Financial Sector Reform in China
The Asia Public Policy Series

The Asia Public Policy series seeks to promote interdisciplinary research on key challenges facing the region. Specifically the series focuses on the provision of public goods and services, the health of financial systems, and regional security.

Tony Saich
General Editor
The Harvard University Asia Center publishes a monograph series and, in coordination with the Fairbank Center for East Asian Research, the Korea Institute, the Reischauer Institute of Japanese Studies, and other faculties and institutes, administers research projects designed to further scholarly understanding of China, Japan, Vietnam, Korea, and other Asian countries. The Center also sponsors projects addressing multidisciplinary and regional issues in Asia.
Contents

Preface and Acknowledgments vii

Contributors ix

1 Introduction 1
Yasheng Huang, Tony Saich, and Edward Steinfeld

2 Reconstructing the Micro-Foundation of China’s Financial Sector 19
Xinghai Fang

3 The Impact of China’s Post-1993 Financial Reform on State-Owned Enterprises: The Case of Shanghai 29
Le-yin Zhang

4 China’s Program of Debt-Equity Swaps: Government Failure or Market Failure? 50
Edward Steinfeld

5 China’s Rural Enterprises in Crisis: The Role of Inadequate Financial Intermediation 67
Wing Thye Woo

6 Managing China’s Transition Debt: Challenges for Sustained Development 92
Pierre Bottelier

7 Interest Rate Liberalization in China and the Implications for Non-State Banking 111
Ligang Song
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Why More May Actually Be Less: Financing Bias and Labor-Intensive FDI in China</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>Yasheng Huang</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>China’s Rural Health System in Transition: Toward Coherent Institutional Arrangements?</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td>Gerald Bloom</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Financial Reform, Poverty, and the Impact on Reproductive Health Provision: Evidence from Three Rural Townships</td>
<td>178</td>
</tr>
<tr>
<td></td>
<td>Tony Saich and Joan Kaufman</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Are China’s Financial Reforms Leaving the Poor Behind?</td>
<td>204</td>
</tr>
<tr>
<td></td>
<td>Loren Brandt, Albert Park, and Sangui Wang</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>China’s Pension System Reform and Capital Market Development</td>
<td>231</td>
</tr>
<tr>
<td></td>
<td>Xin Wang</td>
<td></td>
</tr>
</tbody>
</table>
Preface and
Acknowledgments

The chapters in this book first saw the light of day as papers for the conference Financial Sector Reform in China, held at the John F. Kennedy School of Government, Harvard University, from September 11 to 13, 2001. They have been through a number of iterations since and we are grateful to the comments of the participants at the conference and for readers on behalf of the press who have helped us improve their quality.

The conference was the first in a series of Asia Public Policy workshops organized by the Asia Programs at the Center for Business and Government either solely or in collaboration with others. The second workshop looked at financial reform in Asia more broadly, drawing lessons from the process of recovery after the Asian Financial Crisis. The third of the workshops shifted away from looking at financial sector issues to social developments and more specifically at the question of HIV/AIDS in China. This edited volume is also the first publication of the Asia Public Policy series under the auspices of Harvard University’s Asia Center. We hope that it will be the first of many looking at public policy challenges in the Asia region.

Asia Programs at the Center for Business and Government encompasses several programs, projects, and executive education initiatives focusing on China, Taiwan, Vietnam, Indonesia, Hong Kong and Japan. The mission is to support the training of officials in the region in an effort to enhance their capacity to manage policy in rapidly changing domestic and international public environments; engage in capacity building in region to further the teaching and analysis of public administration and public policy issues; and promote superior research and policy dialogues on current developments in region and those issues central to relations with the United States. In terms of training, we have run a number of specific executive programs for officials from the region at the Kennedy School, including those for Chinese local government officials and senior officers from the People’s Liberation Army. In terms of capacity building, the program oversees the Fulbright Economics Training Program in Ho Chi Minh City, Vietnam, and works closely with the School of Public Policy at Tsinghua University, China, to help it develop its new degree program in public administration. The research program has comprised projects in Indonesia looking at microfinance lending, economic development in Vietnam,
financial sector reform in Asia, private sector development in China, and the changing patterns for public goods’ provision throughout the region.

For the support of the original conference and the publication of this book, we would like to thank State Street, especially Bob Williams; Dow Jones & Co., Inc.; the Folger Fund and Lee Folger; and the Harvard University Asia Center. Without their financial support, we would not have been able to put such an interesting conference together. We would also like to thank both the former director of the Center for Business and Government, Ira Jackson, for his enthusiastic support for all our programs, and Dow Davis, the executive director. For the conference, the support of Edward Cunningham and Sarah Cao was indispensable. This edited volume would not have seen the light of day without the help of Melanie Strauss, who has been a tower of strength in organizing us down the final stretch. Finally, we would like to thank William Kirby, now dean of the Faculty of Arts and Sciences, who, while Asia Center director, was very encouraging about setting up a new publication series.

Tony Saich
Contributors

Gerald Bloom, leader of the Health and Social Change Team at the Institute of Development Studies in the United Kingdom, has published articles and co-edited a book on health system transition in China. His research focuses on health system development in low and middle-income countries.

Pieter Bottelier, an economist and China scholar, was an Adjunct Lecturer at Harvard University’s Kennedy School of Government (2001–3) and is currently an Adjunct Professor at Johns Hopkins University’s School of Advanced International Studies (1999–present). Bottelier was also chief of the World Bank’s Mission in China (199–97) and Senior Advisor to the Bank’s Vice President for East Asia (1997–98).

Loren Brandt is a Professor of Economics at the University of Toronto specializing in the Chinese economy. His most recent research focuses on the dynamics of China’s economic growth; enterprise privatization and property rights’ reform; and the ongoing reform of China’s financial sector. He is also the author of Commercialization and Agricultural Development in China (Cambridge, 1990), and one of the area editors of Oxford University Press five-volume Encyclopedia of Economic History (2003).

Mr. Xinghai Fang is currently Deputy Chief Executive Officer of Shanghai Stock Exchange. From 1993 to 1998, he worked for the World Bank Group as Economist/Investment Officer. In 1998, he joined the China Construction Bank’s Office of Group Coordination, where he served as director. Then from 2000 to 2001, he was Secretary General of the Management Committee at China Galaxy Securities Company in Beijing. Fang has been a frequent writer on the Chinese economy for the Financial Times and the Wall Street Journal. He received his Ph.D. from the Department of Economics, Stanford University (1993) and his B.S. from the Department of Management Information Systems, Tsinghua University, Beijing (1986).

Yasheng Huang is Associate Professor at MIT Sloan School of Management and author of Selling China (Cambridge, 2003).
Joan Kaufman is Director of the AIDS Public Policy Program at the Center for Business and Government – Asia Programs of the Kennedy School of Government and Lecturer in Social Medicine at Harvard Medical School as well as Senior Scientist at the Schneider Institute for Health Policy at the Heller School of Social Policy at Brandeis University. From 1996 to 2001 she was the Ford Foundation’s Gender and Reproductive Health Program Officer for China. She spent 2001–2 as a fellow at the Radcliffe Institute for Advanced Studies and 2002–3 as a visiting fellow in the East Asian Legal Studies Program at Harvard Law School. She received her Sc.D, from the Harvard School of Public Health, where she taught during the 1990s. Topics of recent publications include China’s SARS epidemic, China’s AIDS epidemic, the gender impacts of health privatization in China, and China’s family planning program. Dr. Kaufman speaks Mandarin and has lived in China for eleven years since 1980.

Albert Park is Associate Professor and Associate Chair of the Department of Economics and Associate Director of the Center for Chinese Studies at the University of Michigan. He has published numerous articles on poverty, rural development, and financial reform in China and has consulted for the World Bank and the OECD.

Tony Saich is Daewoo Professor of International Affairs at the John F. Kennedy School of Government, Harvard University. He is faculty chair for the School’s Asia Programs and the China Public Policy Program. He has taught in universities in the Netherlands, the United Kingdom, and the United States, and from 1994 to 1999, he was the Chief Representative for the Ford Foundation’s China Office. His most recent publication is The Governance and Politics of China (Palgrave, 2004).

Ligang Song is Director of China Economy and Business Program in the Asia Pacific School of Economics and Government at Australian National University, where he also serves as a fellow. Research interests include international trade studies, the Chinese economy and the Asia Pacific economies. Publications include the book Changing Global Comparative Advantage: Evidence from Asia and the Pacific (Addison-Wesley, 1996).

Edward S. Steinfeld is an Associate Professor in the MIT Department of Political Science. His work focuses on the political economy of reform in China, with a particular emphasis on industrial and financial restructuring. Steinfeld is the author of the 1998 book Forging Reform in China: The Fate of State Owned Industry (Cambridge).

Dr. Sangui Wang is the Director and Professor of the Division of Poverty and Development Research at the Institute of Agricultural Economics of the Chinese Academy of Agricultural Sciences. He has been doing research in the fields of poverty and development
finance for more than ten years. He has published dozens of articles on poverty issues in China in both English and Chinese journals.

**Mr. Xin Wang** is a researcher at the State Administration of Foreign Exchange, People’s Republic of China. He was an economist at China International Capital Corporation in 2002–3 and at the State Council Office for Restructuring the Economic System in 1997–2002. His primary research interests include international economics, financial market, and social security. He has authored around thirty academic papers, one of which was awarded Sun Yefang Economics Thesis Prize. Mr. Wang received his M.P.A. from Harvard and was honored for his contribution to the Edward S. Mason Program. He earned his M.A. in economics from the Graduate School of the People’s Bank of China and B.A. from Beijing University.

**Wing Thye Woo** is Professor in the Department of Economics at the University of California at Davis. He is also the Special Advisor for East Asian Economies in the Millennium Project at the United Nations (one of its goals is to halve the absolute poverty rate by 2015), and Visiting Researcher at the Earth Institute of Columbia University. He is Director of the East Asia Program within the Center for Globalization and Sustainable Development at Columbia University. Wing Thye Woo’s current research focuses on international financial architecture, economic growth, exchange rate economics, and the economic issues of East Asia (particularly China and Indonesia).

**Le-Yin Zhang** is a lecturer and course director of MSc. in Urban Economic Development at University College, London. With a broad research interest in the role of the state in development, she has extensive research experience on various aspects of China’s economic development under the reform.
Financial Sector Reform in China
Introduction

Most scholars on China would accept, as a general proposition, that sustained Chinese growth depends critically on reform and development of China’s financial sector. However, even if one accepts this general proposition, many issues remain unsettled in our knowledge and understanding of China’s financial sector. One set concerns basic empirical detail. Despite the comprehensive and pioneering work of Nicholas Lardy (1998), basic issues remain highly uncertain and debatable, such as the current stock and flow of non-performing loans (NPL) in China’s banking system, or the impact of the stock market on state-owned enterprise (SOE) behavior.

Beyond the empirical, a number of fundamental conceptual issues have received scant attention in the existing literature. While we can accept as correct Lardy’s diagnosis that China suffers serious problems of resource misallocation, as evidenced by declining returns on assets in the banking system and rising levels of NPLs, it is also an incontrovertible fact that the Chinese economy has grown extremely rapidly. This raises an immediate question about causation. How exactly do inefficiencies in the formal financial sector impact upon macro-growth? Do some of the financial inefficiencies we observe in fact mask some of the potentially positive contributions of China’s financial system? Or are there alternative mechanisms whereby China’s most promising entrepreneurial ventures have been financed outside the formal financial system? Fundamentally, should we understand China’s financial problems as an obstacle to future growth, or alternatively, should we understand future growth as the solution to China’s financial problems? Can China grow out of its problems, or do the problems themselves preclude sustained growth?

A third set of issues often overlooked in the existing literature pertains to the ramifications of China’s financial sector problems for social development and the provision of public goods and services. After all, the operation of the financial system is not just an economic affair; it entails deep implications for how government fulfills its non-economic obligations to society. Through the course of reform, the Chinese government, at least in some respects, has used the national banking system to substitute for a weak fiscal apparatus. The banks have been the main instrument for the Chinese government to achieve its developmental goals. Over the years citizens have proved willing to pump extraordinary amounts of savings into state-owned banks. The government, in turn, has di-

---

1. In the general economic literature, there is a large body of literature on the relationship between the quality and characteristics of financial institutions and economic growth. For example, one line of research demonstrates the detrimental effect of the underdevelopment of financial institutions on economic growth and on stock market performance; see Wurgler 2000; and Morck, Yeung, and Yu 2000.
rected those resources to fulfill investment aims that can better be understood as budgetary rather than commercial: the funding of strategic “pillar” industries, specific SOEs, and SOE employee wage and non-wage benefits. All this has taken place in the context of a weak fiscal apparatus, particularly at the central level. Whether the government chooses to fulfill its budgetary needs through a formal fiscal system or a quasi-fiscal banking system entails substantial economic implications as well as broad implications for public goods provision and the ability of the government to uphold its social contract.

By raising and attempting to answer these questions, we are forced to present causal explanations for what is (and what is not) driving change in the Chinese system (and perhaps transitional and developing systems more broadly), and what the broader institutional and societal impact of financial reform (or non-reform) might be. To grapple with these questions, a conference on financial sector reforms was held at the Kennedy School of Government at Harvard University in September 2001. In this introductory chapter, we present first some basic facts about China’s financial system and then an overview of how the various chapters in this volume illuminate the issues mentioned above.

**CHINA’S FINANCIAL SYSTEM**

A variety of institutions perform external financing functions for individual and commercial actors in an economy. On the more informal side of the spectrum, a firm can be financed through the personal savings of the entrepreneur, small-scale loans from friends and family members, or even illegal funding from loan sharks. On the more formal side, commercial banks and equity investors provide capital to businesses in return for financial rewards. The term *financial system* is sometimes used to encompass the tax side as well. In this volume, although our emphasis is on the nonfiscal side of the financial system and especially on formal institutions of China’s financial system—banks and the equity market—several chapters do touch on fiscal issues, and one should be mindful that in certain regions of the country and certain sectors of the economy informal financial institutions play a vital role.\(^2\) First we present some basic facts about the banking and equity institutions and then describe some of the problems in this sector.

**THE EVOLUTION OF THE SYSTEM**

In the typical centrally planned economy, such as China’s in the 1960s and 1970s, bank lending was intended to complement the government’s production plans, and banks acted as a “cashier” for the government’s economic programs. Because of state ownership, equity markets were nonexistent. During the reform era, the Chinese banks moved substan-

\(^2\) For more details, see Tsai 2002.
ially away from their complementary planning functions, and equity markets began to develop rapidly in the 1990s.

Two significant reforms were introduced in the 1980s to restructure the banking system. One was the separation of the government’s central banking functions from its commercial banking functions; the second was the breakup of the mono-banking system. Today, apart from the central bank, the People’s Bank of China (PBOC), the Chinese banking system consists of three tiers. The first tier comprises the policy banks created in 1994. These are the State Development Bank, Import and Export Bank, and Agricultural Development Bank. Since their inception, their mandate has been to provide investment financing to central government projects and to fulfill the state’s grain procurement plans. The second tier comprises what are known as the four state-owned specialized banks (Zhongguo guoyou zhuanye yinháng). They are the Agricultural Bank of China (ABC), the Industrial and Commercial Bank of China (ICBC), the Construction Bank of China (CBC, formally People’s Construction Bank of China), and the Bank of China (BOC). During the reform era, these four state-owned, ostensibly “commercial” banks have dominated China’s financial system. Together, they account for an overwhelming portion of total loans during the reform period.

The third tier comprises the much smaller regional and main banks of the SOEs. Examples of the third-tiered banks include the Pudong Development Bank, Shenzhen Development Bank, Huaxia Bank, and Bank of Communications. In addition there are also nonbank financial institutions such as rural credit cooperatives (RCCs) and urban credit cooperatives (UCCs). Apart from the extent of their ownership ties to the central government and their size, generally the lower-tiered banks and nonbank financial institutions are more market oriented in the sense that their lending decisions are guided more by profitability considerations and their loan rates are more flexible. Moreover, they do not have the history of “policy lending”—centrally directed subsidization of key national firms—that so burdens the balance sheets of China’s “Big Four” state-owned commercial banks.

The policy banks and the four commercial banks are wholly owned by the state. The shareholding arrangements of other banks are fundamentally statist as well. Some are owned by local governments; others by large SOEs. For some of the banks, there are multiple shareholders, but all their shareholders have strong ties to the state. Two dramatic examples show the level of the commitment to keeping the Chinese banking system state-owned. First, the Minsheng Bank, the one bank with the strongest ties to the private sector, is in fact under the jurisdiction of the All-China Federation of Industry and Commerce, a government organization overseeing private firms. The director of the bank is also the chairman of the All-China Federation of Industry and Commerce. Second, in 1997, the central government compelled the genuinely private UCCs to form shareholding ties with municipal governments in the name of imposing better financial supervision on these cooperatives. In a single sweep, the municipal governments became the largest shareholders of UCCs (renamed Urban Cooperative Banks).³

³. See the chapter by Fang Xinghai in this volume.
Since China’s accession to the World Trade Organization (WTO), there have been proposals to list minority equity stakes of the commercial banks on stock exchanges and to sell off minority shares to foreign investors. Information on these developments is sparse but Chinese and foreign media have reported a number of such transactions. In 2001, the Shanghai Municipal Government began to sell shares of a number of firms in the financial sector, such as the Shanghai Bank, Pudong Development Bank, Bank of Communications, and Guotai Junan Securities. It is not clear whether the government was willing to sell the controlling share of these firms or, as traditionally has been the case, only a minority stake. In a potentially significant development, in 2003, the U.S.-based equity firm Newbridge Capital entered into an agreement to acquire 20 percent of the shares of Shenzhen Development Bank. What distinguished this transaction from others is that apparently Newbridge Capital was seeking to acquire control of the bank; this was facilitated in part by the fact that 72 percent of Shenzhen’s shares were already in public hands. (However, at the time of writing, this deal appeared to be in jeopardy.) It is possible that these transactions may presage greater ownership changes in China’s banking sector.

