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China
Promoting Growth with Equity
Country Economic Memorandum

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CURRENCY EQUIVALENTS

(As of September 15, 2003)

Currency	=	Renminbi
Currency Unit	=	Renminbi (RMB)
US$1.00	=	RMB8.2769
RMB1.00	=	US$0.120818

WEIGHTS AND MEASURES
Metric System

FISCAL YEAR
January 1 - December 31

ABBREVIATIONS AND ACRONYMS

GDP	-	Gross Domestic Product
HDI	-	Human Development Index
MDG	-	Millennium Development Goals
OECD	-	Organization for Economic Co-operation and Development
RMB	-	Renminbi
SARS	-	Severe Acute Respiratory Syndrome
WTO	-	World Trade Organization

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INTRODUCTION

International experience suggests that the effect of globalization on economic growth, poverty and income distribution can vary significantly among countries, and that its impact depends crucially on national policies. Liberalization of trade and investment since the 1990s has brought high economic growth to China, and China has continued to lift people out of poverty. Inequalities, however, have deepened as the distribution of income and opportunities has shifted in favor of urban areas and coastal regions, leaving rural areas and less developed regions farther behind. Among workers, those with skills have seen their incomes grow much faster than others.

This report assesses the possible patterns of inequality in China in the future, and outlines policy options that could help accomplish China's objective of growth with equity. Growth and inequality projections suggest that, if recent trends in widening rural-urban inequality and the disparate growth of per capita incomes across provinces continue, income inequality would rise sharply, bringing the Gini coefficient up to 47.4 by 2020 (compared to 43.7 in 1999), with essentially equal contributions to national inequality from the rural-urban and inter-provincial disparities.

For sustaining growth, the report emphasizes the freer flow of resources and goods and services in the economy, to be achieved by domestic market integration and flexibility. The report suggests that the cost of market fragmentation and rigidities is high, and highlights measures to reduce local protectionism, facilitate migration, and commercialize the banking sector.

To optimize the results of domestic market integration and promote growth with equity, the report proposes a package of policy actions that would promote new job opportunities, especially in the less developed regions, and raise returns on farm labor and land. Among these, the report highlights investing in people, promoting the diffusion of technology, facilitating urban agglomeration, expanding services and enhancing farmers' prospects.

Finally, the report tackles the social, economic and fiscal risks that may threaten future growth and distributional performance. In particular, it suggests extending different types of formal social security in both urban and rural areas, for fixing the inter-government fiscal system in order to facilitate the provision of public services, and for managing fiscal risk beyond the government budget and officially recognized debt.

POVERTY AND INEQUALITY IN A HISTORICAL PERSPECTIVE

Large-scale poverty reduction has been one of China's greatest accomplishments during the post-1979 reform period. Amidst enormous structural transformations, which included shifts from central planning to markets, from agriculture to manufacturing and services, and from a closed to a globally-integrated economy, government reforms facilitated the lifting of about 400 million people out of poverty at the $1 a day expenditure level. Early reforms, particularly the establishment of household responsibility system and of township and village enterprises, accompanied by sharp increases in agricultural procurement prices, supported agricultural productivity and allowed farmers to exit from agriculture to pursue better paid off-farm jobs. Rural incomes increased rapidly and, during 1978-1984, the rural–urban income ratio rose from less than 40 percent to 55 percent.

Further reforms benefited the poor less effectively. Furthermore, undertaking such reforms without resolving other domestic market distortions contributed to widening inequalities across China. Price liberalization and trade expansion during 1985-1992 mainly boosted productivity in the industrial sector, and thus disproportionately elevated urban incomes (bringing the rural–urban divide back to its pre-1979 level). As foreign direct investment took off in the early 1990s, bringing technology and export competitiveness to China's coastal regions, the inland and western regions, disadvantaged by low agglomeration, scarce skills and expensive transport, fell behind. But, under increasing pressure from imports and changing demand patterns, township and village enterprises lost momentum. As a result, new off-farm job opportunities in the rural areas dried up and migration into urban occupations was not enough to reduce the number of farmers per cultivated land sufficiently to raise returns from farming. Although aided temporarily by increases in government procurement prices during 1994-96, farmers have seen their incomes lag further behind. The existing obstacles to human development and labor mobility have added to the economic and social cost of economic restructuring in both urban and rural areas.

China's quarter-century record of dynamism offers great promise for the future. Continued economic growth is likely to raise household incomes across the entire income distribution if energetic policy action complements economic forces. Such policy action could concentrate on three themes: Promoting domestic market integration and flexibility, improving conditions for growth in the less developed regions and localities, and addressing the risks to future growth and distributional performance in China.

DOMESTIC MARKET INTEGRATION AND FLEXIBILITY

The pace of overall economic growth in China will depend on the development of China's vast domestic market. By 2007, China's post-WTO accession share of the world exports may rise to about 7 percent (from 4.4 percent in 2001), but more than 70 percent of China's output will still be intended for the domestic market. Size, resulting from a population of 1.3 billion people and from a doubling of income every 9 years or so, is

China's most significant source of competitive advantage and a magnet for domestic and foreign investment.

A flexible and integrated domestic market is vital for broadening the basis of China's competitiveness and growth, and for structural adjustment in the Chinese economy. A flexible and integrated market for goods and services, along with flexible entry and exit of firms, allows more productive firms to expand and exploit economies of scale, facilitates diffusion of technology, and stimulates productivity improvements that enhance competitiveness of firms across the national economy. China's labor market, for example, has already seen that mobility across enterprises, sectors and geographical areas facilitates economic restructuring, mitigates its economic and social cost, and helps reduce rural-urban and regional inequalities. As productivity levels in agriculture lag behind industries and services, moving labor from farm to non-farm jobs is vital for future growth. Since most productive non-farm jobs are presently created in agglomerated rather than remote rural areas, the current movement of labor from farm to non-farm jobs is associated with rural-urban migration. As for China's banking system, with annual financial savings running at about 20 percent of GDP, it has an enormous capacity to support growth. Unobstructed by geographical, political, sectoral or administrative boundaries, China's financial market could contribute to sustained growth by promoting efficient resource allocation across the economy.

Currently in China, many forms of local protectionism and market rigidities inhibit dynamic improvements that could promote national competitiveness and growth with equity. Local protectionism continues to be present in both coastal and interior provinces, greater in provinces where local governments undertake more budget spending relative to GDP and where unemployment rates are higher. It is prevalent in industries that are more labor intensive and that make a larger fiscal contribution to the local government budget, in high profit-margin manufacturing goods and raw materials in short supply. Labor markets across China are fragmented, showing wide wage dispersion across localities and across enterprise ownership categories. The financial market provides relatively inexpensive capital to state-owned enterprises but tends to turn away non-state firms. Moreover, the financial market is fragmented across localities and sectors, and the profitability of financial investment is lower than it would be in a commercially-oriented financial sector.

Market rigidities and fragmentation tend to result from broader structural and institutional problems. Among local governments, protectionist incentives sometimes emerge from overlaps among the functions of local governments and enterprises, from close personnel connections between the local government and local enterprises, and sometimes also from the nature of the local development targets used by the central government. The ability of local governments to erect protectionist barriers mainly relates to the high level of autonomy that local governments are given in terms of market regulation and competition policy, and to the influence they are able to exert on the judicial system. In the labor market, the main direct obstacle to migration, the *hukou* (household registration) system, has been slowly easing. Less direct obstacles, including weak execution of land use rights in rural areas, shortage of low-income housing in urban

areas, and a deep segmentation of the social security system, remain to be addressed. Fragmentation of the financial market mainly arises from direct and indirect government control over interest rates and resource allocation. As government has influence on personnel and operating decisions of state commercial banks, incentives to favor government-owned and government-associated credit applicants are strong. At the local level, lending and investment decisions of banks tend to be affected by local government priorities, usually to support the existing local enterprises.

Effort to promote domestic market integration and flexibility could include the following policy measures:

- Review the role of local governments, particularly their functions vis-à-vis local enterprises, financial institutions, and courts, and in the areas of market regulation and competition policy. In addition, consider innovative measures to make local governments accountable for their influence on the market. Complementing the legal context of China's WTO commitments, such measures could include local governance surveys collecting feedback from market agents.
- Consider further institutional changes to facilitate labor mobility, building on the measures introduced since 2001 to reduce constraints on migration. Labor mobility across and within urban areas would benefit from centralizing the financing and provision of social security to the provincial level and from extending social security to the urban non-state sector, including both local residents and migrants. Conditions for rural–urban migration would improve with continuing reforms in land use rights to offer farmers a formal mechanism to sublease or quit their land plots with adequate compensation. Most importantly, perhaps, overall labor mobility would benefit from policies to promote the development of low-income housing in urban areas and urban peripheries, which would particularly benefit from the development of the urban land market.
- Continue commercialization of the banking sector. Resource allocation through the banking system would improve with further reforms of bank governance structure, accounting and information systems and associated internal control and auditing regimes within the banks. To be effective, bank commercialization may require a greater role for the private sector in bank ownership and operation, more flexibility in interest rates, and improvements in corporate governance, accounting and information disclosure in the enterprise sector.

IMPROVING CONDITIONS FOR EQUITABLE GROWTH

Policies to reduce inequality are compatible with the objective of promoting economic growth. Chinese economic strategy, specifically since the 9th Five-Year Plan (1996-2000), has stressed balanced patterns of growth focused on rapid development of the lagging geographical regions of the country, with emphasis given to selected provinces in the interior and western parts of the country. With the appearance of rural distress during the 9th Plan period, renewed attention is being given to developing specific policies and programs to narrow the rural-urban gap. In framing such strategies, it is important to recognize that there are bound to be leading and lagging sectors and

regions in a rapidly-growing economy, whatever its size and complexity. Differences in China result from differing endowments, geographical factors, and the effects of policies. The key issue going forward is to design a set of strategies that would generate the requisite rates of economic growth while reducing, rather than widening, inequalities.

Achieving a better distribution of incomes and opportunities – the essence of a xiaokang society – depends crucially on the creation of productive jobs, especially in the lagging regions, and on returns to farm labor. With globalization, jobs can be sustained only in competitive areas of economic activity. Increased competition arising from the domestic market integration will not necessarily hurt lagging regions, which are at an earlier stage of industry and services sector development than others. Instead, the ability to source cheaper inputs from anywhere in China enhances the competitiveness of finished goods production in the lagging regions, boosting employment and growth. Without appropriate policy actions, however, such regions may suffer from the fact that competitiveness is becoming increasingly based on technology, human capital, and business services. In rural areas, an increase in returns on farm labor depends mainly on reducing the currently high farmer-per-land ratio. This has been happening with the move of labor out of agriculture. In addition, although with somewhat less dramatic effect, the consolidation of land and promoting environmental sustainability and market infrastructure will enhance returns to land and to farm-related activity.

A policy package to promote conditions for equitable growth could focus on five areas: investing in people, promoting the diffusion of technology, facilitating urban agglomeration, expanding services, and enhancing farmers' prospects. Such a package would broaden the agenda of the Tenth 5-Year Plan and help implement the guidance provided by the 16th Party Congress of the Chinese Communist Party in November 2002. Moreover, it emphasizes those aspects of economic policy that have been identified by the new Government since the last meeting of the National Peoples' Congress. In these ways, therefore, the recommended policies represent continuity with the general thrust of China's national economic policy, perhaps with greater emphasis on equity than has been articulated in recent policy documents.

Human Capital Development

Investment in health, education and other social services is crucial for achieving rapid, efficient, equitable and sustainable development in a competitive environment. Improved health contributes to learning and job productivity. Better public health is correlated with greater investors as well as consumers confidence. For basic education, the importance in China today lies in the need not only to raise the level of technological inputs in farm and off-farm rural economic activity, but also to enable inhabitants of rural areas to pursue economic opportunities in an increasingly urbanizing and globalizing environment. In this respect, better health and basic education are core building blocks for a *xiaokang* society. Furthermore, knowledge and higher-level skills have become critical to achieving technology-led growth, increasingly the basis of sustainable economic development. The importance of secondary and tertiary education and life-long learning has risen as the relative demand for skills has grown, partly a result of rapid introduction of new technologies in China's industries. Faster growth in skilled labor in

the context of free migration is likely to assist in reducing inequalities as well as in boosting national welfare.

Human capital development across China, however, faces two main challenges. First, education attainment and health indicators are significantly lower in poor localities. Second, although a large proportion of public funds for education is allocated at the tertiary level, the supply of tertiary education and life-long learning falls short of demand.

- Enhancing human capital development in poor localities would require equalizing the allocation of public funds on basic education and health across localities, introducing special programs to achieve national minimum standards, such as the nine-year compulsory education and basic immunization, and strengthening qualitative and outcome-oriented targets in the delivery of social services.
- In tertiary education and training, private sector provision is likely to expand if the role of government changes from being the main provider of formal education to that of the architect and facilitator of an entire life-long learning system. The implementation of the 2002 Law on Promoting Private Education in China should remove any remaining discriminatory policies and integrate private schools into the formal system. To design and facilitate the entire system of formal education and life-long learning, the government could set up a transparent set of accreditations and certifications, establish standards, regulations and methods of ongoing monitoring and quality assurance, and establish a mechanism to share information on the demand and remuneration for different types of education and skills, and on the quality and performance of different educational providers. Local governments could also assist in facilitating an active role of employers and investors in the life-long learning system.
- Equity in access to education would be well served by a system of stipends and student loans. At the primary and secondary level, child-schooling stipend to the poorest families across China could be effective in reducing drop-outs and enhancing overall school attainment. For tertiary education, the preferred option may be student loans.

Technology Diffusion

Technology is an increasingly important driver of growth in China. Although integrating with the global economy, China is yet to significantly exploit market opportunities in middle- and high-tech products and services. As gaps in efficiency are large, the potential gains from catching up are significant. This suggests that relatively greater emphasis on technology and productivity, rather than merely higher capital investment, should be focused upon as the driver of future growth. Moreover, even sustained competitiveness in low-tech product markets requires new technologies, especially producer services such as marketing and financial management. This is true also for the development of China's lagging regions. Although most jobs created in the lagging regions are likely to target low skilled labor, post-WTO accession competitiveness in the domestic and global markets will require a continuous upgrading of products, the absorption of newer technologies by firms, and the ability of the workforce to utilize such technologies as productively as in competitor firms. So far,

however, most of the technology-led growth in China has concentrated in a relatively small geographical area of coastal cities. Broader technology diffusion has been held back by local protectionism, by localized shortages of skilled labor, and by weaknesses in the current technology-oriented policies.

- The existing technology dissemination schemes need at least minimal financial support from their sponsoring agencies to thrive without deviating from their core tasks. Their core tasks need to be defined more sharply, especially with regard to sharing information about production technologies and management approaches emerging across sectors, and providing technical assistance to small and medium-sized enterprises. In agriculture, technology diffusion would benefit from streamlining the existing extension system and complementing it with more efficient information sharing devices.
- To alleviate the problem of local shortages in skilled labor, as part of the agenda to develop, attract and retain skills in lagging regions, local governments may organize training and research centers in partnership with firms, and facilitate closer links between local firms and universities and other schools.
- Overall, technology diffusion would benefit from competition policies that encourage competitive pricing, facilitate entry by new firms, and pressure producers to innovate and improve their productivity.

Development of Producer and Consumer Services

The expansion of services, their improved efficiency, and closer interaction between services and manufacturing can potentially make a significant contribution to China's future growth. Liberalization and opening to foreign entry in logistics and telecommunications will provide more economic opportunities across China, and is likely to promote more equitable growth. Furthermore, the services sector is the likely pillar for future job creation in China. On average, every year during 1990-2002, the services sector generated 7.6 million jobs, compared to 1.6 million jobs created in industry and 1.7 million exits from agriculture. In the provinces included in the Western Region Development Strategy of the Government, the contribution of services to job creation was about 1.3 million a year, while employment in industries actually shrank (by 2 million in total). The 1990-2001 job creation in these provinces, however, was not sufficient to support effective transfer of labor out of farming, and agriculture provided at least 4 million new jobs. Services sector development suffers mainly from restrictions on services production and delivery.

- The services sector and its contribution to job creation in the lagging regions are likely to grow with continuing reforms of the role of the government. Instead of serving as a provider, the government is increasingly becoming regulator – by implementing relevant standards, leveling the playing field for enterprises of all types, and enhancing the local investment climate. This process needs to be accelerated.
- In financial services, international experience suggests that subsidized lending interventions are generally far less successful than self-sustainable outreach schemes. In China, progressive interest-rate liberalization would make

microfinance, finance to small enterprises and financial services in underserved localities commercially viable. Availability of financial services to non-state firms will also depend on the development of accounting, auditing, legal and other business services, and on regulations and market infrastructure to improve information reliability and disclosure across the economy.

Urbanization

Agglomeration of people and resources contributes to economies of scale and economic efficiency. Given the economic advantages of agglomeration, most new productive jobs in services and manufacturing are likely to emerge in urban areas and urban peripheries. In the past 20 years, the majority of new non-farm jobs has been created in medium and small size cities, with the highest rate being in urban peripheries. Although the greatest benefits of agglomeration are seen when small and medium-sized cities expand, urbanization policy delivers best results if it encourages the development for all types of cities, rather than suppressing the growth of larger cities while promoting small and medium-sized cities and towns. The process of agglomeration is effective, and its economic and social benefits sustained, if it occurs in harmony with the restructuring needs of the economy.

- The benefits of agglomeration in China would expand with establishing sound markets for industrial land development and a favorable environment for low-income housing development. Commercial motives would encourage the desired pattern of land development and use, if complemented by stronger regulatory and supportive government policies.
- The overall results of urbanization also depend on government policies to promote urban peripheries and the quality of urban life. Relocating from city centers, industries are likely to favor urban peripheries, which have the best potential for a synchronized development of new economic activities and housing. In this respect, local governments may need to play a more active role in the residential land market in urban peripheries to facilitate the needed supply of low-income housing. International experience suggests that this role may involve the provision of basic physical and social infrastructure and public services in locations that are near the points of economic activity and suitable for low-income housing. Public services, such as suitable public transport network, locally available basic schooling and environmental protection, would play a vital role in supporting the development of sound and integrated centers of economic activity and quality life.

Farmers' Prospects

Raising income growth rates in poor rural areas will depend on the creation of off-farm jobs, but also on the performance of agriculture. In poorer provinces, rural enterprises are more scarce, rural households draw a higher share of their income from agriculture, agricultural output per farmer is lower, and the gap in rural-urban rates of growth is more prominent. Provinces that contain most of the rural poor appear to suffer from the combined effect of high dependence on agriculture, small land plots and low production inputs per unit of land. Within provinces, dependence on agriculture comes

with remoteness. As the average land plot used for farming in China is currently too small to allow for significant improvements in agricultural productivity, the reduction in the farmer–land ratio (by moving labor out of agriculture), accompanied by land consolidation, is the single most important factor to boost farmers' incomes. Farmers, however, continue to face challenges in executing their land use rights as well as in dealing with environmental and food safety issues and in accessing market information and marketing services.

- There is need for effective enforcement of farmers' land rights and of environmental laws and regulations at the local level. A formal enforcement mechanism could be set up to facilitate the sublease and transfer of land contracts, and the use agricultural land as collateral in credit transactions. Such a mechanism may be needed to effectively implement measures approved by the 2003 National People's Congress, including the proposed penalties on local officials who interfere with land rights. The effectiveness of environmental policies and laws can be supported by greater implementation authority of the State Environmental Protection Agency.
- In addition, farmers would benefit from greater assistance in accessing markets. The government has already announced plans to increase investment, set up market information system, promote standardization of agricultural products, and use China's WTO membership to further open foreign agricultural markets to China's products. Guidance on the priorities for the involvement of local governments in improving farmers' market access would best come from their constituencies, from the actual and potential users of services and from private businesses.

ADDRESSING THE RISKS TO FUTURE GROWTH AND DISTRIBUTIONAL PERFORMANCE IN CHINA

China faces several risks in promoting growth with equity. Among these, the following deserve particular consideration. First, gaps in social security may erode risk-taking in an increasingly market-oriented society and could undermine social cohesion and public support for further reforms. Second, the delivery of public services is inadequate in poor localities and could constrain future economic growth. Third, macroeconomic risks facing the government could escalate, raising uncertainty and exacerbating fiscal pressures.

Providing Social Security

Most of China's poor and vulnerable fall through the gaps in existing social security schemes. As the spread of markets and globalization intensify structural changes and increase uncertainties as well as opportunities, social security is gaining importance. Possible reforms could focus on the following policy actions.

- Extend social security to the labor force in the *urban* non-state sector, including both local residents and migrants. This is important on equity grounds since most new jobs have been generated in the urban non-state sector. Most vital is the expansion of urban basic health insurance.

- Centralize the financing and provision of social security and protection to the provincial level. Provinces are better equipped than cities to pool risk and, with rules for the transfer of rights between provinces, make benefits portable, thus complementing the ongoing labor market reforms.
- Establish comprehensive income maintenance and basic insurance schemes in rural areas. Since poor households and individuals are distributed over the whole of *rural* China, the government may wish to consider an assistance scheme that would target poor people, rather than only poor geographical areas. Insurance against the financial costs of medical care to address catastrophic illness and injury is particularly urgent, building on recent pilot schemes. Most countries at China's income level provide such insurance, ideally along with immunization and other basic preventive care, in the context of tax-funded universal basic health care with a strictly defined minimum benefit package. Eventually, these schemes may become a good basis for the needed removal of the existing rural-urban segmentation in China's social security system.

Financing the Delivery of Public Services

The present inter-government finance system is not ensuring adequate delivery of public services in many localities across China. The central problem in inter-government finance and public service delivery is the large gap between expenditure and revenue assignments at the local level. Expenditure responsibilities at the local levels are much greater than found in other countries. The delivery and financing of most core public services, including education, health care, social security and infrastructure are assigned to local governments. During the last decade in China, per-capita revenues and expenditures of local governments have varied greatly across provinces. Similarly large disparities have been present within provinces. China is also unusual in not having a transfer system that provides for the expenditure needs of local governments. The current system of intergovernmental transfers, in spite of the large volume of flows (financing 46 and 48 percent of local expenditures in 2001 and 2002) is poorly designed to support the financing of vital social services such as rural education and rural public health. Pushing down expenditure responsibilities to lower levels without providing adequate financial support has produced large and growing fiscal disparities that reinforce income disparities across regions. This is just the opposite of the expected role of government – that of alleviating income inequalities and protecting the poor and vulnerable groups. The outcomes are regressive, where governments in poor regions are providing fewer and lower quality services and passing along a higher proportion of the costs to their constituents.

- Ensuring adequate public service delivery across China may not be feasible without a comprehensive reform of the inter-government finance system. Such a reform would address expenditure and revenue assignments to all levels of government in an integrated way, rather than separately as in recent public finance reforms packages, and coordinate inter-government fiscal transfers accordingly.
- Further reforms in the assignment of government revenues can provide the central government with the resources to fund greater equalization transfers. Separately from reforms to boost the government's overall tax capacity, reforms in the tax

sharing system can plausibly boost resources available for transfers as well as they can directly reduce the disparity in local government revenues. In this respect, the amounts allocated on tax rebates could be further reduced and the sharing of value added tax revenues could be further centralized. In promoting fiscal equity across local governments, complementary measures on the revenue side could include a limited discretion offered to local governments in setting local tax rates, possibly as part of the property tax, personal income tax or excise tax.

- Some centralization of the responsibilities for financing and delivery may enhance public service delivery. Moving the responsibility for the financing and provision of selected services from the village, township or county level to a higher level of government may benefit efficiency and administrative capacity as well as equity. The changes in expenditure and revenue assignments should realign responsibilities with financial and institutional capacity at each level of government.
- Furthermore, greater autonomy of local governments, along with greater accountability, could enhance allocative and operational efficiency in their expenditures. To promote the alignment of incentives of local governments with the objective of growth with equity, the central government may want to correspondingly revise the targets and indicators used to evaluate local government performance. Governments at each level could make their decision making process more open and transparent and strengthen monitoring and audit functions. Greater autonomy on the revenue and expenditure sides, complemented by provisions to raise local government accountability, can be attractive to local governments, possibly making the whole reform package somewhat more politically acceptable.

Maintaining Macroeconomic Stability

International financial markets are signaling a renewed risk to China's macroeconomic stability. The perception of macroeconomic risk in China can be plausibly explained by the vulnerability of China's domestic financial sector and by the hidden obligations facing the government. Weaknesses in the financial sector arise mainly from non-performing loans in the banking system, and the potential need for fiscal intervention. This constitutes the core of the perceived government fiscal risks, along with implicit liabilities arising from the pension system and obligations facing local governments. Under favorable conditions, the total burden of government "hidden" obligations currently outstanding appears manageable. Less favorable macroeconomic conditions, however, could generate painful fiscal pressures. Most importantly, continuing accumulation of government obligations poses a major fiscal risk. Therefore, policy actions in this respect are vital.

- In the banking system, an injection of new capital accompanied by structural and regulatory reforms may be needed. The experience of other countries suggests that recapitalization is particularly effective if at least partly financed from private sources, through strategic investors, and accompanied by the transfer and development of new technologies and skills, and if underlying structural problems in enterprises are resolved. Reductions in the rate of non-performing loans on new lending and productivity improvements from reductions in operating cost are likely to come with greater commercial orientation in the financial institutions and with

improved regulatory and supervisory systems. Attracting private capital into the financial sector would mean that more risks are assumed by those market participants willing and able to bear them, rather than by the government.

- There is need to stabilize the current level of government obligations. Internationally, a combination of parametric changes (for example, raising the retirement age and lowering the benefits payable under the pay-as-you go schemes) have proven to be an effective way of reducing financing gaps. To limit fiscal risks arising from local government activities, a country-wide fiscal risk monitoring system could be established. International experience offers several good models for establishing local government fiscal risk monitoring systems at the central or subnational level.
- On the whole, the government will be able to reduce its vulnerability by establishing a comprehensive system to monitor all major sources of fiscal risk. Careful fiscal management across the entire portfolio of government direct and contingent, explicit and implicit, liabilities will ensure that future government deficits and debts remain at prudent levels and fiscal resources adequately support future needs for public services. As discussed in this report, a strong combination of progressive policy, private initiative and public finance is required to achieve the growth and equity objectives of a *xiaokang* society.

FOCUSING ON THE PRIORITIES

China can achieve growth with equity if it follows correct policy priorities. The tasks of promoting domestic market integration and flexibility, improving conditions for equitable growth and addressing the main risks facing China imply some common policy priorities. These are centered around adequate delivery of core public services and indirect involvement of the government in the economy, and mainly include:

- a comprehensive inter-government finance reform that would allow for adequate provision of basic education, health and social security, and reduce the incentives of local governments to be engaged in local protectionism
- proper market regulation and competition policy, implemented uniformly across China, which would reduce the capacity of local governments to be engaged in local protectionism, facilitate technology diffusion, and support the development of the services sector
- effective commercialization of the banking sector, supported by continued reforms in the enterprise sector, which would reduce financial sector vulnerability and government fiscal risk and facilitate efficient allocation of capital
- the development of urban land market and urban infrastructure to support low-income housing near points of economic activity in urban areas and urban peripheries, which would facilitate both migration and urban agglomeration
- effective law enforcement that would allow farmers to better utilize their land use rights in the context of migration and land consolidation, offer farmers adequate environmental protection, and support greater autonomy and accountability of local governments.

Given various competing interests typically facing government and given the complexities of structural and institutional reforms, these priorities may, at times, be difficult to implement. Although beneficial for the majority of China's population and for China's national competitiveness in a globalized economy, each of the policy priorities listed above is likely to be resisted by some interest groups, and there will be many trade-offs that will have to be weighed. For example, reforms of the banking system will likely affect the flow of credit in a way that is good for the long-term but may have adverse employment consequences in the short-term. Reforms in inter-governmental finance, pensions, the composition of public services, and macro-economic risk mitigation are specific areas where the costs and benefits to different groups will vary significantly. Moreover, policy-induced changes will occur within the broader context of major structural changes that are underway already, partly to accommodate the forces of globalization. It will be a task of enormous political will and strategy to navigate among sources of resistance and to mitigate the sharpest edges without undermining the objective of China's growth with equity.

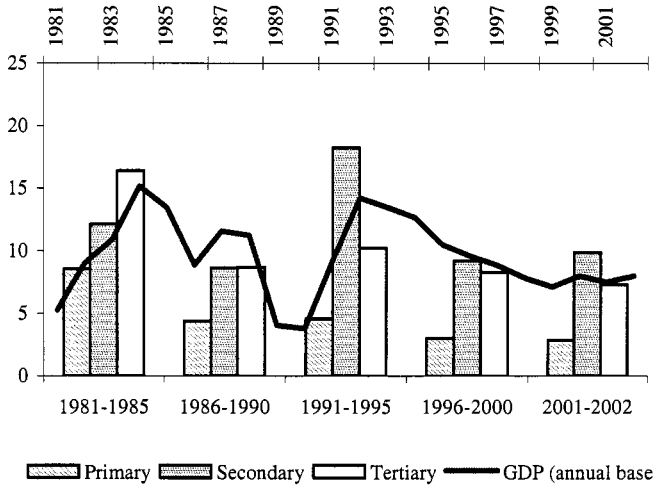
1. GROWTH, POVERTY AND INEQUALITY

1.1 *With a focus on growth, poverty and inequality, this chapter discusses recent economic performance in the context of rapid structural change.* It testifies to the improvements in macroeconomic management and policies that have taken place over the past decade, which has provided macroeconomic stability in the face of external and domestic economic shocks. China's recent performance is even more remarkable in view of the complex structural reforms and market-oriented institutional development that was undertaken over the past decade. Increased international openness and domestic competition offer significant opportunities to China to cope with its economic challenges in the real and financial sectors. At the same time, the rapid movement away from a centrally planned system points to the need for strengthening institutions required for the efficient functioning of a market-based economy, including social security, to cushion the effects of the transition on vulnerable groups.

Two Decades of Unparalleled Growth

1.2 *China has achieved remarkable economic progress since 1979.* Official statistics show that real GDP grew an average 9.4 percent a year in 1979-2002, exceeding 10 percent in the first halves of the 1980s and 1990s. The economy also experienced "overheating" in the past decade, with the GDP growth rate rising to 14.2 percent in 1992 and averaging 12 percent per year during the 8th Five-Year Plan period (1991-1995). The average growth rate was 8.3 percent during the 9th Plan and 7.6 percent over the past five years (Figure 1.1). Between 1996 and 2002, China's GDP has grown from being about two-thirds the size of the rest of East Asia combined (excluding Japan) to 1.2 times. In 2003, in spite of the adverse effects of Severe Acute Respiratory Syndrome (SARS) and the slow growth of world trade, the Chinese economy is projected to grow at about 7 percent, driven by the industrial and services sectors. Various analysts have

Figure 1.1 Real GDP and Sectoral Growth, 1981-02 (%)

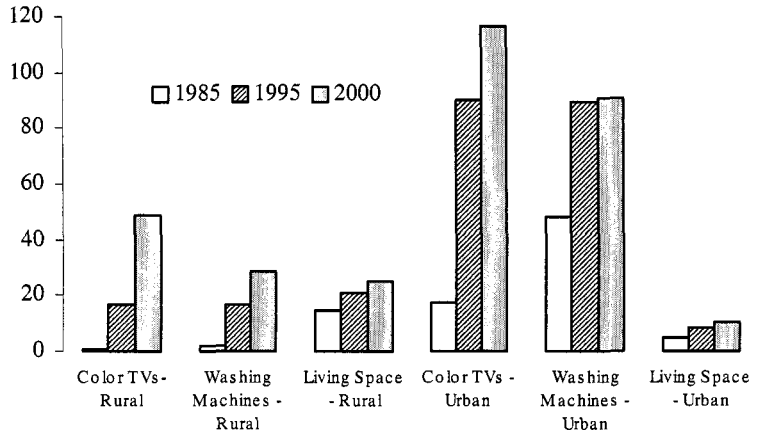


Source: *China Statistical Yearbook*, various years and World Bank estimates

questioned whether growth was really as high as shown in the official statistics. Whatever the outcome of this on-going discussion, the post-1979 growth performance has been associated with dramatic reductions in poverty – approaching 400 million people lifted out of poverty at the US$1 a day consumption level. There have been other observable improvements in the material conditions of the mass of the population as well (Figure 1.2).

1.3 *This progress stands out against the backdrop of enormous structural transformations and external challenges.* Structural transformations included shifts from central planning to markets, from agriculture to manufacturing and services, and from a closed to a globally-integrated economy. Structural changes in the economy are creating immense pressures for migration from rural areas to China's cities. Rapid demographic transition has changed the fertility and aging profiles to match those of the OECD countries, although at a much lower level of income. On top of this, external challenges were posed by the 1997-98 Asian Crisis and the 2000-2002 global economic slowdown. China's steady growth and macroeconomic performance contrasts with both the transition economies of Eastern Europe and former Soviet Union, which have shared the challenge of opening and reforming moribund centrally planned economies, and with the rest of the Asian region, which lost economic control as a result of weak corporate and financial sectors. Aided perhaps by real depreciation of the renminbi between 1993 and 1998, China's massive balance of payments deficit of 1993 (US$11.6 billion) was converted into a surplus. Notwithstanding the global slowdown, China has been able to solidify its strong external position – while maintaining a stable currency. More recently, the strong output performance and increasing openness of the Chinese economy has supported the recovery of the Asia region. [1] China's imports from the region constitute two thirds of China's total imports, and have been growing rapidly.

Figure 1.2 Living Conditions, 1985-2000



Note: Consumer durables per 100 households and net living space per capita index
Source: *China Statistical Yearbook*, 2001

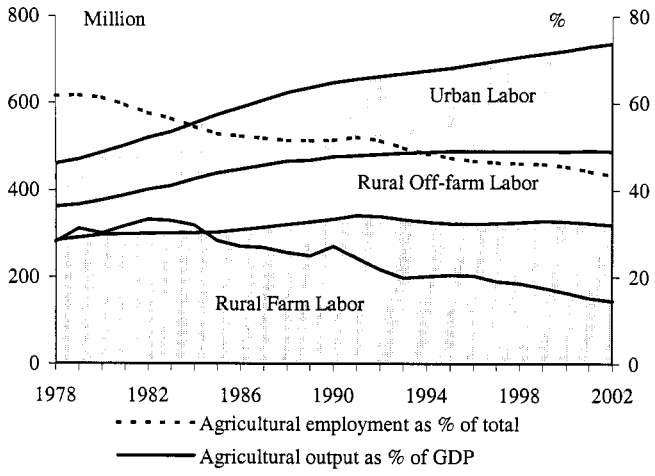
[1] Nearly three quarters of China's imports arrive at zero, or close-to-zero duties, for export processing or as imports under preferences for foreign-invested firms. China's openness is also shown in the US$150 billion of on-shore foreign currency deposits (the second largest after the United Kingdom), which links its monetary policy to developments in external financial markets, regardless of some controls on the capital account.

Reforms and Growth

1.4 *Based on a wide variety of calculations, nearly a quarter to a third of China's post-1979 growth is estimated to have come from increases in organizational and production efficiency.* Alternative estimates of the sources of growth suggest that technological advances sped up in the 1990s with the opening of the economy and inflow of foreign direct investment, raising the demand for skilled labor. Technological growth has averaged above 2 percent per year, which is a strong performance by international standards. Factor accumulation, that is, the application of labor and capital in economic activities, however, have made the greatest contribution to output growth. For the future, most analysts expect changes in saving behavior and demographic conditions to reduce the contribution of factor accumulation to economic growth. Sustained growth will increasingly depend, therefore, on further increases in the efficiency of resource use in the Chinese economy.

1.5 *The strong growth of 1979-84 was mainly a result of the shift of labor from agriculture to rural industry.* The introduction of the household responsibility system, rising agricultural procurement prices, and freedom to sell output in excess of government quotas at market prices improved the rural-urban terms of trade by more than 40 percent. Real per-capita rural incomes increased on average by 15 percent a year, a pace unmatched before or since. Rising farm incomes allowed higher savings to finance new rural enterprises. The share of agriculture in total employment fell from 62 to 53 percent between 1978 and 1985 (Figure 1.3), while the share of township and village enterprises rose from 7 to 14 percent. The shift of labor from agriculture into rural industry experienced another surge in the first part of the 1990s but, later, growing financial difficulties in the rural enterprise sector reduced the scope for new off-farm job opportunities in rural areas.

Figure 1.3 Rural Labor and Agricultural Output, 1978-2002



Source: *China Statistical Yearbook*

1.6 During 1985-92, growth benefited from the improved efficiency of resource allocation. At an early stage in reforms, with prices of industrial goods gradually liberalized and with market transactions steadily expanding in the economy, the Chinese economy was opening to foreign trade and investment.[2] Price liberalization, greater use

[2] The gradual process of foreign opening encompassed expanding the number of enterprises allowed to participate in foreign trade, replacing trade procurement targets by market based trade policy instruments such as tariffs, quotas and duty exemption schemes, gradually reducing trade barriers, and finally,

of markets for resource allocation and opening to foreign trade are all likely to have contributed to improving the efficiency of resource allocation, something that would be reflected in higher productivity growth as measured.

1.7 *In the early 1990s, as the economy further opened, technological progress accelerated.* Annual gross foreign direct investment inflow jumped to reach 6 percent of GDP by 1994. Imports of capital equipment by foreign invested enterprises in 1987-95 exceeded those by domestic firms by more than two and a half times. Such imports are an important source of embodied technological progress, and exemplify the role of foreign invested enterprises as a major locus for the inflow of new technologies, scientific knowledge and modern management practices. The role of foreign direct investment in technological progress in China is crucial, underscored by the still underdeveloped potential of domestic research and development and innovation systems.

Recent Economic Developments

1.8 *Structural changes have intensified and good growth performance has continued in recent years.* Table 1.1 indicates some of the large shifts that have occurred in the generation of output and in the condition of the economy over a short span of ten years. The decline in agriculture's contribution to both output and employment has continued. The rate of increase in average labor productivity in agriculture has slowed, despite the withdrawal of about 22 million workers since 1992.[3] This observation captures a set of core transitional issues in the economy that accounts for low incomes in rural areas. It also explains the rationale for the far-sighted government policies that have been introduced to address land and labor market weaknesses, migration, urbanization, and the wide rural-urban income gap. At the same time, the dominant role of manufacturing in the economy (in output, exports, employment, and productivity) highlights the rapid modernization that has taken place over the same period. In this respect, the current structure of the Chinese economy is notably different from that of other countries at or about the $1,000 level of per capita annual income.[4] As seen in Figure 1.4, trade coefficients are exceptionally high for a country of this size. China is expected to capture a 7-8 percent share of world exports by 2007. Increasingly, the impulse for investment is coming from non-state sources (Figure 1.5), although since the Asian Crisis it has been supported by government spending associated with the macroeconomic stimulus program discussed below.

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increasingly using market mechanisms in foreign exchange allocation and moving from a dual to a unified exchange rate system in 1994.

[3] Official labor data suggest that employment in agriculture mainly declined during 1992-96 and has remained steady since then.

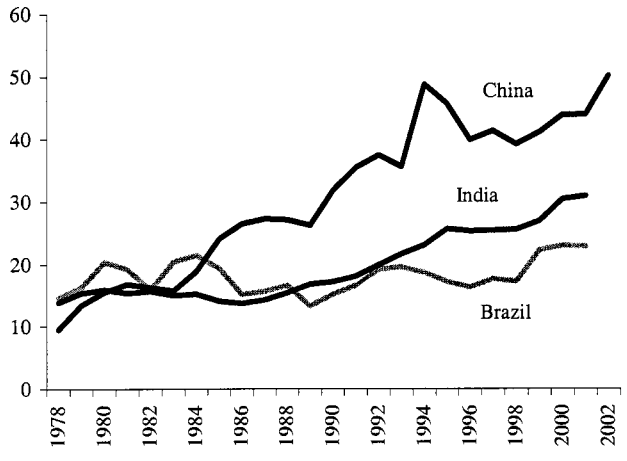
[4] Several methodological weaknesses make services undervalued in the Chinese national accounts. It is often difficult to separate services from manufacturing data for China's vertically-integrated firms, there are gaps in coverage of important rapidly-growing and smaller-sized service producers, and accurate valuation of inputs and outputs in the sector remains a challenge.

Table 1.1 Selected Economic Transitions, 1993-2002

	1993-95 a/	1996	1997	1998	1999	2000	2001	2002
Levels (US$ billions)								
GDP	700	816	898	946	991	1,081	1,175	1,237
International reserves	74	105	140	145	155	166	212	286
Net foreign assets of banks	-3	-4	5	18	31	60	85	108
External debt b/	118	129	147	144	152	146	170	169
Short-term	*22*	*25*	*31*	*17*	*15*	*13*	*42*	*53*
GNI/capita c/	520	620	710	740	780	840	890	940
Output (% of GDP)								
Agriculture	20	20	19	19	18	16	16	15
Industry	48	50	50	49	49	51	50	52
Manufacturing	*35*	*35*	*35*	*34*	*34*	*35*	*35*	*36*
Expenditure (% of GDP)								
Fixed investment	36	34	34	35	36	37	38	42
Government and SOE	*21*	*18*	*18*	*20*	*19*	*19*	*20*	
Exports d/	22	21	23	22	22	26	26	30
Manufactures (% of goods)	*84*	*85*	*87*	*89*	*90*	*90*	*90*	*91*
Imports d/	21	19	18	17	19	23	23	27
Employment (millions)	681	690	698	706	714	721	730	737
Agriculture (%)	49	47	46	46	46	46	44	43
Services (%)	23	26	26	27	27	28	28	29
Productivity (RMB/year) e/								
Agriculture	1,651	1,863	1,946	2,024	2,085	2,193	2,284	2,405
Manufacturing	11,718	14,474	16,106	20,087	22,237	24,459	26,473	27,928

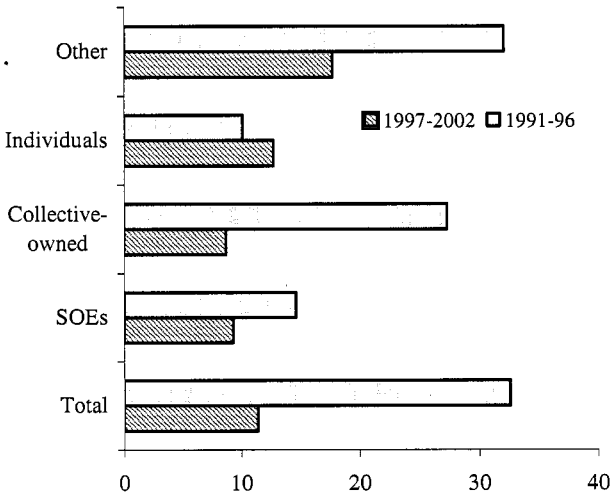
Source: National Bureau of Statistics, People's Bank of China, State Administration for Foreign Exchange, and World Bank
Note: a/ End of period data for levels, period averages for all other data. b/ Series revised in 2001, with short term debt presented on "remaining maturity" basis. c/ Estimate based on World Bank *Atlas* methodology. d/ Goods and non-factor services. e/ Labor productivity - real value-added per worker at 1990 prices.

Figure 1.4 Merchandise Trade, 1978-2002
(% of GDP)



Source: *China Statisitical Yearbook*, various years

Figure 1.5 Real Growth in Fixed Asset Investment, 1991-2002 (%)



Source: *China Statistical Yearbook*, various years

1.9 *China is providing an anchor for economic recovery in the East Asian region.* Figure 1.6 compares the real GDP growth rates in the East Asian crisis countries (i.e. Indonesia, South Korea, Malaysia, Philippines and Thailand), Japan and Singapore with that of China for the year 1998 after the crisis hit and the average growth rates for the post-crisis period 1999-2002. It highlights the contrast in the fortunes of these countries with that of China, which was relatively unscathed by this crisis. More recently, China's industrial output has grown by 12.6 percent in 2002, and by 16.9 percent in the first half of 2003. Meanwhile, China's external position remains favorable (Figure 1.7), benefiting from direct and indirect effects of the country's WTO membership. In 2002, exports made a strong comeback, rising by 22.4 percent, and with imports rising by 21.2 percent the trade surplus reached US$30.4 billion. China's main trading partners are in Asia, and exports from the non-Japan East Asian countries to China rose by 35 percent in 2002, contributing 37 percent of their total export growth. The importance of the China market for other East Asian economies has increased rapidly from the early 1990s onwards, from 8 percent of total exports of the major East Asian exporters in 1990 to 16 percent in 2002. Yet, concerns about the ability of countries to compete with China continue to exist, especially in the Asian region. Such concerns reflect on the flood of Chinese merchandise to the Asian market, competition in third country markets, and the relocation of foreign direct investment to China. Foreign direct investment remains significant as investors seek to exploit the opportunities created by China's entry into the WTO. Gross inflows of foreign direct investment exceeded US$52 billion (4.2 percent of GDP) in 2002 (Figure 1.8), making China the world's largest recipient of foreign direct investment.[5] Providing a cushion against possible adverse developments, foreign reserves have grown further, reaching US$346 billion in June 2003.

1.10 *Government demand management has been vital to the accomplishments on the macroeconomic front.* Since 1998, and again as a macroeconomic management objective of the 10th Plan, the Government has targeted the support of domestic demand through interest rate cuts and increased public spending as well as raising productivity through continuing structural reforms. Proactive fiscal, quasi-fiscal and monetary policies have sought to counteract the negative demand effects of the ongoing restructuring in the enterprise and financial sectors, weak rural economy, and unpredictable external conditions (Table 1.2). The government maintained annual monetary growth at 14-15 percent during 1998-2001, and has accelerated monetary growth to 16.8 percent in 2002, and 20.8 percent in the first half of 2003. As part of the fiscal stimulus program, the government implemented investment projects in the amount of over RMB1.2 trillion (about 12 percent of 2002 GDP) over 1998-2002.[6] Out of this amount, long-term treasury

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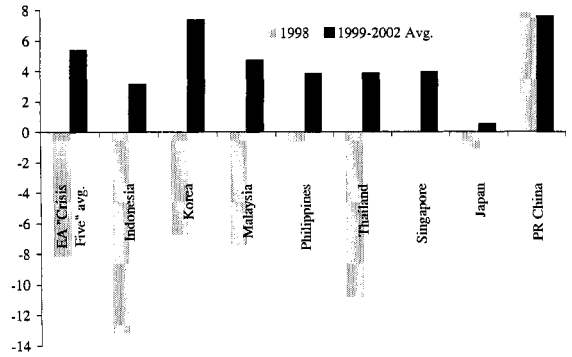
[5] By 2002, China had approved well over two hundred thousand foreign-funded businesses, while cumulative actual and contracted foreign direct investment reached $447 billion and $828 billion respectively. On average about half of actual foreign direct investment has been directed towards using China as an export platform. By 2002, foreign invested enterprises delivered over one half of China's exports and over one quarter of China's industrial output. The share of foreign invested enterprises in the output of technology intensive sectors such as electronics, telecommunications, office equipment and measuring instruments exceeded 60 percent.

[6] The fiscal stimulus program, implemented since 1998, aimed mainly at increasing domestic investment in infrastructure, environment and technology and, since 2000, in China's Western regions. In

bonds financed RMB660 billion and commercial banks and state-owned enterprises covered the rest via co-financing. Government expenditure increased from 14.0 percent of GDP in 1997 to 22.0 percent in 2002.[7] The fiscal deficit, estimated at 3.3 percent of GDP in 2002, is being kept in check by rapidly rising tax revenues – from 12.1 percent of GDP in 1997 to 18.7 percent of GDP in 2002.

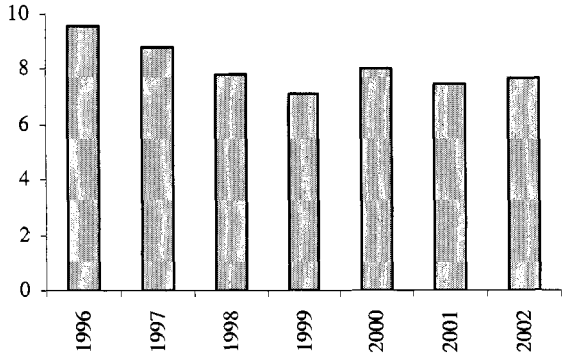
Figure 1.6 China's Macroeconomic Performance

China relatively unscathed by the East Asian crisis...
East Asia Real GDP Growth Rate, 1998-2002 (% per year)



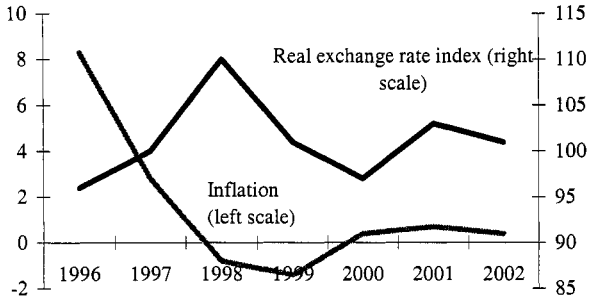
Source: World Bank

... continues its rapid growth...
China Real GDP Growth Rate,1996-2002 (% per year)



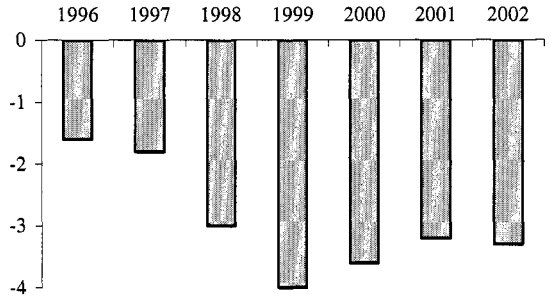
Source: World Bank

... while deflationary pressures may be abating
China Inflation Rate, 1996-2002 (CPI, % per year)
and Real Exchange Rate (Index, 1995=100)



Source: World Bank

...fuelled partly by increased public spending.
Budget Balance, 1996-2002 (% of GDP)



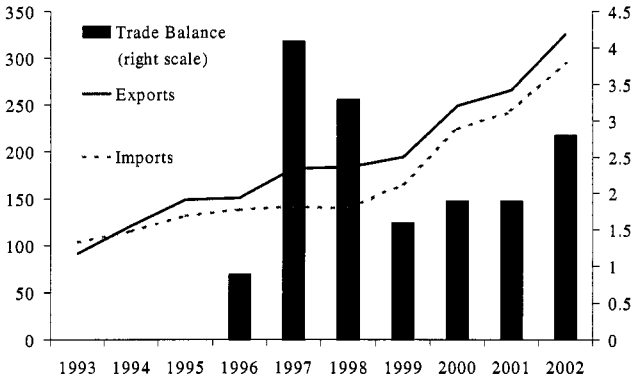
Source: World Bank

contrast to the earlier focus on infrastructure spending, the 2002 budget called for an increased emphasis on social welfare spending, including benefits for laid off workers, and support for rural incomes.

