Medium and Long Term Development and Transformation Of the Chinese Economy

-- An International Perspective

A Synthesis Report

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Background Papers (Papers are available at www.cairncrossfund.org)

1. K.Y. Amoako: "Africa's Expectation of China in the Global Economy"
2. A B Atkinson: "Issues in the Reform of Social Policy in China"
3. Judith Banister, David Bloom & Larry Rosenberg: "Population Aging and Economic Growth in China"
4. Nicholas Barr & Peter Diamond: "Pension Reform in China: Issues, Options and Recommendations"
5. Nicholas Barr & Howard Glennerster: "Social Policy: A Central Element in China's Development"
6. Cai Fang, Richard Freeman & Adrian Wood: "China's Employment Policies in International Perspective"
7. Andrew Crockett: "China's Role in the World Economy: Looking Forward to the 12th Five-Year Plan"
8. Barry Eichengreen: "What Kind of Economic and Financial Leadership Does the World Expect of China? -- Lessons from Two Historical Episodes"
9. Mohamed EL-Erian & Ramin Toloui: "What Does the World Expect from China, and What Should China Provide?"
10. Shenggen Fan, Ravi Kanbur & Xiaobo Zhang: "China's Regional Disparities: Experience and Policy"
11. J. Vernon Henderson: "Urbanization in China: Policy Issues and Options"
12. Homi Kharas: "China's Transition to a High Income Economy: Escaping the Middle Income Trap"
13. Santiago Levy: "Some Remarks on Social Policy from Latin America"
14. Li and Fung Research Centre: "A Business Perspective on Decentralization of Production and Manufacturing for the Domestic Market in China"
15. Li Shi: "Social Policy Reform in China"

16. Jean Pisani-Ferry: “China and the World Economy: an European Perspective”
17. Paul Romer: “Notes on Optimizing China’s New Pattern of Growth”
18. Andrew Sheng: “China’s Approach to Networked Globalization – an Institutional Response”
19. Christine Wong: “Public Sector Reforms toward Building the Harmonious Society in China”
20. Yves Zenou: “Housing Policies in China: Issues and Options”

Foreword

This study was conducted in 2009-2010 by an international team headed by Michael Spence, Nobel Laureate, and Edwin Lim, the first Chief Representative of the World Bank in China. Undertaken at the request of the Office of Central Leading Group on Financial and Economic Affairs (Zhong Cai Ban) and the National Development and Reform Commission (NDRC) of the People's Republic of China, the purpose of the study was to provide some thoughts and suggestions on China's medium and long term development and the 12th Five Year Plan (2011-2015) from an international perspective.

The international team comprised prominent economists and experts from universities, businesses and public institutions from around the world. Members of the team were:

K.Y. Amoako. *former Executive Secretary of the UN Economic Commission for Africa*

A. B. Atkinson, *Research Professor, Oxford University*

Judith Banister, *Director of Global Demographics at the Conference Board (USA)*

Nicholas Barr, *Professor of Public Economics, London School of Economics*

David Bloom, *Professor of Economics and Demography, Harvard University*

Cai Fang, *Director of the Institute of Population and Labor Economics, CASS*

Andrew Crockett, *President of J.P. Morgan Chase International; former General Manager of the Bank for International Settlements*

Peter Diamond, *Nobel Laureate in 2010, Institute Professor of Economics, MIT*

Barry Eichengreen, *Professor of Economics and Political Science, University of California, Berkeley*

Mohamed EL-Erian, *CEO of PIMCO*

Shenggen Fan, *Director-General, International Food Policy Research Institute*

Richard Freeman, *Professor of Economics, Harvard University*

Howard Glennerster, *Professor Emeritus of Social Policy, London School of Economics*

J. Vernon Henderson, *Professor of Economics and Urban Studies, Brown University, and NBER*

Ravi Kanbur, *International Professor of Applied Economics and Management, Cornell University*

Homi Kharas, *former Chief Economist, East Asia Region, World Bank*

Santiago Levy, *Vice President for Sector and Knowledge, Inter-America Development Bank; former Deputy Minister of Finance, Mexico*

Li Shi, *Professor, Beijing Normal University*

Edwin Lim, *first Chief Representative of the World Bank in China; founding CEO of China International Capital Corporation*

Jean Pisani-Ferry, *Director of the Bruegel Institute*

Ian Porter, *former Director, the World Bank*

Paul Romer, *Professor of Economics, Stanford University*

Andrew Sheng, *Chief Advisor to the China Banking Regulatory Commission; former Chairman of Hong Kong Securities and Futures Commission*

Michael Spence, *Nobel Laureate, Professor in Economics, New York University; Professor Emeritus of Management, Stanford University)*

Christine Wong, *Senior Research Fellow, Oxford University*

Adrian Wood, *Professor of International Development, Oxford University*

Yves Zenou, *Professor of Economics, Stockholm University*

Xiaobo Zhang, *Senior Research Fellow, International Food Policy Research Institute)*

Li & Fung Research Center (Hong Kong)

The study was guided by an Advisory Committee that included: Liu Zhongli, Xiang Huaicheng, Wu Jinglian, Zhou Xiaochuan, Lou Jiwei, Guo Shuqing, Li Jiange, Liu He, Victor Fung (Hong Kong) and Teh Kok-Peng (Singapore).

In the course of study, the international team maintained close contacts with the relevant departments of Zhong Cai Ban and NDRC. The international team met with Vice Minister Liu He of Zhong Cai Ban and Secretary General Yang Weimin of NDRC on numerous occasions to exchange views that played an important role in the preparation and completion of the study. Invaluable support was received from Deputy Director- General Han Wenxiu, Deputy Director-General Wang Zhijun, Deputy Director-General Meng Jian of Zhong Cai Ban, and Deputy Director-General Tian Jinchen and Director Zhang Gengtian of the Planning Department, NDRC, in the execution of the study. The NDRC also provided a grant for this study.

The study was mainly funded and supported by Beijing Cairncross Economic Research Foundation. Professor Zhao Renwei, President of the Foundation, participated fully in the study's preparation, implementation and dissemination and also provided comprehensive advice. Comprehensive organizational, logistical and coordination support was received from the Foundation's Programme Director, Dr. Cyril Lin, and the Secretary-General, Susan Su.

Financial and administrative support was also provided by the East Asian Institute (EAI) of the National University of Singapore. Since 2004, the EAI has supported a number of research studies on Chinese policy issues directed by Prof. Michael Spence and Mr. Edwin Lim, beginning with a study on social security reform and most recently a study on urbanization. Findings from these studies have contributed significantly to the present study. Within EAI, Professor Zheng Yongnian, Director, and Lian Wee Li, Senior Associate Director, in particular provided valuable support.

Simon Cox edited the earlier shorter version of the synthesis report as well as the current expanded version. He brought both clarity and consistency to the various chapters of the report that were prepared by different authors.

The study benefited from discussions with leading Chinese economists and officials who provided invaluable comments on the synthesis report. They included: Bai Chong-en, Ding Ningning, Fu Jun, He Di, Lai Desheng, Long Guoqiang, Lu Feng, Ma Xiaohe, Qian Yingyi, Wang Xiaolu, Wu Xiaoling, Xu Shanda, Yi Gang, Yu Yongding, Zhang Weiying and Zhang Xiulan.

The People's Bank of China, the Institute of Population and Labor Economics (CASS), China International Capital Corporation Ltd (CICC) and the China Development Research Foundation kindly organized discussions and seminars for the international and Chinese experts in the course of the study. The participants included: Chen Jiagui, Chen Yulu, Cui Zhiyuan, Du Yang, Gao Shiji, Ge Yanfeng, Ha Jiming, Han Jun, He Ping, He Yupeng, Jing Tiankui, Li Daokui, Li Shantong, Li Yang, Liu Guo-en, Liu Guohong, Lu Mai, Lu Xueyi, Lu Ying, Shan Jingjing, Shen Bing, Si Jinsong, Song Li, Song Xiaowu, Su Ming, Tang Min, Wang Dewen, Wang Jianlun, Wang Yanzhong, Wang Youqiang, Wang Zhenyao, Xie Duo, You Jun, Yu Faming, Zeng Xiangquan, Zhang Li, Zhang Xiulan, Zhang

Zhenzhong, Zhao Dianguo, Zheng Bingwen, Zheng Gongcheng, Zheng Yongnian, Zhu Ling, Zhu Min, Louis Kuijs, Philip O'Keefe and Yvonne Sin.

The heads of the study's international team would like to express their deep gratitude to all those who contributed and provided support to the study. The findings, interpretations, and conclusions expressed in each of the background papers are the responsibilities of the author(s) alone.

Preface

It is my honor that Mr. Edwin Lim invited me to write a Preface for this research report. This research on China's medium and long term development strategy was initiated by the Beijing Cairncross Economic Research Foundation at the invitation of the Office of the Central Leading Group on Finance and Economics and the National Development and Reform Commission (NDRC). Mr. Lim and Nobel Laureate Professor Michael Spence were responsible for the overall study. To this end, they invited more than 20 eminent economists from different institutions around the world to participate, each drafting a background paper in their areas of expertise.

The international team included prominent economists with diverse backgrounds and experiences, including, for example, Professor Peter Diamond, the winner of the 2010 Nobel Prize in Economics, Professor Paul Romer, the father of the "New Growth Theory", and Mr. Mohamed El-Erian, CEO of PIMCO, one of the largest asset management companies in the world. Our objective on the Chinese side in requesting this study was to have the opinions of the international experts on the formulation of China's 12th Five Year Plan.

This study began in early 2009 and was completed just before the Spring Festival of 2010. In the intervening period, the participating experts met with us many times to exchange views on the scope as well as the substance of the study.

I believe this research report is of a high quality. It is compulsory reading for anyone interested in understanding China in the context of global structural changes and in understanding the key development trends in China. Because of the broad perspectives and deep knowledge of the top experts, the report accurately analyzes the trends, key areas and priorities in China's development and reform. It is an important and valuable reference for policy making.

At the completion of the study, in accordance with our suggestion, Professor Spence, Professor Paul Romer, Mr. Ian Porter (former Director of the World Bank) and Mr. Lim summarized and integrated the key findings in a synthesis report entitled "Thoughts and Suggestions for China's 12th Five Year Plan from an International Perspective." When we received this report, we discovered it was full of insights on China's development over the coming five years.

The report was soon distributed to every member of the team drafting the Chinese Government's "Proposal" for the 12th Five Year Plan. This was a high level and large team led by Premier Wen Jiabao and Vice Premier Li Keqiang. More than 70 ministers, experts and scholars participated in this important assignment. Without doubt, the research report submitted by the team of international experts played an important role in the formulation of the "Proposal" for the 12th Five Year Plan.

China's 12th Five Year Plan presents the future Chinese economic and social development strategy. Coming after the global financial crisis and at a time when China is beginning its evolution into a high income country, it is an important strategy at a critical junction in history. The strategy not only defines the direction for the building of a "Xiao Kang" society in China but will also greatly influence the global economic balance and the welfare of humankind. It was a fortunate and rare opportunity for any one able to participate in the formulation of the 12th FYP, given its significance. These participants should also be thanked.

Let me use this opportunity, on behalf of the Chinese agencies involved, to express our sincere appreciation to the international team of experts headed by Professor Spence and Mr. Lim. I would also propose that China should establish a special award for those international experts who have made important contributions to China's reform and openness. Because of them, China was able to acquire advanced development concepts and "valuable (stepping) stones from distant mountains."

It is unprecedented in China for official Government agencies to invite international experts without official affiliations to conduct a study of China's development strategy. We now see that this is a unique method of cooperation that assures high quality and high efficiency. I hope we can continue to cooperate in this way in the future.

Liu He 刘鹤 2011 年 3 月 10 日

Chapter 1 Introduction: International Growth Experience[1]

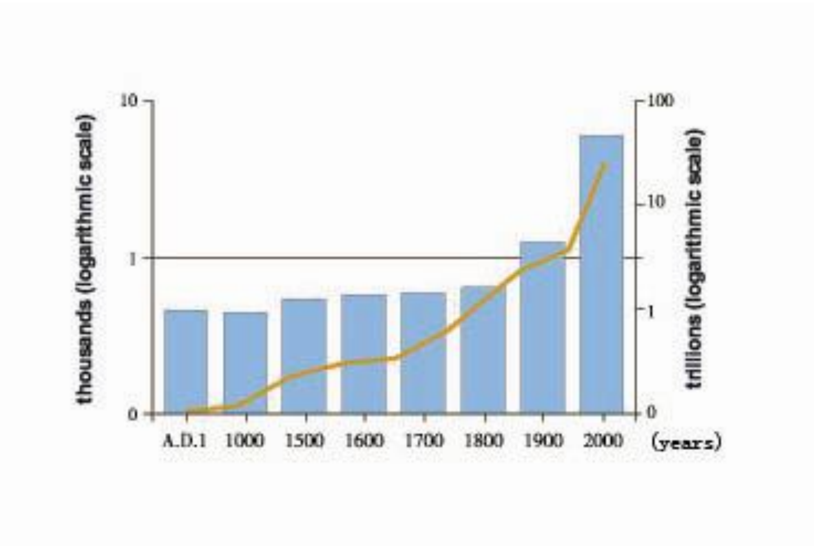
History of Economic Growth

Economic growth is a recent phenomenon in human history. It began with the industrial revolution in Britain at the end of the 18th century. This progress spread to Europe and North America in the 19th century, accelerating as it traveled. In the 20th century, particularly in the second half, it spread and accelerated again (See Figure 1).

As its economy grows, a society becomes more tightly organized, more densely interwoven. A growing economy is one in which energies are better directed; resources better deployed; techniques mastered, then advanced. It is not just about making money.

Figure 1 Evolution of Global and Per Capita GDP in the Last 2,000 Years

1990 international PPP dollars



Blue: per capita GDP Yellow: GDP levels (right axis)

Source: Commission on Growth and Development : The Growth Report, p. 18. (original data from Maddison, Angus. 2007. Contours of the World Economy, 1-2030 AD. Oxford University Press.)

[1] In 2006 a group of the world's leading development practitioners—including former Prime Ministers, Ministers, planners and businessmen, plus two Nobel Laureates in Economics—were brought together to form the Commission on Growth and Development. Governor Zhou Xiaochuan of China was a Commissioner and Professor Michael Spence, who is one of the authors of this report, was the Chairman. This chapter is based on "The Growth Report: Strategies for Sustained Growth and Inclusive Development" issued in 2008 by the Commission. The report, background papers and more information on the Commission are available at www.growthcommission.org.

Today's economists explain growth with the triple formula of technology, capital, and human capital. But these are only the proximate causes of growth. Its deeper roots draw on advances in science, finance, trade, education, medicine, public health, and government, to name but a few of the factors in play. Over the past two centuries, what we now call the global economy has expanded in fits and starts. Interrupted by the slump of the 1930s, it was rebuilt in the 1940s, when the institutional foundations of today's world economy were laid. Globalization has since proceeded apace, aided by legislation (the lowering of tariffs and quotas and the relaxation of capital controls) and innovation (the declining cost of transport and communication).

This renaissance of globalization helps to explain the acceleration in world growth since the latter half of the 20th century. As the world economy has opened and integrated, technology and know-how have flowed more easily to developing countries. Latecomers can assimilate new techniques much more quickly than the pioneering economies can invent them. That is why poorer countries can "catch up" with richer ones.

The lessons that countries import are not only technological. Both China and then India reformed their closed, heavily regulated economies, motivated in part by the force of international example. Reform and openness in China brought about not only dramatic changes in China but also the global economy. This accelerating growth has created new challenges. The first is a clear divergence in incomes within and between countries. Of the roughly 6 billion people on the planet, about 65 percent live in high-income or high-growth economies, up from less than a fifth 30 years ago. The remaining 2 billion people live in countries with stagnating, or even declining, incomes. The world population is projected to increase by 3 billion people by 2050. Unfortunately, 2 billion of this extra population will live in countries that are currently enjoying little or no growth. Thus, if these trends persist, the proportion of the world population living in low-growth environments might increase.

The second challenge is environmental. The quickened growth of world GDP has put new pressure on the planet's ecology and climate. This strain may ultimately threaten the growth environment of the last 200 years. If an economy fails to grow, man's efforts to better himself become a scramble for a bigger share of a fixed amount of resources. Ecological stress quickly becomes social and political.

Since the end of the Second World War, many countries and regions have experienced at least brief periods of rapid growth, but only thirteen have enjoyed sustained growth of 7 percent a year or more, on average, for 25 years or longer. These are: Botswana; Brazil; China; Hong Kong, China; Indonesia; Japan; the Republic of Korea; Malaysia; Malta; Oman; Singapore; Taiwan, China; and Thailand. Two other countries, India and Vietnam, may be on their way to joining this group. It is to be hoped other countries will emerge soon.

This collection of economic success stories includes a remarkably diverse group of countries and regions. The familiar Asian examples may dominate the list, but every other region of the developing world (Africa, Latin America, the Middle East, and emerging Europe) is also represented. Some of the countries are rich in natural resources (Botswana, Brazil, Indonesia, Malaysia, Oman, Thailand); the remainder are not. The sample includes one country with a population well over 1 billion (China), and another with a population well below 500,000 (Malta).

The 13 economies each, then, have their idiosyncrasies. But it would be wrong to conclude that they defy generalization, or that there is no point in learning about their growth paths because the lessons cannot be applied at home. A close look at the 13 cases reveals five striking points of resemblance:

1. They fully exploited the world economy
2. They maintained macroeconomic stability
3. They mustered high rates of saving and investment
4. They let markets allocate resources
5. They had committed, credible, and capable governments

Middle-income Transition

These stories all, then, share some common themes. But it is intriguing how their experiences in sustaining growth after reaching middle income status and attempting to reach high income have differed. Six of the economies (Hong Kong, China; Japan; Korea; Malta; Singapore; and Taiwan, China) continued to grow all the way to high-income levels. But several of the others lost some or all of their growth momentum long before catching the leading economies. The failure to evolve from middle to high income is not an uncommon phenomenon. In a large group of countries, including many in Latin America, growth has slowed markedly at the middle-income level. The reasons are complex. If anything, this second stage of growth, from middle to high income, is less understood, and certainly less studied, than the first stage.

No one can identify all the reasons why some economies lose momentum, and others don't. But there are common patterns across countries that are suggestive. As a country evolves successfully from middle to high income, its economy branches out into more skill-intensive industries. The service sector grows. The domestic economy with its increased size and wealth becomes a more important engine of growth.

The supply of labor in middle-income countries, which once seemed infinitely elastic, ceases to be so. As surplus labor disappears, the opportunity cost of employing a worker in one sector rather than another, rises. Firms compete for workers and wages increase. These higher wages slow the growth of the labor-intensive sectors. Indeed, the export industries that once drove growth decline and eventually disappear.

Shortages of high-skilled labor emerge. As a result, policies shift toward promoting human capital and technology. The policy maker's role must also change. When a country is far behind the leading economies, it is very clear what it has to do, so policy makers can run things like an army. But as an economy catches up with the leaders, it becomes less obvious what it should make and where its future prosperity lies. More must be left to the bets of private investors and the collective judgment of the market.

The first priority for policy makers is to anticipate this transition and the new demands it will make of them. Many governments have a planning unit, which focuses attention on the future evolution of the economy and anticipates the public policies and outlays needed to support it. Korea, for example, changed its policies and public investments in the 1980s and 1990s to help the economy's evolution from labor-intensive manufacturing to a more knowledge- and capital-intensive economy. It opened the door to foreign-direct investment, privatized the national steel company, joined the OECD, and watched labor-intensive manufacturing move to new destinations.

A government's second task—not easy—is to let go of some of its earlier policies, even the successful ones. To cite some specific examples: special export zones, heavily managed exchange rates, and other forms of industrial policy can be pursued for too long. The problems these policies address decline over time, so they are not needed forever. Resisting such forces will delay the structural change of the economy. It will divert investment away from new export industries and from industries that serve the domestic market.

Latin America provides many examples of countries that failed to sustain growth beyond the middle income level. All of the major economies in the region—particularly Argentina, Brazil, Chile, Colombia, and Mexico—experienced periods of rapid growth. But none enjoyed the prolonged, robust expansion required to "graduate" once and for all as a high-income country. Their progress has instead been spasmodic: vigorous growth punctuated by serious macroeconomic crises, followed by strong recoveries and renewed growth.

What explains this unstable pattern? The underlying cause may be the region's longstanding inequality and the failure of its social policies to tackle it. To this day, Latin America's income distribution is one of the worst in the world; even several decades of fitful growth have failed to overcome it. Because of its inequality, Latin America suffers from a profound lack of political consensus, and because it lacks consensus, it is prone to chronic political turmoil. That instability weighs on long-term expectations, undermines investment, and makes it harder to build a solid institutional framework. Without those things, it is impossible to sustain growth.[2]

Implications for China's Medium Term Development

China's per capita income reached $4,280 in 2010, according to the IMF, or $7,520 in purchasing-power parity (PPP, i.e. after adjusting for price differences between countries)[3]. This places China among the middle-income countries of the world, according to the World Bank's classification. These national averages, however, obscure the considerable diversity that exists within the country. Relatively poor provinces such as Guizhou and Gansu remain in the lower middle-income category, while the most advanced areas such as the Pearl River Delta and the Yangtze Delta qualify as upper middle-income economies, with urban areas approaching high income.

These regional disparities should not be forgotten. Nonetheless, despite its lagging regions, China can still legitimately aspire to become a high-income country in the foreseeable future, and it should plan for the challenges that entails. The government has set the worthy goal of becoming a "Xiao Kang" society by 2020. But that should not be the summit of China's ambitions or define the limit of its planners' horizons. Policy makers should also look beyond that goal to the ultimate aim of becoming a high-income country.

That challenge has been recognized by Chinese policy makers and economists for some time. They often discuss the need for a "Transformation of the Development Pattern". This usually comprises three elements: first, a transition from input-driven growth, based on the accumulation of capital and labor, to growth based on productivity gains; second, a shift in the mix of output, from industry to services; and third, a change in the source of demand, from foreign to domestic spending. A second set of challenges relates to building a "harmonious society" and ensuring that China's development is "putting people first." These Chinese priorities are entirely consistent with the lessons of international experience.

Two characteristics of China, however, make its development challenges unique. One is the disparity noted above, between different regions of the country and between rural and urban areas. These wide disparities must be taken into account when designing the new growth model and formulating the social programs required to achieve a harmonious society.

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[2] See also Box 2 in Chapter 4 on "The Middle Class in Latin America" a contribution from Mario Blejer, former Governor of the Central Bank of Argentina and Senior Advisor in the IMF.

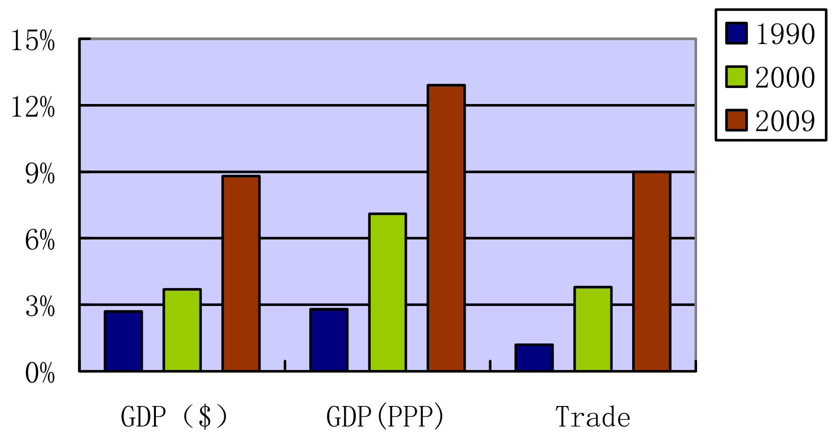
[3] On February 28, 2011 the State Statistical Bureau estimates China's GDP in 2010 as RMB 39,783 billion, and the population at the end of 2010 as 1,341 million. With the exchange rate of RMB 6.57 per US$, China's GDP per capita in 2010 comes to US$ 4,517.

The other distinguishing characteristic is the sheer size of the country itself. See Chart 1.2. China's size colors its interaction with the rest of the global economy. Although its growth pattern over the past two decades is not dissimilar to that of the Asian Tigers that preceded it, China's trade surplus and exchange rate have drawn far greater attention. Although still at a relatively low level of development, China consumes roughly half of the world's cement, a third of its steel and a quarter of its aluminum.

China's size means that it can never emulate the pattern of development pursued by today's advanced countries: the world simply does not contain enough natural resources to sustain that kind of growth. An obvious and controversial example is carbon emissions, which pose the risk of catastrophic climate change. Although emissions per capita in China are only about a quarter of those in the United States, China's total emissions are now the largest in the world—a fact the rest of the world cannot fail to notice. More generally, China has a achieved a measure of dominance and power in the global economy at a relatively low level of per capita income and development. Unlike any other country in history, China has to manage its difficult transformation into an advanced and rich country while assuming the responsibilities and obligations of an economic super power.

Figure 2 China's Rising Share

China's share of world GDP and trade is rising rapidly.



Source: International Monetary Fund, Arora and Vamvakidis "Gauging China's Influence" Finance & Development, December 2010, p. 12, Chart 1.

Outline of this Report

As China began the process of transition to high income status, we offer some thoughts and suggestions for China's medium term development, drawing on modern economic theory and the lessons of international experience. For this purpose we invited more than 20 prominent economists—from universities, businesses and public institutions around the world—to prepare papers in their respective areas of expertise. We also organized a number of seminars, from which we learned an enormous amount from Chinese economists and officials.

This volume collects all of the papers prepared for this initiative. The table of contents lists the papers and their authors, and also offers a short introduction to the team of international economists. A synthesis of the main findings and conclusions of the papers and discussions can be found in the following eight chapters of this report.

Chapters 2 to 4 detail the necessary transformation of China's development pattern.

Chapter 2 discusses China's growth model. In the past, China could grow quickly simply by moving people out of agriculture and into manufacturing. That process is not yet over. But in the future, China's growth will depend less on expanding manufacturing employment and more on improving productivity. That will require some creative destruction, as established firms give way to new, more productive enterprises. The government could help this process along, through judicious policies that favor new activities or techniques, without supplanting the role of the market in finding the best investments. Indeed, China will have to give market forces freer rein in capital allocation, because too much of its investment is currently financed by routine bank loans to safe state-owned enterprises (SOEs), or by the SOEs themselves, reinvesting the excess profits they are allowed to retain. China's future growth will depend, to a large extent, on a financial system that can mobilize saving, spread risk, and allocate capital to a growing variety of enterprises.

Chapter 3 looks at the geographical implications of China's growth strategy. China, it points out, is not as urbanized as many other countries at its stage of development. Many of its cities are of inefficient size (it needs more cities in the population range of 1-12 million) and economic scope, clinging too long to manufacturing. China's cities are also prone to the twin problems of sprawl and fragmentation of land-use on their outer fringes. The chapter argues that China's cities should be free to compete with one another for people and investment, but not at the expense of a seamless domestic market unimpeded by local protectionism. Greater urbanization should help narrow the stark income disparities between different regions of China. The government should remove policies that discriminate against lagging regions, before it embarks on expensive regional policies that discriminate in favor of them.

Chapter 4 turns from the supply side of China's economy, which has grown prodigiously, to the demand side, which has lagged behind. Over the next decade, China should rely more on domestic consumption as an engine of growth. Consumption, however, has fallen as a percentage of GDP, because wage-earners have received a shrinking share of the national income. The chapter discusses a number of measures the government could take to lift consumption, including cutting taxes on labor, easing consumer credit, and transferring some state assets to the public. To sustain growth, China must foster a strong middle class, secure and confident enough about the future to spend more freely on discretionary items. The chapter compares the size of China's middle class to that of other countries, some of whom succeeded in sustaining growth and some of whom failed.

Chapters 5 to 7 cover topics related to the Government's objective of "putting people first" and building a "harmonious society".

Chapter 5 on employment, education and labor market observes that China's labor market is fast approaching a turning point: China's total labor force will probably cease to grow in less than ten years. In the past, China's challenge was to reallocate labor from agriculture to industry. In the future, the challenge will be to reallocate workers outside agriculture from lower to higher productivity activities. In this connection, it should be recognized that productivity differences among countries attributable to physical capital are limited. Human capital, i.e. the skills and competence of the population is much more important. Sustaining growth to high income level will require improvements in the skills of many workers and young people who lack the education required to prosper in an increasingly sophisticated economy. Investing more in human capital in the poorer regions would contribute to both efficiency and equity.

Chapter 6 points out that pension serve multiple purposes—consumption smoothing, insurance, poverty relief and redistribution. Since countries rank these objectives differently, no single pension system best serves all countries. The three elements of China's recently reformed system–the basic pension, individual accounts, and voluntary pensions –provide a good basic structure. China now needs to focus on extending coverage and improving the administration of the system. It should turn the basic pension into a universal state pension, payable to every resident above a certain age, thus removing the tripartite distinction between rural, urban and migrant. It should strengthen the overall management of the pension system. China should learn from other countries' mistakes as well as their example. To further reform the individual accounts, it could consider the "notional" defined-contribution accounts pioneered in Sweden and elsewhere.

Chapter 7 on social policy reviews the sharp rise in inequality that has accompanied China's rapid growth from a comparative perspective. Governments elsewhere have succeeded in offsetting inequality through social policy. But in China social spending is low as a percentage of GDP, the coverage of its social programs is patchy and benefits are not portable from place to place and job to job, impeding the mobility of labor. Income disparity should be reduced to avoid social tension and instability.

Successful social policies should cover the nation as a whole, even if that means a low level of benefits. Their delivery should be as localized and decentralized as possible, but their funding should come largely from the central government so as to permit redistribution from rich areas to poor.

The last two chapters of this synthesis report discusses China's role in the world economy and the further reform of the economic system needed to meet future challenges.

Chapter 8 notes that globalization has provided China with two critical ingredients for catch-up growth: knowledge and deep markets for its goods. As a result of its success, China's economy is systemically significant: it influences world prices and attracts global scrutiny. Other countries now expect China to shoulder some international responsibilities, such as rebalancing global demand and curbing carbon emissions. However China has just reached middle income. Its vast global influence and power at a relatively low level of development is unprecedented in world's history. The chapter argues that there is no insurmountable conflict between the rest of the world's expectations of China and China's objectives for itself. But there is ample scope for disagreement about the manner and speed with which China fulfils these objectives. It is therefore important that China plays an active role in the miscellaneous international fora that steer the world economy.

Chapter 9 on system reform explores some of the institutional reforms China needs if it is to implement its five-year plans successfully. Both the central government and the sub-national administrations will have to rethink their roles and strengthen their capacities. Institutional reform should not stop there. It should also encompass the SOEs, which face too little competition and give too little back to the state in the form of dividends. China will also have to reform its fiscal arrangements, particularly the division of revenue and expenditure responsibilities between the central government, the provinces and the counties. This chapter's over-riding question is how to reduce the gap between the ambition of China's plans and their uneven implementation. This is an extremely complex and challenging question for any country, and this last chapter should be seen as the beginning of the thinking on this topic rather than the end.

In making its transition to a "Xiao Kang" society and beyond, China faces a daunting list of challenges. However, China is also in a strong position to meet them. We find no insurmountable trade-off between China's long- and short-term goals, no great conflict between sustained growth and a harmonious society, and indeed no contradiction between China's aspirations and the rest of the world's interests. The country's accomplishments over the past three decades inspire a great deal of confidence that its present challenges will be met and its future opportunities realized.