Since 1990, China’s equity market has developed rapidly, mainly in terms of its overall weight to GDP, although the precise magnitude is debated. When China’s stock markets opened in 1990, only ten firms were listed, but this had risen to 1,238 by March 2003. Total market capitalization of A and B shares was RMB 104.8 billion in 1992 and 4.27 trillion in March 2003, and the market capitalization of tradable shares was RMB 1.38 trillion. Listing procedures and requirements have also progressed. For the first decade of the stock markets’ existence, covering the first thousand or so firms listed, the right to list was rationed through local governments and central ministries. These received a quota of listing rights, which were in turn allocated to the firms under their charge. Not surprisingly, this process was marked by bribery, corruption, and a lack of transparency. As a result, in 1999 and 2000 a series of reforms was introduced. First, the listing system was changed to reflect a more market-oriented U.S.-style registration system that abolished the right of local governments to recommend stock listings and established stricter procedural guidelines. Second, the China Securities Regulatory Commission set high auditing standards for the disclosure of information for financial institutions applying for listing rights. More recently, the commission has continued its attempts to rationalize listing procedures. It is trying to establish a listing price mechanism that uses market-driven pricing rather than the previous practice that set listing prices at artificially low levels that set off expectations of significant post-listing rises. Last but not least, stock exchanges have started to delist companies with poor performance records.

5. This is from “Banking in China: Strings Attached” (2003).
6. In 1991, the Shanghai and Shenzhen stock exchanges began to offer B shares to provide foreign investors with a legal channel to invest in China’s equity markets.
7. See CSRC 2003. Our thanks to Melanie Strauss for providing information on the stock market development.
8. Financial institutions were permitted to issue public listings beginning in November 2000.
In recognizing the need for start-up technological companies to gain access to capital, China has had a long-term plan to create a second board in Shenzhen specifically for such companies, and there have been discussions to merge the Shanghai and Shenzhen boards. To prepare for this, new listings in Shenzhen were halted in 2000 but because of the burst of the high-tech bubble and the problems seen on NASDAQ, the plans were put on indefinite hold, and the Shenzhen board has not reopened for new listings. Despite such progress significant challenges remain. The stock market is not liquid, with only around 40 percent of A and B shares available for trade, and SOE shares are generally nontradable, which prevents China’s stock market from performing a vital function that other stock markets do perform—effecting changes in corporate controls of the listed firms. Capital is still not allocated efficiently, as the state still privileges inefficient SOEs and its own projects over the more productive private companies. Political interference remains strong with the stock market functioning as an appendage of state policy.9 Given these problems, it is not surprising that the Chinese economy, by and large, has remained heavily bank-dominated.

**FINANCING BIASES**

The phenomenon of financing biases in favor of SOEs at the expense of private firms has been widely documented.10 Banks’ lending bias in favor of SOEs is in part a policy choice by the government to commit massive financial resources to the state sector; in part it is rooted in the standard operating procedures of the Chinese financial institutions. Until 1998, the four commercial banks, which control most of the banking assets, were specifically instructed to lend to SOEs. As an indication, the lending to the nonstate firms by the four commercial banks remained a minuscule portion of their loan portfolio. In 1996, of the new loans extended, 3 percent went to urban collective firms and only 0.1 percent went to the purely private enterprises. The primary lending responsibilities to township and village enterprises (TVEs) and other nonstate firms were assigned to the RCCs and UCCs. The deposit base of the RCCs and UCCs was restricted to nonstate firms, although this restriction was not necessarily strictly enforced. The deposit base restriction, often coupled with a geographic restriction on their lending activities, severely hampered the ability of RCCs and UCCs to carry out a significant financial intermediation function. Until quite recently, the shares of the total loans by these two types of institutions were quite small; in 1996, UCCs accounted for 4 percent of the loans and RCCs, 10 percent (China Finance Association 1997, 465). Their branch network does not even approach the level of the state commercial banks.

During the early part of the reform era, standard banking practices also contributed to the lending bias in favor of SOEs. Until 1998, the central bank issued credit plans

9. For details on the development and problems with China’s stock markets, see Green 2003.
10. The most comprehensive study of the Chinese banking system is Lardy 1998.
to the regional branches of the commercial banks. The credit plans were particularly binding on loans made to finance fixed asset investments. These credit plans served two purposes. One was to reconcile the lending priorities of the banks with the investment priorities of the planning agencies, both at the central and at the local level. Each year, the credit plan was formulated in conjunction with investment plans drawn up by enterprises and submitted to the supervisory government departments. Contained in these investment plans were requests for funding, either for fiscal grants or for bank credits. The regional planning agencies aggregated and adjusted these plans and submitted a regional investment plan, along with a funding request, to the then State Planning Commission at the national level. The planning agency and the central bank then worked to reconcile the investment requests with funding requests and made further adjustments. The State Council finally approved the consolidated investment and funding plans and issued them to ministries and regional governments for implementation.  

Interest rate policies have also benefited SOEs. Until the mid-1990s, interest rates on the working capital loans for the nonstate firms were mandated to be 20 percent higher than the same type of loans to the SOE sector. Since then, the SOE loan rates have been used as a benchmark from which rates on the nonstate firm loans are allowed to fluctuate upward by 20 percent. However, the true size of the windfall conferred on the SOEs far exceeds the 20 percent spread between SOEs and nonstate firms. In more recent years, interest rates have become considerably more flexible, although as Ligang Song points out in his chapter in this volume, there are still substantial curbs on interest rates imposed by the state.

The cumulative effect of these banking policies and practices has been a severe credit constraint on the nonstate firms—domestic private firms in particular—despite the latter’s phenomenal growth and dynamism. This is confirmed both by the official statistics as well as by numerous surveys on private businesses. At least by one measure, credit constraints on nonstate firms seemed to have risen. In 1984, loans to collective firms, TVEs, and private firms accounted for 18 percent of the new loans; in 1995, they accounted for only 5 percent (Sehrt 1998: 83). However, one alternative interpretation is that this measure accounted only for loans in the four commercial banks rather than the entire banking sector. What is incontrovertible, however, is that at any given moment during the reform era, private firms were credit constrained compared to SOEs and TVEs. Research by Jean Oi (1999) has shown that even though joint and private firms account for a larger share of firm establishments, fixed assets, and net profits, they receive far fewer loans as compared with firms owned by the township and village governments. Although her survey showed that in 1995 joint ownership and private enterprises received 14.6 percent of bank loans, the township and village enterprises received 85.4 percent. By contrast the net profits of

11. For a summary description of the investment and credit plan formulation, see Huang 1996.
the township and village enterprises accounted for 46 percent of total net profits, and those of the joint and private sector 54 percent.

As noted above, the rapid development of the equity markets has been directed primarily to benefiting SOEs. As one expert commented, “The securities market is essentially a state securities market conceived and designed to support corporatized SOEs.”

According to one estimate, nonstate listed companies accounted for around 3 percent of all domestically listed companies. Of the 976 companies listed on the Shanghai and Shenzhen stock exchanges as of 1999, only eleven were nonstate firms. For many years, the prominent Chinese economists Wu Jinglian and Dong Fureng have called for greater listing access to private firms. But progress has been slow. After 1997, when the policy toward the private sector is considered to have been liberalized, a total of only four nonstate firm initial public offerings took place (in 1998 and 1999). In the mid-1990s, the equity financing of nonstate firms became more difficult. In 1995, the authorities closed several regional stock markets that served small and medium-size firms, ending a source of funding for private firms. Although the amount of funds that companies have raised through stocks has increased dramatically—from 0.01 percent of GDP in 1992 to 1.7 percent of GDP in 2000—firms are still heavily reliant on bank loans for funds (Green 2003: 1). For example, in 1999 nonfinancial corporations in China received almost 70 percent of their funding from loans but only 8 percent from securities (CSY 2002: 80–81).

Given such bias it is not surprising that survey after survey reveals that the single most important constraint on private sector growth is capital shortage. One such survey of 2,564 private firms in 1995 asked the respondents to rank ten funding sources for their firms when they started their operations. Only 5.1 percent of the respondents chose bank loans as their top funding source, and only 6.7 percent picked credit cooperatives. This statistic is especially revealing since the credit cooperatives are specifically mandated to fund nonstate firms. By far, the most important source of funding was “savings from labor compensation,” and the second most important source “loans from friends and relatives.” According to Xinghai Fang, the curb market rate in Beijing for private entrepreneurs amounted to some 18 percent for a loan with one-year maturity, vastly exceeding the 6 percent available in the formal sector.

This strong financing bias in favor of SOEs at the expense of private firms entails a number of important implications. One is the accumulation of NPLs in China’s banking sector. There is wide recognition of the NPLs in the Chinese banking sector but estimates vary as to their size. The official estimate of NPLs in the four state banks for 1998 was RMB 1.7 trillion (about U.S. $205 billion) against a total of loans outstanding of RMB 6.8 trillion. Thus the NPL ratio is 25 percent. Of the RMB 1.7 trillion, about 20 percent, or RMB 340 billion, is considered “nonrecoverable,” i.e., the sum owed exceeds the liq-

uidation value of borrowers’ assets after the borrowers have gone bankrupt. In the late 1990s, Chinese NPLs amounted to more than 30 percent of GDP; by contrast, the costs associated with the savings and loan crisis in the United States amounted to only 2 percent of GDP.16

The NPL problem has persisted despite a large-scale government program to transfer the NPLs off the balance sheet of banks. As Xinghai Fang reports in this volume, at the Bank of China, the NPL ratio remained at 26 percent of the bank’s assets even after some 20 percent of the bank’s portfolio was removed. This reflects either a substantial underreporting of the size of NPLs by the government in the late 1990s or that the NPL measures, while tackling the stock side of the problem, have not had the desired effect of stemming the flow problem. Complicating the story is the fact that standards used by banks to classify distressed assets have changed several times in recent years. Thus, it has become difficult to determine whether the actual rate of NPL accumulation is changing or shifting classification standards have affected the manner in which the existing stock of bank assets is categorized.

Explanations for the high NPL level abound. One is the lack of commercial viability of many investment projects undertaken by SOEs; another has to do with the high social obligations SOEs are required to fulfill. However, banking practices and deliberate policy choices have also contributed to the problem. Loan obligations were lax because of the pressures local governments put on banks to protect the firms under their charge.17 The central government made the situation even worse with policy measures intended to improve the competitiveness of the SOEs. Between 1998 and 2001, to fulfill his pledge of restoring SOEs’ profitability within three years, Premier Zhu Rongji implemented a concerted program to reduce interest burdens on SOEs via a combination of across-the-board interest payment forgiveness and debt-for-equity swaps. These programs, some of the details of which are analyzed by Edward Steinfeld in this volume, had the effect of

16. One should be cautious in reading and interpreting these numbers. One difficulty in arriving at a precise estimate has to do with different classification practices. The Chinese standards in loan classification are more generous than those prevailing in other countries. There are a number of important differences. First, the Chinese classification is tied not to the status of the borrower but to the status of the loan payment. For example, if a borrower defaults on one loan but not on a second loan, the Chinese bank increases the provisions only against the loan actually defaulted rather than against the entire loan portfolio of this borrower. Second, classification of bad loans is tied to the repayment of the loan principals but not to the interest payment. Third, the provisions are made not against the riskiness of the loan portfolio but against the actual default actions. Thus during a period of real estate crash, Chinese banks would not normally increase their bad debt provisions against their real estate exposure as long as the borrower is in compliance with the terms of the loan. For a detailed discussion, see Lardy 1998.

17. This observation is confirmed by a number of enterprise-level studies. In their study of Chongqing Clock and Watch Company, Byrd and Tidrick (1992) find that depreciation charges or taxes on fixed assets were diverted to loan repayments, and in the case that these are not sufficient, industrial-commercial taxes were used for the same purpose. Another enterprise-level study, of Changchun Bicycle Factory, revealed that the Changchun Municipal Government bailed out the money-losing factory in 1983 by forgiving all its tax obligations for 1983 and 1984 in addition to granting a subsidy of RMB 3 million in 1983. The factory was able to take out a new loan, from the same bank, of RMB 4.8 million (Zhang 1992).
creating a classic moral hazard problem by weakening the incentives of the SOEs to honor their loan obligations.

There is room for guarded optimism, however. Although financial intermediation remains disproportionately dominated by state banks and bank lending itself disproportionately directed toward state enterprises, Chinese banks in recent years have begun to diversify their loan portfolios in a commercially sensible manner. Home mortgage financing—generally understood as a low risk, reasonably high return investment for banks in market economies—has in recent years become the biggest generator of new loan activity for Chinese banks. Banks, particularly in provinces dominated by private sector activity, are also proving increasingly willing to lend to larger-scale private firms. Nonetheless, given their long and deeply rooted legacy of noncommercial lending, Chinese banks—and the Chinese financial system more broadly—still have a great distance to travel on the road to sustainable commercialization.

**DIAGNOSES, REFORM PROSPECTS, AND SOCIAL ISSUES**

Many of the issues and problems mentioned above are already well known to government officials and outside observers. The purpose of this volume is not simply to review these well-known facts about China’s financial sector but to offer in-depth analyses of their possible causes and their wider societal ramifications. The volume is organized around three broad conceptual themes. The first delves mainly into those issues related to the functioning of China’s financial system itself. The second touches on the implications for the rest of the Chinese economy of the functioning of China’s financial sector. The third has to do with broader linkages between financial sector reforms and social issues. Taken together, these chapters provide a comprehensive roadmap not only toward a better understanding of the characteristics of China’s financial system but also toward policy design questions of making China’s financial sector more responsive to the economic needs of firms and the social needs of the society.

**THE CURRENT STATE OF THE FINANCIAL SECTOR AND ITS REFORM**

The general literature on the topic presents at least three alternative approaches to understanding the role and function of financial institutions. Each approach has some built-in assumptions and notions of causation that, if taken together, would hold conflicting implications for how to interpret China’s current financial dilemmas. First, there is the view that financial deepening hinges on the ability of the state to make credible commitments (à la North and Weingast),\(^\text{18}\) namely, credible commitments to contain its own financial

---

ambitions. In other words, the state must effectively retreat by subordinating itself to financial obligations specifically and rule of law more generally. The “weak” state—one bound by law—becomes the strong state (financially) through its ability to make credible commitments. Analogues can be found in the literature on post-socialist transition and economic development more broadly.  

The basic idea is that financial distortions and impeded growth stem from politicization and excessive state intervention. The solution entails state retreat and further dismantling of socialist institutions.

In this volume, this view is echoed in the chapter by Xinghai Fang, a Stanford-trained economist with considerable policy experience in China. For Fang, the “micro-foundation” of China’s financial institutions is problematic. He traces the ultimate cause of the problems in China’s financial sector to the pervasive controls and influences of the government. The list of government controls is long and their scope broad, ranging from listing approvals to an insistence on governmental ownership of listed firms to provision of guarantees to China’s financial institutions. On top of these extensive control instruments, Fang considers the lack of expertise in financial management by China’s senior political leaders an important causal factor.

The chapter by Le-Yin Zhang provides further evidence of the statist orientation of China’s financial institutions. She provides a healthy antidote to the view prevailing among scholars of the Chinese economy that the reformist leaders long ago gave up on SOEs by presenting both documentary and statistical evidence on the extent of central government financial support for SOEs. The functions of the stock market, she argues, have to be viewed in this larger context of a substantial political commitment to SOEs.

The second approach, rather than emphasizing excessive politicization and “government failure,” stresses the complex agency relationships and information asymmetries affecting interactions between lenders and borrowers in financial markets. In this view, financial markets run into trouble not because governments interfere but because governments fail to interfere—or more specifically, because governments fail to provide the regulatory mechanisms needed to alleviate agency problems between lenders and borrowers or investors and investees. This perspective is not necessarily contradictory to the micro-foundation perspective, but it does raise the question whether commercialization and depoliticization are themselves sufficient for solving many of the problems of the Chinese financial system. Rather than ownership, the regulatory perspective focuses on issues generic to any financial system—including those in market economies. According to this perspective, financial—especially banking—operations even in the most developed systems are replete with complex, cross-temporal agency relationships involving vast information asymmetries. As such, financial systems, if poorly regulated, routinely fall prey to market failure, moral hazard, and adverse selection (Stiglitz 1982, Stiglitz 1997, Kindleberger 1996).

The implications for China of this perspective are both sobering and profound. The fundamental question becomes Is socialism—the micro-foundation of China’s finan-

cial system—really the heart of the issue? Or is China going through some of the same teething problems that many other developing economies experience as they seek to develop a financial system to harness capital efficiently? Most scholars of the Chinese economy, including several contributors to this volume, have an intuitive grasp of the ownership issues, but do they unwittingly ignore the far more entrenched problems related to the underdevelopment of the regulatory apparatus and instruments?

The chapter by Edward Steinfeld represents the regulatory perspective in this volume. In its analysis of China’s NPL resolution efforts, the chapter acknowledges that problems of government failure (excessive politicization) and market failure (unmitigated agency problems and information asymmetries) have become deeply intertwined in the Chinese financial system. Steinfeld’s argument is that this intertwining is consistent with financial problems that have arisen in a number of developing and developed market economies. Moreover, the problems—in cases as diverse as China’s contemporary situation and the U.S. savings and loan crisis of the 1980s and 1990s—arise precisely when the state diminishes its regulatory presence and encourages financial liberalization. The point is that, simply to function, financial markets effectively require a complex institutional and regulatory foundation, one likely to be provided only by the state and one desperately lacking in contemporary China.

A third and related approach in the literature argues that financial sector development ultimately turns not only on the ability of the state to bind itself or retreat but also on its ability to enforce commitments between members of civil society and government. The emphasis here is both on legal and institutional development and on a keen recognition that these legal and institutional developments entail major advances in state capacity. Does the Chinese state have the necessary capacity to monitor the complex intertemporal transactions that characterize financial markets? Have there been efforts made in the direction of acquiring these capabilities?

The question of state capacity was a central issue in the paper presented to the conference by Jack Langlois (2001), which focused on the fiscal strength of the Chinese state. The underdevelopment of China’s fiscal capacity—manifested in its inability to collect tax revenues proportionate to the GDP growth—is a direct hindrance to a proper functioning of China’s financial system. The state, in order to make up for its fiscal shortfalls, taxes its banking institutions heavily; this in turn “represses” their development. This tax perspective nicely complements the regulatory perspective presented by Steinfeld. It reminds us of the importance of moving away from ownership-obsessed analysis and of focusing on factors that are more generic for developing economies.

