) an overly strict system of project approvals; (c) credit restrictions; and (d) restrictions of raw material supplies. These measures have been tried in the past and have yet to solve the problem. They are being reemphasized under the present austerity program, and are being enforced most rigorously against collectives and TVEs.

4.96 A second alternative is to use indirect incentives to correct the distortions in the system and change the pattern of profitable investments. This alternative would use prices and taxes to bring financial and economic rates of return into closer conformity. Correcting relative prices and changing the basis on which taxes are assessed will reduce the number of duplicate investments in any province by reducing their financial profitability. For these measures to be effective, it is essential that collectives and TVEs be treated equal to state-owned enterprises. In other words, they should be subject to the same taxes at the same rates, but also should be given equal access to inputs and credits. Attempting to cut bank credits and raw material supplies to all collectives and TVEs, while assuring the survival of all state-owned enterprises regardless of their efficiency and performance, does not address the issue of scale diseconomies.

- (b) Leave the pricing of additional outputs of energy, transport, and raw materials produced through local investments to the local government and its enterprises.

4.97 This measure is essential to overcoming the administrative barriers to provincial and local investment in key priority sectors. If local governments can charge market prices for any incremental output in these sectors, they will be willing to increase their investments in other provinces. This also would expand the role of market prices and reduce the incentives for arbitrage caused by the dual pricing regime, since over time a smaller share of output would be available at state plan prices. This measure represents an entirely feasible way of implicitly adjusting key prices in the system. It already has been pursued with local coal mines and should be replicated for other industries.

- (c) Avoid the reimposition of regulations against labor mobility, but allow the system of contract labor to develop further in order to allow enterprises more flexibility in the use of labor.

4.98 The introduction of contract labor has increased the flexibility enterprises have to expand output and adjust factor proportions to changing market demand. Reimposing constraints on labor mobility would only disguise unemployment and retard the development of more extensive and open labor markets. However, the problems of urban development are likely to place severe limits on interregional mobility.

- (d) Abolish the differences in the "internal exchange rates" for foreign exchange provided by MOFERT to the enterprises.

4.99 There seems to be little rationale for imposing another distortion in the real exchange rate at which different enterprises buy imported inputs. The recent trends, including the devaluation of December 1989, to remove distortions in the foreign exchange regime should continue to be pursued.

- (e) Increase number of enterprises allowed direct trading rights and give other enterprises the right to trade through whichever Foreign Trade Corporation they choose; grant all FTCs the right to trade in any product they choose.

4.100 The right to trade directly has been expanding over time and was significantly increased in the fall of 1988. This trend should be allowed to continue; while the government has recently sought to reduce the number of FTCs, it is continuing to grant trade rights to producing enterprises on a selective basis. The FTCs provide important externalities in foreign trade by pooling information, undertaking marketing research and negotiations, and providing a host of other services. Their monopoly on trade is less extensive than it was before decentralization and the proliferation of provincial and line ministry FTCs. However, from the point of view of any given enterprise, the FTCs are still in the position of monopsonists--that is, sole buyers. This is because enterprises are obliged to trade through the FTC set up by their own supervisory agencies. It is this monopsonistic position of the FTCs that should be eliminated. Enterprises should be allowed to join any FTC they choose. If they wish to join an FTC of another agency, they could do this by paying a membership fee and appropriate charges for services used. Similarly, any FTC should be allowed to trade in any product so as to increase the degree of competition among them.

- (f) Toughen budget constraints on enterprises by enforcing loan repayments on time; this is a prerequisite for effective use of interest rate and credit policies.

4.101 Excessive lending by the banking system is an important cause of inflationary pressure. In the past, excessive lending stemmed from an overambitious pursuit of growth by the central government. The pressure for loans now stems from provincial and local governments, who press higher level authorities for excess credits. This pressure is transmitted up the banking chain until it reaches the head office of the central bank, which has the power to issue currency. The process is facilitated by the power of local governments to force bank branches to issue loans for projects.

4.102 Despite the substantial changes that have occurred in the banking system since 1979, competition between banks remains weak and interest rates still play only a minor role in restricting

lending. Banks do not operate as fully functional enterprises, with profit and loss responsibility, since their profits continue to be remitted to the government. Implicit government guarantees for state and collective enterprises greatly reduce risk considerations in lending decisions. Moreover, banks have little incentive to improve their monitoring and assessment of borrowers' performance.

4.103 Similarly, branch banks count on support from their head offices when they run into financial difficulties as a result of a bad loan portfolio. Ultimately the central bank issues currency to cover the excess demand for credit. Consequently, there is an inherent tendency for monetary growth to spin out of control. The system is kept in some kind of balance by frequent austerity measures supported by quantitative controls over credit.

4.104 Finally, when state-owned enterprises borrow and cannot make their loan payments, the loan is either renegotiated, written off, or taken over by the supervising governmental authority. Thus, the entire financial system is characterized by a soft budget constraint.

4.105 For interest rate policies to be effective, a hard budget constraint must be imposed on the enterprises. Without this, interest rate policies are not likely to have much effect on investment decisions or reduce the demand for credit.

- (g) Encourage mergers and consolidations through the development of industrial product groupings and industrial associations that transcend local and provincial boundaries.

4.106 This is a third possible solution to the problems of scale diseconomies and provincial self-sufficiency. Mergers and consolidations already are occurring spontaneously in many areas, and they should be allowed to continue without too much administrative interference. In this context it should be noted that the contract responsibility system discourages mergers and industrial restructuring, and therefore in the longer run it may have to be revised or abandoned.

- (h) Facilitate the relocation or subcontracting of labor-intensive functions to areas with surplus labor as part of the restructuring process.