[7] Unless noted otherwise, figures on government expenditures, revenues and deficit reported here follow the IMF definition.

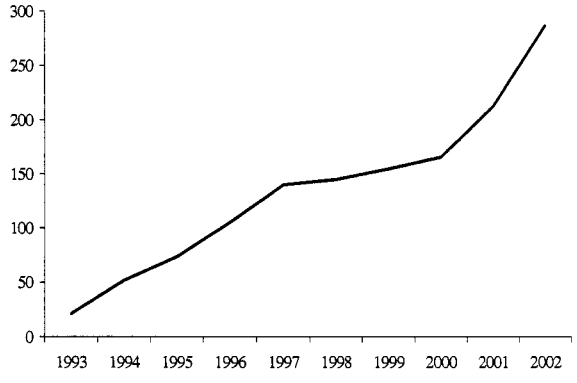
Figure 1.7 China's External Position

China's external position is holding up well...
Exports and Imports, 1993-2002 (US$ bn) and Trade Balance (% of GDP)



Source: World Bank

...and international reserves continue to rise.
Gross Foreign Exchange Reserves (US$ bn)



Source: World Bank

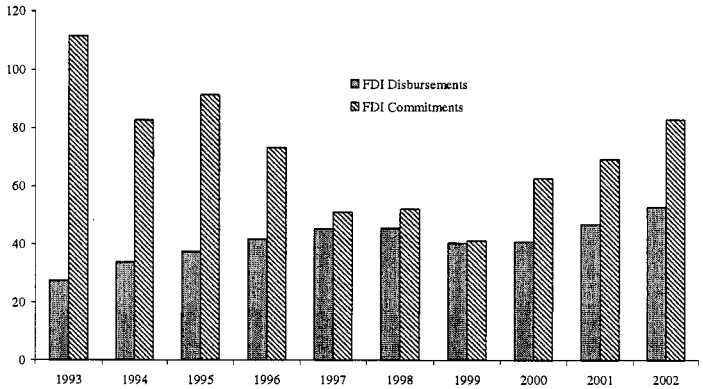
1.11 *China is likely to sustain current growth levels over the medium term.* Both in the short and medium terms, external demand will continue to play an important role.[8] Global growth projected for the short term is slowly recovering (2.3 percent increase in GDP in 2003, compared to 1.7 percent in 2002), possibly leading to a rate of growth of world trade of 6.5 percent, or half the expansion of 2000. The Government is relying on domestic demand to support China's growth. The effect of SARS is judged to be temporary, although future economic effects will depend on the Government maintaining its strong containment measures. Official projections for 2003 see output rising by 7 percent; analysts see output growth in the medium term settling at a 6.5-7 percent annual rate.

Table 1.2 Contribution to Real GDP Growth, 1997-2002 (%)

	1997	1998	1999	2000	2001	2002
Total Domestic Demand	7.0	7.0	8.4	6.9	7.8	7.5
Private Demand	3.4	3.6	5.5	6.7	4.7	3.7
Government Demand	2.3	4.6	2.4	1.9	3.5	4.4
External Demand	1.8	0.8	-1.3	1.1	-0.3	0.5
Export	3.9	1.4	2.9	6.3	2.4	7.5
Import	-2.1	-0.6	-4.3	-5.3	-2.7	-7.0
Growth	8.8	7.8	7.1	8.0	7.5	8.0

Source: World Bank staff estimates
Note: Private demand includes also investment by collective-owned enterprises.

Figure 1.8 Foreign Direct Investment Flows, 1993-2002
(US$ bn)



Source: World Bank

[8] Since the third quarter of 2001, the net effect on demand of foreign purchases of China's exports and Chinese residents' purchases of imported goods has been positive, reversing the trend during 7 of the 10 previous quarters.

1.12 *Over the long term, China's success will depend on addressing an array of difficult, interlinked structural and institutional issues.* China's accession to the WTO is expected to aid its growth prospects, mainly by raising the efficiency with which the economy uses its resources. In spite of the advances made, domestic markets for goods, services, labor and capital suffer from rigidities that create obstacles to agglomeration and further structural adjustments, retarding broadly-based improvements in productivity. State-owned enterprises, while contributing a decreasing share of total output, continue to dominate access to finance and local product markets, and burden banks with non-performing loans. Banks, in turn, require decisive actions to deal with their portfolios. Measures such as recapitalization, however, may have only a temporary effect if the incentives problems associated with state ownership in the banking and enterprise sectors remain unresolved. Government contingent liabilities emerging from the pension system, local governments, and the banking sector, along with the growing government debt, make the fiscal stimulus program untenable in the long term. But problems in the delivery of essential public services such as education, health and social security, associated mainly with weaknesses in the inter-government finance system but also in shortfalls in spending in some critical areas, pose another fiscal challenge. Addressing these needs while the stimulus component of government expenditures is reduced will require major changes in the composition of public spending, and associated budget management reforms.

Exceptional Anti-Poverty Performance

1.13 *Large-scale poverty reduction has been one of China's greatest accomplishments during the reform period.* Using the official poverty line, the number of poor people is estimated to have fallen from about 200 million 1981 to 34 million in 1999. [9] Alternatively, using the World Bank's $1/day income measure, the number of poor is estimated to have dropped from about 490 million to 98 million over the same period (and further to 88 million by 2002), which corresponds to a decline in poverty incidence from 49 percent in 1981 to 7.8 percent in 1999 (and 6.9 percent in 2002). Finally, using the World Bank's $1/day consumption measure, the number of poor declined from 360 million in 1990 to 223 million in 1999 (and 161 million in 2002), which corresponds to a decline in poverty incidence from 31.5 in 1990 to 17.8 percent in 1999 (and 12.5 percent in 2002). Thus, by all measures, the decline in the number of poor has been dramatic. Figure 1.9 summarizes the main trends in national poverty (and inequality, which is discussed below). Poverty dropped most in two main episodes, first in the early 1980s and then again in 1994-96. In both cases, poverty reduction was associated with improving rural – urban terms of trade (Figure 1.10).

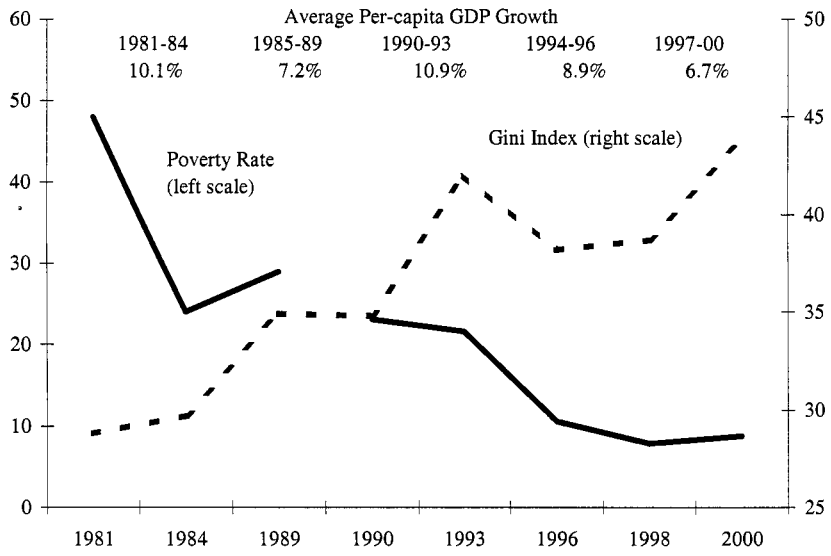
1.14 *Poverty dropped most significantly in the early 1980s, when fast growth emerged from rural reforms.* A strong growth in grain yields (5.7 percent per year) and in rural industries, accompanied by sharp increases in agricultural procurement prices, alongside with improvements in rural-urban terms of trade, raised rural incomes at 15 percent a

[9] Only official data until 1999 are available publicly. The 2002 estimates are based on a World Bank methodology for estimating and projecting poverty rates using disaggregated national accounts and household survey information.

year in real terms (Figure 1.10). As poverty in China was essentially a rural phenomenon and rural poverty was widely dispersed in the early years of post-1979 reforms, rural income growth delivered nearly universal poverty reduction across China. Between 1981 and 1984, income poverty at the $1/day level fell from 49 to 24 percent and the rural-urban income ratio rose from about 40 to 55 percent.

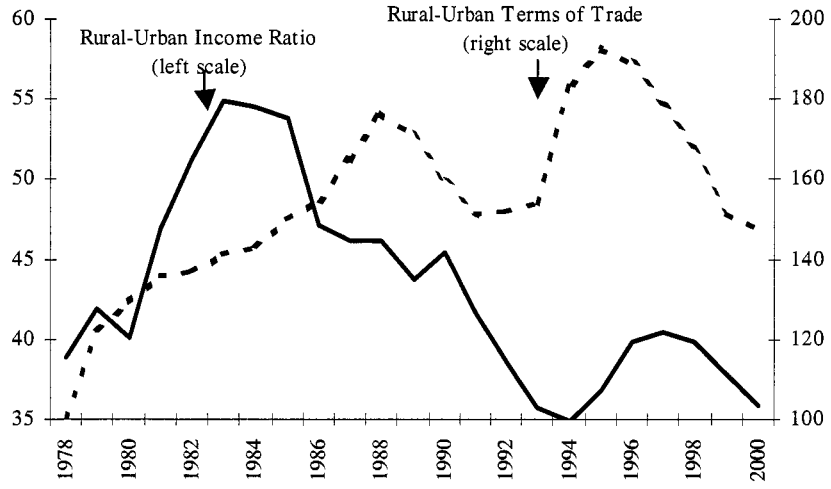
1.15 *Again at a time of high rural growth related to government procurement reforms, the second episode of fast poverty reduction occurred during 1994-96.* After a period of reduced growth and poverty reduction in the late 1980s, when the $1/day poverty rate stagnated and in some years even rose, poverty declined sharply again in 1994-96. During those three years, poverty incidence fell from 18 to 11 percent, or, measured at the $1/day consumption line, from 25 to 17 percent. Increases in agricultural prices and output in rural areas and the introduction of the"8-7 Plan" for poverty reduction (80 million people to be lifted out of poverty in 7 years) accounted for this reduction.[10]

Figure 1.9 Poverty Rate, Inequality and Growth 1981-2000



Source: National Bureau of Statistics, World Bank and Chen and Wang (2001)
Note: Poverty rate is based on $1/day income using official household survey data. There is a break in poverty data series in 1990.

Figure 1.10 Rural-Urban Income Ratio and Terms of Trade



Source: *China Statistical Yearbook*, various years

[10] The 8-7 Plan, launched by the government in 1994, provided tax reductions, financial grants and social-economic development projects to 592 designated "poor" rural counties.

1.16 *Poverty reduction over the post-1979 reform period was successful also in terms of broader social development.* By 2001, adult literacy rates had risen to 85 percent, and enrollment rates to 99 percent (net) in primary schools and to 89 percent and 44 percent (gross) in junior and senior secondary schools, respectively. During 1980-2001, the average years of schooling in the 15-64 year age group rose from 5 to 8 years. In terms of educational attainment, the share of population with primary schooling remained at about 35 percent, but the shares increased from 15 percent to 34 percent for those with junior secondary schooling and from 6 percent to 11 percent for those with senior secondary and technical schooling. [11] Major progress was also achieved in health, with China overhauling lower middle-income standards by 2001 (Table 1.3). Average life expectancy at birth reached 70 years, infant mortality declined to 3.1 percent, and under-5 mortality fell to 3.9 percent. The share of one-year olds fully immunized against tuberculosis and measles reached 98 percent. Nearly 85 percent of the population has gained access to essential drugs and less than 10 percent are undernourished.[12]

Table 1.3 Progress in Health

	China		East Asia and Pacific		Lower middle-income countries		High income countries	
	1980	2001	1980	2001	1980	2001	1980	2001
Life Expectancy at Birth (years)	67	70	64	69	65	69	74	78
Mortality Infant (per 1000 live births)	42	31	53	34	55	33	12	5
Mortality Under 5 (per 1000 live births)	64	39	79	44	83	41	15	7

Source: *World Health Report* and *World Bank World Development Indicators*, various years

The Effect of Growth on Poverty Has Weakened and Inequalities Have Widened

1.17 *The second half of 1990s revealed that economic growth alone is not sufficient to sustain the downward trend in poverty.* During 1998-2000, while the economic growth continued at nearly 8 percent per year, poverty reduction appeared to have slowed (Table 1.4). The overall growth in rural income fell, in particular as the purchasing power of agricultural products declined (Tables 1.5-6 and Figure 1.10). Moreover, growing competitive pressures and financial difficulties in the rural enterprise sector curbed the growth of rural enterprises, and the movement of labor out of agriculture increasingly took the form of rural-urban migration.

Table 1.4 Recent Trends in Poverty Reduction

Poverty headcount rate at $1/day income	1990	1992	1996	1998	1999	2000
National	23.1	21.6	10.6	7.9	7.8	8.8
Rural	31.0	30.0	14.9	11.4	11.2	13.7
Urban	0.9	0.0	0.2	0.0	0.25	0.3
Poverty headcount rate at $1/day consumption						
National	32.9	30.2	17.4	17.8	17.8	16.1
Rural	44.4	41.4	24.8	26.2	27.0	25.0
Urban	1.0	0.8	0.4	1.0	0.5	0.5

Source: World Bank estimates based on official household survey data available only until 2000.

[11] In 2001, enrollment to tertiary schools was 13 percent (up from 2 percent in 1980) and 4 percent of the population had education college or above, up from less than 1 percent in 1980.

[12] United Nations (2002).

Table 1.5 Poverty Reduction and Rural-Urban Inequality, 1990-2002 (1990 RMB)

	1990	1993	1996	1999	2000	2001	2002	1991-93	1994-96	1997-02
Household Real Income								Change (avg. annual, %)		
Rural	686	765	922	1,044	1,066	1,111	1,164	3.7	7.1	3.6
Urban	1,510	1,945	2,299	2,749	2,925	3,174	3,599	8.8	4.4	7.2
Urban/Rural	*2.2*	*2.5*	*2.5*	*2.6*	*2.7*	*2.9*	*3.1*	4.4	-1.9	4.4
Household Consumption Spending								Change (avg. annual, %)		
Rural	585	632	826	829	878	908	961	7.3	4.0	3.0
Urban	1,279	1,593	1,862	2,167	2,328	2,456	2,818	4.8	2.7	7.9
Urban/Rural	*2.2*	*2.5*	*2.3*	*2.6*	*2.7*	*2.7*	*2.9*	4.3	-2.7	4.7

Source: *China Statistical Yearbook*

Table 1.6 Annual Income Distribution Across Rural Households, 1980-2002 (percent)

	1980	1985	1990	1996	1998	1999	2000	2001	2002
Below RMB1000	98.4	97.8	82.3	18.0	12.7	13.0	14.2	13.2	12.0
RMB1000 to 2000	1.6	2.1	15.7	43.6	39.5	38.1	35.8	34.3	33.1
RMB2000 to 3000		0.1	2.0	22.5	25.7	25.5	24.8	24.9	24.8
RMB3000 to 4000				8.5	11.5	11.7	11.9	12.5	13.4
Above RMB4000				7.3	10.7	11.7	13.3	15.1	16.8

Source: National Bureau of Statistics

1.18 *Poverty mainly remains a problem of people living in the rural areas, but the map of rural poverty has changed.* Out of the 161 million people estimated at or below the $1 a day consumption in 2002, some 99 percent lived in rural areas.[13] Rather than being uniformly spread across China, however, rural poverty started to concentrate in western provinces (Table 1.7 and 1.8) and in localities that lag behind in terms of growth, and are remote, poor in human and natural resources, or weakly linked to the rest of the economy. High proportion of the rural poor now live in mountain villages, some of them located in relatively well-off counties, and are disadvantaged by low educational and health status as well as by low (and sometimes even deteriorating) quality of land.[14] In addition, an increasing proportion of the poor are people with disabilities (who are estimated to account for 5 percent of the national population).

1.19 *Slower poverty reduction has been accompanied by rising inequalities.* The post-1979 reform period witnessed two episodes of rising inequalities, both notable also for little progress in poverty reduction (Figure 1.9). The *first* occurred during 1985-93, in time of slower growth, when the rural-urban terms of trade declined as agricultural prices failed to keep up with larger increases in partially-liberalized industrial product prices.

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13 World Bank estimates.

14 The most remote mountain areas tend to be occupied by minorities, which represent a highly disproportionate share of the rural poor. World Bank (2001).

The increase in the Gini coefficient of inequality from about 20 in the first half of 1980s to 42 in 1993 was the fastest among all countries, although the 1993 level still left China around the middle of the distribution for inequality across countries. The *second* occurred during 1997-2000, associated with the liberalization of some agricultural trade and markets, declining international prices in many commodities, including wheat, soybeans, cotton and sugar, and a domestic surplus in grains. Inequality widened and in 1999-2000 the Gini index exceeded its levels of 1993-95, with rural-urban inequality being the most prominent. As international prices of agricultural commodities, including soybeans and wheat, broadly stabilized since 2000, continued liberalization of agricultural production has been benefiting Chinese farmers more recently.

Table 1.7 Rural Poverty by Province, 1999 (%)

	Share of China's rural poor	Provincial rate of rural poverty
Yunnan	9.4	8.1
Guizhou	9.1	9.0
Sichuan	7.4	3.4
Henan	6.8	2.9
Shanxi	6.4	8.0
Shaanxi	5.8	6.7
Gansu	4.7	7.0
Hunan	4.6	3.0
Guangxi	4.5	3.6
Hebei	4.1	2.6
Jiangxi	4.0	3.7
Chongqing	3.8	5.3
Hubei	3.7	2.8
Xinjiang	3.7	7.7
Anhui	3.4	2.2
Inner Mongolia	3.3	5.6
Heilongjiang	3.0	4.3
Liaoning	2.9	4.2
Jilin	2.4	4.8
Shandong	2.1	1.1
Qinghai	1.6	12.6
Tibet	1.1	20.6
Ningxia	1.1	9.6
Zhejiang	0.8	0.7
Jiangsu	0.6	0.4
Fujian	0.3	0.3
Guangdong	0.2	0.1
Beijing	0.1	0.6
Hainan	0.1	0.6
Tianjin	0.1	1.1
Shanghai	0.0	0.0

Note: Based on NBS household survey and official poverty line. National average rate of rural poverty is 3.5 percent.

1.20 *During the post-1979 reform period, inequalities have risen among provinces, between the rural and urban areas, and within rural as well as within urban areas.* Inter-provincial inequalities have been driven by rising disparities between the coastal provinces and those in the interior. The coast-interior income disparities increased most rapidly in the first half of the 1990s (Figure 1.11, measured somewhat imprecisely by the standard deviation of log per-capita GDP) with the continued liberalization of economic policies and the beginning of the investment boom (domestic and foreign), which concentrated in the coastal region.[15] Reflecting the similar conditions of geography and policy, incomes have converged

Table 1.8 Rural and Urban Poor by Region, 1999 (%)

Regions	Share of China's rural poor	Share of China's urban poor
Western Provinces	46.6	23.0
Central Provinces	42.1	46.2
Coastal Provinces	11.3	30.8

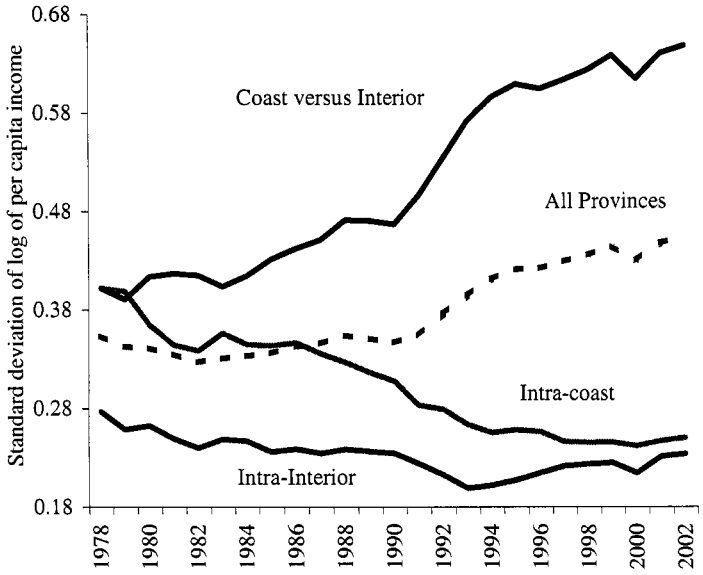
Note: Based on NBS household survey and official poverty line.

[15] By 2002, the coastal region received nearly 90 percent of foreign direct investment. Guangdong, Jiangsu, Fujian, Shandong and Shanghai alone absorbed 65 percent of foreign direct investment and accounted for 70 percent of China's exports, enjoyed the most rapid provincial growth rates and became a magnet for migrant workers from other provinces.

within the group of coastal provinces and within the group of interior provinces. Most recently, and specifically from the end of the 8th Plan period when greater attention has been given to the development of selected western provinces, the overall provincial income disparities may have been capped. [16] The Government's Western Region Development Strategy launched in 2000 (described in box 2.3), focuses a significant share of public resources to the development of the poorer provinces. The recent increases in per capita income growth rates in several western provinces, if associated with increased public spending, suggest that the Strategy could help reduce inequality.

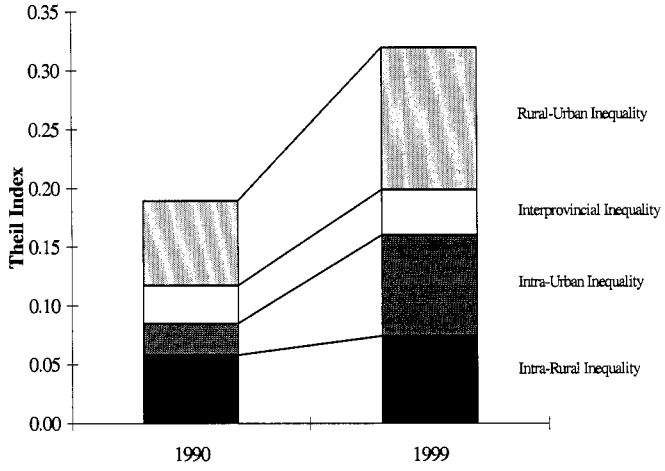
1.21 *The rise in the rural-urban income imbalance was sharpest in the late 1980s and early 1990s.* Figure 1.12 shows the evolution of inequality using the Theil Index. [17] According to official data, a fall in rural incomes relative to urban ones explained over one third of total inequality in 1999 and over one third of the rise in total inequality between 1990 and 1999. Perhaps uniquely in the 1990s, related to enterprise restructuring and emerging

Figure 1.11 Regional Income Disparities, 1978-2002



Source: World Bank staff estimates

Figure 1.12 Decomposition of Income Inequality, 1990-1999



Note: Interprovincial inequality in this figure is the sum of intra-rual inter-provincial and intra-urban interprovincial inequalities. The inter-provincial disparity related to the uneven level of urbanization across provinces is captured in the rural-urban gap.
Source: World Bank staff estimates

[16] Analysis of regional and coast-interior disparities using household survey data broadly confirms the pattern found with provincial GDP data of a leveling out of disparities in the second half of the 1990s.

[17] The Theil Index allows to divide inequality into a number of components. The Theil index is calculated as a weighted geometric average of the respective incomes relative to mean. The analysis underlying Figure 1.12 first splits inequality into rural and urban. Each of these is divided into variation across provinces, and variation within provinces.

unemployment, the rise in intra-urban inequality contributed nearly one half to the increase in total inequality and, by 1999, intra-urban inequality accounted for nearly 30 percent of total inequality in China.[18]

1.22 *Notwithstanding improvements in both rural and urban areas, rural-urban and coast-interior disparities in human development have widened.* Schooling is on average 2-3 years longer in urban areas compared to rural areas. In 2000, the enrollment rate in senior secondary schools was 34 percent in Central and West China, compared to 50 percent in East China, with fewer qualified teachers in poorer localities.[19] In health, the gap between rural and urban indicators has remained striking (Table 1.9). Moreover, the improvements in rural areas appear to have slowed since the mid-1990s.

Table 1.9 Recent Trend in Health Indicators

	Infant Mortality		Under 5-Year Mortality		Maternal Mortality	
	Rural	*Urban*	*Rural*	*Urban*	*Rural*	*Urban*
1991	58	17	71	21	100	46
1992	53	18	66	21	98	43
1993	50	16	61	18	85	39
1994	46	16	57	18	78	44
1995	42	14	51	16	76	39
1997	38	13	49	16	80	38
1998	38	14	48	16	74	29
1999	38	12	48	14	80	26
2000	37	12	46	14	70	29

Note: Infant mortality and under 5 year of age mortality rates are per 1000 of live births. Maternal mortality rate is per 10,000 of live births.
Source: China Health Statistical Digest, 2001

1.23 *While successfully integrating with the global economy, China now faces the challenge of integrating domestically and promoting growth with equity.* Development experience from around the world suggests that interventionist policies have largely failed in accelerating growth in selected localities, except in brief spurts.[20] The benefits associated with such policies have seldom justified the costs. This is as true for rapidly growing East Asian countries, like Japan, Korea and Thailand, as it is for the slower growing regions of southern Europe and northeast Brazil. Creating the conditions for growth with equity is a long process and most interventionist policies tend to be slow to react to changing conditions. Instead, equitable growth has resulted largely from the removal of major distortions in the economy (namely macroeconomic imbalances and disincentives, rigidities in transferring land, labor and capital to alternative uses, and fragmentation of the domestic product market), from urbanization and from human capital development. In this respect, in addition to geographical or sectoral interventions, a broader package of policies that includes macroeconomic stability, adequate delivery of social security and other public services, human capital development, and functioning markets for capital, land, labor, and goods and services, is central to future growth and distributional performance in China.

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[18] The rising urban poverty since mid-1990s prompted a number of Chinese organizations to calculate an urban poverty line in terms of expenditure needed for a socially acceptable subsistence. For the practical purposes of providing assistance to poor urban households, each city sets its own poverty line. On average, in 2000, the poverty line was RMB1,800 for urban areas compared to RMB635 for rural areas.

[19] Drop out rates were significantly higher in poor localities where tuition fees and the cost of textbooks appear to be the main cause.

[20] Common interventionist regional development strategies include investment incentives, employment subsidies, administrative controls, public investment in infrastructure, enterprise zones, export processing zones, and clusters. For analysis of their effectiveness, see Hon and Fallon (2001).

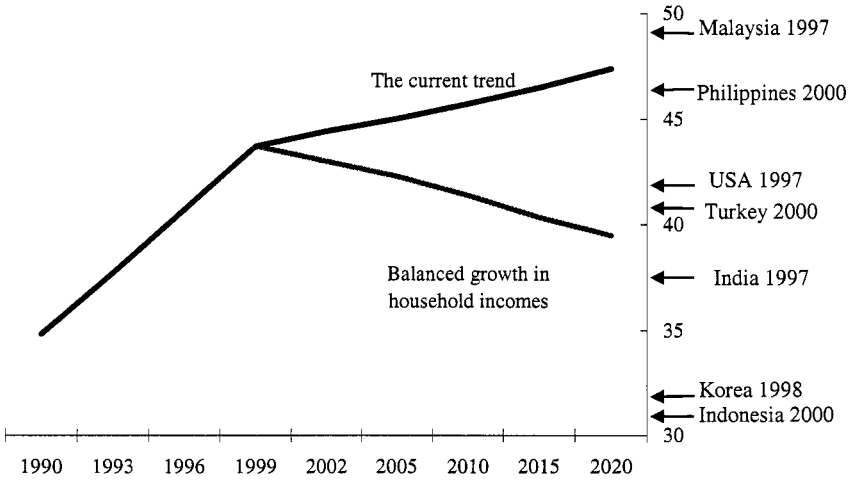
2. FACING THE PROSPECT OF RISING INEQUALITY

2.1 *China's quarter-century record of dynamism offers great promise for the future.* Continued economic growth is likely to raise household incomes across the entire income distribution if energetic public action complements economic forces. The Government is concerned, however, that economic gains will not only be distributed unequally, which is natural in a country as vast and rapidly changing as China, but that current inequities will further expand unless some policies are adjusted to offset such a tendency. Subsequent chapters of this report present the policy options that could assist in meeting China's objective of growth with equity. This chapter provides a backdrop against which to evaluate such options.

Growth and Inequality: Some Projections

2.2 *Projecting future patterns of inequality in China is problematical.* China's economy has undergone massive transformations, including the relative decline of agriculture and, more generally, of rural economic activity, shrinking contribution of public sector output and employment, rising global integration that has changed the structure of production and its regional concentration, and a sharply altered demographic profile that has lowered the rate of growth of the population while, for the time being, has increased the share of those seeking jobs.[21] Equally, as the process of globalization, restructuring and secular changes in the economy proceed, or even accelerate, large resource reallocations may be expected to occur over the next decades. Tracing the effects of the past transformations is complex, adding in the uncertainties associated with future changes makes projections a task of unparalleled difficulty. In particular, there are numerous

Figure 2.1 Income Inequality Projections for China (Gini coefficient)



Source: World Bank estimates and World Bank (2003).

[21] The share of economically active persons in the population increased from 43.5 percent in 1980 to 57.4 percent in 2002. This trend is being reversed by the aging of the population.

combinations of policies and instruments that will propel China towards the goal it has set – the establishment of an all-encompassing *xiaokang* society by 2020 (see Box 2.1). It is impractical, if not impossible, to examine each of these.

Box 2.1 Towards a *Xiaokang* Society

The 16th Congress of the Communist Party of China reiterated the objective of establishing an all-encompassing *xiaokang* (comfortable, or well-off) society by 2020. The quadrupling of China's GDP from the level of RMB8.9 trillion (US$1.1 trillion) reached in 2000 has been established as a notional target. This implies an average growth rate of 7.2 percent per year, and an average income level of RMB25,000 (US$3,000) in the final year, compared to RMB7,780 (US$940) today. Consequently, by 2020 the average standard of living in China is expected to reach the level found today in the upper middle-income developing countries, as defined by the World Bank. China's population growth rate has been slowing, but total numbers are projected to reach 1.47 billion in 2020, compared to 1.29 billion now, which adds to the challenge. Moreover, the growth of the labor force is expected to fall to near-zero by 2020, and turn negative thereafter, while the share of those aged 65 years and over will rise from today's 7.3 percent to 11.8 percent. Such an increase in the dependency ratio (the share of non-working population) underlines the need for a rapid increase in productivity among China's working population.

But building a *xiaokang* society is considered to be much more than a rapid increase in average income. An official attempt in the mid-1990s to quantify different aspects of well-being identified, among others, the urban-rural income gap, availability of selected services such as primary health care and roads, and social indicators such as infant mortality, literacy and life span. In this sense, the measures of well-being contain elements that form the human development index of the United Nations Development Program, and now the Millennium Development Goals (MDG). By the standards of the MDG, in terms of national averages China has reached the global benchmarks already, although there are wide variations among the different regions of the country.

The recent debates around the meaning of an all-encompassing *xiaokang* society and its utility as a national goal suggest that it is even more inclusive than the concept of well-being that the international development community has attempted to capture through the MDG. Increasingly, the phrase "all-round way" has been appended to the concept of establishing a well-off society. It is believed that in addition to material gain, progress also depends on improvements in the rule of law, civic life, physical and natural environment, and the quality of leisure. Above all, either explicitly or implicitly, a core component of movement towards *xiaokang* is an increase in equity or fairness as a goal in itself, rather than merely as a condition to improve growth prospects or social stability.

2.3 *Instead, this report adopts a simpler approach to such projections by focusing on a crucial set of outcomes, namely the implications of growth for equity.* Figure 2.1 presents the results of an analysis that is based on a simple framework developed in an earlier World Bank report (see Box 2.2).[22]

2.4 *This framework illustrates several important points, although the projections should be interpreted only as broad descriptions of likely trends.* First, if recent trends in rural-urban household-level inequality and the disparate growth of rural and urban household incomes across provinces continue, income inequality would rise sharply. The measured Gini coefficient would increase from 43.7 in 1999 to 47.4 in 2020. By this measure inequality in China would approach inequality levels found in Malaysia in 1997. By contrast, an alternative set of assumptions, namely the elimination of variations in provincial growth performance, with the income of households in all rural and urban

[22] See World Bank (1997).

areas across provinces growing at the target 7.2 percent rate, would reduce the measured Gini coefficient to 39.5 by 2020.[23]

Box 2.2 Projecting Inequality

The simple projection framework uses household survey data (1999, the latest year for which data are available publicly) and assumptions regarding population and income growth in the rural and urban areas of each province to generate a measure of national income inequality for 2020, which is the target year for achieving a *xiaokang* society. There are no behavioral relationships in this framework. The national population grows at a rate of 0.7 percent per year, while the urban population is assumed to grow along the 1995-2001 trend, reaching 65 percent of the total population in 2020.

There are two projections based on recent trends in average income growth of rural and urban areas in each province. Thus, regional growth disparities are maintained. The first of these projections assumes that rural-urban inequality in each province continues to widen at the same rate as during 1990-99. The second is based on freezing inequality in each province at the 1999 level. In both projections, inequality within each rural and urban area is assumed to remain unchanged.

In addition, there are two projections based on a 7.2 percent growth in annual income in all areas, the implicit rate of growth implied by the 2020 target for establishing a *xiaokang* society. The first assumes that rural-urban inequality in each province will widen at the 1990-99 rate. The second that rural-urban inequality is unchanged from the 1999 level. Again, inequality within each rural and urban area is assumed to remain unchanged.

Admittedly, the projection framework is simple and makes strong assumptions. However, it is useful to show the effects of recent historical trends, if continued, on the direction of income inequality in China.

2.5 *Perhaps more interesting are comparisons of the Theil index implied by these projections, which show the relative effects of changes in inequality between households in rural and urban areas within provinces and those between the provinces themselves.* The projections suggest that if rural-urban inequality remains unchanged, but average incomes in each province continue to grow as in the recent past, the Theil index reaches 38.6 in 2020, compared to 32.4 in 1999. Conversely, if rural-urban income inequality continues to widen at recent rates, but the disparity in provincial income growth is eliminated, the effect on overall inequality is almost the same, with the index rising to 39.1. For illustrative purposes, it is worth noting that should rural-urban inequalities be frozen at the 1999 level and provincial income growth be equalized, the Theil index for 2020 is projected to fall to 26.

2.6 *Scrutinizing the projections of the Theil index suggests that there could be two equally effective strategic approaches for managing overall inequality in China.* One would focus on narrowing rural-urban inequality, possibly through migration and targeted programs. The other would rely on regional development policies, flexible markets, and intergovernmental fiscal relationships to reduce growth differentials among the provinces. A combination of such policies is required for a balanced strategy to promote growth with equity. In fact, the Government is operating along both axes, combining its targeted anti-poverty programs with a broader strategy of developing the lagging regions of the country (for example, the Western Region Development Strategy discussed in Box 2.3). Neither of the strategic approaches, however, should freeze the

[23] In all scenarios, urbanization is projected to continue at its 1995-2001 rate and works in the direction of diminishing inequality.

labor force, capital, or other resources in their present activities or geographic areas. In contrast, as subsequent chapters discuss, incomes in lagging areas (rural areas within provinces or in lagging provinces themselves) are likely to growth both from the better utilization of resources within such areas and from the reallocation of resources to other, more productive areas (economic activities or localities).

Box 2.3 China's Western Region Development Strategy

The strategy aims at reducing the gap in income and social indicators between the coastal provinces and some Central and Western provinces. It covers the following 12 provinces: Chongqing, Gansu, Guangxi, Guizhou, Inner Mongolia, Ningxia, Qinghai, Shaanxi, Sichuan, Tibet, Xinjiang, and Yunnan.

The strategy is meant to be different from the Third Front Strategy of the 1960-70s. The latter also focused on the Western Region but it was mainly a geo-political strategy aimed at dispersing industry away from the coastal belt. Since the Third Front enterprises were established on the basis of strategic instead of economic considerations, many of them became loss-making or non-viable when market-oriented reforms were deepened.

The Western Region Development Strategy is concerned less directly with the establishment of industrial enterprises and more with the creation of conditions for the proliferation of a wide range of economic activities that would survive in a market economy. The creation of such conditions includes investment in transport infrastructure and utilities services, protection and improvement of the natural environment (including the conversion of marginal lands into forests and the management of water resources), investment in education and vocational training, and encouragement to foreign and domestic enterprises to invest in the region. Investment in transport, for example, is designed so that its benefits accrue to a wide range of activities and localities. It has three objectives: improve access of inland localities in the South-West to sea ports, develop navigation on the Yangtze River, and revive the North-West as the land bridge linking China with Central Asia and beyond to Europe. Priorities identified under the strategy, however, are not always identical with those identified by individual local governments (for a province by province comparison see Hu, 2001).

In assessing the Western Region Development Strategy, it is important to distinguish between the aim to raise the local GDP relative to the national average, and the aim to raise the income of the poor in the locality. In specific contexts, the two aims may be inconsistent. Accelerating the development of a lagging locality may raise mean incomes without significantly benefiting the poor. Further, the aims of poverty relief and enhancing the income of the poor are not restricted to the lagging regions. The implication is that pro-poor development of lagging localities requires a policy package with a mix of instruments, some focused on the development of the locality and some narrowly focused on the promotion and protection of the poor. The conflation of regional development with the promotion and protection of the poor may lead to a choice of a defective policy package. The best regional policies may not be best for assisting the poor in the locality and, conversely, the best poverty alleviation policies may not be best for promoting regional development.

2.7 *Policies to reduce inequality are often compatible with the objective of promoting economic growth.* Recent Chinese economic strategy, specifically since the 9th Five-Year Plan (1996-2000), has stressed balanced patterns of growth focused on rapid development of the lagging geographical regions of the country, with emphasis given to selected provinces in the interior and western parts of the country. With the appearance of rural distress during the 9th Plan period, renewed attention is being given to developing specific policies and programs to narrow the rural-urban gap. In framing such strategies, it is important to recognize that there are bound to be leading and lagging sectors and regions in a rapidly-growing economy, whatever its size and complexity. Differences in China result from differing endowments, geographical factors, and the effects of policies.

The key issue going forward is to design a set of strategies that would generate the requisite rates of economic growth while reducing, rather than widening, inequalities. Even under the condition that some regions of the country were to always grow faster than others, if the share of households that benefit from this regional growth keeps increasing, overall measured inequality in China will fall.

Growth with Equity: A Role for Policy?

2.8 *In spite of evidence from China's post-1979 experience, economic determinism (or, in its modern form, geographical fundamentalism) has played an important role in debates on economic strategy in China.* As described in the previous chapter, there are large regional differences in income, human development, and social protection in China. This can be seen at different levels: between urban and rural areas, among counties, prefectures, provinces, and sub-regions (i.e., the standard 6-way classification into North, Northeast, East, Southeast, Southwest and Northwest), among the development belts (coastal, interior, western), or when comparing the coastal region to the rest of the country. Recent debates, although reviewing individual components of the desirable policies in extensive detail, could have examined more thoroughly the role of public policies in reducing such differences in a coordinated manner.[24] Available evidence on regional growth patterns suggests that the relative standing of different groups in China can change fairly rapidly and that geography, while important, is not as deterministic as currently argued in economic circles in China.

2.9 *The growth processes and prospects of the lagging regions reflect both their endowments and geography.* In terms of endowments (natural, human, financial and institutional), lagging regions show large differences. These differences are more evident, the greater the level of spatial disaggregation. As is well known, endowments have a significant effect on prices, hence on incomes, and traditionally have been considered to be the main source of comparative advantage. With respect to geography (the spatial relationship between productive resources, production centers and markets and the costs implied for organizing economic activity), with the exception of locations in the Northeast, lagging regions are generally characterized by smaller local markets and greater distances to trans-regional markets than the other regions. Table 2.1 presents an example of the problem of geography, using simplified costs for containerized garment exports from China to the United States. With the same input costs but a different transport burden, the maximum possible value added in an inland city such as Lanzhou is only 60 percent of that in coastal Shanghai. The return to labor in the interior province can reach just 43 percent of that in the coastal area, and just 33 percent of the international wage. Since, as in most garments processing, inputs are imported, the cost of an overland access to the port from China's interior, which typically accounts for two-thirds of total transport cost, acts as a double-tax on inland locations. Even without large differences in endowments, geography can strongly affect wages and per capita incomes.

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[24] Bao et al's (2002) statistical analysis, for example, suggests that 60 percent or more of the variation in provincial growth rates during the post-1979 reform period can be explained by geographical variables such as elevation, distance from the province to the coast and the length of the province's coastline. The analysis is unable, however, to separate policy and geography adequately in distinguishing between the relative performances of lagging and leading regions.

2.10 *China's own experience, however, suggests that neither geography nor endowments are insurmountable constraints to growth.* The experience of most countries suggests that offsetting the effects of endowments and geography requires a multi-pronged strategy. Political choices, public policy and historical developments can all have a critical impact on how the effects of endowments and geography play out. Policies such as the Third Front industrial location strategy of the 1960s and 1970s, or the coastal region development strategy of the 1980s and 1990s, have played a significant role in affecting growth outcomes in the regions of China. As a result, there has been substantial change in the ranking of China's provinces over a short period of two decades (shown in Table 2.2), and this is likely to continue.

Table 2.1 Geography and Returns to Labor

	Seattle	Shanghai	Lanzhou
Labor	45		
Capital	15		
Total Value Added	60		
Input transport	-		
Input cost	40		
Output transport	-		
Output sale price c.i.f.	***100***		
Output transport		*5*	*15*
Output sale price f.o.b.		95	85
Input transport		*5*	*15*
Input cost		40	40
Value Added		*50*	*30*
Capital		15	15
Labor		35	15

Note: The output sale price is determined in the competitive US market.

Table 2.2 Changes in Ranks (per capita income, 1980-2002)

Change in Rank	Improvement	Deterioration
6 – 15 places	Fujian (15), Henan (9)	Tibet (13), Ningxia (12), Gansu (12), Qinghai (11), Shanxi (9)
3 – 6 places	Shangdong (8), Zhejiang (6), Hainan (6), Chongqing (6), Hebei (4), Inner Mongolia (4), Xinjiang (4), Anhui (4)	Heilongjiang (5), Liaoning (4), Shaanxi (3)
1 – 2 places	Hunan (2), Guangdong (2), Yunnan (2)	Jilin (2), Sichuan (1)
No change	Beijing, Tianjin, Shanghai, Jiangsu, Jiangxi, Hubei, Guangxi, Guizhou	

Source: National Bureau of Statistics

2.11 *Currently in China, the task for economic policy is to enhance conditions for growth in the lagging groups and regions.* Table 2.3 gives a sense of the locational priorities. The greatest concern exists about provinces in the right lower corner of the table, whose income level *and* growth rate are lower than the national average. With the exception of Hunan and Shanxi, the other provinces within this quadrant have been included in the Western Region Development Strategy. Inasmuch as the strategy envisions a reallocation of public spending towards lagging regions as well as the promotion of regional development by other means, it recognizes the role that policy changes can play in promoting development. At the same time, as delineated in the Tenth Plan and other strategic documents of the Government, the Government recognizes that improved economic conditions in the lagging regions may sometimes require the movement of economic resources, especially labor, out of these areas. In fact it is likely that in a dynamic economy with flexible markets resources will go to their point of highest return, resulting in more equitable growth over time. Recent government policies

have been directed, where possible, at assisting such resource movements in parallel with *in situ* efforts to stimulate the development of lagging regions. An economic strategy that is explicitly oriented toward growth with equity conforms to the general thrust of China's existing national development strategy. However, it needs clearer delineation and early implementation. Moreover, it may also require effective dealing with various interest groups that may lose out in the process.

Table 2.3 Growth and Income in China's Provinces

		Per capita income, 2002	
		Above median	***Median and below***
Growth rate 1980-2002	***Above median***	Fujian, Guangdong, Hainan, Hebei, Hubei, Jiangsu, Jilin, Shandong, Zhejiang (9)	Anhui, Chongqing, Henan, Inner Mongolia, Jiangxi (5)
	Median and below	Beijing, Heilongjiang, Liaoning, Shanghai, Tianjin, Xinjiang (6)	Gansu, Guangxi, Guizhou, Hunan, Ningxia, Qinghai, Shaanxi, Shanxi, Sichuan, Tibet, Yunnan (11)

Source: National Bureau of Statistics

2.12 *The remainder of this report describes the main actionable components of a strategy to promote growth with equity.* They need to address three challenges. First, how to overcome the geographical disadvantage of lagging regions? The ongoing investments in transport infrastructure and liberalization in logistics,[25] by reducing the cost of business across China, work in this direction. Further policy actions may be needed to create a conducive environment for economic activities in which lagging regions could establish their competitiveness based on their lower cost of inputs. Second, how to manage endowments? To some extent, freer movement of people, goods, capital and ideas have already been working to make endowments a more dynamic factor of local development. Further policy measures could promote market integration and flexibility, boost the development of human capital, facilitate adoption of suitable technologies, and improve the management of natural resources. Third, how to react to the challenges of rapid globalization? Policy actions could enhance the ability of the domestic market agents, including private businesses and farmers, to respond to changing market conditions. Overall, the effectiveness and sustainability of the results of development may depend on whether or not public action is in harmony with private initiative and market forces. The report recognizes the challenges facing the government in navigating among the different interest groups that are the beneficiaries of the currently existing distortions in the market and governance. Addressing these challenges, however, will ultimately require a great political insight, enormous political will and skillful political maneuvering – matters that are outside the scope and grasp of this report.

[25] Logistics include transport, storage and warehousing, distribution, inventory financing, packaging and courier services, system management, freight forwarding, and administration. The definition of logistics has been rapidly evolving over the last 30 years. Presently, logistics is defined as that part of the supply chain process that plans, implements, and controls the efficient, effective flow and storage of goods, services, and related information from the point of consumption in order to meet customers' requirement.

3. DOMESTIC MARKET INTEGRATION AND FLEXIBILITY

3.1 *The pace of overall economic growth in China will depend on the development of China's vast domestic market.* China's external trade has grown by 13 percent a year since 1979 in real terms. In 2002, its export-to-GDP ratio reached 26 percent of GDP, and the total trade-to-GDP ratio approached 50 percent. In terms of trade, China can hardly be compared to other "continental" economies. It has reached a level of global integration that is more than twice as high as Brazil, India, or the United States. Projections of global trade from World Bank models suggest that China's post-WTO accession share of the world exports would rise from 4.4 percent in 2001 to about 7 percent by 2007. Despite the extraordinary growth of exports, however, more than 70 percent of China's output will still be intended for the domestic market by 2007. Moreover, size, resulting from a domestic market of 1.3 billion people and a doubling of income every 9 years or so, is China's most significant source of scale economies, hence competitive advantage, and a magnet for domestic and foreign investment.

Box 3.1 The Implications of Market Integration: International Experience

Experience of the United States in the late 19th and early 20th century and, to some extent, of Europe since the mid-20th century suggests that domestic market integration has been associated with positive contribution to GDP growth and with modest income convergence in the long term.

The experience has confirmed that with market integration, GDP growth mainly benefits from an improved allocation of capital and labor and from productivity gains of greater agglomeration and regional specialization. Specifically, market integration has facilitated a shift from agriculture to manufacturing and to services, and reduced the effects of land quality and resource endowment on economic development and on income levels across localities. In an integrated market, with better transportation and communication network, relative production costs rather than geography have increasingly influenced decisions about location for manufacturing production and for those services not requiring proximity to customers. Manufacturing industries have become geographically more concentrated, particularly in localities with an easy access to large markets.

As for regional inequality, the evidence from the United States and Europe indicates that per capita incomes and output in poor states tend to grow faster than in rich states, with the rate of convergence of about 2 percent a year. Critical in the process of regional convergence has been labor mobility, especially migration out from areas with more abundant labor.

Source: Kim (1997), Henrekson et al (1996), Amiti (1998), Barro and Sala i Martin (1990 and 1991), and Park (2002)

3.2 *The development of domestic markets is also vital for structural adjustment in the Chinese economy.* Most significantly, mobility of factors of production and flexibility in the entry and exit of firms can facilitate and ease the pain of restructuring. A more flexible and integrated domestic market is likely to promote the flying geese pattern of industrialization and progressive technological upgrading from eastern to central and western regions in

China, and hence broaden the basis of competitiveness and growth.[26] Similarly, the ongoing domestic structural adjustment is more likely to deliver results that are viable in the long term if it occurs in an integrated domestic market in harmony with broader market forces. Box 3.1 illustrates international experience with the structural effects of domestic market integration.[27] In some aspects, well functioning domestic markets can contribute to reversing the trend of rising inequalities and to continued poverty reduction. In the labor market, for example, rural–urban migration already allows some farming families to increase their incomes by family members taking jobs in urban areas.

3.3 *Existing domestic barriers to the free flow of resources for production and of goods and services for consumption constrain China's potential.* Arguably, the formation of a few large regional markets should not be a source of concern if competition and trade among such blocks are preserved and internal barriers within each are minimized. The size of each block is likely to maintain the benefits that accrue from economies of scale, agglomeration of enterprises, and regional specialization. China's internal market, however, is much more fragmented than this. Many forms of local protectionism and market rigidities reflecting broader structural and institutional problems, inhibit dynamic improvements that could promote growth with equity.

3.4 *Under the WTO arrangements, China is committed to a free internal market and to providing a central point where firms and individuals can notify the central government of problems they are experiencing at sub-national levels.* If these are not resolved, China could find itself fighting, and losing, dispute settlement cases between itself and other WTO members over problems arising within provinces, prefectures or even lower-level administrative units. Therefore, local protectionism not only implies economic cost for China, its obvious manifestations are now becoming illegal and curbed through a body focusing on maintaining free trade.