To a certain extent, elements of all three perspectives—government failure, market failure, and state incapacity—can be found in the Chinese financial sector, a point made eminently clear by Davin Mackenzie’s paper (2001) on enterprise-sector borrowers. Mackenzie’s paper, exploring the demand rather than supply side of financial intermediation, argued that most Chinese enterprises are simply not structured in a fashion

that would make them legitimate candidates for loans, even if China had a well-functioning financial system. Devoid of transparent governance, plagued by excessive diversification, and continually struggling with low profitability, firms—particularly in the private sector—are poor candidates for loans, this in itself is a reflection of a commercial environment characterized by weak institutions of public governance and a high degree of politicization of economic activity. The Chinese state has been slow to offer political legitimacy to private firms, slow to guarantee property rights, slow to provide the legal mechanisms necessary to secure commercial contracts, and slow to coordinate interventionist activity across the various levels of its own administrative bureaucracy. In a sense, the same issues that foster distortions on the capital provision side end up impeding progress on the demand side, particularly to the extent that we understand corporate transparency and effective governance as key aspects of a healthy financial system.

FINANCIAL SECTOR AND ECONOMIC GROWTH

The first part of this volume is devoted to analyzing the problems of the financial sector and to varying—and even conflicting—interpretations of their causes. The second part analyzes the economic implications of the functioning of China’s financial sector. Whereas the general economic literature on the linkages between financial institutions and economic growth can provide some guideposts, they can only do so up to a point without getting into China-specific contexts and facts. The basic fact is clear: China has experienced phenomenal growth in conjunction with a dysfunctional financial system.

One can draw two conflicting implications this seemingly incongruous combination of facts. One is that healthy economic growth, contrary to conventional wisdom, does not require a healthy financial system. The other is that alternative mechanisms embedded in the Chinese system have somehow ameliorated the problems related to the inefficiencies of China’s financial institutions.

China’s outstanding growth record, however, does not lend itself to the notion that conventional wisdom is wrong, as the chapters on this topic in this volume attest. Wing Thye Woo covers the remarkable slowdown in one sector of the Chinese economy that was unquestionably a bright spot in the 1980s and the first half of the 1990s, namely the famous TVEs. He provides stark evidence of “the stagnation (if not decline) of the rural industrial economy since 1997.” He attributes the slowdown in TVE growth to inadequate financial intermediation in the rural economy.

As an empirical matter, Woo’s analysis may not be surprising, but at an analytical level, his analysis entails implications that are not explicitly drawn out in the chapter. In the economic literature, it has become almost a mainstream idea that TVEs were an unique innovation by the Chinese reformers that had the effect—if not the intention—of substituting for conventional reform measures such as establishing the sanctity of private property rights and a well-functioning financial system. Whatever the merit of this con-
ceptualization of China’s reform process for the 1980s and early 1990s, it is clear from Woo’s analysis that the further development of TVEs themselves requires a sound financial system. TVEs cannot serve as a long-term substitute for an efficient financial system.

If the notion that drastic—and politically and technically hard—reform measures would have to be undertaken to sustain the momentum of growth is implicit in Woo’s chapter, it is explicit in the chapter by Pieter Bottelier. Bottelier, another policy practitioner as a former head of the World Bank in China, first presents evidence on the alarming level and development of NPLs in China’s banking sector and then outlines a vision for reforming China’s financial sector in a way that seeks to protect the solvency of the state. China, as Bottelier points out, has many enviable strengths, including a strong balance of payment position, but this is not sufficient. Bottelier advocates that the state sell most of the shares it currently holds in firms listed on the stock exchanges. Although Bottelier approaches the issue mainly from a financing perspective, it is important that his suggestion amounts to nothing less than a wholesale privatization of state assets, a policy stance that the Chinese government has so far steadfastly resisted.

The issue of the private ownership of assets is dealt with in two chapters. One, by Ligang Song, deals with the prospects for the development of nonstate banks in China. As illustrated in a number of chapters in this volume, despite twenty years of reforms, China’s financial sector remains fundamentally statist in terms of the ownership structure of its institutions. State-owned banks dominate both the deposit and the asset sides of China’s financial sector but, as Song notes, one of China’s obligations to the WTO is a greater relaxation on the ownership restrictions of its banking sector. Nonstate banks would have to be developed, but a prerequisite for such a development is the liberalization of interest rates. This is an important point both at an empirical and at a normative level. Empirically, the lack of interest rate liberalization is another piece of evidence for what Lardy calls China’s “unfinished revolution” (Lardy 1998). There is a near-consensus among the authors in this volume that China’s reforms in the financial sector have lagged behind those in the real sector and that substantial reforms are necessary to sustain future economic growth and diversification of its institutional structure. Normatively, such a proposal would entail a further movement away from what is often billed as a unique Chinese reform approach—the dual-price system. This chapter, like many others in this volume, raises the question whether Chinese gradualism has come to an end.

Future growth prospects notwithstanding, how should one account for the growth and development of the nonstate sector that have actually occurred? A research agenda that touts the virtues of more radical reforms would run hollow if this issue is not addressed adequately. Here the chapter by Yasheng Huang provides one hypothesis. The chapter argues that foreign direct investment (FDI) has in fact played a previously underestimated role in financing credit-constrained private entrepreneurs and that FDI plays this missing function because the formal financial system has failed to do so.

Traditionally, the role of FDI is conceptualized as enabling technology transfer and market access. Huang’s chapter does not necessarily contradict the traditional per-
spective but makes the argument that normal business functions in those sectors populated by private entrepreneurs are not unique to FDI. Contract production in other contexts has brought about the same benefits. What is unique about FDI is that it brings financing to those entrepreneurs shunned by China’s formal financial system. This line of research goes some way toward resolving the seeming puzzle that financial dysfunction and rapid growth of the nonstate sector could co-exist for a sustained period of time.

**Broader Issues of the Financial Sector Reforms**

Financial sector reforms have ramifications far beyond economics. As pointed out in the first part of this chapter, one of the factors hindering development of a healthy financial sector in China is the massive welfare provision role performed by SOEs, covered to a significant extent by China’s banks. Thus, social demands have affected the state of Chinese banks while change in bank lending policy has also heavily affected the provision of public goods. At the same time, the ability to use the financial system as a quasi-fiscal apparatus has to some extent lessened the pressure that Chinese officials face to build a modern fiscal system. Yet, devoid of a modern fiscal system, China faces massive problems today in meeting its commitments for public goods provision, whether defined in terms of health, education, environmental protection, or a host of other responsibilities. Banks may be used to keep enterprises afloat – and by extension, to keep funding benefits for a select group of workers – but banks are not well suited to financing the types of basic public goods provision that virtually all modern governments fund through the formal state budget. It could be argued at the very least that China’s weak fiscal capacity, the country’s current pattern of privatizing vast portions of public goods provision, and the parlous state of the nation’s financial system are all deeply related phenomena. While the past scholarship has mainly focused on the causes of SOEs’ welfare provision as a contributor to NPLs,21 several chapters in this volume deal with the effects of China’s financial institutions and reforms.

There are two coherent themes emerging from this line of research. First, the evolution of China’s financial sector has directly affected—mainly negatively—the provision of social welfare, especially in areas where the traditional socialist welfare provision was relatively under-developed. For example, Gerald Bloom describes in his chapter, the far-reaching changes in the rural health sector and how these far-reaching changes have been brought about by economic changes, which were not initially thought of as belonging to the social arena. Both Bloom and the chapter by Tony Saich and Joan Kaufman show how the responsibility for local governments to fund services such as healthcare has led to uneven provision across China and has caused clinics and hospitals to shift to a “fee-for-service” system that has led to an emphasis on curative procedures rather than preventive services. At its worst, this process has led to the collapse of rural health ser-

21. Lardy (for example, 1998) has focused on this issue.
services in poor rural China and at best a *de facto* privatization of services that are increasingly covered out-of-pocket rather than through collective health schemes. As Saich and Kaufman show this has led to a decline in the use of reproductive health services for poor rural women and even where these services may be available to under-use.

The chapter by Loren Brandt, Albert Park and Sangui Wang looking at rural poverty provides further illustration of this tension between financial reforms on the one hand and social performance on the other. Lack of access to credit by the rural poor has been a major problem and this chapter asks whether they are being short-changed by the reforms. With an enhanced emphasis on profitability for local banks, the question arises as to whether they will eschew lending to the poor as the costs are too high and the returns too low. Brandt et al discover that the reforms have indeed left the poor behind but not because of the expected reason that there is a greater flow of funds out of the poor areas. While rural areas suffer from increasing NPLs, the problem is worse in poor areas because of slower deposit growth and more serious repayment problems. The key question remains as to whether the problems stem from the lack of good projects or institutional failings. The chapter suggests that many of the problems lie with the latter and thus judicious policy intervention could ameliorate the situation.

The second theme, however, conceptualizes reforms as a solution to some of the emerging social problems in a fast-changing China. Social liability, just as economic and financial liabilities, have to be financed. One financing mechanism has been identified by Bloom, and Saich and Kaufman, which takes the form of a more equitable distribution of existing financial resources within the Chinese system. Another complementary financing instrument is to use the new value created by an asset appreciation process that is commonly associate with deepening of capital markets to meet these social obligations. This is what Xin Wang, an official from the State Administration of Foreign Exchange, sees as a way to finance some of China’s social liabilities. Compared to many developing countries, China has the unique advantage of a very high savings rate and thus the ability to harness its rich financial resources efficiently to create value has a direct bearing on its ability toward meeting the growing social liabilities. Thus, Wang argues that capital market development not only has an economic logic, as emphasized by several authors in this volume, but also is an imperative from a social perspective.

**CONCLUDING COMMENTS**

The chapters in this volume do not provide definitive answers to the problems of China’s financial system, but they reveal the complexity of the problem—often the solution to one problem is nested within another—propose a variety of solutions, and suggest a number of approaches for future research. One clear theme that runs through many of the papers is the distortions emanating from the financial system in China. These include the overprivileging of the SOE sector that reduces the funding available to the more produc-
tive private sector, the inadequate flow of credit to the poor, and the perverse incentives for local governments in the supply of public goods such as health. Resolving these problems would have a significant effect on the rational development of China’s economy over the long term.

Although Chinese leaders have come to recognize the problems created by the problems in the financial sector, it is less clear that they could undertake many of the suggestions proposed in this volume, since they would amount to a significant change in the relationship of the state to the economy and even to society. Redirecting resources away from propping up the ailing SOE sector would have major consequences for unemployment and restructuring in urban areas. Despite all the reforms to date, there is still the underlying suspicion that the leadership is committed to a significant state-run sector of the economy and is loathe to release its control over key financial levers. Yet, financial pressures may leave the leadership with little alternative. Certainly the increased unemployment from the SOE downsizing and the attempt to transfer the welfare functions of SOEs to the government reflects recognition of the need for change. However, the weakness of the fiscal system, despite recent increases in tax revenues, undermines government attempts to provide expansive welfare provision in urban areas and even minimum coverage in poor rural areas.

Even if the state’s fiscal picture is restored to good health, there remain fundamental biases within the system of redistribution. Public expenditure is biased in favor of the urban areas, and although some inequality may be inevitable during the transition, it has been exacerbated by policy and institutional choices that have disfavored the poor. Subsidies and collective goods have vanished for the most vulnerable populations in China, and regressive social policy has made things worse. The 1993–94 tax-sharing system has redistributed revenues in favor of rich localities and exacerbated long-existing regional disparities. To compound this, per capita income is much lower in rural areas than in urban areas, but rural dwellers pay more in taxes than they receive in transfers, whereas urban inhabitants receive a significant net subsidy. According to the UNDP, there are also problems in the rural areas, where net taxes are highly regressive. In 1995 the top decile of the rural population appropriated the vast majority of all net subsidies, and the poorest two deciles paid half of all net taxes (UNDP 2002).

China’s development strategy has been to maintain high-level growth while cushioning the blow of transition for SOEs and the urban sector and often shifting resources away from the countryside and the poor. Financial policy has been an integral part of this strategy, with investment patterns and preferential fiscal policies that favor the coastal strip at the expense of the inland regions. As we have seen, there is a massive bias in formal credit policy to favor capital-intensive, and often inefficient, SOEs, while, for example, prices are set artificially low for natural resources extracted from the hinterland.

Should the new CCP leadership be concerned about these questions of social inequity and inefficient allocation of resources? There are both economic and moral arguments why these should be concerns. Generally, countries with high levels of inequality...
tend to find it more difficult to sustain growth over the long term. With WTO-entry, it is debatable to what extent China will be able to maintain its rapid economic growth with a dysfunctional financial sector. On the moral side, the CCP claims to represent the entire population of China and maintains that its strategy for development is not capitalist but socialist. Providing basic public goods for some in the population while denying them to others raises questions about the meaning of citizenship in contemporary China and whose interests the CCP really represents.

Reform of the financial and fiscal systems could help overcome the biases inherent in the development strategy. However, given the current political power structure, in which the power elite in China is drawn primarily from the urban and coastal areas and disadvantaged and marginalized groups are underrepresented, it is unlikely that a significant shift in resource allocation will occur. More likely are policy measures to reassert basic minimums in rural China for healthcare and education in line with current policy. In fact, the implementation of existing policy of healthcare access and compulsory schooling would not be expensive to achieve and could win political capital for the new leadership. If this were combined with removal of discrimination against the nonstate sector and better targeting for revenue collection, this could ameliorate the most egregious aspects of the current system. Failure to address many of the issues raised in this volume could well produce the kind of social instability that the CCP is so keen to avoid.

REFERENCES


Reconstructing the Micro-Foundation of China’s Financial Sector

This chapter starts by pointing out that the resource allocation efficiency of the Chinese financial sector is quite low. It proceeds to explain why the efficiency has been low. It then assesses the reforms taken so far to address the problems in this sector. Finally, it outlines a set of reforms aimed at changing the micro-foundations of financial firms.

China’s High Savings Are Poorly Allocated by Its Financial Sector

The fact that China’s financial sector has not done well in allocating the country’s resources is well known to many interested observers of China’s economy. One major well-known problem is the high ratio of non-performing loans (NPLs) in the banking sector. The banking sector is the dominant financial intermediary in China. In terms of providing external funds to firms, about 80 percent of the funds are from the banking sector.¹ Thus the performance of the banking sector in allocating savings largely determines the performance of the whole financial sector. Unfortunately, as measured by the NPL ratio, the banking sector’s performance has been dismal. My experience with China Construction Bank and China Cinda Asset Management Company shows that the NPL ratio of the entire banking sector was at least 30 percent at the end of 1999. What is worse is that nobody knows what the precise NPL ratios are for the large state-owned banks, since no independent auditing of their loans has been carried out. The NPL ratios that banks report to the government were compiled by the various branches, whose incentives to report the true status of NPL in their regions are generally not very strong. In 2002, the president of Bank of China said in public that his bank had an NPL ratio of 26 percent, after some 20 percent of the bank’s loan portfolio had been transferred to an asset management company.

¹ During 2000, China’s two stock exchanges raised RMB 150 billion in equity for firms. But this number dropped to RMB 72 billion during 2002.
Another problem is that the return on equity (ROE) of listed companies is quite low. One good thing about listed companies is that they have to report their financial performance twice a year. Since their reports are examined by the investing public and independent auditors, there is strong reason to believe that the reports are more or less accurate. One measure of the performance of the securities markets, the second pillar in China’s financial system, is low ROE of all the listed companies. This was 7.66 percent for the year 2000.\(^2\) Since long-term (20–year) government bonds are yielding only 4.2 percent these days, a 7.66 percent ROE seems not so bad. But 2000 was an exceptionally good year for the Chinese economy; GDP growth rate was 7.6 percent. Plus, my colleagues at the Shanghai Stock Exchange told me that about 20 percent of the reported earnings in 2000 were from stock market investment by the listed companies. Since the stock market rose 70 percent in 2000, most stock investment did very well. Excluding this 20 percent, the average ROE of listed companies would be cut to about 6.5 percent, hardly an inspiring number.

A direct macroeconomic consequence of the inefficient allocation of the nation’s savings is chronically weak domestic demand. Hence, China needs to maintain a high export growth ratio to maintain economic growth. The bulk of China’s savings is still channeled into the state-owned sector, which does not generate much income for its vast number of employees, resulting in weak consumption demand. While lending rates are low (about 6 percent per year) for those who can access the banking sector, that is not the case for the firms that are excluded. In Beijing’s curb market for small private firms, the one-year lending rate is an astonishing 18 percent! This means that many worthy investment opportunities are not being realized.

One may ask why, if the financial sector is so inefficient, the Chinese economy has been growing so fast for the past twenty years. I believe that has to do with resource mobilization and large capital inflows. China had vast unutilized resources at the beginning of this period of rapid economic development. These resources have been mobilized for development. The high GDP growth rates during the past twenty years owe a lot to foreign investment as well. A recent study shows that on average, foreign investment has contributed 2.7 percent annually to the GDP growth rate during these years.\(^3\) The companies with foreign investments are still largely outside the domestic financial sector. They are financed mainly by foreign capital inflows and retained profits. If they want to borrow from domestic Chinese banks, they have to obtain a guarantee from a reputable international bank, which increases their overall borrowing costs considerably. And they are only beginning to be allowed to list in the stock exchanges. While foreign investment into China will continue, further domestic resource mobilization will sooner or later reach its limit. So

\(^2\) This number slipped to 5.3 percent for 2001.
\(^3\) China Homeway Financial News 2001.
in order to sustain a high rate of economic growth, the need to enhance the efficiency of resource utilization in the Chinese economy goes without saying.

**REASONS FOR THE INEFFICIENT FINANCIAL SECTOR**

In my view, there are two main causes for the malaise in the financial sector: pervasive government control and interference, and mismanagement by financial institutions.

**Pervasive Government Control and Interference**

China’s services sectors (financial, telecommunications, education, health care, etc.) are still under the government’s tight control. In the financial services sector, the control mainly takes the following forms.

*Entry approval.* The establishment of all financial services firms has to be pre-approved by the central government. Firms primarily sponsored by private investors are either not approved or approved with crippling business restrictions. This strict approval system results in insufficient competition from foreign and private firms. The degree of competition in the financial sector is up, but firms competing with one another are all government-owned and -controlled. They compete on lower efficiency levels.

*Ownership control.* Other than a few joint venture insurance companies, almost all financial services firms are either directly owned by the government or owned by government-controlled entities. Government ownership results in the absence of real long-term shareholder interest in the firms.

*Management appointment.* Through ownership control, the government gets the opportunity to appoint senior management of financial firms. Many people from the government with no industry experience or knowledge are appointed as senior managers. Also, too many senior managers, appointed by the government to begin with, look for promotions in the government hierarchy as their ultimate career goal. They never become professionals.