Chapter 2 Changing the Growth Model[4]

A New Pattern of Growth

Many countries have enjoyed spurts of rapid growth. But as the previous chapter pointed out, few have sustained it for three decades, as China has done. Indeed, rapid growth of 5 – 10% a year became possible only in the second half of the 20th century. Development at that pace required an open world economy, knitted together by trade liberalization and technological advances in transport and communications. This global integration made it possible for less developed countries to import ideas and knowhow from the leading economies. It also offered them entry to a vast world market, which allowed economies of scale and specialization their domestic markets alone could not support. As production expanded briskly, they could draw on an abundant supply of labor previously trapped in agriculture.

Once countries reach middle-income status, decisions about where best to use their labor and capital become more complex. A country's broad characteristics and endowments may provide some clues, suggesting a future in more skill-intensive services or more capital-intensive manufacturing, for example. But what line of manufacturing, exactly, using what technology? A great deal is left open. Economies that saw export success as the true test of a product or firm's worth must rely increasingly on the verdict of their domestic marketplace. Having assimilated technologies from abroad, they must also rely increasingly on local entrepreneurs as a source of new ideas and innovations.

In the early stages of development, the best indicator of progress is an increase in employment, particularly in the formal sector and in urban areas. Once a country reaches middle-income status, the best indicator of success is an increase in the average wage. This is for two reasons. As development proceeds, competition increases for workers of a given skill level, driving up their wages. In addition, workers become more skilled, allowing them to shift to more challenging and more rewarding jobs. Firms that rely on low-wage workers shift to higher value-added components of global supply chains, go out of business or move offshore, taking the less rewarding jobs to workers in poorer countries.

As nations go through this process of creative destruction, firms complain that they can no longer afford to hire workers. At this point, the nation must choose. Does it want to protect the existing firms or to see continued growth in the wages of its workers? Nations that protect their firms stop growing, and productivity stagnates. Nations that strive for higher wages keep growing. It is clear then that continued growth requires substantial structural change in the supply side of the economy, in the tradable sector and specifically in the export sector.

[4] This chapter draws on Background paper no. 17 by Paul Romer: "Optimizing China's New Pattern of Growth" and no. 7 by Andrew Crockett: "China's Role in the World Economy: Looking Forward to the 12th Five-Year Plan."

If a country's wages are to keep growing, then its productivity must keep pace. Some existing firms will develop new lines of business that require higher skills and justify higher-wage workers. But some incumbent firms will not be able to keep up. In high-income economies, many of the new, higher paying jobs come from new firms. These new entrepreneurial ventures start out small. Many of them fail. But the ones that succeed grow rapidly and drive improvements in productivity.

If this transition is to succeed, investment must be quick to switch to the most productive firms and activities. And as the economy relies increasingly on ideas, knowledge, and entrepreneurship, investment (including public-sector investment) must shift its emphasis from physical capital to human capital.

Box 1: On Changing China's Growth Model: An Analogy

In his 1890 classic, "Principles of Economics", Alfred Marshall compared the upheaval of economic progress with the growth of a forest. A similar analogy can also shed light on China's development. Before reform China was like a forest of pine planted long ago. All the trees had stopped growing. The reforms made it possible to plant seedlings for new redwood trees, which grow much taller than pines. The redwoods brought new vigor to the forest, just as China's new firms brought new vigor to its economy.

In the next stage, sustaining growth is more difficult. One part of the challenge is to find better seeds each year, so that each generation of redwoods grows taller still. Fortunately, China can still benefit from a large stock of ideas tested and developed in other economies, as well as developing its own capacity for innovation at the technological frontier.

The second challenge is to make room for these new, more productive seedlings. This requires the removal of some existing trees, which will otherwise block the light of their younger rivals. When everyone wants a tall forest, it is easy to persuade people to cut down a short pine tree that has stopped growing. It is more difficult to persuade them to cut down some tall redwoods to make room for younger trees that might eventually grow even taller. And it is more difficult still to cut down redwoods that are still growing. But if each generation of seedlings is much better than the last, the economy must find a way to keep planting many new ones each year. This is what economists call creative destruction.

Nations and firms do embrace the necessary reforms when their circumstances become desperate. But after a first round of reforms is rewarded with a burst of growth, it is easy to become complacent. People fail to appreciate that making room for new ideas requires a constant process of renewal.

As part of a commitment to sustained productivity growth in the next five-year plan, China will have to encourage not just the entry of new organizations, but also the shrinkage and even the closure of organizations that were once very successful but which are starting to fall behind. The competition between new entrants and older firms ensures that a society's most valuable resource, its people, are working in organizations that become steadily more productive on average from one year to the next.

Source: Background Paper no. 17 by Paul Romer: "Notes on Optimizing China's New Pattern of Growth".

Industrial and Technological Upgrading

Some economists would argue that China does not yet need a new development pattern. Its comparative advantage, they would suggest, remains in labor-intensive production. Parts of China, after all, have barely moved out of the low-income stage of development, and a large amount of surplus labor still exists in the rural areas. Some economists therefore argue that China's comparative advantage remains in labor-intensive manufacturing.

There is scope for China's manufacturing to expand further and also to migrate to poorer parts of China, where labor is cheaper. But to sustain steady improvements in wages, China will need a new growth model at some point—and that point may have already arrived in its coastal cities. Moreover, a new growth model based on knowledge accumulation and productivity gains will require new institutions and rules that take time to develop. China should therefore start this process as soon as it can.

Other economists would agree that China needs to upgrade its industry, but argue that the government is the wrong entity to do it. Industrial policies can easily backfire; governments cannot pick winners. However, the experience of many East Asian economies, including China itself, suggests otherwise. Japan, Taiwan, South Korea and Singapore all intervened in the market to shepherd their economies successfully through the middle-income stage to advanced levels of development. Policies that encourage this transition need not pick particular firms, or even particular industries, to favor. Industrial policies should apply across the board, favoring new technologies or new entrants across the board, irrespective of the industry or sector they are in. Such policies can encourage both the birth of new firms and innovation in existing firms, while still allowing the market to decide which specific firms or industries take off.

This is not to deny that industrial policy is difficult to formulate and implement. There are no universal blueprints. Each country must develop its own institutional model, based on its own circumstances. Nonetheless, the experience of Asian and Latin American countries suggests a number of guidelines.

As a general principle, the government should seek not to replace market forces but merely to supplement market incentives, when they fall short in some way. The market may, for example, under invest in non-traditional industries because of the uncertainty that shrouds them. A useful rule would be to provide incentives and subsidies only for new activities, and to withdraw support from failing projects, so that resources do not get bottled up in unproductive activities. To this end, it will be necessary to:

- specify monitorable criteria for success and failure and build in an automatic sunset clause for subsidies
- target economic activities or directions of technological change (e.g. low-carbon technology), not industrial sectors or firms
- subsidize only activities that can potentially provide spillovers and demonstration effects
- maintain competition between firms at all stages in the process, by subsidizing buyers, for example, and letting many firms compete for their business

- promote activities that can potentially sustain and renew themselves, so that the government-backed venture is only the first turn in an ongoing cycle of innovation

The agencies responsible for implementing industrial policy, such as the NDRC, should stay as close as possible to the market, building channels of communication and feedback with private investors and customers.

In this way, the government may help firms to adopt and apply new ideas and techniques. But the government also has a key role further upstream, in encouraging the research that produces new ideas in the first place. Some principles gleaned from international experience may help guide its technology and research policy.

A key question is how to allocate research grants to reward the best researchers. One way to do this is to allow researchers to take their grants with them to any university in China. These grants should offer a net financial benefit to the institution that hosts the researcher. This arrangement would encourage healthy competition between institutions for the best researchers, and this competition would ensure that productive researchers are better compensated than their less productive peers.

The government should also allow several agencies to commission their own outside research. Experience suggests that agencies can learn a lot by funding university research on topics of interest to them. This outside research is often more productive than research produced by their own in-house labs. A variant of this model is to allow competition between their in-house research and the external research they sponsor.

The government should not, however, make research grants directly to firms. The pitfalls of this approach are well illustrated by the Clean Car initiative in the United States. The US government spent hundreds of millions of dollars in an ultimately futile attempt to get American auto-makers to introduce hybrid cars. Unfortunately, the US firms did not perceive it to be in their interest to develop fuel-efficient cars. They saw profits primarily in large vehicles, and the research funds did nothing to change this strategic commitment. If a government wants to encourage a specific outcome it should create an incentive for the behavior it wants to induce. It may be more effective to give a subsidy to consumers of the new technology rather than to the producers. An alternative is to tax (or at least avoid subsidizing) the consumption of rival products that do not employ the new technology. Research grants for firms inevitably end up helping the firms but not the research or technology goals they were intended to promote.

The government thus has a key role to play in steering a new pattern of growth. The main responsibility for allocating resources should, however, lie with the financial sector, to which we shall return later in this chapter.

Investment System

Without strong rates of investment, China could not have grown at such rapid rates over the past three decades. By sacrificing consumption in favor of investment, China made a choice in favor of the future over the present. This difficult choice has brought great benefits; it should be admired and imitated.

But China's investment rate has exceeded 45% of GDP in recent years, a rate without international precedent. Heavy investment promotes growth, but only if the returns to that investment remain high. In China's case, there are grounds to believe that the productivity of investment is flagging. Incremental Capital Output Ratios (ICORs) are admittedly an unreliable metric, but for what they are worth, they show the efficiency of Chinese investment falling below that in other countries. China's ICOR has risen sharply since the early 1990s, from 3 to over 5, whereas the international average is about 2. Econometric analysis also shows a clear downward trend in the rate of return to capital, beginning in the early 1990s. When investment is financed with domestic saving, it squeezes domestic consumption. Aggregate demand created by low-yielding investment is not a sustainable basis for growth.

Three decades of economic reform have given the forces of supply and demand wide reign in China's labor and product markets. By contrast, market forces play a relatively small role in the allocation of capital[5]. Half of the fixed-asset investment in China is financed from the internal funds of enterprises. Manufacturing investment is also strongly correlated with liquidity, which largely reflects retained earnings. This would matter less if companies were closely policed by their boards or their shareholders. But the heavy reliance on self-financing, combined with weak enterprise governance, contributes to an investment boom that feeds on itself. Managers reinvest earnings to expand their assets and their market share, rather than concentrating on innovation or productivity.

(Foreign investment probably pays greater heed to market forces. It was likely responsible for the higher return to investment in the earlier years of reform. Its share has, however, declined over the last decade and is now less than 5% of total investment.)

The problem arises in part because of a surprising side effect of creative destruction. Firms that are very profitable may, paradoxically, have few good investment opportunities. This is particularly true of firms that are well established in mature or declining industries. Conversely, firms that are rich in opportunity, may be short of cash or capital.. This is particularly true of start-up firms in new industries. If the financial system encourages the reinvestment of profits, the first type of firm will make large investments in projects that pay little return. The new startups will not be able to exploit the opportunities that they have uncovered.

The traditional central planning system sustained very high rates of investment at the expense of consumption. Three decades of reform have erased many aspects of what was known as the "shortage economy". But the so-called "investment hunger" seems to persist. This hunger combines a disregard for risk (abetted by soft budget constraints) with an appetite for size, which adds to the status of the enterprise, its supervising agency and its manager.

In China this hunger is felt not only by enterprises, but also by local governments and their managers. Such is the enthusiasm of local authorities for investment that they circumvent controls on their borrowing, by doing their infrastructure spending through State-Owned

[5] IMF Working Paper: Barnett and Brooks, "What's Driving Investment in China?" November, 2006. See also OECD Economic Surveys: China 2010, Chapters 3 and 4.

Enterprises (SOEs), funded by bank loans, instead. The sheer scale of investment, coupled with these shortcomings, has contributed to some wasteful spending. There is plentiful anecdotal evidence of “white elephant” projects that duplicate infrastructure or contribute to excess capacity. Thus, despite the efforts of the government and party leadership to increase the share of household consumption in GDP, investment has claimed a large and growing share of national resources over the past decade, even in the face of diminishing returns.

The role of SOEs in the investment system deserves special attention. The weight of SOEs in the economy has diminished, as private and foreign-invested enterprises have grown in importance. Nonetheless they remain a significant force, which may prove to be a significant drag on the economy’s effort to transform its development model. (See Chapter 9 for a fuller discussion of the role of the SOEs.)

These shortcomings in capital allocation may assume greater significance as China’s development pattern evolves. In the early stages of development, a country’s production structure is relatively simple and it can draw plenty of guidance from the many countries above it on the development ladder. Governments thus find it relatively easy to spot opportunities to improve productivity, and to guide resources accordingly. But as China’s economy grows in complexity, the government will find it harder to guide resources to their best uses. Deciding to invest in manufacturing instead of agriculture is much easier than deciding to invest in one manufacturing firm instead of another.

As long as investable funds are administered by government officials and high-level managers, they will favor firms and divisions that are large, established and influential, regardless of their productivity. It is not only a question of ownership. International experience shows that even big private firms have succumbed to the same malaise. The US automobile companies, for example, reinvested a large share of their profits in a bid to keep market share, while resisting innovation. The industry would have fared better if GM had paid out more of its profits as dividends and if new entrants had carried out more of the industry’s investment, using funds raised from outside. The key is to make sure that managers are not able to reinvest profits solely to build "empires."

The transformation of the development pattern will require a very different system of investment. An independent financial sector should be encouraged to play a bigger role in the allocation of funds between non-SOE firms, and even between SOEs and private firms. Investment should be guided by risk-adjusted returns, and not primarily by which entities have the funds. Government can and should intervene to shift investment incentives when there are important social objectives that are not captured in the private returns. Beyond that, the goal should be to have the investment process increasingly guided by market evaluation and discipline.

When it works as it should, market-based finance allows financial intermediaries to allocate both fresh household saving and the profits of existing firms to the most promising investment opportunities. Because financial intermediaries seek the highest-possible returns, they search diligently for the firms with the best ideas. If capital is guided by realistic evaluations of potential returns in new ventures, then firms rich in cash, but bereft of good investment opportunities, should no longer be able to invest indiscriminately in lackluster projects. Instead, their funds should be allocated to new firms that can make better use of the money, or to new lines of business with higher returns.

Markets can also flounder, of course, as the global financial crisis amply demonstrates. Although we believe China should let markets, including financial markets, play a bigger role in allocating capital, we also believe those markets should be regulated. Or to put it another way: China should leave more investment to market forces, but it should not leave those markets to themselves. The kind of regulation and supervision required is the subject of the next section.

Financial Sector Development

The financial sector acts as the main control center in a market economy: through asset prices, interest rates and institutional norms, it guides the allocation of resources across competing uses. If the financial system is working well, the whole economy benefits, enjoying higher productivity, growth, and employment. By the same token, if it misfires, or ceases to function at all, it inflicts pervasive damage on the broader economy.

A fully developed financial system has many parts. It deserves a separate study in itself. What follows is a brief summary of the key financial-sector improvements China needs to support its changing growth pattern. We also reflect on the experience of the crisis and the lessons that can be drawn from it.

The financial sector remains a relatively underdeveloped part of China's economy, even in comparison with other middle-income countries in Latin America and South Asia. Most of China's prodigious savings are mobilized and allocated through the banking system. But banks are not the most appropriate source of long-term funds for industrial investment. More must be done to foster equity markets and other channels for allocating equity capital, such as private equity. China also needs an expanded set of fixed-income markets, which would allow companies to leverage equity capital prudently. Despite recent initiatives, credit is still hard to come by for small and medium-sized enterprises and rural businesses. The corporate bond market has expanded, but issuance remains relatively light.

If China's "real" economy is to evolve towards a productivity-driven, knowledge-based growth model, it must allow the financial system to evolve in tandem. The experience of other countries shows that the financial sector helps an economy branch out into a more sophisticated and diversified mix of activities.

China's financial system must keep pace with changes not only in China, but also in the world. In a recent study, the McKinsey Global Institute argued that the era of cheap capital around the world is coming to an end. Investment rates are rising in the emerging economies, it pointed out, and as these economies grow larger, their capital spending will offset declining investment rates in the advanced economies. That will be enough to raise the cost of capital around the world. Put bluntly, there will be more competition for savings. China, of course, is a net capital exporter, partly insulated from global capital markets by regulatory controls. Nonetheless, as the global cost of capital rises, it will, if nothing else, raise the opportunity cost of investments at home. As a consequence, it will become more important to allocate capital efficiently. The financial sector must therefore be a priority in the 12th FYP.

Saving

If China's financial system is to help change its growth pattern, it needs to rapidly develop several key functions. They include providing a rich menu of saving vehicles that offer an appropriate risk-adjusted return, rewarding the thrifty for investing prudently. China's savers would benefit from a wider array of mutual funds, which would give them an alternative to deposits or property. If households could hold better-diversified portfolios of equity and fixed-income instruments, it would help them spread the risks they face.

Increasing the return to savers might have the welcome, if paradoxical, side-effect of reducing excess savings. If they received a higher income on their savings and investments, people would not need to set quite as much aside in order to meet their savings goals, such as providing for retirement or the costs of medical care. A higher return to savers might also have the second side-effect of reducing imprudent investment behavior. Under the present financial regime, many frustrated savers pursue higher returns, for instance, in speculative investment in properties, at the cost of excessive risks.

Corporate finance

In addition to providing a variety of savings vehicles, the financial system must do a better job of channeling capital to new and growing enterprises of all sizes and in a variety of sectors. In the early stages of development, banks are traditionally the main sources of finance and debt is the principal instrument. That needs to change as the economy moves to higher value-added activity, expands services, and generates more of its own technology.

China is now at the stage where it would benefit greatly from the kind of capital and expertise associated with private equity. Private equity includes venture capital for startups, but also a host of other types of investment that allow businesses to grow, family firms to transfer ownership, and new services to be created. Private-equity institutions require in-depth knowledge of particular industries and sectors to play their assigned role. This expertise inevitably takes time to build. But policy makers should seek to encourage this sector with appropriate regulations and reporting requirements, drawing on the lessons of international experience.

To help this process along, China should encourage the entry of foreign investment firms, just as it has historically welcomed FDI. Of course, China does not need to attract foreign capital for the sake of the money: its domestic savings are more than enough to finance its own investment. But venture capital and private equity typically come packaged with a various kinds of expertise, which can help businesses in a wide range of industries, from agriculture to biomedical technologies and environmental startups. Apple, Sun, Cisco, Google, Intel, Oracle and many other successful companies, including several technology firms in China (like Baidu), were financed by venture capital. It is possible to "reinvent the wheel" so to speak, but it is more efficient to learn selectively from past successes and failures in other settings.

In fairness, China is already making brisk progress in building institutions and capabilities in this sector. It has attracted scores of foreign private-equity managers who compete and collaborate with numerous domestic firms. These firms have little trouble raising equity: there is plenty of wealth in China for them to tap. The challenge is to ensure that the legal, regulatory and institutional support keeps up. Sixty years ago, venture capital in the United States was largely a matter of wealthy individuals and families making direct investments in startups. But as the size and scope of the sector expanded, new and larger institutions were required. A similar pattern will occur in China.

To support China's economic transformation, other financial developments are also needed. China will require bigger, more liquid bond markets, including a market for municipal bonds issued by local governments to finance the rapid growth of cities. Land sales may serve as a transitional device for financing urban infrastructure, but they clearly do not provide long-term financing on a sustainable basis. As in other areas, legal and regulatory institutions are required to support this development.

China's banking regulator has made progress in fostering a "credit culture" among banks and their customers. But the government and other public institutions, particularly at the local level, still exert an influence over lending decisions. In its reforms, China should aim to free bank lending decisions from non-financial considerations. China's banking supervisors would also have an easier task if the country's capital markets were better developed. The market could then complement the supervisors in their job of policing and scrutinizing banks, expressing their suspicions through the sale of a bank's shares, or the purchase of credit-default swaps on their bonds.

These are all formidable tasks. In tackling them, China can undoubtedly benefit from foreign expertise and experience, embodied either in foreign-owned operations, or in joint ventures with Chinese institutions. But ultimately China will have to solve these challenges in its own way.

Lessons of the crisis

The recent global financial crisis, which originated in the advanced countries (particularly the United States,) has exposed fallacies and flaws in their approach to regulation. Before the crisis, many regulators believed that financial institutions could accurately perceive most of the risks they were taking, and that the system therefore had self-regulatory properties. That approach is now being rejected in favor of more intrusive regulation. The new systems being put in place are untested and we will not know for some time how they will perform. Thus some lessons from the crisis will require time to discover.

But other lessons are more immediate. The crisis demonstrated that unchecked financial sector innovation, coupled with inadequate official regulation, can produce a fragile financial system with excess levels of private sector debt and inflated asset prices, liable to shatter with catastrophic results. Given this experience, China should foster strong risk management and robust capital cushions in its financial institutions. Much has already been achieved in this regard, particularly by the Banking, Insurance and Securities regulatory commissions.

China may also wish to consider the merits of a banking model in which, a portion of the banking system is segregated and heavily regulated. These banks offer a limited range of services, such as deposit and savings accounts, and hold a restricted range of safe assets. These banks concentrate on performing the vital functions of the financial sector, including a payments system and, under some definitions, credit intermediation, i.e. turning deposits into loans. They do not engage in proprietary trading, that is, making speculative bets with their own money.

This approach aims to insulate credit intermediation from any danger of complete collapse. Such a collapse was only narrowly averted in the advanced countries during the crisis, thanks to quick and unconventional intervention, mainly by central banks. It was a dangerous episode. The proposed banking model isolates a subset of the banking system from most of the risks of balance-sheet damage. This creates a bulwark in the financial system, ensuring that at least some channels of credit remain open, even if the rest of the system goes under. In some ways, current practice in China already resembles the proposed banking model. But commercial banks lack a formal system of deposit insurance, a gap the government may need to fill as China develops.

Securitization has been much criticized in the wake of the financial crisis. The turmoil starkly revealed the dangers of complex securitized asset, created with poorly assessed risks and lax regulatory oversight (the shadow banking system in the United States and Europe was very lightly regulated). But China should not draw the conclusion that all securitization is unwise. In fact, properly regulated securitization is a cost-effective alternative to bank credit. It should be encouraged at a measured pace, evolving in parallel with, and not too far ahead of, the regulators' capabilities. For China, this may mean limiting the products on offer to plain-vanilla securitizations.

Derivatives can serve the useful purpose of spreading and reallocating risk. But they are also one reason why financial-sector balance sheets are so tightly interconnected. We think it is fair to say that there is not yet a well worked-out and agreed-on model for derivative regulation. That will come in the future. In the meantime, the best policy for China is to proceed with caution, focusing on simple contracts traded on, and cleared through, regulated exchanges.

A related subject is systemic risk and prudential regulation. The crisis has exposed the limits of conventional prudential regulation, which looked for signs of trouble in individual banks and other intermediaries, institution by institution. Unfortunately, financial dangers can also emerge out of the interaction between institutions that might each seem individually sound. To spot and prevent these "systemic" hazards, many countries are now appointing a "macro-prudential" or "systemic" regulator. China should do the same. It could create a new body specifically for the task. It could designate one of the existing regulators (or the People's Bank) as the systemic regulator. Or it could create a "council" of all the relevant regulatory authorities. Regardless of how responsibility is assigned, strong cooperation will be required among all the various regulatory bodies.

Just as banks and capital markets increasingly span the world, financial regulation should ideally converge across countries. Otherwise financial firms can simply shift their operations to the least regulated countries, a process known as regulatory arbitrage. In practice, however, countries must develop a financial system that reflects their own circumstances. Regulation in the advanced countries, for example, has revolved around capital standards. But many developing countries have yet to build the necessary legal and accounting frameworks to make capital standards fully effective.

Even among the advanced countries, considerable diversity remains in regulatory principles and practices. China's regulators can learn from these differences. In particular, they may want to pay attention to the differences between the Canadian financial sector, which has performed very well in recent years, and the US financial sector, which has performed badly.

If nothing else, the crisis served as a painful reminder of the costs of financial breakdown. China perhaps needed that reminder less than many other countries. Its government has long appreciated the importance of financial stability. Safeguarding that stability begins with sound macroeconomic management—keeping a lid on inflation, excessive debt and asset bubbles, which distort price signals and investment behavior. In addition, stability entails regulating financial markets and institutions to minimize systemic risk, maximize transparency, and reconcile the incentives of financial institutions with the collective interests of the country.

But although financial stability is a necessary condition for China's development, it is not sufficient. Stability should not, in particular, mean immobility. In an economy seeking to expand rapidly and make the transition from one growth model to another, the financial sector must be allowed to innovate. It must find better ways to intermediate savings and exploit the flurry of investment opportunities that arise. In principle, well-functioning financial markets can help achieve both the optimal level of savings and the best pattern of investment. This function assumes greater importance as the economy grows in complexity, outstripping the ability of the state to allocate resources well.

The global financial crisis has plunged regulators in Western financial centers into doubt and confusion. But the necessary direction of development for China is quite clear. There remains a compelling case for further development and careful liberalization of the financial system as the principal vehicle for mobilizing saving, spreading risk, and allocating capital to a growing variety of enterprises.

Chapter 3 Urban and Regional Development[6]

China's remarkable economic progress owes much to its success in breaking the gridlock that once impeded the movement of labor, capital and goods across the country. Thanks to this increased mobility, China's recent development has followed a distinctive spatial pattern. Put simply, people and investment have migrated to the cities and the coasts. China still has room to grow in this way. Only 46% of China's population lived in cities in 2008, compared with 55% in a typical country with its per capita income, and 70-85% in developed countries[7]. Economic theory and international experience also confirm that urbanization, in particular, is critical to economic growth (see chapter) because manufacturing and service production is more efficient when undertaken in urbanized areas and cities are the places where innovations are incubated and sophisticated skills are developed.

It is important, therefore, that the government encourage rapid as well as healthy urbanization. Investment in urban infrastructure and services must be a foundation: urban construction is already at an exceptionally high level, but it may need to rise even higher. China must also take steps to promote good governance, including in finance, develop an integrated domestic market as a national "public good" and foster healthy competition among cities. It will also be important to ban bad non-competitive practices such as protectionism and local preferences.

But to do all of this and ensure that urbanization is efficient and is accompanied by even development for the people of China the government needs to address a number of problems with the current process of spatial development. These include:

- The income disparity between urban and rural areas, which is far larger than other countries at a comparable stage of development
- The inefficient size and economic scope of China's cities: China does not have enough mid-sized cities and its urban economies lack specialization
- Land is used inefficiently within cities and it is excessively fragmented on the fringes of urban areas
- The weakness of urban finance and management
- The disparities in income and development between regions

Reducing Urban-Rural Income Disparities

Over the past three decades, household incomes have increased throughout China. But they have risen most dramatically in the cities and along the coast. The gap between urban and rural incomes is now enormous: per capita income was 3.3 times higher in the cities than in the rural areas in 2008 (and the gap is even larger if government subsidies, which disproportionately

[6] This chapter draws mainly on the Background paper no. 11 by J. Vernon Henderson: "Urbanization in China: Policy Issues and Options" and the Background paper no. 10 by Shenggen Fan, Ravi Kanbur and Xiaobo Zhang: "China's Regional Disparities: Experience and Policy".

[7] See Background paper no. 11 by J. Vernon Henderson: "Urbanization in China: Policy Issues and Options", page 6

favor urban residents, are taken into account). This ratio far exceeds that observed in other Asian countries. It has also widened—up from 2.8 times in 1995—at a point in China's overall development when, international evidence and theory suggests, it ought to be narrowing[8]. To reduce this disparity and increase overall productivity, China will need to complete the rural-urban employment transition by further integrating the labor market, so that people can move to wherever they are most productive. It must invest more in its labor force, particularly migrant workers in the cities and the people they leave behind in the villages. It will also have to raise the productivity of agriculture..

It is critical that the government lower remaining barriers to the flow of surplus labor from the countryside to the cities. In the past, migration from rural to urban areas was severely constrained by the hukou system. In recent years, this registration system has been loosened, and the pace of migration has accelerated. About 5-7 million people now move to the cities and towns each year, bringing the total number of migrants to about 150 million, of which only 12 million are non-working family members[9]. The government has recently decided to further relax controls on permanent-residence permits in small and medium-sized cities. This is a step in the right direction, which will be of particular benefit to regions with low rates of urbanization and a high proportion of small and medium-sized cities. To encourage more migration, the government should now consider extending the reform to larger cities and certainly to prefecture-level cities. Central and provincial governments as well as city administrations also need to recognize that the migration China is experiencing is almost all permanent, that migrants will want to move with their families, and that the appropriate incentives need to be in place for cities to increase their permanent population and provide them with the necessary services.

More investment in educating and training rural workers, migrants and their children will also have a very high pay-off. Compared with other countries at a similar stage of development, China's labor force is well educated. Most migrants from the countryside have enjoyed a junior secondary school education or more. This is one of China's great strengths, which few other developing countries can match. China needs to maintain and improve upon this good educational record by providing more job training for migrants and allowing their children to attend good schools in urban areas. It also needs to include migrant families in health and social security systems, which should become increasingly national in scope, providing portable benefits to both urban and rural residents. Migrant workers should also benefit from equal treatment under China's Employment Contracts Law and other labor laws.

A challenge for China, as for other countries, is how to prevent the development of slums and improve the living conditions of migrants (and other poor households), without indirectly subsidizing migration. Governments have a duty to spare migrants from hardship and squalor. But efforts to improve the lot of migrants can have the perverse effect of attracting more migrants. It is not easy to resolve this dilemma. Hong Kong and Singapore, for example, have

[8] World Bank "From Poor Areas to Poor People: China's Evolving Poverty Reduction Agenda", 2009, page 35

[9] World Bank, 2009 Chapter 5 section e provides further information on estimated levels of rural-urban migration

both prevented the emergence of slums by providing public housing. But in both places migration was strictly controlled.

In China's case, the government should be cautious about getting directly involved in provision of public housing and rely more on alternative policies[10]. It could, for example, revitalize the urban villages where most migrants currently live by bringing them under city administration, encouraging the renovation of buildings, offering tax breaks to firms that set up in these villages, and improving the quality of public services. But care needs to be taken to avoid damaging existing housing markets in these villages. These markets appear to be working quite well, allowing many migrants to rent the space they want at prices they can afford. Bringing urban villages under city administration should strengthen the property rights of owners and tenants, making them feel more secure. If so, this alone will stimulate the housing market, without the government having to do anything more. The government could also consider measures to support the construction of low-cost rental housing in existing urban areas, for example by leasing land to developers for the building of high-density apartments.

An alternative approach is to target people rather than places. The government could, for example, provide small housing loans ("shelter microfinance") to households with land who wish to improve their structures. It could also encourage migrants to move from urban villages to more expensive parts of the city by providing housing subsidies or vouchers. But such a reform would need to be accompanied by other reforms to encourage a formal sector rental market in urban areas. The government should also target such policies carefully, lest richer migrants capture the bulk of the benefits. It is also very likely that the easing of hukou rules will, on its own, stimulate demand for low-income housing outside the urban villages. Of course, place-targeted policies and people-targeted policies are not mutually exclusive and can be implemented together. The government will also have to be somewhat experimental, discovering along the way what impediments there are to the private sector supplying the evident and growing demand and introducing measures to address those impediments.