Market for goods and services

3.5 *A flexible and integrated domestic market for goods and services promotes competition and productivity.* For a market to be competitive, entry and exit of firms need to be relatively free, barriers to the movement of productive resources, goods and services should be minimal, and prices should be set based on market signals.[28]

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[26] A forthcoming study by the Development Research Center of the State Council and the World Bank identifies local fragmentation of markets in China as a major problem and a matter of strategic significance to break up local protectionism, establish a nationally integrated, competitive and standaradized market system, in order to support growth and competitiveness.

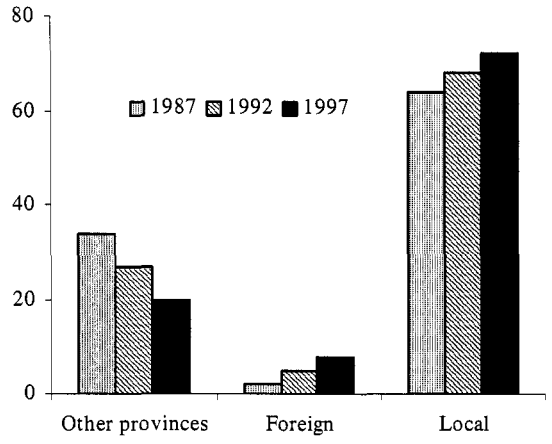
[27] Regulatory instruments to promote market integration and flexibility include laws on the number of agents and freedom of entry, such as licensing and regulatory procedure; laws on competitive behavior, such as regulations on monopolies and unfair trade practices; laws to safeguard and maintain competition, laws on exit, such as bankruptcy law; the system of contract law and contract enforcement, an independent judicial system, safeguards to producers (such as patent, trademark, copyright) and safeguards to consumers (such as advertising rules, consumer protection laws).

[28] Empirical results suggest that lower barriers to entry and exit are associated with higher productivity, entrepreneurship and employment growth. These results are derived by Dollar at al (2002) and Hallward-Driemeier, Wallsten and Xu (2003) based on a enterprise-level dataset covering 1500 Chinese enterprises in ten industries in five cities.

Competitive integrated markets enable efficient producers to expand their market share, better exploit economies of scale, and promote specialization.

3.6 *Inter-provincial commerce and business in China suffer from barriers.* Recent empirical studies have employed four different approaches to measuring these barriers. The *first* approach analyzes spatial disparity in prices and rates of returns. It shows that prices and rates of returns on capital and labor generally exhibit large differentials across localities.[29] The *second* approach examines the trend and similarity in the production structure across different provinces, indicating that the production structure shows limited specialization across provinces.[30] The *third* focuses on the direct analysis of inter-provincial trade flows. This suggests that inter-provincial market transactions are depressed (Figure 3.1 illustrates the average shares of provincial spending on goods supplied from other Chinese provinces compared to the shares spent on goods supplied from within the province or from foreign countries).[31] And, the *fourth* analyzes the correlation of business cycles among regions, illustrating that the business cycle of China's Western provinces is different from that of coastal provinces, which is more closely associated with the national growth cycle.[32] Although the studies on China sometimes disagree on the trend in market fragmentation in the 1980s and 1990s, they generally agree that the problem is serious. Market fragmentation may also explain why competitiveness and productivity levels within sectors in China vary significantly across enterprises.

Figure 3.1 Average Provincial Absorption of Goods, 1987-97 (% of Total)



Source: Poncet (2002b)

3.7 *Barriers partly relate to China's large distances and mountainous terrain and to costly logistics.* The problems of geography and topography are well known and a vast investment program in transport infrastructure (including the farm-to-market road network as well as highways, railways and inland waterways) has been aimed at overcoming the high cost associated with such barriers. As a result of the development of local and regional infrastructure, for example, prices for maize, soybeans and rice have

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29 World Bank (1994) and Fan, Robinson and Zhang (2003). The extent of market integration is different for different commodities. For instance, Rozelle and Huang (2002) found that price differentials for maize, soybeans and rice are relatively limited across China.

30 Young (2000), Bai et al (2002), Chen Dongqi (2002), and Naughton (1999).

31 Poncet (2001a,b and 2002a,b). Measurement of inter-provincial barriers to trade, based on how much consumption of goods from other provinces deviates from consumption of local goods, after accounting for the influence of relative prices, geographical distance and relative production levels, suggests that the average border effect among China's provinces was about 51 percent in 1997. This is much higher than, for example, the 35 percent border effect estimated for trade between member countries of the European Union.

32 Xu and Voon (2002)

become more synchronized across China's local markets in recent years.[33] In logistics, the partial liberalization of transport, storage, distribution, warehousing, and other services is expected to reduce the cost of conducting business across China. Presently, logistics could account for as much has 30-40 percent of the total cost of manufactured goods in China, compared to about 10 percent in Europe, 14 percent in Asia and 5-20 percent in the United States. Transport cost accounts for about a half of the total cost of logistics in China, compared to about one quarter of the total logistics cost in developed countries. The damage goods rate is estimated at 5 percent in China compared to 1 percent in developed economies.[34]

3.8 *Significant barriers to conducting trade and other business within China have been erected by local governments.* Local protectionism continues to be present in both coastal and interior provinces, greater in provinces where local governments undertake more budget spending relative to GDP and where unemployment rates are higher. It is prevalent in industries that are more labor intensive and that make a larger fiscal contribution to the local government budget, in high profit-margin manufactured goods (automobiles, tobacco products and alcohol)[35] and for raw materials in short supply (tobacco, cotton and aluminum).[36] Anecdotal evidence suggests that protectionism also affects the performance of farmers (Box 3.2). Obstacles erected by local governments take the form of access barriers (complete prohibition or quantitative restrictions, technical barriers, local content rules on inputs, fees on goods produced outside the locality, and local preferences in government procurement), outflow barriers (a ban on outflow of commodities and fees imposed on external users) in the commodity markets and other barriers to doing business (preferential treatment of local enterprises in access to assets, such as land, and in the context of market regulations and in local courts).

Box 3.2 Local Barriers in the Seeds Market

Farmers sometimes face problems in obtaining seed. The production and distribution of hybrid rice and maize is often monopolized by county seed companies. These companies, owned or supported by local governments, enjoy exclusive access to the local market. For example, in Dexing City of Jiangxi Province, Dexing County Seed Company sells and distributes its seed to the local farmers through township seed stations. It has a monopoly on seed supply and is the only authorized source of hybrid rice seed in the whole area. The company, however, sells only one variety each for early, middle, and late rice, giving farmers no choice about the rice variety to grow. Interviews with farmers suggest that the varieties offered by the county seed company were not those most suitable in agronomic and economic terms.

Source: World Bank staff field visits

3.9 *Measures to reduce local protectionism need to separately address the main sources of motivation and the ability of local governments to engage in protectionism.*

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33 Rozelle and Huang (2002)

34 See Gibson (2001). For more on the potential role of logistics in promoting growth across China see Chapter 4.

35 After China's WTO accession, these manufacturing sectors are facing the strongest pressures to restructure, expand their scale of operations, and upgrade technology to be internationally competitive.

36 See Economic Intelligence Unit (2002), OECD (2002), Development Research Council (2002) and Poncet (2002a and 2002b).

Addressing these requires special consideration in further reforms of the inter-government finance system, in modifying the role and responsibilities of local governments in the economy, and in judicial reform. For instance, as the inter-government tax sharing system has reduced the weight placed on enterprise ownership and, since 2002, local governments no longer obtain the full amount of enterprise income tax collected from their own enterprises, the *incentive* to protect such enterprises may have weakened. The local economic base, however, remains the main source of local budget revenue, making protection of local enterprises financially attractive to local government officials. Protectionist incentives also emerge from the existing overlap among the functions of local governments and enterprises, from close personnel connections between the local government and local enterprises, and sometimes also from the nature of development targets imposed on local governments by the central government (including short-term targets for local investment, production and employment). As for the *ability* of local governments to erect protectionist barriers, this mainly relates to the high level of autonomy that local governments are given in terms of market regulation and competition policy and to the high level of influence enjoyed by local governments in the judicial system. Local governments, run local enterprises as well as have significant powers in regulating and intervening in the business operations of their competitors. In the local courts, local governments appoint and control the judiciary personnel. Under such circumstances, it is difficult for a court to make an impartial judgment.[37]

3.10 *In addition, the central government could adopt several innovative measures to make local governments accountable for their influence on the market.* Complementing the legal context of China's WTO commitments, such measures could include local governance surveys of firms, which could be conducted on a regular basis by the central government across localities. International experience in dealing with local protectionism suggests that legal and regulatory measures are viable only to the extent to which they are supported by an effective enforcement mechanism. Some countries have adopted comprehensive national agreements and monitoring and enforcement mechanisms, and succeeded in reducing protectionist actions in the domestic market. Box 3.3 provides an example from Canada.

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[37] The status of the head of the local court is lower than that of the head of local government. Restrictions on judicial independence are particularly problematic after China's accession to the WTO. The WTO has a requirement that a Member's judicial review body should be independent of its administrative agencies. If the foreign parties do not believe the courts of China are impartial and fair, they would choose to approach the dispute settlement body in the WTO through their own governments. For analysis of China's current legal and judicial problems vis-à-vis WTO, see Feinerman (2003).

Box 3.3 Abolishing Local Trade Barriers in Canada

Until recently, Canada's local governments were often involved in the following protectionist practices:

- discriminatory practices (local governments required procurement tenders to have local presence, suppliers to have high levels of local content, and owners of certain assets such as land to have local residence),
- practices increasing transaction cost (local governments applied their own requirements for corporate registration, for annual reports and for various licenses – such as required occupational and educational training for specific businesses), and
- inequitable application of administrative practices (local governments limited the dissemination of tender requests or the time frame for bid submission in government procurement process).

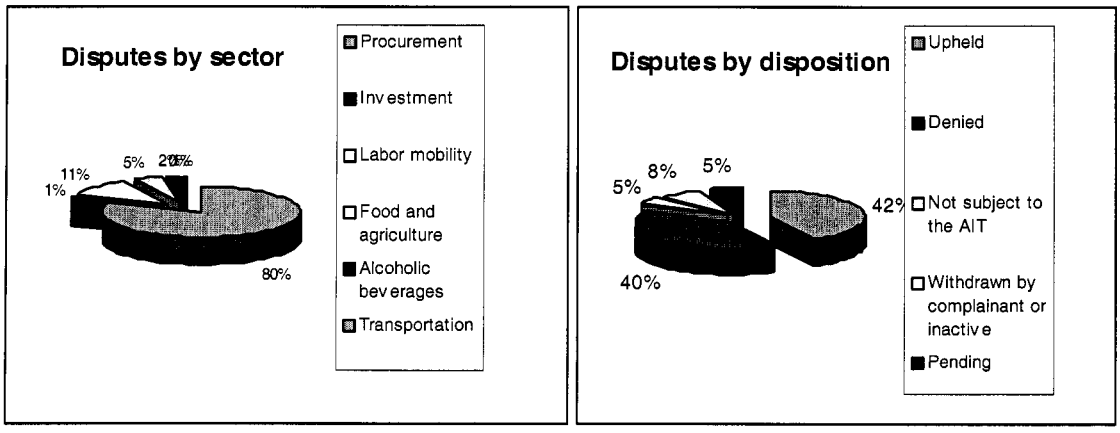
As a result, while the real value of international trade expanded dramatically across Canada from 1990 to 1996 following the regional trading arrangements with the United States, inter-provincial trade remained almost flat.

To correct the situation, the federal and provincial governments signed an Agreement on Internal Trade in 1995. Similar to the European Union's Single European Act, the Agreement set up general rules and specified particular barriers to be removed in 11 areas, including: government procurement, investment, labor mobility, consumer-related measures and standards, agricultural and food products, alcoholic beverages, natural resources processing, energy, communication, transportation, and environmental protection. To ensure adequate enforcement, the Agreement laid out dispute resolution procedures.

The progress since the Agreement has came into force has been remarkable.

- Discriminatory practices concerning investment have been removed. A list of remaining presence and residency requirements has been completed for further action.
- Residency requirements have been eliminated for employment, license applications, certification or registration.
- A gateway website, MARCAN, was launched to increase the transparency of public sector tender opportunities. Discriminatory practices such as local presence, local content requirement or local payment preferences have been removed.

From 1995 to the beginning of 2002, a total of 129 complaints by individuals, corporate entities, or local governments against governments (either federal or other local) for formal dispute resolution. Among them, a total of 122 cases have been resolved or withdrawn by the complainants. In 42% cases, the dispute resolution panels upheld the complainants' argument and found the defendant guilty. In such cases, corrective measures were ordered for implementation within 60 days. Non compliance was punished by bad publicity and retaliatory actions.



Note: The total number of cases is 129
Source: Internal Trade Secretariat of Canada, www.intersec.mb.ca/index_he.htm, and Leidy (1998)

Labor Markets

3.11 *As China integrates with the global economy, a flexible labor market will offer increasing economic and social benefits.* Some of the benefits of labor transfer for economic restructuring have been seen already in China's post-1979 experience. Now, as before, productivity levels in agriculture lag behind industry and services. In fact, the gap has been expanding (Figures 3.2 and 3.3). Hence, boosting economic growth mainly entails moving labor from the farm to non-farm jobs. Since most productive non-farm jobs are presently created within agglomerations of different sizes rather than in geographically dispersed rural areas, the current movement of labor from farm to non-farm jobs is associated with rural-urban migration. And, because one of the main constraints on further improvements in agricultural productivity and farmers' income is the small size of agricultural land plots, freer rural–urban migration (if accompanied by land consolidation) would also benefit overall agricultural performance and incomes of the remaining farmers. The positive contribution of migration to the returns on farm labor is evident when modeling the effects of China's WTO accession. As Table 3.1 shows, free migration significantly boosts farm wage. Greater availability of migrants in urban areas somewhat reduces non-farm skilled and unskilled wages. In the economy, this encourages substitution away from capital to labor and hence should promote non-farm employment. [38] For those

Figure 3.2 Annual Level of Labor Productivity, 1979-2002
(RMB/worker)

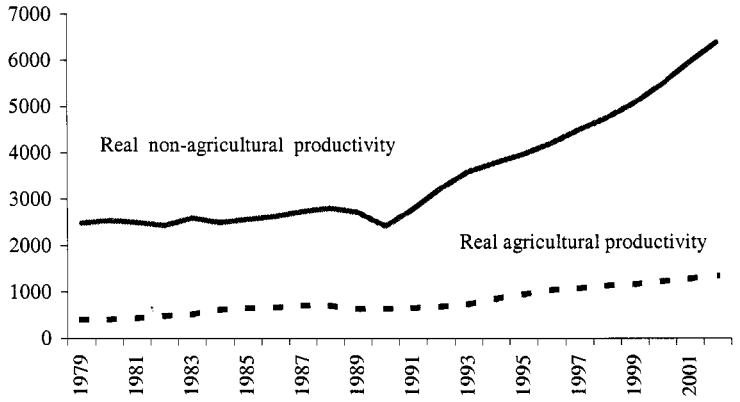
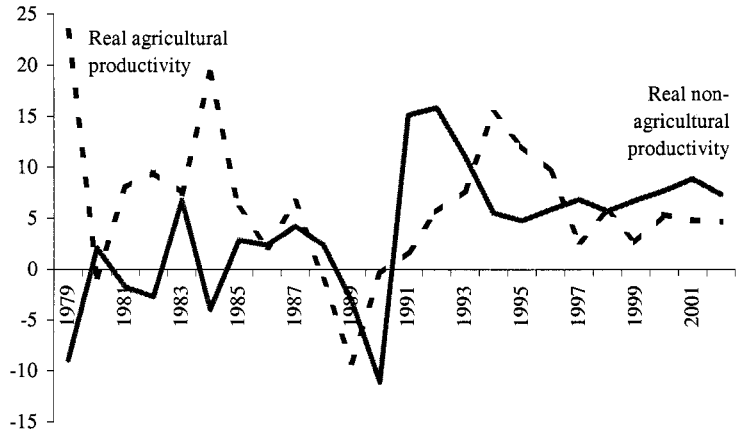


Figure 3.3 Annual Growth in Labor Productivity, 1979-2002 (%)



Source: *China Statistical Yearbook,* various years
Note: Real value added per workers at 1978 prices

[38] Results are based on a general equilibrium (GTAP) model that reflects China's labor market characteristics as well as the profile of expected tariff reduction, removal of quotas and export subsidies, liberalization of the service sector, and restructuring of key sectors, such as the automobile sector. In the baseline, the model internalizes the existing obstacles to labor mobility as a friction between agricultural and non-agricultural employment and imperfect substitution of unskilled workers. The model further assumes full employment, perfect unskilled labor mobility within non-agricultural and within agricultural

poor concentrated in remote and disadvantaged localities and in those cities most negatively affected by restructuring, migration offers new economic opportunities.

3.12 *Migration also supports the efficiency gains of agglomeration.* Manufacturing and services are often more efficient when concentrated in dense business-industrial areas, such as cities and urban peripheries. International experience indicates that total factor productivity in medium-size cities and towns rises by about 10% when their size doubles. By international standards, medium-size cities and towns in China seem too small to effectively exploit urban scale economies and become competitive as national and international commercial centers. By boosting productivity, the expansion of towns and cities and the development of their peripheries are likely to benefit, on average, the current urban residents as well as rural migrants.

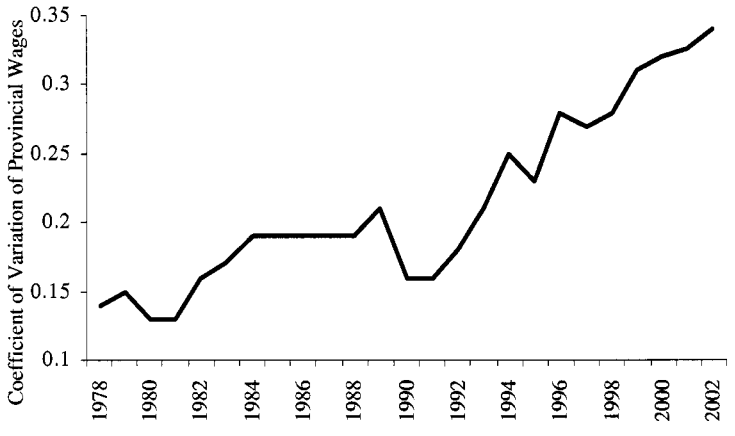
3.13 *Labor markets across China are fragmented, showing wide wage dispersion across localities and across some enterprise categories.* Wage differentials across geographical regions are wide and growing (Figure 3.4). During 1992-1999, using urban Sichuan as a benchmark, the wage differential increased from +20 percent to +46 percent in Bejing, from +71 percent to +85 percent in Guangdong, from +2 percent to –11 percent in Liaoning and from +25 percent to +46 percent in Zhejiang. [39] As for enterprise ownership, state-owned enterprises offer a wage premium compared to the other employers. In cash, state-sector workers have earned more than workers in urban collectives. When adjusted

Table 3.1 The Expected Effect of China's WTO Accession on Real Factor Prices, 2001-2007 (%)

	Baseline	Free migration
Farm unskilled wage	-0.7	16.8
Rental price of land	-5.5	-9.7
Non-farm unskilled wage	1.2	-3.8
Skilled labor wage	0.8	-1.7
Rental price of capital	1.3	-1.4
Price of capital goods	-0.9	-3.6
Migration (million) [a]	6	28
National welfare (US$, billion) [b]	10	11

Note: [a] Number of people expected to move from farm to non-farm jobs.
[b] Change in national welfare expressed in 1997 US dollars.
Source: Ianchovichina and Martin (2002)

Figure 3. 4 Urban Wage Dispersion Across Provinces, 1978-2002



Source: *China Statistical Yearbook* and *Comprehensive Statistical Data and Materials on 50 Years of New China.*

sectors, and trade balance and government tax revenues both as fixed share of GDP. The baseline roughly replicates the 2002 World Bank global growth estimates for the period 1997-2007. For details see Ianchovichina and Martin (2002).

[39] Holding constant individual characteristics, firm ownership, sectors and occupation, the regional comparison is based on a survey described in Shen (2002).

for benefits, state-sector worker remuneration is the highest among all low skill workers and second highest (after foreign and mixed funded enterprises) among high skill workers.[40] On average, however, labor productivity in state-owned enterprises is lower than in the private, mixed and foreign ownership enterprises. Thus, the premium paid in the state sector, contrasts with its weaker relative performance, but is consistent with the general findings on the effects of local protectionism and of a bias in capital allocation (discussed below).

3.14 *The well-known obstacle to migration, the hukou (household registration) system, has been slowly eased by local governments.* Until very recently, the *hukou* system of residential registration and the associated discrimination of migrants have been the most visible obstacles to migration, mainly rural-urban but also urban-urban labor flows. Not having local urban *hukou*, migrants were denied jobs that were formally or informally reserved for local urban residents, and faced discriminatory pricing of education and other public services. Since 2001, a number of local governments have taken important initiatives towards making the treatment of migrants on par with local residents. Since mid-2002, these initiatives have been publicly encouraged by the central government. Officially, the ban on hiring migrants to certain urban industries and jobs has been lifted. Migrants with a job are becoming entitled to local residence permits and to basic public services. Extra school fees earlier collected from migrant children have become illegal.

3.15 *Less direct obstacles to migration remain to be addressed.* In rural areas, the execution of land use rights has been weak, making it difficult for households to either maintain or monetize their land use rights when migrating. In urban areas, in spite of rapid residential development, low income housing needed by the bulk of the reallocating labor, remains scarce. This partly reflects the existing shortages and problems in the urban land markets. With land being scarce in China and the scope for developing new areas of cultivated land nearly exhausted, urban development ultimately reduces the area of cultivated land. This gives rise to difficult trade-offs in urban expansion and in the spatial restructuring of the Chinese economy. These trade-offs are sometimes aggravated by the fact that industrial land is not priced and allocated through a competitive process in land markets but, rather, industrial land development is monopolized by local governments.[41] For various reasons, including the tax system, towns and townships tend to subsidize the cost of industrial land but charge high prices for housing and commercial use. As a result, land in the residential market becomes too costly for the development of low-income housing.

3.16 *Labor mobility is also complicated by the remaining problems in the provision and portability of social benefits.*[42] The social security system and public services provision are geographically segmented to the extent that portability of benefits has been

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[40] Based on survey data from six provinces (Zhao, 2002). Overall, reported wage and income data suffer from problems of random inclusion of non-cash income as part of salary and of an unknown markup for benefits.

[41] Allocating 25% of land supply, as in Shanghai and Guangdong, for non-revenue producing uses such as government facilities is not unreasonable. However, keeping two-thirds of available land out of the market, as in the case of Henan Province, may hamper the development of a functioning land market.

[42] The portability of benefits and social security more broadly are addressed in Chapter 5.

technically impossible. Moreover, changing a job even within a single urban area sometimes implies a loss of benefits and accumulated rights and a challenge to find other, affordable housing. This is because many non-state enterprises fail to participate in the mandatory health insurance and pension schemes, and housing, although no longer directly provided by employers, tends to be tied to employment.

3.17 *Creating a more unified and flexible labor market will entail not just removing controls on labor movement, but also building a whole series of complementary institutions and markets to facilitate such movement.* International evidence suggests that policies need to ensure equal access to job opportunities and public services, strengthen safety nets for those most negatively affected and vulnerable, promote the development of skills demanded by the evolving production process, facilitate labor market information flows, and motivate the private sector to supply low-cost housing. In China, labor mobility across and within urban areas would benefit from centralizing the financing and provision of social security to the provincial level and from extending social security to the urban non-state sector, including both local residents and migrants. Conditions for rural – urban migration would improve with continuing reforms in land use rights to offer farmers a formal mechanism to sublease or quit their land plot with adequate compensation. Most importantly, perhaps, overall labor mobility would benefit from policies to promote the development of low-income housing in urban areas and urban peripheries. Such policies relate to specific issues in the urban land market, urban infrastructure and public services, as well as to broader questions of urbanization. The set of policies identified in this paragraph is discussed in Chapters 4 and 5.

Financial Markets

3.18 *A flexible financial market promotes efficient resource allocation across the economy and contributes to sustained growth.* China's financial system has been providing sound facilities for savings in both rural and urban areas. With annual savings within the banking system reaching about 20 percent of GDP (up from negligible levels before 1978), the financial system has an enormous capacity to support growth. Unobstructed by geographical, political, sectoral or administrative boundaries, capital would flow to points of higher returns at each risk level. This would support entrepreneurship and expanding firms, facilitate economic restructuring, and thus contribute to sustained growth. In the banking sector, emphasis on efficient resource allocation would also contribute to the quality of bank asset portfolios and thus reduce financial sector vulnerability and the associated fiscal risk ultimately facing the government (discussed in Chapter 5).

3.19 *Currently, the financial sector in China provides relatively inexpensive capital to a limited pool of applicants.* The banking sector mainly serves state-owned and state-affiliated enterprises. Less directly, it also serves local governments (for instance, by lending to special purpose companies set up by local governments to finance development projects and to cover occasional shortfalls in local revenues relative to expenditures). In addition, state banks play an important role in absorbing new government debt issues. However, many creditworthy firms that are not owned or sponsored by governments or government officials have difficulty accessing formal

finance. Would-be issuers of equities and corporate bonds are sometimes blocked from access to listing, mainly due to non-transparent accounting and reporting practices and concerns about profitability, but also due to concerns about the likely effect of an increased supply of securities on overall share prices and bond yields. Partly because of segmentation and partly because of underdevelopment, small firms and dynamic firms with long-term potential in an increasingly technologically-driven economy are not valued accurately by financial institutions and lack access to risk financing.

3.20 *The financial market is fragmented also across localities and sectors.* Profit rates and returns to capital differ widely across localities. Yet, across provinces in China, the level of investment is associated strongly with each province's level of savings. After controlling for the provincial rate of investment, volumes of financial intermediation appear negatively associated with provincial growth and positively associated with the size of the state-owned-enterprise sector in provinces.[43] Within provinces, although returns on capital in the rural economy have exceeded those in the urban economy, the financial sector tends to divert resources from the rural to the urban economy.[44] Inter-regional merger and acquisition activities are highly localized and constrained by local governments. Similarly, local governments restrict capital outflows from local enterprises and the local investment activities of outsiders.

3.21 *Market fragmentation mainly arises from government control over interest rates and resource allocation.* All financial institutions in China are owned directly or indirectly by different levels of government, and securities markets are monopolized by the public sector.[45] Government caps on interest rates makes lending rates artificially low, which in turn creates excess demand for credit and rent seeking, in which projects that contribute to local government revenue or favored clients are given priority. Directed credit to state-owned enterprises has reportedly been nearly eliminated, but incentives to avoid bankruptcies (and their consequences for banks' financial statements) and other non-commercial considerations continue to play a role in lending decisions. Given the strong influence of the government on personnel and operating decisions of state commercial banks, incentives to favor government-owned and government-associated credit applicants are strong. At the local level, lending and investment decisions of banks tend to be affected by local government priorities, usually to support the existing local enterprises. The result is that the efficiency of investment is lower than it would be in a

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[43] On the spatial characteristics of investment in China, see Boyreau-Debray and Wei (2002) and Boyreau-Debray (2002). Canada, Germany, Japan, the US and UK, which have internally integrated capital markets, show much lower saving-investment correlation across the regions. See Bayoumi and Rose (1993), Iwamoto and van Wincoop (2000), Sinn (1992), Thomas (1993), and Yamori (1995).

[44] Jefferson and Singh (1999), for instance, estimated pre-tax return on capital for rural industry 25 percent higher than in the state-owned urban sector.

[45] Corporate bonds account for 1 percent of the total bonds outstanding, government bonds account for 73 percent, and bonds issued by two state-owned non-deposit-taking policy banks account for 26 percent. In the equity markets, over 90 percent of the nearly 1200 listed companies are state-owned and local government enterprises. About two thirds or shares are ineligible for trading.

commercially-oriented financial sector, which negatively affects the creation of productive jobs and economic growth.[46]

3.22 *Integration and flexibility in the securities market will improve with expanding access by non-state firms (as issuers) and by individuals and non-state firms (as final investors).* A high-level policy decision would help to enable non-state banks to access the corporate bond market. Subsequently, the approval process for the public issuance of corporate debt would benefit from streamlining. With respect to the demand for securities, there is a need to review the legislative, regulatory and operational structures that surround the institutional investment sector to determine what improvements will promote demand for securities issued by creditworthy non-state firms.

3.23 *Domestic financial market integration and flexibility in China will improve with continuing commercialization of the banking sector.* The central government has been taking steps toward commercializing the four state commercial banks.[47] It is becoming clear, however, that putting the state banks on a commercial footing will be a long-term process, intensive in institutional improvement and capacity building. Bank commercialization may require a fundamental redesign and professionalization of their governance structure. Particularly, it may require eliminating possible ambiguities in the objectives and performance measures of bank managers, which in turn may not be possible without a greater role for the private sector in bank ownership and operation. State commercial banks could be incorporated as commercial banks.[48] Furthermore, bank commercialization can hardly be effective without freer interest rates and without uniform accounting and information systems and associated internal control and auditing regimes within the banks. Consistent with bank commercialization, bank supervision should focus on quality of governance arrangements and internal governance infrastructure (internal controls, internal and external auditing and risk management systems). Successful bank commercialization will also require improvements in corporate governance, accounting and information disclosure in the enterprise sector. In a commercial environment, more non-state firms and fewer existing state-owned enterprises are likely to be viewed as acceptable credit risks. Ultimately, this will improve capital allocation in China and contribute to China's growth performance. It

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[46] Empirical evidence suggests that credit extended by state-owned banks is negatively associated with local economic growth and that the system of financial intermediation in China vastly misallocates financial resources. Boyreau-Debray (2002)

[47] In 1993, the State Council established the state policy banks to conduct policy lending, and eliminated explicit requirements for directed credit from the state commercial banks. In 1998, state commercial banks were ordered to reduce their shares of non-performing loans as well as their staff and branches. Boards of supervisors have been established to supplement state commercial banks' internal control and audit mechanisms. Since 2001, state commercial banks may be corporatized, creating a distinct legal entity with a shareholding structure and a board of directors, their ownership may be diversified beyond the central government.

[48] As complementary measures, it would be practical to reconfigure the existing state commercial banks into a larger number of smaller, more manageable banks, to redesign the ownership and governance functions applicable to the banks, to restructure the banks and to establish and enforce individual performance targets for each bank. The measure of commercial performance in the near term would be a simple target, such as return on assets, before more appropriate targets such as a specific return on equity or dividend yield become practical.

may, however, negatively affect employment in state-owned enterprises, and thus add pressures on the social security system and local government budgets in the process.

Protecting the Losers of Domestic Market Integration

3.24 *The cost of market fragmentation and rigidities is high.* When market fragmentation obstructs efficient allocation of labor and capital in the economy and limits competition in favor of the state sector, it inhibits more productive firms in expanding their market share, in building economies of scale and, possibly, in strengthening their international competitive advantage. Protection of the less productive firms is likely to reduce the speed of technological upgrading and long-term viability of the ongoing structural changes in the economy. The social cost of market fragmentation is also significant especially as it reduces the ability of China's rural population to take full part in the country's economic opportunities.

3.25 *Addressing the rigidities and fragmentation of the domestic markets will be a time-consuming process.* This chapter indicated that dealing with the underlying causes of market fragmentation and rigidities may imply a wide range of structural and institutional reforms. Improvements may be required in many areas, including market regulations and local governance, urban land markets and infrastructure, the enforcement of rural land use rights, and accounting, information disclosure and governance in the financial and enterprise sectors. Experience of China as well as other countries suggests that institutional reforms take time to design and capacity to implement. Institutional capacity, and particularly human capacity, is essential in the process. Many institutional reform initiatives around the world have failed because too few people had the enthusiasm, understanding and skills necessary to carry out implementation.

3.26 *Domestic market integration, while overall positive for the Chinese economy and society, will have its losers.* Domestic market integration will improve the transmission of the opportunities and competitive pressures from globalization across China's economy. In localities riddled with unproductive enterprises, a sudden removal of local protectionist policies and of bank favoritism may have a temporary or permanent effect on employment. Similarly, in the Western regions, a significant drop in the cost of transport and other logistics, while opening new economic opportunities for those local firms that are internationally competitive, may cause distress in those less so. Migration, while overall contributing to the reversal of rising inequalities and to poverty reduction, may depress wages and contribute to unemployment in some urban areas. The potential losers of market integration and flexibility, namely some state owned enterprises, local governments and urban residents may oppose the measures identified in this chapter.

3.27 *The number of losers will be lower if the process of domestic market integration occurs in the context of sustained economic growth and stronger social protection.* Economic growth, driven my the more productive forces of the economy, is needed to generate productive jobs. Furthermore, by positively contributing to government finances, sustained growth will also generate resources that could be used to facilitate the revitalization of depressed localities, ensure adequate delivery of public services and promote equity.

3.28 *To optimize the results of domestic market integration and promote growth with equity, a broader policy package of accompanying policies could consist of measures to generate new job opportunities, particularly in the less developed and negatively affected localities, and to raise rates of returns on farm labor and land.* More specifically, as discussed in the next chapter, given the current stage of China's development and remaining structural problems, it would be beneficial to enhance the conditions for human capital development, technology diffusion, urbanization and services sector development, and farmers' capacity.

3.29 *In addition, the government may need to consider policies to address directly the main risks of domestic market integration.* Individuals and localities on the losing end of domestic market integration will depend on public services, particularly social security. Because both provision and financing of public services, including social security, is highly decentralized, adequate provision of public services will depend on the soundness of the inter-government finance system. Bank commercialization, while ultimately reducing financial sector vulnerability, will first expose the financial gap generated by non-performing loans. That may give rise to macroeconomic vulnerability and negatively affect public finances. Chapter 5 will discuss these risks.

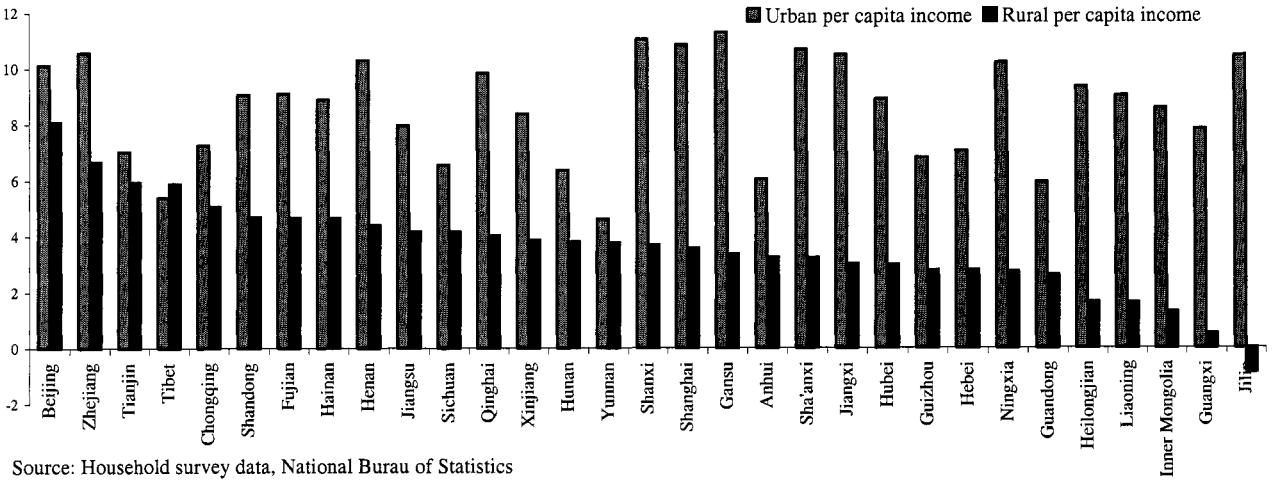
3.30 *Only a well balanced strategy can deliver results that are socially sustainable as well as economically favorable.* Moreover, only a well balanced strategy would align the interests of local governments with those of the central government and thus reduce the transaction cost of developing and preserving an integrated and flexible domestic market.

4. CREATING CONDITIONS FOR EQUITABLE GROWTH

4.1 *The previous chapter discussed the necessity for reducing barriers to the free flow of investment, labor, and products.* It noted that this would be a time-consuming process, and one that may initially increase income inequality before helping to reduce it. In this chapter we draw upon international experience to examine the type of policy package that could assist in sustaining high growth over the medium- and long-term, while promoting equity. In the specific conditions facing China today, the package identifies five nodes for concerted policy action: *investing in people, promoting the diffusion of technology, facilitating urban agglomeration, expanding services, and rising farmers' income.* Each of these areas for focus has been highlighted in the Government's own strategy documents, such as the Tenth 5-Year Plan, and among the announced priorities of the new Government established in 2003. Therefore, the adoption of a policy package along these lines does not represent a break with the general thrust of China's development policy. This chapter emphasizes those aspects of the package that would be of particular importance to generating a better distribution of incomes and opportunities – the essence of a *xiaokang* society.

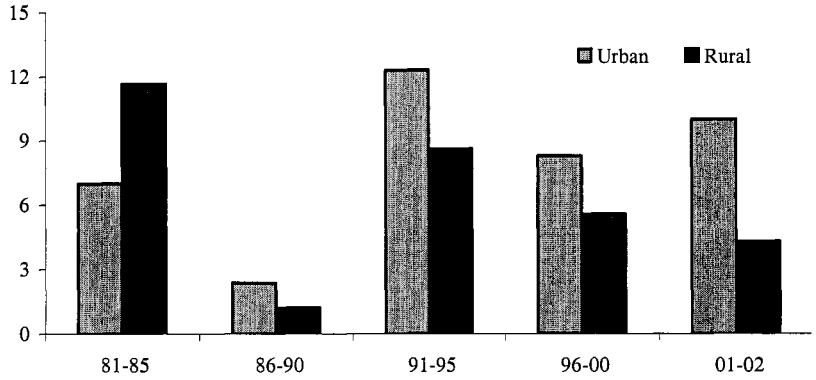
4.2 *If further increases in inequalities in China are to be curtailed, per capita incomes need to grow in a more equitable manner across rural and urban areas and across lagging and leading regions.* There is some recent evidence of a growth spurt in several lagging provinces, resulting partly from central government spending initiatives and partly from improvements in communications and a reduction in local protectionism. As Figure 4.1 shows, some lagging provinces, including Qinghai, Ningxia, Shaanxi, and Gansu, have experienced above average growth levels in urban areas. Other lagging provinces, including Sichuan, Chongqing, Qinghai, Xinjiang, Yunnan, and Tibet delivered above average growth rates in the rural areas. Overall, with the exception of Jilin, agricultural growth has been reviving since 2000, restoring positive income growth in rural areas. In dealing with rural urban inequality, the current revival in agriculture, however, appears insufficient to build upon – compared to the type of success seen in the 1980s with the growth of town and village enterprises (Figure 4.2). Continued liberalization of trade, while having overall positive effects on the economy, cannot be expected to contribute by itself to higher growth in the lagging regions and rural areas without a more supportive government policy environment.

Figure 4.1 Annual Average Per Capita Income Growth by Province, 1998-2002 (%)



Source: Household survey data, National Burau of Statistics
Note: Data for Tibet cover only years 1999-2002.

Figure 4.2 Annual Average Per Capita Income Growth, 1981-2002 (%)



Source: Household survey data, National Bureau of Statistics (various years)

4.3 *Until resource flows begin to play a stronger equilibrating role across China, more equitable growth across it's regions depends crucially on a faster rate of job creation in the industry and services sectors of the lagging regions than seen so far.* In net terms, of the over 100 million jobs created in services and industries in China during 1990-2001, only about 14 million were in the lagging regions. The entire net increase in the lagging regions occurred in the services sector, while employment in industries declined by about 2 million (some of which may have been offset by the net absorption of labor in agriculture, where employment increased by 4 million during 1990-2001). With globalization, jobs can be sustained only in competitive areas of economic activity. Domestic market integration, discussed in the previous chapter, will promote the competitiveness of the lagging regions. It provides an opportunity for economies of scale and, as it facilitates competition in markets for inputs and outputs, it further improves efficiency. It is not evident that increased competition arising from the domestic market integration will necessarily hurt lagging regions, which are at an earlier stage of industry and services sector development than others. Instead, as demonstrated increasingly by

manufactures in Chongqing and Sichuan and, to a lesser degree in Hunan and Sha'anxi, the ability to source cheaper inputs from anywhere in China enhances the competitiveness of finished goods production in the lagging regions, boosting employment and growth. Without appropriate policy actions, however, lagging regions may suffer from the fact that competitiveness is becoming increasingly based on technology, human capital, and business services.

4.4 *Equity in household income between rural and urban areas will be difficult to achieve without raising rates of returns on farm labor and land.* An increase in returns on farm labor depends mainly on reducing the currently high farmer-land ratio. This has been happening with the move of labor out of agriculture. In addition, although with somewhat less dramatic effect, the consolidation of land and promotion of environmental sustainability and market infrastructure will enhance returns to land and to farm-related activity. The key drivers, focus agenda and policy implications for generating a better distribution of incomes and opportunities across China are discussed below.

Human Capital Development

4.5 *Countries cannot be competitive in today's global economy without good human capital.* Investment in health, education, training and other social services is crucial for achieving rapid, efficient, equitable and sustainable development. Improved health contributes to learning and job productivity. Health and nutrition are key for attendance in schools and for the capacity of individuals to learn and develop skills. Better public health unlocks resources that would otherwise be spent on treating illness and is correlated with smaller production losses caused by worker illness and with greater investor as well as consumer confidence. China's own recent experience with SARS suggests that a local public health problem could pose risks for economic development and well-being in the entire country, and even beyond. Unwavering attention to public health throughout the national governance system has proven necessary to maintain the country's good economic performance and access to the international marketplace and foreign investment.[49]

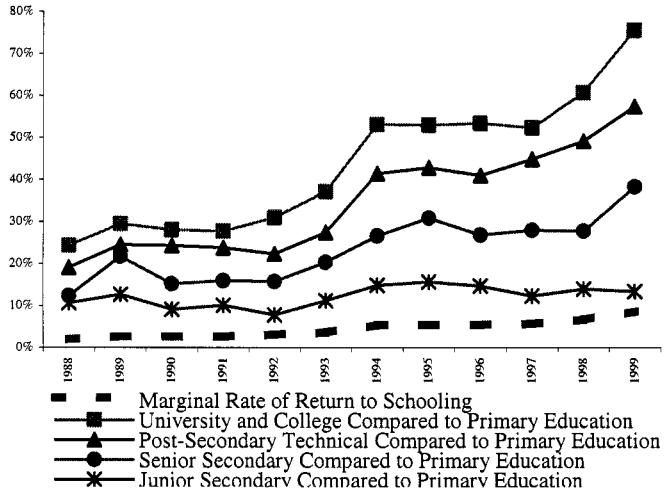
4.6 *For basic education, the need today in China is not only to raise the level of technological inputs in farm and off-farm rural economic activity, but also to enable inhabitants of rural areas to pursue economic opportunities in an increasingly urbanized environment.* Investment in human capital determines the entire working life. An important feature of investment in formal education is that much of it precedes entry into the labor market and additional educational investment following entry in the labor market is for most individuals relatively small. Moreover, learning through work experience crucially depends on educational attainment prior to entering the labor force. Empirical evidence in China suggests that investment in education and public health

[49] The macroeconomic effects of illness are substantial. The potential income loss from illness in developing countries has been estimated at 2.1 to 6.5 percent of annual GDP, and at below 2 percent of GDP in the United States. In China, the direct negative economic effect of the SARS outbreak alone has been estimated at 0.5 to 1 percent of 2003 GDP.

tends to be very effective in reducing rural poverty.[50] In this respect, health and basic education are core building blocks for a *xiaokang* society.

4.7 *Furthermore, knowledge and higher-level skills have become critical to achieving technology-led growth, increasingly the basis of sustainable economic development.*[51] Partly a result of rapid introduction of new technologies in China's industries, relative demand for skilled labor has grown. The growing demand for skilled labor, coupled with the effects of wage liberalization, has been raising returns on tertiary and senior secondary education (Figure 4.3). High returns on skills are not unique to the most developed localities, skills may command an even higher premium where they are very scarce, such as in lagging areas (Table 4.1).

Figure 4.3 Returns to Schooling, 1988-1999 (percent)



Source: Park, et al. (2003)
Note: In China, primary education includes grades 1-6, junior secondary grades 7-9 and senior secondary grades 10-12. Junior secondary and senior secondary are both considered secondary education.

4.8 *Faster growth in skilled labor is likely to deliver distributional as well as productivity gains.* China's WTO accession is raising the pressures to keep up with new knowledge and to promote restructuring and technological upgrading to maintain and enhance competitiveness. Rapid introduction of new technologies puts a premium on education and skills to effectively use, adapt and create knowledge. As for the distributional impact, if a faster growth in skilled labor is occurring in the context of free migration, it is likely to assist in reducing inequalities as well as in boosting national welfare. Table 4.2 indicates that, jointly, a faster growth in skilled labor and free migration can effectively lift farm wages.[52] From the perspective of national welfare, the gains would more than outweigh the losses.

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[50] Fan at al (2002)

[51] Secondary and higher schooling can be vital for the diffusion of technology (Barro (1999). Across regions, Xu (2000) implies that a locality needs to reach a minimum human capital threshold level in order to benefit from technology transfer and diffusion.

[52] The GTAP model described in Chapter 3 is used here to assess the distributional impact of different labor market characteristics. The baseline (identical to the baseline reported in Chapter 3) reflects the current estimate of growth in skilled labor of 4.15 percent annually. The two scenarios raise this level by 20 percent to an annual growth of 5.0 percent, starting in 2001. The model assumes a constant population growth of 0.8 percent annually. The two scenarios correspondingly adjust the annual growth in low skill labor from 1.3 percent to 1.1 percent. Compared to the baseline and the first scenario, the second scenario adds the assumption of no barriers to migration. In the results of all scenarios, return to capital, which equals the rental price of capital divided by the price of capital goods, remains roughly equal.

4.9 *The key channels supporting the growth of skilled labor are secondary and tertiary education.* Increasingly, it is also the process of life-long learning that allows for constant updating, absorbing and applying new knowledge and skills.

Table 4.1 Compensation and benefits for Chinese nationals, 2002 (annual gross average, '000 RMB)

Position	Guaranteed pay Beijing	Guaranteed pay Shanghai	Guaranteed pay other cities	Add-on costs lagging areas for all positions
General Manager	470	490	460	Hardship allowance 20% of pay
Financial Controller	340	300	325	Housing and transportation
Sales Manager	350	330	300	12 yearly flights to home city
HR Director	450	400	375	Social insurance contributions
Marketing Manager	230	200	Not applicable	

Note: Other cities are other than Beijing, Shanghai and Guangzhou.
Source: Haarmann Hemmelrath Management Consultants' compensation database

Table 4.2 The Expected Effect of China's WTO Accession on Real Factor Prices, 2001-2007 (%)

	Baseline	Faster growth of skilled labor	Faster growth of skilled labor and free migration
Farm unskilled wage	-0.7	1.6	19.4
Rental price of land	-5.5	-6.4	-10.5
Nonfarm unskilled wage	1.2	2.7	-2.5
Skilled labor wage	0.8	-6.3	-8.7
Rental price of capital	1.3	0.9	-1.8
Price of capital goods	-0.9	-1.1	-3.9
Migration (million) [a]	6	10	32
National welfare (US$, billion) [b]	10	10	11

Notes: [a] Number of people expected to move from farm to non-farm jobs. [b] Change in national welfare expressed in 1997 US dollars.
Source: Ianchovichina and Martin (2002)

4.10 *Education attainment and health indicators are significantly lower in poor localities.* According to the United Nations Human Development Index (HDI), China no longer has any province in the "low development" category.[53] However, HDI indicators across China differ widely, from levels similar to Vietnam and Indonesia (with HDI 0.68) in the poorer, predominantly rural provinces (such as Gansu, Guizhou, Tibet, Qinghai and Yunnan, with HDI 0.59-0.67) to levels similar to Hong Kong, Korea and Singapore (with HDI about 0.88) in wealthier, more urbanized provinces (such as Beijing, Guangdong, Jiangsu, Shanghai, Tianjin and Zhejiang, with HDI 0.80-0.89). Current enrollment rates in junior secondary education vary from 49 percent in Tibet, and about 60-70 percent in Guangxi, Guizhou, Hainan, Heilongjiang, Ningxia, Yunnan and Qinghai, to about 99 percent in Beijing, Shanghai, Tianjin, and Zhejiang. Enrollment rates in senior secondary education vary from under 30 percent in Anhui, Henan, Inner Mongolia and Yunnan, to 96 percent in Beijing. Drop out rates, up to 35 percent in the secondary schools of poorer localities, further exacerbate the disparity in educational attainment. In the lagging provinces, only 70 percent of students had completed the 9-year universal compulsory education curriculum by 2000 (a priority target rolled out by the government in 1986), compared to 100 percent in East China. The average length of schooling in rural areas

[53] The cutoff for low development is at HDI level of 0.50. Provincial HDI indicators are explained in UNDP (2002).

was about 6 years. Life expectancy at birth varies from about 65 years in Guizhou, Tibet and Yunnan, to 76-79 years in Beijing, Jiangsu, Shanghai and Tianjin. Infant, under-5-year and maternal mortality rates are on average three times higher in rural compared to urban areas. The spread of tuberculosis and other preventable diseases is of great concern in a number of poor localities. Although questions remain about the accuracy of the province-level social indictors, they are broadly substantiated by information collected through individual project interventions, and indicative of the disparities that exist. Comparatively low educational attainment and poorer health status among children in backward localities may in time act as an impediment to local economic competitiveness, to the quality of local governance (particularly, if future local civil servants lack adequate training), and to rural-urban migration. Thus, they may become a major impediment to reversing the trend of rising spatial inequalities.