*Price and quantity control.* The government sets all interest rates for deposits and lending. However, this type of control is most visible in the listing of new stocks. The government carefully controls the pace and price of new share listings, so as to maintain an artificially high secondary market. Distorted stock prices lead to misallocation of resources. Other, more subtle quantity controls exist in the banking sector. If it chooses, the government can still heavily influence the amount of bank loans being extended.

*De facto government guarantee for the liabilities of banks and insurance companies.* Because the government intervenes so profoundly in the financial sector, it cannot escape
its responsibilities as the final guarantor of the financial sector. This causes a severe moral hazard problem among financial services firms (mostly banks and insurance companies).

The origins of such controls are deep-seated. First, every government wants to have resources to serve its strategic (non-economic) goals. In China, these goals include propping up the state-owned enterprise (SOE) sector, aggregate demand management, finding positions for aging government officials, etc. Having control over the financial sector is a convenient and less explicitly costly way to achieve such goals. Second, the financial sector is linked with the interest of almost every person in a society. It is also prone to many kinds of disasters. So losing control of this sector is politically a very risky undertaking, particularly in China where there are already many hidden and accumulated problems in the sector. One positive result of tight government controls is that the Chinese financial firms have not been able to take up certain risks (such as foreign currency risk or some derivatives risks) that could lead them to a sudden death, as occurred in some of China’s neighboring countries during the Asian financial crisis.

What compounds the control problem is a dearth of financial expertise at the top of the government. The Chinese government system is a very hierarchical one. Due to the recent nature of the market economy in China, there is by definition not much market economy expertise at the top of the government in general and in finance in particular. Yet all major decisions regarding the financial sector are made at the top.

**Mismanagement by Financial Institutions**

Having faulted the government for creating an inefficient financial sector, I certainly do not want to give the impression that financial firms themselves share no blame. Mismanagement by financial firms is very much another cause for the inefficiency of the financial sector. There are a number of instances of mismanagement.

*Frequent paralysis or dictatorship in decision-making.* Because the government is remote as an owner, checks and balances within management are necessary to ensure that management does not steal from the firm. At present, this is accomplished through mandatory committee decision-making in which the CEO and several deputy CEOs are all members of a committee. However, both the CEO and the deputy CEOs are appointed by a higher government organ, and the deputy CEOs cannot be removed from their positions by the CEO. The purpose of this is to ensure that deputy CEOs can monitor the CEO. Yet since each committee member has his own agenda, it is rare that the full committee can function as a coherent body. Very often there is indecision, resulting in the loss of important business opportunities. Occasionally, a strong CEO can intimidate or buy out the other committee members. But he will then very likely become a dictator, accountable to nobody. Many corruption cases in the financial sector are a result of this. While some people
argue that it is better than paralysis in business firms, dictatorship not accountable to owners is hardly an efficient form of corporate governance.

_Strong short-term incentives for management to expand the business and no long-term incentives to build an enduring institution._ Since senior managers are poorly paid and their incentives lie in promotion up the government ladder, short-term expansion and window dressing are prevalent. Recently, all the “big four” banks reported strong profits and significant decline of NPL for the first half of 2001. However, I am sure this is as much the result of posturing by the “big four” banks’ chiefs before the CCP 16th Congress (November 2002) as a reflection of the improvement of the economy. It takes many years of consistent work to build a great financial services firm. Since top management does not benefit much from that work, there is little incentive for them to do it.

_Lack of push from senior management leads to little incentive at the working level to take appropriate risks in business._ Financial services are all about striking a balance between return and risk, a balance not easily achieved. There needs to be a strong push from top management and appropriate incentives for the working level to strive to achieve that balance. Otherwise the results are either excessively lax standards, which lead to an undue amount of risk, or too much caution, which gets little business done.

_Loans for favors._ Favors can take two forms: monetary and political. The practice of loans in exchange for favors has been a chronic problem in the Chinese banking sector. It compromises loan quality.

_The absence of a real shareholder leads to poor allocation of capital and the underutilization of assets._ A few years ago, banks and insurance companies went into every business one could possibly imagine: hotels and restaurants, resorts, equipment leasing, consulting, stockbrokering, etc. Fortunately, this was stopped by former Premier Zhu Rongji. However, now companies are building glitzy office buildings with lavish offices for top managers and numerous “training centers” equipped with all kinds of recreation facilities.

The preceding is certainly not an exhaustive list of mismanagement instances. Since the government sets the overall environment for the financial sector and takes the lead in financial reform, I believe the burden of creating an efficient financial sector lies first with the government. In other words, financial reform starts with the government.

**AN ASSESSMENT OF THE REFORMS SO FAR (1995 TO 2001)**

The Chinese government carried out many reforms in the financial sector since 1995. Several significant measures were adopted during a crucial government conference on the financial sector in November 1997. Without touching on the fundamental problem of the
sector, that is, government control, the reform measures aimed to realign control powers among different levels of government and tried to consolidate the financial institutions.

Centralizing government control of large banks, insurance companies and stock exchanges. Previously, management appointment power in the branches of the “big four” banks and insurance companies was shared between the central and provincial governments. Now, however, only the central government exercises this power. Stripping provincial governments of this power was very necessary. Not only did it stop provincial governments from meddling in the loan-making decisions of the banks and insurance companies but these banks and insurance companies were also made into unified firms, rather than a collection of separate ones. This paves the way for further reforms in these large financial firms, such as listing them in international stock exchanges. The two stock exchanges in Shanghai and Shenzhen were formerly operated by the two respective municipal governments. The two exchanges competed with each other for business and paid little attention to irregular trading and other abnormal business dealings. Now the two exchanges have been put under the aegis of the central government. The present situation is still not ideal, with the central government controlling the exchanges, but it should help improve market regulation.

Forcing urban credit cooperatives to merge. Numerous urban credit cooperatives were created in the early 1990s and had become shaky by 1997. However, prior to 1997, many urban credit cooperatives had emerged in the coastal regions that were in effect small private banks. Their shares were in the hands of a few private people and their business was thriving. In order to resolve the problems in shaky credit cooperatives and also to compensate local governments for the loss of their control over these large banks, all credit cooperatives, good or bad, were ordered to be merged into the so-called “city cooperative banks,” with local governments exercising majority control (with some capital injection from local governments). This indiscriminate measure destroyed some fledgling healthy private banks and only pushed the problems it tried to resolve into the future.4

Changing from quotas to the approval system in share listing. Prior to 2000, China had the most outrageous system of listing shares in the stock market: the quota system. A company had to obtain a certain amount of “share quotas” from the government before it was allowed to apply for a listing. Now in principle any company can apply for listing. Once the China Securities Regulatory Commission (CSRC) approves its application, the company can go ahead with a listing. There is still too much government control in the present “approval system,” but it is an improvement over the quota system.

4. According to China Homeway Financial News, Shantou City Commercial Bank was shut down by the People’s Bank of China on August 10, 2001, because it could not repay about RMB 1.5 billion in household deposits.
Abolishing loan quotas. Since this coincided with the slowdown of the economy and deflation, it has had no real effect. Nevertheless, it is a needed reform.

Establishing asset management companies to deal with NPL. It helps to have institutions that are specifically focused on the disposal of NPL. However, the bigger issue is to stop new flows of NPL by the banking sector. In this respect, no fundamental reforms have taken place. There is no question that the government will have to bear the cost of disposing of NPL eventually, but it is still unclear when the government will do so.

Separation of banking and non-banking services. Banks and insurance companies were stripped of their other financial services operations (mainly brokerage businesses) and investments in unrelated areas such as hotels and restaurants. Although against the world trend of moving toward universal banking, this model suits the situation in China well and should be maintained since banks and insurance companies still have the incentive problem mentioned above. Giving them one more toy to play with can only create one more problem for the government.

In summary, the reforms so far are predominantly not forward-looking. They were meant to consolidate the financial sector and prepare it for further and more fundamental reforms. If no follow-up and truly market-based reforms are introduced in a timely fashion, the positive results achieved so far will be lost.

RECONSTRUCTING THE MICRO-Foundation
OF THE FINANCIAL SECTOR

The micro-foundation of the financial sector is of course very much influenced by the macro–financial environment set by the government. For the moment, however, this chapter will leave the issue of government control in the financial sector aside and only concern itself with the internal structure of the banking and securities sectors (also leaving aside the insurance sector). Several reforms are needed in these two sectors.

The banking sector. The purpose of reform in this sector is to instill incentive and self-discipline in the banks so that they will do their best to seek out worthy lending opportunities. However, any reform attempt in the banking sector has to face the reality that the “big four” banks have a lot of NPL and a large number of employees that cannot be

5. The “big four” banks are the Industrial and Commercial Bank of China (ICBC), Construction Bank of China (CBC), Bank of China (BOC), and Agricultural Bank of China (ABC). Together these banks comprise 70–80 percent of the banking sector. The People’s Bank of China, reported recently that at the end of June 2001, the “big four” accounted for 86 percent of all outstanding loans extended by banks. Other banks are
shed. If these limitations are not acknowledged, reform may lead to problems in the “big four” that could force the government to halt reform measures. With these points in mind, a number of specific recommendations can be made.

1. Immediately start to prepare the “big four” banks for domestic or international listing. After the listing, the government should commit itself to reduce its shares in them to below 50 percent. It is a fact in China that listed companies on average perform better than unlisted companies. Market monitoring and discipline do work. In order to steer the “big four” through listing and the subsequent reduction of government shares, a much younger and professional management team has to be put in place immediately. This team will have a longer horizon. Of course, they should be given equity interest in the banks as well so that their own long-term interest is closely aligned with the long-term prospects of the banks.

2. Expand the scale of well-run nationwide shareholding banks (such as China Merchants Bank, China Everbright Bank, and China Minsheng Bank). Most of these banks are either already listed or being prepared for listing. They are newer and have far less NPL than the “big four.” Their senior managers are well paid and have much fewer prospects of being promoted in the government. They also have the capital and the personnel talent to expand their business. The problem they face is that their majority shares are still held by government-owned entities (such as SOEs). The government should begin a program of divestment in these banks by these state-owned entities immediately.

3. Allow private local banks to be established. The vast Chinese economy calls for the creation of many small and medium-size local banks to serve the small and medium enterprises (SMEs) in their respective regions. Rather than trying repeatedly to make the city cooperative banks and rural credit cooperatives into well-functioning local banks to support SMEs, which is an impossible task, the government should change its strategy and allow purely private small banks to be established.

4. After China’s WTO entry, let joint venture or foreign sole-owned banks be established rapidly. China urgently needs sound banking practice models for the domestic banks to learn from, and foreign entry can best serve this purpose. Of course, how fast foreign banks are allowed in is in an important way determined by the reform of the “big four.” Without reform, a rapid introduction of foreign banks will take too much good business away from the “big four” and cause their collapse.

*The securities sector.* Direct financing through the securities sector has an enormous potential in China. This has to do with high savings, a risk-taking culture, and an equity-deficient capital structure in most Chinese firms. Equity capital raised in the domestic market for Chinese firms during 2000 was RMB 150 billion (USD 18 billion) and will be around RMB 200 billion this year. The stock market in China is much deeper than most people think, evidenced by the 2000 offering of Sinopec. The total amount of subscription catching up. During the first half of 2001, only 70 percent of incremental loans were extended by the “big four” (China Securities News 2001).
money reached RMB 630 billion (USD 76 billion for an RMB 12 billion offer) in this deal. In terms of new equity money raised, the Chinese stock market is likely to be second only to the US market this year. So the securities sector in China can play a very big role in the financial sector overall. The issues in the securities sector are quite different from those in the banking sector. Unlike banks, securities companies do not have unfunded liabilities to the general public. This makes reforms in the securities sector much easier. The biggest problem here is a lack of government expertise. Very few top decision-makers really understand the securities market. Since short-term monetary incentives for executives are already very adequate in the securities sector, at the micro-level, reforms in this sector should primarily aim to create firms that care about their long-term franchise value. The present irregularities in the securities market are mainly caused by a lack of concern for the franchise value of the securities and investment management firms. There are a number of necessary reforms.

1. Government and government-owned entities should divest from securities companies and investment management firms. Unlike in the banking sector, divestment by the government will not cause any confidence problem in the securities firms. When shareholders do not care about or care very little about long-term franchise value, it is hard to expect that senior managers will.

2. Allow all the securities firms to be listed, if they wish and are able to do so. While internationally it is not absolutely necessary for securities firms to have a public listing, in China listing has many special meanings. First, firms can increase their capital. Securities firms in China are all thinly capitalized. The largest securities firm, China Galaxy, has only RMB 4.5 billion (USD 540 million) in capital. Second, government can divest through the stock market in due time. Third, management can start to acquire equity interest in the firm through options and other means. This is facilitated by a traded stock.

3. Encourage mergers and acquisitions in the sector. With more than one hundred securities firms, the securities market is fragmented. At the same time, no firms are large enough or have adequate expertise to handle big deals (such as Sinopec) when the market situation and competition become tough. Measures to facilitate mergers and acquisitions are very needed now. A prerequisite for efficiency-enhancing mergers and acquisitions to take place is that government-owned shares are diluted to an insignificant level. Otherwise, non-economic considerations by the government owners will get in the way.

4. Let many joint ventures and foreign wholly-owned securities and investment management companies be established after China’s WTO entry. China should exploit the overwhelming enthusiasm of foreign firms (particularly American and European firms) to

6. To beef up its expertise, the CSRC has hired a former chairman and a current vice chairman of the Hong Kong securities regulatory body to be its chief advisor and vice chairman, respectively. Both hires were unprecedented in Chinese government history.
enter the Chinese securities sector. The main benefits of allowing foreign firms in are the expertise and increased competition they will bring.

5. Expand the number and size of investment management firms and let them play an important role in corporate governance. There is convincing evidence that investment management firms can better discover value in the stock market than small investors. It goes without saying that there need to be numerous solid listed companies for the securities sector to thrive. Sound corporate governance is sorely lacking in China. The old committee decision model in corporate governance has proved to be inappropriate under the new situation of market competition. Representatives from investment management firms who own sizable shares of a corporation should sit on the board and replace some of the members of the old committee who were appointed by a higher government body. However, before investment management firms can do a good job at corporate governance, they themselves have to be transformed from government-controlled entities into market institutions that cherish their own franchise values.

While I do not think there is any imminent danger of a collapse of the Chinese financial sector, the efficiency of the sector is certainly low. Given the huge importance of this sector in allocating economic resources and promoting growth, the need to reform is obvious. The problems in the banking sector, particularly in the “big four,” seem to be quite intractable and it will take years for the sector to show some real improvement. Since increasing evidence\(^7\) shows that the securities sector can allocate resources better than the banking sector and has much fewer serious problems, it makes sense for the government to enlarge the role of the securities sector in China’s overall financial intermediation. The next round of financial reform should put more focus on the securities sector.

**REFERENCES**


---

\(^7\) By early September 2001, all the listed companies have reported their first half earnings. Weighted average ROE was 3.8 percent. It was slightly below the annual rate of 7.66 percent of 2000. Since the stock markets did not perform well in 2001, the investment income of listed companies was not good. So a 3.8 percent ROE for the first half was quite good.
Two opposing perspectives can be identified with regards to the relationship between reforms in China’s financial sector and state-owned enterprises (SOEs). One perspective emphasizes the role of the financial sector in raising capital for investment, while an alternative view focuses on the incentives that the relationships between financial institutions and SOEs create for the latter. The second perspective is evidently influenced by the “soft budget constraint” (SBC) concept that Kornai (1980) introduced more than two decades ago. Kornai used the SBC concept to describe a situation in which SOEs in socialist economies were regularly able to have their budget constraints readjusted through bargaining with the responsible government organs. As a result of SBCs, SOEs are wasteful in their use of financial resources and slow in responding to market changes, thus operating at a low level of efficiency. On the other hand, because they do not have to pay for the cost of investment, they are in a constant state of “investment hunger” as they attempt to absorb as much investment as they can. This then leads to a misallocation of resources in the economy. According to the SBC perspective, the SOEs’ insatiable appetite for investment is only a symptom of the more deeply rooted SBC syndrome. Moreover, since soft credit constitutes one of the four main sources of SBCs (the others being negotiability of tax rates, soft subsidies, soft administrative prices), the key to the success of financial sector reform is to remove the availability of soft credit for SOEs (Bowles and White 1989).

A review of the Chinese government’s efforts to reform SOEs since 1979 shows that both perspectives have influenced policies, but also that the former has often had the upper hand. For SOEs, the most important financial reform measure prior to 1993 was the experimentation, and eventual introduction in 1985, with the “loans-for-grants” reform, whereby bank loans replaced the previous budgetary allocations of investment, and enterprises became responsible for the repayment of principle and interest. This was intended to increase the financial accountability of SOEs and harden their budget constraints. In the meantime, however, the period between mid-1980s and 1993 saw the
general introduction of performance contracts between SOE managers and government departments, which in essence substantially expanded SOE autonomy in all aspects of their operation. Existing studies have concluded that budget constraints did not harden but actually softened as a result of (1) the government’s continued influence over bank lending decisions, (2) the government’s (particularly the local governments’) emphasis on raising capital rather than on improving the efficiency of capital use and (3) the SOEs’ increased scope for financial manipulation (e.g., Wu 1995; Bowles and White 1989).

Since 1994, however, the SOEs have discovered another important source of capital apart from bank loans and retained profits: namely, equities. This is the direct result of the introduction of the so-called “Modern Enterprise System” (MES), following the decision in November 1993 by the third plenum of the 14th Central Committee of the Chinese Communist Party (CCP) to move China toward a “socialist market economy.” Under the MES reform, more and more SOEs are converted into gufenzhi (meaning corporatized) companies, capable of raising capital from society directly.

Moreover, following the 15th CCP Congress in 1997, the government launched a three-year campaign to consolidate state industry with the ultimate aim of strengthening the largest SOEs, which constitute the core of state industry. During this campaign, much emphasis was placed upon financial restructuring; in particular, a large number of the targeted SOEs were put on the stock market to raise capital. New measures were also taken to deal with non-performing loans that SOEs had accumulated from the largely state-owned banks.

The purpose of this chapter is to make a preliminary assessment of the effects of these measures introduced since 1994. The key questions that we will investigate are: (1) What have been the main reform measures since 1994? (2) Have these measures hardened SBCs on SOEs and improved SOE performance? And (3) what has been the effect of these measures on the allocation of resources in the economy?