4.107 This is a second best solution in the absence of well developed factor markets and given the floating population of contract labor moving from areas of stagnation to areas of high growth. This type of relocation and subcontracting already is occurring to some degree, as provincial agreements to supply labor from interior provinces to coastal provinces are increasing. This solution also provides a path for joint ventures in special economic zones, and encourages development along lines of comparative advantage while by-passing provincial boundaries.

- (i) Encourage the development of share companies to help local governments pool their resources for investment.

4.108 This pooling of resources is another second best solution to increase competition and overcome administrative boundaries. It should be used extensively while more efficient and nationally integrated capital markets develop in the long run. To be effective this practice will require the development of legal rules on ownership and clarification of administrative rights and responsibilities among participating members.

- (j) Further encourage mergers between loss-making and profitable enterprises by offering two- to five-year tax breaks.

4.109 This development offers a solution both to loss making enterprises and to the more general problems of industrial restructuring. It provides a second best strategy pending the more effective implementation of bankruptcy laws. It also has two additional advantages. It reduces the burden of government deficits and hence excess demand, and it allows financial institutions to survive as financially viable institutions, especially if the debts of enterprises are paid or absorbed in the process of mergers.

4.110 A well functioning bankruptcy law would complement the development of mechanisms for transferring assets and property rights. Although a law on bankruptcy became effective in late 1988, only three known cases of bankruptcy have occurred so far. The law is not expected to become a major instrument of restructuring, however, because bankruptcy is not seen as a solution to the problem of unhealthy enterprises given the lack of a safety net for displaced workers and the difficulty in assigning responsibility for poor performance in a distorted economy.

- (k) Improve exchange rate management and export incentives by increasing retention rights and making them uniform.

4.111 The market in foreign exchange retention rights should be broadened to cover a large proportion of foreign exchange transactions and include a large number of enterprises, particularly enterprises that already are responsible for profits and losses. In this way coastal and inland provinces would be placed on a more equal footing as far as foreign exchange is concerned.

4.112 Similarly anti-export bias could be reduced by rebating to exporting enterprises the tariff duties collected on inputs used in the production of export goods. The rebate system should include domestic taxes on export production. Exporters as a group also need improved access to domestic working capital financing. Each of these policy instruments should apply to indirect exporters such as inland component suppliers of coastal exporters. In this way, enterprises throughout China would reap the advantages that only the SEZs now provide.

V. POLICY IMPLEMENTATION

A. Introduction

5.1 Decentralization has been a key element of the reform strategy since 1978. At that time more autonomy for local governments and enterprises was expected to stimulate incentives for production and investment, lead to a better utilization of available information, and allow more room for local preferences to express themselves.

5.2 In the industrial sector, the process began with profit retention schemes, above quota production for the market, and increased local authority over investment decisions. The use of incentives has found its most forceful expression in contract responsibility systems which have spread from enterprises to universities, foreign trade corporations, and even taxation.

5.3 The powerful positive incentives of responsibility systems have led to rapid growth of industrial output and investment. With it, control over investment resources has shifted from the central government to local governments and enterprises, as documented in the report. Local governments and enterprises have invested surpluses in sectors where profits have seemed highest. This has brought into open the problems of relying on decentralized decision-making in a regime which had hitherto been characterized by central planning--and few markets for materials and producer goods.^{1/} The full benefits of decentralized decision-making do not require perfect markets, but reasonably functioning markets with information flows, low entry barriers, economies of scale in operation, few impediments to trade, a system of norms and laws to stabilize expectations, and prices that direct production and investment into the sectors that make best use of the economic potential of the community.

5.4 During the transition from a centrally planned economy to a mixed planned and market economy, well functioning markets and correct pricing signals could not be put in place immediately. By definition the economy will operate in the middle of the two systems, with the problems and advantages of both. The processes of decentralization, better functioning markets, and improved signals are interactive, each one generating pressures for change in the others. China's success in the industrial sector, as shown by high domestic growth and even higher export growth, demonstrates that on the whole this process has been managed rather well.

5.5 Nevertheless, the imperfect status of markets and prices has led to structural imbalances in investment. Low state plan prices for key materials have provided few incentives for local governments to invest there. Capital markets have been slow to develop, and more often than not investment surpluses are reinvested in the provinces where they are generated. This process tends to reinforce income disparities between provinces, allowing rich ones to become richer and poor ones to become poorer. The pattern of investments that has been created over the past decade has led to increased structural imbalances. Rapidly growing collectives in coastal provinces are investing in

^{1/} This is not to say that before 1978 there was no trade in industrial goods; the Chinese planning system has always been supplemented by barter trade between provinces and enterprises. It was only with economic reforms, however, that explicit production for the market was undertaken, and that official markets for materials and producer goods were organized.

light industry thereby increasing the pressure on priority infrastructure sectors. At the same time interior provinces that could develop mining, water, energy, and other materials are being starved of the resources to produce them.

5.6 The central government has attempted to restore some of the balance by concentrating investments under its control in a smaller number of priority sectors. This strategy has helped to stabilize the proportion of resources going into priority infrastructure sectors, but it has not been able to close the gap entirely between supply and demand in these sectors. With the continued decline in central government control over investment, additional measures will be needed to increase the flow of resources into priority sectors.

B. The Austerity Program and Medium Term Policies

5.7 Macroeconomic stability also could be enhanced by tightening central government control over provincial investments in the short term. This option is appealing, since it combines adjustments to the structure of investment with the necessities of aggregate demand policies. The current austerity program takes just such a course. This approach coordinates the following policy measures: stricter guidelines on wages and bonuses, and taxes on excessive bonus payments; increased taxes and reduced subsidies; restrictions on capital spending and investments; slower growth in the money supply; tight restrictions on credit tied to a program of credit quotas for every bank outlet and locality; higher nominal interest rates on deposits and loans; and flexible use of import controls. These measures already have had a salutary impact on aggregate demand, growth, and inflation. Since the austerity program was initiated in 1988, annual growth rates have dropped from more than 10 percent to less than 1 percent in early 1990, and the urban price index has dropped from around 27 percent to around 4 percent.