Changing the Size and Structure of Cities

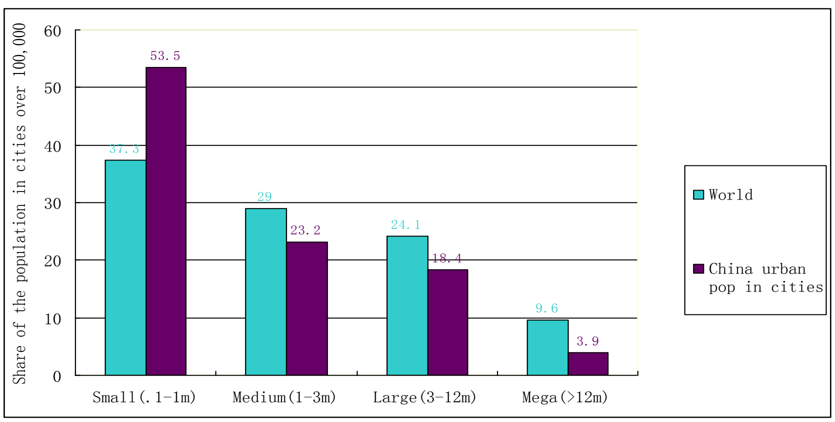
China's pattern of urbanization is inefficient, both in the size distribution of its cities and their lack of specialization. Typically, in the early stages of industrialization, the largest cities take the lead, becoming focal points for the introduction, assimilation and refinement of new technologies. As development proceeds, manufacturing technologies become standardized. This allows the decentralization of industrial production to small and medium-sized cities with lower labor and land costs. Over time an urban hierarchy emerges. Small and medium-sized cities become highly specialized in industries such as steel, textiles and apparel, wood products, insurance, health care and even entertainment. This specialization allows them to exploit local economies of scale and to capture many of the benefits, such as trained workers or specialized suppliers that can spill over from one firm in an industry to another. Larger cities have more diverse economies, including higher order services, distribution, innovation and sophisticated manufacturing, where economies of scale between industries, as well as within them, are

[10] This section draws on the Background paper no. 20 by Yves Zenou: "Housing Policies in China: Issues and Options".

important. The very largest cities in developed countries (e.g. New York, Tokyo, London) have little manufacturing but provide a huge share of the country's financial services and business services.

China's pattern of urbanization does not conform to this international experience. In the initial period of economic reform, migration was highly localized ("leave the land but not the village"). In more recent years, more migration has been inter-provincial, from the central provinces and the southwest to coastal cities. But China still lacks cities in the population range of 1-12 million, and many prefecture-level cities are about half their efficient size (see Figure 3). Indeed, estimates suggest that a doubling of the population in prefecture-level cities would lead to a 20-35% increase in real output per worker[11]. The capital market (as well as administrative actions by higher levels of government) also appears to have favored the very largest provincial-level cities. Such cities enjoy much more foreign investment per capita and fixed-asset investment per capita than other urban areas, even though rates of return have been higher elsewhere[12]. Many cities have also clung to their manufacturing industry instead of nurturing a flourishing services sector, even though they have little comparative advantage in manufacturing and their local firms frequently operate at too small a scale.

Figure 3 Share in Urban Population of Each City Size Category: World vs. China, 2000



Source: Background paper no. 11 by J. Vernon Henderson: "Urbanization in China: Policy Issues and Options"

To resolve such problems, the government needs to create a level playing field, allowing market forces to work as well as possible and avoiding administrative actions that favor a particular size

[11] See Background paper no. 11 by J. Vernon Henderson: "Urbanization in China: Policy Issues and Options", page 8

[12] See Background paper no. 11 by J. Vernon Henderson: "Urbanization in China: Policy Issues and Options", page 12

of city or pattern of urban development. Where the government must intervene, it should do so even-handedly, minimizing any distortions to the specialization and efficiency of cities.

Policies that distort the labor, capital and goods markets need to be repealed, allowing economic forces to evolve. China's capital markets and fiscal policies currently favor the biggest cities (see Table 1). If this favoritism is not curbed, then any relaxation of the constraints on migration, as recommended above, could result in excessive flows of people to the biggest cities. To avoid the emergence of unduly over-populated mega-cities, China should help those further down the administrative hierarchy attract investment and workers. To do so, it needs to open up the capital market so that all firms, cities and villages can compete freely for finance. Such a reform would also boost growth by ensuring that capital goes to the best ventures, not just the politically favored ones. China must also curb local protectionism, whereby cities and other local jurisdictions favor local interests through discriminatory standards, charges and other measures. This protectionism inhibits the specialization across cities, which is so important for productivity growth.

Table 1 Where Capital Investment Goes.

	Total FDI (US$) Per capita (hukou population): 2002-2007	Total investment in fixed assets (¥) per capita: 2002-2007	Share of second sector in GDP 2007
Provincial level cities (4)	3850	122,500	42%
Provincial capital (26)	2060	98,900	44%
Other prefecture level cities (238)	1570	64,000	56%
County-level cities (367)	980	24, 400	54%

Source: Urban Year Books (China: Data Online). Numbers for prefecture and above level cities are for urban districts.

Other constraints to an efficient spatial pattern of urbanization need to be lifted. The natural economic base of the very largest cities is business services and the financial sector. In China, however, these sectors are small, albeit fast growing. Some, such as advertising, were only recently freed from government control, and others, such as legal and financial services, remain under strict state supervision. Once these modern services develop further, China should begin to develop mega-cities, comparable to Tokyo, London or New York.

Although services are the natural economic base of large cities, big cities in China also enjoy an unfair advantage in attracting manufacturing, thanks to their greater power and resources. They continue to exploit this advantage at a time when they might otherwise focus more on promoting services. Moreover, city leaders often display a bias towards manufacturing, rooted in their training and work experience. They may also wish to retain manufacturing because it generates value-added taxes for the city, even though services generate business taxes. If China's cities are to achieve the right size and scope, changes will therefore be required in the administrative hierarchy of urban areas and the attitudes of government officials, as well as in the financing of urban governments.

Promoting Efficient Cities

Because they are tightly packed, cities permit the rapid exchange of labor, goods, services and information. These exchanges contribute greatly to the productivity of urban economies. Historically, the population density of Chinese cities has been much higher than that of cities in the now developed countries. But a number of policies and practices are negatively impacting on the intensity with which Chinese cities are now increasing their built up areas. The fringes of Chinese cities are suffering from increasing fragmentation as urban villages spring up outside the city administration, housing mostly migrant workers without urban hukou. Built-up areas on the perimeter of Chinese cities are also interspersed with enclaves of agricultural land. This land is extremely difficult to develop, because of strict quotas imposed on the conversion of agricultural land to other uses. Industries are being re-located from central urban areas to new industrial estates in peri-urban areas and new towns are being developed at the periphery with little regard for the intensity of land use. Municipal practices of limiting building intensity within cities are also lowering land use efficiency and extending spatial spread. In addition, the lack of coordination between land use and infrastructure development is increasing travel times and costs and contributing to consumption of more land than necessary. Once this type of urban sprawl and fragmentation takes hold, it is difficult if not impossible to reverse, and it will sap urban productivity as well as increase infrastructure costs, travel times and pollution. China therefore needs to address this issue as a matter of urgency. This will require strengthened property rights and a more competitive land market, as well as better regulation of land usage.

The pricing of land on the fringe of cities is a major problem that needs to be solved urgently. Currently, cities do not pay the true cost of the agricultural land they encroach upon. On the contrary, city governments make huge profits buying land from farmers and villages at low prices and selling it to developers at much higher prices. This arbitrage opportunity gives local governments a strong incentive to requisition rural land aggressively, adding to urban sprawl when China should be striving to reduce it.

At present, local governments are restrained mainly by directives from above, but these directives have only limited effect. A more important constraint would be to strengthen rural property rights so that the compensation paid to farmers and villages reflects the market value of their land as closely as possible. The decision in October 2008 to extend the length of agricultural leaseholds from 30 years to an open-ended term sent a clear signal of the central government's determination to strengthen farmers' land security. But further measures would also be worthwhile. The government should introduce a system for registering rural land at the plot level. It should grant land-rights certificates to farmers, following the example of Vietnam, where the land-rights arrangements are similar to China's. It should ensure that leaseholds are fully transferable and saleable. It should also ensure that any village-land transactions are approved not just by the village head but by all villagers who are effective shareholders in that land.

The efficiency of the urban land market needs to be improved. Developers now acquire urban land through leasehold sales. The method of sale must, therefore be open, transparent and fair, so that developers pay the true cost of their projects, including the cost of necessary infrastructure. Leaseholds could, for example, be sold through English auctions[13] with open entry. Developers of industrial, commercial and residential areas should also be able to bid competitively for land on an equal basis. Over time, such changes should result in more realistic pricing and should curb the over-consumption of industrial land. Higher prices should also spur the decentralization of some industrial activities to smaller cities. The government should also consider fiscal incentives, such as tax breaks, to encourage state enterprises to redevelop land.

Better urban planning is essential. Even countries that place great faith in markets impose zoning laws on their land markets. These laws limit the permissible uses of a piece of land and specify the intensity of building on it. China currently has master plans for land use, often referred to as "zoning plans", but they need to be given more legal bite, perhaps by requiring the local People's Congress to approve them. It is also essential that these plans show the allowed variations in floor area ratios and that the variations in floor area ratios are used by city administrations to channel growth to desired locations – for example locations in the proximity of mass transit stations can be allowed higher floor area ratios to encourage densification. China should also consider a broader regional approach to city development, focusing on the design of the urban perimeter and the eventual integration of "urban villages" into city administration. It could promote this integration in a number of ways. It could allow agricultural enclaves within the urban perimeter to be developed without using conversion quotas. It should also allow for the proper sequencing of transport infrastructure and housing, so that house-building and other development at the periphery are not permitted until trunk infrastructure is in place. Cities must also improve their capacity to prepare and implement such plans, by, among other things, training professionals in city and transport planning.

Finally, cities need new sources of revenue. The above-mentioned measures should all help to promote efficient land use within cities. But unless city governments find an alternative source of revenue beyond leasehold sales, it will be very difficult if not impossible to persuade city administrations to make such changes. Accordingly China also needs further reforms of urban financing and management, which is the focus of the following section.

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[13] English auction is perhaps the most common form of auction in which bidding starts with a low price and is raised incrementally as progressively higher bids are solicited, until either the auction is closed or no higher bids are received. Often the seller sets a reserve price below which the item is not sold and the auction is aborted.

Reforming Urban Financing and Management

No country has a particularly enviable record of managing rapid urbanization. Compared to other countries, China has not done a bad job to date. However as the pace of urbanization accelerates, China must carry out further reforms of urban management, including restructuring urban finances, redefining the role of government officials, and reforming the administrative hierarchy of urban areas.

Urban and local governments in China must reduce their dependence on leasehold sales. Cities are far too reliant on leasehold sales as a source of revenue, with transient public officials selling off the long-term assets of a city, i.e. its land, to pay for current operating expenditure (as well as some capital spending), thus depriving future generations of the income from these assets. This is a potential “time bomb” that needs to be defused as a matter of urgency. As part of a reform of public accounting, proceeds from the sale of leaseholds should be allocated only to the capital budget, so as to match the sale of long-lived assets to the purchase of assets. Moreover, even capital expenditures should be financed less from leasehold sales and more from other sources, such as municipal bonds (a measure used by a number of developing countries under the careful supervision of national – or provincial – level government) or fiscal transfers from the central government.

The introduction of an ad valorem property tax on residential and business property would be a big step forward. Currently, municipal revenues in China are generated by the VAT and business taxes, as well as land sales, all of which encourage cities to attract business but not residents. An ad valorem tax on residences would not only help raise revenues but also encourage cities to accept new residents. Likewise, a tax on business property would encourage a welcome change in behavior, prompting firms to economize on land and the use of space. Such a tax would better reflect the cost of providing public services, such as transport, sewerage and electricity connections, to commercial property. In paying the tax, the property owners who benefit from these services would meet more of the cost of providing them.

Property taxes would reduce the value of leaseholds to potential buyers, because of the future tax obligations the real estate would entail. Local governments would, therefore, raise less money from their property sales. But this drop in value would help bring about a welcome shift in the funding of operating budgets—a shift away from asset sales towards an on-going revenue source. The government may also wish to consider making leaseholds permanent as compensation for the introduction of property taxes. Such taxes need not be too difficult to administer. An ad valorem property tax does require registration of ownership as well as a non-corrupt property assessment system, but it need not imply investing in a costly cadastre system. An area property tax, similar to the council tax in the UK, may suffice.

The incentives facing urban government officials need to be reformed. The principal roles of urban government are to provide residents with good public services, and to complement private-sector investment with appropriate public infrastructure. But in the past, the performance of mayors and other local government officials has been judged not by the quality of the public services they deliver, but by the industrial growth they oversee. In the absence of aggressive institutional reform to make mayors more accountable to city residents, the central government needs to be more creative in devising appropriate incentives for local officials. One important measure now being explored is to evaluate local officials on the basis of social indicators, such as citizen report cards, spending on health and education and enrollment rates. Because the impact of physical infrastructure is easily observed right after it is built, while it takes much longer to see the full impact of social investments, government officials should also be encouraged to stay in their posts for longer terms; and to get incentives further in line, their performance could be judged with respect to indicators of long term financing sustainability.

Finally, it is critical that small cities be allowed to compete on a more equal footing with large cities. Currently, higher-level cities in China "oversee" the governance of lower-order cities and enjoy greater autonomy in decision-making, more fiscal resources, and greater access to transport corridors, rail capacity and so on. This hierarchy needs to be reformed. China should build on some of the on-going pilots and move in the direction of giving each city, regardless of size, a well-defined administrative area over which it has full autonomy and allowing all cities and towns access to the same set of tax bases, revenue instruments, exemptions, and formulae for inter-governmental transfers, as well as the same expenditure responsibilities. It will, of course, take longer for smaller cities to get into a position where they can utilize financing instruments such as municipal bonds so in the interim, inter-governmental financial support formulae that put them on an equal footing with larger cities will be helpful.

Reducing Regional Disparities as part of the Middle-Income Transition

As it embarks on the middle-income transition discussed in the last chapter, China has few models to follow. Only two large countries, Japan and Korea, have successfully managed it. They are both relatively homogeneous countries, whereas China is a highly diverse economy with regions at very different stages of economic development. Indeed China can be seen as comprising three different economies with vastly different levels of per capita income between them: the rural economy, which is still dominated by agriculture and saddled with significant amounts of underemployed labor; the low-wage export-oriented coastal economy, which has led the growth of the last two decades; and the emerging productivity-driven, knowledge-based economy that should lead the transition to high income over the coming decades. China's macroeconomic policy mix must balance the disparate needs of these different economies. The right exchange rate or wage policy for the emerging knowledge-based economy may not be right for the export-dominated economy, or for the rural economy.

The persistence of China's poor, rural hinterland suggests the country has not yet exhausted the opportunities for catch-up growth. That is good news for China's macroeconomic prospects. But these disparities are nonetheless a big obstacle to a harmonious society. If economic theory and international experience is any guide, economic forces are unlikely on their own to eliminate such disparities. To address the inequalities that remain, most countries have introduced regional policies of various kinds. These policies offer different answers to the question, "should we move people to the jobs, or move jobs to the people?" This is not simply a technical question; not a matter of simply weighing the costs and benefits of different policy instruments. The answer also depends on what exactly the regional policy hopes to achieve. In the European Union, for example, regional policy focuses on both lagging countries and lagging regions within countries. It recognizes the need to ease migration so that people can move to new jobs away from home. But it also explicitly acknowledges the imperative to preserve regions as viable entities, which requires moving jobs to the people.

In China's case a fundamental part of any strategy for reducing regional disparities and supporting its transition from a middle to a high income country must be raising agricultural productivity and rural incomes. Because our team of international economists did not have much expertise in agriculture, the sector has not been addressed in detail in this report. But the sector remains of fundamental importance to China's future development. Migrant workers are typically more productive in their urban jobs than they were in agriculture. Therefore, as more labor flows from rural to urban areas, the economy's overall productivity increases (even though urban productivity may fall). In fact, it has been shown that reallocating even 1% of the agricultural labor force to non-agricultural activities could increase national GDP by 0.9%[14].

As workers leave overmanned farms, agricultural productivity should rise. Their departure provides an opportunity to transform traditional peasant farming on small plots into modern farming on much larger tracts of land by highly skilled, educated people. Korea provides a good example of such a transformation. Over three decades, landholdings were consolidated, farmers and rural youth educated, farms mechanized and new technologies introduced. By 2005 the country's farm population was just 26% of its 1975 level and it was using 16% less agricultural land, even as grain output was up by 61%[15]. To replicate this success, China will need to strengthen rural property rights, reform the financial sector to allow more agricultural investment (some recent studies have shown that reallocating 1% of capital from urban to rural areas in China could increase national GDP by 0.5%[16]) and improve education, because more educated farmers are better equipped to adopt new technologies, understand market conditions, and choose their crops and inputs accordingly.

Before considering any additional and specific policies to help lagging regions, it is also critical that the government first remove policies that hinder lagging regions. Policies on provision of essential services—such as basic education, health care, water and sanitation--should be spatially blind in their design and national in their coverage.

Distortions in the markets for land, labor, capital and goods should also be corrected. This would represent a major change from past government policies that gave preferential treatment to the coastal region. Such reforms can shoulder much of the task of economic integration by encouraging people to migrate to places that are rich in opportunity, as well as encouraging firms to set up shop in the most cost-effective locations. Moreover, such reforms involve no additional fiscal costs. The inter-provincial movement of people can be an especially important source of dynamism for China. It will allow the richer provinces to offset the natural increase in their dependency ratio by bringing in younger migrants at peak working age. And it will provide employment opportunities for rural migrants from poor provinces who can remit

[14] Au and Henderson "How Migration Restrictions Limit Agglomeration and Productivity in China", Journal of Development Economics, 2006a

[15] See Background paper no. 11 by J. Vernon Henderson: "Urbanization in China: Policy Issues and Options", page 4

[16] Au and Henderson "How Migration Restrictions Limit Agglomeration and Productivity in China"

money back home thanks to the higher incomes they earn in rich provinces.

Infrastructure is critical to overcoming distance. Like many other countries, China has pursued a strategy of building up infrastructure in lagging regions. This strategy has had some success. One specific example is China's western development strategy, with its particular focus on roads and railways. This policy appears to be one reason why overall regional inequality has leveled off, and even declined slightly, since the mid-2000s. Other investments have also had a substantial impact, such as outlays on rural telecommunications and electricity in lagging regions. Investment in education probably has an even bigger payoff, contributing both to growth and poverty reduction. It certainly appears, therefore, that China should maintain its emphasis on infrastructure (as well as social sector) investment in poorer regions. However, it would be useful to look more closely at what specific types of infrastructure have the highest returns in which specific regions. Moreover, in very remote regions, the marginal returns to infrastructure may fall quickly as costs increase. It may be more economical to move people out of remote, and often fragile, land into areas with more jobs.

Lagging regions can do more to attract investment. The spatial pattern of industrial activity is not easy to explain or predict. The geographical forces that push and pull industry interact in subtle and unforeseeable ways. As wages rise in China's coastal regions, it is possible that factories may relocate to China's interior provinces where wages are still relatively low, instead of migrating to cheaper locations overseas. However this possibility cannot be taken for granted. The government's recent efforts to encourage industries to relocate have not been successful even within Guangdong province for example. The kind calculations businesses make in choosing where to locate were illuminated by a paper from the research department of Li & Fung, one of the world's largest trading companies, [17] Surveys found that firms are likely to relocate within China only if their intermediate inputs are readily available elsewhere in China and their overseas sales are a relatively small share of their business. Firms that import most of their inputs and export most of their products will mainly relocate to other low-cost countries, while export firms that depend on local industrial clusters are unlikely to relocate either in China or abroad.

Because of this complexity, China should be cautious about introducing specific policies to attract industry to lagging regions. It should instead let the market guide the location of economic activity, recognizing that the spread of industry to lagging regions is likely to be a gradual, protracted process.

There is, however, nothing to stop lagging regions trying to become more attractive to investors. They should begin with a thorough assessment of their investment climate, identifying any shortcomings, such as a shortage of reliable information, burdensome land and tax policies, or infrastructure constraints. They should then highlight the steps required to overcome these limitations.

[17] See Background paper no. 14 by Li and Fung Research Center : "Notes on Decentralization of Industrial Production in China and Prospects for Manufacturing for the Domestic Market."

Lagging regions should also consider targeted interventions to help people in remote rural villages and townships. Children in remote areas often live far away from any secondary schools, for example. Many therefore need to stay at a boarding school. But the cost of boarding is a heavy financial burden for many poor families and a common reason why students drop out. To ease this burden, governments should consider a conditional cash transfer program or a school feeding program in poorer regions. This could simultaneously reduce the cost of schooling, improve child nutrition and promote education. To provide further encouragement to rural students in poorer regions, the government could consider waiving tuition fees and providing more scholarships. To redress the lack of dedicated teachers in such localities, the government could also consider a program to employ college graduates as teachers in underserved regions. There are excellent examples of such programs in countries such as Mexico, Bangladesh and the United States.

Chapter 4 Strengthening Domestic Consumption and the Middle Class[18]

Policies to Strengthen Domestic Consumption

As an economy reaches middle-income status, domestic demand typically becomes a more important engine of growth. This is particularly true for a country as large as China. Its size puts a natural limit on the expansion of its exports. The world market, diminished by the financial crisis and marked by increasing protectionism, will struggle to digest the kind of growth in Chinese exports over the next decade that it absorbed over the last two.

Domestic demand is not a perfect substitute for global demand. In serving world markets, a country can specialize in a narrow range of products, reaping economies of scale. But if a country must cater more to domestic demand, it will need to produce a broader range of products, so as not to saturate any particular local market niche. It must also devote more of its resources to services and non-tradable items that are missing from a country's export basket, but which figure prominently in domestic demand.

To transform its development pattern, China must reform the demand side of its economy. This represents something of a departure from its longstanding focus on the supply side, where it has performed exceptionally well. Over the past 30 years, it has mobilized its labor force, by permitting migration from the pool of unemployed and underemployed workers in the countryside. It has added rapidly to its capital stock, thanks to high investment rates, fuelled by easy access to credit and low, controlled prices for land, electricity, water and other utilities. Technical efficiency (or total factor productivity) has expanded by 3-4 percent per year.

Where China has done less well is in expanding demand. This has not been deliberate. Even before the global crisis, China's 11th FYP called for a better balance between growth led by exports and growth led by domestic demand, especially consumption. But the economy has turned out quite differently. In the 1990's personal consumption was about 45% of GDP, already very low by international standards. Over the past decade, the share has fallen even further, reaching 36% immediately before the global financial crisis. This is far below the global average (61 percent) and the share in economies such as Vietnam (66 percent), Indonesia (63 percent), India (54 percent) and Thailand (51 percent). It is also much lower than China's historical share. Since 2000, consumption growth has averaged 2.5 percentage points less than GDP growth. Unlike successful

[18] This chapter draws mainly on Background paper no. 12 by Homi Kharas: "China's Transition to a High Income Economy: Escaping the Middle Income Trap" which contains details of the methodology and calculations in estimating the size of the middle class and on Background paper no. 7 by Andrew Crockett: "China's Role in the World Economy: Looking Forward to the 12th Five-Year Plan."

market economies, China has not yet succeeded in developing large numbers of consumer-oriented households that can drive the economy forward.

The main reason for the falling share of personal consumption is the declining share of labor income. The share of wages in national income has fallen from two-thirds in 1980 to just over one half of GDP today. This fall in the wage share is all the more remarkable considering the rapid growth of human capital over the period and the reallocation of labor from low productivity rural occupations to higher productivity occupations in manufacturing and services. Both of these trends would normally raise the share of labor in national income, but neither has been strong enough to offset the rapid growth in profits resulting from strong productivity gains and high investment levels.

For some time, the government has aimed to raise the labor share in GDP, as part of its objective of rebalancing the economy. There are a number of policy instruments to do this. One option is to intervene directly in wage setting. The government could set the minimum wage at a reasonable level and see that it is enforced. In the medium term, it could ensure that existing regulations, such as the labor contract law, are applied to all workers, including migrant workers. Other than this, forceful intervention to increase wages should be avoided, however. It is likely to distort the choice of technology by industries, encouraging more capital-intensive techniques, and reduce employment. That would have the opposite of the intended effect on labor's share of national income. (See also Chapter 5 on Employment, Education and the Labor Market.)

In Singapore, for example, the government tried to force a transition to the knowledge economy by artificially raising real wages (by about 25 per cent) in 1979-81. Over time, skills and productivity did increase. But the wage hike also had unintended and undesirable effects, contributing to a surprisingly steep fall in manufacturing employment throughout the period from 1981 to 1986. In 1985, the Singapore economy slumped. In 1986, to revive labor demand, the government reversed course, taking draconian action to cut wage costs by freezing nominal wages and reducing the contribution to the Provident Fund from 25 percent of wages to 10 percent.

A more promising approach is to make growth more labor-intensive by reducing policy biases against employment. Some analysts argue that China's private-sector firms have limited access to finance and so tend to limit employment.[19] This is corroborated by survey evidence. The World Bank's *Doing Business* survey ranked China 61st in the world in terms of ease of access to credit. The data suggest that less than half of small and medium enterprises have a bank loan. Econometric results indicate that firms facing greater difficulties in accessing credit create fewer jobs. With better lending policies, it should be possible to improve access to credit for smaller firms without sacrificing loan quality and risking default.

[19] International Monetary Fund, July, 2007, Jahangir Aziz and Li Cui, "Explaining China's Low Consumption: The Neglected Role of Household Income."

Policymakers could also help new private ventures by opening up China's service sectors. In advanced economies, it is new firms that tend to create most jobs. If these firms are in the services sector, the effect is amplified. Services, by their very nature, tend to be much more labor intensive than manufacturing.

Another impediment to labor-intensive growth is the continued expansion of a state sector that tends to be much more capital intensive than the private sector. Since the late 1990s, capital per worker in the SOEs has increased enormously and is now almost four times greater than in the private sector.[20] To some extent, this may be because SOEs are concentrated in sectors that are intrinsically capital intensive. But it may also reflect a lingering lending bias in favor of SOEs by the predominantly state-owned banking sector. (See Chapter 9 for a fuller discussion of the role of SOEs.) Reforming the SOEs, by subjecting them to stiffer competition or tougher lending standards for example, would probably reduce the capital bias in China's growth, leading to higher employment and a greater income share for labor. And if SOEs were to pay more of their profits to the treasury, it would allow the government to reduce taxes on households and private businesses without reducing the overall level of public revenues.

One priority is to cut the many fees and taxes imposed on labor. The average take-home pay of a Chinese worker is only 65 percent of total compensation, with the remainder lost to government-mandated labor taxes, and a variety of insurance provisions (health, occupational safety, unemployment and the like). A second priority is to cut business taxes. Some estimates suggest that over half of private-enterprise profits are payable in the form of value-added taxes, a big impediment to growth.

Households should also earn more personal income from their savings and investments. Low administered interest rates on bank deposits have traditionally depressed returns to savers, hurting household incomes. Scope may well exist to raise deposit rates and lower lending rates, squeezing banks' interest margins to the benefit of household depositors and borrowers.

The share of personal consumption in GDP would also rise if the saving rate fell. Personal saving averaged about 30% of disposable income during the 1990's, a relatively high rate by international standards. It has risen even higher over the last decade. One possible explanation is the lack of a social safety net. Some statistical evidence suggests that government transfers to social programs have lowered the saving rate in a number of developing countries. A recent IMF study concludes that personal consumption in China goes up when government expenditure on health increases.[21]

The saving rate might also fall if consumer credit were easier to obtain. Credit is sometimes necessary to smooth consumption over the life-cycle, and a more

[20] See OECD "Economic Survey China 2010" p. 110. The report contains a detailed analysis of the performance of the SOEs relative to the private sector.

[21] International Monetary Fund, January, 2010: Steve Barnett and Ray Brooks, "China: Does Government Health and Education Spending Boost Consumption?"

sophisticated financial system would provide plenty of ways to borrow. China should not liberalize consumer credit indiscriminately, of course, lest it repeat Korea's unhappy experience with the spread of credit cards over the last decade. But the careful relaxation of credit constraints would help to limit unnecessarily high household saving.

Households also tend to save more, paradoxically, when the return to saving is low. This is because they need to set aside more money to reach their desired level of retirement income. The saving rate might therefore fall if the financial system offered a greater variety of saving instruments with better returns. This would also give households an alternative to property as a vehicle for investment.

A consumer's spending will also reflect his wealth. For many rural households, the most important asset is their right to use their land. But their rights are generally insecure. Strengthening those rights would increase the farmers' propensity to consume. Over the medium term, one direct way to raise consumption in China is to increase government consumption. From 2003 to 2007, the gross domestic saving of the government averaged 7.4% of GDP, rising to more than 10% on the eve of the financial crisis. China's public finances are remarkably strong and could readily accommodate a permanently higher level of government spending on education, health and other sorely needed social programs. This higher level of social spending is essential to the building of a harmonious society in China and is the subject of discussion in the following three chapters.

Thus, it is clear there is a wide range of policy instruments available to the government to raise the share of household income in the national economy. Such a rise should also occur naturally as the economy grows and evolves. Over the long run, employment will eventually shift more to services, which account for about 70% of total employment in high-income countries, compared with 33% in China today. Since services are even more labor-intensive than agriculture, the growth of services will naturally increase workers' slice of the national cake. With the transition to a knowledge-based economy, the returns to skilled labor should also increase, possibly resulting in an increase in aggregate labor income.

In addition the Government has the further option of transferring some of the wealth it has accumulated over the past few decades to households in order to stimulate personal consumption. The sale of public housing, at low prices, to tenants in the 1990s was very successful in transferring wealth from the state to the public. The government could consider a similar distribution of part of its vast SOE shareholdings to boost domestic demand in the medium term. Some years ago the government proposed to transfer some of its SOE shares to the social security fund in order to finance the legacy obligations of the mandatory pension system and reduce the contribution rate of current workers(See Chapter 6: "Strengthening the Pension System"). Unfortunately that welcome measure has yet to be implemented.

The Middle Class

The sale of public housing in the late 1990s turned China into a home-owning society almost at a stroke. Homeownership is often cited as one of the defining attributes of the middle class, a social category that is hard to define yet impossible to ignore. A prosperous middle class is a necessary condition for strengthening consumer demand, sustaining growth and escaping the middle-income trap. If China is to rebalance its growth towards domestic consumption, therefore, it needs to foster a large middle class. But although the Chinese consumer market can claim to be the "largest" in many dimensions—it is the largest market for cell phones, automobiles, and housing, for example—the middle class in China today is probably still too small to serve as an engine of rapid growth. The question, then, is when will China's middle class become large enough to power its economy, and what policies can speed up this process.

The term "middle class" is an ambiguous social classification, broadly reflecting the ability to lead a comfortable life. The middle class usually enjoy stable housing, healthcare, educational opportunities (including college) for their children, reasonable retirement and job security, and discretionary income that can be spent on vacations and leisure pursuits. The middle class come from a range of occupations: they can be government officials, rich farmers, traders, business people and professionals. They can be found in various management and clerical jobs. Many are self-employed in small businesses, crafts and commercialized family farms.

From an economic perspective, the middle class can be defined as those households that enjoy a certain amount of discretionary income. After paying for the necessities of life, they have some money left over which they are free to spend on consumer durables, quality education and health care, housing, vacations and other leisure pursuits. Unlike the poor, this group have choices over what they consume. Unlike the rich, their choices are constrained by their budget; they are price and quality sensitive.

Defining and measuring China's middle class is a favorite pursuit of consulting companies, banks and business houses. Although they use different definitions of the middle class, they all agree that it will grow significantly in the coming years. Merrill Lynch believes China's middle class will number 350 million by 2016; McKinsey, adopting a different definition, projects a middle class of 520-600 million by 2025. A 2005 study by China's National Bureau of Statistics defined the urban middle class as three-person households with annual incomes in the range of 60,000 to 500,000 yuan, or about US$16 to US$132 per person per day in 2005 dollars, adjusted for purchasing power. By this measure, the study suggested, 45 percent of China's urban population will be middle class by 2020.[22]

A background study for this book adopts a definition of the middle class that can be applied globally, so as to permit a comparison between China's emerging middle class and the large middle class currently concentrated in the United States, Europe and

[22] Referenced in Cheng Li (ed.) *China's Emerging Middle Class,* Brookings Institution Press, 2010

Japan.[23] In these countries, the middle class was able to drive income levels to new highs. It could do the same in China.