The structure of the chapter is as follows: Section 1 briefly considers the government’s position on SOEs. It highlights the government’s strong commitment to SOEs, more on political than economic grounds. Section 2 then offers an overview of the key measures to reform SOEs during the 1990s. This highlights two key phases, the experimentation with the MES from 1994 and the campaign during 1998–2000. Section 3 attempts to evaluate the impact of these measures on the SOEs and beyond. The analysis shows that, despite apparent performance improvement among a relatively small number of targeted SOEs, the state sector as a whole continues to suffer from SBCs and poor performance. Moreover, the three-year campaign has led to worsening misallocation of financial resources in the economy as a whole. Finally, the chapter discusses the implications of these findings.
THE GOVERNMENT’S POLITICAL COMMITMENT TO SOEs

There is no doubt that the government is strongly committed to SOEs. This is most evident in the fact that the CCP has never swerved in its insistence on the dominance of public ownership since 1984, when the 3rd plenum of the 12th Central Committee of the CCP decided to undertake economic restructuring in China. This has occurred despite the fact that the party has made several attempts to redefine the overall objective for such restructuring, as detailed in a speech by Jiang Zemin (1992), then the General Secretary of the CCP, to the 14th Party Congress. In the very beginning (as of 1984), the official position was that China’s socialist economy was “a planned commodity economy based on public ownership.” This recognized the useful role of market mechanisms in the determination of prices but insisted on the dominant roles of the plan and public ownership. Later on, in 1987 the 13th CCP Congress introduced a theory of primary-stage socialism in China, arguing that, at this stage, because of the low level of economic development, market forces and even private ownership have to be permitted and harnessed to help develop productive forces (Jiang 1992, 1). This theorization has since underpinned the state’s policy to permit development of the private sector and to support development of the collective sector.

Then finally, in 1992 the CCP decided to adopt the socialist market economy development strategy. According to Jiang, a socialist market economy strives to “let market forces, under the macro-economic control of the state, serve as the basic means of regulating the allocation of resources.” He emphasized, however, that the public sector, which for the first time included collectively owned enterprises (COEs) as well as SOEs, “was to remain predominant.” Official documents of the subsequent Party Congresses in 1997 and 2002 have continued to stress this insistence as a matter of policy.

This then raises the question of why the government is committed to maintaining the dominance of the public sector. One way to understand this is to view it within the context of values held by communist parties in general. According to Kornai, societies under communist party rule are based on the following principles: the unity of party power, the (almost total) elimination of private ownership, and the general spread of public ownership (1992, 89). Kornai (1992, 88, 89) notes that “socialism differs first and foremost from capitalism in having replaced private ownership with public ownership.” For communists, the replacement has an intrinsic value as it underpins the elimination of the capitalists’ exploitation of workers and the end of capitalism. Furthermore, it is precisely this emphasis on the intrinsic value of public ownership that distinguishes the classical Marxist-Leninist, communist value system and action program from those of other strands of socialism, notably the social democrats. For the latter, public ownership and associated forms of distri-
bution have only instrumental value, justifiable to the extent that they may further such intrinsic values as welfare, social justice, and the assurance of liberty.

However, it is interesting to note that the CCP has paid scant attention to the intrinsic value of public ownership in terms of eliminating the exploitation of workers by capital. This is evident in the consistent reference to the principle of remuneration according to one’s work, which deflects attention from income redistribution. Rather, the emphasis is placed on the point that a socialist market economy, as defined earlier, is integral to the basic system of socialism characterized by the Four Cardinal Principles (keeping to the socialist road, upholding the people’s democratic dictatorship, leadership by the Communist Party of China, and Marxism-Leninism and Mao Zedong Thought) (Kornai 1992, 2). Thus, public ownership is defended as part-and-parcel of the “basic system of socialism” in China. ¹ In other words, the commitment is politically motivated. Thus Jiang’s speech went on to say that to reform SOEs successfully, “increase[ing] their vitality and efficiency” is key not only to establishing the socialist market economy but also to “consolidating the socialist system and demonstrating its superiority.” ² The implication is that there exists a clear political logic behind the insistence on dominant public ownership: SOEs must be strengthened and preserved to support the CCP’s central claim to power, namely, that socialism is superior to capitalism in promoting the development of productive forces. ³

An alternative explanation is to regard public ownership as the preferred means of managing the economy and exercising macro-economic control in order to implement the government’s development strategies and policies. This is indeed how some leading theorists in China have attempted to rationalize the insistence on the dominance of public ownership, especially for the larger SOEs. For instance, Hu pointed to the economies of scale of the larger SOEs and argued that, by investing in and owning these enterprises, the state has been able to implement more effectively its industrial policies and improve the allocation of resources (1999, 284–87). In essence, this line of argument continues to view the market with suspicion. There is some evidence that this kind of thinking has gained influence in the past few years. For instance, Jiang’s speech at the 15th Party Congress in 1997 stressed that the key criterion for dominant public ownership is the ability of the state to maintain control. Such arguments encounter two difficulties: one theoretical and the other practical. First, Putterman (1993) has argued that, theoretically, there are other more effective policy instruments (e.g., macro-economic policies) than public ownership to ensure that the state’s social goals are attained. Second, and more practically, with the emphasis placed upon the separation of ownership from management and profit making for SOEs under MES reform, it is difficult to see how public ownership could enable the state to implement social goals through its ownership in individual enterprises. Another alternative interpretation of the insistence on public ownership is to

---

1. This is clear in Hu 1999: 71 as well as in Jiang’s speech.
3. According to Hu (1999: 285–86), this is a point that Jiang revisited a number of times after 1992.
consider public ownership as a result of the interested groups’ resistance to change. This is well recognized in the literature regarding privatization.

Needless to say, these alternative ways of interpretation are by no means exhaustive or mutually exclusive. The purpose of discussing them here is not to prove that either interpretation is correct, but simply to highlight the fact that reforming SOEs is not a purely economic matter. Indeed, it is deeply intertwined with politics. Bearing this in mind, in what follows, the chapter reviews the experience of reforming SOEs since 1994 and attempts to assess the impact.

**THE REFORM OF CHINESE SOEs SINCE 1994**

There have been two key steps in SOE reform since 1994: the introduction of the MES in 1994 and the three-year program to turn around SOEs from 1998 through 2000. Both are closely related; indeed, one led to the other. This is clear from the fact that a primary strategy of the three-year campaign was to introduce the MES to a majority of the targeted large and medium-size SOEs (LMSOEs). However, while the MES reform aimed to address the institutional weaknesses of all SOEs, the program during 1998–2000 was specifically targeted at a selected group of the LMSOEs, 6,599 in all, with the clear-cut aim of preventing persistent financial losses.

**Modern Enterprise System Reform Since 1993**

The MES reform was introduced as part of a coordinated reform package that was launched during 1993–94 to implement the decision to turn China into a “socialist market economy.” Under the MES reform, most SOEs were converted into gufenzhi companies, either as companies with limited liability (CLL) or as stockholding companies with limited liability (SCLL). The introduction of the Company Law in July 1994 paved the way for the general implementation of this reform. The key differences between the two types of gufenzhi companies are the company’s size, the required number of shareholders, and the role of the stock market. CLLs tend to be relatively small with a minimum registered capital of RMB 100,000 and a minimum of two shareholders. By comparison, with a minimum required registered capital of RMB 10 million, the SCLL are bigger, involving a minimum of five shareholders. The latter have an important advantage, namely the potential opportunity to raise capital through initial public offering (IPO) of stocks and flotation.

The avowed purpose of the corporatization drive was to turn Chinese SOEs into independent, profit-oriented businesses that could enjoy clearly defined property rights and benefit from good corporate governance (Chen 1994, 168). According to Lardy (1998, 24), the gufenzhi companies are characterized by four important features: (1) They are distinctive legal entities that are separated from their owners (i.e., shareholders, in-
cluding the government). (2) They have limited shareholder liability. (3) They have a board of directors that is elected by shareholders and is responsible for hiring and firing managers. And (4) they maintain the transferability of shares. In the reformed shared-ownership structure, since the state would only be one of many shareholders, any government department that represents the state on the board of directors would not be able to dictate company affairs. This would then have the effect of reducing government interference in enterprise affairs, thus lessening a problem that is considered by some analysts as critical to the success of SOEs (Nolan and Wang 1998). It was also hoped that the diffused ownership structure would enhance monitoring and place greater pressure on enterprises, thus leading to better performance (Dong 1999). On the other hand, with limited liability, the state would no longer have to be responsible for the losses of the enterprises concerned. In theory, corporatization should harden budget constraints, as profit-driven banks would start to act like normal creditors (seeking returns) and a new class of shareholders would be motivated to monitor closely the performance of enterprise managers.

The Three-Year Program

An important decision that emerged from the 15th CCP Congress in 1997 was to adopt a strategy of zhuo da fang xiao (i.e., “grasp the large, and release the small”) in handling Chinese SOE reform. In particular, with regards to larger SOEs, the decision was to make a sustained effort over a period of some three years to help the 6,599 loss-making LMSOEs to “shake off their difficulties” (or tou-kun). This was against the backdrop that, in 1996, state industry as a whole had a net loss for the first time, totaling 37.8 billion (SSB 1998, 460). The other objective of the campaign was to implement the MES among the key LMSOEs by the end of 2000, which referred mainly to a group of 514 key-point SOEs. By official estimation, this last group accounted for two-thirds of the state industry’s assets (62.8 percent), sales revenue (67.4 percent), and pre-tax profits (68.4 percent) (Sheng 2001, 42). In order to achieve the objective of tou-kun, the strategy emphasized MES reform and SOE reorganization, restructuring, and strengthened management. In reality, however, considerable emphasis was placed upon helping the state sector reduce its financial burdens, especially debts. During the three-year campaign, the government adopted both traditional and nontraditional measures to reduce the financial burdens of SOEs. These included the following.

1. The conversion of enterprises’ loan liabilities to state equity. Four state-owned Asset Management Companies (AMCs) were set up in 1999 to manage this type of equity, one to work with each of the four specialized state-owned banks. Their task was to take over the non-performing loans (NPLs) from the commercial banks and to help restructure SOEs so as to make them profitable (within four years). While their initial capital (RMB one billion each) was provided by the central government, their capital for acquiring NPLs was to be obtained by issuing treasury bonds and borrowing from the...
central bank with maturity ranging from 10 to 30 years. They would buy NPLs at face value and acquire a corresponding stake in the enterprises concerned. At the end of the four years, they must sell their shares in the market. The aim was to achieve as high a recovery ratio as possible (30 percent was considered acceptable). However, the Ministry of Finance would foot any AMC losses. According to Sheng Huaren, the president of the State Economic and Trade Commission (SETC), by October 2000, the “loans-to-equities” swap had been implemented for 580 industrial enterprises, involving a total loan value of RMB 405 billion, and by April 1, 2000, the enterprises involved had stopped paying interest (Sheng 2001, 42). It is likely, however, that the scope of the operation went beyond that, as the four AMCs had taken over a reported total of RMB 1393.9 billion of NPLs from the banks by mid-2001.4

2. Increased bankruptcy and mergers. Between 1998 and 2000 a total of 1,718 bankruptcy and merger cases were approved, which involved the write-off of RMB 126.1 billion in bank loans (Sheng 2001, 44). To make up the banks’ financial shortfall due to bankruptcies, the central government set up a reserve fund in 1996 with an initial payment of RMB 30 billion. By the end of 1999, however, the government had paid RMB 173 billion toward this fund, with a further expected contribution of RMB 80 to 85 billion for the year 2000. This measure alone would have reduced enterprises’ annual interest payments by over RMB 20 billion (Zhou and Xia 2001).

3. Lower interest rates to reduce enterprises’ debt payment. This amounted to RMB 70 billion in 1997 alone.

4. Tax refund for qualified SOEs that are located in the 111 cities that took part in the experiment of “optimizing capital structure” (GOSCCESR 1998, 137).5

5. Increased investment in technical upgrading. Between 1999 and 2000, a total of RMB 240 billion was invested in this area, financed by a combination of treasury bonds and bank loans (Sheng 2001, 44)

In addition to these measures, the government decided that the stock market should play an important role in helping SOEs raise the funds needed for restructuring. In principle, this thinking is consistent with the government’s long-standing policy toward the stock market; namely, that the development of the nascent capital market should serve China’s socialist cause. Thus the key legislative document governing the issuance and trading of stocks, announced in April 1993 and effective until 1999, stated clearly in its preamble that stock issuance and trading should maintain the key CCP principle of socialist public ownership and, in pursuit of this, should guard against the erosion of state assets.6 The Company Law, approved in December 1993, also gives clear preference to

---

5. These included the 100 MES trial enterprises and enterprises involved in enterprise groups trials.
6. This was taken out in the Securities Law, which was promulgated in December 1998 and went into effect July 1999.
Table 2.1
Expansion of the Chinese Stock Market

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of shares* issued (100m)</th>
<th>Total amount of funds raised (RMB 100m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>1992</td>
<td>20.75</td>
<td>94.09</td>
</tr>
<tr>
<td>1993</td>
<td>95.79</td>
<td>375.47</td>
</tr>
<tr>
<td>1994</td>
<td>91.26</td>
<td>326.78</td>
</tr>
<tr>
<td>1995</td>
<td>31.60</td>
<td>150.32</td>
</tr>
<tr>
<td>1996</td>
<td>86.11</td>
<td>425.08</td>
</tr>
<tr>
<td>1997</td>
<td>267.63</td>
<td>1,293.82</td>
</tr>
<tr>
<td>1998</td>
<td>105.56</td>
<td>841.52</td>
</tr>
<tr>
<td>1999</td>
<td>122.93</td>
<td>944.56</td>
</tr>
<tr>
<td>2000</td>
<td>512.03</td>
<td>2,103.08</td>
</tr>
<tr>
<td>1991–2000</td>
<td>1,338.66</td>
<td>6,559.72</td>
</tr>
</tbody>
</table>

*Includes A shares, H shares, N shares, and B shares.


SOEs in issuing corporate bonds. In practice, the government made sure through its tightly controlled approval procedure that the former SOEs got priority for stock market listing.

However, from 1997, the government significantly stepped up its exploitation of the stock market as a source of cheap finance for designated SOEs. Indeed, to implement this strategy, the government raised the national limit for new share issues in 1997 to 30 billion shares, doubling that of 1996. The China Securities Regulatory Commission (CSRC) in 1997 made taking over or merger with loss-making SOEs a qualifying condition for enterprises to be given priority for IPOs and stock market flotation (RIIE 1998, 47). Since then, three types of SOEs have been singled out for priority listing. These include the 100 MES trial enterprises; the 120 enterprises that take part in the experimentation with enterprise groups (qiye jituan); and finally the 520 so-called key-point enterprises, of which 514 were fully or majority owned by the state. By the end of 1997, 48 percent of type I (MES trial) enterprises (forty-eight), 42 percent of Type II (enterprise groups trial) (fifty) and 36 percent of type III (key-point) enterprises (194), had been listed (RIIE, 20). By October 2000, the number of the key-point enterprises that were listed rose to 247 (47.5 percent) (Zhou and Xia 2001, 48).

In fact, the Chinese stock market expanded rapidly after 1997, raising on average RMB 100 billion a year for the listed companies during 1997–1999, and as much as RMB 210 billion in 2000 (Table 2.1). On the other hand, between 1998 and 2002 a total of

7. These are SOEs to receive particularly strong state support. And their number is planned to increase to 1,000.

8. The figure for each group varies slightly in different sources. For instance, according to Dong 1999, the number of enterprises became listed is 186 for key-point enterprises, 40 for MES trial-point enterprises, and 59 for enterprise groups trial-points.
RMB 660 billion in long-term treasury bonds were issued (Renmin ribao, overseas edition, July, 12, 2002). Judging by the ability to raise funds, the Chinese capital market performed extremely well during the campaign. However, in the light of the alternative perspective, the critical questions are whether such concerted efforts have had the intended effect on the SOEs and whether these measures have advanced the wider goal under socialist market economy policy of improving the allocation of financial resources in the economy. In what follows, we examine the effects in three important areas.

THE EFFECTS

Lack of Progress in Changing Corporate Governance

A key objective of the MES has been to formalize and improve the governance structure of corporatized SOEs. However, evidence shows that the impact of MES reform has been limited. To begin with, bureaucrats and enterprise managers have collided in their efforts to preserve full state ownership or dominant controlling stakes by the state in newly converted gufenzhi companies. This has been achieved partly by exploiting a legal loophole. To safeguard state control, the Company Law contains clauses (nos. 21 and 75) that provide exceptions, which authorize state organizations or government departments to set up CLL with the state as the sole owner, and that SOEs-turned SCLL may have fewer than five shareholders.

According to government sources, these clauses were meant to apply to only a small number of exceptional cases (RIIE 1998, 37). In reality, however, they have been widely adopted. Out of the 100 SOEs that were designated by the SETC and the Commission for Economic System Restructuring to experiment with MES, only seventeen adopted a multiple shareholder structure with CLL and SCLL. Of the rest, sixty-nine opted for fully state-owned CLL, while ten became fully state-owned kongguxing (stock-controlling) companies. The results of the experiments sponsored by sub-national governments, which involved 2,348 enterprises, were better in the sense that a higher percentage of the enterprises opted for multiple-shareholder CLLs (540) and SCLL (540). However, 909 of these enterprises (34 percent) also opted for full state ownership (RIIE 1998, 20).

Consequently, the hoped-for changes to corporate governance have not been realized. For instance, it was noted that, among the sixty-nine reformed SOEs that have chosen to become fully state-owned CLLs, the system of general shareholder meetings was deemed unnecessary, in accordance with the Company Law. Of the twenty-nine companies that did fully convert into gufenzhi, only 12 companies established general shareholder meeting system by September 1997 (RIIE 1998, 36). It appears that the clauses
Table 2.2
Shareholding Structure of Listed Companies in China, 1998

<table>
<thead>
<tr>
<th>Types of shares</th>
<th>%</th>
<th>Types of shares</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tradable shares</td>
<td>34.11</td>
<td>Non-tradable shares</td>
<td>65.89</td>
</tr>
<tr>
<td>Of which</td>
<td></td>
<td>Of which</td>
<td></td>
</tr>
<tr>
<td>A shares</td>
<td>24.06</td>
<td>By government</td>
<td>34.25</td>
</tr>
<tr>
<td>B shares</td>
<td>5.30</td>
<td>By legal persons</td>
<td>28.32</td>
</tr>
<tr>
<td>H shares</td>
<td>4.75</td>
<td>By employees</td>
<td>2.05</td>
</tr>
<tr>
<td>Others</td>
<td>0.00</td>
<td>By others</td>
<td>1.25</td>
</tr>
</tbody>
</table>

NOTE: (1) Shares held by legal persons include holdings by foreign legal persons (1.42 percent). (2) Shares held by employees cannot be traded in the stock market in the first three years (Dong 1999).