5.8 Several aspects of the current austerity program have a bearing on medium-term industrial policies. First, most of the instruments of the program have been administrative in nature. This may have been inevitable in the short run, but it nevertheless represents a reversion to the old system of administrative-command management that prevailed before the reforms. In contrast to its stated objectives, the government has used mainly direct controls instead of supplementing them with the use of indirect instruments such as tax, pricing, and interest rate policies. If the objective of industrial policy in the medium term is to manage the industrial system through greater use of indirect policies, then any prolonged use of these direct controls will conflict with this objective. There is a real risk associated with using the administrative-command system beyond the declared period of the austerity program. This should be avoided at all costs.

5.9 Second, some macroeconomic stability is required to make other policies effective. A few examples will illustrate this point. First, if inflationary pressures were to continue unabated, it would be difficult to initiate any serious reforms of the contract responsibility system or to phase it out in favor of greater enterprise autonomy. Continuing inflation would require continuing renegotiations of whatever contract systems are put into place. Second, with aggregate demand increasing faster than supply, it would be difficult to undertake a full-scale price reform and allow market prices to allocate resources. Similarly, it would not be possible to have greater competition since this requires the growth of buyers' markets to some degree. Finally, if credit demand continues unabated, it will be difficult to make the financial system more responsive to interest rate policies and to give financial institutions the incentives to operate effectively on a business basis.

5.10 Third, it appears that some form of recentralization also is needed to achieve further market reforms. Some of the measures of the austerity program complement measures that are recommended for the medium term. The former merely require some degree of recentralization to correct for the loss of central control over investments, credits, and fiscal matters. This requires strengthening the role of the central government vis a vis provincial and local authorities, reinforcing its prerogative to manage the economy via macroeconomic monetary and fiscal policies, and reinstating its control over the way in which investments take place, credits are allocated, and taxes are assessed, collected, and shared.

5.11 In the past, aggregate demand in China has been controlled primarily through changes in investment. With few effective indirect instruments in place and little experience in their use, central and provincial governments inevitably have resorted to investments to dampen inflationary pressures. This has been done by reducing provincial approval limits and even eliminating approval for some kinds of investments. Although some of the present difficulties are due to excessive investment in some sectors such as light industry, cutting back these investments alone will not be sufficient to achieve a better balance over the medium term. Active policies to mobilize resources for investment in priority sectors will be needed.

5.12 Fourth, it is essential to look beyond the short-term austerity program to the years after some measure of macroeconomic stability has been regained. The medium term objectives of industrial policy are clear and include: (a) increasing industrial efficiency; (b) restructuring industry along the lines of comparative advantage, both domestically and internationally; (c) correcting structural imbalances in the composition of investments; (d) overcoming energy, transportation, and raw material bottlenecks; (e) aligning production with the changing composition of demand as per capita incomes increase; (f) reducing industrial pollution and urban congestion; (g) providing gainful and productive employment to the growing, urban-based labor force; (h) increasing the role of market forces in allocating resource use; and (i) using more indirect policy instruments to manage the mixed planned- and market-economy. These objectives must be reinstated after the austerity program has achieved its short-term objectives. It is important that the short-term austerity program not conflict with medium-term policies.

5.13 In the immediate short term, tightening of central government control over investment may be necessary to control aggregate demand and the attendant inflationary pressures. There are sound policy reasons for taking this approach, although it is not a good instrument of industrial policy for more than a short period of time.

5.14 There are two reasons for this. First, the tightening, central government control reduces the benefits of decentralization, including incentive effects, quick response to changing markets, and efficient use of distributed information. Also, the bureaucratic dynamics of such a strategy may be difficult to control, which could lead to abandonment of further reform plans. Second, this tightening of control over investments is unlikely to have the impact policymakers would hope for, because of the passive nature of the approval system. That is, it is possible to limit investments in sectors that are considered less desirable, but it is not possible to actually induce local governments to invest in priority sectors. Therefore, over the medium term, there seems little choice but to deepen the reforms.

5.15 To be effective, both direct and indirect policy measures must acknowledge the enormous structural changes that have occurred in the industrial system and anticipate the changes likely to

occur in the coming decade. Chapter 1 highlighted some of the structural changes that must be anticipated in the coming decade and their likely implications for medium-term industrial policies. The industrial policy initiatives now being discussed in China do not appear to be anticipating these structural changes. Instead short-term, reactive measures are being substituted for medium-term industrial policy. This report takes the view that any industrial policy must look far beyond the next two to three years of austerity, to the next decade and beyond. This does not mean that industrial policies will not change during the coming decade; indeed they must be revised frequently as the underlying industrial system continues to change.

5.16 This report maintains that the benefits associated with prudent reforms and more indirect policy methods will lead policymakers to continue with the reforms after the austerity program is completed. The writers of the report also recognize that the roles of the central and provincial governments will remain paramount for a long time.

C. Timing and Sequencing of Policy Reforms

5.17 In order to be effective the various policy recommendations need to be properly phased and sequenced. Each of the previous three chapters outlined both short-term and medium-term policy recommendations. These chapters also indicated the approximate timing and speed with which to implement recommendations for reform in the three major areas: (a) the state investment and material allocation system; (b) pricing and credit allocation policies; and (c) the enterprise contract responsibility system, enterprise taxation, and domestic competition.