The study somewhat arbitrarily defines the global middle class as those households with daily expenditures between $10 and $100 per person in purchasing-power parity terms (PPP). The lower bound is comparable to the average poverty line in Portugal and Italy, the two advanced European countries with the strictest definition of poverty. In these countries, the poverty line for a family of four is $14,533, or $9.95 per day per capita (in constant 2005 international dollars, adjusted for PPP). The upper bound represents twice the median income of Luxembourg, the richest advanced country. Defined in this way, the global middle class excludes those who are considered poor in the poorest advanced countries and those who are considered rich in the richest advanced country.

The Significance of the Middle Class

Global middle-class households, defined in this way, share some common characteristics. They tend to have high rates of ownership of consumer durables (housing, cars, cell-phones, electronics). They tend to have high income elasticities of demand. They therefore constitute a "consumer class". They are not necessarily a class in the traditional sense of being organized to further their own goals (and therefore some analysts prefer to think of several middle classes) but they do constitute a significant market. It is the global middle class that has powered the world economy and it is the financial weakness of the middle class in North America and Europe that may prevent the global economy reverting to the healthy rates of growth of the past twenty years.

In the wake of the crisis, the global growth model based on Asian production, Western consumption and resource extraction from the rest of the world is no longer sustainable. That gives the middle class in China and the rest of Asia added significance. Global rebalancing requires that Asia consume more, but many of the policies prescribed to achieve this are institutional and long-term in nature: creation of a social safety net, medical insurance schemes, and improved public education. A better hope for increasing consumption in the medium term is for a middle class to lead the way, with its purchasing power leveraged by credit cards, mortgages and other forms of hire purchase. Thus, sustained global growth depends on the emergence of an Asian middle class.

The Middle Class and Sustaining Economic Growth: International Experience

The failure to foster a middle class is one explanation for some countries failure to navigate the transition from middle to high income. Absent a strong middle class, countries struggle to generate the large consumer markets, investments in education, institutionalized savings, and social mobility necessary to sustain growth. This problem is

[23] See Background paper no. 12 by Homi Kharas: "China's Transition to a High Income Economy: Escaping the Middle Income Trap".

best illustrated by the experience of Latin America (see Box 2).

Box 2: The Middle Class in Latin America

Decades of rapid growth in Latin America did create an embryonic middle class, which might have stabilized the region's tumultuous politics. But chronic poverty and glaring inequality persisted, undermining social strength. Despite fast growth of employment, social mobility was limited. Growth was accompanied by urbanization. But the large urban centers were surrounded by secondary agglomerations, which did not enjoy the modernity of cities or the same improvement in living standards. While the middle class developed in the core urban areas, those who lived on the fast-growing periphery remained permanently marginalized. They were poorly served by the school system, which failed to equip young people with the skills required to work in the modern economy. The lack of appropriate training placed a ceiling on the growth of the middle class. This experience shows that human-capital accumulation is the passport to social mobility and a stronger middle class.

Brazil, the largest country in the region, may have broken this pattern in recent years. After many frustrated attempts to strengthen its middle segments, it managed to powerfully develop its middle class after the 2003 recovery. According to Fundacion Getulio Vargas, today the middle class represents about 52% of the population against 36.5% in 2003. This has, of course, fortified the internal market and created a strong constituency in favor of political stability and the continuation of the growth strategy developed by Presidents Cardoso and Lula. There is hope today that Brazil may be really taking off on a more sustained basis. In the current financial turmoil, Brazil's middle class suffered much less than in previous crises. The biggest blow was felt not by the middle class, who work in industry and exports, but by the high-earners concentrated in the financial and service sectors. The resilience of this emerging middle class raises the hope that Brazil may finally be "coming of age".

Source: Contribution by Dr. Mario Blejer, former Governor of the Central Bank of Argentina and Senior Advisor to the International Monetary Fund

The Brazilian experience stands in sharp contrast to that of the Republic of Korea. Korea reached an income level of $4,600 (the level at which Brazil stalled in 1979) in 1986. Since then, it has continued to grow rapidly, reaching an income level of over $18,000 in 2010, despite the shocks of the 1997/98 Asian crisis, the 2001 dot.com crash, and the recent Great Recession. Of course, Korea changed its growth strategy significantly, making the transition to a knowledge economy. But it was able to do so successfully in part because of the country's sizeable middle class. In 1986, with the same per capita income as Brazil in 1979, Korea's middle class was 55 percent of its population, over twice the proportion in Brazil.

Large middle classes could also be found in other fast growing economies. Japan's middle class in 1965, when its income level was $4,900, was also 55 percent. The rapidly growing middle-income economies today, like Poland, Russia, Thailand and Malaysia, have large middle-class populations. Only Indonesia has as small a middle class as China (and Indonesia is significantly poorer). Conversely, slow growing middle-income economies, like Egypt, Syria, Bolivia, and the Philippines, tend to have a small middle class. The one exception is Mexico.

Table 2 Selected Country Middle Class Shares and Per Capita Income Levels, 2009

	Percent Middle Class	Per Capita GDP (PPP 2005 dollars)	Long-term growth
Bolivia	16	4123	Slow
Brazil	37	9283	Slow
China	12	5991	Fast
Egypt	18	5849	Slow
Indonesia	12	3635	Fast
Malaysia	47	12418	Fast
Mexico	65	12577	Slow
Morocco	10	4161	Slow
Philippines	13	3383	Slow
Poland	85	16230	Fast
Russia	69	13846	Fast
South Africa	36	9247	Slow
Syria	16	4518	Slow
Thailand	32	7544	Fast
Turkey	45	7694	Slow
Ukraine	37	6357	Fast

Source: Background paper no. 12 by Homi Kharas: "China's Transition to a High Income Economy: Escaping the Middle Income Trap."

Even in advanced economies, some scholars feel, the stagnation of the middle class and the growing concentration of income might have contributed to the recent financial crisis. Formal economic models suggest that if the highest earners capture an increasing share of the national income, less fortunate households may seek to shore up their consumption by borrowing. This results in a growing debt burden for the middle and lower classes. If this continues for long enough, households eventually accumulate intolerable levels of debt, leading to widespread default and financial bankruptcies in the event of an adverse shock.[24]

Estimating the Size of China's Middle Class

From some perspectives, China already has a substantial middle class. Home ownership in urban areas reached 82 percent by 2007 thanks to the privatization of housing started in 1998. College enrollment has increased to 26 million students in 2009. Some 26 million automobiles were registered in 2009, with sales of 13.6 million units in that year alone. About 150 million credit cards were in circulation by the end of 2008. There are an estimated 700 million cellphone subscribers. In fact, in a 2007 survey of 6000 shoppers, more than 40 percent said shopping was a favorite activity. Based on these statistics, it would appear that the Chinese middle class is already substantial in size.

By our estimates, China may have had 170 million people living in middle-class households in 2010, or about one-eighth of the population.[25] That can be compared to 230 million people in middle-class households in the USA, or three-quarters of the population. What is more, the average US middle class household is richer and spends more than the average Chinese middle-class household. The same is true in countries like Korea, Japan, and the European Union countries. There, the middle class is over 90 percent of the population. Looking into the future, China's middle class has the potential to expand exponentially. Several decades of fast economic growth have brought many Chinese out of dire, absolute poverty and up to the threshold of the middle class. Today 26 percent of the population lives on between $5 and $10 a day, and a further 41 percent lives on between $2 and $5 a day. A significant share of the population is therefore poised to become China's new middle class as growth continues

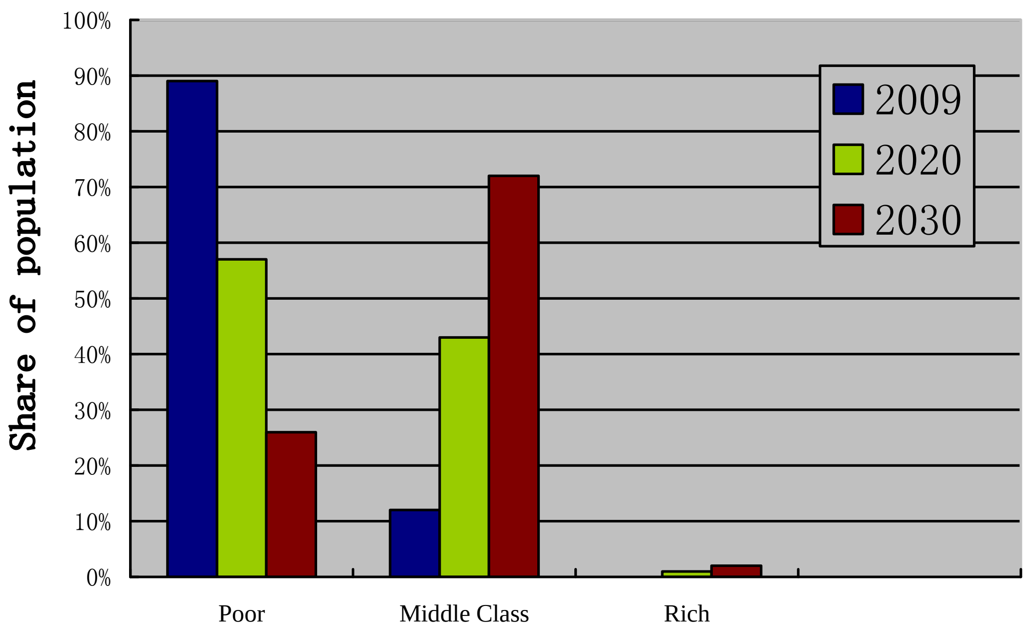
[24] "Inequality, Leverage and Crises", M. Kumhof and R. Ranciere, mimeo, November 2010

[25] For the detailed methodology behind this calculation, see the Background paper no. 12 by Homi Kharas: "China's Transition to a High Income Economy: Escaping the Middle Income Trap". The calculation of the size of the middle class depends on many assumptions. Dr. Kharas' estimate of 12% for the share of the middle class in China's population is on the low side. Other estimates are as high as 20%. There seems no question however that because of the low share of household income in GDP and the highly unequal distribution of income among the population, the share of the middle class in China today is much lower than Korea and even Brazil at the same level of development, i.e. when these countries had achieved middle income status and were attempting to transition into higher income level.

in the decades ahead.

As incomes rise, the number of people crossing the middle-class threshold will rise rapidly. Assuming average income growth of 7 percent between now and 2030, the proportion of China's population with expenditures surpassing $10 per day would increase to 74 percent (see Figure 4), a share that is comparable with that in the United States today. Within one generation the majority of Chinese could go from being poor to being middle class. The actual growth of China's middle class over the coming decades will depend on the success of the government's policy to increase the share of personal income in GDP and strengthen domestic consumption – as discussed in the earlier sections of this chapter – and its social policies and programs reviewed in the next three chapters.

Figure 4 China's Expanding Middle Class



Chapter 5 Employment, Education and the Labor Market[26]

The level, composition and quality of employment will be key ingredients of China's "harmonious society". China's leaders often speak about the importance of employment. During the 2008-2009 global recession they expressed great concern about the employment of college graduates and of the millions of laid-off migrant workers in export industries. Employment issues were addressed in the 11th Five Year Plan. China has also created a framework of employment law (from the Labor Law of 1994 to the Employment Contract Law of 2008) and a system to mediate labor disputes, as well as legislation to promote employment in various ways. These policies have drawn on international experience, adapted to China's circumstances, but there is still much to be learned from other countries which have tried to resolve employment problems that China faces or is likely to face.

Employment matters largely because it affects personal and family income: its level, its distribution among individuals and groups, and its stability. Wage and salary employment is particularly valued for the stability and predictability of the income it provides. Losing a job not only causes a fall in income but also has a huge negative effect on happiness or mental well-being – comparable to divorce, or to the death of a family member. In a market economy, however, almost everyone who needs to earn a living can find some way to do so: so what matters is not just having a job, but the level of earnings and conditions of work.

Employment is a more prominent policy objective in developed countries than in developing countries, and in middle-income than in low-income countries, because richer countries have fewer self-employed farmers and more people in jobs subject to labor regulations. For this reason, employment is likely to become an increasingly prominent policy issue in China as it continues to advance economically. Now largely the concern of the Ministry of Human Resources and Social Security, employment issues should move up the agendas of the Ministry of Finance, the People's Bank of China (PBOC) and the National Development and Restructuring Commission (NDRC).

One employment policy issue in all countries is the total number of wage jobs – both fluctuations related to unemployment and longer-term trends. This issue, however, is blurred in developing countries (and increasingly in developed ones) by the large share of jobs in the informal sector, whose number cannot be accurately measured and whose quality is often inferior to that in the formal sector.

A second employment policy issue is the quality of the wage jobs – which depends crucially on the quality of education and on skills development at all levels of the education system. In this regard, economic theory and experience from other countries provides many messages that are relevant for China.

[26] This chapter draws mainly on Background paper no. 6 by Cai Fang, Richard Freeman and Adrian Wood: "China's Employment Policies in International Perspective" and Background paper no. 17 by Paul Romer: "Notes on Optimizing China's New Pattern of Growth".

Employment policies also invariably extend to more specific issues, including wages and conditions of work, motivated by two objectives. One is to increase economic efficiency by allowing the country's supply of labor and skills to move freely into industries, occupations and localities where its contribution to production is greater and out of those where its contribution is lower. The other is to reduce unfairness at work by ensuring that workers of similar skill in jobs of comparable attractiveness receive similar wages, that women and minorities are not discriminated against, and that people are not exposed unwittingly to health hazards. In some cases, efficiency and fairness considerations pull the same way, but in others they conflict, which requires governments to strike difficult balances.

Employment Growth, Sectoral Structure and Adjustment

Growth and Employment

In developing countries, faster growth is linked to faster shrinkage of the share of agriculture, where self-employment predominates. Shifts of labor from agriculture to non-agriculture thus raise the number of wage and salary jobs in the economy. They also tend to raise the quality of employment, partly because wages outside agriculture exceed those in agriculture and partly because wage and salary jobs in non-agriculture generally involve less arduous work and yield more stable incomes than agricultural self-employment.

Consistent with this developing country experience, China's rapid growth since 1980, coupled with labor market reforms that have allowed workers to leave agriculture more easily, has made employment outcomes better than they would have been if growth had been slower and other features of the economy remained the same. Official statistics suggest that in 1978, the agricultural share of employment was almost the same in China as in India (71%), but by 2004 had dropped by 24 percentage points in China and by only 14 percentage points in India.

Looking forward, however, it would be a mistake to let concerns about employment determine policy choices between faster or slower growth. Employment in agriculture is already much reduced. Many agricultural workers are also relatively old. Thus the scope for further transfer of labor out of agriculture into wage jobs is becoming more limited. Moreover, in less than 10 years China's total labor force will cease to grow.

In this context, China will start to look much more like a developed country in which short-term fluctuations in output cause fluctuations in employment (usually proportionally smaller, because labor productivity varies pro-cyclically), but there is little connection between the trend rate of aggregate output growth and aggregate employment. In this context, the future challenge for China is to raise the quality, not the total number, of non-agricultural jobs, and to reallocate workers in non-agricultural sectors from lower to higher productivity activities.

It should also be noted that while the structural transition from agricultural to non-agricultural employment has proceeded rapidly and relatively smoothly in China, the related transition from rural to urban employment has been slower and more difficult, as emphasized in Chapter…. Completing the rural-urban employment transition in a satisfactory way over the next couple of decades is among the biggest challenges that China faces in building a harmonious society.

Economic re-balancing and employment

Both international and Chinese economists have suggested that China needs to rebalance its economy in various ways: reduce investment; reduce saving; increase household consumption; increase government consumption; and reduce the foreign trade surplus. All these adjustments would affect the demand for labor. Over the medium term, none would have a large effect on the aggregate level of employment – including self-employment and informal employment, as well as formal wage and salary employment. However, rebalancing could affect the structure of employment, wages and working conditions, and would need to be carefully managed to minimise adjustment costs for workers and employers.

One relevant question is how rebalancing would affect the share of formal wage and salary jobs in total employment. In this regard there would be differences between the two main sorts of rebalancing that have been proposed for China. The first rebalancing is of the composition of domestic expenditure. A shift from investment to household consumption would reduce the share of wage and salary jobs, particularly formal jobs, because most investment involves this sort of employment (in machine-making or construction), whereas quite a lot of household spending is on goods produced by self-employed or informally-employed workers in agriculture, light industry and services. By contrast, a shift from investment to government consumption would not affect the share of wage and salary jobs and would increase the share of formal jobs, since almost all government employment is formal.

The other proposed sort of rebalancing is to reduce the trade surplus, with an accompanying increase in domestic expenditure. This would shift the composition of aggregate output away from tradable goods and services and towards non-tradables (construction and services). The effects on wage and salary employment are ambiguous because the reduction of tradable output could include agriculture (as a result of higher imports) as well as manufacturing (as a result of lower exports), while non-tradables, too, contain a mixture of wage and salary jobs and self-employment. On balance, however, a reduction in the trade surplus would probably reduce the share of formal wage jobs, since such jobs are a lower proportion of total employment in services than in export-oriented manufacturing. The alternatives to jobs in export-oriented manufacturing, moreover, whether in services or in the production of material goods for the domestic market, would be mainly in interior provinces, with lower earnings.

But although in these ways reducing the trade surplus might lower the quality of employment in China, it would probably increase the total amount of non-agricultural employment. This is because the trade surplus is one of the main reasons why China's service sector remains small by comparison with other countries, and because at present in China services generate more than twice as many jobs per unit of output as manufacturing. For example, complete elimination of the trade surplus could increase the service sector's share of employment in China by three to four percentage points.

If implemented too rapidly or without supporting policies, shifts in the structure of demand for labour can inflict heavy adjustment costs on workers, forcing them into inferior jobs or unemployment. The workers released from contracting activities may also lack the skills needed in expanding activities. The implication for policy is that rebalancing should be done gradually, so that changes in the structure of employment can occur mainly through different rates of expansion of different activities, rather than by growth of some activities and absolute shrinkage of others. Adjustment costs for workers can also be reduced by government action, especially to improve labor market information.

Absorbing China's surge of college graduates

The number of students in higher education has greatly increased in recent years, with the number of higher education graduates rising from 1.1 million and 1.5 million in 2002 to 6.3 million in 2009. They have entered the job market with career expectations that will be hard to fulfill and the employment prospects of college graduates has become a matter of concern for the government. Over time the situation should ease. With the increase in supply of university graduates, the pay premium they command in the job market should fall, increasing demand for their services. More important than this movement along the "demand" curve is the potential shift in the curve as a result of the economy's transition to highly skilled, technologically complex activities.

Korea provides the closest parallel to China's recent rapid and massive expansion of university education. Korea increased the number of higher education graduates at phenomenal rates from the mid-1980s through the 1990s. The Korean labor market absorbed the huge numbers of graduates fairly smoothly, partly through large declines in the relative earnings (and thus cost to employers) of graduates. But their absorption was also eased by changes in the sectoral structure of the economy. Less skill-intensive manufactured export sectors, for example in clothing and footwear, contracted, and more skill-intensive ones, such as chemicals and semi-conductors, expanded, increasing the demand for engineers and other workers with a college education, relative to less educated workers.

This will also happen in China. Rising education levels will make skilled workers relatively cheaper and shift the country's comparative advantage into more skill-intensive manufactures and services, absorbing part of the increased skill supply. Korea also provides another lesson. Despite the rapid growth of its high tech sector, most of its expanded supply of college graduates found employment in jobs that had traditionally used less educated workers. There was an upgrading of the education levels of occupations and industries across the board.

Education and Skills Development

Importance of Education for Growth

Nations set great store by their physical wealth: their factories, plants, roads and ports. But economists have shown that differences in the size of the physical capital stock can explain only a small fraction of the vast gaps in productivity between countries. Of greater importance is human capital – the skills of the population.

A 2004 study by the Nobel Laureate James Heckman[27], since confirmed by several more recent

[27] James J. Heckman "China's human capital investment" in China Economic Review 16 (2005) 50-70

studies, shows the return to investment in human capital in China is much higher than the return to investment in physical capital. Moreover, the returns in poorer regions are higher than in richer areas. This means that China has been investing too much in physical capital, relative to the human kind. Indeed, the single strongest conclusion to emerge from the analysis of China's recent growth is that China should invest more in human capital, especially in young people underserved by current patterns of education spending. The economic case is compelling on its own. But the argument derives added force from the country's commitment to a harmonious society.

The under-investment in human capital is partly attributable to mispricing: the wages paid to skilled workers do not adequately reflect their contributions to the economy. This reduces the incentive to acquire skills. One way to fix this problem is to subsidize training and skill development more generously. Heavier outlays by the central government in underserved areas would contribute to efficiency as well as equity, because the returns to education are higher in poorer areas.

Another way to fix the problem is to correct the under-pricing of skill. This would require further liberalization of the labor market. Greater labor mobility, for example, would help equalize the rate of return to human capital across regions and between cities and the countryside. In a freer labor market individuals would be compensated for their skills more generously, thus motivating them to acquire more human capital. In addition, a student-loan market should be developed to allow students to borrow against future earnings. Otherwise, only the rich will send their children to university, transmitting inequality from one generation to another.

Upgrading Worker Skills

China must improve the skills of many workers and young people who have (or in future are at risk of having) low levels of education. Experience in the US, the UK and other developed countries has shown that an underclass of poorly educated people in a modern economy is both a massive waste of human resources and a major cause of income inequality and social polarization. China should make every effort to avoid this problem, and this effort should start now, because the children who are educated in the next decade will be in the labor force for the next half-century.

The clearest current problem is the low quality of much education in rural areas. This problem is exacerbated by the unsatisfactory situation of the huge numbers of migrant workers(discussed in Chapter 3: "Urban and Regional Development"), who are unable to obtain education for their children in the urban areas where they work, and therefore have to leave their children in their rural areas of origin. The educational prospects of these children are worrying: not only are many rural schools of low quality, but the children are living with grandparents whose educational level is low and may have emotional problems caused by the separation from their parents. Improving the quality of basic education, especially for schools and children in the lower part of the distribution of educational attainment, must be one of China's top priorities.

International experience with job-related education and training is more complicated. The economic returns to vocational schooling, as measured by the wages of its former students, tend to be lower than the returns to academic schooling. Government-run special training programs tend to have low returns, too, even in countries which have put large resources into them, such as Sweden. Vocational training seems to be most effective where it is run by employers, rather than by schools or government, and where it is in the form of apprenticeships. China needs to take account of this experience in developing its job-related education and training.

Reforming higher education

In recent years, China has rightly emphasized the need to expand higher education; with the result that the enrollment of college students has increased enormously. Spending by central and provincial governments on higher education has also increased greatly in recent years. However, there are now increasing concerns about the quality of higher education in China and its ability to meet the requirement of the economy and society. In particular, the higher education system remains one of the least reformed sectors in China, retaining many features of the planned economy. Government ministries intervene extensively in the academic and administrative affairs of the universities, leading to inefficiency and low productivity. Within the universities, there is a lack of clear leadership and accountability under the current "system of president's responsibility under leadership of the party committee." There are also excessive restrictions on the establishment of private universities. Policies are needed that would include simple procedures for private universities to be registered, for them to obtain academic credit, and to provide tax exemption for financial contributions to private institutions.

International experience also provides a number of important messages for China:

First, competition between universities is beneficial, though quality assurance is essential. A competitive environment creates incentives for universities to be more responsive to demand from both employers and students, most of whom are well-informed or potentially well-informed and hence best able to make choices which conform with their interests and those of the economy. In China's case, this suggests that the existing universities should be given much more autonomy in enrollment of students, in the choice of curriculum and learning environment, and in the mobilization and allocation of both human and financial resources within universities. The government should also issue its research grants in ways that encourage healthy competition between universities, for example by allowing professors who receive grants from an agency of the central government to take the grant to any university in China. The establishment of private universities should also be encouraged.

Second, universities should be financed by a mix of taxpayer support and variable fees. Higher education creates benefits beyond those to the individual, justifying taxpayer subsidies. However, graduates also receive significant private benefits – in terms of higher earnings and more satisfying jobs – so that it is efficient as well as equitable that they bear some of the costs. However, they should bear those costs when they can afford them – as graduates – not when they are students. A system of student loans is, therefore, essential.

Third, widening participation in higher education requires a range of interventions, many of them earlier in a person's education. If student loans are income-contingent, experience from other countries (notably Australia, New Zealand and the UK) suggests that participation in higher education by students from poor backgrounds will not suffer. But efforts to increase the participation of students from poorer backgrounds needs to start much earlier and, most particularly, with measures that will improve a student's high school leaving grades.

Increasing efficiency of education expenditures

More generally, experience around strongly suggests that China should rely much more on incentives and competition to drive improvements in the quality of education at all levels of the system and increase the efficiency of educational expenditures. Schools and universities that find better ways to teach pupils should be rewarded with more resources, so that they can teach even more students. The government might consider several measures to encourage this. By measuring educational outcomes – the skills students learn and the value of those skills in the marketplace – it could identify schools and universities that use resources well. The government could also require universities to make the salaries and job placements of their graduates available to prospective students. The disclosure of such information may increase competition to the benefit of society as a whole.

Insofar as they measure performance at all, most schools and universities test their students after they complete their studies. The institutions look good if their students do well. This encourages them to compete for the best students, but not necessarily to do a better job of teaching them. The government should instead test student knowledge at two points: before they begin an academic program and after they complete it. This type of testing captures the value that a school or university adds. The best educational institutions are not necessarily the ones with the best students but the ones that get the best out of the students they have.

To encourage competition among schools, students should be given more freedom to choose the school they wish to attend. Academic contests could award winners with fellowships, which would encourage students to excel and allow good students to choose their universities. State-controlled institutions should face competition from more private institutions, such as business schools and technological research institutes. Combined with rigorous measurement of student outputs, this would greatly enhance China's educational productivity.

Competition would also improve schooling at lower levels of education. As China continues to urbanize, it will need to build new schools, particularly at the primary and secondary levels. School buildings should be allocated first to the institutions that have performed the best. Instead of subsidizing schools, the government could offer school vouchers to target populations, such as the children of migrant workers. They could then "spend" these vouchers at the school of their choice.

By sharpening incentives and creating a competitive market for human capital, the government could do a lot to improve the effectiveness of the country's educational infrastructure, at no additional fiscal cost. International experience has shown that an effective way of improving basic education especially in poor regions is for the central government to take over responsibility for financing, while lower level governments continue managing schools. Thus local governments will have incentive to improve the quality of the education they provide and to attract more students, including the children of migrant workers (See Chapter 9: "section on 'Reforming the Inter-Governmental Fiscal System'").

Labor Market Institutions and Regulations

Balance between Institutions and Markets

Every market economy needs labor institutions and regulations to protect worker rights at the job, to allow workers to form collective organizations to bargain with employers, and to limit labor-management conflicts. A good labor relations system provides workers with institutions of collective voice in the workplace and in the economy as a whole. It encourages employers and employees who engage in collective bargaining to reach efficient bargains – agreements that maximize output, as competitive markets are supposed to do, while producing a different division of output than in a market that lacks such institutions. Efficient bargainers "leave no money on the table". This usually occurs through labor-management cooperation, with infrequent strikes and considerable sharing of information, sometimes involving the assistance of neutral mediators or arbitrators.

Analysts categorize labor systems according to the extent to which wages and working conditions are determined by institutions – collective bargaining or regulations – rather than by market forces. Greater reliance on institutions lowers the dispersion of wages among observationally equivalent workers (that is, those who are similar in education, age and gender), and reduces the pay differential between ordinary workers and management. Advanced countries on average rely more on labor institutions than do developing countries, but there is wide variation among countries within both these groups in the degree of reliance on institutions.

International economic agencies differ in their opinions about the best combination of institutions and markets. The ILO favors 'social dialogue' institutions because they create greater equity. The OECD, IMF and World Bank favor markets because they increase wage flexibility and give management the power to determine employment and working practices. In the 1990s, these three agencies favored the US labor market model, with its high turnover, limited regulation and weak unions, giving more weight to the US's high level of employment than to its high inequality and poverty. But evidence that some advanced countries – the East Asian and the Nordic countries in particular – have labor markets that diverge greatly from the US model but also produce high employment as well as the recent Wall Street implosion and rise in US unemployment have produced a substantial change in thinking and a lot more uncertainty on the virtues of market determination of outcomes compared to institutional determination. Indeed, recent surveys of research on labor institutions in advanced countries, and on unions, regulations, and social protection in developing countries, stress that the only indisputable finding is that institutions reduce earnings inequality.

There is thus no ideal set of labor institutions or regulations that China might copy. The market-oriented policies that the OECD, IMF, and World Bank recommended for labor markets have not caused economic disaster (unlike laisser-faire policies for financial markets). But neither have the policies proved superior to policies in which government or collective bargaining play a greater role in the labor market. Rather than favoring any one set of policies or institutions, the evidence highlights trade-offs: institutions reduce earnings inequality and provide safety nets, but can reduce labor mobility and concentrate joblessness on disadvantaged groups of workers.

Knowing how countries around the world have responded to labor market problems can inform China about the range of possibilities for policies and their potential consequences in different circumstances, but there is no guarantee that what works in one setting in one period of time will work in another setting in a different period. Labor markets are idiosyncratic, so there is leeway for China to develop institutions and regulations with Chinese characteristics. The choice depends on the problems facing the country, the trade-offs the country wants to make between different goals, and the politics of enacting and implementing these decisions. A more flexible labor market has helped China to expand employment over the past thirty years, but looking ahead, the goal of a harmonious society could be endangered by excessive inequality of earnings, which argues for increasing the role of labor market institutions.

Role of Unions

Countries vary widely in the nature of their labor laws and in the extent of the unionization of their workforces. There is a large gap between the EU and the US, for example, in the unionization rate, and an even greater gap in the percentage of workers covered by collective bargaining. There are also differences among countries in the ways unions operate. In some countries, unions bargain in a highly decentralized way with individual firms. This is common in the enterprise-based labor relations systems prevalent in parts of Asia – Japan, Korea, Malaysia and Hong Kong, for example – and in the US. By contrast, in many European countries bargaining is often between centralized industrial unions and employer federations in entire sectors. Economy-wide bargaining for wages by national union confederations has declined worldwide.

The variation among countries in union membership and how unions operate mainly reflects variation in national policies and institutional history rather than variation in the preferences of workers. Surveys of what workers want, in countries ranging from the US to Germany to Korea, and including one small survey in China, show striking similarity in worker desires for some independent representation inside their firms and for cooperative relationships with managements that pay attention to their views and interests.

China's 2008 Labor Contracts law (which instituted written contracts of employment for all workers, including migrants, aimed at reducing wage arrears, and strengthened the ability of the All China Federation of Trade Unions (ACFTU) to organize workers in the private sector) and other recent changes in labor law regarding mediation are well up to world standards. Moreover, the role and impact of Chinese unions appears to have been qualitatively similar to that of unions in other countries: in unionized firms, wages are modestly higher, fringe benefits are more generous, and so on. The key issue going forward, therefore will be effective implementation of labor laws and effective support for those laws by the ACFTU – including pressuring firms to follow national labor laws, acting as a counterforce to the growing influence of wealthy business groups on policy decisions that affect workers, and helping migrant workers safeguard their rights.

Minimum Wage Policy

Virtually every government in the world sets minimum wages, though with wide variation in how exactly this is done. Some minimum-wage laws apply the same rate to all workers in a country, while others apply different rates for young workers or for workers in different regions, and so on. China introduced its first minimum wage regulation in 1993. In 2004, the Ministry of Labor and Social Security pressed each province, autonomous regions, and municipality to develop its own minimum wage, which resulted in higher minima in the more advanced areas, many of which set monthly rather than hourly rates, with greater monthly hours for migrant workers. Some people fear that regional minimum wages encourage a 'race to the bottom' to attract investment, but in practice workers in areas with low minimum wages often press for increases. The US has a national hourly minimum wage, while states and municipalities can set their own minima. In 2008 enough localities had done so for most American workers to be covered by minimum wages substantially higher than the federal minimum.