4.11 *Disparity in human development indicators reflects both the lack of capacity and skewed incentive structure for local governments.* In poor localities, the cost of education and health services relative to current income levels is very high – while government financial contribution appears unusually low. The financing and delivery of human capital development is largely the responsibility of local governments. Poorer local governments and communities, however, often lack the resources needed to deliver adequate basic education and health services and to achieve even the priority targets set by the central government. Out of the 500 counties that had not achieved the goal of universal compulsory education by 2001, most are poor, often in mountainous and remote localities. The central government has been raising its financial support for the implementation of universal compulsory education. But the average per student government expenditure has remained relatively low in poor provinces (in 2001, for junior secondary schooling RMB196 and RMB219 in Guizhou and Qinghai, respectively, compared to the national average of RMB403, and for primary schooling RMB76 and RMB112 in Guizhou and Gansu, respectively, compared to the national average of RMB218).[54] In the health sector, nearly two thirds of government financing is allocated to urban areas and thus available to only about one third of China's population. The World Health Report 2000 ranked China 61st out of 191 countries in overall quality of health, but 188th in fairness of government financial contribution on health. As a result of the remaining inequalities in government financing, households in poor localities face relatively high education fees (such as fees for textbooks and school attendance) and medical out of pocket expenses. Programs to assist poor households in covering these fees and expenses have inadequate reach, and are nearly non-existent in poor rural localities. Targets set by the central government to evaluate local government performance place greatest weight on local economic growth and physical capital investment, rather than human capital development. Similarly, probably to the detriment of the level and quality of education and health services provided, government targets mainly track quantitative and input-based, rather than qualitative and outcome-oriented indicators.

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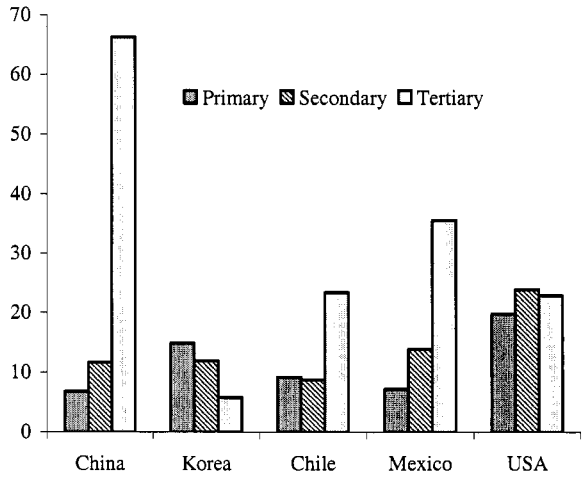
[54] Xu Jianchen, Fuwei (2002). In China, 56 percent of total spending on education is financed from public sources and 44 percent from private sources. This ratio is similar to that of Chile and Korea. In OECD countries, on average 88 percent comes from public sources and 12 percent from private sources.

4.12 *Although a large proportion of public funds for education is allocated at the tertiary level, the supply of tertiary education and life-long learning falls far short of demand.* The insufficient supply of tertiary and life-long learning country-wide may explain some of the brain drain from the lagging regions to the coastal centers.[55] Dealing with this problem may require a broader set of measures, including those to improve the local business climate and the quality of urban life in the lagging regions. As for the existing supply constraint in tertiary education, the number of public colleges and universities and the allocation of public funds can hardly be seen as the main reason. The current ratios of about 10:2:1 in government per-student spending on tertiary-secondary-primary education, respectively, are already high compared to other countries (Figure 4.4). Since the demand for tertiary education in China is very strong and most of the returns on tertiary education directly accrue to the individual as opposed to the society at large, tertiary education could generally be provided on a fee basis, with fees set at levels that cover cost. Special loan schemes for poor students could serve equity purposes. Life-long learning, including training and various other programs of continuous updating of knowledge and skills, is similar to tertiary education insofar as the benefits accrue to the individual and employer, and rise with economic restructuring and technological upgrading. Legally, the supply of tertiary education and life-long learning is no longer constrained by discrimination against private schools and providers and against the degrees and certificates they grant. The Law on Promoting Private Education in China, passed in December 2002, strengthened the status of private education and clarified the functions of the government vis-à-vis educational institutions. To support the quality as well as rapid development of private education, the law is expected to be complemented by rules, procedures and institutions to provide some level of management, quality assurance and accountability.

Figure 4.4 Government Spending on Education per Student, 1990s (% of GNP per capita)



Source: Wang (2002)

4.13 *Ensuring adequate financing for and attention to the quality of primary and secondary education and basic health services across China would imply several broader areas of reforms.* Since the provision and financing of education and health services are highly decentralized in China, it may not be possible to achieve greater equity in human

[55] For example, out of the best graduates of secondary schools in Inner Mongolia admitted to universities and colleges in the coastal provinces in the 1990s, only 10 percent have returned upon graduation. Nearly one half of college graduates from Ningxia, Qinghai, Shanxi, Inner Mongolia, Heilongjiang, Jiangxi and Hunan who graduated from public universities in year 2000 have not returned to their home provinces. See Qu at al (2001).

capital development without reconsidering the entire system of inter-government finance. The allocation of public funds on education and health needs to be reasonably equitable across localities. In addition, special programs may be needed to broaden the achievement of national minimum standards, such as nine-year compulsory education and basic immunization, across China. Starting 2003, rural residents of lagging regions can access a RMB10 per capita annual subsidy from the government to support health insurance schemes, which are a step in the right direction. Even in this progressive program, however, further steps may be needed since poor local governments and families may not be able to afford the required matching funds. Incentives with respect to the quality of social services can be improved by strengthening qualitative and outcome-oriented targets (such as career placements of school graduates and monitoring the local burden of diseases), facilitating training for providers, and monitoring results in the education and health systems. More broadly, the extent of improvement in local human capital indicators is potentially an incentive-compatible yardstick for the performance evaluation and promotion prospects of local government officials.

Box 4.1 Private Initiative in Training – Aero-Engine Maintenance Training Center in Guanghan

The Aero-Engine Maintenance Training Center was established in 1997 by a joint venture and the Civil Aviation Administration of China. The foreign investors contributed about US$17 million in providing 6 engines, tooling equipment and 2 full-time expatriate trainers for 5 years each, and helped design the training courses. The Chinese partner offered new training facilities, integrated with an existing aviation training center and the Civil Aviation Flight College in Guanghan, and financed 15 Chinese staff.

In establishing the training center, the joint venture had several clear incentives that reflected both its business strategy and government policies. First, China will soon become its second biggest market for aero-engines after the United States. Second, following several plane crashes in the early 1990s, the Chinese government raised maintenance standards and pressed on suppliers to assist in needed training. Third, training programs organized earlier in the United States and France had been attended by senior aviation officials rather than professionals in need of the technical skills. And, fourth, by investing in the center, the joint venture satisfied its "off-set obligation" which required it to purchase goods worth US$250 from Chinese sub-contractors for every US$100 worth of own products sold in China.

4.14 *In tertiary education and training, private sector provision is likely to expand if the role of government changes from being the main provider of formal education to that of the architect and facilitator of an entire life-long learning system.* For institutions of tertiary education, important steps include proper implementation of the 2002 Law on Promoting Private Education in China to remove any remaining discriminatory policies and to integrate private schools into the formal system. To design and facilitate the entire system of formal education and life-long learning, the government could set up a transparent set of accreditations and certifications, establish standards, regulations and methods of ongoing monitoring and quality assurance, and establish a mechanism to share information on the demand and remuneration for different types of education and skills, and on the quality and performance of different educational providers.[56] In a less formal way, local governments could also assist in facilitating an active role of employers and investors in the life-long learning system (Box 4.1 gives an example).

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[56] World Bank (2001).

4.15 *Equity in access to education would be well served through a system of stipends and student loans.* At the primary and secondary level, child-schooling stipend (transfer payment linked to continued enrollment) to the poorest families across China could be effective in reducing drop-outs and enhancing overall school attainment as it has been in Mexico and other countries (Box 4.2). For tertiary education, the preferred option may be student loans with repayment schedules adjustable according to the debtor's post-graduation income.

Box 4.2 Educating the Poor: The Case of Korea and Mexico

During 1960s-1970s, Korea expanded its basic education rapidly, raising the supply of skilled workers in line with the demands of its integration with the global economy. Over two thirds of government expenditure on education concentrated on primary and secondary schooling. As a result, during 1960 to 2000, the mean number of years of schooling more than doubled.

The distribution of education in Korea has been very equitable, more equitable than the distribution of income. In 1960, when Korea's per capita income was the same as China today, Korea's education Gini coefficient was 0.55, lower than that of China in 1975. In 2000, Korea's education Gini declined to 0.21 (income Gini was 0.34), much below China's education Gini of 0.40 in 2000. One hypothesis is that equitable access to education, ensured a sufficient supply of skilled workers and thus averted excessive skill-based divergence in incomes. In this respect, Korea's experience with the distributional effects of globalization stands in contrast to that of Mexico.

In Mexico, unequal access to education emerged as a main cause of high income inequality (Gini at 0.57 in the early 1990s). Reforms to correct education inequality included an increase in government spending on education from 4.7% to 6.1% of GDP during 1992-2000, expanding the share of financing allocated to basic schooling, strengthening the role of the central government in ensuring adequate financing and quality control, and introducing an integrated family support program for education, health and nutrition (PROGRESA) that links income transfers for poor households to preventive health care and continued school enrollment. The reforms have delivered encouraging results. For example, drop-out and repeater rates in primary schools have declined by nearly a half over the 1990s.

Technology Diffusion

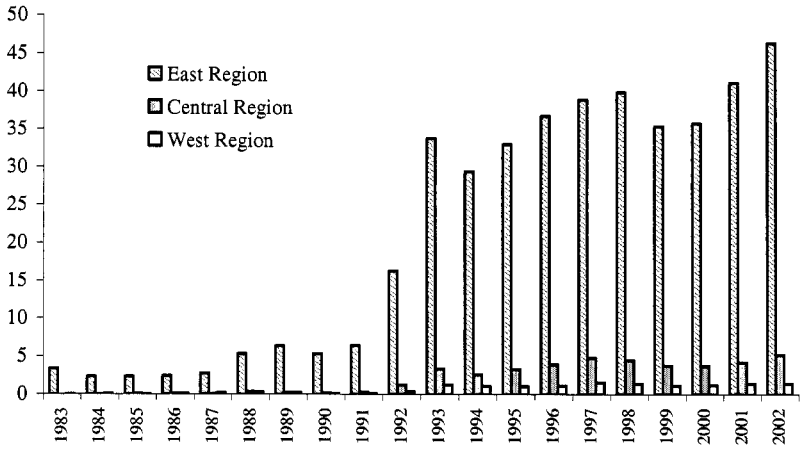
4.16 *For China, technology is an increasingly important driver of future growth.*[57] Integrating with the global economy, China competes in high-, middle- and low-tech activities. It is increasingly dominating the market in traded low-tech products. Middle- and high-tech products and services, however, offer market opportunities that China is yet to fully exploit. As gaps in efficiency are large, gains from catching up are significant. This suggests that relatively greater emphasis on technology rather than merely higher capital investment can effectively drive future growth. Moreover, even sustained

[57] For analysis, see Yusuf and Evenett (2002) and Yusuf (2003). Technology includes process technologies (promoting productive efficiency and/or improved product quality), product technologies (delivering new products) and transaction technologies (facilitating co-ordination, information sharing and exchanges between economic agents). Technology transfer includes new physical technologies embedded in products and machines, new processes transferred when people learn how to use new machines, knowledge passed through new processes, plans, or blueprints, and knowledge and information transferred from consultants, managers, and other types of technical training. Technology transfer occurs when a firm imports equipment, hires consultants or new employees with specialized knowledge, and interacts with suppliers and customers.

competitiveness in low-tech product markets may require better business services, such as marketing and financial management. The quality of such services, based on appropriate technology, will play an important role in China. The relative underdevelopment of China's services industry makes it more likely that large manufacturing and services sector productivity payoffs can come from technology improvements in services, especially in the producer services sub-sector. This is true also for China's lagging regions. Although most jobs created in the lagging regions are likely to target low skilled labor, the competitiveness of firms may ultimately depend on the ability of local services to bring products up to the domestic and international market standards.

4.17 *In recent years, China's technology-led growth has concentrated in coastal areas.*[58] Geographically, the spill-over of industrial as well as civilian technology developed domestically or transferred through foreign direct investment has not penetrated from the coast to the hinterland (Figure 4.5 and Box 4.3).[59] Similarly, creation of domestic technology has been concentrated in East China, and its diffusion has been geographically constrained. Partly as a result, total factor productivity growth and new product sales differed sharply across regions (Figure 4.6 and Box 4.4). Agriculture was an exception in this respect. During the 1980s and early 1990s, technology was driving significant increases in agricultural productivity (particularly in rice, wheat and maize). But this trend has slowed in recent years.

Figure 4.5 FDI Inflows into China by Regions, 1983-2002 (1995 US$, bn)



Source: *China Statistical Yearbook,* various years

[58] Compared to East China, growth in West and Central China was more capital-intensive, with capital per worker in enterprises rising faster than in East China. See Jefferson and Jian (2002).

[59] Research suggests that technology transfer via foreign direct investment under spillovers mainly happens vertically – through local suppliers (Saggi, 2002). The export processing regime, attracting a large share of foreign direct investment, has inhibited the creation of vertical links. East China firms report that on average over 50 percent of their suppliers are located in the same city, and most suppliers are located in the same region (based on a survey of about 1000 firms in Steinfeld, 2001).

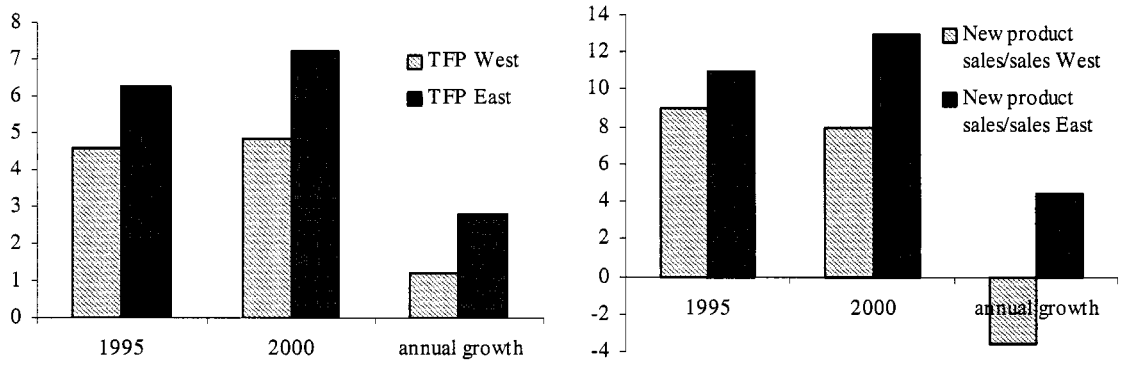
Box 4.3 Foreign Direct Investment and Technology Diffusion – The Case of Suzhou

In the 1990s, in Jiangsu province, Suzhou emerged as a rising star, attracting foreign direct investment. It became known for a market-friendly local government that supported technology transfer through contract-based production of parts and components for Shanghai's enterprises. By 2000, Suzhou had attracted over $20 billion of actual foreign direct investment. Throughout the second half of the 1990s, foreign capital contributed one half of the total cumulative fixed asset investment. In 2000, the share of foreign-funded enterprises reached 40% in Suzhou's total industrial output (80% of the output of electronics and telecommunications), 40% in urban employment, over 30% fiscal revenues, and nearly 80% in exports. Among foreign-funded firms, in 2000, wholly foreign owned enterprises accounted for two-thirds and joint ventures for most of the rest. Geographically, within Suzhou municipality, foreign direct investment concentrated in special development zones.

A survey conducted for this report suggests that technology transfer through foreign direct investment in Suzhou has been massive. Foreign-funded enterprises have been benefiting from imports of more advanced technology through their foreign investors and producing internationally competitive products.

Technology diffusion to other domestic firms, however, has been limited. Among over 7000 foreign-funded enterprises, less than 100 have signed contracts with domestic firms to share technology. Contracting out by foreign-funded enterprises has remained mainly within vicinity of Suzhou and has focused on low-tech inputs, such as raw materials and simple parts and components. Surveyed foreign-funded companies indicated that the main obstacle to greater technology diffusion is a shortage of qualified technical staff and skilled workers in domestic companies. About one third of the surveyed firms have been conducting significant research and development, but few have had any technical cooperation with domestic firms or research institutions and universities. None of the surveyed companies have had any direct contact with enterprises or institutions located in Central or West China.

Figure 4.6 The Regional Distribution of Growth in Total Factor Productivity and New Product Sales (%)



Source: Jefferson and Jian (2002)
Note: Based on NBS data from 22,000 large and medium-size industrial enterprises across China.

4.18 *Broader technology diffusion has been held back by local protectionism, localized shortages of skilled labor, and weaknesses in technology-oriented policies.*[60] As the previous chapter discussed, local protectionism limits economies of scale and competition, and so reduces both the capability and incentives of producers to upgrade their technologies. Local shortages of skilled labor further reduce the ability of firms to introduce new technologies. Nor is technology upgrading across China promoted by

[60] World Bank (2001a)

technical regulations and standards, which are often set and implemented locally or, if promoted by a central agency, implemented in an uneven manner. China's science and technology infrastructure is stronger in basic research than in technology diffusion. The existing engineering research centers, launched in 1991 to demonstrate technology, and productivity centers, launched in 1993 to disseminate technology information and provide consulting, training, innovation and marketing support to small and medium-sized enterprises, depend to a great extent on self-financing. Often, in search of revenues, they have deviated from their main tasks. Although successful in the past, the system of research and technology diffusion in agriculture has become too cumbersome to serve the changing needs of farmers in the market economy.[61]

Box 4.4 Trends in Total Factor Productivity

China's enterprise data of 1995-2000 suggest that:

- East China firms exhibit twice as high TFP growth compared to Central and West China firms, whether controlled for ownership or not
- TFP growth has been converging within regions and diverging across regions
- TFP grows fastest in foreign-funded firms and about twice faster in non-state enterprises compared to state-owned enterprises without a joint venture
- The introduction of non-state assets in restructuring state-owned enterprises is correlated with higher growth in total factor productivity
- Firms with high levels and growth rates of TFP exhibit higher wages and higher wage growth, but not larger workforces or more rapid workforce growth than firms with lower TFP levels and growth rates
- Domestic (particularly state-owned) enterprises are vulnerable to "market stealing" by foreign funded firms, but are able to narrow their productivity gap within 5 years – particularly in apparel, chemicals, machinery, plastics, textiles and transportation, in East China.

Source: Jefferson and Jian (2002)

4.19 *The diffusion of technology can be facilitated by strengthening dissemination schemes, competition policy and by fostering links between industry and education in the lagging regions.* In agriculture, technology diffusion would benefit from streamlining the existing extension system and complementing it with more efficient information sharing devices. In recent years, useful knowledge sharing has been facilitated, for instance, by Farmers' Professional Associations that have sprung up in counties across China. For other sectors, the existing technology dissemination schemes require at least minimal financial support from their sponsoring agencies (which is a common practice in the industrial countries), so that they can thrive without deviating from their core tasks. There is, at the same time, a need for defining the core tasks more sharply, especially with regard to sharing information about production technologies and management approaches emerging across sectors, demonstrating technology, pilot testing and providing technical assistance to small and medium-sized enterprises. To ease local shortages in skilled labor, as part of the plan to develop, attract and retain skills in lagging regions, local governments may organize training and research centers in a partnership with firms, and facilitate closer links between local firms, universities and schools. Such links may encourage schools to undertake more research relevant to local industries, and also encourage students to establish possibly long-lasting relationships with local firms. More

[61] The extension system is credited with major contributions to China's agricultural growth. The system, however, has become costly and inefficient with its six-level network (national, provincial, prefectural, county, township and village), 675,000 extension workers and 500,000 farmer technicians.

broadly, in the context of promoting domestic market integration and flexibility, discussed in the previous chapter, technology diffusion will particularly benefit from competition policies to encourage competitive pricing, facilitate entry by new firms, and pressure producers to innovate and improve their productivity.

Development of Producer and Consumer Services

4.20 *The expansion of services, their improved efficiency, and closer interaction between services and manufacturing can potentially make a significant contribution to China's future growth.* The rapid growth of the Chinese economy has been intensifying demands on the services sector. [62] At about 30 percent, the share of services in GDP in China is low in relation to the rising domestic demand and to comparable countries.[63] Efficiency levels of the services sector seem to lag far behind those of the industrial countries. Many services are unavailable, except at prohibitive cost, the quality of services is variable, and the interaction between services and manufacturing remains weak. This is generally undermining the vital role of services in promoting firm competitiveness. In the transport sector, for instance, the networks are overloaded and struggling to keep pace with the rapidly rising tonnage to be moved. Transport and other logistics services are underdeveloped and costly, which works as a double-tax on farmers and firms located in inland provinces – raising the cost of their inputs shipped from elsewhere and reducing profits on their outputs shipped to the market (which is illustrated in Chapter 2). Logistics and other producer services also tend to be monopolized by state-owned enterprises who favor larger clients at the expense of small and medium size enterprises. Financial services are not accessible to many non-state firms and farmers, which constrains possible improvements in their technologies and productivity. This, in turn, makes it difficult for firms and farmers to establish and maintain their competitiveness at a time of trade liberalization.

4.21 *The services sector is the likely pillar for future job creation in China.* Compared to industry, services generate larger numbers of jobs with smaller amounts of capital investment. On average, during 1990-2002, the services sector generated 7.6 million jobs each year, compared to 1.6 million jobs created in industry and 1.7 million exits from agriculture.[64] In the lagging provinces, the contribution of services to job creation was about 1.3 million a year, while employment in industry actually shrank (by 2 million in total). The 1990-2001 job creation in these provinces, was not sufficient to support

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[62] Consumer services are provided to individuals and households for final consumption. Producer services are intermediate inputs that become embodied in the production of other goods and services. This section does not address core public services, such as social security, education and health care, which are covered elsewhere in the report.

[63] In reality, the output of China's services sector is probably somewhat higher than the officially reported figure. This is because the production-based method of national accounts identifies sectors as "goods producing" or "services producing". For many producers of goods, however, a sizeable portion of their value added comes from their own marketing, distribution, sales and other service-type activities. In high-income countries, services account for nearly two-thirds of the total output; in middle-income countries for about one half of output. Generally, as per capita incomes rise, demand for (a wider range of better quality) services tends to grow faster than demand for goods. Similarly, demand for services rises with urbanization. In addition, in China, the pressure on the services sector to develop is also growing as state-owned enterprises are restructured and reduce their services function vis-à-vis employees.

[64] National Bureau of Statistics, based on census data.

effective transfer of labor out of farming, and agriculture provided at least 4 million more jobs during that period. Since the creation of alternative productive jobs is the main enabling factor for the transfer of labor out of farming, the sustained expansion of the services sector is needed also to facilitate further exits from agriculture. Moreover, the expansion of services facilitates urbanization which, in turn, further expands demand for services.

4.22 *Services sector development suffers mainly from restrictions on services production and delivery.* Compared to the emerging market countries in Asia, the production and delivery of services in China remain among the most restricted and regulated. Many producer services, such as banking, insurance, telecommunications, transport and logistics, are managed and controlled by the government. For consumer services, the main constraint is the lingering bias against private ownership.[65] In most consumer and producer services, international experience suggests that the state is not an effective producer. Recent experience with regulatory reform in OECD countries shows that liberalization and private sector development in the services sector has brought about significant productivity gains, cost reductions and output growth.

4.23 *Liberalization and opening to foreign entry in logistics and telecommunications will promote more equitable growth across China.* China is currently undertaking the most radical services reform ever negotiated in the WTO.[66] The implementation of China's WTO commitments, involving the abolition of many existing regulatory restrictions, is expected to contribute to moving transport and other logistics service industries away from monopolistic state enterprises toward market-responsive private firms. This is expected to expand the capacity and range of available services, improve their quality and reduce cost. In some segments, notably long-distance trucking, these developments will directly benefit centers of economic activity more distant from the coast, boosting their ability to trade and compete both domestically and internationally. The development in other segments of the services sector, however, will depend on further reforms and investments outside the WTO framework to achieve a better balance of demand and supply. Railways, for instance, suffer from serious shortage of capacity and make shipments wait or seek other modes of transport. Half of the railway freight business is government-supported coal traffic, while more profitable inland transport of containers is jammed. Improvement depends on solving the outstanding questions about flexibility in pricing and about investments needed to ease capacity bottlenecks.

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[65] This bias takes several forms, including a large number of permissions required to set up a private unit, illegal or irregular exactions applied by local officials, and limited access to credit. Any bias against private ownership ultimately works against services. This is because public ownership favors larger units, which are not always effective in the production of services. This is linked to the fact that the economies of scale are not as important in many branches of services as they are in industry. Particularly in consumer services, including local passenger transport, tourism and hotels, on average units engaged in the provision of services are smaller than those in industry. The cost of monitoring and control, however, is related inversely to the number of units.

[66] In cross-border trade, consumption abroad and establishment trade, China has made more commitments in more service sectors than the industrial countries, other developing countries, or countries recently acceding to the WTO. For discussion of some of the reforms and their effects on less-developed localities in China see Bhattasali, Li, Martin (2003).

4.24 *Financial services will contribute to promoting growth opportunities in China's lagging regions if liberalization is accompanied by reforms.* The problem of insufficient access to formal finance by non-state firms and in the rural areas was discussed in Chapter 3. This problem will not be solved by foreign entry except for the more developed localities where foreign entrants are likely to concentrate. Commercialization of the state commercial banks in a more liberal interest rate environment, discussed in Chapter 3, will likely to alleviate the problem in rural areas and for small enterprises. But in the current environment, the state commercial banks have been massively reducing their presence in the less profitable localities and market segments. Government-subsidized rural credit cooperatives, which account for more than three quarters of rural credit, are mostly in difficult financial positions and fall short of meeting the needs.[67] International experience suggests that publicly funded subsidized lending interventions are generally far less successful than self-sustainable outreach schemes. But rural finance, microfinance to poor households and financial services for small enterprises are commercially unsustainable under the current interest rate cap.[68] Furthermore, providing financial services is generally difficult, especially in the small and medium enterprises segment, as little credible information on enterprise performance and credit risk is available in China. As for farmers, their access to credit is severely constrained also by the ineligibility of their land rights to serve as a collateral.

4.25 *Financial services are likely to better develop and assist in revitalizing lagging regions if exposed to market environment.* Interest-rate liberalization would make microfinance, finance to small enterprises and financial services in underserved localities commercially viable. This may be complemented by government efforts to mitigate the cost and risk characteristics of rural finance. As for any financial support to rural finance, international experience suggests that the cost of subsidies and the outreach to target customers should be measured. In this regard, the government may wish to evaluate the existing credit lines extended through the rural credit cooperatives. In the enterprise sector, government may facilitate the orientation of more banks to the small business market and support the adoption of efficient small business lending technologies. Availability of financial services to non-state firms will also depend on the development of accounting, auditing, legal and other business services, and on regulations and market infrastructure to improve information reliability and disclosure across the economy. Complementary reforms to enhance market integration and the local investment climate will improve the conditions for services sector development.[69]

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[67] The system of rural credit cooperatives contains of 400,000 units owned by the central bank. Given their high share of non-performing loans, many Rural Credit Cooperatives have negative equity. They appear poorly managed and inefficient in credit allocation. OECD (2002) suggests that a large proportion of credit provided by rural credit cooperatives benefits applicants supported by local governments.

[68] In rural areas, high rates of poverty, low population densities, isolation, highly covariant risks, limited opportunities for risk diversification, seasonal variations in the demand for financial services, and absence of traditional collateral, raise the transaction costs and risk exposure of financial institutions.

[69] International experience suggests that differences in investment climate contribute to the differences in growth rates across domestic localities and regions as well as across countries. Investment climate is generally understood as having three components: (a) macro, country-level issues concerning economic stability (based on macroeconomic, fiscal, monetary and exchange rate policies), political

Urbanization

4.26 *Empirical evidence suggests that agglomeration of people and resources contributes to optimizing economies of scale and to economic efficiency.* Production and distribution of manufacturing and services are often more efficient when concentrated in dense business-industrial areas, such as urban locations and urban peripheries. A recent study of output per worker in over 200 prefecture level Chinese cities in 1990-97 suggests that labor productivity in the majority of prefecture level cities could be at least 20 percent higher if cities expanded to their optimum size, allowing for economies of scale in production and distribution. The study suggests that doubling the size of rural townships in China could raise labor productivity in local enterprises by 20 percent.[70]

4.27 *Given the economic advantages of agglomeration, most new productive jobs in services and manufacturing are likely to emerge in urban areas and urban peripheries.* The previous chapter discussed the relative importance of the movement of labor out of agriculture, rural–urban migration and agglomeration in China. Urbanization potentially contributes to the creation of productive jobs and enterprise development. This is especially relevant to those lagging regions in which low population densities make it unlikely that a strategy that disperses production to the countryside (e.g., the model of township and village enterprises, which was implemented mainly in the coastal areas) is plausible. In the past 20 years, the majority of new non-farm jobs has been created in medium and small size cities, with the highest rate being in urban peripheries.[71]

4.28 *Urbanization policy is most effective in the creation of productive jobs and viable firms when it takes the form of market-based development of cities.* Although the greatest benefits of agglomeration are seen when small and medium-sized cities expand, a number of recent studies on China reached the conclusion that urbanization policy delivers best results if it encourages the development of all types of cities, rather than suppressing the growth of larger cities while promoting small and medium-sized cities and towns. The process of agglomeration is effective, and its economic and social benefits sustained, if it occurs in harmony with the restructuring needs of the economy. If it is, urbanization facilitates specialization and the establishment of local comparative advantages and competitiveness that is sustainable. The government can bolster enterprise development and job creation in urban economies by promoting flexible entry, exit and relocation of firms, politically unconstrained mergers and acquisitions, continued vertical

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stability and national policy toward foreign trade and investment; (b) efficacy of the regulatory framework for firms, including the issues of entry and exit, labor relations and flexibility in labor use, efficiency and transparency of financing and taxation, and efficiency of regulations concerning the environment, safety, health, and other legitimate public interests; and (c) the quality and quantity of available physical and financial infrastructure, such as power, transport, telecommunications, and banking and finance, and the endowment of skills and technology.

[70] Au and Henderson (2002). Economies of scale outweigh the negative implications of agglomeration up to a point, after which growing congestion and other diseconomies tend to hurt productivity.

[71] Townships belonging to some 200 prefecture-level municipalities include less than half of China's rural population, but they host about twice as many non-farm jobs as other, more remote rural areas, and also are creating jobs twice as fast as the latter. Since 1995, the number of non-farm jobs created in urban peripheries (which are often officially classified as rural areas) has exceeded those in the city proper.

disintegration of state-owned enterprises, and the development of small enterprises, especially in the services sector.

4.29 *Moreover, the land market can play an important role.* The benefits of agglomeration in China would expand with establishing sound markets for industrial land development and a favorable environment for low-income housing development.[72] While government would continue to regulate the amount of land to be converted for urban development, along with enforcing certain environmental and social standards, industrial land development would be most efficient if driven by commercial incentives. The government would be able to facilitate locational adjustments driven by commercial considerations by promoting standard model leases, clear rules governing exchange and sublease of plots without involving the government, land prices set through competitive and transparent auctions, conversion of land use rights to land leases, and marked-to-market fees for occupied land.

4.30 *The overall results of urbanization may depend on government policies to promote the development of urban peripheries and quality of urban life.* Industries are likely to favor urban peripheries, which offer the best potential for the synchronized development of new economic activities and housing. In this respect, local governments may need to play a more active role in the residential land market in urban peripheries to facilitate the needed supply of low-income housing. International experience suggests that this role may involve the provision of basic physical and social infrastructure and public services in locations that are near the points of economic activity and suitable for low-income housing. Public services, such as a public transport network, locally available basic schooling and environmental protection, would play a vital role in supporting the development of sound and integrated centers of economic activity and quality life. For lagging regions, improvements in the quality of urban infrastructure, services and environment would also make it easier to attract and retain skilled labor. The ability to retain skilled labor in lagging regions would, in turn, facilitate private and foreign investment and technology diffusion to benefit the creation of productive jobs. Market-based development of cities, supported by enabling public policies, may thus be instrumental in breaking the circle of dependence and in revitalizing the lagging regions.

Farmers' Prospects

4.31 *Raising income growth rates in poor rural areas will depend on the creation of off-farm jobs, but also on performance in agriculture.* In poorer provinces, rural enterprises are more scarce, rural households draw a higher share of their income from agriculture, agricultural output per farmer is lower, and the gap in rural-urban rates of growth is more prominent. Provinces that contain most of the rural poor appear to suffer from the combined effect of high dependence on agriculture, small land plots and low production inputs per unit of land (Table 4.3). Within provinces, dependence on agriculture comes with remoteness. Availability of off farm work and possibilities to commute or migrate depend on proximity to a large urban center (Figure 4.7).

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[72] Chapter 3 illustrates the problems of the urban land market.

Table 4.3 Poor and Non-poor Households' Dependence on Agriculture by Region, 1998

	Non-poor Average	Poor Average	Region I	Region II	Region III	Region IV
Agricultural income (including forestry) (%)	49.6	68.3	49.5	70.1	69.8	84.8
of which from crop production (%)	45.0	58.4	47.0	57.5	60.0	78.3
Income from other household business (%)	26.7	18.1	24.0	16.2	17.7	8.4
Other income (%)	23.7	13.6	26.5	13.7	12.5	6.8
Land per capita (mu)	2.1	1.6	0.7	1.3	1.6	5.9
Grain yield per mu (kg/mu)	347	165	400	268	181	147
Grain production per capita (kg)	714	406	266	353	295	865
Production inputs per capita (RMB)	668	289	259	316	274	572
Production inputs per mu (RMB)	318	181	370	243	171	97

Source: China Rural Poverty Monitoring Report, 2000, National Bureau of Statistics, Rural Social Economic Survey Team
Note: 1) Region I: Economically developed with limited poverty, less than 5% of Chinese poor. Provinces: Shanghai, Beijing, Tianjin, Zhejiang, Jiangsu, Fujian,and Guangdong. Region II: Large areas of shallow poverty, home to 55% all poor. Provinces: Hebei, Shanxi, Liaoning, Anhui, Jiangxi, Shangdong, Henan, Hubei, Hunan, Guangxi, Hainan, Chongqing, and Sichuan. Region III: Areas of concentrated and extreme poverty, home to 35% of the total poor. Provinces: Guizhou, Yunnan, Shaanxi, Gansu, Qinghai, Ningxia, and Xinjiang. Region IV: Cold area with limited poverty, home to 6-8% of the total poor population. Provinces: Inner Mongolia, Jilin and Heilongjiang. 2) 1 mu = 666.67 square meters

4.32 *The average land plot used for farming in China is currently too small to allow for significant improvements in agricultural productivity.*[73] The scope for further increases in returns to land via crop diversification, improved farm management, and on-farm capital and other improvements is relatively limited without consolidation of land plots. Hence, a reduction in farmer per land ratio that is achieved by moving labor out of agriculture, accompanied by land consolidation, is the single most important factor to boost the income of farmers. Moreover, in the context of continued agricultural trade liberalization, labor is likely to move out of agriculture in localities with soil and water supplies too poor to support competitive production.[74]

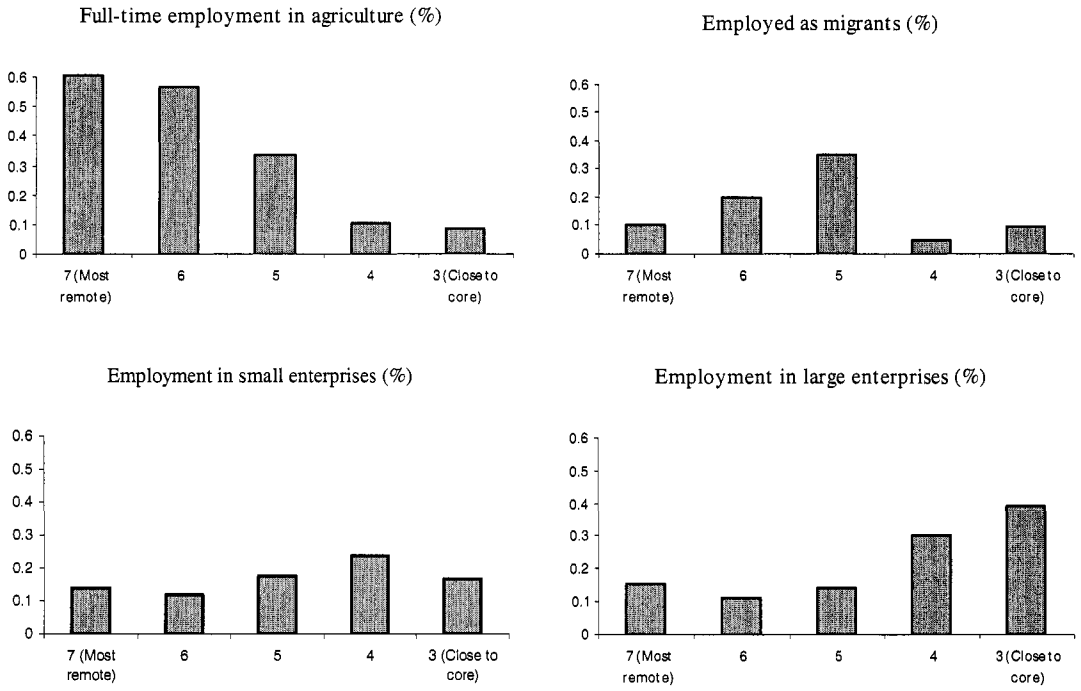
4.33 *While having the right to consolidate land, the ability of farmers to do so often remains limited.* China's 1998 Land Management Law and 2002 Rural Land Contracting Law confirmed a 30-year land lease term, gave individual farmers a standardized land use contract (stipulating clear rights for sublease, transfer and exchange of land) and attempted to limit the power of village committees to redistribute land. The existing laws grant farm households the right to sublease and transfer their land contracts, provided that land use is limited to agricultural purposes. In practice, however, subleasing remains informal, with user rights generally exchanged between friends and trusted neighbors on an annual basis and without legally enforceable contracts and any clear pricing mechanism. Land law and policy have yet to offer clear signals on land use markets, hence currently provide inadequate security to either sub-lessors or sub-lessees. Since

[73] According to the *China Statistical Yearbook* (2002), the average farm was 0.5 hectare in 2001.

[74] Exposed to the constraints of land quality and water scarcity, for example, farmers in the North may find it difficult to further raise productivity and cut the cost of maize production, or to find other profitable crops. Domestic maize prices are nearly one third above the international level. In addition, as it is produced in North China and consumed by the expanding livestock population in South China, maize is costly to trade domestically. For the South, it turns out to be less expensive to transport maize from a foreign producer through a near-by port than to have it shipped from the domestic producers in the North.

local courts are sometimes unduly influenced by local governments, enforcement of land rights is often subject to local government priorities. While there are differences across localities, land rights are difficult to monetize and land consolidation is lagging behind the pace of migration.[75]

Figure 4.7 Rural employment and distance from urban centers



Source: Mohatrapa (2002)
Note: The distance from urban center is shown as a core-periphery zone, which is 1-3 for the villages in the immediate vicinity (suburb) of one of China's seven major metropolitan areas and 7 for those most remote (Skinner, 1994).

4.34 *Farmers also face constraints in the nature of their physical environment, market infrastructure and finance.* Rural infrastructure has seen major improvement over the past decades – particularly in transport, irrigation, and flood control, making a clear contribution to the prospects of farmers (Box 4.5). Local governments are now involving the private sector in financing and operating rural infrastructure that essentially yield private benefits, such as irrigation and drainage. Examples include the self-financed irrigation and drainage districts emerging in China. However, complementary reforms in related service industries, such as local trucking, are lagging behind the pace of capital investment in infrastructure. On the financial side, the burden imposed on farmers in the form of various fees by local governments will be gradually alleviated by the rural fee

[75] Being unable to obtain adequate compensation for transfer or sublease of their land use rights, most migrants leave some family members behind to continue cultivate the family land plot. Reported cases of local officials confiscating land from farmers and shirking compensation to farmers for land development suggest that a new law, although a critically important achievement, is not sufficient without an adequate enforcement mechanism. See Ho (2001).

reform that has been piloted in Anhui and elsewhere. This important reform, however, still needs to be accompanied by improvements in access to credit in rural areas, since farmers seem unable to fully finance the needed technology upgrading from their retained earnings. As for the physical environment, land degradation – namely water erosion and desertification – ineffective management of water and pollution can hurt the livelihood, and not just the market performance, of many farmers.[76] Environmental issues have been on the top of the government policy agenda. The implementation of environmental policies and laws, however, could be strengthened at the local level. Market infrastructure is constraining farmers in localities where market information is scarce, marketing and promotion services not available, sanitary and phyto-sanitary regulations not effective, or pesticide regulations and management deficient. As food safety standards in developed countries have been gradually rising, quality problems make it difficult for products like fruit and vegetables, in which China appears to have comparative advantage, to access international markets.

Box 4.5 Rural Roads and Farmers' Prospects in Henan

Rural roads and transport services have been associated with improvement in farmers' prospects. In the late 1990s, Henan province, like many others, invested into building rural roads in low income counties to better integrate local rural economies with outside markets and to improve access of rural residents to education, health and other services. During 1996-99, with the new roads in place, these counties saw their agricultural production reach outside markets and grow by 35 percent, with the production of medical herbs, mushrooms and chestnuts rising by 80 to 320 percent. Facilitated by the new transport network, off-farm employment surged in services (with employment in services rising by one third, mainly in logistics, commerce and tourism), in mining (granite and marble doubled their output during 1996-99), and in the processing industries. New job opportunities have emerged and clustered in towns and townships. This was supported by urbanization and new bus transport links facilitated commuting and migration. Closer contacts with the outside world brought information, knowledge and ideas, which contributed to enhancing crop selection and technologies, supported entrepreneurship, and further boosted migration. Partly as an indirect effect of the new road network, income per capita increased by 30 percent and the number of poor dropped by over 40 percent in the affected counties. Through the positive income effect as well as directly, the new roads have been associated with higher enrollment and completion rates at local schools (numbers of students in senior and junior high schools rose by over 30 and 20 percent respectively, and villages in Qinba Mountain Areas reported enrollment rates rising from about 40 to 90 percent). The social impact of these road investments has been positive also because these investments were closely coordinated with other developmental policies, including investments to improve access to safe water, electricity, and telephones.

Source: Highway Bureau in Henan Communication Department, Zhengzhou, Henan

4.35 *In assisting farmers, the government may wish to pursue effective enforcement of farmers' land rights and of environmental law and regulations at the local level.* A formal enforcement mechanism could be set up to facilitate the sublease and transfer of land contracts, and the use agricultural land as collateral. Such a mechanism may be needed to effectively implement measures approved by the 2003 National People's Congress, including the proposed penalties on local officials who interfere with land rights formulated by the 1998 and 2002 laws. As for environment, the power of

[76] The area of land affected by water erosion has expanded by about 2 percent annually since the mid-1970s. Desertification affects about 262 million ha of land, that is more than a quarter of China's total land area. Both problems are reported as accelerating. During 1987-97, about 0.8m ha of cultivated land was lost to floods, erosion, and desertification (another 1m ha disappeared due to construction).

environmental policies and laws can possibly be supported by greater implementation authority of the State Environmental Protection Agency and a requirement to promote sustainable development also at the Ministry of Agriculture. Attention to sustainable development along with proper investments can yield good returns on incremental agricultural production as well as improve the environment (Box 4.6).

Box 4.6 Loess Plateau Watershed Rehabilitation Project

The Loess Plateau Watershed Rehabilitation Project (partly financed by the World Bank, implemented during 1994-2001 in nine tributary watersheds of the Yellow River in the Loess Plateau) combined sustainable soil and water conservation with gains in agricultural production and farm incomes.

To replace crops on sloped land, the project built terraces that create high-yielding, level farmland for field crops and orchards. On slopes of more than 20 degrees and wastelands, the project planted trees, shrubs, and grasses to reduce soil loss and to produce fuel, timber and fodder. Further, the project introduced a ban on grazing, which has been a main cause of environmental degradation in the Loess Plateau. As a result, farmers of the Loess Plateau have seen their productivity and incomes rise, crops varieties increase, local environmental conditions improve (particularly, drought damage drop), and conditions created for sustainable soil and water conservation. Moreover, by reducing erosion, these activities have also reduced sediment flows into the Yellow River, and thus brought about environmental improvements and economic benefits downstream.

4.36 *In addition, farmers would benefit from assistance in accessing markets.* To complement the ongoing program of improving farm-to-market transport network, local governments may need to pay more attention to logistics services. Selling off state-owned trucking firms and enabling small firms to enter the trucking business, for instance, may be needed to open adequate transport possibilities for farmers to supply the local as well as more distant markets. As for market infrastructure, the government has already announced plans to increase investment, set up a market information system, promote standardization of agricultural products, and use China's WTO membership to further open foreign agricultural markets to China's (and other developing countries') products. Domestically, this will require improvements in regulations and supervision by the central government as well as investment, technology and expertise in the entire production and marketing chain at the local level. Overall, guidance on the priorities for the involvement of local governments in improving farmers' market access is likely to be most effective if it comes from their constituencies (through a transparent process of planning and budgeting), from the actual and potential users of services and from private businesses (through public hearings).

Sequencing and Financing the Policy Package

4.37 *The effort to promote high growth with equity in China is likely to be effective if the government focuses on the delivery of core public services, while being only indirectly involved in the economy.* The desired role of government is that of a facilitator rather than a provider of jobs and economic activity, the guardian of market rather than a protector of the public sector, a force to empower rather than thwart economic agents and individuals, and a provider of core public services and public goods rather than enterprise subsidies and credit. Such a change in the government role is underway at the central level and is gradually, in the form of pilots and experiments, reaching the local levels.

Table 4.4 Policies to Support Growth with Equity

	Key Drivers	Focus Agenda	Policy Implications
Lagging regions	Productive jobs	Human capital	Ensure financing and promote quality of primary and secondary education and basic health services **S-M** Expand private sector provision of tertiary education and life-long learning **M** Support equity in access to education through stipends and student loans **M**
		Technology	Implement competition policy **S-M** Refocus and support technology dissemination schemes **M** Promote links between industries and the education system **M**
		Urbanization	Emphasize market-based development of cities **S-M** Establish sound urban land markets **S-M** Facilitate the development of urban infrastructure and social services **M-L**
		Services	Reduce the role of state in the production and distribution of services **S-M** Focus on regulations to promote relevant standards and competition **S-M**
Rural areas	Returns on farm labor and land	Farmers' prospects	Strengthen enforcement of land use rights **S-M** Strengthen enforcement of environmental laws and regulations **S-M** Improve rural market infrastructure **M-L**

Note: S-M is short- to medium-term, M is medium term, and M-L is medium- to long-term

4.38 *The speed and sequencing of policy implementation depends upon the available institutional capacities and finance.* The changing role of government has wide-ranging implications for the country's institutional frameworks, which will require time and resources to implement. Table 4.4 summarizes the policies discussed in this chapter and suggests their feasible timing. In the short- to medium-term, government could focus on ensuring financing and enhancing quality of primary and secondary education and basic health services in the lagging regions, on implementing effective competition policy (in the context of promoting market integration and flexibility discussed in the previous chapter), on promoting relevant standards and competition in services and reducing the role of state in services production and distribution, on emphasizing market-based development of cities and establishing sound urban land markets, and on strengthening the enforcement of farmers' land rights and of environmental laws and regulations. Expanding private sector provision of higher education and training, supporting equity in access to education through stipends and student loans, building linkages between the education system and industries, and refocusing technology dissemination schemes in the lagging regions may take a longer time to implement. Finally, as a long-term process to support some of the institutional changes, government would assist in the development of urban infrastructure and services and in improving rural market infrastructure.

4.39 *Furthermore, effective implementation of the policy package will also require the government to maneuver among many competing interests and interest groups.* The richer, urban segments of the population may not support greater financing for rural basic education and health care. Local governments as well as current state monopolies are likely to be against an open, rule-based market competition. State-owned enterprises and local governments are likely to oppose a greater role for the private sector in bank ownership and operation. Those presently influencing the allocation of urban land and firms benefiting from subsidies on industrial urban land development are likely to resist greater transparency and efficiency of urban land market. Local governments along with polluting enterprises may also resist changes toward a more effective enforcement of national environmental and land-use laws.

4.40 *The evolving role of government would mainly affect the composition rather than necessarily the aggregate amounts of government expenditure.* The government is currently using a budgetary package that includes fiscal stimulus to promote the development of lagging regions. Spending increases on primary and secondary education and basic health services are expected and fully justifiable. Such increases, however, will have to be accommodated within the existing fiscal constraints.

4.41 *The government's current fiscal position offers only limited room for continuing fiscal expansion.* First, with a growing government debt to GDP ratio, the future growth in expenditures needs to be constrained below the growth in revenues. Without major reforms in tax policy and tax administration, revenues may be expected to grow at 7-9 percent annually in real terms. If GDP rises at the target rate of about 7-7.2 percent, by this rule government spending as a share of GDP may increase by about 0.1 percentage point annually. This, however, would be insufficient even to cover the projected increases in interest payments on government debt (Table 4.5). Second, the current fiscal stimulus and policies of a fiscal nature in the past have in part relied on financing through the banking and enterprise systems. This has generated a stock of government obligations of an implicit or contingent nature that are not officially considered government debt but, in due time, are likely to negatively affect the fiscal position.[77] In fact, it is important to minimize the use off-budget funding and any further increases in the government's hidden obligations in order to maintain fiscal stability in the future. Hence, the main challenge for the government would be to continue adjusting the composition of its expenditure, moving away from providing enterprise subsidies, credit and jobs, and toward delivering core public services and public goods without increasing aggregate expenditure as a share of GDP.

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[77] Government faces direct and contingent liabilities, each of which can be either explicit (which are legally binding, based on laws or contracts) or implicit (which are based on the expected crisis management or political pressure or on the moral responsibility of the government to act). Direct liabilities are certain to realize. The realization of contingent liabilities depends on the occurrence of particular events. Most *direct explicit* obligations of the central government are reported as government debt. Among the *direct implicit* obligations of the central government, the largest are future obligations under the public pension system and the future cost associated with current public investment programs. The central government's *contingent explicit* liabilities include various state guarantees and state-guaranteed insurance programs. Its *contingent implicit* liabilities are numerous, the largest being the potential fiscal cost of reforming the banking system. Since direct implicit and contingent explicit and implicit liabilities remain unreported, and often even unrecorded, they may be considered "hidden". Chapter 5 discusses some of these obligations.