SOURCE: Yang 2001: 118n1).

that provide exceptions and are contained in the Company Law have been exploited to the extent that the original purpose of the MES reform has largely been defeated.

The situation with listed companies is hardly better. A crucial factor here is that, in order to maintain the state’s controlling stakes in listed former SOEs, the government has introduced a distinction between SOEs with a minority of tradable shares and a majority of non-tradable shares. The former are those that are offered to the public and openly traded in the stock market, while the latter are those that the state and enterprises retain legal ownership of. As a result, on the one hand, the share structure of many listed companies is dominated by state equity. On the other hand, the majority of shares are not tradable (see Table 2.2). Consequently, government departments, as representatives of state equity, still dominate boards of directors and exercise great influence over decisions regarding appointments and business strategies. Individual shareholders, on the other hand have little say over these issues.

Even more seriously, in some areas corporate conduct deteriorated in the late 1990s as the government implemented its strategy to use the stock market to raise funds for SOEs. In theory, the stock market ought to discipline enterprise managers through share price changes, rewarding the stronger performer and penalizing the incompetent. In reality, however, due to the rationing of access to the stock market, the share prices bore little relationship with enterprises’ performance in the real economy. The stock market has simply become a money-raising device for SOEs (therefore the Chinese term juan qian).

Tempted by the considerable financial benefits that stem from stock market listing, many companies cheated in order to gain and retain a public listing. Ranging from pro-forma accounting to outright fraud, companies that inappropriately gained public listing often did so by providing inaccurate information to meet the following listing requirements: (1) a minimum of three-years’ operational history, (2) profitability for the past three financial years, and (3) a public company that has made losses in the last three years would be in danger of losing its status if it did not improve its performance within
the next six months. The most notorious case concerned a biochemical firm, Yin-
guangxia, which reported a net profit of RMB 417 million ($50 million) in 2000, rather
than a loss of RMB 150 million, as was actually the case, according to CSRC investiga-
tors (The Economist, Oct. 23, 2002, p. 91). In another case (Daqing Petrochemical), the
fraud involved backdating the company’s registration record for three years, implicating
government departments at both the provincial and municipal levels (China Capital Mar-

Thus, not only did the stock market reforms fail to strengthen monitoring, but
they also enabled widespread abuse of the market by the government and its agencies,
which severely undermined the investing public’s confidence in the market and the gov-
ernment. It was thus inevitable that, amid a string of negative press about corporate mis-
conduct, the government’s announcement in mid-2001 to reduce its stake in listed com-
panies (thus increasing the supply of shares) set off a prolonged downturn in the Chinese
stock market.

**Deterioration in the Allocation of Financial Resources**

The 1990s saw a general decline of the state sector’s share in fixed asset investment
(FAI). This is consistent with the steady decline of the state sector in economic output
and its relatively poor economic performance. However, in 1998 and 1999, the state sec-
tor’s share rose momentarily, largely as a result of the three-year campaign. There is also
clear evidence that banks, mostly state-owned, continued to severely discriminate
against non-state sectors, in spite of the steady increase in their contribution to the na-
tional economy. For instance, despite some increases in the 1990s, in 2000 private and
individually owned enterprises held only 1 percent of total short-term loans from finan-
cial institutions. In Shanghai, the situation was similar. A survey at the end of 1998 found
that the SOEs accounted for 67.1 percent of all outstanding bank loans by financial insti-
tutions (Yi 2000, 108), compared with the sector’s much smaller contribution to total
GDP (SMSB 2001, 333). The misallocation of resources is most evident in the distribu-
tion of listed companies and the funds raised. A majority of the listed companies are for-
mer SOEs. As of October 2002, out of the 1,216 companies listed on either the Shanghai
or the Shenzhen Stock Exchanges, only 82 were privately owned. Apart from the 100 or
so COEs, the rest were all SOEs (The Economist, Oct. 12, 2002, p. 12).

9. In 1998, the state-owned specialized banks accounted for 78 percent of total deposits and 86
percent of loans (Liu 2000).

10. There is some ambiguity about the contribution of the state sector to the city’s GDP. The
Shanghai Statistical Yearbook (SMSB 2001) indicates two values for 2000, 55.7 percent in one section and
41.6 percent in another. The likely cause of this discrepancy is mixed ownership. It is conceivable that in
the higher value, a proportionate part of the output of the enterprises with minor state ownership was as-
tigned to the state sector, while in the lower value, this was not so. For 1998, the only available indication
is 55.7 percent, the same as for 2000.
Table 2.3
Percentage Shares of Investment in Fixed Asset, by Ownership Type

<table>
<thead>
<tr>
<th>Year</th>
<th>SOEs</th>
<th>COEs</th>
<th>Private</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>81.9</td>
<td>5</td>
<td>13.1</td>
<td>-</td>
</tr>
<tr>
<td>1992</td>
<td>68.1</td>
<td>16.8</td>
<td>15.1</td>
<td>-</td>
</tr>
<tr>
<td>1993</td>
<td>60.6</td>
<td>17.7</td>
<td>11.3</td>
<td>10.3</td>
</tr>
<tr>
<td>1994</td>
<td>56.4</td>
<td>16.2</td>
<td>11.6</td>
<td>15.8</td>
</tr>
<tr>
<td>1995</td>
<td>54.4</td>
<td>16.4</td>
<td>12.8</td>
<td>16.3</td>
</tr>
<tr>
<td>1996</td>
<td>52.4</td>
<td>15.9</td>
<td>14.1</td>
<td>17.7</td>
</tr>
<tr>
<td>1997</td>
<td>52.5</td>
<td>15.4</td>
<td>13.7</td>
<td>18.3</td>
</tr>
<tr>
<td>1998</td>
<td>54.1</td>
<td>14.8</td>
<td>13.2</td>
<td>18.1</td>
</tr>
<tr>
<td>1999</td>
<td>53.4</td>
<td>14.5</td>
<td>14.1</td>
<td>18.1</td>
</tr>
<tr>
<td>2000</td>
<td>50.1</td>
<td>14.6</td>
<td>14.3</td>
<td>21.1</td>
</tr>
<tr>
<td>2001</td>
<td>47.3</td>
<td>14.2</td>
<td>14.6</td>
<td>23.9</td>
</tr>
</tbody>
</table>


It is strongly evident that the increased financial inputs to SOEs in the late 1990s have served to soften SOE budget constraints, rather than fundamentally hardening them. This becomes clear from a close look at the capital structure of SOEs. It is noted that, as a result of the “grants-to-loans” reform, over the years the share of budgetary grants (or state appropriation) in total fixed asset investment (FAI) in the Chinese economy has steadily declined from 28.1 percent in 1981 to 4.3 percent in 1992, reaching its lowest point in 1996. By contrast, the share of bank loans rose from 12.7 percent in 1981 to 23.0 percent in 1987, and reached its peak in 1992 (at 27.4 percent; see Table 2.4). On the other hand, due to enterprise reform, which steadily increased the proportion of retained profits, the share of self-raised funds (and others) rose from 55.4 percent in 1981 to over 60 percent in the 1990s. Significantly, however, the four years between 1997 and 2000 seem to have reversed this important trend. The share of state appropriation rose from 2.7 percent to 6.4 percent during this period, while the share of bank loans rose appreciably.

Further analysis of the detailed capital structures of the different enterprise groups (see Table 2.5) suggests that the state sector was largely responsible for this reversal. Moreover, while the share of state appropriation in the state-sector total FAI rose from 4.7 percent in 1997 to 10.0 percent in 1999, the share of self-raised funds declined from 52.7 percent to 47.7 percent. The share of domestic loans also rose, although only slightly. On the other hand, foreign investment’s contribution declined from 5.1 percent to 3.9 percent. Given that the state sector raised a huge amount of capital from the stock market between 1997 and 2000 (which was included in the self-raised funds), these changes suggest that, as a result of the post-1993 financial reform—particularly in late 1990s—the state sector increased, rather than lessened, its reliance on budgetary allocations and subsidized domestic bank loans. Furthermore, the reform also appears to have significantly weakened the state sector’s ability to generate internal funds for long-term investment. In the perspective of SBC, the reform measures further softened budget constraints on the SOEs.
Table 2.4
Sources of Fixed Asset Investment for All Enterprises

<table>
<thead>
<tr>
<th>Year</th>
<th>State appropriation</th>
<th>Domestic loans</th>
<th>Foreign investment</th>
<th>Self-raised funds and others</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>28.1</td>
<td>12.7</td>
<td>3.8</td>
<td>55.4</td>
</tr>
<tr>
<td>1985</td>
<td>16.0</td>
<td>20.1</td>
<td>3.6</td>
<td>60.3</td>
</tr>
<tr>
<td>1987</td>
<td>13.1</td>
<td>23.0</td>
<td>4.8</td>
<td>59.1</td>
</tr>
<tr>
<td>1990</td>
<td>8.7</td>
<td>19.6</td>
<td>6.3</td>
<td>65.4</td>
</tr>
<tr>
<td>1991</td>
<td>6.8</td>
<td>23.5</td>
<td>5.7</td>
<td>64.0</td>
</tr>
<tr>
<td>1992</td>
<td>4.3</td>
<td>27.4</td>
<td>5.8</td>
<td>62.5</td>
</tr>
<tr>
<td>1993</td>
<td>3.7</td>
<td>23.5</td>
<td>7.3</td>
<td>65.5</td>
</tr>
<tr>
<td>1994</td>
<td>3.0</td>
<td>22.4</td>
<td>9.9</td>
<td>64.7</td>
</tr>
<tr>
<td>1995</td>
<td>3.0</td>
<td>20.5</td>
<td>11.2</td>
<td>65.3</td>
</tr>
<tr>
<td>1996</td>
<td>2.7</td>
<td>19.6</td>
<td>11.8</td>
<td>66.0</td>
</tr>
<tr>
<td>1997</td>
<td>2.8</td>
<td>18.9</td>
<td>10.3</td>
<td>67.7</td>
</tr>
<tr>
<td>1998</td>
<td>4.2</td>
<td>19.5</td>
<td>9.2</td>
<td>68.2</td>
</tr>
<tr>
<td>1999</td>
<td>6.2</td>
<td>19.2</td>
<td>6.7</td>
<td>67.8</td>
</tr>
<tr>
<td>2000</td>
<td>6.4</td>
<td>20.4</td>
<td>5.2</td>
<td>68.6</td>
</tr>
</tbody>
</table>

SOURCES: for pre-2000 data, see SSB (2000, 169); for 2000, see Lu (2002, 9).

This conclusion is also supported by the relative investment growth rates among different enterprise groups. The fact is that, between 1993 and 2001, for only two years (1997 and 1998) was the growth of FAIs in the state sector higher than society’s FAIs as a whole. In subsequent years, the FAI growth rate in the state sector has fallen again well below the national average rate.\(^{11}\) The implication is that, despite the increased support in the late 1990s, the state sector continues to decline.

Nevertheless, it is evident that this three-year campaign cost the rest of the economy a great deal. In order to sustain the increased financial inflow to the state sector, the government had to reduce other inflows into the rest of the economy. For the COEs, for instance, the share of bank loans in their FAI was reduced from more than 35 percent in mid-1980s and early 1990s to a mere 13.2 percent by 1999. Consequently, despite increased inputs from state appropriation (presumably from local governments), their reliance on self-raised funds had to rise from 39.8 percent in 1992 to 63.5 percent in 1999. Even the Ministry of Agriculture recognized that decreased lending (from 10 percent in 1995 to 5 percent in 1999) to the township and village industrial enterprises was a key factor in the decline of this sector in the late 1990s.\(^{12}\) It would seem that non-state enterprises paid a heavy price for the government’s increased support to the state sector in the late 1990s.

---

\(^{11}\) The society’s FAIs grew by 5.1 percent in 1999, 10.3 percent in 2000, and 13 percent in 2001, while that of the state sector increased only by 3.8 percent, 3.5 percent, and 6.7 percent in the same years. See Lu 2002: 3.

\(^{12}\) CEMYE 2000: 292.
Table 2.5  
Source of Investment Finance for Selected Years, 1985-99

<table>
<thead>
<tr>
<th>Year</th>
<th>State budget</th>
<th>Domestic loans</th>
<th>FI</th>
<th>SRF</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State-owned enterprises</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>14.7</td>
<td>24.2</td>
<td>9.0</td>
<td>40.5</td>
<td>11.7</td>
</tr>
<tr>
<td>1992</td>
<td>6.3</td>
<td>30.4</td>
<td>8.0</td>
<td>46.5</td>
<td>8.7</td>
</tr>
<tr>
<td>1995</td>
<td>4.9</td>
<td>23.4</td>
<td>7.8</td>
<td>48.2</td>
<td>15.7</td>
</tr>
<tr>
<td>1997</td>
<td>4.7</td>
<td>23.0</td>
<td>5.1</td>
<td>52.7</td>
<td>14.3</td>
</tr>
<tr>
<td>1998</td>
<td>7.1</td>
<td>23.5</td>
<td>4.4</td>
<td>50.3</td>
<td>14.8</td>
</tr>
<tr>
<td>1999</td>
<td>10.0</td>
<td>24.0</td>
<td>3.9</td>
<td>47.7</td>
<td>14.4</td>
</tr>
<tr>
<td></td>
<td>Collectively owned enterprises</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>1.5</td>
<td>37.6</td>
<td>0.9</td>
<td>–</td>
<td>60.0*</td>
</tr>
<tr>
<td>1992</td>
<td>0.1</td>
<td>36.7</td>
<td>2.6</td>
<td>39.8</td>
<td>20.8</td>
</tr>
<tr>
<td>1995</td>
<td>1.7</td>
<td>25.3</td>
<td>6.2</td>
<td>54.8</td>
<td>12.0</td>
</tr>
<tr>
<td>1997</td>
<td>1.8</td>
<td>17.6</td>
<td>7.3</td>
<td>60.4</td>
<td>14.1</td>
</tr>
<tr>
<td>1998</td>
<td>2.1</td>
<td>14.9</td>
<td>6.2</td>
<td>55.6</td>
<td>21.1</td>
</tr>
<tr>
<td>1999</td>
<td>5.6</td>
<td>13.2</td>
<td>4.4</td>
<td>63.5</td>
<td>13.3</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>100.0</td>
<td>–</td>
</tr>
<tr>
<td>1992</td>
<td>–</td>
<td>–</td>
<td>4.2</td>
<td>84.1</td>
<td>11.7</td>
</tr>
<tr>
<td>1995</td>
<td>0.3</td>
<td>12.5</td>
<td>20.0</td>
<td>57.0</td>
<td>10.2</td>
</tr>
<tr>
<td>1997</td>
<td>0.2</td>
<td>13.7</td>
<td>21.8</td>
<td>58.2</td>
<td>10.1</td>
</tr>
<tr>
<td>1998</td>
<td>0.3</td>
<td>14.4</td>
<td>18.3</td>
<td>52.4</td>
<td>14.6</td>
</tr>
<tr>
<td>1999</td>
<td>0.5</td>
<td>14.4</td>
<td>12.3</td>
<td>57.9</td>
<td>14.9</td>
</tr>
</tbody>
</table>

* Includes self-raised funds. FI=foreign investment; SRF=self-raised funds.


**Limited Effects on Improving the Performance of SOEs**

There is strong evidence that the three-year campaign had a considerable positive financial effect on the targeted LMSOEs. According to Sheng Huaren (2001), the president of SETC, by October 2000, of the 6,599 targeted SOEs in the three-year campaign (including those SCLL with controlling state equity), 4,098 enterprises (62.5 percent) were no longer loss-making, although some of the enterprises were simply closed down or taken over by others. It was estimated that by the end of 2000, 65 percent of the targeted LMSOEs would have shaken off loss-making status. Moreover, after a dip from 80.65 billion in 1997 to 52.5 billion in 1998, gross profits by state-owned industrial enterprises
(including with those with controlling state equity) climbed to 99.79 billion in 1999 and an estimated RMB 230 billion in 2000.

However, caution is required in reading these numbers. First, given the substantial amount of financial supports, as detailed above, some improvements are expected. Indeed, the synchronization of the “loans-to-equities” implementation and the big increase in profits in 2000 suggests that “loans-to-equities” probably played a particularly significant role in making the increase possible. In fact, it was indicated by Sheng Huanren (2001) that 80 percent of the SOEs designated for the swap would immediately show profits.

Second, as of the first half of 2000, the liability-to-assets ratio among Chinese SOEs was still as high as 62.03 percent. Moreover, new LMSOE loss-makers had emerged during the campaign (Zhou and Xia 2001). Despite some signs of overall improvement, the performance of the state sector as a whole remained poor. At the end of 1999, 41 percent of the industrial SOEs were officially still showing losses, compared with 19 percent for the COEs. The state sector’s share in total gross industrial output stood at a mere 28.2 percent, compared with 68.8 percent in total assets and 54.5 percent in employment (SSB 2000). Third, part of the improvement was undoubtedly the result of a general improvement in the conditions of the economy as a whole.

Significantly, it was reported that 63 percent of all the 2002 profits made by SOEs (including those with the state owning a controlling stake) was attributable to listed state-controlled companies (Renmin ribao, overseas edition, Dec. 23, 2002). This would imply that a key explanation in the LMSOE turnaround lies in their access to the stock market. The question is, how did access to the stock market help improve the performance of the listed companies? Was corporatization a key to their success? To find answers to this, we now turn to a case study of industrial enterprises in Shanghai. Our purpose is to examine how SOEs, corporatized or not, improved their performance in the late 1990s and, more important, what led to their recovery.

First, a discussion of the current methods for measuring enterprise efficiency is necessary. In assessing the performance of different Chinese enterprise groups, most existing studies in the English-language literature focus on enterprises’ relative level of technical efficiency as captured by total factor productivity (TFP), rather than by financial and economic performance indicators (e.g., Jefferson and Singh 1998). This is related to the concern that in the absence of a fully developed market for factors and products, financial and economic indicators may not fully reflect the extent of enterprise efficiency. Unfortunately, despite increasingly sophisticated methods, existing TFP studies are largely ambiguous concerning the level of TFP in SOEs, relative to other enterprises (Lardy 1998). Part of the difficulty with the methodology is that changes in the values of the parameters and in the choice of deflators used in the calculation significantly affect the results. The requirement for firm-level data further reduces the attractiveness of these measurements.