Debates over minimum wages focus on how much they reduce employment. Most studies find modest effects (a 10 percent rise in the wage reducing employment by about 1 percent), and some find no effect at all. Some economists find these results surprising, but they can be reconciled with theory by recognizing that the elasticity of demand may be low, that governments pay attention to possible job losses when choosing the level of the minimum wage, and that firms can adjust labor practices to maintain employment while paying modestly higher wages. High minimum wages might well cause large job losses (or be unenforceable) but the cautiously chosen levels of minimum wages around the world do not appear to have significant adverse effects on employment, and benefit many workers, including those whose employers would otherwise have the power to hold their wages below the market level.

The key issue in minimum wages (as in other direct government regulation of labor outcomes) is again enforcement. Unions and workers themselves can play a vital role in enforcement by complaining to the government about illegally low wages and violations of laws on hours and other conditions of work. However, they are likely to complain only when they believe that enforcement would not cause job losses. Where workers or their unions believe that employers could not maintain employment if they complied with the law, the law will be difficult to enforce (we return to this issue below in relation to the informal sector).

Unemployment Insurance

Unemployment insurance is another debated issue: it allows jobless workers to maintain a reasonable living standard, but it also tends to increase the length of time for which they are unemployed. Research shows that the adverse effect on the level of unemployment is related more to the duration of unemployment benefits than to their level relative to the worker's normal wage (the 'replacement rate'). Thus in booms it may be desirable to reduce the length of time for which workers can receive unemployment benefits, and in major recessions to extend the duration of coverage, as the US has historically done. The best policy may be to combine varying duration of coverage with relatively high replacement rates.

A major task for China concerning unemployment insurance is to expand its coverage, which at present includes only urban areas, leaving the many employees of township and village enterprises uncovered. Even in urban areas, most migrant workers are not covered. These omissions debase the role of unemployment insurance in protecting workers, and make the system inefficient. In 2008, only 41 percent of urban resident workers were covered, and less than four percent of migrant workers living in urban areas for 6 months or more . The surplus of unemployment insurance revenue over spending has been increasing since 2002 and had mounted to 130 billion yuan by 2008. A growing surplus makes little sense in a program of this type, but it could perhaps be used to extend the coverage of the program.

The informal sector

'Informal' employment is hard to define or measure precisely, but is agreed by all to exist on a large scale in most countries. It includes wage and salary jobs in firms which are not registered with government agencies, and workers who lack formal employment contracts or are not enrolled in social security programs. The term is sometimes also extended to jobs which are casual, temporary, or home-based, and to the self-employed. Different countries use different definitions of 'informal', depending on their circumstances and on what information is collected by their household and establishment surveys.

On any and all of these definitions, there is currently a lot of informal employment in China. More than a third of the urban jobs measured by labor force surveys are not visible in establishment data , there is probably an even higher proportion of such jobs in rural areas, and roughly half of the workers surveyed lack contracts or social security provision . Since the mid-1990s, the government has endorsed 'flexible' employment as part of the solution to job losses from unprofitable or overstaffed state enterprises. Over the same period, however, the government has developed a comprehensive system of employment law and introduced a market-compatible social security system in urban areas.

China's informal employment share is not unusual by international standards. More than half of all non-agricultural jobs worldwide can be considered informal. In developing countries, this share ranges from one-half to three-quarters, of which 30-40% (and in Asia over 50%) is wage employment and the rest is self-employment. As in China, the informal share of employment has either risen or remained stable over the past two to three decades in most countries, including developed countries and fast-growing developing countries such as South Korea. Worldwide, there is no sign in the data that the informal share of jobs in developing countries is likely to decline in the foreseeable future.

Policy towards informal employment raises difficult issues, because informality arises from a mixture of voluntary and involuntary decisions and has a mixture of desirable and undesirable results. Some unregistered firms are cheating the state and their workers out of taxes, wages and benefits that they could afford, or exposing their workers to unacceptable health risks. But some of the firms that avoid registration and taxation, and the jobs that they create, would not otherwise exist. Similarly, some workers accept jobs with no contracts or social security, or with health risks or wages below the legal minimum, because the alternatives for them are even worse jobs or no jobs at all. Others may find that the informal sector gives them greater opportunity to be entrepreneurial or to earn more (by avoiding taxes) than in the formal sector. In China informal employment, often of reasonable quality, has also helped to bridge the transition from planned to market-oriented allocation of labor.

There is thus an international consensus that the right policies lie somewhere in between two extreme and inappropriate approaches. It would be undesirable (and probably impossible) to suppress informal employment by draconian enforcement of laws and regulations. Such a policy would hurt many poor people by eliminating their jobs, as well as being administratively costly. But it would also be wrong to do nothing, since some sorts of informal employment inflict unnecessary harm on poor people, as well as imposing costs on the state through lost tax revenues and through expenditure on health, pension and poverty problems caused by non-compliance with the law.

It is thus necessary to strike a difficult policy balance in this area, as China seems to have done quite successfully over the past decade. One strategic issue is the degree to which the governments should tacitly tolerate the avoidance of labor market regulations, especially in small firms and in backward areas. Some such toleration seems unavoidable. But too much toleration will make the problem of informal employment worse, subverting the basic objectives of improving the quality of employment and of making China into an efficient and fair rule-based society.

In addition to extending social benefits to informal sector workers (which is discussed in chapter 7 on Social Policy) an obvious priority is to tackle serious violations of health and safety regulations in informal firms, which result in many industrial accidents. Worldwide, occupational injuries and deaths arise disproportionately in small firms. In some cases, workers may be willing to expose themselves for economic reasons to health and safety risks which the government cannot control, but the government can improve outcomes by disseminating accurate information on the nature and extent of these risks, which are often not fully understood by the workers who choose to take them. Similarly, even workers who choose to remain in the informal sector can benefit from the availability of better information on labor market conditions, which enable them to find better jobs at higher wages.

Another strategic issue concerning informal-sector employment is its implications for the standards that should be set by laws and regulations governing wages and working conditions in the formal sector. The existence of a big informal sector might suggest that the standards in formal-sector laws and regulations should be set at lower levels than would be ideal, to reduce the incentive to avoid them (which tends to enlarge the informal sector). However, a surprising finding of recent research is that government policies alter outcomes (and may improve the well-being of workers) in the informal sector even though they are not enforced there. In some respects, that is, informal workers and firms adhere to policies covering the formal sector (for example on minimum wages or the length of the statutory work week) as if those policies had established a social standard. This evidence is supportive of China's practice of making and enforcing labor laws.

Chapter 6 Strengthening the Pension System[28]

Over the past two decades, China has fundamentally reformed its pension system. In urban areas, a mandatory system is now in place that includes a basic pension and individual accounts. There is a separate system for public employees. Provision has also been made for voluntary pension arrangements. The dibao system provides money to some of the elderly poor in both urban and rural areas. In addition, the government is piloting a pension scheme in rural areas which will include both a basic pension and voluntary individual accounts.

However, the pension system is still beset by problems. The mandatory system is highly fragmented and in most municipalities, the pension fund is in deficit. Mandated contributions are unevenly enforced; the system covers cities incompletely, because most firms in the informal sector do not participate; and it omits migrant workers and rural workers altogether. The system of individual accounts is also struggling. Funding has not occurred as planned (leading to the problem of so-called "empty accounts") and there are no institutions to help workers pick their portfolio and make direct investments in different assets. The pension system for public employees needs to be better designed. In addition, the rural pension system faces several strategic issues. One is whether the basic pension should be conditional on contributions. The second is whether such pensions should be confined to rural areas, or offered throughout the economy.

As part of China's overall effort to improve its social policies and programs, further reform of the country's pension system must remain a high priority.

Lessons from Economic Theory and International Experience

Core Objectives of a Pension System

Throughout the world, pension systems have the core objectives of consumption smoothing, insurance, income redistribution and poverty relief.

CONSUMPTION SMOOTHING. Pensions allow a person to transfer consumption from his[29] productive middle years to his retirement years, so that he has money to spend even when he is no longer working and earning.

INSURANCE. A person does not know how long he will live. Thus pension systems provide insurance in the form of annuities, i.e. weekly or monthly payments to the individual for the rest of his life. Such annuities are a form of risk pooling, enabling people to insure against the risk of outliving their pension savings. Pension systems can also protect spouses and young children if a worker dies before retirement.

INCOME REDISTRIBUTION. Pension systems can redistribute incomes within a generation: low

[28] This chapter is a summary of Background paper no. 4 by Nicholas Barr and Peter Diamond: "Pension Reform in China: Issues, Options and Recommendations"

[29] Throughout this chapter, the masculine pronoun is used to refer to an individual and his pension; but it is recognized that the pensioner may equally well be a woman.

earners, for example, can receive pensions that provide a higher replacement rate (ie, a higher percentage of their previous earnings) than high earners receive. Pension systems can also redistribute income across generations. They can, for instance, impose a higher contribution rate on the present generation, thereby allowing future generations to enjoy more generous pensions or lower contributions. Similarly, pensions can redistribute income from future taxpayers to current retirees by giving them a better retirement income than their past contributions alone could finance.

POVERTY RELIEF. A general system of poverty relief for the entire population may not be affordable. It may also blunt the incentive to work. The elderly, however, are not expected to provide much labor, and are, therefore, a particular target for programs to reduce poverty, programs that would work less well across all age groups.

Of these four objectives, some are clearly the responsibility of the state; others can be addressed in different ways, so countries vary in their pension arrangements.

Pension Systems Around the World

International experience and economic theory suggest that no single pension system best serves every country (see Box 3). Rather, a number of different structures work pretty well. They include one or more of the following elements, in different degrees of importance and size.

Box 3: No single best pension system for all countries

Pensions have multiple objectives, notably the achievement of consumption smoothing, insurance, poverty relief and redistribution. They also face a series of constraints:

- Fiscal capacity: stronger fiscal capacity makes it easier for the system to find additional revenues for a pension system.
- Institutional capacity: stronger institutional capacity widens the range of feasible options for pension design.
- Behavioural parameters: these include the responsiveness of labour supply to the design of the pension system, and the effect of pensions on private saving.
- The shape of the income distribution, prior to transfers: a heavier lower tail of the income distribution increases the need for poverty relief.

There is no single best system for all countries for several reasons:

- Policy makers will weigh these objectives differently. They will differ in the importance they place on poverty relief and in their views about how risks should be shared within and across generations.
- The pattern of constraints, including the value of key behavioural parameters, will differ across countries.
- Politics: what is politically feasible in some countries, may be politically impossible in others.
- History bequeaths a set of institutions, which influence policies today. This institutional inheritance may be worth building on—or at least difficult to dismantle.

In sum, if the objectives differ and the constraints differ, the optimum is likely to differ. Thus:

- Different countries have different structures for addressing the multiple goals.
- Though no country's system is perfect, there are a number of different structures that work pretty well.

NON-CONTRIBUTORY PENSIONS, MINIMUM-INCOME AND MINIMUM-PENSION GUARANTEES (CITIZEN'S PENSION.) In many ways the simplest option is a tax-financed pension available to everyone beyond a given age, as in the Netherlands and New Zealand. This is commonly called a citizen's pension. As a variant, the citizen's pension can be affluence-tested, ie, given to everyone except the best-off, as in Australia, Canada, Chile (since July 2008) and South Africa. Alternatively, there can be a guaranteed minimum income available to all poor elderly people on the basis of an income test, as in many countries.

DEFINED-BENEFIT (DB) PLANS. In a national DB plan, a worker receives a pension based on his earnings history and the age at which he first draws benefits. Though in many cases the pension benefit is based on the worker's wages in his final few years of work, it is now increasingly recognised that this design is problematical, and that it is better to base a person's pension on a longer period, up to his entire career. There may be a taxpayer subsidy from general revenues. Some national DB plans are partially "funded", which is to say they set aside financial assets in a trust fund in anticipation of future pension payouts. But most plans are largely "pay as you go" (PAYG), with pensions paid out of current revenues, with little or no prior funding.

FUNDED DEFINED-CONTRIBUTION (DC) PLANS. With funded individual accounts, pensions are paid from a fund built up over the years by members' contributions and actually invested in securities or other assets. The contribution rate is fixed. Upon retirement, the pensioner receives an annuity whose size is determined by the size of his lifetime pension accumulation, life expectancy and the rate of interest. Countries with DC systems can use publicly organised investment (as in Singapore) or private, regulated financial intermediaries (as in Chile).

NOTIONAL DEFINED-CONTRIBUTION (NDC) SYSTEMS[30]. A fairly recent innovation, pure NDC systems (sometimes also called non-financial defined-contribution systems) are hybrids, combining elements of both DC and DB. Like DC systems, they give workers individual accounts, which record the contributions workers make from their earnings and base benefits on contributions, not earnings. These systems also share some risk with the pensioner, since benefits vary with

[30] There are different Chinese translation of Notional Individual Account and the difference between fully funded and notional individual accounts is often not well understood. With a fully funded account, contributions are used each year to purchase individual assets – stocks, bonds, mutual funds and bank deposits. Thus, a fully funded account is similar to a private investment account. By contrast, a notional defined-contribution account is similar to a bank account. The returns credited to a NDC account are set by the government, based on the returns on the assets held and on the anticipated flow of new contributions. Thus, to the individual worker the only difference between the NDC and a funded account is that with the former, the rate of return is set by rules based on overall fund availability, as in a bank account, while with the latter, it depends on future market returns on the particular assets held in the account. The confidence of the worker that he will get his pension when he retires depends not on whether there are assets in the account or not, but on his confidence in the government. This is like in a bank account; the depositor only cares about the strength of the bank where he has the account and the sustainability of the rules determining benefit levels, not how the money he deposited was used. With funded accounts, the individual worker faces great uncertainty about how the markets will function, how much return he will get, and in the case of decentralized investment management, how competent and trustworthy is his investment manager.

average wage growth and can rise or fall. But they are similar to DB pensions in that they are not fully funded: workers' contributions go into a separate part of the state budget, and may or may not in part be separately invested in private financial assets. Pensions are paid to a greater or lesser extent out of current revenues, like a PAYG system. In place of market rates of return and market mortality projections for annuity determination, benefits are instead determined using legislated formulas, often tied to life expectancy and the growth of the payroll tax base. If they are in a separate part of the state budget, they are generally invested in financial assets, if only government debt

PUBLIC EMPLOYEE PENSIONS. Many governments set up pension systems for public employees. Most are DB systems, although some have been defined contribution or have offered DC as an option. Some public employees are included in the national mandatory system, with the government -- their employer -- providing a supplementary pension, just as a large corporation might provide a supplementary pension for its employees. Other countries exempt some or all public employees from the mandatory national system.

VOLUNTARY PENSIONS. These are separate from mandatory arrangements, and arise in two ways. An employer may choose to establish a pension fund even though the government does not require it. Such a pension scheme is voluntary for the employer, although he may require all of his staff to join the scheme as a condition of their employment. For workers covered by the mandatory national system, such voluntary pensions can be thought of as supplementary (the 'enterprise annuities' in China fall into this category). In addition, in many countries, workers can choose to make contributions to a voluntary individual plan. Voluntary pensions of both types typically receive favoured tax treatment: contributions may, for example, be deducted from a person's taxable income. Countries vary widely in the size of their mandatory systems, and hence in the amount of room for voluntary arrangements.

Lessons from International Experience

The main conclusion to draw from experience worldwide is that there is a wide range of pension designs, with no single, dominant arrangement. There are many ways to design good pensions and so systems function reasonably well even in countries that have made very different choices from each other. This section discusses some of the other, central lessons.

LABOR-MARKET EFFICIENCY. It is very important to avoid unduly discouraging labor mobility, which is essential to the efficiency of the labor market and the growth of productivity. Pensions should be portable in the face of at least four types of movement by a worker: from one firm to another, from one geographical area to another, from the state to the private sector (including self-employment), and from the uncovered (rural) to the covered (urban) sector. Such portability is achieved most readily when the system has a uniform underlying structure, both across localities and across sectors, although parameters can vary.

PENSIONS CAN BE PROVIDED TO THE SELF-EMPLOYED AND THE INTERMITTENTLY EMPLOYED. Even countries with very high pension coverage worry about people with incomplete employment histories, primarily women and informal workers. Countries generally have difficulty bringing these groups into the fold of pension systems that were created for employees of established firms. One solution is to provide a pension to the entire population above some age, paying the same benefit to everyone with lifetime residence in the country, and a pro-rated benefit to residents who have spent time abroad.

GENDER AND FAMILY. Should a basic pension be awarded to an individual or to his family? Such decisions can have major ramifications. Pension systems could focus primarily on workers, leaving arrangements between the worker and his family largely to his discretion. Alternatively, they could focus on the family by mandating protection, primarily for the surviving spouse (predominantly widows) and sometimes for young children as well. Pension arrangements can also differ in their consequences for each gender. A non-contributory pension, for example, will favor women more than a contributory pension, since women typically have more fragmented employment histories.

FUNDED INDIVIDUAL ACCOUNTS IMPOSE TRANSACTIONS COSTS; AND MAY OR MAY NOT ASSIST CAPITAL MARKETS. Funded individual accounts, which allow the individual to choose their portfolio or their fund provider, carry significant transactions costs. These costs can be reduced if the government selects the portfolio or limits the set of alternative investments. But in this case, the rate of return may be poor if the government chooses badly, or picks investments in pursuit of some goal other than the accumulation of retirement assets. It should also be noted that funded individual accounts may facilitate the development of capital markets, but this is not always or necessarily the case. Policy makers will need to ask themselves whether existing capital markets and financial intermediaries can meet the needs of funded accounts; and if they cannot, whether funded accounts, by increasing the demand for financial instruments and intermediary services, can improve the functioning of both.

FINANCE AND FUNDING. An important feature of pension design is the degree of funding, i.e. whether contributions are used for current pension payments (Pay As You Go – PAYG), or to accumulate assets from which pensions in the future are paid (funding). Funding can affect the level of national savings and thus the rate of growth. Indeed, it is through increasing national savings that increased funding might conceivably raise economic welfare. Whether increased funding will actually improve welfare depends on the conditions in a particular country.

IMPLEMENTATION MATTERS. The scale and complexity of mandatory pensions must respect the constraints of financial capacity and technical capacity. Clearly, a country’s pension system must be affordable. Mandatory pensions managed by the government also require significant public-sector capacity. The government must be able to collect contributions effectively and maintain records over the years for workers who may move from firm to firm and place to place. Governments must also make actuarial calculations and pay pensions in an accurate and timely way. Pensions also require effective coordination between central, provincial and local levels of government, if all three are to have a role in supporting the elderly. Since a PAYG system commonly has partial funding, the system’s portfolio of assets must be managed (if it is not limited to government debt). This capacity is available in most countries but it is important that there is adequate auditing and supervision. Additional technical capacity is needed for fully funded individual accounts.

GOVERNMENT MATTERS. It is not only mandatory pension systems that depend critically on effective government. Voluntary pensions also depend on government to set rules and enforce them. Government must be able to enforce compliance with contribution conditions and protect asset accumulations. They must also maintain macroeconomic stability, without which households will not accumulate long-term financial assets, and ensure effective regulation and supervision of financial markets. Without government regulation and supervision, financial markets, including insurance and annuities markets, do not function well. Such regulation is therefore vital to protect individuals in areas too complex for them to protect themselves.

CAPACITY TO EVOLVE. It is also desirable for pension systems to have the capacity to evolve in a straightforward way as incomes rise, reforms proceed and administrative capacity grows. This principle is particularly relevant to China, a country in the midst of widespread change, where workers are moving from rural to urban areas and from the state to private sectors, where the age profile of the population is rapidly changing, and where labor markets and financial markets are undergoing significant reform.

Options for Further Reform of China's Pension System

The three elements of the present system – the basic pension, individual accounts, and voluntary pensions – provide a good basis for further pension reform. This reform needs to focus both on extending coverage and on improving pension design.

Non-contributory Basic Pension (Citizen's Pension)

Even in a modern economy, contributory pension systems will have gaps. To fill these gaps and relieve poverty, governments in a number of countries, including some middle-income countries, offer a universal citizen's pension. Financed by taxes, without any contribution from the pension-holder, these pensions cover everyone– urban and rural, formal and informal, men and women. These pensions are often awarded at a flat rate to anyone who meets age and residence tests. Unlike contributory pensions, they can be extended to the informal sector without too many administrative difficulties. Such pensions help not just the retirees themselves but also other members of their family, including grandchildren.

In China, similar concerns about coverage have led to the recent introduction of a pilot pension scheme in rural areas. This is a very welcome development. The experiment should be institutionalized as quickly as possible, as part of a broader effort to introduce nationwide coverage and portable benefits. The government might also consider a number of refinements. It could separate the non-contributory part of the pension from the contributory part, so that all senior citizens in rural areas could benefit from a non-contributory basic pension. Tying the two parts together may increase contributions overall, but it also complicates the administration of the system and risks leaving many people out. The government might also consider expanding the non-contributory basic pension to cover city-dwellers as well as rural residents, thus making it a citizen's pension. This would end the tripartite distinction between rural, urban, and migrant, helping to integrate the system nationally.

Such a system clearly needs to be affordable. In that regard, policy makers need to give careful consideration to the size of the benefit; the age at which it is first paid; and the eligibility of better-off elderly people who can count on sufficient alternative sources of income. The full pension should be large enough to make a significant contribution to poverty relief, and to justify the administrative costs of delivering it. As examples, the Netherlands has a benefit equal to 70% of the net minimum wage and New Zealand a benefit set at between 65% and 72.5% of the net average wage for a married couple, and more per person for singles. To secure a uniform living standard across China's different regions, the benefit level should vary to reflect the cost of living in the beneficiary's place of residence. If a region chooses, it could supplement the benefit from its own resources to better reflect local living standards. The level of the non-contributory benefit should be indexed to prices and/or wages in the same way as the contributory pension.

The non-contributory pension should cover everyone who meets an age and residence test. The age for eligibility might well match the age for full benefits in the contributory system. Over the long run, as life expectancy increases, the age of eligibility should rise automatically in accordance with a measure of healthy life expectancy, although not necessarily in strict proportion. China should carefully study the trade-off between the generosity of benefits and the age at which people become entitled to them. A later starting age might be necessary to finance a sufficiently large benefit to make the pension worthwhile. This trade-off obviously depends on the level of resources devoted to the system. China also needs to consider whether to reduce the benefit level for older people who have spent time abroad, as students or workers for example. It is likely that many such people would not have as large a financial need in old age, so this appears to be a good option.

Should the size of the citizen's pension be related to a person's income? There are several options. A flat-rate pension on the basis only of age and residence, and subject to income tax (as is the practice in the Netherlands and New Zealand) has the advantage of simplicity. But it is also the most expensive option (holding the size of benefits and age of retirement constant). If one wants to reduce or eliminate benefits for better-off people, they can be excluded on the basis of an income test. The test could apply to a person's total income, mandatory pension income or a combination.

Irrespective of these specific issues, it is appropriate that the level of benefits be quite low at first, until the system is working properly. However payments should increase thereafter, keeping pace with prices or wages in the same way as the contributory pension. The program should be introduced as quickly as possible and certainly over the course of the 12th Five Year Plan.

Mandatory Contributory Pension

The mandatory contributory pension should also be gradually extended. It should first ensure that all large firms (referred to as the formal sector) in urban areas are covered. It should then be broadened beyond the cities to reach the formal sector in rural areas. This would represent a big step towards unifying the pension system and integrating the nation's labor market. Eventually the mandatory contributory system should include small firms and the self-employed (referred to as the informal sector). But in China, as in every other country, this is a demanding task. In the short run it may not be the best use of China's administrative energies.

In the meantime, the danger is that the mandatory contributory pension will discourage firms from graduating to the formal sector from the informal sector. To avert this danger, the pension's net cost (that is, the cost of contributions minus the value of future benefits) must not be too large. China should take care to avoid the fate of some South American countries, where social security, which is closely associated with salaried labor, is resented as a tax by workers and employers.[31] This damages productivity and deters informal firms from moving into the formal economy.

The contributions base also needs to be changed. Contributions are currently based on the standard wage, which encourages workers and employers to switch to other kinds of compensation. The contributions base should, therefore, be changed to a measure of earnings that approximates total compensation. The same measure of earnings should be used for both pension contributions and the income tax, thereby aligning the incentives of the income-tax authorities and the pension administration. Similarly, the calculation of basic benefits should be based on average local earnings using the same definition that is used for determining contributions. Thus benefits should vary with location, but within a formula set by a national authority.

Individual Accounts

The system of individual accounts could also work better. China introduced individual accounts as part of its pension reform in 1997. These were intended to be fully funded. However, funding has not occurred in line with the standard model. There are no institutions to help workers select individual portfolios or make direct investments in different assets. In addition, the need to pay current benefits has left the system unable to purchase assets as originally designed, seriously undermining its credibility.

China could follow the example of a number of other countries, such as Sweden, that offer "notional" defined-contribution (NDC) accounts. NDC pensions are a relatively recent innovation, used by countries seeking to retain the usefulness of a defined contributions approach without the necessity of full funding. Each worker has an account that records his cumulative contributions over the years; these contributions earn interest, credited to the account each year by the pension authority at a rate defined by law, for example, the growth rate of the payroll tax base. The recorded accumulation, therefore, increases each year by the amount contributed during the year plus the product of the notional interest rate and the level of the accumulation at the end of the previous year. Whether or not contributions are partially invested in private financial assets, the pension each worker receives is based quasi-actuarially on his accumulation, and paid for out of a combination of current revenues and returns on assets.

Such an arrangement would not preclude an eventual move to full funding, should that suit China's future circumstances. The two arrangements can also coexist. For example, Sweden's 18.5% contribution rate is divided, 16% going to the NDC system and 2.5% to fully funded accounts. But even if China eventually moves to full funding, this should not be an objective for

[31] See Background paper no. 13 by Santiago Levy : "Some Remarks on Social Policy of Latin America" for further discussion of this issue.

the 12th Plan period. The circumstances under which funding might be attractive do not apply today. Funding is desirable if it leads to worthwhile increased national saving. But China already has a high savings rate that is more than enough to finance its current levels of investment. Funding might also be desirable if it could help improve the effectiveness of China's capital markets. But financial markets are still at an early stage of development in China. As a result, in the immediate term, funding individual accounts is likely to result in low returns or high risks. In addition the administrative requirements for mandatory funded accounts with individually chosen portfolios are stringent and do not seem now to be in place in China.

A more urgent and important objective is transparent accounting for individual accounts. At present, workers' contributions are not always recorded accurately, and the system's books are not open or accessible. To fix this, China will need to build stronger administrative systems so that all contributions to individual accounts are recorded and data is accessible. The rules that determine the rate of return on pension accumulations need to be made explicit and contributors should be told the annual rates of return on their funds. Contributors also need to be assured that their accounts are not "empty" accounts but obligations of the government/pension authorities. They should receive annual statements of their accumulation and the likely replacement rate (ie, percentage of previous earnings) they can expect from the basic pension and their individual account.

Public Employee Pensions

Pensions for public employees—including civil servants and those, like teachers, who provide public services—are generous world-wide. In most countries, including China, the pension systems are DB, with benefits based on a short period of earnings at the end of a career. Such systems are poorly designed. They encourage gaming of the system and distort people's incentives for moving between public and private employment and retirement.

One can therefore applaud China's experiments with incorporating public employees who are not government employees into the mandatory contributory system. It's a decision that should be implemented fully and extended to government employees as well. This would not necessarily require a reduction in government employee pensions, since their participation in the national system can be supplemented by a government-provided pension, just as private firms are encouraged to supplement the mandatory system. Any supplementary system should endeavor to hold down administrative costs. This has been done successfully in the US with the Thrift Savings Plan for employees of the federal government.

Voluntary Pensions

In many countries, people complement their mandatory pensions with voluntary plans, provided by their employer or by themselves with approved institutions. In China both types of voluntary retirement plan are likely to grow and evolve in the coming years and should be encouraged. But China also needs better regulation and supervision to safeguard such arrangements for both individuals and firms. Stronger regulation is also needed for any insurance companies that provide benefits on an annuitized basis. International experience strongly suggests that voluntary pension plans should be fully funded DC pensions, with income-tax treatment clarified and set on a consistent basis.

Overall Management of China's Pension System

The reforms outlined above will require major changes in the overall management of China's pension system. One issue is the need to raise the retirement age. Another key issue is the overall administration of the system, which needs strengthening and broadening to become nationwide in scope.

Raising the Retirement Age

Throughout the world, people are living longer. This is a wonderful thing, but it implies that if people continue to retire at the same age, the cost of a given monthly pension will rise. Moreover in China, longer life expectancy is currently combined with large-scale early retirement. This is because enterprises going through hard times encourage early retirement in order to shift the burden of compensation to the pension authorities. This is leading to even more pressure on pension finance.

In response to such pressures, a number of countries have increased the earliest age at which pension benefits, in part or in full, can be claimed. Even more are now considering such changes in the light of current fiscal constraints. For example, the US passed legislation in 1982 increasing the age for full benefits in stages with delays and slow phasing. The age was 65 in 1982; it is now 66 and will reach 67 in 2022. In the UK, recent legislation phases in an increase in the state pensionable age, which will rise from 65 to 66 in 2020 and thereafter by one year each decade. Japan is slowly increasing the official age for benefits from 60 to 65. Also many countries that had different retirement ages for men and women have legislated increases in the ages for women so that retirement ages are equalised.

Although the labor market in China is not yet working efficiently, the pension system needs to be set up for the long term. In that context China needs to raise the retirement age, which is presently 60 for male SOE workers and 50 or 55 for women. It also needs to avoid encouraging or even mandating early retirement. Increasing the retirement age does, however, need to be done very carefully. It should follow a number of key principles. These include ensuring that the rules relate to date of birth and not date of retirement, that changes are made annually, and that as far as is sensible, rules for changing benefits are made explicit (see Box 4 for further elaboration of these principles).

Box 4: Principles for adjusting pensionable age

An increase in pension age should be based on three principles.

- The rules should relate to a person's date of birth (which a person cannot change) and not to their date of retirement (which he can choose strategically). Otherwise there will be a wave of retirements just before any changes to benefits go into effect. Such an incentive to retire is inefficient. Mere consideration of raising the retirement age may prompt people to retire too early for fear that the pension age will change for anyone not yet retired.
- Changes should be made annually, to avoid large changes in benefit levels across nearby cohorts. Large changes are inequitable and politically difficult, since benefits could differ significantly between people born in successive years, sometimes only days apart. The combination of large changes and rules determined by date of retirement would exacerbate the inefficient incentive to retire early.
- As far as is sensible, rules for changing benefits should be explicit. The public should have little difficulty understanding the rationale for adjusting benefits as life expectancy changes. Automatic adjustment in line with explicit rules leads to greater predictability and decreased political pressure. Automatic adjustments may function better if based on actual mortality outcomes rather than projections. Nevertheless, there always remains the option of legislation to change whatever the automatic rules produce. Legislators around the world have, for example, intervened to alter income-tax brackets that rise automatically in line with prices.

Many people in China worry that raising the retirement age would increase unemployment. This is based on the belief that if workers stay in their jobs longer, there will be fewer job openings for new entrants to the labor force. Apart from temporary, short-run effects, that view is erroneous. In a market economy, there is not a fixed number of jobs. As discussed in Box 5, the number of jobs in the economy is responsive to the availability of labor.