Table 4.5 Fiscal Projections (% of GDP)

	2002	2003	2004	2005	2006	2007
Fiscal revenues	18.7	18.8	19.1	19.3	19.4	19.6
Fiscal expenditures	22.0	22.2	22.3	22.4	22.5	22.6
out of which interest payment	0.8	0.8	1.0	1.2	1.5	1.5
Fiscal balance	-3.3	-3.4	-3.2	-3.1	-3.1	-3.0
Government debt	26.3	27.4	28.3	29.1	29.5	29.7

Source: World Bank projections based on official figures available in June 2003 and IMF definition
Note: 1/ Excluding government off-budget activities and possible negative effects of existing fiscal risks.
2/ Projections are generated in a standard macroeconomic consistency model of the World Bank.

4.42 *The ability and capacity of the government to fully fund the achievement of its objectives would rise with continued reforms in tax policy and tax administration.* The government was able to raise the share of its revenues in GDP from 12.1 percent in 1997 to 14.3 percent in 1999 and further to 18.7 percent in 2002. While this impressive rate of growth is unlikely to be sustained, the prospects for reasonable growth in revenues are good with continued reforms in tax policy and tax administration. In tax policy, the government has been launching initiatives to further broaden the tax base, revise tax incentives, and enhance the efficiency of the tax system. Along these lines, it has outlined comprehensive reforms of the personal, enterprise income and value added taxes, among others. In tax administration, modernization has been rapid since 2000, including the introduction of unified tax payment procedures and massive computerization. Continuing development of the tax administration information system and simplification of procedures for tax payers would support not only further improvements in the efficiency of revenue collection but also the technical feasibility of implementing some of the desirable tax policy reforms.

5. ADDRESSING THE RISKS

5.1 *The discussion in the previous chapters suggested several strategies to achieve sustained growth with equity, but also revealed some sources of risk.* Chapter 3 indicated that policies to promote domestic market integration and flexibility, while facilitating further economic restructuring and sustained economic growth in China, will have a differential impact on localities and individuals, including adverse effects in some cases. This will generate demands for mitigation measures and public services, especially social security. Given the high degree of decentralization in China, such demands will place heavy burdens on local governments in poor localities, posing a challenge to the existing system of inter-government finance system. Chapter 4 reinforced the nature of this challenge, showing that the policy package to ensure continued growth with equity in China will imply further changes in the role of government, particularly at the local level. Tailoring fiscal interventions to match the new roles, while addressing fiscal pressures beyond the officially defined government budget and debt, will be a challenging task over the next few years. Furthermore, a number of political challenges will arise as reforms in inter-governmental finance, pensions, the composition of public services, and macro-economic risk mitigation are specific areas where the costs and benefits to different groups will vary significantly. Moreover, policy-induced changes will occur within the broader context of major structural changes that are underway already, partly to accommodate the forces of globalization.

Suitable Social Security [78]

5.2 *The formal system of social security in China continues to adjust to the kinds of social risks emanating from the expanding role of market forces in the economy.* A strong social security system is an essential component of a market-based economy, not least because it promotes the kinds of risk-taking behavior that yield high payoffs in economic growth and innovation. The system in China (summarized in Tables 5.1 and 5.2) covers only a small part of the population, leaving most of the population unprotected. It is segmented along the lines of rural-urban household registration. It excludes the rural labor force, farmers as well as off-farm workers and most of the migrant labor force. Financing and management is decentralized down to the level of counties, townships and villages. Such decentralization sometimes fragments the policy response to poverty. It also inhibits labor mobility, which is generally an effective household response to shocks.

[78] In this chapter, social security stands for all contributory and non-contributory schemes that provide income or close substitutes for income to households (Tables 5.1 and 5.2 provide an overview).

Table 5.1 Contributory Social Security Schemes

Scheme	Coverage	Benefits	Financing	Administering Agency
Social Insurance Dates back to the 1950s Extensively modified in the 1990s	In principle, mandatory for the whole urban labor force In reality, covers 58% of the urban labor force	Old-age pension Disability benefit Unemployment Insurance Medical care insurance Maternity benefit	Employer and employee contributions Residual financing from city and higher government tiers	Municipal Labor and Social Bureaus under the supervision of Provincial Bureaus and the Ministry of Labor and Social Security
Rural pension schemes Instituted in 1991	Recommended but not mandatory Covers 9.5% of the total rural population	Pension related to contribution Variable across localities Aims to cover no more than a percentage of basic subsistence	Contribution from scheme participants Residual financing from villages and other tiers of rural government	County Civil Affairs Bureaus and Village Councils under the supervision of Provincial Bureaus and the Ministry of Civil Affairs
Rural Cooperative Medical Insurance Dates back to the 1970s Promoted in recent years	Recommended but not mandatory Covers less than 20% of the rural population	Usually covers basic medical treatment only and requires co-payment Variable across localities, programs not standardized	Contribution from scheme participants Residual financing from villages and other tiers of rural government	County Civil Affairs and Public Health Bureaus and Village Councils under the supervision of Provincial Bureaus and the Ministry of Civil Affairs

Table 5.2 Non-Contributory Social Security Schemes: Social Assistance or Social Safety Net

Scheme	Coverage	Benefits	Financing	Administering Agency
Support Program for Laid-off Employees (*xiagang*) Formalized in 1997 Due to be phased out in 2003 No new beneficiaries from the beginning of 2001	Regular employees of state and urban collective enterprises laid-off for economic reasons	Basic living allowance, 70 to 80% of the local minimum wage Subsidized medical care Subsidized participation in re-training programs Help with job placement	Joint financing from enterprises, Unemployment Insurance Fund, city and higher government tiers and donations	Enterprises under the supervision of Municipal Labor and Social Security Bureau
Minimum Living Standard Scheme Since 1998, in all cities Some rural areas have a parallel scheme	In principle, all urban residents, excluding rural migrants	Subsistence allowance less than the unemployment insurance benefit Variable fee exemptions or reductions for health, education and rent/heating Means-tested top-up benefit to the local threshold Workfare requirement for those able to work	Joint financing by the central and territorial governments	Municipal Civil Affairs Bureaus
Support for Poor Rural Localities A range of programs operated by various government tiers	Designated localities Localities affected by natural disasters	Variable benefit package	Joint financing by the central and territorial governments	County Civil Affairs Bureaus
Local Rural Support Schemes for Poor Households Long history The nature of the scheme tends to vary widely across localities	Those regarded as poor by the local standard – often the lowest 5-10%	Variable benefit package Sometimes includes medical financial assistance Means-tested	Financed by villages or townships and donations	County Civil Affairs Bureaus and Village Councils

Urban Social Security

5.3 *The urban social security system has traditionally targeted employees of state and urban collective enterprises.*[79] With the extension of formal social insurance to the whole of the urban labor force in 1998, the division between the state sector and the non-state sector employees has been officially abolished, but still survives in practice as small private firms are reluctant to join.

5.4 *Social insurance schemes suffer from financing weaknesses.* First, social insurance contributions are collected separately for each of the five schemes and often separately from enterprise taxes. This lowers the compliance rate and introduces a variation in the compliance rates between schemes.[80] Second, in many urban areas, the combined contribution to social insurance may be too high, possibly inducing non-compliance and also impeding the extension of coverage.[81] Third, although social insurance is based on regulations issued by the State Council or the Ministry of Labor and Social Security, its financing is decentralized to the city level. Apart from a few very large ones, cities are too small to provide sufficient risk pooling to ensure sustainability. As a result, the balance between contributions and expenditure, overall financial capacity, and the contribution rate and benefits under social insurance schemes vary widely across localities, even within the same province (Box 5.1). As yet, there is no settled procedure for portability of benefits across cities.

5.5 *The Minimum Living Standard Scheme, is an adequate social safety net for the eligible urban population, but it too has restricted coverage driven in part by decentralized financing.*[82] First, like social insurance, by design the Minimum Living Standard Scheme does not apply to migrants, even those living and working in the locality on a long-term basis. Second, the scheme does not help in covering medical costs. This is a major deficiency in that the cost of treating illness or injury is a major cause of poverty. In practice, many cities offer exemptions and reductions on the cost of health, education, rental and heating services, but the practice is not standardized. Third, as in the case of urban social insurance, there is as yet no settled procedure for the sharing

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[79] Under the "iron rice bowl" approach in the 1960s, these programs were administered and financed by individual enterprises. Faced with a dramatic worsening of their financial position in recent years, many state enterprises have faced problems with their social security obligations, causing delays in the payment of pensions and the re-imbursement of health care expenses, or outright default in some cases.

[80] The government has already considered a proposal to transform disparate contributions into one composite social security tax, which would be collected together with other taxes. This proposal has been piloted in Liaoning province, which allows cities to collect social insurance contributions jointly with enterprise taxes.

[81] In some cities, the total social insurance contribution rate can be as high as 38 to 40 percent of the payroll. Out of this amount, about one third belongs to medical insurance, unemployment and maternity benefit and disability compensation, and two thirds to old-age pension. Pensions have been financed by employers either individually or by local pension pools. Recently, the liabilities of the old system have been transferred to the budgets of individual cities when these became responsible for pensions. As a result, in some cities, employer contribution towards old-age pension alone is as much as 30 percent of the payroll, compared to the limit of 20 percent specified by the State Council.

[82] The number of recipients of benefits under the Minimum Living Standard Scheme has grown from 1.84m in 1998 to 20.6m in 2002. It is estimated to grow further to some 27-28m over the next few years, without taking into account migrants.

of cost between government tiers, which causes variations in the operation of the scheme across localities.[83] Not all low income households receive coverage.

Box 5.1 Advantages and Disadvantages of Decentralization of Social Safety Net Schemes

Decentralization allows flexibility in accordance with local variations and gives local governments freedom to take initiative. In some cases local government initiatives have been scaled up as national policies. For example, the Minimum Living Standard Assistance Scheme for urban areas, now a nation-wide scheme, was first pioneered in a few coastal cities. A uniform system for all of China runs the risk of being inadequate in some while superfluous in other local conditions.

But municipalities and the individual tiers at which rural social security schemes are organized are in many instances too small to provide sufficient risk pooling to maintain the financial integrity of schemes. Decentralization in China is also associated with variations in standards of provision that may go beyond the socially acceptable differences. Such variations may also impede the transferability of social security entitlements (such as old-age pensions) and thus impede labor mobility. Presently, arrangements for the transferability of benefits between cities, even in the same province, are either non-existent or rudimentary. Decentralization has an additional effect on accentuating disparities. Localities with higher poverty or a higher percentage of the needy in the population tend also to have more strained public finances, and thus are forced to reduce coverage or benefit levels.

The pilot program to improve the urban social security system, currently implemented in Liaoning province, recognizes the problems created by decentralization. One of its aims is to move the provision and financing of social insurance from the municipal to the provincial level, and to improve and standardize administration.

Rural Schemes

5.6 *Social security schemes available in rural areas are sparse, highly variable across rural counties, and geared largely to relieving severe poverty.* The rural social security system consists of two contributory schemes (rural pension scheme and rural cooperative medical insurance), and two non-contributory schemes (special assistance to counties officially designated as "poor" by the central and provincial governments, and the Local Rural Support Schemes for Poor Households). Social insurance schemes do not apply to township and village enterprises, which in 2002 employed 133 million people (compared to 72 million in the urban state sector).

5.7 *Locally-organized and financed partial old-age pensions and cooperative medical insurance cover less than 10 percent and 20 percent of the rural population, respectively, and are highly variable among localities in their coverage and benefits.* The vast majority of the rural population obtains medical care only on the basis of fee for service, with fees so high as to be impoverishing or unaffordable for a representative rural family. Problems related to the investment choices of rural social insurance schemes suggest that covered individuals face the risk of future default on benefits. Similarly, the Local Rural Support Schemes for Poor Households (such as the "Five Guarantees", which cover small groups such as the elderly without family support) are restricted and variable in coverage.

5.8 *A major gap in China's rural anti-poverty policy is the absence of an effective system for dealing with household and individual poverty in the midst of relative*

[83] In 2002, under the scheme, the central government contributed RMB4.6bn via transfers and local governments paid out RMB6.7bn.

prosperity. The focus on assistance to "poor counties" rather than on poor households addresses those causes of poverty that are particular to the whole locality, such as poverty of natural resources. But many causes of poverty are particular to individuals and households rather than the whole locality and, as a result, about one half of rural poor live outside the "poor counties", distributed over the whole of rural China.

5.9 *The traditional pillars of rural social security, that is land plot and family, are gradually becoming less effective.*[84] The cultivation of individual land plots has been instrumental in reducing the incidence of rural poverty, especially when combined with income diversification opportunities in rural enterprise. But by themselves they have not been sufficient to prevent poverty, not even extreme poverty. Low returns to farm labor over the past decade have implied that most poor households are those that rely on agriculture as their sole source of income. Moreover, as the liberalization of trade in agricultural commodities exposes Chinese farmers to international prices, it generates volatility in returns and thus reduces the social security value of land. This impact may be significant especially for those farmers and localities that are unable to adjust their cropping pattern adequately.

Priorities in Social Security Reform

5.10 *Social assistance schemes in urban and rural areas should not narrowly focus on families and persons below the poverty line; they should complement social insurance programs to aid people in coping with risk of poverty.* According to household data, poverty rates in both rural and urban areas are highly sensitive to comparatively small shifts in the poverty line. Among rural residents, presently, 10 percent live below the official poverty line but an additional 15 percent live just above the official poverty line and below the US$1 a day consumption line. In urban areas, the incidence of vulnerability has been low but rising, as the number of unemployed and retirees increases. For households living just above the official

Box 5.2 Vulnerability to Poverty

Poverty is not a static phenomenon, most people are not permanently poor. It is a dynamic process with households continuously moving in and out of poverty. Empirical research suggests that, in China, a household's average wealth is an important determinant of both transient and chronic poverty. For chronic poverty, additional determinants include education levels and health status. The main determinant of transient poverty (vulnerability to poverty) is exposure to uninsured income risk. While China's strategy to develop poor regions is possibly good at addressing chronic poverty, it may not help in reducing vulnerability to poverty. To reduce vulnerability, other policy instruments may be more effective, including seasonal public works, credit schemes, and insurance programs such as health insurance or coverage for weather risk.

Likewise, research suggests that with poverty incidence of around 10-20% (for example in Sichuan province during 1991-95), twice as many people actually become poor for at least one year. Therefore, anti-poverty policies should target not only those who are already poor but also those who are vulnerable to poverty. Research also indicates that households who are poor for more than one year are more likely to remain poor for many more years. Hence, being poor over a long period of time reduces household's ability to lift itself out of poverty.

Source: Jalan & Ravallion (1998, 1999 and 2001) and McCulloch & Calandrino (2001)

[84] Providing each rural household with a piece of land has contributed to the dramatic drop in the (official) poverty headcount from 250 million in 1978 to 70 million in 1994, on the eve of the 8-7 poverty plan introduced in 1994. Better management of natural resources, investment in rural infrastructure, and technological upgrading can relieve, but not eliminate, the constraint on the income security land provides.

poverty line, any adverse factor, such as sickness in the family or bad weather, that reduces income or increases the living cost, can lead to poverty (Box 5.2). This suggests that a significant percentage of the rural and urban non-poor remain susceptible to falling under the official poverty line. Steps to address the most critical sources of vulnerability would include the establishment of universal access to basic health care, including protection against catastrophic illness and injury.

Extending Social Security in Urban Areas

5.11 *Widening the coverage of social security is important in order to close the widening gaps in urban areas and to broaden the system's financial base and risk pool.*[85] The government has undertaken several reforms of urban social security schemes in recent years, including the social security reform pilot in Liaoning, new laws and national social security trust fund for pensions, and expansion of both the unemployment insurance program and the Minimum Living Standard Scheme. As a result, the blueprint of the alternative to the work-unit-based social security system for urban areas is almost completed, though still far from implemented. The major impediments in its implementation are three: administrative, coverage and financial. As contributory schemes, such as the current urban social insurance, are difficult to design for the self- or the informally-employed even in developed economies, the priority could be to expand social security to the wage earners, both local and migrant, in the formal sector in urban areas. The existing problems in the current urban social insurance schemes should be solved, however, before coverage is expanded.

5.12 *Extending social security to migrants is important as migration is desirable in the context of economic restructuring and rural poverty alleviation.* The priority should be to cover all long-term migrants.[86] For the purposes of social security, long-term migrants could be regarded as part of the urban population. Such treatment of short-term migrants may, however, give rise to adverse incentives since, on average, the official urban poverty line is nearly three times higher than the official rural poverty line.[87] A person may be poor according to the urban line but well off by the rural line.

5.13 *Expanding the coverage for contributory social security schemes may require administrative improvements and a clearing mechanism across urban areas.* It is relatively easy to expand coverage for non-contributory social security schemes, such as the Minimum Living Standard Scheme. But contributory schemes, such as old-age pension, medical care insurance and unemployment compensation, involve deferred benefits and raise the issue of portability. It is possible to achieve portability even under the current level of decentralization. It would, however, create demands on the administrative capacity under each of the schemes and require information sharing and clearing mechanism across urban areas. To make benefits transferable across urban areas

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[85] In urban areas, the non-state sector is rapidly expanding, and includes most migrants and an increasing share of local residents.

[86] For legal migrants, the local Public Police Stations monitor the length of stay in urban areas. Long-term basis can be defined as length of stay beyond 6 months. This definition is used in Guangdong, see Box 5.3.

[87] RMB1,800 compared to RMB635 per person/year on average

within provinces (and improve pooling of social security contributions and expenditures), it would be desirable to fully integrate social insurance administration and financing at the provincial level. Expansion of coverage could start with unemployment insurance, as the contribution rates are lower. As for medical care insurance, the urgency of extending the existing contributory scheme could be alleviated by establishing a universal basic insurance against catastrophic illness and injury, ideally along with immunization and other basic preventive care, in the context of a tax-funded universal basic health care program with a strictly defined minimum benefit package.

Centralizing the Financing and Provision of Social Security at the Provincial Level

5.14 *A pooling of social security contributions and expenditures at the provincial level is the policy aim for urban social security, and would seem to be an urgent priority in the case of old-age pensions and unemployment insurance.* Upgrading the level of budgeting from cities to provinces can take a number of forms, ranging from a full integration to compensatory transfers within a decentralized system. It raises important questions about the appropriate degree of decentralization in administration and about ensuring adequate equity across localities.

5.15 *One immediate priority is to speed up the establishment of the administrative and informational infrastructure for social insurance.* Given the 30-year history of reliance on work units for administering the labor insurance schemes, municipal governments lack the administrative structure that is needed for a government-managed social security system. Municipal Labor and Social Security Bureaus that are to function as social security agencies are still in the process of establishment in many cities. Further, most provincial and municipal Labor and Social Security Bureaus lack the information system needed to operate a social insurance system that is not reliant on work units.

Establishing Income Maintenance and Basic Insurance Schemes in Rural Areas

5.16 *The rural-urban segmentation running through the Chinese social security system should be considered temporary, but its abolition by extending the current urban social security system in its entirety to rural areas does not seem to be feasible in the near future.* As discussed above, the urban system suffers from problems in raising the coverage rate in urban areas and meeting its commitments to the covered labor force. Its immediate extension to rural areas would magnify the existing problems (Box 5.3).

5.17 *To combat income poverty, the government may wish to consider an assistance scheme that would target poor people, rather than poor geographical areas.* According to the official poverty line, the comprehensive rural income maintenance scheme would cover about 30 million people. Such a scheme could be established on the same line as the Minimum Living Standard Scheme for urban citizens. Zhejiang has taken a lead in this respect by extending the Minimum Living Standard Scheme to rural counties. However, the introduction of a comprehensive rural income maintenance scheme would be challenging. First, a pre-condition for the scheme is that allowance for its local costs will be adequately reflected in the system of inter-governmental finance (discussed below). Second, assessing household income in agriculture is problematic. Several

countries have managed to use community-based approaches effectively. If such systems are well administered, compared to the existing support for poor rural localities, household support organized through villages might provide better targeting and thus achieve greater poverty alleviation for a given cost. Centralization of the overall financing and management of rural social security schemes at the provincial level would allow easier risk pooling and benefit portability across rural areas.

Box 5.3 Three Options for Correcting Urban-Rural Segmentation in Social Insurance

The first option is to gradually bring into the social insurance net rural migrants living and working in cities on a long-term basis. Guangdong province has extended social insurance to migrants staying beyond 6 months (the length of stay is monitored by the local Public Police Stations).

The second is to allow and encourage provinces or cities with well-functioning social insurance to extend the system to wage earners in rural counties within administrative boundaries. Given the growth of wage employment, the institution of a rural social insurance system parallel to that in urban areas financed by employer and employee contributions in larger rural enterprises would seem to be feasible. Shanghai and Zhejiang are planning to extend social insurance to their rural counties.

The third is to accelerate the development of rural social security schemes such as those for old-age pensions and basic medical care with a view to an eventual integration with the urban scheme.

5.18 *Insurance against the financial costs of medical care to address catastrophic illness and injury is urgently needed to address vulnerability.* Injury and catastrophic illnesses tend to have devastating consequences for the affected household. It is difficult to implement contributory insurance schemes for self-employed. Nonetheless, most countries at China's income level provide insurance against injury and catastrophic illness, usually, along with immunization and other basic preventive care, in the context of a tax-funded universal basic health care with a strictly defined minimum benefit package (broadly along the lines of the current experiments with medical financial assistance for the poorest in selected localities in China). This would also build upon the recent experience in coping with SARS, where weaknesses in health coverage for low-income groups were a dominant concern in designing containment measures.

5.19 *Establishing an old-age pension scheme for the rural population is administratively difficult.* As noted above, a possible approach is to cover the wage-earning rural population, that is mainly employees of township and village and other rural enterprises. An alternative to expanding contributory pensions to the self-employed rural population would be to allow the elderly to qualify for the same minimum income support under a household-based rural income maintenance scheme discussed above. Such an approach has been adopted successfully in Brazil and other countries. Eventually, the basic insurance schemes in the rural areas may become a good basis for the needed removal of the existing rural-urban segmentation of the social security system.

Financing the Delivery of Public Services

5.20 In many localities across China, the present inter-government finance system is not ensuring adequate delivery of public services. The delivery and financing of most core public services, including education, health care, social security and infrastructure are assigned to local governments (Table 5.3). As of 2001, 63 percent of overall government expenditure responsibilities was about equally distributed among the

provincial, prefecture and county levels of government, and townships accounted for 7 percent.[88] Since public services like basic education and public health, generate important spillover effects for society as a whole, they are usually seen as responsibilities shared by central and sub-national governments. Often, the extensive decentralization of such responsibilities is associated with regional inequalities, unless complemented by a strong system of inter-government fiscal transfers.

5.21 During the last decade in China, per-capita revenues and expenditures of local governments have varied greatly across provinces, with transfers playing some but not an adequate equalizing role (Table 5.4 and Figures 5.1 and 5.2). Similarly large disparities have existed within provinces.[89] At the same time, some central standards and policies are applied without adequate allowance made for local conditions. For example, local government staffing and salaries, which absorb over two thirds of local government budgets, are set by the central government. The relative lack of autonomy in such a major spending area, disparities in fiscal capacity, and different levels of accountability of local governments largely explain why many local governments, especially those in poor localities, have fallen short of ensuring adequate delivery of public services. To raise more revenues, local government incentives have been biased toward diverting resources from the budget to extra-budgetary channels (so weakening prioritization of government expenditures), protecting local enterprises (thus adding to market fragmentation as discussed in Chapter 3) and imposing an array of arbitrary fees (creating obstacles to business and making schooling and medical care too costly for poor households). This often jeopardizes the implementation and ultimate accomplishment of policy priorities set by the central government.

Table 5.3 Central and Local Budgetary Expenditures, 1998-2001 (percent)

	1998		1999		2000		2001	
	Central	**Local**	**Central**	**Local**	**Central**	**Local**	**Central**	**Local**
Total [1]	29	71	31	69	31	69	31	69
Capital Investment	44	56	50	50	34	66	34	66
Education and Healthcare	11	89	11	89	11	89	11	89
Pensions and Social Security	11	89	10	90	13	87	13	87
Government Administration	7	93	8	92	6	94	6	94
Agriculture Support	11	89	10	90	10	90	11	89
Research and Development	23	77	28	72	28	72	25	75

Source: Ministry of Finance and National Bureau of Statistics
Note: [1] The proportion 31:69 was reported also for 2002.

[88] Data provided by Ministry of Finance. In comparison, for a sample of about 100 countries for which data are available, sub-national governments, including states or provinces, account on average for only 13 percent of total budgetary expenditures in developing countries, and 35 percent in developed countries. In other countries social security is almost always provided by the central government. Safety net mechanisms are almost always jointly financed by the national government.

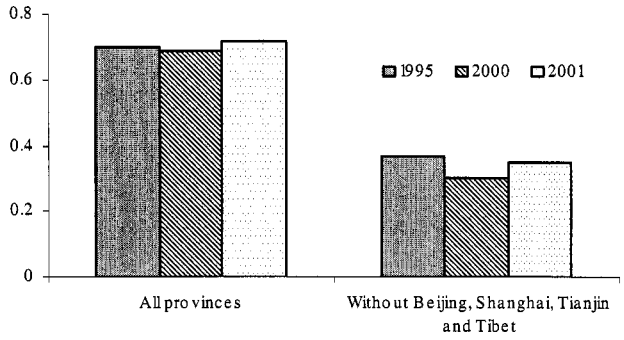
[89] World Bank (2002) found that inequalities in per-capita local government expenditures and revenues across counties and townships within selected provinces are comparable to inequalities across provinces.

Table 5.4 Local Government Per-Capita Revenues and Expenditures by Province (RMB)

	Local Government Revenue per Capita						Local Government Expenditure per Capita					
	Max		Min		*Ratio*	*CV*	Max		Min		*Ratio*	*CV*
1995	Shanghai	1552	Tibet	90	*17.3*	*0.95*	Shanghai	1837	Anhui	226	*8.1*	*0.70*
			Guizhou	111	*14.0*	*0.94*	Tibet	1453			*6.4*	*0.59*
	Guangdong	557	Tibet	90	*6.2*	*0.68*	Guangdong	756			*3.3*	*0.51*
			Guizhou	111	*5.0*	*0.67*						
2000	Shanghai	2900	Tibet	206	*14.1*	*1.03*	Shanghai	3636	Henan	480	*7.6*	*0.69*
			Gansu	239	*12.1*	*1.02*	Tibet	2290			*4.8*	*0.59*
	Guangdong	1054	Tibet	206	*5.1*	*0.87*	Qinghai	1319			*2.7*	*0.57*
			Gansu	239	*4.4*	*0.86*						
2001	Shanghai	3776	Tibet	232	*16.3*	*1.10*	Shanghai	4387	Henan	532	*8.2*	*0.72*
			Guizhou	263	*14.4*	*1.09*	Tibet	3976			*7.5*	*0.65*
	Guangdong	1491	Tibet	232	*6.4*	*0.94*	Qinghai	1937			*3.6*	*0.58*
			Guizhou	263	*5.7*	*0.93*						

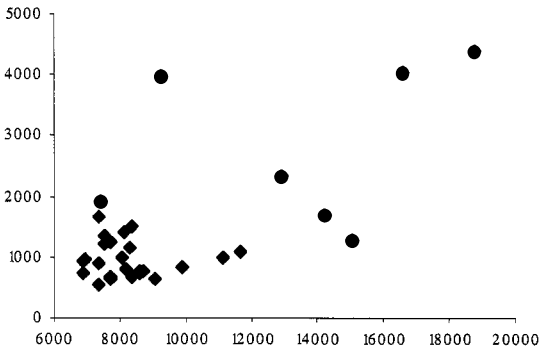
Notes: Includes all levels of local governments by province. Revenue is net of transfers from the central government. Expenditure includes the proceeds from transfers. If the maximum/minimum province is a municipality or Tibet, the non-municipality and non-Tibet maximum/minimum province is also listed. CV is coefficient of variation, a statistical measure of disparity.
Source: Ministry of Finance and National Bureau of Statistics

Figure 5.1 Disparity in Local Government Per-Capita Expenditures (coefficient of variation across provinces)



Source: National Bureau of Statistics and Ministry of Finance

Figure 5.2 Local Government Per-Capita Expenditures and Local Per-Capita Income by Province, 2001 (RMB)



Source: China Statistical Yearbook, 2002

5.22 *The central problem in inter-government finance and public service delivery is the large gap between expenditure and revenue assignments at the local level, but the most visible problem is the level of equalization grants.* China is unusual in not having a transfer system that provides for the expenditure needs of local governments. Although the volume of central transfers is large, accounting for 46 and 48 percent of local expenditures in 2001 and 2002, respectively, the current system of intergovernmental transfers is poorly designed to support the financing of vital social services such as rural education and rural public health. The combination of pushing down expenditure responsibilities to lower levels and not providing adequate financial support has produced large and growing fiscal disparities that reinforce income disparities across regions. This is just the opposite of the expected role of government – that of alleviating income inequalities and protecting the poor and vulnerable groups. The outcomes are regressive,

where governments in poor regions are providing fewer and lower quality services and passing along a higher proportion of the costs to their constituents.

5.23 *Recent increases in equalization transfers have helped, but by themselves cannot address public service delivery needs.* In 2002, the central government allocated RMB435 billion (about 19 percent of total government expenditures, or 4.2 percent of GDP) on transfers to local governments on top of local government tax rebates of RMB301 billion. The local tax rebates accrue disproportionately to wealthier provinces as a reward for tax collection, and the rest of the transfers mainly pursue equalization objectives. The amount available for equalization transfers has been increasing over the past several years. This has resulted from tax reforms that expanded the share of central government revenues in the total revenues, from about 49 percent during 1996-98 to 58 percent in 2002 (11 percent of GDP). Equalization transfers have also been boosted by the fiscal stimulus package. Since its launch in 1998, earmarked grants for social security and capital programs have increased significantly. The allocation of equalization grants has also improved as the Ministry of Finance has been adjusting the formula for calculating the fiscal needs of individual provinces. The amounts available for equalization grants, however, continue to fall short of covering the fiscal needs determined by the formula. Furthermore, some earmarked grants require matching funds, which somewhat dilutes their equalization effects.

5.24 *In recent years, a number of critical financial problems at the local level have been addressed by corrective interventions or by singling out specific local expenditures for more attention.* In 2001-2002, the central government intervened to assist local governments in covering the cost of wage increases (mandated by the central government) and social security. This intervention accounted for over a half of transfers net of provincial tax rebates.[90] Corrective interventions have also accompanied the rural fee reform which, while reducing the financial burden of farmers, has tended to deepen the financing gap of local governments. In 2002, this intervention accounted for 6 percent of transfers net of provincial tax rebates.

5.25 *Such corrective interventions have helped alleviate immediate problems, but are not appropriate for meeting long-term needs.* They indicate that the current expenditure assignments are both unsustainable and increasingly blurred, and signal the willingness of the central government to gradually accept more responsibility for financing stability-preserving expenditures such as social security and civil service wage payments. The continuing need for such corrective interventions, however, constrains central government spending in other areas, and limits the amount of resources available to finance strategic priorities. Furthermore, as these corrective interventions occur on an ad hoc basis, with the amounts often determined later in the fiscal year, based on the

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[90] In 2002, the central government transferred RMB24.5 billion as transfer payments to compensate local governments in provinces carrying out the rural fee reform. Local governments obtained subsidies on financing wage increases in the amount of to RMB89 billion in 2001 and RMB82 billion in 2002. Subsidies on social security schemes rose from zero to RMB10 billion in 2000, RMB35 billion in 2001, and RMB77 billion in 2002 (out of which subsidies to the local minimum living standard schemes were RMB2.3 billion in 2001 and RMB4.6 billion in 2002).

availability of funds, they raise unpredictability in local government budgeting.[91] Addressing specific spending items, such as teachers' salaries, without a broader sectoral, behavioral and macroeconomic context can also have negative effects (Box 5.4).

Box 5.4 Centralizing the Payment of Teachers' Salaries

The State Council "Decision on Rural Compulsory Education" issued in 2001 made two significant advances toward funding rural education. First, it declared that the costs of rural compulsory education should be borne primarily by the government, rather than rural families. Second, it mandated that salary payments for teachers be moved from the township to the county level, and factored into the county budget. These are important steps toward incorporating rural expenditure needs into the formal fiscal system.

By singling out salaries from other costs of education, however, this measure is likely to exacerbate the tendency toward employing too many teachers. For example, in Gansu, where the responsibility for teachers' salaries has been at the county level, the evidence is that rural schools have added more teachers even though state guidelines for student-teacher ratios are already over-fulfilled. Funds for supplies and other non-personnel costs of education remain extremely inadequate. In addition, unless the State Council Decision is followed up with a hard commitment of increased central and provincial transfers to the counties, the already hard-pressed county budgets will find it difficult to meet this new responsibility, and the fiscal problems will simply have moved up one tier in the administrative structure.

Reforming the Inter-government Finance System

5.26 *Ensuring adequate public service delivery across China may not be feasible if the sole focus of inter-government fiscal reform is on equalization transfers.* To implement its strategic priorities, central government needs to ensure financing for the minimum standards of public service provision and set up a system of clear accountability with respect to the quantity, quality, timeliness and cost of the respective services. Simultaneously, and as illustrated in Chapters 3 and 4 of this report, it needs to examine the need for continued government provision and financing, given the expanding role of the private sector in China. For services that are to be fully or partly financed by the government, expenditure assignments need to be matched to revenue assignments. For example, some centralization of the responsibilities for financing and delivery may enhance public service delivery. Moving the responsibility for the financing and provision of selected services from the village, township or county level to a higher level of government may be beneficial in view of efficiency and administrative capacity as well as equity. Similarly, on the revenue side, the amounts allocated on tax rebates could be reduced further and the sharing of value added tax revenues could be further centralized.[92] In promoting fiscal equity across local governments, complementary measures on the revenue side could include a limited discretion offered to local governments in setting local tax rates, possibly as part of the property tax, personal income tax or excise tax.

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[91] In 2001, for example, the total amount had been budgeted at only RMB119.5 billion at the beginning of the fiscal year, but was raised to RMB187 billion due to increased revenue flows to the central government. See Xiang (2002).

[92] Value added tax generates over 40 percent of total government revenues and its sharing system is the most disequalizing part in local government revenues. For analysis see IMF (2002) and World Bank (2002).

5.27 *It is expected that even with appropriate expenditure and revenue assignments for each level of government, horizontal and vertical disparities will exist.* This is only natural for a country the size of China, with vastly different economic capabilities, concentrations of population, and levels of development in its different parts. An improved system of equalization of transfers will therefore be needed, with reforms building on the lessons of recent years. For example, once the national minimum standards of public service delivery are clearly defined, they may be supported by special non-matching transfers with conditions on standards and outreach of service. To reduce fiscal disparities across provinces and counties, general non-matching grants and fiscal capacity equalization transfers may need to be expanded. To compensate for benefit spillover or to influence local incentives in areas of high national priority, matching transfers may be considered. This would go beyond the financing of national minimum standards and possibly apply to education, public health, social security, research and development as well as rural market infrastructure. To tackle the problem of intra-provincial inequality, the equalization mechanism could be built either through a central transfer mechanism reaching down to counties, townships and villages, or through central norms on provincial arrangements to ensure that equalization takes place.

5.28 *Greater autonomy and accountability on the expenditure side would be also beneficial.* Giving local governments greater autonomy along with enforcing greater accountability can enhance allocative and operational efficiency in their expenditures. Most notably with respect to spending autonomy, the uniform national wage scales and the centralized system of determining staffing needs across the entire government could be eliminated. However, to use their larger autonomy well, local governments need to be clear about their role. The previous chapters of this report noted that in promoting growth with equity it is important that local governments focus on the provision of core public services (and public goods) as opposed to direct interventions in the enterprise sector or the market, emphasize human capital in addition to ensuring the availability of adequate levels of physical capital, and concentrate on outcomes as opposed to inputs. To promote the alignment of incentives of local governments with their role, the central government may want to correspondingly revise the targets and indicators used to evaluate local government performance. Furthermore, governments at each level could make their decision making process more open and transparent and strengthen monitoring and audit functions. Timely availability of relevant and reliable information forms the basis for accountability as well as executive capacity in public finance management. In this respect, the current effort to establish proper government accounting and budgetary systems and the overall government financial management system, and to extend these systems to the local governments will support the improvement and monitoring of results of fiscal policies, including public services delivery.

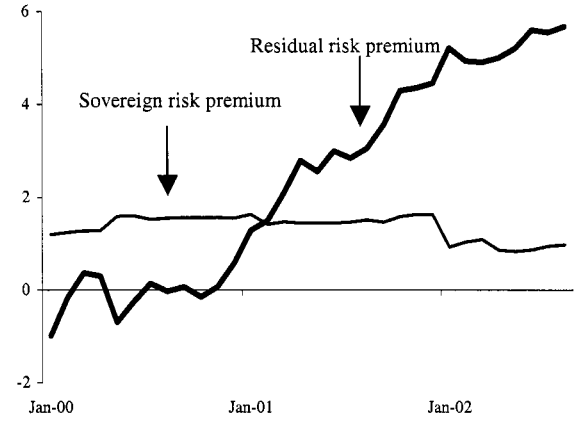
5.29 *Hence, it is useful to evaluate every component of the inter-government finance system as part of a comprehensive reform package.* The changes in expenditure and revenue assignments would need to be considered jointly to realign responsibilities with financial capacity at each government level. Moreover, expenditure and revenue assignments, and equalization transfers to close any major gaps, need to be considered in the context of government expenditure and tax policies, and in the context of the institutional arrangements and capacities available at each level of government. Greater

autonomy on the revenue and expenditure sides, complemented by provisions to raise local government accountability, can be attractive to local governments, possibly making the whole reform package somewhat more politically acceptable. Richer provinces, for example, will not easily agree with greater equalization transfers and lower tax rebates. The needed inter-government finance reform is a large undertaking that would have to be synchronized with the government's overall policy priorities and reforms across sectors. A wealth of international experience and useful lessons learned in China not least since the last inter-government finance reform of 1994 can contribute to its success.[93]

Macroeconomic Stability

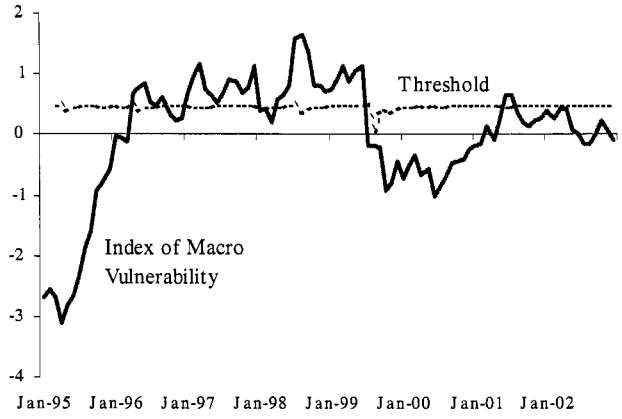
5.30 *International financial markets are signaling a renewed risk to China's macroeconomic stability.* A simple analysis of international and domestic interest rates on government bonds and of exchange rate forecasts suggests that since 2001, on top of the sovereign risk premium and exchange rate risk premium, the markets have been attributing to China an additional macroeconomic risk (Figure 5.3).[94] Macroeconomic risk appears also when estimating an index of macroeconomic vulnerability based on developments in the real effective exchange rate, the real growth of domestic credit, and broad money in relation to international reserves.[95] Although below the threshold level,

Figure 5.3 Residual Risk Perceived by the Market



Source: World Bank

Figure 5.4 Index of Macro Vulnerability



Source: World Bank

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93 World Bank (2002) provides a detailed examination of China's inter-government fiscal system and proposes a comprehensive agenda of reforms.

94 This analysis is conducted on the basis of the interest parity condition. The residual macroeconomic risk is derived as a premium paid on the domestic government bonds over the level that would be expected based on the US treasury bill rate, sovereign risk premium and expected devaluation of the domestic currency (Kharas, Pinto and Ulatov, 2001): $e_r = i^d - i^* - s_r - e_e$ where: e_r is the residual macroeconomic risk, i^d is the domestic, one year government bond rate, i^* is the one year US treasury bill rate, s_r is the sovereign risk premium and e_e is expected devaluation, taken from Consensus Forecasts. The sovereign risk premium is measured by the spread paid by the government over a comparable maturity risk-free asset, in this case the one-year US Treasury bill.

95 This estimation methodology is based on the assumption that real effective exchange rate, real growth rate of domestic credit and the ratio of broad money to international reserves drift in the same direction, or have a common element in their behavior prior to a macroeconomic crisis. Specifically, index

the level of the index indicates renewed macroeconomic vulnerability since 2001 (Figure 5.4). Over time, monitoring of such market sentiment may provide early warning signals of any possible increases in future macroeconomic risk.

5.31 *The perception of macroeconomic risk in China can be plausibly explained by the vulnerability of China's domestic financial sector and, related to it, by the fiscal risk facing the government.* Weaknesses in the financial sector and perceived government fiscal risks have been accumulating over the past years. Without significant reforms, and with banks possibly coming under pressure during post-WTO accession liberalization, present trends may continue and impair future macroeconomic management.

Vulnerability of the Financial Sector

5.32 *Risks in the financial sector arise from a higher level of non-performing loans.* Non-performing loans have been estimated at about 25-30 percent of the total loans outstanding for the state commercial banks and higher for the rural credit cooperatives, city commercial banks and policy banks.[96] The continuing emergence of non-performing loans has been associated with the use of non-commercial lending practices and market distortions, both discussed in the previous chapters. The available estimates of non-performing loans are not very reliable since the information management systems within banks and the loan classification system itself are in the process of long needed modernization. These estimates, however, are enough to indicate that a majority of financial institutions in China (with state commercial banks, rural credit cooperatives, city commercial banks and policy banks accounting for about 59, 10, 10 and 12 percent of the total banking assets, respectively) are functioning on a severely eroded capital base.

5.33 *State commercial banks are unlikely to be able to carry the current load of non-performing loans.* Simple financial scenario analysis suggests that current and proposed efforts to decrease the rates of non-performing loans out of new lending, reduce bank operating costs, or raise interest spreads and non-interest income may not be sufficient to prevent a further erosion of their capital, even over a 10 year horizon (Figure 5.5).[97] The current burden of non-performing loans is too large to allow the state commercial banks to fully restore their capital base.

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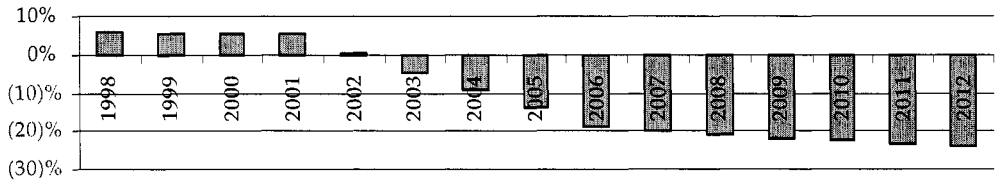
of macro vulnerability = real effective exchange rate + real growth rate of domestic credit + broad money / international reserves. (Herrera and Garcia, 1999)

[96] The official estimate for non-performing loans was about 27 percent of loans outstanding for state commercial banks in 2002. There is a wide range of unofficial estimates, usually higher. The loss rate for non-performing loans has been estimated at about 75 percent for state commercial banks.

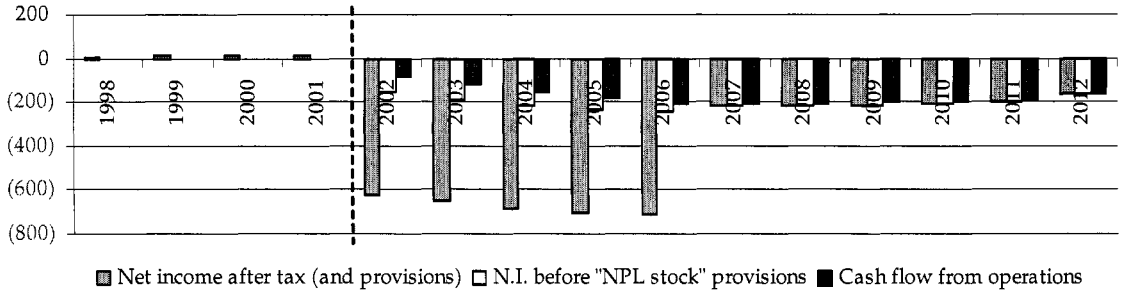
[97] To illustrate the possible future performance of state commercial banks, a financial simulation model is used to build scenarios based on the following main assumptions: a) non-performing loans at 30-40 percent with 75-80 percent loss rate, b) non-performing loans on new lending gradually reduced from 11-13 to 3-10 percent, c) cost reductions that improve the banks' productivity at 2-6 percent a year, d) lending spreads rising from the current 3.5 percent to 5 percent and growing non-interest income, and e) stable macroeconomic conditions. Bello (2003)

Figure 5.5 Illustrative Scenario

Capital of State Commercial Banks
(% of assets – not risk weighted)



Profitability and Operating Cash Flow (RMB)



Source: Bello (2003)
Note: The illustrative scenario is based on the following assumptions: a) non-performing loans at 40 percent with 80 percent loss rate, b) non-performing loans on new lending gradually reduced from 13 to 3 percent, c) cost reductions that improve the banks' productivity at up to 6 percent a year, d) lending spreads at current 3.5 percent, and e) stable macroeconomic conditions.

Box 5.5 Recapitalization and Reforms in the Banking Sector

The government recapitalized the state commercial banks twice in the late-1990s, once by direct capital contribution and once by the transfer of non-performing loans to the banks' asset management companies. Furthermore, to stem losses of state commercial banks, the State Council in 1998 ordered a cutback of staff and branches and a reduction in the percentage of non-performing loans by 2-3 percentage points per year. This strategy strengthens the efforts of state banks to collect or restructure non-performing loans and to reduce the incidence of new bad loans. But it may not be sufficient to bring non-performing loans to the targeted levels. Moreover, in an effort to comply with that requirement, the state banks may have reduced new lending to non-state firms. Also, steps were taken to strengthen governance, including the establishment of boards of supervisors. Yet whereas in other countries such boards would define broad objectives, policies and strategies for the banks and select, monitor and hold accountable top managers, in China they have been oriented to supplement state banks' internal control and audit mechanisms, a task for which they may not be well-suited.

Recapitalization of state-commercial banks and reform efforts to date seem not to have been as successful as had been hoped. Recently, the government announced further internal reforms for state commercial banks. State commercial banks may be corporatized, creating a distinct legal entity with a shareholding structure and a board of directors. Moreover, their ownership may be "diversified" beyond solely the central government. It can be envisioned that there will be calls for a further round of recapitalization. But the disappointing results of prior recapitalizations suggest a need for caution.

The root cause of disappointing results so far may well be that ambiguities in objectives to be pursued by state banks managers were not eliminated as a component of recapitalization. Governance arrangements may not have been sufficiently clarified, rationalized and professionalized, and the incentives facing managers of state banks may not have been fundamentally and systematically altered. Managers may still be motivated by potential political advancement rather than solely by the commercial performance of the bank. Furthermore, bank recapitalization was not closely linked with resolution of non-sustainable enterprise debt.

Source: Scott (2002)

5.34 *To restore banks to solvency and profitability, not only is there need for an injection of new capital, there is also need for further reform.* The injection of capital is likely to be effective only if accompanied by structural and regulatory reforms in the financial system. The performance of the state commercial banks after their recapitalization in 2000, when non-performing loans in the amount of 20 percent of their then outstanding loans were transferred to asset management companies, suggests that bank recapitalization without complementary reform can deliver only short-term results (Box 5.5). Moreover, the experience of other countries suggests that recapitalization is particularly effective if at least partly financed from private sources, through strategic investors, and accompanied by transfer and development of new technologies and skills, and if underlying structural problems in enterprises are resolved.

Fiscal Risk

5.35 *The possible need to recapitalize the banking sector in the future is the largest contingent liability for the Chinese government.* Available estimates of the future likely fiscal cost associated with bank restructuring, at the current estimated level of non-performing loans, vary between 25 and 45 percent of GDP.[98]

5.36 *Another relatively known fiscal risk relates to the pension system.* As discussed above, the pension system appears under-funded, with future revenues falling short of spending commitments. Estimates of the future financing gap are very sensitive to possible future reforms (such as increasing the retirement age) and range from 20 to 100 percent of GDP, to accrue over the next 30-70 years.[99]

5.37 *Less is known about the financial obligations of local governments.* Although officially not permitted to borrow, many local governments have accumulated various, often implicit, contingent and direct liabilities. These obligations are in the form of credit taken from banks, or bonds issued through various municipal enterprises such as the urban development infrastructure companies, in the form of guarantee schemes and investment funds run by local government sponsored agencies, in the form of letters of comfort provided to local enterprises to facilitate their access to credit, in the form of concession contracts, and so on. Local governments themselves sometimes admit to not knowing all their contingent liabilities. In case of their realization, local governments tend to arrange various forms of bailouts. Sometimes, however, such bailouts directly affect the local government budget to such an extent as to force them to request financial intervention by the central government.

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[98] Several different methodologies exist to assess the expected fiscal cost of bank restructuring. The estimation includes steps to evaluate: (a) the ratio of non-performing loans (or, the rates of different types of non-performing loans according to the official classification) and their loss rate across financial institutions (including state commercial banks, rural credit cooperatives, policy banks, etc), and (b) expected loss rate on the total portfolio of the existing asset management companies. The result depends on the assumed target non-performing loan ratio and target capital adequacy ratio. Different scenarios are built with respect to possible macroeconomic developments and the future flow of new non-performing loans.

[99] Recent estimates are described in World Bank (2003). The financing gap in the pension system is an implicit, not a contingent, liability since it is certain to arise eventually (as opposed to arising only in case a currently unknown or uncertain event were to occur, which is the definition of contingent liabilities).