5.18 The issue of how to sequence the various policy recommendations remains a matter of some importance. The central question concerns which reforms and measures to undertake first--price reforms, enterprise reforms, social security reforms, or financial sector reforms. In China, there is a long-standing controversy over whether to implement price reforms or enterprise reforms first. There are two schools of thought, and both merit serious attention.

5.19 One school contends that price reforms should be given first priority.^{2/} This school argues that it makes little sense to give enterprises, financial institutions and provincial and local governments greater autonomy if the price signals to which they are likely to respond are grossly distorted. If the signals are distorted, so will be the economic responses to them. In particular, if enterprises and banks are left to their own devices, they will end up trying to maximize short-term financial gains and will neglect sectors in which the greatest shortages exist, since prices do not reflect scarcity. Resource allocation and investments will be distorted, leading to further imbalances in industrial output. This school also maintains that many of the problems of rent seeking activity, side-payments, and diversion of resources from the material supply system are caused by the dual pricing regime.

^{2/} This school is most clearly articulated and associated with the work of Mr. Wu, Jiang Lin at the Development Research Center of the State Council. See his Zhongguo Jingji Gaige de Zhengti Sheji (The Integrated Design of China's Economic Reforms), DRC, Beijing, 1988.

5.20 The other school argues that enterprise reforms should proceed first because of the predominance of the soft budget constraint and the way it affects enterprise behavior.^{3/} As long as enterprises face a soft budget constraint and operate under a negotiable contract responsibility system, they will not be very responsive to price signals. Price increases will not lead to increased outputs in priority sectors because of administrative fragmentation and the long gestation of these investments. On the demand side, managers in these sectors are very sensitive to output prices but not to input prices. Because inputs are scarce managers attempt to secure as many inputs as possible in order to increase their rents, but they have no incentives to use resources efficiently. Instead, most state-owned enterprises pass their costs forward via cost-plus pricing in the contracts they sign with supervisory bureaus. Further pressures to increase wage and bonus payments are also high, and seldom are linked to increases in labor productivity. Thus, in the present environment both inputs and wage costs increase and these increases are passed downstream or to consumers via cost-plus negotiated pricing.^{4/} Furthermore, both demand and supply are price inelastic so price reforms will not help to change enterprise behavior or increase the supply of critical inputs.

5.21 The effectiveness of price reforms also is limited by problems of market structure, as outlined in the last chapter. As long as monopolies or oligopolies prevail in local markets and planning bureaus limit competition by prohibiting excess capacity in product lines in their jurisdiction, freeing markets will only lead to increased prices and monopoly profits.

Interdependence of Reform Measures

5.22 Given that both arguments are relevant, it makes a great deal of sense to consider implementing price and enterprise reforms simultaneously--at least in theory. There is a strong case for moving on all fronts at once, because of the interdependence of many reform measures. For example, undertaking further enterprise reforms to harden the budget constraint facing enterprises will require many of them to be bailed out with government subsidies. The objective of the hard budget constraint would be to force closure and exit on those enterprises that are inefficient by letting them go bankrupt, and letting those that are efficient remain and flourish. However, as long as prices are distorted, hidden subsidies are given, and loans are written off, it is difficult to determine which enterprises are really efficient. Thus, without price and financial reforms, attempts to impose a hard budget constraint will fail.

5.23 Furthermore, even if inefficient firms could be identified, closing them would create a major problem of unemployment. This is a serious consideration for policymakers in China, because lifelong employment and the security that goes with it are part of the larger social contract. Large scale unemployment is unacceptable in China because employment in most state-owned enterprises is tied to a package of social security benefits that are not available elsewhere. These benefits are enterprise specific and are available only through employment in the enterprise. For the individual worker in China, the loss of a job means loss of access to housing, medical benefits, schooling for his children, retirement, and a host of other services. This is quite a high cost indeed, compared to the meager benefits of greater factor mobility, increased efficiency, and lowered costs to the enterprise

^{3/} This school is most closely associated with Li, Yi Ning at BEIDA and others like Zhang, Xuejun at the Institute of Economics and Hua, Sheng at CASS.

^{4/} In a survey of 300 enterprises carried out in 1989 Zhou, Qi Ren found that of all the alternatives offered to them to respond to changing market conditions, enterprise managers are least interested in reducing prices.

and the economy. The opposition to further enterprise reforms therefore is not surprising, and unless a substitute for these social security benefits can be provided, it will be difficult to proceed with the reforms. In this context, reform of the social security system becomes essential for further progress on enterprise reforms.^{5/}

5.24 Because reforms of pricing, markets, enterprises, fiscal and financial instruments, and social security are interrelated, it is difficult to move in one area of reform without also moving in the other areas. This is the dilemma policymakers face in socialist countries as they attempt to move toward a mixed plan and market system. There is no easy solution to the problem of sequencing, but one possible strategy is outlined below.

One Possible Reform Sequence

5.25 A pragmatic approach to sequencing the reforms should begin with the initial conditions. As noted before, (para 3.50) conditions in the early 90's are favorable to further price reform. Also, most contracts for enterprises are due for renewal during 1990. Under these circumstances, first priority should be given to price reform and to revising the contract responsibility system. Then, over time measures should be taken to impose a hard budget constraint on enterprises by making sure that they pay back their loans and by reducing indirect government subsidies via negative real interest rates. Thus, interest rate reforms also take priority.

5.26 In revising the contract responsibility system, enterprises should be given greater autonomy to purchase, hire, produce and sell with minimum interference from their bureaus. Contracts should be non-negotiable, and be limited to a single performance criterion--pretax profits, after accounting for the price regime under which each industry or enterprise operates. Taxes should be assessed at a uniform rate on profits, after depreciation and interest payments.