Box 5: Unfounded worries: Earlier retirement and unemployment

Early retirement. If the number of jobs in an economy were fixed, inducing an older worker to retire would create an opening for some other worker. In that case, early retirement could ease unemployment. But that view is generally mistaken since the number of jobs in an economy is not fixed. Consider the experience of developed countries, where the average retirement age has decreased substantially over recent decades, without any parallel decline in unemployment rates. Empirical evidence for a number of developed countries over a 10-year period shows no systematic relationship between encouraging early retirement and lowering unemployment. There is no reason to think that this basic insight is different in developing countries.

It is wrong for several reasons to think of market economies as producing a fixed number of jobs. First, additional workers exert downward pressure on wages and make it easier for firms to find suitable workers, thus encouraging the creation of new jobs. The number of jobs is therefore variable, and is influenced by the number of workers. Second, taking a pension early frequently does not remove workers from the labor force, since some workers continue to work elsewhere while receiving a pension from a previous employer. Third, the large pool of rural workers is potentially a much greater source of unemployment.

Thus it is mistaken to encourage early retirement or mandate retirement as a palliative response to unemployment. Retirement, after all, has long-term effects, often taking a worker out of the labour force for good, whereas unemployment is generally a short-term problem. It is better to focus on unemployment benefits and creating incentives for long-run growth, rather than distorting the labor market in the vain hope that retirement will have a large impact on unemployment. Similarly, disability benefits should be awarded on the basis of disability, not as a response to unemployment.

Raising the retirement age. The corollary to the previous argument is that slowly raising the retirement age in China will not have a significant effect on unemployment.

Administration of the Pension System

The government also needs to reform key aspects of pension administration.

ESTABLISHMENT OF A NATIONAL PENSION ADMINISTRATION. Without a unified national system, pension rights will not be portable, compromising labor mobility. The mandatory contributory pension should be subject to a single set of regulations, with room for regional variations in benefit levels. All pension contributions, for both the basic pension and the individual accounts, should flow into a single pool, i.e. a national trust fund. Record-keeping and pension payments should be the responsibility of a single nationwide pension administration. It should manage a national database containing information on each worker’s account and use a single system of record keeping. Such a National Pension Administration should be capable of making projections of the financial position of mandatory pensions and carrying out broader research. To boost confidence in the system, it should also inform the public about changes in the system, once they have been decided.

SEPARATION OF THE CONTRIBUTORY PENSION SYSTEM FROM THE STATE BUDGET. The contributory pension system should continue to be financially separate from the state budget. These pensions should be financed from dedicated revenue sources. Surplus revenues could be transferred to the National Social Security Fund (NSSF); deficits could be financed out of earnings on the Fund's assets, or, if necessary, out of the assets themselves. Pension contributions should be collected by the tax authority and delivered promptly to the pension administration. Under the current dual system, collections are made both by the Ministry of Labor and Social Security and by the tax authorities. This makes collections more costly and less accurate than they need to be.

MANAGEMENT OF LEGACY OBLIGATIONS. At the time of the 1998 pension reforms, China had to meet two legacy obligations: the pensions of workers who retired before 1998 and the pension entitlements that contemporary workers had accrued up until 1998. In recognition of these legacy obligations, the government decided in 2003 to transfer some of its shares in SOEs to the NSSF. However, progress has been slow and only a small quantity of shares have been transferred. Given the extent of legacy obligations, continuing the transfer of state shares to the NSSF offers two potential advantages. Shifting the dividend flow to the pension system will improve the system's finances and reduce the fiscal subsidies it requires. Adding the NSSF as a long-term shareholder could also improve the corporate governance of the SOEs.

ADMINISTRATION OF THE NON-CONTRIBUTORY BASIC PENSION. This can build on different institutions in the short run and the long run. In the long run, the administrators of the non-contributory basic pension have much the same task as the administrators of the contributory pension: to deliver pensions accurately and in a timely fashion. As the coverage of the contributory pension spreads, the population covered by the two systems will become more and more similar. The administrators of the contributory system will then become the natural administrators of the non-contributory system as well, because they will be serving an increasingly similar clientele. Right now, however, the contributory pension benefit is not paid throughout the country. In the near term, therefore, it may be more appropriate to distribute the non-contributory pension through the Dibao facilities, which administer poverty relief throughout the country.

Concluding Remarks

The strategy outlined above is intended to provide a pension for everyone, to address problems in the existing system, and to integrate the two.

The strategy is coherent and fits the economy and society of China today. Some elements are directly relevant to the next five-year plan: putting into place a consistent set of rules for a nationwide system; creating an administrative structure to deliver a "citizen's" pension, and beginning to deliver such a pension; reforming 'empty accounts' by introducing an explicit system of NDC individual accounts; extending the mandatory urban system to large firms in rural areas and to public employees; improving the regulation of voluntary pensions and of the asset markets in which they invest; and strengthening the administration so that it can support a national framework.

The strategy is also compatible with longer-term economic and social developments. It begins a process that will eventually cover all workers in all sectors and localities, avoiding the problems of categorical systems (e.g. ill-defined borderlines, people that fall into none of the categories, a person's category changing over time, some categories becoming obsolete, etc.). This arrangement supports efficient labor mobility. It is also compatible with a future move towards funding the individual accounts in the mandatory contributory system if that becomes worthwhile.

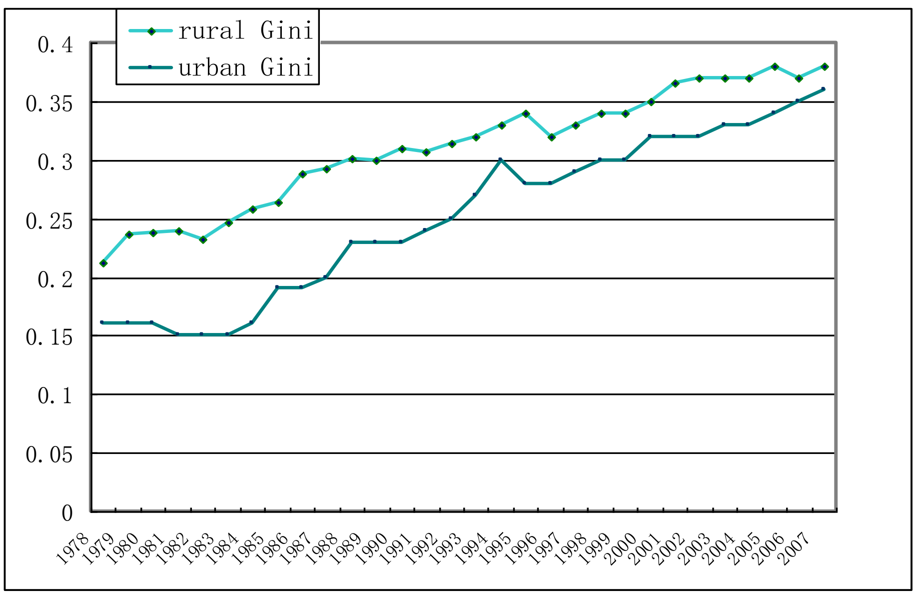
More generally, the strategy is compatible with moving towards a high-income country.

Chapter 7 Social Policy[32]

Tackling Income Inequality

China's economic reforms over the past 30 years have helped to lift more than half a billion people out of poverty. The country has also made great strides on broader measures of "human development", extending beyond income. Poverty nonetheless remains a major issue in China, and the country's social programs remain limited in their range and quality, with many groups (such as migrant workers) largely excluded. In addition, income inequality has risen rapidly in recent decades, both between urban and rural areas and within them. China's overall Gini coefficient, for example, has increased from about 0.3 to 0.45, with corresponding increases in both the rural and urban coefficients (see Figure 5). If not addressed, such disparities risk fueling greater social conflict and instability.

Figure 5: Changes in income inequality in urban and rural China, 1978-2007



Source: Annual Report of Household Income Distribution in China, 2008.

[32] This chapter draws mainly on the Background paper no. 15 by Li Shi: "Issues and Options for Social Security Reform in China"; Background paper no. 5 by Nicholas Barr and Howard Glennerster: "Social Policy: A Central Element in China's development"; Background paper no. 2 by A.B. Atkinson: "Issues in the Reform of Social Policy in China"; Background paper no. 3 by Judith Bannister, David E. Bloom, and Larry Rosenberg: "Population Ageing and Economic Growth in China"; Background paper no. 19 by Christine Wong: "Intergovernmental Fiscal Reform: the Prerequisite for Building a Harmonious Society in China"; and Background paper no. 13 by Santiago Levy: "Some Remarks on Social Policy from Latin America" .

How should policy makers tackle inequality? One option is to suppress it at source: governments can intervene in the market, redirecting the rewards that it bestows. The government could, for example, dramatically raise the minimum wage. However, such measures can introduce damaging distortions into the allocation of resources. While some strengthening of labor market regulations is frequently desirable, the experience of other countries shows that inequality is best reduced through the broad gamut of social policies. In the UK, for example, inequality was reduced from 52 to 31 (as measured by the Gini coefficient) by benefits in cash and in kind, for education and health.[33] A similar reduction was achieved in Sweden and Denmark through cash benefits only. In the United States, inequality was reduced by 20% through social programs. These large gains in equality need not come at great cost to efficiency. In fact, well-designed social policy can raise productivity and growth.

China is certainly very focused on such issues. Both the 11th Five Year Plan (FYP) and the guidelines for the preparation of the 12th FYP clearly state the government's objective of reducing inequalities and improving social programs. As part of this endeavor to build a harmonious society, the government has introduced several important new policies and programs in recent years, including free rural education, a cooperative medical scheme in rural areas, and a program to guarantee a minimum standard of living for hard-pressed households, But China's social programs remain much smaller relative to GDP than those in high-income countries or even many middle-income countries. Its programs also suffer from limited scope, patchy coverage, a very uneven distribution of benefits, and a lack of portability. Indeed the programs that do exist have mixed implications for inequality. Because their benefits are more generous in the cities than in the rural areas, and in richer rural areas than in poorer ones, they are increasing inequalities between localities even as they may narrow inequalities within a given area.

Social policy can be a powerful instrument to achieve the government's objective of reducing inequality. But to do this the existing programs require major reforms in their design, scale, and financing, as well as a redistribution of responsibilities between the central and local governments.

Common principles of reform[34]

No one social system fits all countries. One cannot derive an optimal social model from the deductions of theory or the lessons of international experience. Even if such a system existed, it could not be transplanted from one country to another. Each country needs to develop its own system, in light of its own history and development objectives. But the panel of international experts that have contributed to the preparation of this report and the accompanying background papers believe the following common principles are worth bearing in mind as China seeks to improve its social programs.

[33] Background paper no. 5 by Nicholas Barr and Howard Glennerster : "Social Policy: A central element in China's development"

[34] Background paper no. 2 by A.B. Atkinson: "Issues in the Reform of Social Policy in China" provides a more detailed discussion of these principles

- **Social policymaking must be tightly integrated with economic policymaking.** Social policy and economic policy can complement each other, or conflict with each other. These synergies and frictions should be recognized and accommodated upfront, with a view to maximizing the positive economic effects of social programs. One synergy was starkly illustrated by the world financial crisis. After it struck, many economies benefited from social safety nets, which cushioned the impact and hastened the rebound.
- **Strike the right balance between the market and the state.** The division of labor between the state and the market should be decided on the basis of rigorous analysis. Before the state intervenes, it should pinpoint the market failure it hopes to correct. And once the state has determined whether to step in, it must then consider how to intervene. Should it provide the service in question, pay for it, regulate it or give people the money to buy it, if they so wish? Answers to these questions can sometimes be gleaned from international experience and theory. For example, the production and distribution of food can be left more or less to the market, guided by regulation. The market cannot, however, reliably provide poverty relief, unemployment insurance, or primary education without substantial government involvement. In other areas, such as pensions and health care, the proper division of labor between the state and the market is less clear-cut. The country will have to make up its own mind in light of its particular circumstances.
- **Ensure universal, nationwide coverage as soon as possible.** Universal coverage helps to reduce inequality and strengthen social inclusion. It can also help improve efficiency. By knitting social programs into a seamless nationwide system, the government can make rights portable. This in turn contributes to the flexibility of the labor market, since people can then carry their benefits and entitlements with them when they move in search of work.
- **Institutional flaws are best prevented, because they are hard to fix.** Once an institutional structure is in place, people quickly acquire a vested interest in its preservation. The flawed structure then becomes surprisingly resistant to reform, as the US health-care system clearly demonstrates. The design of social programs needs to pay particular attention to the dichotomy between the formal and the informal sectors.
- **Programs should be easy to expand as resources allow.** The size of a social program must, of course, be sustainable in terms of the financial resources available. But the program should also be easily "scalable", able to grow, without fundamental changes in shape or design, as more resources become available. The resources available depend on a country's fiscal constraints, which themselves depend on the country's economic wherewithal and political disposition. A country with an individualistic ideology and little aversion to risk (such as the US) will tend to support a more parsimonious welfare state, whereas countries that prize solidarity and recoil from risk will support wider and deeper welfare states (e.g. Sweden).
- **Share the financial burden fairly between the central government, local governments and individuals.** Services should be managed with an optimal level of decentralization,

taking into account the nature of the service and the importance of being responsive to local needs. Imposing a fee (if only a small one) on the beneficiaries of the services may also contribute to more optimal utilization. However, many social programs, including primary education, basic health, and poverty relief, have spillover effects on the wider economy and on social cohesion. They qualify as national public goods. In recognition of this, national governments in developed nations have become increasingly involved in the design, financing and monitoring of such programs in recent years. They have established minimum standards of service, provided the resources necessary to meet those standards, and then enforced them from the center.

- **Decide who can best manage and deliver the program.** National programs are sometimes better delivered by provincial or local governments. Sometimes the secret of successful delivery lies outside the government altogether: programs benefit from the engagement of non-governmental organizations, grassroots organizations, and the poor and socially excluded themselves.
- **Make sure the program can be monitored, measured and evaluated.** Too often, governments do not know whether their social programs are succeeding or not. Programs should be designed so that their impact can be measured. Governments must identify the right indicators, collect the necessary figures, and monitor them diligently. They also need to develop a strong research and evaluation capacity.

These broad principles apply to the whole range of social policies and programs. Some of these programs have been discussed in earlier chapters – for example chapter 5 looked at unemployment insurance and some aspects of education and chapter 6 examined pension. This chapter will focus on other important social policies and programs, beginning, however, with some further reflections on the critical importance of education to equity as well as economic growth.

Education

The roots of economic inequality in China lie, in substantial part, in education. The rich and poor are divided by large gaps in schooling. They also reap different returns on the educational investments they have made. Making education affordable and accessible is rightly a priority for the government. It has successfully extended primary schooling to almost every child, even in the poorest areas. It has also expanded secondary education. Books are provided without charge to poorer families, who also receive a subsistence grant to defray the opportunity cost of keeping their children in school.

Unless everyone receives a reasonably good education, growth will slow and the economy will develop a “dual” character, with unproductive, unskilled activities coexisting alongside modern, skill-intensive production. This danger is starkly illustrated by the experience of Latin America and, to some extent, Africa, where a poorly educated subgroup of the population struggles to find employment in the modernizing part of the economy. In essence, this subgroup gets left behind. As the richer section of society approaches OECD levels of income, growth will eventually slow down, but poverty will linger. China does not yet have this problem. Its literacy rates are higher than virtually all other developing countries. Nevertheless the risks of slippage in access or quality should not be underestimated.

China has decentralized school finance, forcing each school to rely on local funding. As a result, the wide variation in local economic circumstances is translated into wide differences in school quality. According to economic principles, basic education should be publicly financed on the whole. Theory gives less guidance on whether it should be financed locally or nationally. But in the advanced countries, the central government is taking a growing interest in improving the performance of pupils and narrowing the gaps between them. The leveling up of standards is increasingly seen as a national public good, which cannot be achieved unless the central government devotes substantial funds to education and instills the right incentives in schools.

What does this mean for China? It suggests that if the central government wants to improve standards and close the gaps between pupils, it must commit more of its own resources to supporting education and motivating schools. There are various ways to do this. The government could, for example, offer block grants that take account of a locality's prosperity and population. But to raise the quality of education, this money must have strings attached so that local governments or schools improve the standard of schooling or the performance of pupils.

The experience of other countries suggests that the goal of raising standards can conflict with another worthy aim: keeping children in school for longer. It is harder to maintain high standards over many years of schooling. If there is a trade-off between duration and quality, governments should err on the side of quality. It is important not to extend the length of schooling if that risks reducing the spread of good schooling. If China nonetheless wishes to extend the duration of secondary education, it might profit from studying countries that have created vocational courses for children over 14, who may get "turned off" academic schooling.

China might also benefit from laying more emphasis on pre-school education, as well as the nutrition and care of very young children. According to recent research, the foundations of intellectual as well as social and emotional development are mostly laid by the age of five. Early childhood development is therefore crucial. In response, many countries have passed legislation requiring employers to offer parental leave at the time of birth. They have also expanded pre-school facilities, extended the school day, or linked schools with day-care and after-school facilities that match the varied working hours of parents. Many countries now offer health checks and parental advice through family support centers. Some have also offered cash payments to parents who vaccinate their children or keep their children in school.

Human capital is crucial to China's economic strategy. Safeguarding the welfare and intellectual development of children represents one of the best investments in human capital. It would therefore seem appropriate to gradually extend pre-school facilities in China as resources allow. In the medium term, China might also consider following the lead of many other countries by introducing child benefits: a weekly cash payment per child, frequently paid to the mother, often regardless of income.

Health

China's health-care system was once a leading example of comprehensive coverage, especially for a country at its stage of economic development. That is no longer the case. In health, China may have taken the market a stage too far. It gave responsibility for health care to local governments with meager resources. Its old system of primary-care clinics largely collapsed, taking preventive health care with it. Hospitals became the dominant providers of health care at much higher costs. As a result, progress in health has slowed, the private costs of health care have risen dramatically (even for those who are insured) and inequalities in income have been transmitted to inequalities in health.

These problems have not escaped the government's notice. Since 1998, it has introduced various reforms, including compulsory medical insurance for urban workers, a basic insurance scheme for other city-dwellers, and a new cooperative medical scheme for rural residents. These moves are all welcome, but worries still remain. Access to health care remains very unequal, varying by location, work status, and age. Hanging over many people is the possibility of catastrophic medical bills, relative to their incomes. Primary and preventive care, which could cut costs and reach the whole population, is neglected. The finance of hospitals is complex and focused on inputs rather than outcomes. The rural health-care initiative is clearly a move in the right direction. But it still saddles its beneficiaries with significant out-of-pocket payments, relative to their incomes, if they fall seriously sick.

Any discussion of health care must begin from an essential analytical distinction between finance and delivery. Almost every advanced country has adopted some form of collective finance of health care, and increasingly the money comes from taxes rather than employers. Many countries have also introduced and increased co-payments, or user charges, but their aim is more to cut costs, by discouraging irresponsible use of services, than to raise money.

This international practice chimes with economic theory, which suggests that health-care finance should be mostly public. This is particularly true for health insurance. The reason is that health risks differ across people and time. Purely private insurance provision always goes in the direction of segmenting the market by risk category. That is how you make money in insurance underwriting. The effect is to make insurance and hence certain kinds of care unaffordable or unavailable for those who are high risk at birth, and those who become high risk later in life (after suffering an episode of cancer for example). Even worse, if health care is closely related to employment, as in the US, then those with higher health risk lose access to health insurance and health care, whenever they quit an employer or lose their job. Further, they may have trouble finding employment if their health risk is high.

But public finance does not necessarily imply public delivery. In the UK and Scandinavia, delivery is mainly public, but in Canada it is mainly private, and in France and Germany, it is a mix. However health care is delivered, there is also wide agreement that good primary care is the best way to promote health, prevent illness, and control acute medical costs.

There is a powerful case for China to show more ambition in health care. International experience suggests it should consider moving to a system that is more uniform, universally available and largely tax-financed. It needs to reform hospital management to contain costs and it could also benefit from sharpening incentives for good professional practice, by measuring clinical outcomes, waiting times, and compliance with quality standards. The government's health targets should be raised, its spending increased. Although health outlays have grown consistently in recent years, they are still low by international standards. Consideration could also be given to having a private component to the health delivery system to create at least some competition and consumer choice.

The dibao program

Better health care and education will help alleviate some of the poverty that still persists in China, despite the dramatic reductions in poverty since the end of the 1970s. But the government is not relying on such programs alone. In the late 1990s, it introduced the dibao program, which guarantees a minimum standard of living to eligible persons. Extended to rural areas in 2005, the program now benefits about 70 million people (see table 3).

Table 3 Urban and rural population supported by MLSG in China, 2000-2008 (million)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Urban	4.0	11.7	20.6	22.5	22.1	22.3	22.4	22.7	23.3
Rural	3.0	3.0	4.1	3.7	4.9	8.3	15.9	35.7	43.1

Source: Ministry of Civil Affairs of China: Statistical Report of China's Social Development in 2008.

Poverty relief can contribute to economic efficiency, as well as equity. Investments in schooling, for example, will go to waste if pupils are distracted by hunger. Moreover, economic development will face greater resistance if those dislocated by it have no safety net to catch them, as policy makers in Central and Eastern Europe discovered when they liberalized their economies. A further strong conclusion from the theory of fiscal federalism is that welfare for the poor should not be financed locally. This is partly because poor localities have fewer resources, but also because localities are vulnerable to common shocks, such as the closure of a major industrial enterprise, which touch everyone.

This suggests a number of areas for improvement in the dibao program, if it is to be the backbone of China' social-assistance program for the future. Coverage of the program needs to be extended to all those eligible, including migrant workers and those in the informal sector. Eligibility should be determined more rigorously, benefits simplified, and inconsistencies in implementation ironed out. The dibao standard must also be set more systematically, based on a more accurate assessment of poverty, which keeps pace with the cost of living. To make the program fair across regions, the central government should consider playing a bigger role in paying for it. Implementation, however, should involve all levels of government, the grassroots administration, and communities. To track the execution of the program and assess its impact, a monitoring framework should also be established.

Population policy

China's population is aging. The proportion of the population aged 15-64, which grew rapidly over the past few decades, has reached its peak and is slated to decline quickly in the coming decades. According to demographic projections more than 30% of the population will be 60 or over by 2050[35]. The roots of population aging in China are the same as elsewhere: a low fertility rate, rising life expectancy, and the cumulative effect of past changes in birth and death rates. Another central factor in China is the one-child policy.

There is widespread concern in China that these future demographics will damage growth and impose a heavy burden on the working population. China is not alone in this. Similar worries can be found in other aging societies. China might therefore consider some of the policy responses other countries have identified. These include policies to raise the retirement age, help those caring for children to work, increase the labor-force participation of women, and raise the productivity of the people remaining in the workforce. If implemented, such measures would go a long way to offset the economic consequences of an aging society.

An easing of the one-child policy is not essential to preserve economic growth in China. But such a change would allow the working-age population to rise gradually as a proportion of the whole. More importantly, an easing might help reverse the highly skewed ratio of males to females in the Chinese population. This ratio reflects selective prenatal abortions and the neglect, or worse, of girl babies. It prevents millions of men from marrying and leaves them bereft of the support of a spouse, children or grandchildren in their old age.

Overall planning and governance of social policy

The government's initiatives under the 11th Five Year Plan are consistent with many of the principles proposed by the panel of international experts assembled for this report. But it is also clear that much more can and should be done to ensure that China has a well designed, governed and monitored system of social policies that effectively addresses inequality and supports economic growth.

Social policy should be better integrated with economic policy. China gives social policy due importance in its 11th FYP and in the guidelines for the 12th FYP and it can claim considerable progress towards its social objectives. But Plans themselves are not an adequate mechanism for integrating social and economic policy. While they list guiding principles and development objectives, these lists are not backed up by strong policy content. The Plan's legal status is unclear and it carries insufficient weight with the line ministries and provinces responsible for implementing policies. Moreover, the situation on the ground in China is changing rapidly,

[35] See Background paper no. 3 by Judith Bannister, David Bloom and Larry Rosenberg: "Population Ageing and Economic Growth in China", Executive Summary.

requiring more frequent monitoring. To integrate social and economic policy during the next plan period, China should consider alternative mechanisms. These alternatives should effectively translate broad objectives into specific action plans at national, provincial and local levels, with clearly defined indicators to monitor performance.

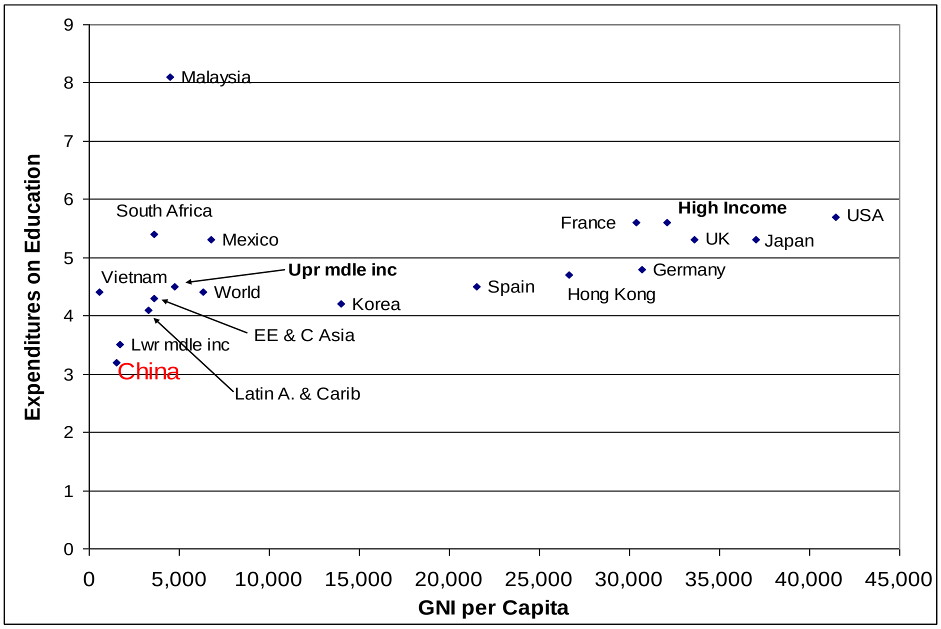
In this regard the EU experience with its social inclusion process may have some useful lessons for China, given the large size of China and the differences in social and economic conditions across regions. The EU Social Inclusion Process tries to redress the many dimensions of social deprivation, going beyond a narrow focus on income poverty. Since social policy is largely the prerogative of individual member states, the Social Inclusion Process operates through a set of common objectives, which are then translated into national action plans. The success of each member states in reaching these objectives is monitored on the basis of an agreed set of social indicators. The process benefits from peer assessment and frequent comparisons of policies across countries, all of which encourages member states to learn from each other. Progress is tracked with commonly defined social indicators, applied to internationally comparable data. This makes it possible to cross-check a nation's assessment of its own performance. A similar process may be useful to monitor effectiveness of social policy in difference provinces or regions in China.

China's social programs remain fragmented and partial. Although their coverage has increased, they still serve the formal labor force in urban China far better than any other slice of the population. Many programs leave out the large rural population, or the growing number of migrants and other workers in the informal sector, who account for about half of the urban labor force. As the government expands programs, it tends to take a piecemeal approach, adding schemes to cover discrete groups in need of support, such as landless farmers or rural migrants. This approach fails to pool risks efficiently. More importantly, it limits the portability of entitlements and impedes the mobility and flexibility of labor. It would be better to cover these new groups under existing schemes.

China can afford to scale up its social programs. Compared with other countries, China's government currently spends significantly less in this area. For example, its budgetary outlay on education (3.2% of GDP) is far below that of Vietnam, or the average lower middle-income country, let alone the OECD (see Figure 6). China's public spending on health, at 1.8% of GDP, is also well below most lower middle-income countries (see Table 4)[36]. China's fiscal position is very strong by international standard and it could spend much more on health, education and other social priorities.

[36] Data on education and health spending come from Background paper No. 19 by Christine Wong: "Intergovernmental Fiscal Reform: the Prerequisite for Building a Harmonious Society".

Figure 6 Public Expenditures on Education, 2004 (% of GDP relative to GNI per capita in US$)



Source: Dahlman, Zeng and Wang, The Challenge of Life Long Learning for Education Finance in China; paper prepared in 2006 for conference organized by Ministry of Finance and World Bank

Table 4 Public Expenditures on Health, China and Comparator Countries/Regions

Countries/Economies/ Regions	1990-1998*	2005
CHINA	2.0	1.8
High income	6.2	7.0
Middle income	3.1	2.9
Lower middle income		2.2
Low income	1.3	1.2
Low and middle income countries in:		
East Asia & Pacific	1.7	1.8
Europe & Central Asia	4.0	4.1
Latin America & Caribbean	3.3	3.3
Middle East & North Africa	2.4	3.0
South Asia	0.8	0.9
Sub-Saharan Africa	1.5	2.6

**Data are for the most recent year available in period.*

Source: World Bank, World Development Reports 1998-2006, and 2008 World Development Indicators.

China has devolved responsibility for most basic services to lower levels of government. This devolution is understandable in such a vast country, overseen by a relatively small central-government machine. But in keeping with the traditional Chinese principle of local self-reliance, China has taken it further than any advanced country and most developing ones. As a result, poorer areas, especially in the countryside, have far less to spend on their social programs. Indeed the government spends almost four times as much on social welfare in urban areas as it does in rural areas, although the urban population is smaller than the rural population. If China wants to ensure national minimum standards, in education or health, for example, its central government must provide more significant funding, as well as setting standards and motivating local agencies to meet them.

The central government should play a greater role in the design, financing and monitoring of social programs. But its capacity to play that role must first be strengthened. China cannot move to national systems until it builds the administrative capacity to support such systems. As the central government's role expands, the responsibilities of other levels of government must adjust accordingly. And their capacity must match their new duties.

Assuming the state apparatus is able to deliver social programs, officials must also be willing to make them work. Their incentives must be aligned with the overall objectives of the programs they are implementing. This will require better gathering and sharing of information on a program's performance and results. It may also include consultations with the public, who are, after all, the intended beneficiaries of social programs. It is often the people themselves who are the best judge of whether or not policies are "putting people first".

Chapter 8 China's Role in the Global Economy[37]

Like the other post-war examples of catch-up growth, China's economic success was made possible by globalization, including the confluence of lower tariffs, cheaper transport, and frictionless communications. The open global economy provided two critical ingredients for China's growth: knowledge and markets. China absorbed technology, knowhow and ideas from the rest of the world, assimilating this knowledge and, in many cases, adding to it. This learning contributed to rapid gains in productivity, enlarging the supply-side powers of its economy. But supply is of no use without demand, and China also took full advantage of deep global markets, which provided a reliable outlet for the fruits of its industrial revolution. Even as China has benefited handsomely from globalization, it has also contributed hugely to it. Its outward turn, culminating in its accession to the World Trade Organization (WTO) in December 2001, warrants a chapter in the annals of globalization all by itself.

Having recently surpassed Japan as the second largest national economy, China's economy is now of systemic significance. Its growth has a sizeable impact on global relative prices, ranging from commodities to manufactured goods. The deployment of its foreign-exchange reserves, the largest in the world at 2.85 trillion dollars, also has a significant impact on the global financial system. In addition, China is playing a growing and crucial role in a multitude of developing countries, by virtue of its demand for their goods and its investments in their assets, especially their natural resources. The remarkable post-crisis recovery in the developing countries is due in no small measure to China's resurgent growth and its longstanding openness.

The aftermath of the financial crisis

The open, global economy that underpinned China's success has just suffered its biggest shock since the Great Depression. The financial crisis of the past three years was the result of debt-fuelled asset inflation, resulting in excess consumption, deficient savings and persistent current-account deficits. This process came to a "sudden stop" in the fall of 2008, causing great damage to balance sheets throughout the economy and in many parts of the world. The damage quickly spread to the real economy via drops in consumption, investment, employment, and of course trade. The epicenter was the US financial sector. But the disaster was rapidly transmitted far beyond US shores, leaving no country untouched.