5.38 *At present, the total burden of government hidden obligations outstanding appears manageable.* There are at least three reasons why the currently high level of contingent and implicit liabilities do not necessarily threaten future fiscal stability. First, the implicit liability under the pension system can be significantly reduced through timely and sound pension reforms. Second, the government is able to raise substantial revenues by selling state enterprises, which has been the general direction of policy since 1999. In addition, large foreign exchange reserves and revenue-generation possibilities from the sale or lease of land and other assets provide the Chinese government with a cushion of financial safety. Third, even without resorting to asset sales, fiscal sustainability analysis suggests that at continuing high levels of economic growth and low levels of interest rates, the Chinese government would be able to service a significantly higher level of debt than today.

5.39 *Less favorable macroeconomic conditions, however, could generate painful fiscal pressures.* Should the rates of economic growth temporarily decline, an uncomfortably high fiscal surplus will need to be generated in the government budget to service debt beyond a level of 60 percent of GDP (which is a commonly-used benchmark in domestic discussions of fiscal sustainability). Such pressures would be particularly unpleasant at a time when further resources are needed to improve the delivery of public services essential to promoting growth with equity. Furthermore, as the composition of the government debt portfolio is as important as its size, using the debt/GDP ratio as the main indicator of fiscal sustainability has often proven misleading.[100]

5.40 *Most importantly, the continuing accumulation of government obligations poses fiscal risks.* In the financial sector, without drastically reducing the rate of non-performing loans on new lending (from an estimated 11-13 percent over the past 10 years to some 3 percent), banks will be unable to generate positive cash flow from new lending or avoid periodic financial claims on the government in the future. Reducing the rate of non-performing loans on new lending may be feasible but, most likely, this would add financial distress among many of the less productive state-owned enterprises and constrain infrastructure finance, which may ultimately add more pressure on the government budget. Local governments, without tighter monitoring of their fiscal risks, are likely to continue accumulating obligations of various types, risking future financial health, with potential spillover risks for the central government. For instance, recent initiatives to promote private participation in infrastructure may, as international experience shows, imply significant public financial risk in the future unless the process is coordinated within broader risk management approaches. Eventually, by adding to the

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[100] Generally, the better is debt management capacity and the deeper are government bond markets, the higher the level of debt that can be assumed prudently. By taking a strategic approach to debt management, government can reduce the risks of suddenly rising debt service costs or a liquidity crunch. Refinancing (rollover) risk, for instance, can be reduced by limiting the size of short-term debt and by generating a sound profile of amortization payments for long-term debt; interest rate risk can be mitigated by ensuring that issuance is spread across the term structure. Government bond markets can reduce government exposure to refinancing and other financial risks if they are deep and liquid, by providing readily accessible domestic financing. Moreover, well developed government bond markets also allow government to reduce its debt service costs by lowering liquidity premia embedded in the yields on government bonds.

stock of government debt, possibly as much as a few percent of GDP every year, these obligations could impair fiscal sustainability.

Priorities for Government Risk Management

5.41 *The primary need is to stabilize the current level of government obligations.* The existing obligations, including government debt and the expected fiscal cost of the current hidden obligations, appear to be sustainable. However, further growth in the share of government obligations in GDP, whether through the budget deficit or off-budget operations, could make future fiscal performance vulnerable to unfavorable developments in other macroeconomic variables, such as the economic growth and interest rates.

5.42 *Reversing the accumulation of government contingent liabilities mainly requires improving performance in the financial sector.* Reductions in the rate of non-performing loans on new lending and productivity improvements from reductions in operating cost are likely to come only with greater commercial orientation in the financial institutions and with improved regulatory and supervisory systems. Overall, these would work also toward reducing the risk of vulnerability in the financial sector. Specifically, attracting private capital into the financial sector would create conditions that more risks are assumed by those market participants willing and able to bear them, rather than by the government. As for state commercial banks, new ownership and governance arrangements need to ensure that their managers pursue the goal of long-term value creation and that this is effectively monitored. Clear ownership policies, and better oversight and exit mechanisms are required for other financial institutions, such as the rural credit cooperatives and urban credit cooperatives.

5.43 *The implicit liability arising in the pension system could be reduced by reforms under the existing pay as you go system, while new pension schemes need to be designed in a manner to prevent the emergence of new fiscal risks.* Internationally, a combination of parametric changes such as raising the retirement age and lowering the benefits payable under pay-as-you go schemes, have proven an effective way of reducing financing gaps. These steps are needed prior to extending the scheme's coverage, essentially to avoid creating new unfunded liabilities. The inherited overhang of pension liabilities should ideally be financed from sources other than current payroll contributions. In principle this is provided by the State Council Circular of 2000, which moves towards setting aside a percentage of proceeds from the sale of state shares in enterprises to finance the overhang of pension liabilities. As for the funded component of the new pensions schemes, its finances need to be separated from the pay-as-you go schemes and be adequately regulated and monitored, without the need for any government guarantee.

5.44 *To limit fiscal risks arising from local government activities, a country-wide fiscal risk monitoring system could be established.* International experience suggests that local government fiscal risk monitoring systems can be effectively established at the central level (as, for example, Colombia and Hungary) or subnational level (as, for example, the State of Ohio in the USA). In addition, some countries have effectively established a market-based system of financial discipline (driven, for example, by mandatory credit rating of local governments and related mandatory bank provisioning for credit to local

governments in Mexico). In China, local government fiscal risks could be monitored by provincial governments, with the central government then consolidating the information, using it in its overall fiscal analysis, and ensuring necessary oversight. China is presently developing such a monitoring system. This system could be very effective if it captures the whole range of channels through which governments at the local level generate fiscal risks, including letters of comfort, credit and guarantee funds, urban development corporations, local government controlled enterprises, and so on.

5.45 *On the whole, government would be able to reduce its exposure to fiscal risk by bringing fiscal risk into its current fiscal management processes and systems.* [101] International good practice implies that government should periodically compile an inventory of major sources of fiscal risk and analyze the possible fiscal cost. Government fiscal analysis should internalize the major risk factors affecting revenues and expenditures for the years ahead. The government should establish a risk management strategy to guide public organizations, such as state-owned enterprises and public sector units, in taking actions that expose them to direct or contingent liability. Finally, the government could prepare detailed contingency plans for dealing with specific contingent liabilities when they occur. Careful fiscal management, across the entire portfolio of government direct and contingent, explicit and implicit, liabilities will ensure that future government deficits and debts remain at prudent levels and fiscal resources adequately support future needs for public services. As discussed in this report, a strong combination of progressive policy, private initiative and public finance is required to achieve the growth and equity objectives of a *xiaokang* society.

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[101] Brixi and Schick (2002)

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STATISTICAL APPENDIX

Table 1: National Accounts
(Billions of RMB, in current prices)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GDP at market prices	1,854.8	2,161.8	2,663.8	3,463.4	4,675.9	5,847.8	6,788.5	7,446.3	7,834.5	8,206.7	8,946.8	9,731.5	10,479.1
GDP at factor cost	1,753.3	2,033.2	2,491.9	3,189.3	4,332.4	5,442.0	6,329.6	6,869.2	7,169.9	7,429.3	8,082.2	8,696.6	9,247.4
Agriculture	501.7	528.9	580.0	688.2	945.7	1,199.3	1,384.4	1,421.1	1,455.2	1,447.2	1,462.8	1,541.2	1,611.7
Industry	771.7	910.2	1,170.0	1,642.9	2,237.2	2,853.8	3,361.3	3,722.3	3,861.9	4,055.8	4,493.5	4,875.0	5,354.1
Mining and quarrying	48.0	60.7	82.3	118.8	174.2	234.8	290.8	356.5	367.3	371.9	390.5	423.7	460.7
Manufacturing	609.7	707.6	881.4	1,196.6	1,610.7	2,026.9	2,355.7	2,580.0	2,637.6	2,771.9	3,108.2	3,373.0	3,708.9
Services	581.4	722.7	913.9	1,132.4	1,493.0	1,794.7	2,042.8	2,302.9	2,517.4	2,703.8	2,990.5	3,315.3	3,513.3
Imports of goods & non-factor services	265.7	347.8	478.4	644.0	1,096.4	1,268.3	1,281.4	1,363.0	1,354.4	1,571.2	2,075.3	2,246.4	2,714.9
Exports of goods & non-factor services	325.2	420.0	519.5	591.4	1,184.0	1,402.7	1,427.4	1,718.0	1,717.3	1,808.8	2,314.3	2,478.1	3,024.3
Resource balance	59.5	72.2	41.1	-52.6	87.6	134.4	146.0	355.0	362.9	237.6	239.0	231.8	309.4
Total expenditures	1,795.3	2,089.6	2,622.7	3,516.1	4,588.3	5,713.4	6,642.5	7,091.3	7,471.6	7,969.1	8,707.8	9,499.7	10,169.7
Total consumption	1,136.5	1,314.6	1,595.2	2,018.2	2,679.6	3,363.5	4,000.4	4,358.0	4,640.6	4,972.3	5,460.1	5,892.7	6,236.5
General government	225.2	283.0	349.2	450.0	598.6	669.1	785.2	872.5	948.5	1,038.8	1,170.5	1,302.9	1,383.0
Non-government	911.3	1,031.6	1,246.0	1,568.2	2,081.0	2,694.4	3,215.2	3,485.5	3,692.1	3,933.5	4,289.6	4,589.8	4,853.5
Statistical discrepancy	14.4	23.3	63.9	-1.9	-17.4	-37.8	-44.6	-112.5	-123.6	-73.4	-2.3	-139.1	-302.3
Gross domestic investment	644.4	751.7	963.6	1,499.8	1,926.1	2,387.7	2,686.7	2,845.8	2,954.6	3,070.2	3,250.0	3,746.1	4,235.5
Gross domestic fixed investment	473.2	594.0	831.7	1,298.0	1,685.6	2,030.1	2,333.6	2,515.4	2,763.1	2,947.6	3,262.4	3,681.3	4,216.8
Nonfinancial public sector	298.6	371.4	549.9	792.6	961.5	1,089.8	1,200.6	1,309.2	1,536.9	1,594.8	1,650.4	1,760.7	1,887.7
Non-State sector	174.6	222.6	281.8	505.4	724.1	940.3	1,133.0	1,206.2	1,226.2	1,352.8	1,612.0	1,920.6	2,329.1
Changes in stocks	171.2	157.7	131.9	201.8	240.5	357.6	353.1	330.3	191.5	122.7	-12.4	64.8	18.7
Gross domestic saving	703.9	823.9	1,004.7	1,447.2	2,013.7	2,522.1	2,832.7	3,200.8	3,317.5	3,307.8	3,489.0	3,977.8	4,544.9
Net factor income	5.0	4.5	1.4	-7.4	-8.9	-98.3	-103.4	-91.2	-137.8	-148.8	-121.4	-158.7	-123.7
Net current transfers	1.3	4.4	6.4	6.8	11.5	12.0	17.7	42.6	35.4	40.9	52.3	70.4	107.5
Gross national saving	710.3	832.8	1,012.5	1,446.6	2,016.3	2,435.8	2,747.0	3,152.1	3,215.1	3,199.9	3,419.8	3,889.5	4,528.8
Net indirect taxes	101.5	128.6	171.9	274.1	343.5	405.8	458.9	577.1	664.6	777.4	864.6	1,034.9	1,231.7
Indirect taxes	197.5	216.9	248.6	345.0	411.5	475.1	538.0	667.8	769.2	875.9	997.5	1,138.9	1,322.4
Subsidies	96.0	88.3	76.7	70.9	68.0	69.3	79.1	90.7	104.6	98.5	132.9	104.0	90.7
Gross national product	1,859.8	2,166.3	2,665.2	3,456.1	4,667.0	5,749.5	6,685.1	7,355.1	7,696.7	8,057.9	8,825.4	9,572.8	10,355.4
Nominal official exchange rate (annual average)	4.8	5.3	5.5	5.8	8.6	8.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3
GDP at market price (current million US$)	387,771.8	406,090.1	483,046.8	601,083.0	542,529.6	700,217.9	816,907.3	898,226.8	946,309.9	991,386.8	1,080,793.7	1,175,725.5	1,266,045.7

Source: China Statistical Yearbook; Balance of Payments, International Financial Statistics (IFS); staff calculations.

Table 2: National Accounts
(Billions of RMB, in constant 1990 prices)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GDP at market prices	1,854.8	2,025.4	2,313.0	2,625.3	2,956.1	3,266.5	3,580.1	3,895.1	4,198.9	4,497.1	4,856.8	5,221.1	5,638.8
Net indirect taxes	101.5	120.5	149.3	207.8	217.2	226.7	242.0	301.9	356.2	426.0	469.3	555.2	662.8
GDP at factor cost	1,753.3	1,904.9	2,163.8	2,417.5	2,738.9	3,039.8	3,338.1	3,593.2	3,842.7	4,071.1	4,387.5	4,665.9	4,976.0
Agriculture	501.7	513.7	537.9	563.2	589.6	619.1	650.7	673.5	697.0	716.6	733.8	754.3	776.2
Industry	771.7	879.0	1,065.4	1,277.4	1,512.4	1,722.6	1,931.1	2,133.8	2,323.7	2,512.0	2,748.1	2,978.9	3,270.9
Mining and quarrying	48.0	58.9	76.1	96.0	122.4	147.3	174.5	213.7	232.7	243.2	251.8	273.3	297.6
Manufacturing	609.7	686.7	815.3	966.9	1,131.1	1,271.6	1,413.1	1,546.2	1,671.0	1,812.6	2,004.5	2,175.8	2,395.5
Services, etc.	581.4	632.5	710.9	787.0	862.6	935.0	1,008.9	1,100.7	1,192.1	1,283.8	1,387.8	1,504.4	1,617.2
Statistical discrepancy	0.0	0.2	-1.1	-2.2	-8.5	-10.2	-10.6	-12.9	-13.9	-15.3	-12.8	-16.5	-25.5
Imports of goods & non-factor services	265.7	314.0	408.9	572.7	634.8	682.2	690.0	766.7	790.5	969.2	1,206.6	1,336.6	1,704.5
Exports of goods & non-factor services	325.2	367.7	408.9	464.5	581.5	618.6	614.6	755.0	809.1	931.8	1,216.6	1,333.7	1,726.0
Resource balance	59.5	53.7	0.0	-108.2	-53.3	-63.6	-75.4	-11.7	18.6	-37.4	10.0	-2.9	21.5
Total expenditures	1,795.3	1,971.7	2,313.0	2,733.5	3,009.4	3,330.1	3,655.5	3,906.8	4,180.3	4,534.5	4,846.8	5,224.0	5,617.3
Total consumption	1,112.6	1,242.8	1,419.3	1,551.3	1,675.4	1,829.5	2,014.3	2,134.6	2,290.9	2,488.6	2,721.9	2,917.2	3,112.3
General government	225.2	268.7	305.2	333.0	363.3	384.7	395.3	427.4	468.2	519.9	583.5	645.0	690.2
Non-government	887.4	974.14	1114.1	1218.32	1312.12	1444.79	1619	1707.2	1822.7	1968.7	2138.4	2,272.2	2,422.1
total consumption	38.3	31.7	106.6	199.0	197.4	187.9	224.3	283.6	305.9	363.5	360.6	297.0	225.9
Gross domestic investment	644.4	697.2	787.2	983.2	1,136.6	1,312.7	1,416.9	1,488.6	1,583.5	1,682.4	1,764.3	2,009.8	2,279.1
Gross domestic fixed investment	473.2	547.5	678.3	846.6	996.4	1,131.9	1,230.7	1,315.8	1,480.9	1,615.2	1,771.0	1,975.1	2,269.1
Nonfinancial public sector	298.6	348.0	477.5	600.8	607.9	608.8	633.2	684.8	823.7	873.9	895.9	944.6	1,015.8
Non-State sector	174.6	199.5	200.8	245.8	388.5	523.1	597.5	631.0	657.2	741.3	875.1	1,030.5	1,253.3
Changes in stocks	171.2	149.7	108.8	136.6	140.2	180.8	186.2	172.8	102.6	67.2	-6.7	34.7	10.0
Net factor income	5.0	3.7	2.1	-6.8	-7.7	-52.8	-51.4	-66.5	-71.6	-72.6	-60.7	-79.7	-60.3
Net current transfers	1.3	4.2	5.6	5.3	7.5	6.7	9.4	22.3	19.0	22.4	28.4	37.7	57.8
Gross national product	1,859.8	2,029.1	2,315.2	2,618.5	2,948.4	3,213.8	3,528.7	3,828.6	4,127.3	4,424.4	4,796.1	5,141.4	5,578.4
Gross domestic saving	703.9	750.9	787.2	875.0	1,083.3	1,249.1	1,341.5	1,476.9	1,602.1	1,645.0	1,774.3	2,006.9	2,473.4
Gross national saving	710.2	758.7	795.0	873.5	1,083.1	1,203.1	1,299.5	1,432.7	1,549.5	1,594.8	1,742.0	1,964.9	2,470.9
Capacity to import	325.2	379.2	444.0	525.9	685.5	754.5	768.6	966.4	1,002.3	1,125.2	1,345.5	1,475.0	1,898.8
Terms of trade adjustment	0.0	11.5	35.1	61.4	104.0	135.9	154.0	211.4	193.2	193.4	128.9	141.3	172.8
Gross domestic income	1,854.8	2,036.9	2,348.2	2,686.7	3,060.1	3,402.4	3,734.1	4,106.5	4,392.1	4,690.5	4,985.7	5,362.4	5,811.6
Gross national income	1,859.9	2,040.6	2,350.3	2,679.9	3,052.4	3,349.6	3,682.7	4,040.0	4,320.5	4,617.9	4,925.0	5,282.7	5,751.2

Source : China Statistical Yearbook; Balance of Payments-IFS; staff calculations.

Table 3: National Accounts
(Implicit price deflators, 1990=100)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GDP at market prices	100.0	106.7	115.2	131.9	158.2	179.0	189.6	191.2	186.6	182.5	184.2	186.4	185.8
Net indirect taxes	100.0	106.7	115.2	131.9	158.2	179.0	189.6	191.2	186.6	182.5	184.2	186.4	185.8
GDP at factor cost	100.0	106.7	115.2	131.9	158.2	179.0	189.6	191.2	186.6	182.5	184.2	186.4	185.8
Agriculture	100.0	103.0	107.8	122.2	160.4	193.7	212.8	211.0	208.8	202.0	199.4	204.3	207.7
Industry	100.0	103.6	109.8	128.6	147.9	165.7	174.1	174.4	166.2	161.5	163.5	163.7	163.7
Mining and quarrying	100.0	103.1	108.1	123.8	142.4	159.4	166.7	166.8	157.9	152.9	155.1	155.0	154.8
Manufacturing	100.0	103.0	108.1	123.8	142.4	159.4	166.7	166.9	157.8	152.9	155.1	155.0	154.8
Services, etc.	100.0	114.3	128.5	143.9	173.1	191.9	202.5	209.2	211.2	210.6	215.5	220.4	217.2
Imports of goods & non-factor services	100.0	110.8	117.0	112.5	172.7	185.9	185.7	177.8	171.3	162.1	172.0	168.1	159.3
Exports of goods & non-factor services	100.0	114.2	127.0	127.3	203.6	226.8	232.2	227.5	212.2	194.1	190.2	185.8	175.2
Terms of trade (Px/Pm)	100.0	103.1	108.6	113.2	117.9	122.0	125.1	128.0	123.9	119.7	110.6	110.6	110.0
Total expenditures	100.0	106.0	113.4	128.6	152.5	171.6	181.7	181.5	178.7	175.7	179.7	181.8	181.0
Total consumption, etc.	102.1	105.8	112.4	130.1	159.9	183.8	198.6	204.2	202.6	199.8	200.6	202.0	200.4
General government	100.0	105.3	114.4	135.1	164.8	173.9	198.6	204.1	202.6	199.8	200.6	202.0	200.4
Non-government	102.7	105.9	111.8	128.7	158.6	186.5	198.6	204.2	202.6	199.8	200.6	202.0	200.4
Gross domestic investment	100.0	107.8	122.4	152.5	169.5	181.9	189.6	191.2	186.6	182.5	184.2	186.4	185.8
Gross domestic fixed investment	100.0	108.5	122.6	153.3	169.2	179.4	189.6	191.2	186.6	182.5	184.2	186.4	185.8
Nonfinancial public sector	100.0	106.7	115.2	131.9	158.2	179.0	189.6	191.2	186.6	182.5	184.2	186.4	185.8
Non-State sector	100.0	111.6	140.3	205.6	186.4	179.8	189.6	191.2	186.6	182.5	184.2	186.4	185.8
Changes in stocks	100.0	105.3	121.2	147.7	171.6	197.7	189.6	191.2	186.7	182.5	185.4	186.6	187.1
Net factor income	100.2	121.8	64.3	108.3	115.6	186.4	201.2	137.3	192.5	204.9	200.0	199.1	205.1
Net current transfers	100.0	106.0	113.4	128.6	152.5	178.7	189.1	191.1	186.4	182.7	184.0	186.6	186.0
Gross national product	100.0	106.8	115.1	132.0	158.3	178.9	189.4	192.1	186.5	182.1	184.0	186.2	185.6
Gross domestic saving	100.0	109.7	127.6	165.4	185.9	201.9	211.2	216.7	207.1	201.1	196.6	198.2	183.8
Gross national saving	100.0	109.8	127.4	165.6	186.2	202.5	211.4	220.0	207.5	200.6	196.3	197.9	183.3

Source: Table 1 divided by Table 2.

Table 4: National Accounts

(Percentage growth rates in constant 1990 prices)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GDP at market prices	3.8	9.2	14.2	13.5	12.6	10.5	9.6	8.8	7.8	7.1	8.0	7.5	8.0
Net indirect taxes	-0.5	18.7	23.9	39.2	4.5	4.4	6.8	24.7	18.0	19.6	10.2	18.3	19.4
GDP at factor cost	4.1	8.6	13.6	11.7	13.3	11.0	9.8	7.6	6.9	5.9	7.8	6.3	6.6
Agriculture	7.3	2.4	4.7	4.7	4.7	5.0	5.1	3.5	3.5	2.8	2.4	2.8	2.9
Industry	3.2	13.9	21.2	19.9	18.4	13.9	12.1	10.5	8.9	8.1	9.4	8.4	9.8
Mining and quarrying	9.7	22.6	29.3	26.1	27.4	20.4	18.4	22.5	8.9	4.5	3.5	8.5	8.9
Manufacturing	2.3	12.6	18.7	18.6	17.0	12.4	11.1	9.4	8.1	8.5	10.6	8.5	10.1
Services, etc.	2.3	8.8	12.4	10.7	9.6	8.4	7.9	9.1	8.3	7.7	8.1	8.4	7.5
Imports of goods & non-factor service	-0.2	18.2	30.2	40.1	10.8	7.5	1.1	11.1	3.1	22.6	24.5	10.8	27.5
Exports of goods & non-factor service	24.5	13.1	11.2	13.6	25.2	6.4	-0.6	22.8	7.2	15.2	30.6	9.6	29.4
Resource balance	..	..	..	..	..	..	..	..	..	..	..	..	..
Total expenditures	0.2	9.8	17.3	18.2	10.1	10.7	9.8	6.9	7.0	8.5	6.9	7.8	7.5
Total consumption, etc.	-2.9	11.7	14.2	9.3	8.0	9.2	10.1	6.0	7.3	8.6	9.4	7.2	6.7
General government	9.2	19.3	13.6	9.1	9.1	5.9	2.8	8.1	9.5	11.0	12.2	10.5	7.0
Non-government	2.4	9.8	14.4	9.4	7.7	10.1	12.1	5.4	6.8	8.0	8.6	6.3	6.6
Gross domestic investment	-0.2	8.2	12.9	24.9	15.6	15.5	7.9	5.1	6.4	6.2	4.9	13.9	13.4
Gross domestic fixed investment	3.4	15.7	23.9	24.8	17.7	13.6	8.7	6.9	12.5	9.1	9.6	11.5	14.9
Nonfinancial public sector	0.8	16.5	37.2	25.8	1.2	0.1	4.0	8.1	20.3	6.1	2.5	5.4	7.5
Non-State sector	8.2	14.3	0.7	22.4	58.1	34.6	14.2	5.6	4.2	12.8	18.0	17.8	21.6
Changes in stocks	-9.0	-12.6	-27.3	25.5	2.6	29.0	3.0	-7.2	-40.6	-34.5	-110.0	-617.9	-71.2
Net factor income	-348.9	-27.2	-41.5	-417.9	12.8	585.4	-2.6	29.3	7.7	1.4	-16.4	31.3	-24.3
Net current transfers	-11.7	220.7	35.4	-6.3	42.7	-11.2	39.7	138.2	-14.8	17.9	26.8	32.7	53.3
Gross national product	4.2	9.1	14.1	13.1	12.6	9.0	9.8	8.5	7.8	7.2	8.4	7.2	8.5
Gross domestic saving	9.9	6.7	4.8	11.2	23.8	15.3	7.4	10.1	8.5	2.7	7.9	13.1	23.2
Gross national saving	11.0	6.8	4.8	9.9	24.0	11.1	8.0	10.3	8.1	2.9	9.2	12.8	25.8
Capacity to import	..	..	..	..	..	..	..	..	..	..	..	..	..
Terms of trade adjustment	..	..	..	..	..	..	..	..	..	..	..	..	..
Gross domestic income	4.4	9.8	15.3	14.4	13.9	11.2	9.7	10.0	7.0	6.8	6.3	7.6	8.4
Gross national income	4.8	9.7	15.2	14.0	13.9	9.7	9.9	9.7	6.9	6.9	6.7	7.3	8.9

Source: Table 2.

Table 5: Balance of Payments
(Billions of US dollars)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Exports of goods and non-factor services	67.9	78.8	94.1	102.6	137.4	168.0	171.7	207.2	207.4	220.9	279.6	299.4	365.4
Merchandise (fob)	62.1	71.9	85.0	91.7	121.0	148.8	151.1	182.7	183.5	194.7	249.1	266.1	325.7
Non-factor services	5.8	6.9	9.2	10.9	16.4	19.1	20.6	24.6	23.9	26.2	30.4	33.3	39.7
Imports of goods and non-factor services	55.5	65.3	86.8	111.8	127.2	151.9	154.1	164.4	163.6	190.3	250.7	271.4	328.0
Merchandise (fob)	51.2	61.2	77.3	99.7	110.9	126.7	131.5	136.5	136.9	158.7	214.7	232.1	281.5
Non-factor services	4.4	4.1	9.4	12.0	16.3	25.2	22.6	28.0	26.7	31.6	36.0	39.3	46.5
Resource balance	12.4	13.5	7.4	-9.2	10.2	16.1	17.6	42.8	43.8	30.6	28.9	28.0	37.4
Net factor income	1.1	0.8	0.2	-1.3	-1.0	-11.8	-12.4	-11.0	-16.6	-14.5	-14.7	-19.2	-15.0
Factor receipts	3.0	3.7	5.6	4.4	5.7	5.2	7.3	5.7	5.6	8.3	12.6	9.4	8.3
Factor payments	2.0	2.9	5.3	5.7	6.8	17.0	19.8	16.7	22.2	22.8	27.2	28.6	23.3
Net current transfers	0.3	0.8	1.2	1.2	1.3	1.4	2.1	5.1	4.3	4.9	6.3	8.5	13.0
Current receipts	0.4	0.9	1.2	1.3	1.8	1.8	2.4	5.5	4.7	5.4	6.9	9.1	13.8
General government	0.1	0.4	0.4	0.4	0.7	0.7	0.4	0.5	0.2	0.2	0.2	0.1	0.9
Other current transfers	0.2	0.5	0.8	0.9	1.1	1.2	2.0	5.0	4.5	5.2	6.7	9.0	12.9
Current payments	0.1	0.1	0.1	0.1	0.4	0.4	0.2	0.3	0.4	0.4	0.6	0.6	0.81
General government	0.1	0.0	0.0	0.1	0.2	0.0	0.1		0.1	0.1	0.1	0.2	0.2
Other current transfers	0.0			0.0	0.0	0.3	0.4	0.2	0.3	0.3	0.5	0.4	0.7
Current account balance before official grants	13.6	14.8	8.4	-9.6	10.0	5.1	7.0	36.5	31.4	21.0	20.5	17.4	34.7
Current account balance as a share of GDP (percent)	3.5	3.6	1.7	-1.6	1.8	0.7	0.9	4.1	3.3	2.1	1.9	1.5	2.7
Net official capital grants	0.0	0.4	0.4	0.3	0.5	0.6	0.3	0.5	0.1	0.1	0.1	-0.1	0.7
Current account balance after official.grants	13.7	15.2	8.8	-9.3	10.5	5.7	7.3	37.0	31.5	21.1	20.5	17.3	35.4
Direct investment, Net	2.7	3.5	7.2	23.1	31.8	33.8	38.1	41.7	41.1	37.0	37.5	37.4	46.8
Long term capital inflows, Net	4.0	4.0	-6.4	1.2	0.4	3.6	1.7	5.3	-8.8	-16.7	-8.2	-7.9	-8.3
Total other items (net)	-14.3	-11.5	-11.6	2.7	-12.1	-20.7	-15.4	-48.0	-57.5	-32.6	-39.1	0.6	1.6
Net short-term capital	-9.2	-3.1	-0.9	-3.9	-3.1	0.4	-1.6	-16.8	-34.0	-21.7	-16.8	27.5	2.7
Capital flows not elsewhere included	-3.6	-3.6	-4.9	13.8	-2.1	-7.4	1.7	-9.2	-4.6	6.7	-10.6	-22.2	-8.9
Errors and omissions	-1.4	-4.8	-5.8	-7.1	-7.0	-13.7	-15.5	-22.1	-18.9	-17.6	-11.7	-4.7	7.8
Changes in net reserves	-6.1	-11.1	2.1	-17.7	-30.5	-22.5	-31.7	-35.9	-6.3	-8.7	-10.7	-47.4	-75.5
Gross reserves (excluding gold)[a]	29.6	43.7	20.6	22.4	52.9	75.4	107.0	142.8	149.2	157.7	168.3	215.6	291.1
Gross reserves (including gold)[b]	34.5	48.3	24.8	27.3	57.8	80.3	111.7	146.4	152.8	161.4	171.75	220.0	297.7
Exchange rates:													
Nominal official exchange rate (average)	4.8	5.3	5.5	5.8	8.6	8.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3
Nominal official exchange rate (end-of-year)	5.2	5.4	5.8	5.8	8.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
Manufactures Unit Value Index (% change)	3.9	2.0	3.9	0.7	3.6	5.9	-4.9	-7.0	-3.8	-0.3	-2.0	-1.4	-1.4
Real effective exchange rate index(1995 = 100)	112.4	97.6	94.3	82.3	91.7	100.0	107.4	112.2	112.4	106.9	107.6	110.5	108.3

[a] Since August 1992 the authorities have defined gross international reserves as the sum of only state foreign exchange reserves (not total reserves), gold, reserve position in the Fund and SDR holdings.
[b] Gold valued at London prices (Source: IFS)
Source: State Administration of Foreign Exchange (SAFE), People's Republic of China (PRC); International Monetary Fund (IMF): IFS

Table 6: Balance of Payments: Services
(Millions of US dollars)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
A. Shipment of freight (Including Port expenses)													
Credit	2,226	1,517	1,662	1,636	2,825	3,352	3,069	2,955	2,301	2,420	3,671	4,635	5,720
Debit	3,245	2,508	4,325	5,479	7,621	9,526	10,312	9,944	6,763	7,898	10,369	11,324	13,612
B. Insurance													
Credit	227	342	486	452	1,700	1,852	123	174	384	204	108	227	209
Debit	84	214	274	362	1,880	4,273	233	1,046	1,758	1,921	2,471	2,711	3,246
C. Travel													
Credit	1,738	2,346	3,530	4,683	7,323	8,730	10,200	12,074	12,602	14,098	16,231	17,192	20,385
Debit	470	511	2,512	2,797	3,036	3,688	4,474	8,130	9,205	10,864	13,114	13,909	15,398
D. Investment Income													
Credit	3,017	3,719	5,595	4,390	5,737	5,191	7,318	5,544	5,488	8,184	12,349	9,092	7,671
Debit	1,962	2,879	5,347	5,674	6,775	16,965	19,755	16,715	22,024	22,278	26,537	27,711	22,339
E. Posts													
Credit	159	221	349	471	706	756	315	272	819	590	1,345	271	550
Debit	13	15	72	85	146	217	134	290	207	193	242	326	470
F. Labor income													
Credit	..	..	..	..	..	..	..	166	97	146	202	297	674
Debit	..	..	..	..	..	..	..	..	204	523	679	852	950
G. Other services													
Credit	1,505	2,553	3,222	3,656	3,813	4,440	6,893	9,095	7,789	8,936	9,075	11,011	12,880
Debit	540	873	2,251	3,313	3,615	7,518	7,432	8,558	8,740	10,711	9,835	10,996	13,802
H. Total services													
Net	2,558	3,698	63	-2,422	-969	-17,866	-14,422	-14,403	-19,421	-19,810	-20,266	-25,104	-21,728
Credit	8,872	10,698	14,844	15,288	22,104	24,321	27,918	30,280	29,480	34,578	42,981	42,725	48,089
Debit	6,314	7,000	14,781	17,710	23,073	42,187	42,340	44,683	48,901	54,388	63,247	67,829	69,817
I. factor Services													
Net	1,055	840	248	-1,284	-1,036	-11,774	-12,437	-11,004	-16,644	-14,470	-14,665	-19,173	-14,945
Receipts (credit)	3,017	3,719	5,595	4,390	5,738	5,191	7,318	5,711	5,584	8,330	12,551	9,390	8,344
Payments (debit)	1,962	2,879	5,347	5,674	6,774	16,965	19,755	16,715	22,228	22,800	27,216	28,563	23,289
J. Non-factor services													
Net	1,503	2,858	-185	-1,138	67	-6,092	-1,985	-3,399	-2,777	-5,340	-5,601	-5,931	-6,783
Receipts (credit)	5,855	6,979	9,249	10,898	16,366	19,130	20,600	24,569	23,896	26,248	30,430	33,335	39,745
Payments (debit)	4,352	4,121	9,434	12,036	16,299	25,222	22,585	27,968	26,673	31,588	36,031	39,266	46,528

Source: SAFE, PRC.

Table 7: Transfers
(Millions of US dollars)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Private unrequited transfers													
Net	222.0	444.0	804.0	883.0	836.0	810.1	1,827.6	4,659.9	4,187.8	4,835.5	6,257.3	8,559.0	13,058.1
Credit	233.0	484.0	821.0	901.0	1,095.0	1,170.1	1,989.0	4,994.0	4,477.7	5,166.7	6,713.0	8,987.0	13,708.9
Debit	11.0	40.0	17.0	18.0	259.0	360.0	161.4	334.1	289.9	331.2	455.7	428.0	650.8
Interofficial													
Net	-132.0	-69.0	351.0	289.0	501.0	624.0	301.0	483.0	91.0	108.0	53.0	-67.0	-73.6
Credit	107.0	115.0	385.0	389.0	675.0	656.0	379.0	483.0	183.0	201.0	147.0	138.0	86.5
Debit	239.0	184.0	34.0	100.0	174.0	32.0	78.0	..	92.0	93.0	94.0	205.0	160.1
Total transfers													
Net	90.0	375.0	1,155.0	1,172.0	1,337.0	1,434.1	2,128.6	5,142.9	4,278.8	4,943.5	6,310.3	8,492.0	12,984.5
Credit	340.0	599.0	1,206.0	1,290.0	1,770.0	1,826.1	2,368.0	5,477.0	4,660.7	5,367.7	6,860.0	9,125.0	13,795.4
Debit	250.0	224.0	51.0	118.0	433.0	392.0	239.4	334.1	381.9	424.2	549.7	633.0	810.9

Source: SAFE, PRC.

Table 8: International Reserves
(Millions of US dollars)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total reserves (minus gold)[a]	29,600	43,700	20,620	22,387	52,914	75,377	107,040	142,760	149,190	157,730	168,280	215,600	291,100
SDR's	395	404	305	352	369	392	427	447	480	540	613	677	734
Reserve position with Fund	430	433	758	704	755	1,216	1,396	2,270	3,553	2,312	1,905	2,589	3,723
Foreign exchange reserves	28,594	42,664	19,443	21,199	51,620	73,579	105,029	139,890	145,000	154,700	165,574	212,165	286,407
Gold (million fine troy ounces)	13	13	13	13	13	13	13	13	13	13	13	16	19
Gold (National valuation)[b]	631	634	610	445	445	444	445	444	445	445	445	564	675
London gold price(US$ per oz)	385	354	333	391	383	387	369	290	288	290	274	277	343
Gold at London price (US$ million)	4,890	4,491	4,232	4,961	4,867	4,912	4,689	3,686	3,646	3,677	3,477	4,452	6,598
Total reserves including gold (National valulation)	30,231	44,334	21,230	22,832	53,359	75,821	107,485	143,204	149,635	158,175	168,725	216,164	291,775
Total reserves including Gold (London price)	34,490	48,191	24,852	27,348	57,781	80,289	111,729	146,446	152,836	161,407	171,757	220,052	297,698

[a] From August 1992 onwards the authorities have defined gross international reserves as the sum of only state foreign exchange reserves (not total reserves gold, reserve position with in the Fund and SDR holdings.
[b] Gold valued at SDR 35 per fine ounce.
Source: World Bank, IMF*: IFS.*

Table 9: Commodity Composition of Merchandise Exports
(Millions of US dollars, customs basis)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
PRIMARY GOODS	15,886	16,145	17,004	16,666	19,708	21,485	21,925	23,929	20,600	19,928	25,458	26,353	28,480
FOOD	6,609	7,226	8,309	8,399	10,015	9,954	10,232	11,054	10,619	10,459	12,282	12,779	14,623
Live animals chiefly for food	430	439	479	453	468	503	487	476	441	385	385	344	344
Meat and meat products	791	906	770	950	909	1,371	1,438	1,310	1,148	1,065	1,253	1,481	1,384
Fishes, shell-fish, molluscs etc.	1,370	1,181	1,366	1,254	2,320	2,853	2,855	2,927	2,652	2,958	3,652	3,998	4,481
Grain and grain products	614	1,169	1,692	1,660	1,687	285	525	1,500	1,657	1,276	1,817	1,237	1,876
Vegetables and fruits	1,742	1,946	2,023	2,163	2,889	3,342	3,118	3,071	2,994	3,104	3,299	3,708	4,243
Coffee, tea, cocoa etc.	534	491	499	510	484	516	552	622	594	545	555	592	612
NON-FOOD	3,537	3,486	3,143	3,052	4,127	4,375	4,046	4,193	3,517	3,921	4,464	4,173	4,404
Oil seeds and oil-containing fruits	619	741	867	793	666	522	479	279	284	373	417	461	462
Textile fibers etc.	1,095	1,125	4,224	4,179	1,093	753	713	805	609	980	1,086	751	902
Animal and vegetable raw materials	809	705	606	617	1,136	1,351	1,244	1,284	1,127	1,074	1,212	1,106	1,152
MINERAL FUELS	5,237	4,754	4,693	4,109	4,069	5,332	5,929	6,987	5,181	4,646	7,851	8,416	8,372
Coal, coke and briquettes	755	829	..	..	1,054	1,695	1,730	1,925	1,869	1,638	2,379	3,598	3,496
Petroleum, petroleum products etc.	4,460	3,975	..	..	2,789	3,243	3,902	4,247	2,664	2,228	4,662	3,939	3,991
OTHER	503	679	859	1,106	1,497	1,824	1,718	1,695	1,283	903	861	985	1,082
MANUFACTURED GOODS	46,205	55,698	67,936	75,078	101,298	127,298	129,141	158,767	163,157	175,003	223,754	239,802	297,085
CHEMICALS AND RELATED PRODUCTS	3,730	3,818	4,348	4,623	6,236	9,094	8,879	10,225	10,316	10,373	12,098	13,354	15,329
Organic	838	911	1,403	1,541	1,602	2,285	2,262	2,576	2,601	2,596	3,113	3,467	4,103
Inorganic	842	913	1,050	1,145	1,350	2,225	2,107	2,382	2,327	2,273	2,619	2,854	3,023
YARN, FABRICS, AND RELATED PRODUCTS	6,999	7,734	9,846	10,166	11,818	13,919	12,112	13,815	12,822	13,044	16,135	16,828	20,565
NON-METALLIC MINERALS	1,316	1,668	1,896	2,065	2,521	3,425	3,300	3,999	3,789	3,968	4,701	4,849	6,146
IRON AND STEEL	1,283	1,669	1,662	1,658	1,654	5,225	3,643	4,461	3,184	2,656	4,391	3,154	3,323
MACHINERY AND TRANSPORT EQUIPMENT	5,588	7,149	13,219	15,282	21,895	31,407	35,313	43,702	50,233	58,834	82,602	94,918	126,983
OTHER	27,289	33,659	36,965	41,284	57,174	64,229	65,894	82,565	82,813	86,129	103,827	106,699	124,740
Clothing and garments	6,848	8,998	16,883	18,325	23,732	24,049	25,037	31,781	30,060	30,078	36,072	36,656	41,306
TOTAL	62,091	71,843	84,940	91,744	121,006	148,780	151,066	182,696	183,757	194,931	249,203	266,098	325,565

Note: Data are based on Standard Industrial Trade Classification (SITC).
Source: China Customs Statistics.

Table 10: Commodity Composition of Merchandise Imports
(Millions of US dollars, customs basis)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
PRIMARY GOODS	9,853	10,834	13,255	14,210	16,468	24,411	25,440	28,620	22,952	26,845	46,740	45,774	49,272
Food	3,335	2,799	3,143	2,206	3,119	6,131	5,672	4,304	3,793	3,619	4,758	4,976	5,237
Beverages and tobacco	157	200	239	245	68	394	497	320	179	208	364	412	388
Animal and vegetable oils, fats and waxes	982	719	525	502	1,809	2,601	1,697	1,684	1,491	1,367	976	763	1,625
Petroleum, petroleum products etc.	1,272	2,113	3,570	5,819	3,595	4,568	5,921	9,330	5,880	7,631	18,930	15,926	17,226
Crude materials (non-food)	4,107	5,003	5,775	5,438	7,438	10,158	10,697	12,006	10,716	12,740	20,004	22,128	22,740
Others	0	0	3	0	439	559	956	976	893	1,281	1,708	1,569	2,057
MANUFACTURED GOODS	43,492	52,957	67,330	89,749	99,224	107,668	113,398	113,741	117,214	138,873	178,357	197,779	245,931
Chemicals and related products	6,648	9,277	11,157	9,704	12,130	17,300	18,106	19,297	20,166	24,030	30,213	32,106	39,041
Textile yarn (yarn, fabrics etc.)	2,748	3,689	3,690	3,145	9,347	10,914	11,980	12,267	11,082	11,081	12,832	12,574	13,061
Non metallic minerals	453	443	4,519	3,776	1,001	1,113	1,221	1,328	1,409	1,715	2,401	2,506	3,022
Iron and steel	2,852	2,694	5,051	13,896	9,438	6,878	7,244	6,665	6,488	7,495	9,690	10,750	13,599
Non-ferrous metals	579	816	2,420	2,224	1,659	2,683	3,002	3,183	3,470	4,716	6,746	6,206	7,524
Paper and related products	745	969	1,771	1,741	1,923	2,157	2,776	3,228	3,400	3,781	3,746	3,458	3,940
Rubber and related products	50	76	555	598	186	224	304	321	320	106	577	670	801
Furniture	72	49	178	218	111	90	64	83	96	26	170	237	293
Travel goods	6	7	302	327	50	42	24	14	19	1,102	33	38	42
Clothing	48	61	437	543	622	969	1,044	1,117	1,072	306	1,192	1,275	1,356
Footwear	9	11	506	513	325	341	353	358	290	306	320	330	304
Photo supplies	361	441	2,024	2,320	1,656	1,861	1,855	1,907	1,990	2,227	2,904	3,336	3,379
Others	28,919	34,424	34,721	50,745	60,777	63,094	65,424	63,973	67,411	81,983	107,532	124,295	159,570
Total	53,345	63,791	80,585	103,959	115,693	132,078	138,838	142,361	140,166	165,718	225,097	243,553	295,203

Note: Data are based on SITC.
Source : China Statistical Yearbook, China Customs Statistics.

Table 11: External Debt: Disbursements and Repayments
(Millions of US dollars)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
DISBURSEMENTS												
Public & publicly guaranteed long-term debt	9,665	8,659	16,308	19,227	16,151	21,441	20,985	22,458	10,679	12,719	9,672	8,612
Official creditors	2,578	2,649	3,103	5,501	4,200	9,073	5,669	6,214	5,012	7,332	5,768	4,742
Multilateral	1,158	1,455	1,523	2,252	2,558	2,838	2,797	2,939	2,830	2,396	3,280	2,575
of which IDA	507	612	778	869	680	812	811	713	592	460	379	311
of which IBRD	591	668	552	977	1,380	1,457	1,286	1,562	1,474	1,294	1,528	1,480
Bilateral	1,420	1,194	1,580	3,248	1,642	6,235	2,872	3,275	2,182	4,936	2,487	2,167
Private creditors	7,087	6,010	13,204	13,727	11,951	12,368	15,316	16,244	5,667	5,387	3,904	3,870
Bonds	277	260	894	2,737	3,337	1,224	2,777	3,105	1,325	1,067	848	1,486
Commercial banks	3,247	2,623	5,062	5,622	2,380	4,977	4,915	5,889	1,537	890	131	348
Other private	3,563	3,127	7,248	5,368	6,234	6,167	7,624	7,250	2,805	3,430	2,925	2,036
Private non-guaranteed long-term	0	0	198	332	0	544	129	1,518	469	7,665	7,082	6,170
Total long-term disbursements	9,665	8,659	16,505	19,559	16,151	21,985	21,114	23,976	11,148	20,384	16,754	14,782
IMF purchases	0	0	0	0	0	0	0	0	0	0	0	0
Net short-term capital	0	0	0	0	0	0	0	0	0	0	0	0
Total disbursements	9,665	8,659	16,505	19,559	16,151	21,985	21,114	23,976	11,148	20,384	16,754	14,782
REPAYMENT DUE												
Public & publicly guaranteed long-term deb	3,319	4,123	5,213	6,727	6,343	9,070	10,260	11,320	8,182	11,105	10,798	8,579
Official creditors	851	605	760	886	1,083	1,171	1,269	1,899	2,724	3,945	4,271	2,586
Multilateral	220	141	215	272	359	420	414	554	575	696	1,400	1,182
of which IDA	0	1	2	4	9	14	20	26	38	53	66	87
of which IBRD	216	130	196	245	315	350	343	351	396	505	578	817
Bilateral	631	464	545	614	725	751	854	1,345	2,150	3,249	2,871	1,404
Private creditors	2,468	3,517	4,453	5,841	5,260	7,899	8,991	9,421	5,458	7,160	6,527	5,993
Bonds	325	236	1,095	831	461	1,451	1,716	1,087	0	2,321	443	926
Commercial banks	808	2,010	2,046	2,893	1,803	2,645	4,132	5,159	3,018	1,638	2,016	1,557
Other private	1,335	1,271	1,312	2,117	2,996	3,803	3,143	3,175	2,440	3,201	4,068	3,510
Private non-guranteed long-term debt	0	0	0	0	0	0	0	207	3,027	8,730	9,127	8,064
Total long-term repayments due	3,319	4,123	5,213	6,729	6,343	9,070	10,260	11,527	11,209	19,835	19,925	16,643
IMF repurchases	490	451	0	0	0	0	0	0	0	0	0	0
Total long-term repayment & IMF repurcha	3,809	4,574	5,213	6,729	6,343	9,070	10,260	11,527	11,209	19,835	19,925	16,643
NET FLOWS												
Official creditors	1,727	2,044	2,343	4,615	3,117	7,902	4,401	4,315	2,288	3,387	1,497	2,156
of which IDA	507	611	777	865	671	798	791	687	554	407	314	224
of which IBRD	376	538	357	732	1,066	1,107	943	1,211	1,078	788	950	663
COMMITMENTS												
IBRD commitments	0	602	1,578	2,155	2,145	2,370	2,490	2,490	2,323	1,674	1,673	788
of which fast disbursing	0	0	0	0	0	0	0	0	0	0	0	0
IDA commitments	590	978	949	1,017	925	630	480	325	293	423	0	0
of which fast disbursing	0	0	0	0	0	0	0	0	0	0	0	0

Source : World Bank: World Debt Tables.