5.27 After the above reforms have been completed, credit allocations should be phased out, and financial institutions should be encouraged to allocate investments according to proper rate of return criteria. In this transition there should not be a sudden move from directed credit to full reliance on the financial system, as this system does not have the institutional capacity to undertake financial intermediation independently of local and provincial authority. Eventually the aim should be to phase out all price, credit and interest subsidies. This will be possible when sectorial, regional, and functional objectives are made explicit and direct.

D. Policy Coordination and the Role of Government

5.28 The central concerns of industrial policy-making in the transitional regime must address three additional issues: (a) the feasibility and limits of using indirect instruments to achieve policy objectives; (b) the balance between direct and indirect instruments; and (c) the changing role that governments and other institutions must play in the coming decade.

^{5/} Recommendations for reforming the social security systems in China form the focus of a separate World Bank report, China: Reforming the Social Security in a Socialist Economy, China Department, September 18, 1989.

Direct and Indirect Policies

5.29 The policy recommendations contained in this report may be listed under two broad categories: (a) direct policies; and (b) indirect policies. Under direct policies (in Chapter 2), options for reforming the state investment system and its collateral components--the material supply system, and the project approval process--were discussed. The system of credit allocations also fits under the category of direct measures, because of the way in which financial institutions are being used as a supplement of the planning system and the way in which credit controls have been used to dampen investment demand under the austerity program. Over time direct credit allocations need to be phased out and replaced by the use of interest rates to control aggregate investment demand. Credit allocations then would fall under the purview of autonomous financial institutions, and interest rates and total credit supply would remain instruments of central policies.

5.30 The contract responsibility system as presently used is also a direct policy instrument, but because it is inextricably linked with enterprise taxation, it was discussed in conjunction with tax policies. If further enterprise and price reforms are carried out, this system could become an effective instrument for measuring, monitoring, and influencing the behavior of public sector enterprises.

5.31 Indirect policies include the role of relative prices, enterprise taxation, interest rates, and exchange rates. These are the "prices" that provide the signals and incentives for enterprises to change their behavior. However, the response to these indirect policies in the short run will be limited because of thin and poorly developed factor and product markets, fairly extensive oligopolistic markets, and the preponderance of the planning system and direct controls. The effectiveness of indirect measures can only be enhanced if the role of markets is enlarged and the role of the planning system is further reduced.

The Emerging Role of Government

5.32 The major role of government in the medium-term will be to create institutions for coordinating and regulating industrial policies. Because the Chinese are the most familiar with their present institutional structures, they are in the best position to recommend improvements in them. The suggestions presented below, therefore, are general and tentative.

5.33 Decentralization in China has led to a fragmentation of policy-making institutions and a proliferation of independent policies at the various levels of government. As a result, there is a great deal of confusion about what policies should be adopted, which level of government is responsible for them, and how to go about implementing them.

5.34 What is presented below is one approach to organizing the institutional framework for implementing many of the policy suggestions listed above. It is difficult to predict how the process of institutional change will occur in the medium term. With large and powerful bureaucracies in contention at the state, provincial and local level, each seeking to define a new role for itself, the interplay of personal and political forces may dominate the process in the end.

The Role of Governments vis-a-vis Industrial Enterprises

5.35 The discussion that follows addresses two interrelated issues: (a) what types of enterprises should be subjected to direct policy interventions; and (b) the relative roles of state, provincial, and local governments and financial institutions in implementing the policies.

5.36 Chinese enterprises may be broken down into three broad groupings: (a) the largest 200 or so enterprises; (b) large and medium size enterprises; and (c) small-scale enterprises. Most of the largest enterprises are directly managed by the central government and are funded under the state plan. These enterprises operate in the key raw material, energy, and infrastructure sectors of the economy which include metallurgy, power, coal, chemicals, iron and steel, petroleum, and machine building. Most of the large and medium size enterprises are provincially owned and managed. They can be further broken down into: (i) provincially owned SOEs that also operate in key basic and infrastructure industries including metallurgy, power, coal, chemicals, iron and steel, and petroleum; and (ii) provincially owned SOEs that operate in the remaining sectors including food processing, textiles, machine building and household durables, among others. Small scale enterprises include SOEs, collectively owned enterprises (COEs), and township and village enterprises (TVEs). These enterprises operate in all sectors both above and below the town level.

5.37 Table 5.1 presents a breakdown of these enterprise groupings. The data are given by number of enterprises in each group, the value of GVIO generated by each group in 1985 (at constant 1980 prices), and their share of industrial employment.^{6/}

^{6/} Zou and Xu compiled these data from the enterprise level files for 8,000+ medium and large scale state-owned enterprises published in the Chinese version of the 1985 Industrial Census. The data for each enterprise had to be examined to map them into various sectoral and ownership classifications (See the background note "A Classification of Chinese Industrial Enterprises," by G. Zou, (mimeo), World Bank, August 6, 1989, prepared for this report). The data on TVEs and small SOEs were separated by above and below township levels.