The balance sheets of America's households and banks are still under repair, even as the US

[37] This chapter draws on a number of Background papers, including Background paper no.1 by K.Y. Amoako: "What African Countries Expect from China?"; Background paper no. 8 by Barry Eichengreen: "What Kind of Economic and Financial Leadership Does the World Expect of China?"; Background paper no. 7 by Andrew Crockett: "China's Role in the World Economy: Looking Forward to the 12th Five Year Plan"; Background paper no.9 by Mohammed A. El-Erian and Ramin Toloui: "What Does the World Expect From China, and What Should China Provide?"; Background paper no. 16 by Jean Pisani-Ferry: "China and the World Economy: A European Perspective"; and Background paper no. 18 by Andrew Sheng: "China's Approach to Networked Globalization – an Institutional Response"; as well as the Commission for Growth and Development (Chairman: Michael Spence) 2009 "Post-Crisis Growth in Developing Countries".

government is rapidly adding to its debt. It is true that credit spreads in US financial markets have narrowed and growth has resumed. But even with the Federal funds rate near zero, output has not rebounded as vigorously as many people hoped. And what growth there has been has created surprisingly few jobs. Nine per cent of the labor force remain unemployed, a figure that rises to over 16% if you add everyone who would take a full-time job were it available, but who now works part-time or has given up looking for a job altogether. The longer high unemployment persists, the more analysts wonder whether the divergence between growth and employment may have deep structural causes, reflecting the rising competitiveness of major emerging economies in a subset of the global supply chain.

The euro area, for its part, has suffered from repeated bouts of instability caused by the sovereign-debt woes of some of its members. The European Union's institutions have stepped in to help these countries meet their immediate financing needs. But there remains the threat of a debt restructuring in one form or another. That cannot disappear until the EU faces the politically difficult decision of how to share the burden among its members.

The advanced countries, which account for about two-thirds of global GDP (measured at market exchange rates), are likely to face an extended period of slower growth and, in many places, stubbornly high unemployment. Many emerging economies, by contrast, have weathered the storm remarkably well. They benefited from prudent macroeconomic policies and strong, heavily regulated financial sectors that steered clear of toxic assets.

But despite the rebound in emerging economies, a return to the pre-crisis pattern of global growth is neither likely, nor is it even desirable. Conditions that seemed "normal" before 2007-08 were in fact unsustainable, especially in the US. America's growth relied too heavily on the expansion of household balance sheets, and the world economy relied too heavily on American household demand. The crisis was not merely an interruption of these trends; it was, in many ways, the culmination of them.

So the global economy needs to move to a "new normal". But what kind of "new normal" will emerge? This is difficult to predict, because it is still very much a work in progress. It will be influenced by the choices governments make as they exit from the crisis, revive demand, reform their financial systems, contend with protectionist pressures, squabble over exchange rates and trade imbalances, and confront structural impediments to growth hidden by the pre-crisis dynamics. The new normal is, then, something to build, not just something to predict. China, by adapting its growth pattern and exercising its new influence in multinational policymaking, will be one of its architects.

The realignment of the world economy

The implosion of the advanced economies and the resilience of the emerging markets have hastened the ongoing realignment of the global economy. As the US struggles to recover from debt exhaustion, it has turned inwards, devoting less energy to global issues that require cooperation and compromise, including trade talks and the international dimensions of financial reform. With luck, its focus on these international issues will increase, as its domestic economy improves. Europe is a natural champion of global governance. But it too faces pressing domestic economic challenges and its economic significance in the global economy is diminishing. Japan's relative position in the global economy is also declining and it has usually refrained from playing a prominent role in the management of the world economy and the global financial system.

On the other hand, a number of emerging economies have reached critical economic mass, giving them greater influence on the rest of the world economy and even a measure of insulation from it troubles. China's economy, in particular, is now of systemic significance (see Figures 7 to 9 on shares of global GDP and exports). It is no longer merely a "price-taker" in the world economy. Its asset purchases have a material impact on yields. Its appetite for oil, iron, copper, and so on has a marked effect on commodity markets. Its manufacturing output puts downward pressure on the relative prices of those goods and the relative wages of the people who make them. From being a marginal player, China has become central to the world economic and financial system. Chinese economic policies and performance thus have a significant impact on other countries, both developed and developing. As a consequence, they are now looking to China for leadership.

Having achieved critical mass, the emerging economies now appear capable of growing at a healthy pace despite the slow recovery and lingering instability in the advanced countries. This is partly the result of their increased size. But it is also attributable to a shift in the composition of demand in these economies. As their incomes have risen, several emerging economies have become sizeable and attractive markets in their own right. A related element is the rising trade between emerging economies. A whole range of countries, from Korea to India, now count China as a big, and in many cases the biggest, trading partner.

This new pattern, absent even 10 years ago, has increased the resilience and economic independence of emerging markets. It does not, however, represent complete decoupling. The advanced countries are still an important component of external demand. To get a sense of how important, suppose the advanced countries were to suffer another downturn (an unlikely scenario, but certainly a possible one). It is hard to imagine that the emerging economies would escape unscathed.

As their reliance on the advanced countries has diminished, the emerging economies' dependence on China has increased. If China's growth were to slow sharply, the other developing economies would immediately feel the effects. It is no secret, for example, that a key ingredient in the restoration of Latin American growth has been trade with China.

Figure 7 Shares of global GDP at current exchange rates

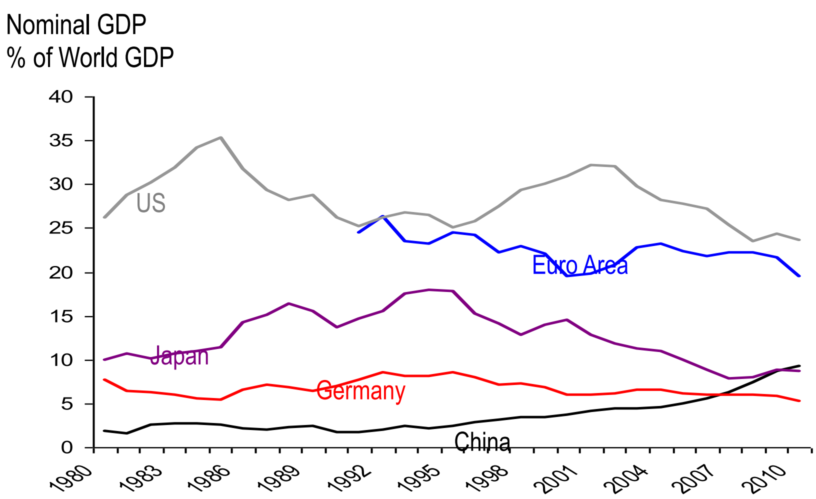


Figure 8 Shares of global GDP in PPP terms

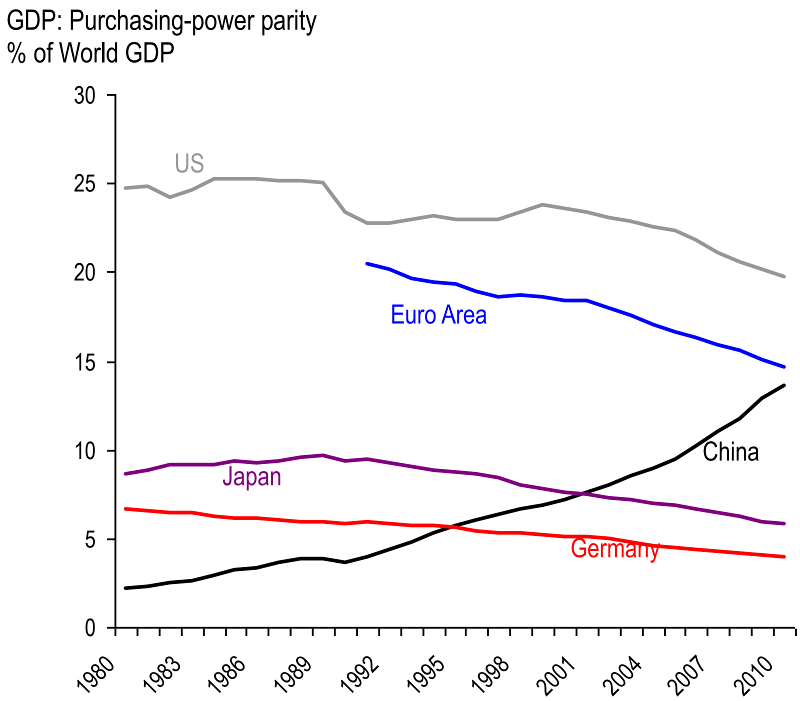
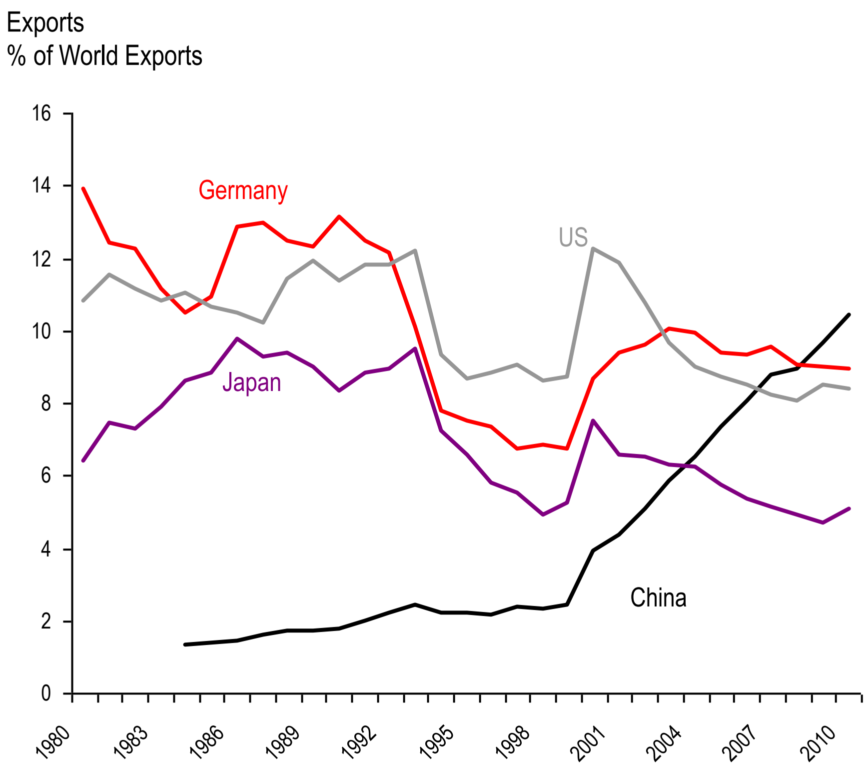


Figure 9 Exports as a share of world exports



Source of Figure 7 to 9: IMF

It is clear that the global economy will continue to take on a more multi-polar character, with emerging economies in general and China in particular playing a more important role. Such realignments of economic clout can create tensions. They erode long-standing entitlements; they require new procedures and mindsets; and they render certain policy instruments less effective. This creates the potential for costly policy mistakes and market accidents.

These tensions will be exacerbated by the world economy's multi-speed recovery. Countries growing at different rates may pursue inconsistent policies. Lagging economies may try to revive growth with unconventional policies, such as quantitative easing. Faster-growing economies may respond with unconventional policies of their own, including macro-prudential regulations and capital controls. A multi-speed recovery also raises the threat of escalating protectionism, as political sentiment in countries suffering from high unemployment turns hostile to trade.

Since the Second World War, the United States' position as the world's leading economic power has carried with it a number of privileges and responsibilities. It has been expected to provide what are often referred to as global public goods. These have included:

- Acting as a consumer of last resort
- Helping on occasion to co-ordinate macroeconomic policies through agreements such as the Plaza Accord
- Providing a reserve currency
- Acting as a lender of last resort in a financial crisis, providing liquidity to emerging markets short of dollars
- Helping to lead global trade talks and supporting multilateral institutions, such as the WTO

The US economy's weight in the world is declining and its capacity to perform these roles was significantly damaged by the crisis. It would struggle, for example, to resume its role as consumer of last resort. With the erosion of the US's dominant role, it is far from clear how these critical global public goods will be provided in the future. The world now faces the prospect of a period of leaderless global governance just at a time when major global issues—including rebalancing and restoring global aggregate demand, promoting global trade and investment, and combating climate change—require urgent and collective attention.

Some now expect China to shoulder global responsibilities commensurate with its new economic weight. But despite the size of China's economy, its per capita income is still relatively low. It is home to millions of people who have yet to leave the countryside and enter the modernizing economy. Because it is still a relatively poor country, China naturally feels it cannot yet afford to shoulder outside responsibilities. It is preoccupied with its domestic agenda, and would prefer to defer any responsibility for the global system until it reaches higher income levels. There is perhaps no historical precedent for an economy that attains such systemic significance at such an early stage in its own development.

Rebalancing global demand

Of the global duties the US now struggles to perform, the most pressing is that of consumer of last resort. The rebalancing and restoration of global demand in the medium term is much discussed within the G-20, but it has not really gotten underway.

As a result of higher savings in the US, global aggregate demand is deficient. The US believes it cannot restore full employment without raising its net exports. Reviving America's export industries will entail some awkward supply-side adjustments, as resources leave the construction industry and enter tradable sectors. In making these adjustments, the US might draw inspiration from Germany, which has enjoyed an export boom thanks to impressive wage restraint and admirable productivity gains. But supply-side adjustments are only part of the story. As a matter of arithmetic, the US cannot raise its net exports unless the rest of the world increases its combined demand.

With their aging demographics, Europe and Japan are unlikely to do much to revive global demand (although a reduction in Germany's large current-account surplus would help). The world is therefore looking to Brazil, Russia, India and China (the so-called BRICs). The onus is falling on China in particular to do more to stimulate consumer spending and reduce its current-account surplus. This is consistent with the new growth pattern that China is itself keen to promote, so there is no fundamental conflict of objectives. The disagreements have more to do with the means of adjustment and the speed, with China's critics urging it to cut its surplus faster. It is, however, important to note that no one would benefit if hasty efforts to cut China's excess savings jeopardized its stability and growth. This point is often overlooked in international commentary.

Some critics of China's current-account surplus seem to believe that trade is a zero-sum game, in which one country's gain is another's loss. This line of thinking shows little grasp of the substantial external benefits of China's growth. But although such critics are ill-informed, they can be influential in political circles. Their complaints might sour the politics of international trade and foreign investment, including cross-border acquisitions and technology transfer. However, once the discussion gets beyond the mistaken perception of a zero-sum game, China's interests and the rest of the world's are largely aligned. China should narrow its surplus, because it would benefit its own economy, as well as the broader global economy.

Rebalancing China

Combined with substantial FDI and other less desirable capital inflows, China's current-account surplus is contributing to large increases in foreign-exchange reserves. For a country at China's level of development, it is wasteful to devote as much as 10% of GDP in some years to the accumulation of foreign assets. Most of these reserves are held in US Treasuries. Given the US's fiscal profile and prognosis, these assets are vulnerable to inflation and further depreciation of the dollar. They would seem to offer high risks, for low returns. That said, as a byproduct of its policy of managing the appreciation of the renminbi, China's accumulation of reserves may bring wider benefits to China beyond the coupon on a Treasury bond.

China's surplus reflects its high savings and its prodigious exports. But exports are likely to be a less powerful engine of growth in the future, as China's traditional markets in the advanced economies endure a period of protracted stagnation. One country's exports can, of course, grow faster than the overall market. But that would mean further enlarging China's market share, which might create tensions with its trading partners in both advanced and developing countries. Even if a large trade surplus were in China's interest, all else equal, it would cease to be so if it provoked a damaging trade war.

China should, therefore, rely less on developed markets and more on emerging markets—including especially its own. Beyond the fiscal stimulus of its crisis response, China would benefit from making maximum use of the domestic market to drive growth. This would not be to the exclusion of the evolving export sectors, but rather in addition. It is prudent at this stage to diversify as much as possible across markets to spur economic transformation and mitigate the risks to growth.

In fact, one of the objectives of China's 11th Five Year Plan (2006 – 2010) was to achieve a basic balance between export and import. The critical question is how should it do so? One school of thought regards China's surplus and its exchange rate as closely tied. This view is quite widespread, as reflected in numerous recent commentaries by influential analysts and journalists. They think of the exchange rate as the principal cause of the surplus and the main policy instrument for dealing with it. In their view, a stronger renminbi would be sufficient to eliminate the surplus.

While the exchange rate is relevant to restoring external balance without impairing growth, it is not sufficient. In fact it isn't even the main event. China's previous round of exchange-rate appreciation from 2005 to 2008 was accompanied by an expansion in the current-account surplus rather than the reverse. Many outside commentators simply conclude that the appreciation was not fast enough. But they underestimate the structural changes China must undergo if it is to contain its excess saving. That excess saving has deep roots (just as the US saving shortfall has deep roots)—it is not an exchange-rate issue alone.

Unless China's policies change the structural parameters of income, consumption and savings, a further strengthening of the exchange rate may not help. Nonetheless, there is a good argument for an appreciation as part of an overall program to increase consumption and upgrade the industrial structure, while maintaining internal balance. A stronger yuan would create pressure for beneficial microeconomic and structural changes in the tradable sectors of the economy. It would also slow the accumulation of reserves and probably help prevent overheating of the domestic economy.

China's real exchange (properly measured) is rising much faster than its nominal rate, because wages in some of China's export sectors are rising faster than productivity. This is a beneficial change. Higher wages should help to boost consumption, weaning the economy off its dependence on investment and exports. On the supply side of the economy, higher wages will impel productivity to catch up, shifting the economy towards higher value-added activities.

China fears that a decline in the competitiveness of export-oriented manufacturing will undermine the job creation needed to support migration from rural to urban areas. International experience, particularly in Latin America, suggests that China is right to be concerned about a pattern of growth and development that leaves large numbers of people stranded outside the modernizing part of the economy. But no one inside or outside of China thinks the country's long-term future lies in low value-added manufacturing processing. As incomes rise, this sector will move inland (assuming the country's infrastructure allows it) and then decline. In economies like Korea's, which have successfully navigated the route from middle-income to high-income, the domestic market grew in importance as the economy's purchasing power increased. As the growth of export jobs slowed, industries serving the domestic market contributed a bigger share of new employment.

As discussed in earlier chapters, China should therefore give priority to (1) the expansion and integration of the domestic economy and (2) education (increasing its quantity and quality). By fostering the domestic market, China will create fresh sources of demand for labor. And by increasing the quality and quantity of education, it will give its people the skills they need to thrive in higher value-added industries. This would relieve the exchange rate of the burden of preserving the labor-intensive export sector.

Promoting Global Trade and Investment

If China agrees to narrow its surplus, it will also derive an indirect benefit. By doing its bit to restore global demand, it will strengthen the cause of free trade and multilateral co-operation, causes which benefit China and other countries enormously in the long run. It is in the interest of all countries, but especially China, to preserve an open global trading and investment system.

China went to great lengths to gain membership of the World Trade Organization in 2001. It now has a big stake in preserving the credibility of the WTO as the guardian of an open trading system. It is therefore important for China, and indeed all member countries, to abide by the WTO's rules and dispute-settlement mechanisms. It is widely, and probably correctly, believed that multilateral trade liberalization can quickly shift into reverse if forward momentum is not maintained. Given the role of open trade in China's development strategy, few countries have a greater interest in combating protectionist tendencies.

In practice, China's record of trade liberalization is generally good. This is not to say, however, that there are no areas of concern. Issues that merit continued attention include (i) intellectual property rights, which are not always enforced as vigorously as they should be; (ii) export incentives, in the form of tax rebates in certain industries; (iii) hidden subsidies for the exports of state-owned enterprises, and (iv) energy subsidies which often create distortions that hamper growth in the longer term. In general, since China's economy still has a substantial element of central planning, the government has an additional need to demonstrate that export prices reflect true costs.

The rules and policies that govern international investment are also coming under greater scrutiny. As far as possible, China should allow market forces to determine the allocation of investment, both within and across borders. Not only does capital mobility permit savings to travel across borders, it also facilitates the transfer of managerial and technological knowhow.

In the long term, China should aim to gradually dismantle barriers to direct and portfolio investment. (In return, of course, China is entitled to seek reciprocal liberalization from other countries.) Provided that China's markets are properly regulated, freer flows of capital should result in a more efficient allocation of resources. Overseas investment often brings healthy competition and additional sources of expertise into a country as well as money. Foreign investors may, for example, help to identify and back the more sophisticated industries China will need as it grows richer.

However, in circumstances like the present, capital inflows can be excessive and destabilizing. The surge of foreign portfolio investment in emerging economies in 2010 represents one of the distortions introduced by the West's response to the crisis: investors are fleeing rock-bottom yields at home in search of richer pickings abroad. In these circumstances, governments have every right to intervene to curb capital flows in order to keep control of inflation and asset prices. But a commitment to the goal of gradual liberalization, backed up by regular steps in this direction, would provide a valuable signal, both to domestic industry and to external trading partners.

China is not only a favored destination for inward investment, but also a growing source of outward investment. Its large trade surplus, coupled with substantial inflows of portfolio capital, has given China the financial means to make large overseas investments. Thus far, the bulk of this has been in the form of liquid claims on governments (particularly US Treasury securities). But, for understandable reasons, China is seeking a higher return on its foreign assets. Unfortunately, its attempts to diversify into longer-term equity-type assets have provoked protectionist reactions in receiving countries. These reactions are mostly unjustified, but it will be important for Chinese policy not to give cause for legitimate concern. Such concerns could arise if it was believed that foreign investments were motivated by political and strategic, rather than commercial, considerations. Overseas acquisitions by state-owned enterprises are likely to encounter particular resistance, because these companies remain under the control of the Chinese government. Over time, China can alleviate some of these concerns by making sure its investment decisions conform to commercial criteria that are clearly specified and communicated to host countries. Singapore, which makes substantial equity investments through its sovereign-wealth fund without much controversy, shows that this can be done.

When foreign investment brings managerial control, particular care is required. China should be prepared to demonstrate that such control has a clear commercial rationale. Its investments in the raw materials of emerging and developing countries also require tact. Such investments are a legitimate outlet for a country's excess savings, but they should not bring privileged access to natural resources at the expense of other countries. In other words, control of the sources of raw materials should not interfere with the principle that commodities are sold into a global market, supplying all customers at a more or less uniform price. This is an important principle that should be supported by the collective voice of the G-20.

The IMF now hosts a dialogue between sovereign-wealth funds and the countries in which they invest. China can and should use this vehicle to promote greater acceptance of cross-border investment based on commercial criteria, and to allay exaggerated fears on the part of receiving countries. China can work with financial institutions in receiving countries to identify opportunities for investment that benefit both China and the host country.

Shifting to a Low-Carbon Economy

One of the highest priorities for the global economy over the period of the 12th FYP and beyond will be mitigating climate change and shifting to energy-efficient, low-carbon economies. The effects of climate change are starting to be felt around the globe, not least in China where extreme weather events (floods, droughts, etc) are becoming more frequent, endangering its progress and economic achievements. It is therefore imperative that China give due weight to climate change in formulating its growth strategy. Not doing so would lock China into industrial structures and urban forms that may become significant liabilities in a low-carbon world.

China has already begun an aggressive shift towards a lower-carbon economy. Indeed the transformation of the development pattern discussed in earlier chapters and the energy-efficiency objectives articulated in recent planning documents together represent one of the biggest efforts to reduce emissions by any country. However the 12th FYP will need to flesh out the policies that will achieve these objectives. In particular it will need a strategy for shifting from the use of coal in power generation towards low-carbon fuels.

China's global partners hope and expect that it will make progress in mitigating climate change. This outside scrutiny can be uncomfortable for China. But it should be able to meet international expectations without compromising its growth strategy, for the following reasons.

- Reducing greenhouse gases and increasing energy efficiency is consistent with the wider rebalancing under way in the Chinese economy (and, for that matter, the rebalancing required at the global level). Over the medium term, the shift is likely to be beneficial— even essential—for the development of a sustainable economy for the mid 21st century.
- China is in many ways better placed to fight climate change than most other countries at a similar stage of development. It has strong state institutions, which can implement and enforce the targets the government sets. It also has strong public finances, which means it can afford to make the necessary public investments.
- Cutting carbon will impose transitional costs on China. But those costs can be minimized if the government shows a clear sense of direction and a credible commitment to future emissions cuts. That will give firms the right signal and sufficient time to plan for costlier carbon. Conversely, the longer China delays, the worse the transitional costs will become, because while it procrastinates, firms will be busy investing in plant and machinery that may be incompatible with a low-carbon future.
- The shift need not compromise energy security and could even enhance it.

These points bear further illustration. Take rebalancing, for example. At a global level, this implies a fall in US imports, including imported industrial products, combined with a shift in China from exports, which are largely industrial goods, towards domestic demand, of which a large proportion should be services. Thus rebalancing should reduce the carbon intensity of the global economy.

Cutting emissions will not, however, be easy. As noted above, China's economy is relatively carbon-intensive for a country at its level of development. This is mainly because industry is such a big part of China's GDP; energy is such an important input for industry; and coal is such a big component of China's energy production. As a result, it may not be enough for China to improve the energy-efficiency of its current industries; it may also have to change its industrial mix, moving into less energy-intensive activities.

Such changes will inevitably entail transitional costs. Companies and regions which have depended on coal-intensive industrial production will suffer; and the cost of power will probably rise for all users as the economy moves to more expensive, lower carbon energy sources.

The composition of growth will change, but the rate of growth need not slow. Faster expansion in services and higher value-added industrial production can offset the slowdown in more carbon-intensive industries. Even coal-based industrial output could continue to grow, albeit more slowly than in the past, as long as it can reduce energy intensity as quickly as it increases production.

Although the 11th FYP clearly aimed to change China's pattern of growth, it was not entirely successful. China proved to be better at expanding output than at rebalancing it. The 2008 stimulus package did increase social spending, but did not otherwise represent a significant break with China's past growth model. It will therefore be necessary to announce a new course, supported by a set of new policy commitments and instruments, if China is to move towards a low-carbon economy.

To bring about these changes, energy-intensity targets will not suffice. China will also need to create incentives for the economy to adopt low-carbon fuels and less carbon-intensive activities. Market-based instruments—such as carbon taxes, cap-and-trade schemes, or both—could be introduced. They encourage firms and households to reduce carbon as cheaply and conveniently as possible, as well as providing incentives for innovation. By putting a price on the external costs of energy use, carbon taxes correct an economic distortion, confronting energy users with the full cost of their decisions. This gives carbon taxes great theoretical appeal. They are also comprehensive, falling on anyone who uses carbon throughout the economy. But this is also a major drawback in practice, since carbon taxes inevitably produce a comprehensive range of losers—including everyone who uses electricity. This disadvantage can however be offset:

- The taxes can start at a low level, increasing in stages; or they can begin with limited coverage, which is gradually widened. As long as there is a credible long-term commitment to increase the tax, or broaden its coverage, it can be wise to start small, thereby minimizing the tax's short-term costs while still providing longer-term incentives for appropriate investments.
- A carbon tax should induce a range of novel, and cost-reducing, responses. It would, for example, give impetus to the exploration of unconventional energy sources and to efforts to improve energy efficiency.
- A carbon tax raises revenues which could be used to ease any transitional problems. Compensation could be paid to low-income consumers, for example, to offset higher electricity costs. Subsidies could also be provided for insulation and other energy-conservation measures.

Another policy instrument that could be used—on its own or in tandem with a carbon tax—is a cap-and-trade scheme. By allowing firms to buy and sell the right to emit greenhouse gases, the cap-and-trade system imposes a hard limit on emissions, while allowing great flexibility in how that limit is reached. China's participation in the carbon-credit mechanisms of the Kyoto Protocol has started to lay the institutional foundations such a system will need to function effectively. Depending on how such a trading scheme is set up, it could also raise revenue through the sale of emissions allowances. Over the medium term, an emissions trading system in China could possibly link to other carbon markets elsewhere in the world, accelerating China's shift to a low-carbon economy.

In addition to putting a price on carbon emissions, China should also consider some more specific measures, such as vehicle-efficiency standards and building codes, as well as zoning laws to combat urban sprawl and demarcate parks and other green areas that might sequester carbon.

Such policies need not compromise China's energy security, for the following reasons:

- By raising prices and efficiency in transport and other sectors, these policies will reduce China's demand for imported fossil fuels, such as oil, thereby easing China's dependence on the insecure regions of the world that produce these fuels.
- China's domestic coal industry has contributed to its national security for many decades. But the sector is already under some strain (as shown by the need for imports in some recent years) and it probably cannot keep pace with China's economic ambitions. China will therefore have to draw on a wider range of resources and use them more efficiently.
- Incentives for the production of alternative fuels (like shale gas) and for greater efficiency will improve the resilience and diversity of the energy sector.
- A shift to more renewable energy would increase China's energy security, because renewable energy can be generated domestically. Nuclear energy also raises few concerns regarding security of supply, not least because nuclear fuel can be readily stockpiled if necessary.
- Cutting carbon will require a number of supporting measures, such as the introduction of smart grids for distributing electricity. Many of these ancillary measures will also improve security, adding to the country's energy efficiency and contributing to the modern infrastructure that an advanced economy will require.

China can therefore cut carbon emissions while preserving energy security. Indeed, a continued dependence on carbon may itself prove risky, and not just environmentally. By mid-century, the world economy may have shifted to a low-carbon model. Goods and services incompatible with that model may be spurned; low-carbon goods prized. China has already shown that it can turn its traditional manufacturing skills to advantage in green industries such as wind and solar power. It could also play a pioneering role in the technologies and industries that will define the low-carbon economy, from carbon capture to electric cars. But China's firms will find it harder to thrive in these industries, if their home market is still wedded to a high-carbon model.

Global governance

Rebalancing global demand, promoting global trade and investment, addressing climate change and reforming the exchange-rate system are four of a much longer list of major global issues that developed and developing countries need to address together. These global issues – whether they are economic, social, ecological, or broader issues of security – are increasingly interconnected. But the international institutions that exist to tackle these issues remain patchy and fragmented. Policy makers must work through a loose collection of institutions and ad-hoc committees lacking any coherent design or any consistency in their representation of developing countries. This ungainly architecture has evolved in response to various past events and crises. It is now in urgent need of reform. The world would greatly benefit from China's active participation in discussions on how best to accomplish such reform.

The international frameworks in most obvious need of reform are those governing the world's financial system. Some of the chief tenets of that system have been thrown into question by the financial crisis of the past three years. The turmoil demonstrated that unfettered financial markets are not self-regulating and that their ructions can in fact disrupt the global economy. Although financial markets do have some self-stabilizing properties (greed is tempered by fear; rewards are accompanied by risk; high prices can be a signal to sell; low prices an invitation to buy) these properties fail, disastrously, if risk is misperceived and mis-measured. A debate is therefore underway in international as well as domestic fora on whether the financial system can be stabilized by incremental changes to current financial arrangements, or whether wholesale change is required.

Emerging markets such as China have every reason to participate in this debate. On the one hand, emerging markets have often suffered the consequences of global financial disruptions (although much less so on this current occasion). On the other hand, emerging markets have been among the major beneficiaries of open capital markets and the free flow of investment. Their views deserve to be heard when it comes to striking the right balance between new controls on global finance and preserving the benefits that globalization can bring.