Table 12: External Debt: Interest and Debt Outstanding
(Millions of US dollars)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
INTEREST DUE												
Public & publicly guaranteed long-term debt	2,534	2,953	2,708	2,618	3,818	4,624	4,631	5,498	4,612	3,692	4,075	4,244
Official creditors	531	635	678	827	1,131	1,288	1,310	1,785	1,813	1,935	2,387	2,575
Multilateral	226	263	319	377	480	619	684	730	817	965	1,518	1,808
of which IDA	19	23	29	34	41	49	52	56	59	64	65	64
of which IBRD	200	227	264	299	364	460	497	507	545	637	713	733
Bilateral	305	372	358	450	651	669	626	1,055	995	970	869	767
Private creditors	2,003	2,319	2,031	1,792	2,687	3,336	3,321	3,713	2,799	1,757	1,688	1,669
Bonds	367	356	337	286	363	594	506	568	397	483	521	690
Commercial banks	959	1,071	776	738	1,034	1,333	1,351	1,441	983	274	222	202
Other private	677	892	918	768	1,290	1,409	1,464	1,704	1,419	1,000	945	777
Private non-guaranteed long-term debt	0	0	0	12	26	33	53	55	963	2,195	1,924	1,916
Interest arrears	0	0	0	0	0	0	0	0	0	0	0	0
Reduction in arrears (-)	0	0	0	0	0	0	0	0	0	0	0	0
Total long-term interest due	2,534	2,954	2,708	2,630	3,844	4,657	4,685	5,553	5,575	5,887	5,999	6,160
IMF service charges	65	24	0	0	0	0	0	0	0	0	0	0
Interest on short-term debt	649	754	697	809	948	1,340	812	1,365	1,651	1,140	1,168	1,495
Total interest due	3,248	3,732	3,405	3,439	4,792	5,997	5,497	6,918	7,226	7,027	7,167	7,655
DEBT OUTSTANDING AND DISBURSED (DOD)												
Public & publicly guaranteed long-term debt	45,515	49,479	58,463	70,076	82,391	94,675	102,260	112,821	99,424	99,217	94,837	91,706
Official creditors	14,514	17,073	19,105	24,339	28,973	36,982	39,433	39,755	45,146	50,444	50,367	50,494
Multilateral	6,111	7,576	8,614	10,690	13,588	16,302	17,695	18,973	22,283	23,856	25,788	26,790
of which IDA	3,016	3,672	4,286	5,160	6,097	7,038	7,579	7,830	8,693	8,907	8,771	8,654
of which IBRD	2,865	3,494	3,752	4,549	5,933	7,209	7,616	8,239	9,644	10,400	11,118	11,550
Bilateral	8,403	9,497	10,491	13,650	15,385	20,680	21,737	20,782	22,862	26,588	24,579	23,704
Private creditors	31,001	32,406	39,358	45,737	53,418	57,693	62,828	73,066	54,278	48,774	44,470	41,212
Bonds	5,425	5,660	5,449	7,715	11,087	10,684	11,106	12,616	13,941	11,029	11,371	11,852
Commercial banks	14,520	14,963	17,913	20,678	21,475	23,869	24,437	34,873	24,400	13,485	10,622	6,762
Other private	11,056	11,783	15,996	17,344	20,856	23,140	27,285	25,577	15,937	24,260	22,477	22,598
Private non-guaranteed long-term	0	0	200	556	583	1,090	1,150	2,412	27,243	37,688	37,789	36,751
Total long-term DOD	45,515	49,479	58,663	70,632	82,974	95,764	103,410	115,233	126,667	136,905	132,626	128,457
Use of IMF credit	469	0	0	0	0	0	0	0	0	0	0	0
Short-term debt	9,317	10,780	13,765	15,296	17,483	22,326	25,407	31,464	17,340	15,180	13,080	41,680
Total external debt	55,301	60,259	72,428	85,928	100,457	118,090	128,817	146,697	144,007	152,085	145,706	170,137
MEMORANDUM ITEMS												
% Debt on concessional terms	21	21	20	19	19	19	18	16	21	22	21	20
% Debt at variable interest rates	36	33	28	29	28	30	30	39	49	44	47	46
% Bilateral debt on concessional terms	13	11	10	12	12	11	11	9	14	15	14	13
% Multilateral debt on concessional terms	6	6	6	8	8	8	7	7	7	7	7	7
Preferred creditor debt service	17	12	7	7	8	8	7	8				

Source: World Bank, World Debt Tables.

Table 13: Domestic Debt
(Billions of RMB)

Year issued	Type	Amount issued	Repayment period	2003	2004	2005	2006	2007	2008	2009	2010	2011	2014	2016	2017	2021	2032
1995	Treasury bonds	151.1	1-5 years														
1996	Treasury bonds	212.6	0.5-10 years														
1997	Treasury bonds	241.2	2-10 years														
1998	Treasury bonds	380.9	3-10 years														
1999	Treasury bonds	401.5	2-10 years														
2000	Treasury bonds	465.7	1-10 years														
2001	Treasury bonds	488.4	3-20 years														
2002	Treasury bonds	593.4															
TOTAL AMOUNT MATURING		Issued to		287.5	298.3	271.3	173.0	218.8	170.0	221.4	112.0	80.0	20.0	69.3	24.0	40.0	26.0
	Treasury bonds	Households		241.0	209.1	192.2	133.0	102.6	100.0	95.4	14.0	20.0					
	Treasury bonds	General public			36.8			22.4	32.0	80.5		40.0		20.0	24.0	24.0	
	Treasury bonds	Financial institutions		46.5	52.4	79.1	40.0	93.8	38.0	45.5	98.0	20.0	20.0	49.3		16.0	26.0

Source : Quarterly Statistical Bulletin, People's Bank of China (PBOC)

Table 14: Monetary Survey

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
					(Billions of RMB, end of period)					
Net foreign assets	222	506	637	952	1,422	1,557	1,749	2,052	2,669	3,191
Domestic credit	3,301	4,124	5,094	6,137	7,525	9,226	10,461	12,120	12,959	16,890
Claims on government (net)	118	131	165	216	159	483	586	586	1,098	1,330
Claims on other sectors	3,183	3,993	4,929	5,920	7,366	8,743	9,875	11,534	11,861	15,561
Money plus quasi-money (broad money)	3,330	4,483	5,825	7,361	8,897	10,230	11,764	13,249	15,289	18,325
Money	1,628	2,054	2,399	2,851	3,483	3,895	4,584	5,315	5,987	7,088
Currency	586	729	789	880	1,018	1,120	1,346	1,465	1,569	1,728
Demand deposits	1,042	1,325	1,610	1,971	2,465	2,775	3,238	3,849	4,418	5,360
Quasi-money	1,702	2,429	3,426	4,510	5,414	6,334	7,180	7,934	9,302	11,236
					(Twelve-month Percentage Change)					
Domestic credit	42	25	24	20	23	23	13	16	7	30
Claims on Central government (net)	17	11	26	31	-26	203	21	0	87	21
Claims on other sectors	43	25	23	20	24	19	13	17	3	31
Money and quasi-money (broad money)	37	35	30	26	21	15	15	13	15	20
of which: currency	35	24	8	12	16	10	20	9	7	10

Source : PBOC.

Table 15: Banking Survey[a]

(Billions of RMB, end of period)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Net foreign assets	222	506	637	921	1,366	1,504	1,703	2,012	2,642	3,175
Domestic credit	3,481	4,310	5,333	6,641	7,868	9,442	10,585	11,724	12,556	17,262
Claims on Government(net)	118	133	167	218	162	484	588	588	1,102	1,333
Claims on nonfinancial sectors	3,363	4,177	5,167	6,423	7,706	8,958	9,993	11,137	11,454	14,302
Money & Quasi-money	3,488	4,691	6,075	17,610	9,100	10,450	11,990	13,461	15,830	18,501
Money	1,628	2,053	2,399	12,852	3,483	3,895	4,584	5,315	5,987	7,088
Currency in circulation	586	728	789	880	1,018	1,120	1,346	1,465	1,569	1,728
Demand deposits	1,042	1,325	1,610	11,971	2,465	2,775	3,238	3,850	4,418	5,360
Quasi-money	1,860	2,638	3,676	4,758	5,617	6,554	7,406	8,146	9,843	11,413
Time deposits	125	194	332	504	674	830	948	1,126	1,418	1,643
Savings deposits	1,520	2,152	2,966	3,852	4,628	5,341	5,962	6,433	7,376	8,691
Other deposits	215	292	378	402	315	384	496	587	1,049	1,078
					(Twelve-month change, in percent)					
Domestic credit	...	24	24	25	18	20	12	11	7	37
Money & Quasi-money	...	34	30	190	-48	15	15	12	18	17
Money	...	26	17	436	-73	12	18	16	13	18
Quasi-money	...	42	39	29	18	17	13	10	21	16
Currency in circulation	...	24	8	12	16	10	20	9	7	10

[a] Includes the operations of PBOC, the deposit money banks, and other banks (or specific depository institutions).
and later include, in addition, operations of two policy banks (the Export-Import Bank and the State Development Bank).
*As the statistical adjustments, data from 1997 onwards are not comparable with historical ones.
Source: Quarterly Statistical Bulletin, PBOC.

Table 16: Balance Sheets of Urban Credit Cooperatives
(Billions of RMB, end of period)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[b]
Total Assets	118	215	304	375	499	561	630	678	780	88
Foreign assets (net)	0	0	0	0	0	0	0	0	0	0
Reserve assets	33	50	68	78	100	98	104	109	105	16
Required reserves	13	23	33	39	53	91	94	99	98	15
Deposits with the PBC	18	21	28	34	41					
Cash in vault	2	3	5	4	7	7	10	9	7	1
Central bank bonds	0	2	2	0	0	0	0	0	0	0
Claims on central government	7	7	10	10	25	39	50	62	89	4
Claims on non-financial institutions	78	144	207	263	352	401	446	470	550	68
Claims on other financial institutions	0	14	19	24	22	23	29	39	37	1
Total Liablilities	118	214	304	375	499	561	630	678	780	109
Liabilities to non-financial institutions	134	235	336	400	538	608	664	679	781	101
Demand deposits	62	100	117	117	223	258	297	348	405	33
Time deposits	7	20	41	47	63	68	73	79	102	10
Savings deposits	38	73	126	183	242	272	282	240	251	55
Other deposits	27	42	52	52	10	10	12	12	23	2
Liabilities to central bank	2	3	3	3	4	4	14	31	32	4
Liabilities to other non-financial institutions	0	4	6	18	14	12	15	18	7	0
Bonds	0	0	0	0	0	0	0		0	0
Owners' equity	8	16	20	21						
Paid-in capital	8	11	14	16	25	27	31	32	36	4
Other items (net)[a]	-27	-45	-61	-67	-83	-91	-95	-82	-76	0

[a] In keeping with the authorities' presentation, "other items, net" is shown as a negative entry on the liabilities side, rather than a positive entry on the assets side and does not net out bonds and owners' equity.

[b] Starting from 2002, the statistics of Urban Credit Cooperatives exclude Urban Commercial Banks and are not comparable with the historical data.

Source: Quarterly Statistical Bulletin, PBOC.

Table 17: Balance Sheets of Rural Credit Cooperatives
(Billions of RMB, end of period)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002[b]
Total Assets	375	505	679	871	1,012	1,143	1,239	1,393	1,611	1,848
Foreign assets (net)	0	0	0	0	0	0	0	0	0	0
Reserve assets	61	88	122	194	224	221	213	223	258	285
Required reserves	51	67	88	71	125	199	183	191	227	250
Deposits with the PBC	1	9	19	107	80					
Cash in vault	9	12	16	16	20	21	30	33	32	35
Central bank bonds	0	0	0	0	0	0	0	0	0	0
Claims on central government	0	0	34	41	19	38	46	50	74	92
Claims on non-financial institutions	314	417	523	636	766	881	977	1,116	1,274	1,467
Claims on other financial institutions	0	0	0	0	3	3	3	4	4	3
Total Liabilities	375	506	679	871	1,012	1,143	1,239	1,393	1,611	2,115
Liabilities to nonfinancial sector	430	568	717	879	1,061	1,216	1,336	1,513	1,727	1,967
Demand deposits	68	81	89	101	126	145	180	229	271	327
Time deposits	4	6	9	12	16	21	26	39	59	77
Savings deposits	358	482	620	767	913	1,044	1,122	1,236	1,382	1,541
Other deposits	0	0	0	0	5	7	8	10	15	18
Liabilities to central bank	0	0	0	0	2	4	21	40	69	99
Liabilities to nonmonetary financial institutions	0	0	0	0	0	0	0	0	0	0
Bonds	0	0	0	0	0	0	0	0	0	0
Owners' equity	41	62	63	55						
Paid-in capital	41	69	38	40	63	66	65	72	79	49
Other items (net)[a]	-96	-124	-101	-63	-114	-144	-184	-232	-264	0

[a] In keeping with the authorities' presentation, "other items, net" is shown as a negative entry on the liabilities side, rather than a positive entry on the assets side and does not net out bonds and owners' equity.

[b] Since 2002, some rural commercial banks have been established on the basis of former rural credit cooperatives. This sheet does not include rural commercial banks. Therefore the data of 2002 are not comparable with historical data.

Source: Quarterly Statistical Bulletin, PBOC.

Table 18: Consolidated Government Revenue[a, b]

(Billions of RMB)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total revenue	367.2	392.8	476.0	558.4	651.6	770.4	902.0	1,020.9	1,173.4	1,367.4	1,668.6	1,917.4
Tax revenue	299.0	329.7	425.5	512.7	603.8	691.0	823.4	926.3	1,068.3	1,258.2	1,530.1	1,763.2
Taxes on income and profits	82.1	81.1	80.5	101.2	128.7	153.0	155.6	157.1	192.4	260.7	391.2	440.8
Enterprises income tax	73.1	72.1	67.9	70.9	87.8	96.8	94.7	92.6	121.6	166.2	263.1	300.9
State enterprises	62.7	62.5	58.3	61.0	75.9	82.2	79.4	74.4	63.9	82.7	..	
Collectives	10.4	9.6	9.6	9.9	11.9	14.6	16.9	18.2	17.2	17.2	..	
Others	..	..	..	..	..	..	..	0.0	40.5	66.2	..	
Personal income tax (other)	..	..	..	7.2	13.1	19.3	26.0	33.9	41.4	66.0	99.5	107.9
Agricultural income tax	9.0	9.0	12.6	23.1	27.8	36.9	39.6	30.6	29.5	28.5	28.6	32.0
Taxes on goods and services	159.9	205.8	286.8	346.5	400.9	463.6	528.2	601.8	637.2	877.2	1,000.3	1,111.8
Product tax (Consumption tax)	62.9	69.3	82.1	48.7	54.1	62.0	67.4	81.5	82.1	85.8	93.0	97.0
Value added tax	40.6	70.6	108.1	230.8	260.2	296.3	328.4	362.8	388.2	455.3	535.7	616.8
Business tax	56.4	65.9	96.6	67.0	86.6	105.3	132.4	157.5	166.9	186.9	206.4	232.0
VAT and excises on imports										149.2	165.2	166.0
Customs tax	18.7	21.3	25.6	27.3	29.2	30.2	31.9	31.3	56.2	75.1	84.1	70.4
Other taxes	38.3	21.5	32.6	37.7	45.0	44.2	107.7	136.1	182.5	45.2	54.5	140.1
of which construction tax	3.1	3.2	3.8	4.3	5.3	6.2	7.8	10.8	13.0	4.6	1.6	0.0
Nontax revenue	68.2	63.1	50.5	45.7	47.8	79.4	78.6	94.6	105.1	109.3	138.5	154.2
GNP in current prices	2,166.3	2,665.2	3,456.1	4,667.0	5,749.5	6,685.1	7,355.1	7,696.7	8,057.9	8,825.4	9,572.8	10,355.4

[a] According to the definition contained in IMF, *Manual on Government Finance Statistics* (GFS), 1986.

[b] This includes all government revenue, with the exception of extrabudgetary receipts of the various levels of government.

Source : IMF; China Statistical Yearbook.

Table 19: Central Government Revenue
(Billions of RMB)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total revenue[a]	166.5	171.7	166.9	353.5	423.2	434.0	492.7	556.3	649.9	758.7	917.4	1064.6
Tax revenue	78.1	85.4	88.4	283.2	320.5	346.1	423.2	482.4	574.8	689.3	833.9	991.7
Taxes on income and profits	44.7	48.3	47.0	41.7	52.8	56.6	42.5	39.7	59.3	76.0	122.4	223.3
Enterprises income tax	44.7	48.3	47.0	41.7	52.8	56.6	42.5	39.7	59.2	61	94.5	169.3
Personal income tax (other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	15.0	27.9	54.0
Taxes on goods and services	36.76	31.6	40.6	256.3	291	333.4	381	432.6	496	600.6	681.3	748.6
Product tax (Consumption tax)	18.38	15.8	20.3	48.7	54.2	62.0	67.9	81.5	82.1	85.8	93	97
Value added tax	14.6	11.8	12.8	172.8	194.8	222.0	246	272.0	290.8	341.3	401.6	462.6
Business tax	3.7	4.0	7.5	2.3	3.7	4.6	16.3	23.5	21.5	24.3	21.5	23
VAT and excises on imports	0.0	0.0	0.0	32.5	38.3	44.8	50.8	55.6	101.6	149.2	165.2	166
Tax rebate on exports	-25.5	-26.6	-30.0	-45.0	-55.0	-82.8	-55.5	-43.6	-62.7	-105	-108	-100
Customs tax	18.7	21.3	25.7	27.3	29.2	30.2	31.95	31.3	56.2	75.1	84.1	74.0
Other taxes	3.4	10.8	5.1	2.9	2.5	8.7	23.3	22.4	26.0	42.6	54.1	45.8
Nontax revenue	39.4	30.4	18.5	13.3	41.7	27.5	9.1	14.2	15.3	9.5	24.4	12.9
Revenue submitted by local government	49.0	55.9	60.0	57.0	61.0	60.4	60.4	59.7	59.8	59.9	59.1	60.0

[a] The subsidies to loss-making enterprises are included.
Source : Finace Yearbook of China.

Table 20: Local Government Revenue
(Billions of RMB)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total revenue[a]	310.2	354.3	445.2	526.4	558.0	707.1	755.4	855.9	992.0	1106.8	1380.0	1530.5
Tax revenue	221.0	244.3	337.1	229.5	283.3	344.9	400.2	443.8	493.5	568.9	696.3	656.4
Taxes on income and profits	28.4	23.8	20.9	29.2	35.1	40.3	53.8	52.9	93.8	156.2	240.2	185.6
Enterprises income tax	28.4	23.8	20.9	29.2	35.1	40.3	53.8	52.9	52.5	105.2	168.6	131.6
Personal income tax (other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.3	51.0	71.6	54.0
Taxes on goods and services	104.2	120.7	184.5	122.7	148.2	174.9	198.5	224.9	242.8	276.6	319.1	363.2
Value added tax	51.5	58.8	95.4	58.0	65.4	74.3	82.4	90.8	97.4	114	134.2	154.2
Business tax	52.7	61.9	89.1	64.7	82.8	100.6	116.1	134.1	145.4	162.6	184.9	209
Other taxes	88.4	99.8	131.7	77.6	100.0	129.7	147.9	166.0	156.9	136.1	137.0	107.6
Construction tax	3.1	3.2	3.8	4.3	5.4	6.2	7.8	10.8	13.0	4.6	1.6	0
Nontax revenue	33.7	50.3	53.6	58.0	72.0	89.9	69.5	79.9	89.8	71.4	83.5	140.9
Transfers from Central government	55.5	59.7	54.5	238.9	202.7	272.3	285.7	332.2	408.7	466.5	600.2	733.2

[a] The subsidies to loss-making enterprises are included.
Source : Finace Yearbook of China.

Table 21: Structure of Consolidated Government Revenue

(Percentage of total revenue)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total revenue	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tax revenue	81.4	83.9	89.4	91.8	92.7	89.7	91.3	90.7	91.0	92.0	91.7	92.0
Taxes on income and profits	22.4	20.6	16.9	18.1	19.8	19.9	17.3	15.4	16.4	19.1	23.4	23.0
Enterprises income tax	19.9	18.4	14.3	12.7	13.5	12.6	10.5	9.1	10.4	12.2	15.8	15.7
State enterprises	17.1	15.9	12.2	10.9	11.6	10.7	8.8	7.3	5.4	6.1	..	..
Collectives	2.8	2.4	2.0	1.8	1.8	1.9	1.9	1.8	1.5	1.3	..	..
Others	..	..	..	..	..	..	..	0.0	3.4	4.8	..	..
Personal income tax (other)	..	..	..	1.3	2.0	2.5	2.9	3.3	3.5	4.8	6.0	5.6
Agricultural income tax	2.5	2.3	2.6	4.1	4.3	4.8	4.4	3.0	2.5	2.1	1.7	1.7
Taxes on goods and services	43.5	52.4	60.2	62.1	61.5	60.2	58.6	58.9	54.3	64.2	59.9	58.0
Product tax	17.1	17.6	17.2	8.7	8.3	8.0	7.5	8.0	7.0	6.3	5.6	5.1
Value added tax	11.1	18.0	22.7	41.3	39.9	38.5	36.4	35.5	33.1	33.3	32.1	32.2
Business tax	15.4	16.8	20.3	12.0	13.3	13.7	14.7	15.4	14.2	13.7	12.4	12.1
VAT and excises on imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.9	9.9	8.7
Customs tax	5.1	5.4	5.4	4.9	4.5	3.9	3.5	3.1	4.8	5.5	5.0	3.7
Other taxes	10.4	5.5	6.8	6.8	6.9	5.7	11.9	13.3	15.6	3.3	3.3	7.3
Construction tax	0.8	0.8	0.8	0.8	0.8	0.8	0.9	1.1	1.1	0.3	0.1	0.0
Nontax revenue	18.6	16.1	10.6	8.2	7.3	10.3	8.7	9.3	9.0	8.0	8.3	8.0

Source: Table 19.

Table 22: Structure of Government Revenue
(Percentage of GNP)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total revenue	17.0	14.7	13.8	12.0	11.3	11.5	12.3	13.3	14.6	15.5	17.4	18.5
Tax revenue	13.8	12.4	12.3	11.0	10.5	10.3	11.2	12.0	13.3	14.3	16.0	17.0
Taxes on income and profits	3.8	3.0	2.3	2.2	2.2	2.3	2.1	2.0	2.4	3.0	4.1	4.3
Enterprises income tax	3.4	2.7	2.0	1.5	1.5	1.4	1.3	1.2	1.5	1.9	2.7	2.9
State enterprises	2.9	2.3	1.7	1.3	1.3	1.2	1.1	1.0	0.8	0.9	..	..
Collectives	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	..	..
Others	..	..	..	..	..	..	..	0.0	0.5	0.8	..	..
Personal income tax (other)	..	..	..	0.2	0.2	0.3	0.4	0.4	0.5	0.7	1.0	1.0
Agricultural income tax	0.4	0.3	0.4	0.5	0.5	0.6	0.5	0.4	0.4	0.3	0.3	0.3
Taxes on goods and services	7.4	7.7	8.3	7.4	7.0	6.9	7.2	7.8	7.9	9.9	10.4	10.7
Product tax	2.9	2.6	2.4	1.0	0.9	0.9	0.9	1.1	1.0	1.0	1.0	0.9
Value added tax	1.9	2.6	3.1	4.9	4.5	4.4	4.5	4.7	4.8	5.2	5.6	6.0
Business tax	2.6	2.5	2.8	1.4	1.5	1.6	1.8	2.0	2.1	2.1	2.2	2.2
VAT and excises on imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7	1.6
Customs tax	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.7	0.9	0.9	0.7
Other taxes	1.8	0.8	0.9	0.8	0.8	0.7	1.5	1.8	2.3	0.5	0.6	1.4
Construction tax	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0
Nontax revenue	3.1	2.4	1.5	1.0	0.8	1.2	1.1	1.2	1.3	1.2	1.4	1.5

Source: Table 19; Table 1.

Table 23: Structure of Central Government Revenue
(Percentage of GNP)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total revenue[a]	7.7	6.4	4.8	7.6	7.4	6.5	6.7	7.2	8.1	8.6	9.6	10.3
Tax revenue	3.6	3.2	2.6	6.1	5.6	5.2	5.8	6.3	7.1	7.8	8.7	9.6
Taxes on income and profits	2.1	1.8	1.4	0.9	0.9	0.8	0.6	0.5	0.7	0.9	1.3	2.2
Enterprises income tax	2.1	1.8	1.4	0.9	0.9	0.8	0.6	0.5	0.7	0.7	1.0	1.6
Personal income tax (other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.5
Taxes on goods and services	1.7	1.2	1.2	5.5	5.1	5.0	5.2	5.6	6.2	6.8	7.1	7.2
Product tax (Consumption tax)	0.8	0.6	0.6	1.0	0.9	0.9	0.9	1.1	1.0	1.0	1.0	0.9
Value added tax	0.7	0.4	0.4	3.7	3.4	3.3	3.3	3.5	3.6	3.9	4.2	4.5
Business tax	0.2	0.2	0.2	0.0	0.1	0.1	0.2	0.3	0.3	0.3	0.2	0.2
VAT and excises on imports	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	1.3	1.7	1.7	1.6
Tax rebate on exports	-1.2	-1.0	-0.9	-1.0	-1.0	-1.2	-0.8	-0.6	-0.8	-1.2	-1.1	-1.0
Customs tax	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.7	0.9	0.9	0.7
Other taxes	0.2	0.4	0.1	0.1	0.0	0.1	0.3	0.3	0.3	0.5	0.6	0.4
Nontax revenue	1.8	1.1	0.5	0.3	0.7	0.4	0.1	0.2	0.2	0.1	0.3	0.1
Revenue submitted by local government	2.3	2.1	1.7	1.2	1.1	0.9	0.8	0.8	0.7	0.7	0.6	0.6

[a] The subsidies to loss-making enterprises are included.
Source : Finace Yearbook of China.

Table 24: Structure of Local Government Revenue
(Percentage of GNP)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total revenue[a]	14.3	13.3	12.9	11.3	9.7	10.6	10.3	11.1	12.3	12.5	14.4	14.8
Tax revenue	10.2	9.2	9.8	4.9	4.9	5.2	5.4	5.8	6.1	6.4	7.3	6.3
Taxes on income and profits	1.3	0.9	0.6	0.6	0.6	0.6	0.7	0.7	1.2	1.8	2.5	1.8
Enterprises income tax	1.3	0.9	0.6	0.6	0.6	0.6	0.7	0.7	0.7	1.2	1.8	1.3
Personal income tax (other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.7	0.5
Taxes on goods and services	4.8	4.5	5.3	2.6	2.6	2.6	2.7	2.9	3.0	3.1	3.3	3.5
Value added tax	2.4	2.2	2.8	1.2	1.1	1.1	1.1	1.2	1.2	1.3	1.4	1.5
Business tax	2.4	2.3	2.6	1.4	1.4	1.5	1.6	1.7	1.8	1.8	1.9	2.0
Other taxes	4.1	3.7	3.8	1.7	1.7	1.9	2.0	2.2	1.9	1.5	1.4	1.0
Construction tax	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0
Nontax revenue	1.6	1.9	1.6	1.2	1.3	1.3	0.9	1.0	1.1	0.8	0.9	1.4
Transfers from Central government	2.6	2.2	1.6	5.1	3.5	4.1	3.9	4.3	5.1	5.3	6.3	7.1

[a] The subsidies to loss-making enterprises are included.
Source : Finace Yearbook of China.

Table 25: Structure of Government Expenditure

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						(Billions of RMB)						
Total expenditure and net lending	389.7	418.8	501.3	615.9	746.5	875.9	1039.5	1258.7	1505.2	1690.9	1957.9	2227.13
Current expenditure	315.6	340.8	400.0	510.4	618.2	721.3	857.4	985.8	1123.8	1316.1	1563.6	1738
Administration	34.4	42.5	53.6	72.9	87.3	104.1	113.7	132.7	152.6	178.8	219.75	289.6
Defense	33.0	37.8	42.6	55.1	63.7	72.0	81.3	93.5	107.6	120.8	144.2	170.8
Culture, education, public health, science & broadcasting	70.8	79.3	95.8	127.8	146.7	170.4	190.4	215.4	240.8	273.7	336.1	397.2
Economic services	33.4	37.8	44.8	56.5	59.9	69.9	77.0	83.1	88.9	100.5	121.7	142.4
Geological survey	3.8	4.4	4.9	6.4	6.6	6.9	7.3	8.3	8.4	8.8	9.9	10.3
Agriculture	24.4	26.9	32.3	40.0	43.0	51.0	56.1	62.6	67.7	76.7	91.8	108.8
Operating expenditure for industry, communication & commerce	5.2	6.5	7.6	10.1	10.3	12.0	13.6	12.2	12.8	15.0	20	23.3
Social welfare relief	6.7	6.6	7.5	9.5	11.5	12.8	14.2	17.1	18.0	21.3	26.7	36.8
Subsidies	88.4	76.7	71.0	68.0	69.3	79.1	92.1	104.5	98.8	132.1	104.2	90.7
Daily living necessities	37.4	32.2	29.9	31.4	36.5	45.4	55.2	71.2	69.8	104.2	74.2	64.8
Loss-making enterprises	51.0	44.5	41.1	36.6	32.8	33.7	36.9	33.3	29.0	27.9	30	25.9
Other	48.9	60.1	84.7	120.6	179.8	213.0	288.7	339.5	417.1	488.9	611.0	610.5
Capital expenditure	74.1	78.0	101.3	105.5	128.3	154.6	182.1	272.9	381.4	374.8	394.3	489.13
Capital construction	56.0	55.6	59.2	64.0	78.9	90.7	102.0	138.8	211.7	209.5	251.1	311.19
Development of the productive capacity of existing enterprises	18.1	22.4	42.1	41.5	49.4	52.3	64.3	64.1	76.6	86.5	99.2	95.71
						(Percentage of GNP)						
Memorandum items:												
Current expenditure	14.6	12.8	11.6	10.9	10.8	10.8	11.7	12.8	13.9	14.9	16.3	16.8
Subsidies	4.1	2.9	2.1	1.5	1.2	1.2	1.3	1.4	1.2	1.5	1.1	0.9
Daily living necessities	1.7	1.2	0.9	0.7	0.6	0.7	0.8	0.9	0.9	1.2	0.8	0.6
Loss-making enterprises	2.4	1.7	1.2	0.8	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3
Capital expenditure	3.4	2.9	2.9	2.3	2.2	2.3	2.5	3.5	4.7	4.2	4.1	4.7
						(Percentage of total expenditure)						
Subsidies	22.7	18.3	14.2	11.0	9.3	9.0	8.9	8.3	6.6	7.8	5.3	4.1
Capital expenditure	19.0	18.6	20.2	17.1	17.2	17.7	17.5	21.7	25.3	22.2	20.1	22.0

Source: IMF; China Statistical Yearbook.

Table 26: Structure of Central Government Expenditure

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						(Billions of RMB)						
Total expenditure	132.7	133.9	137.3	181.2	236.8	270.7	342.1	465.6	577.8	594.6	589.6	696.6
Current expenditure	90.0	93.3	96.3	134.5	185.6	206.8	266.4	319.8	356.8	394.7	435.0	458.1
Administration	3.1	3.7	4.4	5.8	7.0	7.2	7.6	9.1	58.8	2.9	3.9	4.9
Defense	33.0	37.8	42.6	55.1	63.7	72.0	81.3	92.9	106.8	119.9	143.0	170.8
Culture, education, public health, science & broadcasting	8.4	9.1	10.4	13.8	14.6	16.1	18.7	24.1	25.8	28.6	36.0	64.8
Economic services							16.8	19.8	18.4	16.3	14.9	14.8
Geological survey	3.8	4.4	4.9	6.4	6.5	6.8	7.2	8.2	7.6	4.4	3.0	2.9
Agriculture	2.3	2.7	3.2	4.5	4.6	5.5	5.6	6.9	6.8	7.7	7.7	7.7
Operating expenditure for industry, communication & commerce	1.5	2.1	2.4	3.7	3.5	3.7	4.0	4.7	4.0	4.2	4.2	4.2
Social welfare relief	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.6	0.2	4.5	4.5	4.5
Subsidies	28.6	22.3	17.9	14.9	16.0	19.4	31.9	43.8	36.6	69.5	68.4	69.1
Daily living necessities	5.0	5.5	7.7	9.2	10.1	12.3	22.3	36.4	31.4	64.6	64.6	64.6
Loss-making enterprises	23.6	16.8	10.2	5.7	5.9	7.1	9.6	7.4	5.2	4.9	3.8	4.5
Other	16.9	20.4	21.0	44.8	84.3	92.0	110.0	129.5	110.2	153.0	164.3	129.3
Capital expenditure	42.7	40.6	41.0	46.7	51.2	63.9	75.7	145.8	221.0	199.9	154.6	238.5
Capital construction	36.6	33.2	31.0	34.7	37.8	39.8	43.6	61.0	105.5	100.2	100.2	100.2
Development of the productive capacity of existing enterprises	6.1	7.4	10.0	12.0	13.4	12.5	16.3	14.8	22.4	24.7	24.7	24.7
						(Percentage of GNP)						
Memorandum items:												
Current expenditure	4.2	3.5	2.8	2.9	3.2	3.1	3.6	4.2	4.4	4.5	4.5	4.4
Subsidies	1.3	0.8	0.5	0.3	0.3	0.3	0.4	0.6	0.5	0.8	0.7	0.7
Daily living necessities	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.7	0.7	0.6
Loss-making enterprises	1.1	0.6	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
Capital expenditure	2.0	1.5	1.2	1.0	0.9	1.0	1.0	1.9	2.7	2.3	1.6	2.3
						(Percentage of total expenditure)						
Subsidies	21.6	16.7	13.0	8.2	6.8	7.2	9.3	9.4	6.3	11.7	11.6	9.9
Capital expenditure	32.2	30.3	29.9	25.8	21.6	23.6	22.1	31.3	38.2	33.6	26.2	34.2

Source: IMF; China Statistical Yearbook.

Table 27: Structure of Local Government Expenditure

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						(Billions of RMB)						
Total expenditure	257.0	284.9	364.0	434.7	509.7	605.2	697.4	793.1	927.4	1096.3	1368.3	1530.5
Current expenditure	225.6	247.5	303.7	375.9	432.6	514.5	591.0	666.0	767.0	921.4	1128.6	1279.9
Administration	31.3	38.8	49.2	67.1	80.3	96.9	106.1	123.6	93.8	165.9	118.2	129.1
Defense								0.6	0.8	0.9	1.2	
Culture, education, public health, science & broadcasting	62.4	70.2	85.4	114.0	132.1	154.3	171.7	191.3	215.0	245.1	300.1	332.4
Economic services	25.9	28.6	34.3	41.9	45.3	53.9	60.2	63.3	70.5	82.0	101.4	112.1
Geological survey	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.8	4.4	6.9	7.4
Agriculture	22.1	24.2	29.1	35.5	38.4	45.5	50.5	55.7	60.9	66.8	80.6	89.4
Operating expenditure for industry, communication & commerce	3.8	4.4	5.2	6.4	6.9	8.3	9.7	7.5	8.8	10.8	13.9	15.3
Social welfare relief	6.7	6.6	7.5	9.4	11.5	12.7	14.1	16.5	17.8	21.1	26.5	28.9
Subsidies	59.8	54.4	53.1	53.1	53.3	59.7	60.2	60.7	62.2	63.4	70.5	67.9
Daily living necessities	32.4	26.7	22.2	22.2	26.4	33.1	32.9	34.8	38.4	40.4	44.3	46.5
Loss-making enterprises	27.4	27.7	30.9	30.9	26.9	26.6	27.3	25.9	23.8	23.0	26.2	21.4
Other	39.6	48.9	74.2	90.4	110.1	137.0	178.7	210.0	306.9	343.0	510.7	609.5
Capital expenditure	31.4	37.4	60.3	58.8	77.1	90.7	106.4	127.1	160.4	174.9	239.7	250.6
Capital construction	19.4	22.4	28.2	29.3	41.1	50.9	58.4	77.8	106.2	114.2	165.5	168
Development of the productive capacity of existing enterprises	12.0	15.0	32.1	29.5	36.0	39.8	48.0	49.3	54.2	60.7	74.2	82.6
						(Percentage of GNP)						
Memorandum items:												
Current expenditure	10.4	9.3	8.8	8.1	7.5	7.7	8.0	8.7	9.5	10.4	11.8	12.4
Subsidies	2.8	2.0	1.5	1.1	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.7
Daily living necessities	1.5	1.0	0.6	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.4
Loss-making enterprises	1.3	1.0	0.9	0.7	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.2
Capital expenditure	1.4	1.4	1.7	1.3	1.3	1.4	1.4	1.7	2.0	2.0	2.5	2.4
						(Percentage of total expenditure)						
Subsidies	23.3	19.1	14.6	12.2	10.5	9.9	8.6	7.7	6.7	5.8	5.2	4.4
Capital expenditure	12.2	13.1	16.6	13.5	15.1	15.0	15.3	16.0	17.3	16.0	17.5	16.4

Source: IMF; China Statistical Yearbook.

Table 28: Budget and Its Financing

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						(Billions of RMB)						
Revenue	367.2	392.8	476.0	558.4	651.6	770.4	902.0	1,020.9	1,173.4	1,367.4	1,668.6	1,917.4
Expenditure	389.7	418.8	501.3	615.9	746.5	875.9	1,039.5	1,258.7	1,505.2	1,690.9	1,957.9	2,227.1
Deficit	-22.5	-26.0	-25.3	-57.5	-94.9	-105.5	-137.5	-237.8	-331.8	-323.5	-289.3	-309.8
Financing	22.5	26.0	25.3	57.5	94.9	105.5	137.5	237.8	331.8	323.5	289.3	309.8
Domestic(net)	12.5	13.1	-1.6	53.6	70.9	85.9	116.7	190.9	285.0	309.7	282.2	301.8
Foreign(net)	10.0	12.9	26.9	4.0	24.0	19.6	20.8	46.9	46.8	13.8	7.1	8.0
						(Percentage of GNP)						
Revenue	17.0	14.7	13.8	12.0	11.3	11.5	12.3	13.3	14.6	15.3	17.1	18.3
Expenditure	18.0	15.7	14.5	13.2	13.0	13.1	14.1	16.4	18.7	19.2	20.1	21.3
Deficit	-1.0	-1.0	-0.7	-1.2	-1.7	-1.6	-1.9	-3.1	-4.1	-3.7	-3.0	-3.0
Financing	1.0	1.0	0.7	1.2	1.7	1.6	1.9	3.1	4.1	3.6	3.0	3.0
Domestic	0.6	0.5	0.0	1.1	1.2	1.3	1.6	2.5	3.5	3.5	2.9	2.9
Foreign	0.5	0.5	0.8	0.1	0.4	0.3	0.3	0.6	0.6	0.2	0.1	0.1
						(Percentage of total deficit)						
Financing	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Domestic	55.6	50.4	-6.4	93.1	74.7	81.4	84.9	80.3	85.9	95.7	97.5	97.4
Foreign	44.4	49.6	106.4	6.9	25.3	18.6	15.1	19.7	14.1	4.3	2.5	2.6

Source: IMF.

Table 29: Production of Major Crops

(Million tons)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total food grains	435.3	442.7	456.5	445.1	466.6	504.5	494.2	512.3	508.4	462.2	452.6	457.1
Rice	183.8	186.2	177.7	175.9	185.2	195.1	200.7	198.7	198.5	187.9	177.6	174.5
Wheat	96.0	101.6	106.4	99.3	102.0	110.6	123.3	109.7	113.9	99.6	93.9	90.3
Corn	98.8	95.4	102.7	99.3	112.0	127.5	104.3	133.0	128.1	106.0	114.1	121.3
Tuber	27.2	28.4	31.8	30.3	32.1	35.4	31.9	36.0	36.4	36.9	35.6	36.7
Total oil seeds	16.4	16.4	18.0	19.9	22.5	22.1	21.6	23.1	26.0	29.6	28.7	29.0
of which:												
Peanuts	6.3	6.0	8.4	9.7	10.2	10.1	9.7	11.9	12.6	14.4	14.4	14.8
Rapeseed	7.4	7.7	6.9	7.5	9.8	9.2	9.6	8.3	10.1	11.4	11.3	10.6
Cotton	5.7	4.5	3.7	4.3	4.8	4.2	4.6	4.5	3.8	4.4	5.3	4.9
Sugarcane	67.9	73.0	64.2	60.9	65.4	66.9	78.9	83.4	74.7	68.3	75.7	90.1
Beetroots	16.3	15.1	12.0	12.5	14.0	16.7	15.0	14.5	8.6	8.1	10.9	12.8
Cured tobacco	2.7	3.1	3.0	1.9	2.1	3.0	3.9	2.1	2.2	2.2	2.1	2.1
Fruits	21.8	24.4	30.1	35.0	42.1	46.5	50.9	54.5	62.4	62.3	66.6	69.5

Source: China Statistical Yearbook.

Table 30: Yield of Major Crops
(By sown area, kg/hectare)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total food grains	3,930	3,870	4,004	4,131	4,063	4,239	4,483	4,377	4,502	4,493	4,261	4,267	4,399
Rice	5,730	5,640	5,803	5,848	5,831	6,025	6,212	6,319	6,366	6,345	6,272	6,163	6,189
Wheat	3,195	3,105	3,331	3,519	3,426	3,533	3,734	4,102	3,685	3,947	3,738	3,806	3,777
Corn	4,530	4,575	4,533	4,963	4,694	4,916	5,203	4,387	5,268	4,945	4,598	4,699	4,924
Soybeans	1,455	1,361	1,394	1,576	1,645	1,591	1,698	1,680	1,714	1,693	1,588	1,547	1,787
Tuber	3,015	2,985	3,141	3,450	3,264	3,374	3,609	3,262	3,604	3,516	3,497	3,487	3,710
Peanuts	2,190	2,190	2,000	2,492	2,564	2,687	2,804	2,592	2,943	2,961	2,973	2,888	3,011
Rapeseed	1,260	1,215	1,281	1,309	1,296	1,416	1,367	1,479	1,272	1,469	1,519	1,597	1,477
Cotton	810	870	660	750	785	879	890	1,025	1,009	1,028	1,093	1,107	1,175
Sugarcane	57,120	58,350	58,605	59,012	57,671	58,136	56,225	60,158	59,549	57,338	57,626	60,625	64,663
Beetroots	21,660	20,790	22,832	20,124	17,936	20,132	25,483	24,475	24,806	25,335	24,518	26,807	30,232
Cured tobacco	1,680	1,710	1,687	1,654	1,491	1,584	1,750	1,809	1,740	1,797	1,763	1,732	1,792

Source: China Statistical Yearbook.

Table 31: Gross Output Value of Industrial Enterprises[a]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						(Billions of RMB)							
Total	2,392.4	2,662.5	3,459.9	4,840.2	7,017.6	9,189.5	9,959.5	11,373.3	11,904.8	12,611.1	8,567.4	9,544.9	11,041.1
BY TYPE OF OWNERSHIP													
State-owned and state-control[b]	1,306.4	1,495.5	1,782.4	2,272.5	2,620.1	3,122.0	3,617.3	3,596.8	3,362.1	3,557.1	4,055.4	4,240.9	4,610.3
Collective-owned	852.3	878.3	1,213.5	1,646.4	2,647.2	3,362.3	3,923.2	4,334.7	4,573.0	4,460.7	1,190.8	1,005.3	1,034.6
Individual-owned	129.0	128.7	200.6	386.1	708.2	1,182.1	1,542.0	2,037.6	2,037.2	2,292.8			
Funded by foreigners, Hong Kong, Macao and Taiwan						1,072.2	1,211.7	1,439.9	1,775.0	2,007.8	2,346.5	2,722.1	3,192.8
BY TYPE OF INDUSTRY													
Light	1,181.3	1,288.7	1,612.3	2,250.7	3,249.1	4,346.6	4,793.2	5,570.1	5,867.3	6,179.4	3,409.5	3,763.7	4,320.3
Heavy	1,211.3	1,373.8	1,847.6	2,589.5	3,768.5	4,842.8	5,166.3	5,803.2	6,037.5	6,431.7	5,157.9	5,781.2	6,720.8
						(Percentage of total)							
BY TYPE OF OWNERSHIP													
State-owned and state-control[b]	54.6	56.2	51.5	46.9	37.3	34.0	36.3	31.6	28.2	28.2	47.3	44.4	41.8
Collective-owned	35.6	33.0	35.1	34.0	37.7	36.6	39.4	38.1	38.4	35.4	13.9	10.5	9.4
Individual-owned	5.4	4.8	5.8	8.0	10.1	12.9	15.5	17.9	17.1	18.2			
Funded by foreigners, Hong Kong, Macao and Taiwan						11.7	12.2	12.7	14.9	15.9	27.4	28.5	28.9
BY TYPE OF INDUSTRY													
Light	49.4	48.4	46.6	46.5	46.3	47.3	48.1	49.0	49.3	49.0	39.8	39.4	39.1
Heavy	50.6	51.6	53.4	53.5	53.7	52.7	51.9	51.0	50.7	51.0	60.2	60.6	60.9

[a] Data for 2000 onwards are not comparable with data of previous years, which only cover all state-owned industrial enterprises and non state-owned enterprises with an annual sales over 5 million yuar

[b] Data prior to 1996 only refer to state-owned enterprises.

Source : China Statistical Yearbook.

Table 32: Output of Major Industrial Products

Product	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Coal (million tons)	1,080	1,087	1,116	1,150	1,240	1,361	1,397	1,373	1,250	1,045	1,000	1,160	1,380
Crude oil (million tons)	138	141	142	145	146	150	157	161	161	160	163	165	167
Natural gas (billion cu m)	15	16	16	17	18	18	20	23	23	25	27	30	33
Electricity (billion kWh)	621	678	754	840	928	1,008	1,081	1,136	1,167	1,239	1,356	1,481	1,654
Hydro power	127	125	131	152	167	191	188	196	199	197	222	277	288
Steel (million tons)	66	71	81	90	93	95	101	109	116	124	129	152	182
Steel Products (million tons)	52	56	67	77	84	90	93	100	107	121	132	161	192
Cement (million tons)	210	253	308	368	421	476	491	512	536	573	597	661	725
Timber (million cu m)	56	58	62	64	66	68	67	64	60	52	47	46	50
Fertilizers (million tons)	19	20	20	20	23	26	28	28	30	33	32	34	38
						(Growth rates)							
Coal	2	1	3	3	8	10	3	-2	-9	-16	-4	16	19
Crude oil	1	2	1	2	1	3	5	3	0	-1	2	1	1
Natural gas	2	5	-2	6	5	2	11	15	1	8	8	12	8
Electricity	6	9	11	11	11	9	7	5	3	6	9	9	12
Hydro power	7	-2	5	16	10	14	-1	4	2	-1	13	25	4
Steel	8	7	14	11	3	3	6	8	6	7	4	18	20
Rolled steel	6	9	19	15	9	7	4	8	7	13	9	22	20
Cement	0	20	22	19	14	13	3	4	5	7	4	11	10
Timber	-4	4	6	3	4	3	-1	-4	-6	-13	-10	-3	11
Fertilizers	3	5	3	-4	16	12	10	0	6	10	-3	6	12

Source: China Statistical Yearbook.

Table 33: Total Wage Bill of Staff and Workers by Employment Category

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						(Billions of RMB Nominal)							
Total wage bill	295.1	332.4	393.9	491.6	665.6	810.0	908.0	940.5	929.7	987.6	1065.6	1183.1	1316.1
State-owned	232.4	259.5	309.0	381.3	517.7	608.0	679.3	721.1	681.3	716.1	761.3	835.6	894.86
Urban collectives	58.1	65.9	74.3	85.0	102.3	118.2	124.1	125.3	102.2	96.3	91.9	86.5	82.8
Other	4.6	7.0	10.6	25.4	45.6	83.8	104.6	94.1	146.2	175.2	212.4	261.1	338.4
						(Percentage of total)							
Total wage bill	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
State-owned	78.8	78.1	78.5	77.6	77.8	75.1	74.8	76.7	73.3	72.5	71.4	70.6	68.0
Urban collectives	19.7	19.8	18.9	17.3	15.4	14.6	13.7	13.3	11.0	9.7	8.6	7.3	6.3
Other	1.6	2.1	2.7	5.2	6.8	10.3	11.5	10.0	15.7	17.7	19.9	22.1	25.7
						(Nominal growth rates, Previous year = 100)							
Total wage bill	12.7	12.6	18.5	24.8	35.4	21.7	12.1	3.6	-1.2	6.2	7.9	11.0	11.2
State-owned	13.4	11.7	19.1	23.4	35.8	17.4	11.7	6.2	-5.5	5.1	6.3	9.8	7.1
Urban collectives	8.7	13.4	12.8	14.4	20.4	15.5	5.0	1.0	-18.5	-5.8	-4.5	-5.9	-4.3
Other	35.7	53.0	50.0	140.2	79.7	40.0	24.9	-10.0	55.4	19.8	21.3	22.9	29.6
						(Real growth rates, Previous year = 100)							
Total wage bill	11.4	7.5	9.9	8.7	10.3	4.9	3.3	0.5	-0.6	7.5	7.1	7.1	12.0
State-owned	12.1	6.6	10.5	7.3	10.7	0.7	2.9	3.1	-4.9	6.4	5.5	5.5	7.9
Urban collectives	7.4	8.3	4.2	-1.7	-4.6	-1.3	-3.8	-2.1	-17.9	-4.5	-5.3	-5.3	-3.5
Other	34.4	48.0	41.4	124.1	54.6	23.2	10.5	20.6	56.0	21.1	20.4	20.4	30.4
Percentage share of wage bill in GDP	15.9	15.4	14.8	14.2	14.3	13.9	13.4	12.6	13.6	14.6	15.6	15.6	12.6

Note: 1. This table covers only the state-owned, collective and mixed ownership sectors. Private companies and the informal sector are excluded;

2. Payments to laid-off workers are included through 1997. The wage bill decrease in 1998 primarily represents the remoral of these payments from the total wage bill.

Source: China Statistical Yearbook.