Table 5.1: THREE-WAY CLASSIFICATION OF INDUSTRIAL ENTERPRISES - 1985

Enterprise Categories	Number (no.)	Share** (%)	Share (%)	GVIO (Y bln)	Share** (%)	share (%)	Employees ('000)	Share** (%)	Share (%)
Category A:									
Largest 200 SOEs	200	0.1	0.0	117.58	14.8	13.7	4,407.20	6.7	5.5
Category B:									
1. Large/Medium SOEs (Basic)	1,879	0.5	0.2	75.46	9.5	8.8	5,229.60	7.9	6.5
2. Large/Medium SOEs (Others)	6,241	1.7	0.6	195.01	24.6	22.7	12,430.80	18.8	15.4
Category C:									
1. Small SOEs & COEs & TVEs	350,381	97.7	36.0	403.89	51.0	47.1	43,977.40	66.6	54.6
2. TVEs below Town Level	615,600	n.a.	63.2	66.06	n.a.	7.7	14,539.70	n.a.	18.0
Total*	358,701	100.0	100.0	791.94	100.0	100.0	66,045.00	100.0	100.0
Total	974,301	100.0	100.0	858.00	100.0	100.0	80,584.70	100.0	100.0

n.a.: Not Applicable
 *: Total excluding data of TVEs below town level
 **: Share divided by data of Total*

Notes: A. Most of these enterprises belong to basic and infrastructural industries.
 B. Enterprises within sectors of metallurgy, power, coal, petroleum and chemicals.
 C. Enterprises other than sectors above. Category B items include 256 large/medium COEs

Sources: A. China Industrial Census, 1987, Vol. 9, p. 143-52
 B1. _____, 1987, Vol. 3, p. 10-23
 B2. _____, 1987, Vol. 3, p. 23-41
 C1. _____, 1987, Vol. 3, p. 10-41
 C2. China Statistical Yearbook 1986, p. 220

5.38 This three-way classification of enterprises may be used to define what role state, provincial, and local governments and financial institutions might be expected to play in implementing various policy measures in the medium. For this purpose another set of tables has been prepared. These tables map out direct and indirect policy recommendations for these enterprise groupings at three levels of government--state, provincial and local. [See Tables 5.2(a) and (b)]. Most of the recommendations are self explanatory. However, a few require further elaboration.

5.39 The role of state government has undergone a precipitous decline over the past few years, and the report recommends revising this process in the austerity period via judicious recentralization of monetary and fiscal policies. However, this is to be a temporary solution in the short run, one which recognizes the need for further change in the role of the central government. First, there needs to be a further shift away from the use of direct policy instruments--centrally planned investments, investment approvals, directed and rigidly enforced credit allocations, extensive use of the material supply systems, and the close supervision of enterprise behavior via the contract responsibility supervision. In their place more indirect incentives should be used to guide industrial development--relative prices, taxation and fiscal policies, interest rates and exchange rates.

5.40 Second, given its reduced resource base, the central government should come to terms with its reduced capacity to influence the pattern of investments through plan investments. Instead it should focus its attention on the key raw material and bottleneck sectors and limit its own planned investments to these sectors. What it has been forced to do grudgingly because of reduced resources--that is, limit investments to a limited set of sectors and enterprises--it should now do as a matter of course in the medium term.

5.41 Third, the central government should leave investment decisions in all but the key sectors up to the provincial governments. The weight of this decision-making already has shifted in favor of the provinces. The central government could enhance this process by soliciting the participation of provincial governments in the key raw material sectors, for example, through large, jointly funded projects of interprovincial and interregional significance.

5.42 The major tasks of the state government in the medium term should include the following:

- (a) Setting broad industrial objectives, and key regional and sectoral priorities;
- (b) Planning and directly investing in large-scale energy, raw material, and infrastructure projects and supervising the 200-300 largest key enterprises through the line ministries;
- (c) Setting up the regulatory framework for environmental protection and zoning and establishing a legal framework in areas such as bankruptcy, contracts, companies, enterprises and banking.
- (d) Setting up regulations to monitor interprovincial trade and monopoly practices, and providing a mechanism for resolving interprovincial conflicts about trade and competition;
- (e) Providing a mechanism for coordinating national, provincial and local industrial policies.
- (f) Continuing to set the agenda and framework for systematic and coordinated industrial reforms;
- (g) Managing the macroeconomy via indirect policy instruments.

5.43 Similar tasks are required of the provincial and municipal governments, although the domain of their actions is limited to the provinces. The tasks include:

- (a) Setting broad industrial objectives at the provincial level, consulting with the central government to assure that they do not conflict with national objectives; setting limited provincial sectoral priorities in a similar manner;
- (b) Planning, coordinating, and directly investing in most of the remaining large and medium scale projects involving raw materials, energy, and infrastructure, some as joint undertakings with the state government;

- (c) Supervising the performance of other state-owned enterprises through a limited set of consistent indicators and the use of the contract responsibility system; and over time, phasing out the contract responsibility system for indirect management via performance indicators;
- (d) Implementing national zoning and environmental regulations and enforcing the legal framework set by the central government for bankruptcy, contract, company, enterprise, and banking laws;
- (e) Monitoring inter-county trade and monopoly practices and providing a mechanism for resolving inter-county conflicts;
- (f) Coordinating provincial, national, and local policy initiatives.

5.44 The local governments have three main tasks:

- (a) coordinating investment in the collective and TVE sector by providing market, technical, price and other information to allow them to undertake profitable investments;
- (b) implementing environmental and zoning regulations of the state and province;
- (c) providing managerial, financial, marketing, technology and R&D services to collective and TVE enterprises that are too small or otherwise unable to get them from other sources.

5.45 Using the enterprise breakdowns presented in Table 5.2, the role of state government for enterprises under group A would be to make direct planned investments in key large-scale projects of national significance. Here only very large projects would need to be cleared. The state government essentially would make the investment decisions, provide the basis for overall sectoral strategies, but then disassociate itself from the day-to-day control and supervision. The contract responsibility system could be refined to monitor the performance of these basic public sector enterprises using "management by results" criteria.

5.46 The state also should concentrate on policy coordination and providing the enabling legal and regulatory framework under which the provincial SOEs would operate. This involves working to stabilize the macroeconomic environment under which economic agents operate.

5.47 The large volume of provincial and local investments being undertaken as a result of decentralization reduces the role of the state in these matters. Its role here should be limited to providing guidance through a few regulatory and incentive measures and supplying information and technological, marketing and financial services.