Another question of direct interest to China is how to broaden participation in international economic decision-making, without making those deliberations too unwieldy and inefficient. As the weight of the emerging economies rises dramatically, Europe's overrepresentation on the board of the IMF and World Bank is increasingly anomalous. That has prompted the IMF in particular to carry out some piecemeal reallocations of votes and voice. It is also important that developing countries be adequately represented in groups such as the Basel Committee on Banking Supervision and the International Accounting Standards Board, which now play a much more important role in global governance. The emergence of the G-20 (which also convenes the Financial Stability Board) as a powerful body for international cooperation could well spell changes in the prevailing balance of power among individual countries. But it is too soon to tell if this expanded group of large, systemic countries can be effective in setting international priorities and coordinating policies.

So what will the G-20 and other international groupings ask of China? What does the world want of this rising power? At the most general level it wants China to recognize that its domestic policy choices have cross-border repercussions, and to take those repercussions into account when taking decisions. It also wants China to co-operate with other countries in making mutually advantageous adjustments that might not be advantageous if made in isolation. It wants China to help strengthen the institutions, such as the IMF, that broker such agreements, even as those institutions take steps to accommodate it. But, above all, the rest of the world wants China and the rest of the BRICs to articulate a vision of how the world should accommodate their rise. Without that vision, the rest will not follow.

Beyond this general, shared aspiration, countries differ in their expectations of China. Among developed countries, the US is particularly concerned about its huge trade deficit with China, especially now that it is struggling with high unemployment. In contrast to the US, Europe is a natural champion of global governance. Although the rise of the emerging economies will erode Europe's influence in the Bretton Woods institutions, the gradual emergence of a multi-polar world is otherwise less of a threat. Europe is likely to share China's aspirations for a multi-currency reserve system that includes the euro and the renminbi as well as the US dollar. Europe and China also share an interest in regional integration. The ASEAN Plus Three grouping which includes China, Japan and Korea can perhaps learn from the EU experience. In the coming decade the economic rise of China is likely both to generate friction with Europe and create the potential for fruitful cooperation. The question for policy makers on both sides is how to prevent zero-sum dimensions from dominating and running the show. This requires high-quality dialogue that acknowledges the potential for friction while emphasizing the potential for fruitful cooperation.

Developing countries have a somewhat different interest in China's active involvement in global governance. They are keen to learn from China's remarkable development experience. They also appreciate China's reluctance to interfere in the domestic affairs of other countries and its willingness to invest and provide aid without lectures and conditions. They benefit from China's increasing trade, investment and aid and hope that China will not repeat the mistakes of some of the richer countries.

In this regard, developing countries are likely to encourage China to consider:[38]

- Increasing access to its markets for manufactured goods from developing countries. To some extent this will happen automatically as China's domestic market grows and its firms exit the extremely labor-intensive components of global supply chains.
- Encouraging joint ventures between Chinese firms and domestic companies, so that they can acquire technology and knowhow.
- Untying its aid and providing flexible financing
- Providing support through regional and sub-regional institutions.

Although countries may differ in their expectations of China, almost all are keenly interested in China's domestic policies, because those policies have an impact on them. As a result, they will read the 12th Five-Year Plan for clues about China's aims and intentions. China

[38] A more specific account of what African countries would like from China is provided in Background paper no.1 by K.Y. Amoako "What African Countries Expect from China?"

should not resent this outside scrutiny. It is, in fact, a compliment. China now attracts the attention that befits an economy of systemic significance and rising importance. The government should feel under no great obligation to seek international approval for its policies. But it should make its economic objectives clear to partner countries (and make its policies consistent with those objectives).

International experience suggests, however, that it will not be easy for China to play the global role expected of it. The US and Europe (particularly the UK) still dominate global discussions of international finance and other issues, based on their long experience in international policy formulation, and the skills they have built up, not just in core government agencies but in their legislatures and in a broad range of think tanks. Japan by contrast "punches below its economic weight" for a variety of reasons. Japan's method of coordinating its policies internally gives its negotiators little room for maneuver in international negotiations. Because Japan rotates its staff so frequently, they struggle to match the networks of contacts and depth of institutional experience accumulated by their counterparts from some other countries. In addition Japan suffers from a relative shortage of high-quality think-tanks and universities supporting international policy work. Finally, Japan suffers from a language barrier, given that international communication puts a premium on English language skills.

To improve its engagement with the global community, China must invest in people: it needs highly trained negotiators and interlocutors with a deep and detailed understanding, not only of Chinese realities, but also of the realities of other countries. These intermediaries should represent China to the rest of the world, and represent the rest of the world to China: it needs to be a two-way affair. They should be able to present the Chinese case eloquently and convincingly, while also being able to interpret global perceptions and present the international case to the Chinese community clearly, effectively and objectively.

China must also establish international think-tanks as interfaces with the rest of the world. These think-tanks should enable foreign scholars and policy analysts to work in China and Chinese scholars to work overseas. Staff-exchange programs with international and regional institutions will also be very important. China should also broaden its circle of communications. It needs to talk more with other emerging markets. It also needs to recognize the importance of interacting with a wide range of stakeholders around the world, including governments, the private sector, civil society and community institutions that all have a role to play in global governance.

There will be a time when China and eventually India have global roles similar to those of the United States and Europe now. How the global economy fares when we get there will depend a lot on how these two economic giants deploy their resources and influence. China's transition over the next five years is part of a longer journey to that destination. As it makes this transition, China will have to negotiate, cooperate and occasionally compromise with other countries and international institutions. The valuable lessons it learns during this period will help prepare it for the global responsibilities it will shoulder in the future.

Chapter 9 System Reform[39]

This report has provided an international perspective on the challenges China will face as it evolves from middle-income into an advanced and prosperous nation. In the coming decade, China's economy must cope with at least five transitions: it must a) change its growth model, as its labor costs rise; b) rebalance demand, from investment and exports to consumption; c) accommodate a rapidly urbanizing population; d) build the social infrastructure necessary for a harmonious society; and e) take on international responsibilities, such as steering the world economy and tackling climate change, commensurate with its growing size and global impact. Few countries have successfully managed this transition; no country of China's size and diversity has ever done so.

China has long recognized these challenges. The need for a new growth model was acknowledged as far back as the 9th FYP and reiterated in successive plans. Hardly any of the issues discussed in the preceding sections were not identified in the 11th FYP, or in recent policy announcements by the senior leaders and the Party Congress. But it is easier to recognize these problems than to solve them and, in practice, China has struggled to make many of structural changes envisaged in past plans. Growth is still led by investment and exports, services continue to lag, and, most important, big disparities of income, education and health remain between urban and rural Chinese, and between the coastal and inland regions.

As the country embarks on a new FYP, how can it close this gap between the plan's objectives and its implementation? This chapter will look at the reforms required of the state, if it is to lead the economy through the complex transition to a higher income.

These reforms will require both the central government and sub-national administrations to rethink their roles and strengthen their capacities. The reforms should also extend to the state-owned enterprises (SOEs), which should pay higher dividends and face stiffer competition in the markets they now dominate. China will also have to reform its fiscal arrangements, particularly the division of revenues and responsibilities between the central government, the provinces and the counties. Without reforms in these three areas, the state will struggle to play its part in realizing the ambitions of its development plan.

Enhancing the Effectiveness and Accountability of the Government

International experience suggests that China may have to alter the balance between planning and markets in the years ahead. To realize the plan's objectives, the government will have to draw on a wider range of market-based instruments. It will also have to pay close attention to the incentives faced by governments in the provinces and counties, where the plan's success will ultimately be decided. It may profit from reaching out more to the general public, and from ensuring that high-quality data and information is available to help it monitor progress and appraise its own performance.

[39] The discussion of fiscal reform in this chapter draws on Background paper no. 19 by Christine Wong: "Public Sector Reforms toward Building the Harmonious Society in China"

Comprehensive Policy Planning

In a centrally planned economy, the government hands down a set of targets, quotas, obligations and entitlements that directly guide the behavior of enterprises and households. In the complex, mixed economy that China has become, planners must find other ways to exert an influence. The key to successful implementation is “policy planning”: that is, translating the plan’s objectives into a set of policies that directly and indirectly guide the country’s development. These policies can employ a variety of instruments to influence the decisions of market participants, bringing their incentives into line with the plan’s aims.

To be successful, these policies cannot be formulated independently of each other; they must fit together as a coherent and internally consistent package. Governments are not monolithic and interpretations of the plan’s objectives may differ among ministries and between central and local governments. Policy planning thus requires extensive coordination within the government.

Moreover, since policies cannot be expected to succeed immediately, policy planning must have a 3-5 year horizon. Policies will need to be phased in over time; they may also need revisions and refinements as results appear and circumstances change. Examples abound in China and the rest of the world of economic policies that worked well for several years but eventually outlived their usefulness. These past successes have often ended up as stumbling blocks for future reform.

Judging by the experience of many countries, planning works best when it relies more on the price and other market-based mechanism. By working with the grain of market incentives, planners can achieve more lasting, sustainable results—and achieve them more efficiently. The next five-year plan, for example, aims to reduce China’s consumption of energy per unit of GDP. It will improve its chances of success if it changes the way energy is priced and taxed. (see Box 6).

Box 6: Energy Efficiency Plan

China’s energy efficiency plan, a top priority of the 11th FYP, is impressive in its scope and detail. It comprises five major programs, ranging from the closure of small power plants and obsolete factories to the renovation of industrial boilers. In practice, however, government officials have often felt obliged to meet plan targets by administrative measures, such as arbitrarily cutting off power supply to heavy industry, or closing selected plants temporarily to reduce energy use. Such measures may work in the short term but they are neither efficient nor sustainable. They are, indeed, reminiscent of traditional central planning methods.

In order to meet its energy-efficiency objective, the government needs to rely much more on policy planning. A priority should be reforming energy prices so that they reflect the full costs of supply, including the scarcity value of energy resources and the costs of environmental externalities. At present, electricity prices, for instance, remain heavily regulated and well below generation costs, thereby providing poor signals to industries and consumers. Market prices would discourage waste, and promote energy-saving innovations over the longer term. The government could also rely more on taxes and subsidies to promote the development and dissemination of energy-efficient products.

This kind of planning is analytically demanding. Potential policies must be formulated, compared, monitored and evaluated. None of the issues discussed in this report can be resolved with a single instrument or a short-term fix. There are, moreover, alternative ways of addressing them, each with its own costs and benefits. In choosing between these alternatives, policy makers should be able to draw on a comprehensive analysis of a policy's strengths and weaknesses under a full range of scenarios.

With China's emergence in the world economy, its policy choices also affect other countries. To be fully informed in their policy making, China's leaders will want to know the nature and magnitude of these spillovers.

China's research on specific areas of economic policy is much stronger than it was. But the government still lacks a single agency with the necessary analytical breadth to support policy planning. It needs an internal "think tank", capable of pulling together the different strands of policy, so that all of the agencies concerned with an issue can base their decisions on a shared body of evidence and analysis. Other countries have benefited from the work of "reform teams", with the requisite expertise, clout and autonomy (see Box 7) on Reform Teams). International experience indicates that to be effective, such an agency should be free of administrative responsibilities, but enjoy direct access to the highest level decision makers.

Box 7： Reform Teams

The business of "feeling for the stones" in fast-growing economies was often carried out by highly qualified technocrats in small, dedicated "reform teams". Singapore had its Economic Development Board, Korea its Economic Planning Board, and Japan its Ministry of Trade and Industry.

Reform teams were not burdened with administrative duties, but they were given direct access to the top of the government. Malaysia's Economic Planning Unit reported directly to the prime minister. The Council for U.S. Aid in Taiwan, China, which began in 1948 and evolved into the Council for Economic Planning and Development, reported directly to the president. Indeed, several future heads of government sprang from their ranks.

From this unique position – ensconced in government, but distanced from day-to-day administrative burdens and immediate political demands – the reform teams helped coordinate the government's efforts and overcome administrative opposition and inertia.

Although technocrats unchecked by political forces can fail to balance economic with political and social concerns, political forces unchecked by technocratic knowledge can be disruptive.

Source: Commission on Growth and Development (Chairman: Michael Spence): The Growth Report: Strategies for Sustained Growth and Inclusive Development, p. 28

Reform of Structure and Roles of Sub-National Governments

As well as strong guidance by the central government, China will need sound administration by sub-national levels of government, if it is to prosper over the next decade. China's current administrative reforms, which will make counties the "mainstay", should help to streamline its sub-national government and shorten the “frictional distance” between national policy and local implementation.

But the reforms also run the risk of overburdening provincial and county governments. Provinces may have too many counties to budget for, and counties may have too many schools or medical facilities to supervise. Provinces differ greatly in the size of their population and the number of counties they contain. Counties themselves also vary widely in size, from 31,000 people to 2.15 million. For this reason, a one-size-fits-all strategy for managing schools, clinics and other local services is unlikely to succeed. The government might consider redrawing some administrative boundaries to create units that are of a more manageable size. It might also consider organizing some services along different geographical lines, creating functional districts of a size appropriate for that service, rather than working solely within existing administrative boundaries.

China should also consider reforming the administrative hierarchy of cities, so that cities, regardless of size, can compete on an equal basis. As thing stand, higher-level cities in China “oversee” the governance of lower-order cities. They also enjoy greater autonomy in decision-making, more fiscal resources, and greater access to transport corridors, rail capacity, and so on. In place of this hierarchy, each city, regardless of size, should be given full autonomy over a well-defined area. All cities and towns should be granted the same tax bases and charged with the same expenditure responsibilities. It will, of course, take longer for smaller cities to make full use of all of the available sources of finance. In the interim, they may need more money from higher levels of government to put them on an equal footing with larger cities.

China also needs to ensure that the role of each level of government is clear and consistent with national policies. Currently, this is not always the case. For example, the national goal of rebalancing the economy towards domestic demand is often thwarted by sub-national governments who intervene in domestic trade, protecting local industries and restricting the movement of goods across provincial borders, or even within them. In the past, the central government has not reached below the provincial level. It has left it to provincial governments to implement many policies and to local governments to deliver most public services. But these sub-national administrations may have no obligation or incentive to perform these tasks. The result has been uneven implementation.

The relationship between central, provincial and local governments should, therefore, be a key focus of reform. One approach would be to hold provinces accountable for making sure that local governments implement national policies. Alternatively, China could follow the example of many countries, where the central government is more hands-on, stationing its own staff in local areas to monitor services directly.

Incentives for Public Officials and Public-Service Units

It will also be important to ensure that the incentives of public officials and public-service units (PSU) are aligned with national priorities. For example, mayors should be judged not only on the basis of industrial production and GDP in their cities, but also on other indicators, such as the quality of transport and other public services provided to city residents. The government could also consider soliciting feedback from the public and other stakeholders on the performance of public officials, asking the public to judge how well public officials have met certain clearly defined goals.

Public service units (PSUs) should also be held accountable for the services they deliver, not the profits they make. International experience suggests that PSUs are most efficient and responsive when they are granted a clear mandate, given the resources they need to deliver on it, and held accountable for doing so. In China, however, PSUs now enjoy too much leeway to charge for services without supervision. Nor are they held accountable for results. They have consequently become more profit-oriented than service-oriented.

Reform of the PSUs will also require revamping the remuneration system to sever the link between the revenues a unit collects and the pay its employees receive. User charges and other revenues should be properly managed and accounted for. And the PSUs should also face competition from private providers of the services they offer. Better management and stiffer competition will both help to keep the PSUs focused on serving the public.

Reaching Out to the General Public

Other countries have benefited from consulting the public on the design of policy, the choice of social indicators and the monitoring of progress. Through devices such as “citizen’s report cards”, the public can help the government raise the quality of public services and reduce corruption. The need to reach out to the general public and invite its participation in the design and implementation of social policies is well recognized by the European Union (see Box 8), although experience shows it is not necessarily easy to do in practice. In China, the process of preparing the 12th Five Year Plan has already involved extensive gathering of views from the public in every province, autonomous region and municipality. The government should now carefully consider how to extend this public involvement to monitoring plan implementation.

Box 8: Inclusion Process in the European Union

The EU’s experience over several decades suggests that governments alone cannot secure social inclusion. This cause must also be championed by civil society, including grassroots organizations and the socially excluded themselves. To generate this kind of support, governments have to enter into partnerships with other actors, in accordance with national traditions and community arrangements. The active involvement of the public helps to ensure that the government’s efforts are transparent and its objectives widely known. All work on social inclusion should therefore be as open as possible to the active participation of the regional and local public authorities, non-governmental bodies involved in the fight against poverty and social exclusion, and the poor and socially excluded themselves. The experience of the EU suggests such broad engagement is both crucial to success and difficult to achieve. In particular, it can be hard for civil-society groups to deliver services or advocate for change across local and national boundaries.

Source: Background paper no. 2 by A B Atkinson: “Issues in the Reform of Social Policy in China”

Accountability and information go hand-in-hand. The quality of China’s statistics needs improvement. Even though a huge amount of information is routinely reported, China lacks a system for vetting and reconciling the figures produced by different ministries and agencies, which can vary widely. To plan the transition to a high-income economy, China will also need new indicators that truly reflect China’s development strategy, objectives and performance. Reliable, timely data would also help the government evaluate the performance of the nation's policies, service providers and public officials.

Changes in the Scope and Functioning of the SOEs.

China's rapid growth over the past three decades is attributable in large part to the dynamism of the non-state sector. A recent study by the OECD compared Chinese SOEs with its non-state enterprises. It found that thanks to "improved governance and other reforms, SOEs are, in some ways, operating more like private-sector firms". However, their performance still lags their private counterparts. The OECD derived estimates of total factor productivity, taking into account a firm's capital intensity, size, location and industry. It found that productivity is highest in private firms. This result is consistent with a long list of previous studies that use a wide range of methodologies and generally conclude that China's SOEs are significantly less efficient than enterprises with other ownership forms. "With capital accumulation a key driver of GDP growth and SOEs responsible for a large share of total investment, low capital productivity in the state enterprise sector amounts to a significant drag on economic growth."[40]

SOE reform has been a key element of the reform process in China for many years. In the pre-reform era, SOEs completely dominated the urban economy. Their scope and function has changed substantially since then. But SOEs remain a sizeable force in today's economy. In 2008, according to the Industrial Survey, the net fixed assets of SOEs outside the financial sector amounted to RMB 7,593 billion, double the amount in 2001 and more than the assets of private and foreign-invested companies combined (See Table 5). Their profits were also higher, at RMB 906 billion. Moreover, SOEs benefited disproportionately from the recent stimulus program, which concentrated on the construction and infrastructure sectors they dominate. This suggests that the share of the SOEs in the economy today is even larger than it was in 2008.

Table 5 Selected Industrial Statistics, 2001 to 2008 (billion Yuan)

	2001	2005	2008
Industrial Net Fixed Assets			
State enterprises and Holding Companies	3863.8	4914.0	7592.7
Private companies	203.9	958.7	2394.5
Foreign companies (a)	1111.2	2141.9	3687.1
Total Profit			
State enterprises and Holding Companies	238.9	652.0	906.4
Private companies	31.3	212.1	830.2
Foreign companies (a)	144.3	414.1	824.3

(a) Includes Hong Kong, Macau and Taiwan investments

Source: CIEC

[40] OECD Economic Survey: China, 2010, pp. 109-118.

The continued dominance of the SOEs in today's Chinese economy is largely attributable to government policies—despite the government's emphasis on fair competition among different ownership types. In December 2006, the State Assets Supervision and Administration Commission (SASAC) announced its intention to maintain absolute control in seven sectors declared to be "strategic" (defense, electrical power distribution, oil and petrochemicals, telecommunications, coal, civil aviation, shipping); as well retaining controlling stakes in a long list of sectors described as "basic or pillar industries". These include machinery, automobiles, information technology, construction, steel, base metals and chemical industries.

Must this list be so long? By granting monopolies or oligopolies to SOEs in quite so many industries and services, China may struggle to improve its efficiency and sustain stable growth. It should consider re-examining which industries or activities really require state ownership. After all, the state does not need to own large swathes of an industry—even a strategic industry—in order to steer its development. Both economic theory and extensive international experience show that the state can guide strategic industries and enterprises more effectively through regulation, competition policy and market incentives.

In the early days of China's reforms, state ownership was a bulwark of stability. China was careful not to repeat the chaotic privatizations of Eastern Europe and the former Soviet Union. But conditions in China are now quite different. An orderly reduction in the scale and scope of the SOEs is now possible. The state's shares in SOEs can be transferred to the "public", through the capital markets at home and abroad. In some SOEs, the state could sell its entire holding, transforming the enterprise into a public company. In other cases, the state could substantially reduce its stake, without relinquishing it altogether.

In many sectors, ownership may be less important than competition. The government can erode the monopoly power of the SOEs by removing barriers to entry and other impediments to competition, including the favorable access to credit that SOEs enjoy. Opening up the service sector to private participation will be of particular importance. These reforms would generate much needed economic dynamism during the difficult period of transition.

In the SOEs that remain, corporate governance should be reformed. In the state's industrial enterprises, unlike its financial institutions, corporatization remains incomplete. It has been extended only to second-level companies, not to their group or mother companies. This has resulted in an anomalous situation, where corporatized companies are supervised and owned by parent companies with inferior corporate governance.

The state sector should be accountable to its ultimate owners—the whole people. This will require the corporatization of all SOEs, including the group companies, and the reform of their internal governance. The whole people cannot be active owners, of course. But any institution exercising ownership rights on their behalf, whether it be SASAC or another body, should be responsible for safeguarding the people's interests and holding SOEs accountable to them.

The owners of a company enjoy a residual claim on its profits. But SOEs in China pay virtually none of their net profit to the government, either through dividends or by any other means. This is a most unusual practice, with no international precedent. Many of the second-level enterprises that are listed do pay dividends, but they pay them to their group or mother companies who do not then pass them on to the government. Allowing the SOEs to retain their entire net profit was an exigency introduced in the mid-1990s when many SOEs were in financial distress. But this practice has continued despite the huge profitability of SOEs today.

According to economic principles and international practice, all the net profit of SOEs should belong to the state. In most countries, these profits are paid directly into the State Budget; in some instances, they are paid indirectly through a fund, but the state remains the ultimate beneficiary. In China, recent discussions suggest SOEs might remit more of their profits to the state, but the amounts being considered are extremely small, between 0% and 15%.

Logically, the debate should start at the other end. The assumption should be that the bulk of the net profit of SOEs should go to the state budget. The SOEs could then try to make a case for partial exemption, i.e. for special legacy costs they may bear. The SOEs could also bid to retain some of their earnings for their own investments, but this would have to be justified against all the other investment needs of the state sector as well as other demands on the state budget, such as education and health expenditures. There are many examples internationally of firms that have retained too much of their profit, plowing it into inefficient investments. Higher dividends would also improve the SOEs' corporate governance by removing the over-investment bias, especially in large industrial enterprises.

Reform of the Fiscal System

Strengthening Public Finance

In a market economy, the fiscal system (i.e. the government's ability to tax and spend) is one of the most effective tools for redistributing income and opportunity. At present, the size of the state budget in China is modest by international standards. In recent years, fiscal revenues have amounted to only around 20% of GDP. Adding extra-budgetary revenues would increase the ratio to 25%. But this is still smaller than the ratio in the United States where public expenditures are relatively small (federal revenues amount to about 20% and state revenues add a further 10%, bringing the total to 30% of GDP). In European countries, where expenditures on public services are higher, fiscal revenues are 40% of GDP or more.

If China is to foster a harmonious society and a more prosperous economy, its government will need a bigger budget. Despite the progress made in the 11^{th} FYP, China needs to increase government spending on social protection, health and education, where it still spends significantly less than average for a lower middle-income country. By taking on a greater share of the cost of social programs, such as health, education and social security, the government will relieve the burden on household budgets, increasing their disposable income. The additional public spending should also ensure that poor families and poor regions enjoy better services.

Public spending per person differs greatly across China's localities, contributing to large geographical variations in the standard of public services, such as basic health, education and the minimum income guarantee. The central government has tried to narrow these disparities during the 11th FYP, by increasing its transfers to local governments. But the disparities remain very high by international standards and are inconsistent with the objectives of a harmonious society.

Fiscal revenues should therefore be increased in the near future to at least 30% of GDP, which is the current standard of the United States and below the standard in most other developed countries. This should be achieved with only minimal additional taxes on households, except for the very rich, so as not to defeat the goal of increasing the share of household income in GDP. If China's SOEs were required to remit their net profits to the state budget, as happens in almost every other country in the world, China's fiscal revenue would increase immediately to over 30% of GDP.

As well as raising revenues overall, China should also seek to redistribute the tax burden. At the moment, manufacturing and investment are unduly favored by the fiscal system. Removing that distortion would help to rebalance the economy, as is well known within China. Other useful changes would include expanding the VAT to cover the service sector and levying VAT at the point of consumption, not the point of production.

The mechanics of budget-making also need strengthening at all levels of government. At the national level, the central government needs to improve its ability to design and analyze policy. This will help it to prepare realistic budgets and monitor programs rigorously. The U.S., for example, entrusts these tasks to two main agencies: the Office of Management and Budget (OMB) in the executive branch and the Congressional Budget Office (CBO) in the legislative branch. The OMB has a staff of 500 and the CBO 250, of which most are economists and public policy analysts with advanced degrees (See Box 9). Managerial and analytical skills of this kind are in even shorter supply at the sub-national levels of China's government. These layers of government need the technical knowhow to match their important roles in formulating and implementing China's fiscal policy.

Box 9: Budget preparation and evaluation in the USA

The Office of Management and Budget (OMB) is the largest body within the US President's Executive Office. It has 500 staff, a budget of $70.9 million (in 2008) and its director sits in the cabinet. Its predominant mission is to help the President in preparing the federal budget and supervising its implementation in executive-branch agencies. In helping to make the President's spending plans, OMB evaluates agency programs, policies, and procedures; assesses competing demands for money; and sets funding priorities. OMB ensures that agency reports, rules, testimony, and proposed legislation are consistent with the President's budget and policies. In addition, OMB oversees and coordinates the administration's procurement, financial management, information, and regulatory policies. OMB also tries to improve managerial standards in the government, including its use of information technology, its financial management, its procurement procedures and its staffing practices. The performance of federal agencies is rated (green, yellow, or red) on scorecards prepared by OMB staff. OMB also oversees the efforts of government agencies to evaluate their programs, spot successes and failures and learn from the results.

Approximately half of all OMB staff is assigned to the four Resource Management Offices, the majority of them as program examiners. Program examiners may monitor a federal agency or a topical area, such as U.S. Navy warships. These staff monitor both spending and management. They are also responsible for giving expert advice.

Each year they review the budget requests submitted by federal agencies. They help to decide which requests will be sent to Congress as part of the President's budget. They perform in-depth program evaluations, review proposed regulations, read agency testimony and analyze pending legislation. They are also often called upon to provide analysis and information to staff members of the President's office.

Source: Background paper no. 19 by Christine Wong: "Public Sector Reforms toward Building the Harmonious Society in China"

Reforming the Inter-Governmental Fiscal System

As discussed in earlier sections, if China is to narrow regional disparities and encourage balanced growth, its government needs to increase its social spending in the poorer regions. Under China's decentralized system, it falls to local governments to implement many of the components of social programs, such as improving education, widening health-care coverage, strengthening social-safety nets, and so on. Indeed, for the majority of the Chinese population, these services are provided by rural local governments at the county and township levels. The prospects for improving these services depend, therefore, on the willingness and capacity of local governments to take on the task. Under the present inter-governmental fiscal system, however, the average local government appears to have neither the resources nor the incentive to meet their responsibilities for social spending. To implement the social programs in its development plan, China will need to allocate more central funds to social spending, reduce disparities among localities, and initiate a substantial reform of the inter-governmental fiscal system.

Table 6 Share of Sub-national Governments in Total Government

	Developing Countries	**OECD Countries**	**Transition Countries**	**China (2008)**
Sub-national share of Government Tax Revenues	9	19	17	47
Sub-national share of Government Expenditure	14	32	26	79

Source: World Bank 2006, CSY 2009, quoted in Background paper no. 19 by Christine Wong: "Public Sector Reforms toward Building the Harmonious Society in China"

Note: data for other countries is from various years.

As shown in Table 6, sub-national governments in China are responsible for almost 80% of public spending, but raise less than half of the tax revenues. This is not an unusual phenomenon among large countries. In a big country with large disparities between regions, it is also desirable that the central government receives surplus revenue, so that it can use these funds to help the poorer regions. In China, however, local governments are dependent on transfers to meet their spending needs to a degree unprecedented in international experience. These transfers impose a heavy administrative burden on the central government, which must budget for and monitor a trillion-yuan program of earmarked grants. This issue needs to be reviewed as part of further reforms of inter-governmental fiscal relations.

An immediate priority is to clarify and rationalize the spending responsibilities of different levels of government. The current assignments are largely inherited from the era of central planning and do not suit the highly decentralized, mixed economy that China has become. As China's population becomes more mobile, many local public goods now have significant inter-local or even national spillovers. Two good examples are public health, in a country where contagious diseases can spread by high-speed rail, and the education of migrant children, who may slip through the cracks of the country's fragmented school system. Under these new circumstances, it no longer makes sense to leave the responsibility for education and public health entirely in the hands of local governments. Similarly, assigning pensions and unemployment insurance to local governments hinders population mobility.

Economic principles and international experience suggest three approaches to reforming the inter-governmental fiscal system:

(i) The central government should take over both the financing and management of programs that require a national perspective. One clear example is the basic pension system (See Chapter 6: "Strengthening the Pension System"). Unifying the current patchwork of schemes into a nationwide pension system would serve the cause of both efficiency and equity. It would ensure labor mobility throughout the country (thus improving efficiency) and equalize pension standards (thus promoting equity), after allowing for local differences in the cost of living (ref to earlier sections on pension reform). The same would be true for the unemployment insurance scheme.

(ii) For some other programs, a better solution is to de-link finance and delivery, so that local governments provide the service, but higher levels of government pay for it. In most developed countries this is now the arrangement for basic education. The schools are managed by the lowest level of government, to gain the benefit of having decision-makers close to the students and their families. The costs of the program, however, are met by higher levels of government, to ensure equal standards throughout the country. In China, in contrast, counties are responsible for the bulk of spending on basic education. Because they differ greatly in the resources they can spare, the quality of education also varies greatly between regions. To narrow these gaps, the central government should pay more of the costs of basic education, even if counties continue to provide it. The same is true for other social programs such as basic health, Dibao, etc., where the country aims to achieve universal coverage with equal standards. As discussed earlier, investment in human capital in the poorest regions is the best investment China can make to promote growth and reduce inequality.

(iii) In most countries, the central government's transfers to lower levels of government are tied to particular streams of revenue. The central government may, for example, commit to share a given percentage of some tax or duty, distributed according to an agreed formula. This ensures a stable source of revenues for local governments, allowing them to plan ahead and manage their budgets with greater confidence. China already has very large formula-based transfers. But many local governments feel that these constitute too small a proportion of total transfers. If local governments were relieved of some of their spending responsibilities, as suggested above, then rule-based transfers would then represent a much larger proportion of their remaining transfers.

It is also worth considering whether local governments should be given some formal revenue-raising powers of their own, as happens in many other countries. This could help make local governments more accountable and responsive to the needs of citizens. According to economic principles, local taxes should fall on property and natural resources, i.e. immobile assets whose values depend on the quality of the environment created by the local authorities. Natural resource taxes would be of particular benefit to underdeveloped regions rich in ores, hydrocarbons and so on.

In summary, a reformed fiscal system should give all levels of government the resources they need to further the country's development, and the incentives to do so.

Concluding Remarks

This chapter's over-riding question is how to reduce the gap between the ambition of China's plans and their uneven implementation. Just as reform of the economic system and openness to the outside world were the key factor behind China's remarkable achievements over the past 30 years, so too will achieving China's development objectives in the coming decades depend on deepening reform and continued openness. This is an extremely complex and challenging question for any country, and this last chapter should be seen as the beginning of the thinking on this topic rather than the end.