Table 34: Average Annual Wage by Sector and Ownership
(RMB in current prices)

Sector	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
							By sector						
Total	2,140	2,340	2,711	3,371	4,538	5,500	6,210	6,470	7,479	8,346	9,371	10,870	12,422
Farming & forestry, etc.	1,541	1,652	1,828	2,042	2,819	3,522	4,050	4,311	4,528	4,832	5,184	5,741	6,398
Mining and quarrying	2,718	2,942	3,209	3,711	4,679	5,757	6,482	6,833	7,242	7,521	8,340	9,586	11,017
Manufacturing	2,073	2,289	2,635	3,348	4,283	5,169	5,642	5,933	7,064	7,794	8,750	9,774	11,001
Electric power, gas,and water	2,656	2,922	3,392	4,319	6,155	7,843	8,816	9,649	10,478	11,513	12,830	14,590	16,440
Geological survey	2,465	2,707	3,222	3,717	5,450	5,962	6,581	7,160	7,951	8,821	9,622	10,957	12,303
Construction	2,384	2,649	3,066	3,779	4,894	5,785	6,249	6,655	7,456	7,982	8,735	9,484	10,279
Transport & communications	2,426	2,686	3,114	4,273	5,690	6,948	7,870	8,600	9,808	10,991	12,319	14,167	16,044
Commerce & services etc.	1,818	1,981	2,204	2,679	3,537	4,248	4,661	4,845	5,865	6,417	7,190	8,192	9,398
Real estate	2,243	2,507	3,106	4,320	6,288	7,330	8,337	9,190	10,302	11,505	12,616	14,096	15,501
Social services	2,170	2,431	2,844	3,588	5,026	5,982	6,778	7,553	8,333	9,263	10,339	11,869	13,499
Health care, sports & welfare	2,209	2,370	2,812	3,413	5,126	5,860	6,790	7,599	8,493	9,664	10,930	12,933	14,795
Education, culture & arts etc.	2,117	2,243	2,715	3,278	4,923	5,435	6,144	6,759	7,474	8,510	9,482	11,452	13,290
Scientific research	2,403	2,573	3,115	3,904	6,162	6,846	8,048	9,049	10,241	11,601	13,620	16,437	19,113
Banking and insurance	2,097	2,255	2,829	3,740	6,712	7,376	8,406	9,734	10,633	12,046	13,478	16,277	19,135
Government agencies	2,113	2,275	2,768	3,505	4,962	5,526	6,340	6,981	7,773	8,978	10,043	12,142	13,975
Others				3,371	5,213	6,295	7,184	6,838	8,481	10,068	11,098	12,590	14,215
							By ownership						
Total	2,140	2,340	2,711	3,371	4,538	5,500	6,210	6,470	7,479	8,346	9,371	10,870	12,422
State-owned units	2,284	2,477	2,878	3,532	4,797	5,625	6,280	6,747	7,668	8,543	9,552	11,178	12,869
Urban collective-owned units	1,681	1,866	2,109	2,592	3,245	3,931	4,302	4,512	5,331	5,774	6,262	6,867	7,667
Other types of ownership	2,987	3,468	3,966	4,966	6,303	7,463	8,261	8,789	8,972	9,829	10,984	12,140	13,212
Cooperative units									6,054	6,709	7,473	8,398	9,484
Joint ownership units				3,741	4,982	6,056	6,856	7,310	8,431	9,501	10,663	11,887	12,451
Limited liability corporations									7,750	8,632	9,766	10,993	11,997
Share-holding corporations Ltd.				5,171	6,383	7,277	7,623	7,693	8,833	9,720	11,131	12,385	13,850
Units with funds from Hong Kong, Macao & Taiwan				5,147	6,376	7,484	8,334	9,329	10,027	10,991	11,914	12,544	13,756
Foreign funded units				5,315	6,533	8,058	9,383	10,361	11,767	12,951	14,372	16,101	17,892
Others				3,279	4,954	6,494	7,131	7,063	6,133	8,425	10,223	11,621	..

Note: This table covers only the state-owned, collective and mixed ownership sectors. Private companies and the informal sector are excluded
Source: China Statistical Yearbook.

Table 35: Indices of Average Annual Wage by Sector and Ownership

Sector	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
							By sector						
Total	100	104.6	111.5	119.5	126.1	131.5	135.8	138	160.5	181.5	202.1	233.0	268.2
Farming & forestry, etc.	100	102.5	104.4	100.5	108.8	116.9	123	127.7	135	145.9	155.3	170.9	191.8
Mining and quarrying	100	103.5	103.9	103.6	102.4	108.4	111.6	114.8	122.4	128.8	141.6	222.5	257.4
Manufacturing	100	105.6	111.9	122.5	122.8	127.6	127.4	130.7	156.5	174.9	194.8	216.2	245.2
Electric power, gas,and water	100	105.2	112.4	123.4	137.8	151.1	155.4	165.9	181.2	201.7	223	252.0	286.0
Geological survey	100	105	115	114.4	131.5	123.7	125	132.6	148.1	166.5	180.2	203.4	230.0
Construction	100	106.3	113.2	120.3	122.1	124.2	122.7	127.4	143.6	155.8	169.1	182.4	199.2
Transport & communications	100	105.9	113	133.6	139.5	146.5	151.8	161.8	185.7	210.8	234.4	267.9	305.4
Commerce & services etc.	100	104.2	106.7	111.8	115.7	119.5	120	121.7	148.2	164.2	182.6	206.8	240.9
Real estate	100	106.9	121.9	146.1	166.7	167.2	174	187	210.9	238.7	259.6	288.2	319.3
Social services	100	107.2	115.3	125.4	137.7	141	146.2	158.9	176.4	198.6	219.9	250.9	287.3
Health care, sports & welfare	100	102.6	112	117.2	138	135.7	143.9	157	176.6	203.6	228.4	268.7	309.5
Education, culture & arts etc.	100	101.3	112.9	117.5	138.3	131.4	135.8	145.8	162.2	187	206.8	248.3	290.0
Scientific research	100	102.4	114.1	123.2	152.5	145.8	156.8	171.9	195.7	224.6	261.6	313.9	367.6
Banking and insurance	100	102.9	118.7	135.3	190.3	180	187.6	211.9	232.9	267.3	296.7	356.2	421.7
Government agencies	100	103	115.3	125.8	139.6	133.8	140.4	150.8	169	197.7	219.4	263.7	305.6
Others				100.0	123.7	127.9	134.1	123.8	154.5	185.8	203.2	229.1	260.5
							By ownership						
Total	100	105	112	120	126	132	136	138	161	182	202	233	268
State-owned units	100	103	110	117	127	127	131	136	156	176	195	226	263
Urban collective-owned units	100	106	110	116	116	121	122	124	147	161	174	189	213
Other types of ownership	100	110	116	125	127	129	131	136	139	155	171	188	207
Joint ownership units				100	106	111	115	119	138	158	176	195	204
Share-holding corporations Ltd.				100	99	96	93	91	105	117	133	147	164
Units with funds from Hong Kong, Macao & Taiwan				100	99	100	102	111	120	133	143	150	165
Foreign funded units				100	98	104	111	119	136	152	167	186	207
Others				100	121	136	137	132	115	160	192	217	191

Note: This table covers only the state-owned, collective and mixed ownership sectors. Private companies and the informal sector are excluded.
Source: China Statistical Yearbook.

Table 36: Sectoral Average Annual Wage by Region in 2002

(RMB in current prices)

	Total	Agriculture	Mining & quarrying	Manufacturing	Electric power, gas,and water	Geological survey	Construction	Transport & communications	Commerce & services etc.	Real estate	Social services	Health care, sports & welfare	Education, culture & arts etc.	Scientific research	Banking and insurance	Government agencies	Others
Beijing	21852	13170	18039	17645	28111	23444	14455	26651	18476	22779	23022	30271	26287	30143	50189	26742	27983
Tianjing	16258	12505	19018	14237	22232	17023	15488	22203	13687	15589	14293	19681	16693	18755	22601	19019	12091
Hebei	10032	5003	12310	8800	15777	12861	7875	12884	6002	10338	9491	10963	10477	14764	13567	11181	9721
Shanxi	9357	7407	10446	7915	11024	8680	7921	13483	5175	8720	7351	9934	10550	12422	13088	10159	8418
Inner Mongolia	9683	6211	7440	8153	14776	9827	7201	12932	6272	9955	8047	11697	11655	12626	12741	12094	11715
Liaoning	11659	4976	11965	10511	16609	9986	9058	15359	9052	12505	10952	13068	12832	17144	18004	14126	11049
Jilin	9990	5055	8040	10195	14103	7985	7481	10662	5977	11194	10071	10903	11930	14566	13736	11750	11415
Heilongjiang	9926	5382	8329	8797	14398	16043	9034	12941	7644	10451	8785	12179	13089	13657	17052	12878	7974
Shanghai	23959	17184	22464	22083	29721	24851	21820	33110	21370	28474	18811	26476	24585	26710	37087	26199	23082
Jiangsu	13509	6974	12664	11520	22108	12418	11289	16060	9616	17290	14212	16343	15047	21464	20684	18453	13335
Zhejiang	18785	15967	12712	13298	27860	19686	14478	23970	16755	20796	16020	25149	22149	25987	25418	25080	19775
Anhui	9296	5799	10503	8356	11981	8490	7556	9770	5265	10020	8187	10911	10564	13124	12304	11795	9881
Fujian	13306	7548	9164	11396	18340	12560	12081	19409	11630	15823	12522	16173	14541	19266	21829	15277	15818
Jiangxi	9262	5195	7496	8314	10900	9638	8330	13104	6429	9655	8527	11286	10013	11272	12256	10535	10048
Shandong	11374	9031	15991	8763	16131	11692	9545	16291	6925	12982	10997	14519	12542	16964	17088	12933	11068
Henan	9174	5869	11030	7837	12750	14743	7825	12045	6890	9165	8268	10210	9297	13112	13152	9890	9110
Hubei	9611	4827	10273	8905	12464	9788	9253	11323	6754	9939	8526	10557	11343	14359	11925	11836	8785
Hunan	10967	5653	8740	9917	13895	9068	8934	13167	8899	11551	9820	13446	12193	14851	15881	11403	12119
Guangdong	17814	7684	10949	14701	23752	13993	13306	25783	14937	20564	19217	22032	18401	30202	29404	21769	17316
Guangxi	10774	6305	9625	9959	14716	9351	9054	14021	7290	10772	9543	12571	10796	14242	14709	13012	10272
Hainan	9480	4022	7490	9388	14480	7766	7235	16291	7737	12413	9517	14621	12672	11054	18493	13962	9457
Chongqing	10960	8072	8222	10214	13872	13090	8865	12444	8529	10570	9758	12197	11923	12280	19135	12766	12484
Sichuan	11183	8114	9866	9853	13506	13832	8444	13952	8033	11877	10621	13349	11766	18420	17603	13057	14541
Guizhou	9810	8446	9963	9326	16259	9268	7923	13168	7007	9880	9072	10142	9756	15046	14545	9850	12180
Yunnan	11987	8357	9777	11785	17214	11871	9800	13675	9846	12298	9892	14128	12799	14484	13677	12789	15706
Tibet	24766	20402	14978	10540	16543	28842	15031	22442	14616	20502	16151	29901	28110	31958	28390	28185	24387
Shaanxi	10351	7937	10705	9398	14214	10466	8600	13781	6308	10336	10284	10270	11169	14448	14756	10466	9580
Gansu	11147	8541	10176	10084	15590	11929	8738	14313	6406	10738	9289	12881	12465	13594	13066	12738	11386
Qinghai	14472	10706	15381	10816	19715	23055	10608	18000	8303	11188	9712	16329	16218	17837	15780	15988	13503
Ningxia	11640	6676	11973	9553	16159	12122	9971	16614	7713	10569	9460	14216	13550	15363	17897	12879	12883
Xinjiang	11605	6491	17632	10386	15797	12104	12021	17003	11266	12461	10393	14007	14229	15608	18643	14308	13416

Note: This table covers only the state-owned, collective and mixed ownership sectors. Private companies and the informal sector are excluded.

Source: China Statistical Yearbook.

Table 37: Indices of Sectoral Average Annual Wage by Region in 2002 (Beijing=100)

(RMB in current prices)

	Total	Agriculture	Mining & quarrying	Manufacturing	Electric power, gas,and water	Geological survey	Construction	Transport & communications	Commerce & services etc.	Real estate	Social services	Health care, sports & welfare	Education, culture & arts etc.	Scientific research	Banking and insurance	Government agencies	Others
Beijing	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Tianjing	74.4	95.0	105.4	80.7	79.1	72.6	107.1	83.3	74.1	68.4	62.1	65.0	63.5	62.2	45.0	71.1	43.2
Hebei	45.9	38.0	68.2	49.9	56.1	54.9	54.5	48.3	32.5	45.4	41.2	36.2	39.9	49.0	27.0	41.8	34.7
Shanxi	42.8	56.2	57.9	44.9	39.2	37.0	54.8	50.6	28.0	38.3	31.9	32.8	40.1	41.2	26.1	38.0	30.1
Inner Mongolia	44.3	47.2	41.2	46.2	52.6	41.9	49.8	48.5	33.9	43.7	35.0	38.6	44.3	41.9	25.4	45.2	41.9
Liaoning	53.4	37.8	66.3	59.6	59.1	42.6	62.7	57.6	49.0	54.9	47.6	43.2	48.8	56.9	35.9	52.8	39.5
Jilin	45.7	38.4	44.6	57.8	50.2	34.1	51.8	40.0	32.4	49.1	43.7	36.0	45.4	48.3	27.4	43.9	40.8
Heilongjiang	45.4	40.9	46.2	49.9	51.2	68.4	62.5	48.6	41.4	45.9	38.2	40.2	49.8	45.3	34.0	48.2	28.5
Shanghai	109.6	130.5	124.5	125.2	105.7	106.0	151.0	124.2	115.7	125.0	81.7	87.5	93.5	88.6	73.9	98.0	82.5
Jiangsu	61.8	53.0	70.2	65.3	78.6	53.0	78.1	60.3	52.0	75.9	61.7	54.0	57.2	71.2	41.2	69.0	47.7
Zhejiang	86.0	121.2	70.5	75.4	99.1	84.0	100.2	89.9	90.7	91.3	69.6	83.1	84.3	86.2	50.6	93.8	70.7
Anhui	42.5	44.0	58.2	47.4	42.6	36.2	52.3	36.7	28.5	44.0	35.6	36.0	40.2	43.5	24.5	44.1	35.3
Fujian	60.9	57.3	50.8	64.6	65.2	53.6	83.6	72.8	62.9	69.5	54.4	53.4	55.3	63.9	43.5	57.1	56.5
Jiangxi	42.4	39.4	41.6	47.1	38.8	41.1	57.6	49.2	34.8	42.4	37.0	37.3	38.1	37.4	24.4	39.4	35.9
Shandong	52.1	68.6	88.6	49.7	57.4	49.9	66.0	61.1	37.5	57.0	47.8	48.0	47.7	56.3	34.0	48.4	39.6
Henan	42.0	44.6	61.1	44.4	45.4	62.9	54.1	45.2	37.3	40.2	35.9	33.7	35.4	43.5	26.2	37.0	32.6
Hubei	44.0	36.7	56.9	50.5	44.3	41.8	64.0	42.5	36.6	43.6	37.0	34.9	43.2	47.6	23.8	44.3	31.4
Hunan	50.2	42.9	48.5	56.2	49.4	38.7	61.8	49.4	48.2	50.7	42.7	44.4	46.4	49.3	31.6	42.6	43.3
Guangdong	81.5	58.3	60.7	83.3	84.5	59.7	92.1	96.7	80.8	90.3	83.5	72.8	70.0	100.2	58.6	81.4	61.9
Guangxi	49.3	47.9	53.4	56.4	52.3	39.9	62.6	52.6	39.5	47.3	41.5	41.5	41.1	47.2	29.3	48.7	36.7
Hainan	43.4	30.5	41.5	53.2	51.5	33.1	50.1	61.1	41.9	54.5	41.3	48.3	48.2	36.7	36.8	52.2	33.8
Chongqing	50.2	61.3	45.6	57.9	49.3	55.8	61.3	46.7	46.2	46.4	42.4	40.3	45.4	40.7	38.1	47.7	44.6
Sichuan	51.2	61.6	54.7	55.8	48.0	59.0	58.4	52.4	43.5	52.1	46.1	44.1	44.8	61.1	35.1	48.8	52.0
Guizhou	44.9	64.1	55.2	52.9	57.8	39.5	54.8	49.4	37.9	43.4	39.4	33.5	37.1	49.9	29.0	36.8	43.5
Yunnan	54.9	63.5	54.2	66.8	61.2	50.6	67.8	51.3	53.3	54.0	43.0	46.7	48.7	48.1	27.3	47.8	56.1
Tibet	113.3	154.9	83.0	59.7	58.8	123.0	104.0	84.2	79.1	90.0	70.2	98.8	106.9	106.0	56.6	105.4	87.1
Shaanxi	47.4	60.3	59.3	53.3	50.6	44.6	59.5	51.7	34.1	45.4	44.7	33.9	42.5	47.9	29.4	39.1	34.2
Gansu	51.0	64.9	56.4	57.1	55.5	50.9	60.4	53.7	34.7	47.1	40.3	42.6	47.4	45.1	26.0	47.6	40.7
Qinghai	66.2	81.3	85.3	61.3	70.1	98.3	73.4	67.5	44.9	49.1	42.2	53.9	61.7	59.2	31.4	59.8	48.3
Ningxia	53.3	50.7	66.4	54.1	57.5	51.7	69.0	62.3	41.7	46.4	41.1	47.0	51.5	51.0	35.7	48.2	46.0
Xinjiang	53.1	49.3	97.7	58.9	56.2	51.6	83.2	63.8	61.0	54.7	45.1	46.3	54.1	51.8	37.1	53.5	47.9

Note: This table covers only the state-owned, collective and mixed ownership sectors. Private companies and the informal sector are excluded.

Source: China Statistical Yearbook.

Table 38: Regional Average Annual Wage by Ownership in 2002
(RMB in current prices)

	Total	State-owned units	Urban collective-owned units	Other types of ownership	Cooperative units	Joint ownership units	Limited liability corporations	Share-holding corporations Ltd.	Units with funds from Hong Kong, Macao & Taiwan	Foreign funded units	Others
Beijing	21852	23754	11997	21432	12888	15157	19510	21434	27193	39428	13978
Tianjing	16258	17059	9350	16686	15486	15466	15852	17097	15865	17643	5529
Hebei	10032	10578	6343	9537	7077	10521	9908	9298	10680	10628	5629
Shanxi	9357	9931	5524	9675	5914	7338	9994	10163	7694	10185	4097
Inner Mongolia	9683	10287	6431	8777	5396	7564	8793	9906	6814	7765	4913
Liaoning	11659	12239	7094	12214	8122	9173	11206	13960	12805	14277	9186
Jilin	9990	10369	6411	10671	7678	6180	8746	11537	10011	15668	7818
Heilongjiang	9926	9921	5100	13232	10623	9494	8892	18474	11382	11340	10481
Shanghai	23959	24719	14851	24423	15204	18015	21226	25046	19583	30192	24716
Jiangsu	13509	15030	8638	12633	8983	10386	12067	12907	12655	16033	8786
Zhejiang	18785	22808	14123	15030	12557	15790	14441	18677	15477	14888	15914
Anhui	9296	9961	5808	9501	5607	8065	9148	11643	8166	11105	5874
Fujian	13306	15026	10119	11987	10888	12875	12155	15252	11386	12349	9981
Jiangxi	9262	9607	5859	9444	6257	8396	10177	11468	7880	10671	6523
Shandong	11374	12778	7129	9561	7065	10880	9651	9451	9713	10188	7323
Henan	9174	9864	6664	9335	7153	6260	9188	10081	10416	9920	7540
Hubei	9611	10403	6534	8180	6562	8881	8725	8165	8412	12345	6442
Hunan	10967	11378	7704	10748	9001	8241	10086	11727	11072	11716	15869
Guangdong	17814	19696	9881	17597	11881	19994	21450	22129	14349	19323	13899
Guangxi	10774	11086	7082	11204	6840	14841	11411	11249	7831	14954	11235
Hainan	9480	9368	6615	11247	13712	10744	10840	13850	8848	11505	9919
Chongqing	10960	11745	7598	10338	8838	9108	9115	13117	11777	14060	7381
Sichuan	11183	12388	7395	9233	7977	9016	8571	10020	12125	11500	10045
Guizhou	9810	10150	6566	9680	7727	6098	9820	10193	9427	9787	7819
Yunnan	11987	12429	7947	11443	8400	13534	11147	13138	11747	12397	9404
Tibet	24766	25675	9761	15693	14409	11368	16624	16438			
Shaanxi	10351	10700	6080	10796	6746	9548	10172	11814	12104	18461	5019
Gansu	11147	11791	6967	9540	10661	6611	7555	11582	10139	14012	8081
Qinghai	14472	15816	7211	9585	9674	15105	9328	9814	13406		4509
Ningxia	11640	12366	7572	10400	8350	8962	10609	9909	7976	13324	6643
Xinjiang	11605	11435	9353	12767	10031	10378	11639	19273	11706	11793	8654

Note: This table covers only the state-owned, collective and mixed ownership sectors. Private companies and the informal sector are excluded.
Source: China Statistical Yearbook.

Table 39: Labor Force by Sector
(Millions of workers)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Farming forestry, animal husbandry, fishery	341.2	349.6	348.0	339.7	333.9	330.2	329.1	330.0	332.3	334.9	333.6	329.7	324.9
Mining and quarrying	8.8	9.1	9.0	9.3	9.2	9.3	9.0	8.7	7.2	6.7	6.0	5.6	5.6
Manufacturing	86.2	88.4	91.1	93.0	96.1	98.0	97.6	96.1	83.2	81.1	80.4	80.8	83.1
Electric power, gas and water	1.9	2.0	2.2	2.4	2.5	2.6	2.7	2.8	2.8	2.9	2.8	2.9	2.9
Geological survey & exploration	2.0	2.0	2.0	1.4	1.4	1.4	1.3	1.3	1.2	1.1	1.1	1.1	1.0
Construction	24.2	24.8	26.6	30.5	31.9	33.2	34.1	34.5	33.3	34.1	35.5	36.7	38.9
Transportation, posts & telecommunications	15.7	16.2	16.7	16.9	18.6	19.4	20.1	20.6	20.0	20.2	20.3	20.4	20.8
Commerce, catering trade, supply & marketing of materials and warehouses	28.4	30.0	32.1	34.6	39.2	42.9	45.1	47.9	46.5	47.5	46.9	47.4	49.7
Real estate	0.4	0.5	0.5	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.2
Social services	5.9	6.0	6.4	5.4	6.3	7.0	7.5	8.1	8.7	9.2	9.2	9.8	10.9
Public health, sports and social welfare	5.4	5.5	5.7	4.2	4.3	4.4	4.6	4.7	4.8	4.8	4.9	4.9	4.9
Education, culture, art, radio and television broadcasting	14.6	15.0	15.2	12.1	14.4	14.8	15.1	15.6	15.7	15.7	15.7	15.7	15.6
Scientific research, technical service	1.7	1.8	1.8	1.7	1.8	1.8	1.8	1.9	1.8	1.7	1.7	1.7	1.6
Banking and insurance	2.2	2.3	2.5	2.7	2.6	2.8	2.9	3.1	3.1	3.3	3.3	3.4	3.4
Governments, parties and organizations	10.8	11.4	11.5	10.3	10.3	10.4	10.9	10.9	11.0	11.0	11.0	11.0	10.7
Others	18.0	19.1	23.1	37.4	41.6	44.9	45.6	48.6	51.2	49.7	56.4	58.5	62.5
TOTAL	567.4	583.6	594.3	602.2	614.7	623.9	628.2	635.7	623.7	624.9	629.8	630.5	637.8
Agriculture	341.2	349.6	348.0	339.7	333.9	330.2	329.1	330.0	332.3	334.9	333.6	329.7	324.9
Industry	121.2	124.3	128.8	135.2	139.6	143.2	143.4	142.1	126.5	124.7	124.7	126.0	130.5
Service	105.0	109.8	117.6	127.4	141.2	150.6	155.7	163.6	164.9	165.2	171.5	174.8	182.4

Note: 1. This table covers only the state-owned, collective and mixed ownership sectors. Private companies and the informal sector are excluded
2. Laid-off workers are excluded since 1998.

Source: China Statistical Yearbook.

Table 40: Labor Force by Employment Category

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
							(Millions of workers)						
Total	647.5	654.9	661.5	668.1	674.6	680.7	689.5	698.2	706.4	713.9	720.9	730.25	737.4
Total Urban Laborers	170.4	174.7	178.6	182.6	186.5	190.4	199.2	207.8	216.2	224.1	231.5	239.4	247.8
State-owned	103.5	106.6	108.9	109.2	112.1	112.6	112.4	110.4	90.6	85.7	81.0	76.4	71.6
Urban collective-owned	35.5	36.3	36.2	33.9	32.9	31.5	30.2	28.8	19.6	17.1	15.0	12.9	11.2
Other ownership	31.5	31.7	33.5	39.5	41.5	46.3	56.6	68.6	106.0	121.3	135.5	150.1	165.0
Rural laborers	477.1	480.3	482.9	485.5	488.0	490.3	490.3	490.4	490.2	489.8	489.3	490.9	489.6
							(Percentage of total)						
Total Urban Laborers	26.3	26.7	27.0	27.3	27.7	28.0	28.9	29.8	30.6	31.4	32.1	32.8	33.6
State-owned	16.0	16.3	16.5	16.3	16.6	16.5	16.3	15.8	12.8	12.0	11.2	10.5	9.7
Urban collective-owned	5.5	5.5	5.5	5.1	4.9	4.6	4.4	4.1	2.8	2.4	2.1	1.8	1.5
Other ownership	4.9	4.8	5.1	5.9	6.2	6.8	8.2	9.8	15.0	17.0	18.8	20.6	22.4
Rural laborers	73.7	73.3	73.0	72.7	72.3	72.0	71.1	70.2	69.4	68.6	67.9	67.2	66.4
							(Growth rates)						
Total	17.0	1.1	1.0	1.0	1.0	0.9	1.3	1.3	1.2	1.1	1.0	1.3	1.0
Total Urban Laborers	18.4	2.5	2.3	2.2	2.1	2.1	4.6	4.3	4.0	3.7	3.3	3.4	3.5
State-owned	2.3	3.1	2.1	0.3	2.7	0.4	-0.2	-1.8	-18.0	-5.4	-5.5	-5.7	-6.2
Urban collective-owned	1.3	2.2	-0.2	-6.3	-3.2	-4.2	-4.0	-4.6	-31.8	-12.8	-12.4	-13.9	-13.2
Other ownership	7.2	0.9	5.6	17.8	5.2	11.5	22.2	21.2	54.4	14.5	11.7	10.8	9.9
Rural laborers	16.5	0.7	0.6	0.5	0.5	0.5	0.0	0.0	0.0	-0.1	-0.1	0.3	-0.3

Note: 1. This table covers only the state-owned, collective and mixed ownership sectors. Private companies and the informal sector are excluded.
2. Laid-off workers are excluded since 1998.

Source: China Statistical Yearbook.

Table 41: Total Investment in Fixed Assets

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						(Billions of RMB)							
Total fixed investment	451.7	559.5	808.0	1,307.2	1,704.3	2,001.9	2,291.4	2,494.1	2,840.6	2,985.5	3,291.8	3,721.4	4320.2
State-owned	298.6	371.4	549.9	792.6	961.6	1,089.8	1,200.6	1,309.2	1,536.9	1,594.8	1,650.4	1760.7	1887.7
Collective-owned	52.9	69.8	135.9	231.7	275.9	328.9	365.2	385.1	419.2	433.9	480.2	527.9	590.2
Individual-owned	100.1	118.3	122.2	147.6	197.1	256.0	321.1	342.9	374.4	419.6	470.9	543	628
Other				135.3	269.8	327.1	404.5	456.9	510.0	537.3	690.3	889.8	1211.6
						(Percentage of total)							
Total fixed investment	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	101.0
State-owned	66.1	66.4	68.1	60.6	56.4	54.4	52.4	52.5	54.1	53.4	50.1	47.3	43.7
Collective-owned	11.7	12.5	16.8	17.7	16.2	16.4	15.9	15.4	14.8	14.5	14.6	14.2	13.7
Individual-owned	22.2	21.1	15.1	11.3	11.6	12.8	14.0	13.7	13.2	14.1	14.3	14.6	14.5
Other	0.0	0.0	0.0	10.4	15.8	16.3	17.7	18.3	18.0	18.0	21.0	23.9	28.0
Total fixed investment/GDP (%)	24.4	25.9	30.3	37.7	36.4	34.4	33.8	33.8	33.8	33.8	33.8	38.2	41.2

Note: In 1997, the cut-off point of investment statistics to be included in statistical surveys on capital construction, on technical transformation and other investment statistics was changed from a minimum of 50,000 yuan to the minimum of 500,000 yuan, except statistics on investment in housing, rural collective investment and individual investment. Data before 1996 were based on the old coverage and data after 1996(including 1996) were based on the new coverage.
Source: China Statistical Yearbook.

Table 42: Investment in Fixed Assets by Source[a]

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						(Billions of RMB)							
Fixed Investment	451.8	559.4	808.0	1,307.2	1,782.7	2,052.5	2,335.9	2,526.0	2,871.7	2,975.5	3,311.0	3,798.7	4,504.7
State Budget	39.3	38.0	34.7	48.4	53.0	62.1	62.6	69.7	119.7	185.2	210.9	254.6	316.1
Domestic loans	88.5	131.5	221.4	307.2	399.8	419.9	457.4	478.3	554.3	572.6	672.7	724.0	885.9
Foreign investment	28.5	31.9	46.9	95.4	176.9	229.6	274.7	268.4	261.7	200.7	169.6	173.1	208.5
Others	295.4	358.0	505.0	856.2	1,153.1	1,340.9	1,541.2	1,709.6	1,936.0	2,017.0	2,257.7	2,647.0	3,094.2
						(Percentage of total)							
Fixed Investment	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
State Budget	8.7	6.8	4.3	3.7	3.0	3.0	2.7	2.8	4.2	6.2	6.4	6.7	7.0
Domestic loans	19.6	23.5	27.4	23.5	22.4	20.5	19.6	18.9	19.3	19.2	20.3	19.1	19.7
Foreign investment	6.3	5.7	5.8	7.3	9.9	11.2	11.8	10.6	9.1	6.7	5.1	4.6	4.6
Others	65.4	64.0	62.5	65.5	64.7	65.3	66.0	67.7	67.4	67.8	68.2	69.7	68.7

[a] In 1997, the cut-off point of investment statistics to be included in statistical surveys on capital construction, on technical transformation and other investment statistics was changed from a minimum of 50,000 yuan to the minimum of 500,000 yuan, except statistics on investment in housing, rural collective investment

Source : China Statistical Yearbook.

Table 43: Investment in Capital Constuction by Sector

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						(Billions of yuan)							
All Sectors	170.4	211.6	301.3	461.6	643.7	740.4	857.1	991.7	1191.6	1245.5	1342.7	1482.0	1766.7
Agriculture	2.6	3.3	4.4	4.6	5.7	7.7	10.9	15.4	22.5	29.9	36.1	43.5	58.8
Mining & quarrying	20.5	24.3	30.3	35.1	39.5	43.8	49.9	64.9	54.1	47.4	58.9	64.5	68
Manufacturing	38.2	47.8	59.9	88.5	121.6	154.0	168.0	153.2	148.4	118.3	117.5	150.9	209.8
Supply of electric power, gas and water	36.6	42.6	55.6	76.9	115.1	125.8	154.6	193.9	214.5	219.3	248.0	219.6	245.9
Construction	1.0	1.3	2.3	11.5	13.8	14.6	18.3	15.1	15.8	22.4	19.7	18.9	26.9
Geological prospecting & water conservancy	4.6	5.9	8.2	9.8	12.1	16.6	22.8	27.7	43.3	55.7	59.7	57.0	72
Transport & telecommunication services	21.1	34.0	45.8	90.1	137.3	158.8	184.5	219.7	325.2	342.9	364.2	411.6	439.4
Commerce	3.9	6.4	13.7	20.3	25.5	24.9	25.1	26.5	29.5	27.9	29.3	34.2	39.7
Finance & insurance	1.5	1.9	3.0	6.7	9.6	12.6	13.5	14.3	14.8	12.7	9.0	9.3	6.5
Real Estate	1.5	2.8	5.6	14.1	31.6	18.3	14.0	14.6	18.6	18.5	15.2	16.9	20.2
Social services	6.7	9.4	15.4	30.2	41.7	49.0	60.8	82.0	112.4	135.6	161.2	196.5	258.8
Health care, sports & social welfare	3.5	3.3	4.6	6.6	9.4	10.5	12.3	14.9	18.5	19.9	21.8	26.6	33.9
Educaiton, Health, & Culture etc.	10.3	11.9	15.1	20.4	26.2	35.3	41.8	52.9	61.6	71.2	82.3	95.1	116.5
Scientific research & polytechnic services	2.1	2.3	3.2	4.9	5.3	6.8	6.5	6.8	7.6	8.9	10.3	12.6	13.9
Government Agencies & Other	6.2	8.8	14.2	30.1	37.7	47.4	58.1	71.6	88.8	100.6	87.8	100.6	135.3
Others	10.1	5.6	20.1	11.7	11.7	14.4	16.1	18.1	16.1	14.5	21.7	24.2	21
						(Percentage of total)							
All Sectors	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	1.5	1.6	1.4	1.0	0.9	1.0	1.3	1.6	1.9	2.4	2.7	2.9	3.3
Mining & quarrying	12.0	11.5	10.1	7.6	6.1	5.9	5.8	6.5	4.5	3.8	4.4	4.3	3.8
Manufacturing	22.4	22.6	19.9	19.2	18.9	20.8	19.6	15.4	12.5	9.5	8.8	10.2	11.9
Supply of electric power, gas and water	21.5	20.1	18.4	16.7	17.9	17.0	18.0	19.6	18.0	17.6	18.5	14.8	13.9
Construction	0.6	0.6	0.8	2.5	2.1	2.0	2.1	1.5	1.3	1.8	1.5	1.3	1.5
Geological prospecting & water conservancy	2.7	2.8	2.7	2.1	1.9	2.2	2.7	2.8	3.6	4.5	4.4	3.8	4.1
Transport & telecommunication services	12.4	16.1	15.2	19.5	21.3	21.4	21.5	22.2	27.3	27.5	27.1	27.8	24.9
Commerce	2.3	3.0	4.5	4.4	4.0	3.4	2.9	2.7	2.5	2.2	2.2	2.3	2.2
Finance & insurance	0.9	0.9	1.0	1.4	1.5	1.7	1.6	1.4	1.2	1.0	0.7	0.6	0.4
Real Estate	0.9	1.3	1.9	3.1	4.9	2.5	1.6	1.5	1.6	1.5	1.1	1.1	1.1
Social services	3.9	4.4	5.1	6.5	6.5	6.6	7.1	8.3	9.4	10.9	12.0	13.3	14.6
Health care, sports & social welfare	2.1	1.6	1.5	1.4	1.5	1.4	1.4	1.5	1.5	1.6	1.6	1.8	1.9
Educaiton, Health, & Culture etc.	6.0	5.6	5.0	4.4	4.1	4.8	4.9	5.3	5.2	5.7	6.1	6.4	6.6
Scientific research & polytechnic services	1.2	1.1	1.0	1.1	0.8	0.9	0.8	0.7	0.6	0.7	0.8	0.9	0.8
Government Agencies & Other	3.6	4.1	4.7	6.5	5.9	6.4	6.8	7.2	7.5	8.1	6.5	6.8	7.7
Others	5.9	2.6	6.7	2.5	1.8	1.9	1.9	1.8	1.3	1.2	1.6	1.6	1.2

Note: 1. In 1997,the cut-off point of investment statistics to be included in statistical surveys on capital construction, on technical transformation and other investment statistic was changed from a minimum of 50,000 yuan to the minimum of 500,000 yuan, except statistics on investment in housing, rural collective investment and individual investment. Data before 1996 were based on the old coverage and data after 1996(including 1996) were based on the new coverage.

2. Investment in capital construction in this table include not only that by State-owned units but also that by units of join-owned, share-holding, foreign-funded, Hong Kong-Macao- Taiwan-funded, which are included in the plan of capital construction and innovation.

Source: China Statistical Yearbook.

Table 44: Foreign Direct Investments Inflows
(Millions of US dollars)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
TOTAL	3,754.9	4,666.6	11,291.6	27,770.9	33,945.8	37,805.7	42,135.2	52,387.3	45,462.8	40,318.7	40,714.8	46,877.6	52,742.9
of which, from													
Hong Kong & Macao	2,118.5	2,661.8	7,908.9	18,032.5	20,332.1	20,624.9	21,457.9	21,954.4	18,929.9	16,672.7	15,847.3	17,038.4	18,329.3
Japan	520.5	609.5	748.3	1,361.4	2,086.2	3,212.5	3,692.1	4,390.4	3,400.4	2,973.1	2,915.9	4,348.4	4,190.1
Korea	..	..	674.8	381.5	726.1	1,047.1	1,504.2	2,227.6	1,803.2	1,274.7	1,489.6	2,151.8	2,720.7
Taiwan (China)	..	471.9	1,053.4	3,139.1	3,391.3	3,165.2	3,482.0	3,342.0	2,915.2	2,598.7	2,296.6	2,979.9	3,970.6
United Kingdom	19.9	37.9	38.5	220.5	688.8	915.2	1,301.9	1,859.6	1,174.9	1,044.5	1,164.1	1,051.7	895.8
France	23.4	11.7	46.9	141.4	193.4	287.0	424.7	475.9	714.9	884.3	853.2	532.5	575.6
Italy	8.1	41.3	26.7	99.9	206.2	270.2	169.4	218.1	274.6	187.4	209.5	220.0	176.7
United States	461.2	330.7	519.4	2,067.9	2,490.8	3,083.7	3,444.2	3,461.2	3,898.4	4,215.9	4,383.9	4,433.2	5,423.9
RECEIVED BY PROVINCES													
Regional Total	3,436.4	4,425.8	11,003.3	27,341.7	33,267.7	37,215.5	41,879.7	46,374.4	45,283.9	39,934.8	40,332.9	46,367.0	52,471.3
Beijing	279.0	245.0	349.9	666.9	1,371.6	1,080.0	1,552.9	1,592.9	2,168.0	1,975.3	1,683.7	1,768.2	1,724.6
Tianjin	36.9	132.6	107.8	613.7	1,015.0	1,520.9	2,006.4	2,511.4	2,113.6	1,764.0	1,166.0	2,133.5	1,582.0
Hebei	44.5	56.6	113.1	396.5	523.4	546.7	825.9	1,100.6	1,428.7	1,042.0	679.2	669.9	782.7
Shanxi	3.4	3.8	53.8	86.4	31.7	63.8	138.0	265.9	244.5	391.3	224.7	233.9	211.6
Inner Mongolia	10.6	1.7	5.2	85.3	40.1	57.8	71.9	73.3	90.8	64.6	105.7	107.0	177.0
Liaoning	257.3	362.4	516.4	1,279.1	1,440.1	1,424.6	1,737.7	2,204.7	2,190.5	1,061.7	2,044.5	2,516.1	3,411.7
Jilin	17.6	31.6	75.3	275.3	241.9	408.0	451.6	402.3	409.2	301.2	337.0	337.7	244.7
Heilongjiang	28.4	20.9	72.2	232.3	347.6	516.9	548.4	734.9	526.4	318.3	300.9	341.1	355.1
Shanghai	174.0	145.2	493.6	3,160.3	2,473.1	2,892.6	3,940.9	4,225.4	3,601.5	2,836.7	3,160.1	4,291.6	4,272.3
Jiangsu	134.0	219.2	1,463.2	2,843.7	3,763.2	5,190.8	5,210.1	5,435.1	6,631.8	6,077.6	6,425.5	6,914.8	10,189.6
Zhejiang	49.1	92.3	239.8	1,031.8	1,150.3	1,258.1	1,520.5	1,503.5	1,318.0	1,232.6	1,612.7	2,211.6	3,075.1
Anhui	13.5	10.7	54.7	257.6	370.0	482.6	506.6	434.4	276.7	261.3	318.5	336.7	383.8
Fujian	319.9	471.2	1,423.6	2,874.4	3,713.2	4,043.9	4,084.5	4,197.1	4,212.1	4,024.0	3,431.9	3,918.0	3,838.4
Jiangxi	7.5	19.5	99.7	208.2	261.7	288.9	300.7	481.0	465.0	320.8	227.2	395.8	1,082.0
Shandong	185.7	216.4	1,003.4	1,874.1	2,552.4	2,689.0	2,633.6	2,775.6	2,202.7	2,258.8	2,971.2	3,520.9	4,734.0
Henan	11.4	38.0	53.2	304.9	386.7	478.6	523.6	692.0	616.5	521.4	564.0	457.3	404.6
Hubei	31.8	46.6	203.1	540.5	601.9	625.1	680.0	790.2	972.9	914.9	943.7	1,188.6	1,426.7
Hunan	14.2	25.4	132.7	437.5	331.1	507.7	703.4	917.0	818.2	653.7	678.3	810.1	900.2
Guangdong	1,582.3	1,942.9	3,701.1	7,555.8	9,463.4	10,260.1	11,754.1	12,635.0	12,019.9	11,657.5	11,280.9	11,932.0	11,334.0
Guangxi	35.6	31.9	182.0	884.6	836.3	672.6	663.1	885.8	886.1	635.1	524.7	384.2	417.3
Hainan	103.0	176.7	452.6	707.1	918.1	1,062.1	789.1	705.5	717.2	484.5	430.8	466.9	512.0
Chongqing	3.3		90.2	190.3	439.5	357.4		418.0	431.1	238.9	244.4	256.5	195.8
Sichuan	21.1	80.9	22.0	381.1	482.3	184.2	440.9	248.5	372.5	341.0	436.9	581.9	555.8
Guizhou	11.1	16.3	19.8	42.9	63.6	57.0	31.4	49.8	45.4	40.9	25.0	28.3	38.2
Yunnan	7.4	3.5	28.8	97.0	65.0	97.7	65.4	165.7	145.7	153.9	128.1	64.6	111.7
Tibet													
Shaanxi	47.3	31.8	45.5	234.3	238.8	324.1	325.1	628.2	300.1	242.0	288.4	351.7	360.1
Gansu	1.2	4.8	0.4	12.0	87.8	63.9	90.0	41.4	38.6	41.0	62.4	74.4	61.2
Qinghai	0.0	0.0	0.7	3.2	2.4	1.6	1.0	2.5	..	4.6	..	36.5	47.3
Ningxia	0.3	0.2	0.4	11.9	7.3	3.9	5.6	6.7	18.6	51.3	17.4	16.8	22.0
Xinjiang	5.4	0.2	0.0	53.0	48.3	54.9	63.9	24.7	21.7	24.0	19.1	20.4	19.0

Source: China Statistical Yearbook.

Table 45: Production and Consumption of Energy

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
PRODUCTION (millions of tons of coal equivalent)	1,039.2	1,048.4	1,072.6	1,110.6	1,187.3	1,290.3	1,326.2	1,324.1	1,242.5	1,091.3	1,070.0	1209	1390
							(Percentage of total)						
Coal	74.2	74.1	74.3	74.0	74.6	75.3	75.2	74.1	71.9	68.3	66.6	68.6	70.7
Crude oil	19.0	19.2	18.9	18.7	17.6	16.6	17.0	17.3	18.5	21.0	21.8	19.4	17.2
Natural gas	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.1	2.5	3.1	3.4	3.3	3.2
Hydro power	4.8	4.7	4.8	5.3	5.9	6.2	5.8	6.5	7.1	7.6	8.2	8.7	8.9
CONSUMPTION	987.0	1,037.8	1,091.7	1,159.9	1,227.4	1,311.8	1,389.5	1,378.0	1,322.1	1,301.2	1,303.0	1349	1480
							(Percentage of total)						
Coal	76.2	76.1	75.7	74.7	75.0	74.6	74.7	71.5	69.6	68.0	66.1	65.3	66.1
Crude oil	16.6	17.1	17.5	18.2	17.4	17.5	18.0	20.4	21.5	23.2	24.6	24.3	23.4
Natural gas	2.1	2.0	1.9	1.9	1.9	1.8	1.8	1.7	2.2	2.2	2.5	2.7	2.7
Hydro power	5.1	4.8	4.9	5.2	5.7	6.1	5.5	6.2	6.7	6.6	6.8	7.7	7.8
GDP (billion of yuan, constant 1990 price)	1,854.8	2,025.4	2,313.0	2,625.3	2,956.1	3,266.5	3,580.1	3,895.1	4,198.9	4,497.1	4,856.8	5,221.1	5,638.8
Energy consumption/ GDP (%) (ton per yuan)	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3

Notes: Excluding bio-energy, solar, geothermal and nuclear energy. All fuels are converted into standard fuel with thermal equivalent of 7,000 kilocalories per kilogram. The conversion is
1 kg of coal (5,000 kcal) = 0.714 kg of standard fuel.
1 kg of crude oil (10,000 kcal) = 1.43 kg of standard fuel.
1 cubic meter of natural gas (9,310 kcal) = 1.33 kg. of standard fuel.
The conversion of hydropower into standard fuel is calculated on the basis of the consumption quota of standard coal for thermal power generation for the year.
Source: China Statistical Yearbook.

Table 46: Freight Traffic

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						(Billion ton-km)							
Rail	1,062.2	1,097.2	1,157.6	1,195.5	1,245.8	1,287.0	1,304.4	1,325.3	1,251.7	1,283.8	1,390.2	1,457.5	1,551.6
Road	335.8	342.8	375.5	407.1	448.6	469.5	501.1	527.2	548.3	572.4	612.9	633.0	678.2
Waterways	1,159.2	1,295.5	1,325.6	1,386.1	1,568.7	1,755.2	1,786.3	1,923.5	1,940.6	2,126.3	2,373.4	2,598.9	2,751.1
Pipelines	62.7	62.1	61.7	60.8	61.2	59.0	58.5	57.9	60.6	62.8	63.6	65.3	100.7
Civil aviation	0.7	1.0	1.3	1.7	1.9	2.2	2.5	2.9	3.3	4.2	5.0	4.4	5.2
OVERALL	2,620.7	2,798.6	2,921.8	3,051.0	3,326.1	3,573.0	3,652.8	3,836.8	3,804.6	4,049.6	4,445.2	4,759	5,087
						(Percentage of total)							
Rail	40.5	39.2	39.6	39.2	37.5	36.0	35.7	34.5	32.9	31.7	31.3	30.6	30.5
Road	12.8	12.2	12.9	13.3	13.5	13.1	13.7	13.7	14.4	14.1	13.8	13.3	13.3
Waterways	44.2	46.3	45.4	45.4	47.2	49.1	48.9	50.1	51.0	52.5	53.4	54.6	54.1
Pipelines	2.4	2.2	2.1	2.0	1.8	1.7	1.6	1.5	1.6	1.6	1.4	1.4	2.0
Civil aviation	--	--	--	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OVERALL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	101.0
						(Growth rate)							
Rail	2.2	3.3	5.5	3.3	4.2	3.3	1.4	1.6	-5.6	2.6	8.3	4.8	6.5
Road	-0.5	2.1	9.6	8.4	10.2	4.6	6.7	5.2	4.0	4.4	7.1	3.3	7.1
Waterways	3.6	11.8	2.3	4.6	13.2	11.9	1.8	7.7	0.9	9.6	11.6	9.5	5.9
Pipelines	-0.3	-1.0	-0.6	-1.5	0.7	-3.6	-0.8	-1.0	4.7	3.6	1.3	2.7	54.2
Civil aviation	18.8	23.2	32.9	23.8	11.9	20.0	12.1	16.0	15.3	26.5	18.9	-12.5	17.3
OVERALL	2.4	6.8	4.4	4.4	9.0	7.4	2.2	5.0	-0.8	6.4	9.8	7.1	6.9

Source: China Statistical Yearbook.

Table 47: Passenger Traffic

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						(Billion passenger-km)							
Rail	261.3	282.8	315.2	348.3	363.6	354.6	334.8	358.5	377.3	413.6	453.3	476.7	496.9
Road	262.0	287.2	319.3	370.1	422.0	460.3	490.9	554.1	594.3	619.9	665.7	720.7	780.6
Waterways	16.5	17.7	19.8	19.6	18.4	17.2	16.1	15.6	12.0	10.7	10.1	9.0	8.2
Civil aviation	23.0	30.1	40.6	47.8	55.2	68.1	74.8	77.4	80.0	85.7	97.1	109.1	126.9
OVERALL	562.8	617.8	694.9	785.8	859.1	900.2	916.5	1005.6	1063.7	1130.0	1226.1	1315.5	1412.6
						(Percentage of total)							
Rail	46.4	45.8	45.4	44.3	42.3	39.4	36.5	35.7	35.5	36.6	37.0	36.2	35.2
Road	46.6	46.5	45.9	47.1	49.1	51.1	53.6	55.1	55.9	54.9	54.3	54.8	55.3
Waterways	2.9	2.9	2.9	2.5	2.1	1.9	1.8	1.6	1.1	0.9	0.8	0.7	0.6
Civil aviation	4.1	4.9	5.8	6.1	6.4	7.6	8.2	7.7	7.5	7.6	7.9	8.3	9.0
OVERALL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
						(Growth rate)							
Rail	-14.0	8.2	11.5	10.5	4.4	-2.5	-5.6	7.1	5.2	9.6	9.6	5.2	4.2
Road	-1.6	9.6	11.2	15.9	14.0	9.1	6.6	12.9	7.3	4.3	7.4	8.3	8.3
Waterways	-12.4	7.5	11.9	-1.0	-6.6	-6.4	-6.3	-3.1	-22.9	-10.8	-6.3	-10.4	-8.9
Civil aviation	23.4	30.7	34.8	17.6	15.5	23.5	9.8	3.5	3.4	7.2	13.2	12.4	16.3
OVERALL	-7.3	9.8	12.5	13.1	9.3	4.8	1.8	9.7	5.8	6.2	8.5	7.3	7.4

Source: China Statistical Yearbook.

Table 48: Average Shipping Distance

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						(Kilometers)							
Rail	705	718	734	735	791	807	766	770	763	768	767	757	760
Road	46	46	48	48	50	50	51	54	56	58	59	60	61
Waterways	1,447	1,554	1,433	1,415	1,465	1,551	1,402	1,696	1,771	1,855	1,939	1,959	1,940
Pipelines	398	399	417	409	406	386	366	362	348	310	340	336	339
Civil aviation	2,218	2,234	2,330	2,393	2,241	2,206	2,168	2,334	2,388	2,482	2,556	2,557	2,251
OVERALL	270	284	279	274	282	289	282	300	300	313	326	340	341
						(Growth rate)							
Rail	2.8	1.8	2.2	0.1	7.6	2.0	-5.1	0.5	-0.9	0.7	-0.1	-1.3	0.4
Road	0.0	0.0	4.3	0.0	4.2	0.0	2.0	5.9	3.7	3.6	1.7	1.7	1.7
Waterways	13.0	7.4	-7.8	-1.3	3.5	5.9	-9.6	21.0	4.4	4.7	4.5	1.0	-1.0
Pipelines	-1.0	0.3	4.5	-1.9	-0.7	-4.9	-5.2	-1.1	-3.9	-10.9	9.7	-1.2	0.9
Civil aviation	-0.4	0.7	4.3	2.7	-6.4	-1.6	-1.7	7.7	2.3	3.9	3.0	0.0	-12.0
OVERALL	4.7	5.2	-1.8	-1.8	2.9	2.5	-2.4	6.4	0.0	4.3	4.2	4.3	0.3

Source: China Statistical Yearbook.