5.48 For provincial and municipal governments, the same type of differentiation can be adapted. These government levels would be involved in direct plan investments in group B(i)--that is, only a few large scale, infrastructural and key strategic sectors, leaving investment decisions in other sectors to the enterprises. Provincial/municipal governments then would monitor the behavior of these enterprises in the same way that the state government manages State PSEs--that is, by reforming the contract responsibility system.

5.49 For the other sectors in group B(ii), provincial investments in intermediate products, consumer durables, and consumer industries should be allowed to remain decentralized at the enterprise level. After-tax profits would be kept by the enterprises, but the provincial governments would hold them and the banks that lend to them to a hard budget constraint. This would require is they and the banks be held responsible for their performance.

5.50 Investment decisions could be partially guided through credit allocations, but financial institutions should be encouraged to make these decisions on the basis of sound investments, subject to aggregate rather than sectoral ceilings. To guide the behavior of enterprises in this group provincial/municipal governments should increasingly rely on a limited set of regulatory policies and a general system of incentives. The provincial PPCs would be assigned the initial role of providing the information and analysis for enterprises to assess their sectoral strategies and investment opportunities, both within their province and within the national and international context.

5.51 For the nearly one million small SOEs, COEs and TVEs in group C, their investments should be left to the local authorities. The state, provincial and municipal governments should leave these investments alone to follow their natural course. For this group the provincial/municipal governments would set the minimum regulatory, environmental and zoning rules. Financial institutions, private investors, and other enterprises would be allowed to make investment decisions, and their decisions would be influenced indirectly through the policy measures outlined in Table 5.2(b).

5.52 It will be a long time before the economy can be managed entirely by indirect policy instruments. In the meantime, the role of governments will continue to change and they should be flexible to adapt to these changes. Although the lists above are incomplete, they suggest overall directions for change.

Policy Coordinating Bodies

5.53 Given the regional and provincial fragmentation of policies in China, there is an urgent need to coordinate industrial policies at the state and provincial levels. In this context, there is a need to:

- (1) Set up a high ranking body or designate an already existing one at the state level to coordinate national industrial policies.

5.54 For convenience, this body will be referred to as the State Industrial Policy Commission (SIPC). It would report directly to the State Council and undertake the following functions:

- (a) establish the medium-and long-term objectives of industrial policy;
- (b) provide a comprehensive framework for coordinating policies involving investments, tax and fiscal measures, credit and finances, tariffs, foreign exchange, foreign investment and trade, technology and industrial restructuring, and sectoral and regional priorities;
- (c) examine and regulate monopolistic practices and promote domestic competition;
- (d) monitor, regulate, and promote interprovincial trade;

- (e) arbitrate interprovincial disputes relating to commerce and provincial industrial policies and practices.

5.55 The institution could be set up in a manner similar to the MITT, the KDI or the Indian Planning Commission. It would be responsible for articulating national policies and coordinating the interests of various bureaucracies at the central level. It also would arbitrate trade-offs between powerful provincial interests and the national interest. It would not have to undertake all of these functions itself; it might choose to designate separate bodies to perform these functions.

- (2) Set up Provincial Industrial Policy Councils or designate already existing ones at the highest levels of provincial and municipal governments.

5.56 These Provincial Industrial Policy Councils (PIPCs) would perform functions similar to those of the SIPC. They also may be required to consult with the SIPC on some matters. In general, however, they would function as independent bodies looking to provincial issues, subject to the regulations set by the SIPC. They would be responsible for resolving intraprovincial disputes between local governments and undertaking the same functions as the SIPC. However, they would be prevented from passing regulations that interfere with interprovincial regulations and the mobility of factors and goods, and would be subject to higher level veto on such interprovincial matters.