13. Lo 2001: 109–10. Unfortunately, the data do not permit comparison with the other enterprise groups.
Following the State Statistical Bureau’s recommendation (SMSB 2001, 448), this chapter will adopt return on assets (ROA) as a measurement of enterprise performance. Part of the attraction is that the data needed for the calculation is more readily available. Moreover, it may be argued that, with deepening marketization in China, an enterprise’s technical and economic efficiency is increasingly reflected in its ROA. However, without separate data on interest payments, we are able only to construct a partial ROA measurement: that is, the ratio of pre-tax profits over assets (PPOA). It should be stressed that, since the financial market is uncompetitive and favors the SOEs, the PPOA measurement will overstate the SOEs’ relative performance.

The results are presented in Table 2.6. A number of interesting features emerge. First, Shanghai’s economic structure has been drastically transformed since its pre-reform state, when the state sector dominated the economy. By 2000, the foreign sector had become the most important sector in terms of output, accounting for 52.9 percent of the total. The listed companies, largely overlapping with the membership of SCLLs in Shanghai, more than doubled their contribution of output between 1998 and 2000. In contrast, the traditional SOEs and COEs were much diminished. Notably, the domestic private sector expanded significantly. But as of 2000, this sector produced only 3 percent of total gross industrial output, compared with 18.9 percent at the national level for 1998 (Liu and Dong 2000, 68).

Second, there were some major differences in the levels of PPOA between the different enterprise groups. In 1998, for instance, the ratio was 0.067 for all Chinese enterprises, but 0.075 for the foreign sector. However, the greatest gap existed between the domestic private sector (0.152) and other domestic enterprises, such as SOEs (0.056). While the SCLLs did well with 0.116, the CLLs registered the lowest ratio (0.049).

Third, the ratio for all enterprise groups improved from 1998 to 2000 by an average of 2.5 percent. For the domestic sector as a whole, the ratio rose by 1.4 percent, and for the private sector, by 1.5 percent. For the SCLL group, the ratio rose by 2.3 percent. But the biggest rise was registered by the foreign sector at 4.5 percent. By contrast, the ratio for the CLL group declined by 0.9 percent.

These indicate that of all the enterprise groups, the performance of the CLL group was the worst. Moreover, it deteriorated in the late 1990s. On the other hand, the traditional SOEs were still performing poorly, and registered a below-average rate of improvement. The SCLLs seemed to be doing well. But their performance was still lagging well behind the domestic private sector’s.

14. By 1997, for instance, price controls had been lifted for 90 percent of consumer goods and over 85 percent of producer goods (RIIE 1999: 2).
<table>
<thead>
<tr>
<th>Ownership Type</th>
<th>No. of firms</th>
<th>Output (%)</th>
<th>K/L ratio</th>
<th>Pre-tax profits/assets</th>
<th>Tax and duty/pre-tax profits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese</td>
<td>17442</td>
<td>14800</td>
<td>52.4</td>
<td>47.1</td>
<td>19</td>
</tr>
<tr>
<td>1. SOEs</td>
<td>1819</td>
<td>1278</td>
<td>24.4</td>
<td>13.1</td>
<td>31</td>
</tr>
<tr>
<td>2. COEs</td>
<td>10514</td>
<td>7296</td>
<td>12.9</td>
<td>7.8</td>
<td>9</td>
</tr>
<tr>
<td>3. CLLs</td>
<td>553</td>
<td>1201</td>
<td>4.0</td>
<td>9.9</td>
<td>21</td>
</tr>
<tr>
<td>4. SCLLS</td>
<td>61</td>
<td>74</td>
<td>2.8</td>
<td>7.0</td>
<td>35</td>
</tr>
<tr>
<td>5. Others</td>
<td>22</td>
<td>39</td>
<td>&lt;0.05</td>
<td>0.1</td>
<td>25</td>
</tr>
<tr>
<td>6. Domestic Private</td>
<td>292</td>
<td>1294</td>
<td>0.5</td>
<td>3.0</td>
<td>11</td>
</tr>
<tr>
<td>Foreign</td>
<td>4611</td>
<td>4716</td>
<td>47.8</td>
<td>52.9</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>22053</td>
<td>19516</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

**NOTE:** SOEs = state-owned enterprises; COEs = collectively owned enterprises; SH = shareholding enterprises (i.e., cooperative shareholding enterprises); JO = jointly owned; CLL = companies with limited liability; SCLL = stockholding companies with limited liability. K/L ratio = measured by amount of capital per employee (unit: RMB 10,000/worker).

An important factor for the contrasting performance of the two groups of corporatized SOEs (i.e., SCLLs and CLLs) appeared to be the difference in their capital intensity. As a matter of fact, capital intensity for SCLLs rose by 126 percent during 1998–2000, compared with 48 percent for non-converted SOEs, 47 percent for CLLs, 22 percent for COEs, 6 percent for the foreign sector, and –10 percent for the private sector. This pattern is of course a reflection of the privileged access to low-cost capital by the SOEs, especially the SCLLs.

Moreover, it is likely that SCLLs’ good financial performance was greatly helped by their tax advantage. It was reported that as of 2001, 68.2 percent of all listed companies were subject to a 15 percent (or even lower) corporate tax rate, compared with the standard rate of 33 percent, which represented a 55 percent discount. This is confirmed by the statistics in Table 2.6, which show that the SCLL group, followed by the domestic private sector, has the lowest tax-plus-duty to pre-tax-profit ratio among all enterprise groups. By contrast, the traditional SOEs and the CLLs, despite of their low return on assets, were more heavily taxed. Thus the SCLLs received substantial subsidies in reduced taxes as well as low-cost finance.

CONCLUSION

This chapter has sought to evaluate the impact of China’s continued efforts since 1994 to reform its SOEs. It identifies two phases in this endeavor, with 1997 as the turning point. The first phase marked the slow start to the introduction of MES. In contrast, in the second phase the government implemented a concerted program to attempt to turn around some 6,000 LMSOEs. After a review of the key measures and the evident effects, this chapter makes the following conclusions:

1. Corporate governance. The MES has failed to introduce substantial changes to the way in which SOEs are governed and conduct themselves. The enterprises have not gained real independence from the government nor have they gained effective budget constraint, due to the lack of more substantial changes in ownership structure in the enterprises.

2. Allocation of financial resources. The reform worsened financial resource allocation by increasing the inefficient state sector’s claim on society’s financial resources.

3. The effects on SOEs. The three-year campaign made a positive impact on the financial state of two-thirds of the targeted LMSOEs. But much of the improvement seemed to be the immediate product of large financial inputs from the government, rather

16. This may appear to be evidence that the domestic private sector was favored by the taxation system. In fact, through, the two are not strictly comparable, as private owners are subject to an additional personal tax at 20 percent (Lu 2002).
than the result of fundamental changes in their operation. Finally, the overall performance of the state sector remains poor. An important sign is that the state sector’s ability to sustain itself through long-term investment weakened rather than strengthened in the late 1990s.

The result of the case study shows that, despite discrimination by the financial system, the private sector was the best performer in terms of producing returns on their capital. On the other extreme are the CLLs, which performed even more poorly than the traditional SOEs and showed no signs of improvement. It also finds that the SCLLs performed well, but largely as a result of privileged access to the stock market as a low-cost source of capital and associated tax concessions. In other words, corporatization per se did not improve enterprise performance, but access to the stock market did.

This research shows that China’s financial reform has made limited progress in strengthening incentives and hardening budget constraints for SOEs and in improving the allocation of financial resources. The “loans-to-equities” swap has lifted a huge financial burden off the shoulders of some LMSOErs and banks, but can hardly be expected to have a lasting beneficial effect on the economy, as SOEs showed few substantive signs of strengthening. In the stock market, the government has consistently and systematically attempted to exploit the stock market for the benefit of the ailing state sector to a point that the further expansion of the stock market is in question.

This chapter shows that the government’s commitment to ownership reform through the implementation of the MES is only half-hearted. Indeed, in more recent years, it has attempted to resolve the problems facing the state sector by increasing subsidies, rather than by constructing new forms of corporate governance, as promised by the MES reform. Evidence from Shanghai shows that such an attempt is shortsighted and very costly. On the other hand, it is clear that the government is concerned with maintaining the state sector’s dominant position in the economy, a priority that is clearly politically motivated.

What are the implications of these findings? From what has been presented here, it seems to be certain that the battle of reforming SOEs has not yet been won. Moreover, the further decline of the state sector and the diversification of ownership are likely. However, there should be no illusion that this will be a smooth and painless process, as the coalition of party functionaries, government officials, and enterprise managers are evidently attempting to resist these changes with the help of the powerful state machinery. Past experience has demonstrated that China’s choice of the course of reform will be influenced not only by economic consideration, but by a combination of economics and politics, as well. Eventually, however, the CCP will have to face up to the ultimate challenge: how to safeguard its leadership role in China without the familiar lever of a large state sector.
REFERENCES


Beginning in the autumn of 1999, the Chinese government introduced policies to address a phenomenon that for at least a decade had been virtually ignored: the vast accumulation of non-performing assets in the national banking system. Arguably the most sweeping and complex of these measures has been the program of debt-equity swaps engineered between financial institutions and their failing state enterprise borrowers. The program’s ostensible aims have been the following:

1. To remove distressed assets from the books of state banks so as to tackle moral hazard and adverse selection problems on the lenders’ side. Presumably, this would lead to increased commercialization and better future returns on assets for the four major state banks.

2. To utilize four newly created asset management companies (AMCs) to take over distressed bank assets and employ modern techniques in the recovery of those assets. AMCs would acquire non-performing loans (NPLs) from banks and then convert those assets at par into direct equity holdings in the defaulting borrower, namely, large SOEs.

3. To minimize—or thoroughly eliminate—the costs of bank recapitalization to the state, while at the same time revamping governance procedures within SOEs, the primary recipients of intermediated funds in China. Again, AMCs would constitute the linchpin of the strategy. To the extent that their recovery rates on NPLs are high, pressures on the state budget to finance loan write-offs will be minimized. Furthermore, to the extent that AMCs could radically improve governance mechanisms in their newly acquired SOEs, those industrial firms will presumably be able to flourish and avoid more radical, socially costly restructuring measures.

Certainly the good news is that from its inception, the debt-equity swap program was premised on the realistic view that the problems of China’s financial sector are inseparable from the problems of its state-owned industrial sector. Bank restructuring cannot proceed without SOE restructuring and vice versa. Of course, recognition of this critical nexus still leaves open the question of ultimate policy objectives. To the extent that the objective of financial system restructuring dominates, budget constraints in the industrial sector will tighten, and a major shake-out of SOEs will ensue. Alternatively, to
the extent that ensuring the survival of SOEs dominates, as Le-yin Zhang suggests in her
contribution to this volume, banks will continue to be used as a source of subsidies, and
financial reform will essentially remain sidetracked.

Regardless of long-term objectives, the bad news in the near term is that China’s
debt-equity swap program has produced decidedly lackluster results in the first two years
of its operation. Since 1999, hundreds of SOEs have undergone debt-equity swaps in-
volving a total of more than RMB 1,400 billion in assets. By the Chinese central bank’s
estimates, the removal of these distressed assets reduced the national banking system’s
level of NPLs from 35 percent of the total loan portfolio in 1999 to 25 percent by the end
of 2000. Yet, in spite of these transfers, and in spite of a significant recapitalization of the
banking system, another RMB 400 billion in NPLs appeared on the banks’ books in
2000. Clearly, China’s four major state banks were still engaging in highly problematic
lending practices. Moreover, China’s AMCs, after almost two years of operation, had
disposed of only RMB 90 billion in assets (6 percent of the total transferred from the state
banking system), and recovery rates even for that small portion of the total never ex-
ceeded 10 percent (Lardy 2001).

Put simply, the debt resolution process has been stalled. Bad loans have been
transferred from banks to AMCs, but asset managers have proven no more able to handle
these assets than were bankers previously. Furthermore, as will be discussed below, gov-
ernance has not substantially improved in the SOE borrowers. Finally, evidence suggests
that banks still extend loans to borrowers with extremely poor credit risk, in some cases
the very same SOE defaulters that were subject to debt-equity swaps in the first place.

The less-than-stellar results of China’s debt-equity swaps and the ineffectual na-
ture of the government’s financial restructuring effort overall have hardly come as a
shock to many observers. Yet, the interesting issues are those of interpretation. Why ex-
actly have restructuring efforts been so disappointing? Why does so little seem to have
changed behaviorally, either on the lenders’ side or the borrowers”? Why do institutional
solutions that appear innovative on paper prove so ineffectual in practice?

The standard explanation is that China’s financial problems, like those in virtually
all transitional systems, represent a straightforward case of “government failure.”1 That
is, the problems stem from excessive state intervention and an absence of market forces.
The underlying analytical message is two fold: first, that “government failure” is empiri-
cally distinguishable from “market failure” (the sorts of agency and information problems
routinely associated with financial distress in capitalist systems), and second, that “gov-
ernment failure” is by far the more costly of the two. The normative implication is also
clear: unless the government fundamentally relinquishes control over financial flows and
allows marketization to proceed, capital will continue to be allocated in an extremely in-
efficient manner.

1. For a general introduction to the government failure perspective, see Shleifer and Vishny 1998;
Boycko, Shleifer, and Vishny 1995; and Stiglitz 1999.
While the standard explanation contains obvious elements of truth, the point of this chapter is to argue that it is incomplete in critical respects. While the Chinese government’s handling of financial restructuring has been deficient in a variety of ways, “government failure” alone cannot account for one of the most frustrating aspects of the financial reform process: the degree to which the behavior of grass-roots economic actors remains unchanged even when given an opportunity to do so. Understanding this phenomenon requires an acknowledgment that China’s problems stem not only from government failure but also from market failure. That acknowledgment, then, leads to empirical and normative conclusions somewhat different from the standard government failure story.

**DEBT RESOLUTION IN THE ABSTRACT**

China’s debt-equity swap program, even before its inception, suffered a certain amount of ridicule among critics both inside and outside the PRC. Much of that initial criticism was misguided in the following sense. The debt-equity swap program, like any financial restructuring instrument, is essentially neutral. In of itself, it neither promotes nor obstructs increased allocative efficiency. Rather, it is just an institutional mechanism—a sort of blank slate—that can be employed in virtually any manner. Whether progressive change actually occurs depends greatly on exactly how the mechanism is applied and, perhaps more important, what follow-on steps are taken after its implementation.

As the initial proponents of China’s debt-equity swaps well understood, the program made sense only under the following circumstances. First, the swaps should be employed only with the understanding that simpler forms of debt resolution—extension of loan terms, renegotiation of interest rates, voluntary restructuring on the part of the borrower, etc.—are inapplicable to the situation faced by China (Zhou 1999). That is, the swaps in the abstract make sense only as an extreme option, an open acknowledgment that defaulting borrowers suffer from fundamental governance problems. If the borrowers were fundamentally healthy but were simply facing short-term liquidity problems (due to a business downturn, an accidental disruption of production, etc.), the far easier option for the lender would simply entail a temporary suspension of the loan’s terms. Lenders seek simply to recover their investments and minimize their risks. Particularly given the high transaction costs involved, they have no intrinsic interest in taking over the management of their borrowers. Similarly, given the low likelihood of seeing any returns in the event of a bankruptcy, they face little incentive to pursue that ultimate option.

In that context, a debt-equity swap becomes a next-to-last-resort option, just one step short of using the courts to force the borrower into immediate liquidation (Zhou 1999). Of course, the swap represents an acknowledgment that the borrower—as currently configured, whether physically or managerially—is not capable of meeting its financial obligations. By definition, therefore, the swap can represent only an initial enabling step,
one that accords the lender enough control to initiate the radical changes needed to begin the loan recovery process. For the swap to be successful, therefore, it must be followed by one or more of the following measures with respect to the borrower: managerial change, restructuring of the firm’s physical operations, merger, partial sell-off, or should all else fail, complete liquidation. The clear point is that the swap itself—the conversion from debt to equity financing—does not address the reasons for the borrower’s default. It simply grants the former lender—now owner—power to address those reasons. In so doing, it represents an acknowledgment that the borrower is incapable of healing itself.

The second point is that historically, debt resolution—when pursued on a systemic basis—tends always to be more costly than initially anticipated (Sheng 1996). Returns tend to be low, and full recovery, whether through a debt-equity swap or any other mechanism, rarely is achieved. That debt resolution incurs significant costs is a given. In all reality, resolution mechanisms, therefore, are effective only to the extent they reduce such costs rather than eliminate them entirely.

On a third and related point, the historical experience of debt resolution suggests that the longer painful restructuring efforts are postponed, the greater the overall costs of restructuring tend to be. As has frequently happened, including in the United States Savings & Loan Crisis, the agents of restructuring frequently begin the process without adequately comprehending the ultimate costs. As those costs become increasingly apparent, the initial reaction is often to postpone or slow the restructuring effort in the hope that the prices offered for assets in the future will be higher than at present. Unfortunately, the hope rarely pans out. Buyers generally understand inventory and price accordingly. Hence, the value of assets held in inventory is unlikely to skyrocket in the future. Furthermore, assets held in inventory accumulate maintenance and servicing costs, costs that must be born by the restructuring agent. Finally, if those assets are essentially enterprises that are allowed to continue operations while in a state of default, the very moral hazard problems that contributed to default in the first place are likely to deepen. The point is that the longer the process is drawn out, the higher the costs will be. If the costs appear excessively burdensome today, they are likely only to grow more burdensome in the future.

**China’s Debt-Equity Swaps in Practice**

As noted in the introduction, the macro-data on China’s debt-equity swaps have been less than impressive. Though over 600 SOEs have undergone the conversion process, and though over RMB 1,400 billion in non-performing debt has been transferred from banks to asset management companies, the resolution process has been extremely slow and the

---

2. For similar conclusions with respect to the U.S. Savings & Loan crisis, see Seidman 1993; White 1991; and U.S. House 1995.
3. For a rich discussion, see Seidman 1993.
rate of recovery low. The overall pattern becomes somewhat clearer upon examination of specific cases at the grass roots level. Since 1999, several high-profile debt-equity swaps have been described in the Chinese press, but rather than rehash those politically charged models, the following discussion will focus on a more run-of-the-mill enterprise, a firm the author has had the opportunity to observe in depth over the past two years.