Table 5.2 (a): CHINA: INDUSTRIAL POLICIES FOR THE TRANSITIONAL REGIME - DIRECT POLICY RECOMMENDATIONS

Broad Enterprise Groupings	Role of Governments			Investment Decisions	Material Allocations	Credit Allocations
	State	Provincial	Local			
A. 200 + Largest SOEs (Mainly in Basic and Infrastructure Industries)	<p>Plan, coordinate, guide and directly invest.</p> <p>Set Priorities among sectors and regions.</p> <p>Provide information to Provincial PPCs on sector.</p> <p>Set environmental and efficiency standards for enterprises.</p> <p>Set up SIPC to carry out coordination and regulatory functions.</p>	<p>Provide information on developing bottlenecks and problems and sectoral investment plans to SPC.</p>		<p>Direct state investments via plans coordinated with enterprises/bureaus.</p> <p>(Subject to overall SPC allocations.)</p>	<p>Essential inputs supplied via state MSS* but with increasing share from markets and at market prices.</p> <p>Outputs sold via MSS* but with increasing share at market prices or long run marginal cost.</p>	<p>Overall credit allocation subject to state budget ceilings.</p>
B. (I) Large and Medium SOEs (Mainly in Basic and Infrastructure Industries)	<p>Set legal framework for enterprises.</p> <ul style="list-style-type: none"> - Bankruptcy laws - Contract laws - Company laws - Enterprise laws - Banking laws 	<p>Plan, coordinate, guide and directly invest.</p> <p>Set Provincial priorities among sectors and regions.</p> <p>Provide information on investment plans to SPC.</p> <p>Provide information on sector to local Pcs.</p> <p>Set up PIPCs to carry out coordination and regulatory functions.</p>	<p>Provide information on developing bottlenecks and problems and sectoral investment plans to PPCs.</p>	<p>Direct investments via provincial plans coordinated with SPC and enterprises.</p> <p>(Subject to overall PPC plan allocations.)</p>	<p>Essential inputs supplied via provincial MSS* but with increasing share from markets and at market prices.</p> <p>Outputs sold via provincial MSS* but with increasing share at market prices or long run marginal cost.</p>	<p>Overall credit allocation subject to provincial budget ceilings.</p> <p>Banks to provide growing share of credit requirements.</p>
B. (II) Large and Medium SOEs (In Other Industries)	<p>Set legal framework for enterprises.</p> <ul style="list-style-type: none"> - Bankruptcy laws - Contract laws - Company laws - Enterprise laws - Banking laws <p>Set regulations to monitor inter-provincial trade.</p> <p>Set industrial monopoly practice regulations.</p>	<p>Plan, coordinate, guide and directly invest.</p> <p>Set Provincial priorities among sectors and regions.</p> <p>Provide information to SPC and local Pcs.</p>	<p>Provide information on developing bottlenecks and problems and sectoral investment plans to PPCs.</p>	<p>Investments to be left to enterprises from retained earnings and bank loans.</p> <p>PPCs to be informed about investment planned and undertaken.</p>	<p>Inputs to be obtained from open markets at market prices.</p> <p>Outputs allowed to be sold on the market at market prices.</p>	<p>Banks to determine credit allocations on the basis of financial and economic viability.</p> <p>Banks given autonomy to allocative credits subject to overall provincial ceilings.</p>
C. Small SOEs, Collectives and TVEs		<p>Set provincial environmental and zoning regulations.</p> <p>Monitor inter-country trade barriers.</p> <p>Monitor industrial monopoly practices.</p>	<p>Provide information on markets, technologies and prices to enterprises.</p> <p>Provide managerial, financial, marketing and technological training to enterprises.</p> <p>Provide employment information and services.</p> <p>Regulate zoning and environmental regulations.</p>	<p>Investments to be left to enterprises from retained earnings and bank loans.</p> <p>PPCs to be informed about investment planned and undertaken.</p> <p>Firms allowed free entry, exit and bankruptcy.</p>	<p>Inputs and outputs freely bought and sold in open markets at market prices.</p>	<p>Banks to determine credit allocations on the basis of financial and economic viability.</p> <p>Banks given autonomy to allocate credits subject to overall provincial ceilings.</p>

Table 5.2 (b): CHINA: INDUSTRIAL POLICIES FOR THE TRANSITIONAL REGIME - INDIRECT POLICY RECOMMENDATIONS

Broad Enterprise Groupings	Interest Rates	Taxation	Price Regime	Trading and FX Retention	Other Enabling Measures	
					Contract Responsibility System	Industrial Restructuring and Center-State Relations
A. 200 + Largest SOEs (Mainly in Basic and Infrastructure Industries)	Revised real positive rates adjusted for risk and maturity. Slightly lower rates for priority non-revenue earnings entities. Interest rates to be taken out of CRS*	Uniform profit tax rates for all sectors. Tax and investment credit to stimulate priority sectors. Tax rates to be taken out of CRS*. Abolish adjustment tax. Extend consumption type VAT, unify VAT on intermediaries.	Administered prices slowly readjusted upwards and realigned to prices of outputs outside plan or to long run marginal costs. Prices to be taken out of CRS*	Direct export and import with choice to go through FTCs. Increase and unify FX retention rates. (Higher retention rates priority sectors) Free access to FX Adjustment Centers.	Remove interest rates, taxes and prices out of the CRS. Focus on implementing rational capital charges. Clarify CRS to specify important annual and multi-year management objectives and performance measures.	Set after-tax ratios for a number of years. Assess feasibility of introducing grants commission. Introduce objective basis for tax sharing ratios. Reduce provincial/local discretion in giving preferences.
B. (I) Large and Medium SOEs (Mainly in Basic and Infrastructure Industries)	Revised real positive rates adjusted for risk and maturity. Slightly lower rates for priority non-revenue earnings entities. Interest rates to be taken out of CRS*	Uniform profit tax rates for all sectors. Tax and investment credit to stimulate priority sectors. Tax rates to be taken out of CRS*. Abolish adjustment tax. Extend consumption type VAT, unify VAT on intermediaries.	Administered prices slowly readjusted upwards and realigned to prices of outputs outside plan or to long run marginal costs. Prices to be taken out of CRS*	Direct export and import with choice to go through FTCs. Increase and unify FX retention rates. (Higher retention rates priority sectors) Free access to FX Adjustment Centers. Improve duty and indirect tax rebate for exporters.	"ditto"	Form on-going multi-year plans to rationalize and supervise state-owned industries and restructure state enterprises: - encourage rational industrial groupings; - reduce number of firms; - phase out inefficient enterprises
B. (II) Large and Medium SOEs (In Other Industries)	Revised and real positive and uniform rates adjusted for risk and maturity. Loans to be fully collected. Interest rates to be taken out of CRS*	Uniform profit tax rates for all sectors. Tax rates to be taken out of CRS*. Abolish adjustment tax. Extend consumption type VAT, unify VAT on intermediaries.	Prices to be determined by market demand and supply conditions. (Few exceptions for key wage good to control inflation in short run) Price to be taken out of CRS*	Direct export and import with choice to go through FTCs. Increase and unify FX retention rates. (Higher retention rates priority sectors) Free access to FX Adjustment Centers. Improve duty and indirect tax rebate for exporters.	"ditto"	"ditto"
C. Small SOEs, Collectives and TVEs	Revised and real positive and uniform rates to be charged by banks. Loans to be fully collected.	Uniform profit tax rates for all sectors. Tax rates to be taken out of CRS*.	Prices to be determined by market demand and supply conditions.	Exports and imports via provincial FTCs with rights to go via other intermediaries. Free access to FX Adjustment Centers. Improve duty and indirect tax rebates to exporters.	"ditto" but only for small SOEs.	"ditto" but only for small SOEs.

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