The firm in question, Central China Non-Ferrous Metals (CCNFM), is notable as much for its ordinariness as anything else. Built during the late 1960s and located far from coastal areas, Central China Non-Ferrous Metals shares the legacy of many Third Front enterprises. With just under 9,500 employees, the firm is by Chinese standards an average-size medium-to-large SOE, by no means outstanding in terms of its size, employment levels, tax contributions, or political clout.

Like many similar firms, CCNFM is located in a rural area outside a major metropolitan center. The firm is at once a series of production facilities and a self-standing company town, with worker housing, schools, a 400-bed hospital, and a police force. Despite policy efforts nationally to transfer social welfare and public goods provision away from the firm and back to the state, CCNFM has witnessed little progress on this front.

CCNFM, like many similar heavy industrial firms, has displayed extremely poor financial performance through much of the reform era. While output and sales have increased steadily in recent times, the firm has been a loss-maker every year for the past decade. According to official state figures, CCNFM in 1998 lost RMB 85.51 million on total sales of RMB 1.1 billion (Zhongguo jinshu gongye 1999, 149). The firm that year produced 75,600 tons of output, a 15.1 percent increase from the previous year. In 1997 CCNFM produced 65,700 tons of output (a 27.8 percent year-on-year increase), with gross revenues of RMB 1.08 billion. Net losses for the year were RMB 192.4 million (Zhongguo jinshu gongye 1998, 142).

With liabilities amounting to 102 percent of assets in early 2000, the firm by its own estimates was insolvent. The bulk of these liabilities pertained to credits, now classified as non-performing, extended from 1987 to 1995 by two of China’s four major state banks, the Industrial and Commercial Bank of China (ICBC) and the Construction Bank of China (CBC). Most of this lending, with interest rates varying between 10 and 18 percent, was related to an extensive technical upgrading and expansion program pursued by CCNFM’s then-manager, an individual who retired in 1998.


5. The actual name of this firm has been concealed, given the sensitivity of information provided by respondents.

6. CCNFM originally produced aluminum for the military aircraft industry but, in the process of defense conversion, has shifted to producing material for the air conditioner and construction industries.


Again, the situation is fairly typical among loss-makers in state industry. During the boom period of the early 1990s, managers aggressively borrowed to finance upgrading and expansion.\textsuperscript{11} After all, given inflationary conditions, real interest rates were frequently negligible or even negative, and banks were more than willing to lend to state firms. In such heady times of growth, there was neither reason nor incentive to develop an understanding of financial risk or liability. Managers scrambled for loans and, upon receiving those loans, scrambled to sink those loans into physical upgrading and expansion. Meanwhile, the relationship between the cost of capital and likely returns on investment was rarely considered—that is, until bank non-performing loans became a major national issue after the Asian financial crisis. What had been going on for years—the inability of firms like CCNFM to service their debts, the continual rolling-over of old debts, and the tendency of these firms to rely exclusively on new borrowing to finance working capital needs—now became a major issue to be addressed. It is in that context, that debt-equity swaps emerged as the policy option of choice.

When the program of debt-equity conversion was announced, firms like CCNFM—not to mention their local governmental sponsors—were more than eager to participate.\textsuperscript{12} CCNFM, with the support of its parent China National Non-Ferrous Metals Company (the former governmental non-ferrous metals bureau) and the provincial government, applied to the central government’s State Economic and Trade Commission (Jingmaowei) to be considered for debt conversion. Once CCNFM was granted eligibility, its name was passed on to its two major creditors, the CBC and ICBC. Those two banks, in turn, negotiated with their respective affiliated AMCs—in this case, Cinda and Huarong—to determine the details of the swap.

As noted earlier, CCNFM entered the debt conversion process with a liability to asset ratio of 102 percent. Subsequently, the CBC agreed to sell off all RMB 1.2 billion of its CCNFM loans to its affiliated asset management company, Cinda.\textsuperscript{13} After purchasing those non-performing loans at par through the issuance of bonds to the CBC, Cinda then converted the debts—again on a one-to-one basis—into an approximately 40 percent ownership stake in CCNFM. Similarly, the ICBC agreed to sell off RMB 1.6 billion of CCNFM’s loans (only a portion of the ICBC’s total loans to CCNFM) to its affiliated asset management company, Huarong. Huarong, just as Cinda had done, converted those debts at par into an equity position in CCNFM, this time amounting to just under 50 percent ownership. The remaining 11 percent ownership position was retained by CCNFM’s parent corporation, the China National Non-Ferrous Metals Group. As is typical now in

\textsuperscript{11} See Steinfeld 1998.
\textsuperscript{12} Through 1999 and 2000, SOE managers and local governmental officials were filling the corridors of the SETC and AMC headquarters in Beijing, all trying to lobby for permission to commence debt conversion. Interviews, Beijing 1999, Beijing 2000.
\textsuperscript{13} Details of swap from interviews with firm-level management and officials from the branch offices of the AMCs, Chongqing.
Chinese debt-equity swaps, a minority position is retained by the “parent” corporation, a former industrial ministry or bureau that has been reconstituted as a commercial entity.\(^{14}\)

**The Results**

As noted previously, debt-equity swaps make sense only to the extent that they fundamentally change the governance situation in defaulting borrowers. Yet, particularly noteworthy in the CCNFM case—and that of every other swap that this author has observed—is the extent to which governance remains utterly unchanged even after debt-equity conversion. Technically, new owners have been brought in, but in reality, they do not have the power to hire and fire enterprise management.\(^{15}\) At the same time, as will be discussed subsequently, the new owners have no real interest in getting involved in the firm’s managerial or operational affairs.

Managerial appointments at SOEs like CCNFM are still handled as bureaucratic appointments. The municipal party committee generally has control over these matters, and then pro forma approvals are provided by the national industrial bureaus. The point, however, is not that CCNFM managers are simply political appointees. The current general manager of Central China Non-Ferrous Metals, a dynamic, college-educated, and frank man in his forties, was previously the general manager of an aluminum smelter in Northeast China. In part because CCNFM was more technologically advanced and had better growth prospects than his employer in the Northeast, the general manager elected on his own to apply for the position in central China. The transfer ultimately had to be worked out between the municipal governments on both ends. CCNFM insiders and local representatives of the AMC owners agree that this system of state appointments remains unchanged.\(^{16}\)

What is certainly acknowledged by everyone involved with CCNFM is that the AMCs have nothing to do with the day to day management of their newly acquired firm. Nowhere to be found on-site at CCNFM, the AMCs at best have an arm’s length relationship with the newly acquired firm. CCNFM managers joke that these financial organizations do not know the first thing about aluminum and have no interest in getting involved in management, a characterization that AMC representatives readily support. Of course, for modern companies in general, it may be too much to expect that owners would inter-

\(^{14}\) The “commercialization” of these bureaus relates to governmental downsizing efforts, as well as efforts to separate combined enterprise management and regulatory roles of industrial ministries. Converting the ministry into a corporation, however, does not necessarily solve the problem, particularly when these new corporations either retain regulatory functions or close ties to governmental regulators. A more high-profile example of a commercialized former ministry is the China National Petroleum Corporation.

\(^{15}\) Firm management and asset manager owners agree on this point. Interviews, Chongqing, 2000.

\(^{16}\) Interviews, Chongqing, 2000. Officials in the Beijing headquarters of various AMCs contest this point, though the reality on the ground seems to be that the appointments situation remains unchanged. Interviews, Beijing, 1999.
vene extensively in the affairs of professional managers. Yet, we are referring here to an extremely distressed enterprise that has just been rescued from financial collapse. It is odd, therefore, that new owners would take such a passive stance toward the existing management team. Indeed, local representatives of one of CCNFM’s major AMC owners stated that their role, rather than to intervene in management, is basically just to serve a custodial function on behalf of the Ministry of Finance. In other words, rather than acting as direct owners, they simply represent the state in a state-owned enterprise.

On this score, another aspect of governance that remains unchanged is the inability of outsiders to gain control of the corporate board. Interestingly, even insiders cannot gain control. While Huarong occupies four of the nine board seats, and Cinda three, the state—in apparent violation of the 1993 Enterprise Law—has not permitted either of them to control the chairmanship. Debt conversion cases are treated as “special situations” in which the state retains the power to appoint the board chairman. As explained by CCNFM’s asset manager owners, the idea is that the government will retain control over the corporate board (regardless of the distribution of equity stakes), while the AMCs will exert influence primarily through the firm’s jianshehui, an advisory board. The problem with this is that the advisory board exerts power only by reporting upward through the state bureaucracy should it feel that something is wrong or that vital interests are being violated. Again, this relegates the AMCs—the major equity holders in the firm—to the role not so much of owners, but rather of state auditors at best. They can report upward, but it is almost inconceivable to imagine them firing a manager, consolidating operations, or transferring ownership.

In large part because governance remains unchanged, physical restructuring of the enterprise continually gets postponed. Senior officials in the Beijing headquarters of AMCs occasionally outline the various means by which SOE assets can be sold off, liquidated, or otherwise transferred. The reality on the ground, however, seems to be that the local AMC representatives who actually implement debt-equity swaps have neither the power nor the inclination to touch the SOE assets over which they have nominal ownership rights. China’s asset management companies all have ten-year charters, upon the expiration of which they are to be dissolved. The problem is that exit possibilities for AMCs are both vague and severely limited. There is much discussion of post-swap, revitalized enterprises’ or their parent companies’ going public through initial public offerings and then using the proceeds to buy back equity stakes from the AMCs. Among the conceptual architects of debt-equity swaps, there was also talk of allowing AMC owners to sell off pieces of firms, engage in auctions, or even complete liquidations. On the ground, though, asset managers do not generally feel their role is to physically restructure, let alone utterly dismember, a state-owned enterprise. In the case of CCNFM, none of the

18. Though it is unclear who would buy these shares and at one price.
new owners has any intention—at least in the near term—of reshaping the boundaries of that enterprise or the scope of its operations.

On a similar score, an additional aspect of CCNFM that remains unchanged is the problem of surplus labor. For several years now, CCNFM has been attempting to shed workers by any means possible. With a workforce of just under 10,000 individuals today, the firm has been struggling for years to pare down employment. In 1998, CCNFM was able to achieve a net decrease of 855 employees, while an additional 457 were furloughed (Zhongguo jinshu gongye 1999, 150). In the previous year, approximately 1,000 workers were furloughed. The process, by all estimates, is slow and requires the cooperation and approval of municipal authorities. In addition, few if any provisions exist for paring down mid-level management positions. As the general manager of CCNFM freely admits, getting rid of excess employees is his must frustrating challenge. While the numbers have slowly come down, the basic reality—at least in the manager’s opinion—is that CCNFM needs no more than 600–700 employees. Given the rate of employment reduction, the firm will not reach those levels for years to come. Unfortunately, nothing in the debt-equity restructuring arrangement addresses this fundamental problem. Just as owners have little power to liquidate or transfer assets, they have equally little power to scale back employment.

Meanwhile, though little has changed in the operations of the formerly defaulting enterprise, the one issue that receives tremendous attention—and acclaim—is the immediate effect of debt-equity conversion on the firm’s finances. In the case of CCNFM, some RMB 2.8 billion in debt was suddenly eliminated from the balance sheet, and all the related debt-servicing costs disappeared from the profit and loss statement. The asset-liability ratio that had just months earlier stood at 102 percent suddenly fell to a far more comfortable 48 percent. All the pressure to service unceasing interest payments—more often than not through increased borrowing and ever-expanding sales of low end, low quality, and low margin products—suddenly eased. The firm, as many participants in the swap pointed out, would likely be able to do in the immediate future exactly what commercially oriented firms are supposed to do, show a profit (Municipal Officials 2000)! Moreover, local branches of the major state banks were lining up to extend new loans to the revitalized enterprise, a phenomenon not uncommon for firms that have undergone debt-equity conversion in China. Meanwhile, now that the firm enjoys profitability and

21. This phenomenon was clearly evident in Chongqing. Even at the central headquarters of AMCs in Beijing, senior officials note that banks would—indeed should—lend to firms that have undergone debt-equity swaps. In part, banks want to lend because the relevant firms have undergone a governmental vetting process, thus receiving the imprimatur of the state. Second, since the liability to asset ratios of these firms meet nationally determined lending standards, banks consider the loan safe. Lastly, and perhaps more honestly, some officials acknowledge that because AMCs have such large financial obligations to the banks, banks over the near term do not want to have the firms controlled by AMCs run into cash-flow problems.
renewed access to credit, AMC owners—at least in the near term—face no pressure to pursue additional restructuring. Here again we witness the interconnectedness between two distinct factors that impinge on the restructuring outcome: new owners lack power to effect change, and at the same time, primarily because of pricing issues surrounding the acquisition of assets, new owners lack any incentive to promote change.

**EXPLAINING THE OUTCOMES**

A number of factors have contributed to the disappointing performance of China’s debt-equity swap program, not least of which are those clearly involving “governmental failure.” The clearest examples on that score involve the rules for vetting eligible firms and the terms by which AMCs had to acquire non-performing bank assets.

**The Selection Issue**

With regard to vetting, the decision of which defaulting borrowers should be subject to equity conversion should be made by the lender and associated asset management company. After all, they are in the best position to determine the borrower’s condition, and it is their capital that is ultimately at risk. Moreover, to the extent that the decision is theirs and theirs only, they will face no external obstacles to employing whatever subsequent restructuring methods they choose.

Unfortunately, from the very inception of the swap program, the central State Economic and Trade Commission (SETC, Jingmaowei) inserted itself in the vetting process. As overseer of the program, the SETC must grant initial approval for any firm seeking to participate in a swap. Even worse than the mere fact of governmental involvement, though, are the utterly inappropriate vetting standards set by the commission. Again in the abstract, debt-equity swaps should be reserved as a last-ditch option, applied to cases in which drastic restructuring holds out the only hope for even minimal loan recovery. Yet, the SETC has established standards that select only what are deemed to be the “best” firms for swaps, firms with “exceptional” management teams, advanced technologies, competitive products, and so on. If these firms are so exceptional, they should have simply renegotiated the terms of their outstanding loans with the banks rather than undergoing debt-equity swaps. If these firms are in reality not so exceptional (which is actually the case for many of the defaulting borrowers concerned), they have just been anointed with a mark of approval from the state, making it all the more difficult for new equity holders to fire managers, sell off assets, or otherwise restructure the enterprise. The basic issue is that the SETC’s stipulations, no matter how well intentioned, undercut the power of new enterprise owners and stand directly in the way of real restructuring.
Consistent with the government failure perspective, the SETC’s intervention stemmed in part from two circumstances. The first involved Premier Zhu Rongji’s public commitment in 1998 to “resolve the difficulties” (jie kun) of SOEs within three years.\(^{22}\) Of course, what actually constituted “resolution” was never clearly defined. Nonetheless, as the SETC moved into position as lead agency for enterprise restructuring, it was determined to meet Zhu’s mandate. In this light, debt-equity swaps become immediately appealing. After all, in pure accounting terms, they could in one fell swoop convert a loss-maker into a profit-maker, and thus meet Zhu’s accelerated timetable for achieving results. What unfortunately does not change are the fundamental conditions that pushed the enterprise toward value-destroying behavior in the first place. In that sense, though the letter of Zhu’s commitment is honored, nothing at all is truly resolved.

The second factor, ironically, stemmed from the SETC’s fear that debt-equity swaps would be used by local governments to grant debt amnesty to favored firms. Of course, in reality, the SETC’s own vetting mechanisms encouraged debt amnesty, but the agency was determined to maintain control over the process. Viewed in a somewhat more generous light, there was a clear concern—one that in a sense proved true—that thousands upon thousands of firms and their associated patrons would seek debt relief. The SETC’s concern, again partly legitimate, was that banks themselves, if left to do the vetting, would be unable to withstand pressure from various outside bureaucratic stakeholders in borrower enterprises. The conclusion, therefore, was to plant the central agency squarely in the middle of the selection process. In the end, measures to counter governmental failure simply exacerbated such failures.

**Rules for Debt Conversion**

The terms by which bad loans were acquired from banks by AMCs also involved complicated negotiations between numerous governmental agencies, not least of which were the SETC and Ministry of Finance. Ultimately, the determination was made that AMCs could purchase bad loans only at par, with payment to the banks made via the issuance of 10-year bonds yielding an annual coupon of 2.25 percent.

Again, the drawbacks are obvious. In the near term, as Jack Langlois points out, things look good. The banks have sold an asset worth less than par for par.\(^{23}\) The AMCs, at least initially, can make the coupon payments from an initial capitalization provided by the Ministry of Finance. The ministry is satisfied because it can now tax the profit made by banks on the debt-equity conversion, as well as the profits now declared by enterprise borrowers formerly in default.

The question is, to the extent that we believe full recovery on bad bank assets is impossible (in other words, to the extent we believe China will follow every other his-

---

22. Zhu on numerous occasions later insisted that the promise extended only to large-scale SOEs.
torical example to date), how will the shortfall between what the AMCs paid for NPLs and the actual value of those NPLs be made up? How in ten years will AMCs be able to pay back the bonds they have issued? What will happen to those assets now held by banks (and in the short term yielding 2.25 percent annual returns) when they too prove to be non-performing?

By prohibiting banks from discounting NPLs, and by prohibiting banks from selling AMC-issued bonds on secondary markets, the government has utterly skewed the incentive structure for all parties concerned. Charged with achieving full-recovery on bad bank assets (plus interest), AMCs are put in a no-win situation. The pursuit of real restructuring will inevitably incur costs, costs that cut against the government mandate for full recovery. Hence, AMCs either simply stand to the side in the hope that asset prices will rise miraculously in the future or try to unload these already overvalued assets on new buyers, primarily through enterprise stock listings. As noted earlier, however, markets for the most part understand inventories. Which third parties would possibly purchase these assets at par? How possibly could prices be expected to rise in the future?

Meanwhile, bankers understand that they have traded currently non-performing assets (bad loans) for assets likely to become non-performing in the future (AMC bonds). Hence, conditions have been created for deepening patterns of moral hazard. With balance sheets either explicitly or implicitly awash in red ink, and with low levels of paid-in capital, banks can hardly be expected to engage in effective risk management. Moreover, given that they depend over the near term on the cash flow from AMC bonds, banks face a perverse incentive to extend working capital loans to very firms that have undergone debt-equity swaps. That is, enterprises that have only recently defaulted on prior loans jump to the head of the queue for new loans. Whether any of these firms can be transformed into good investment opportunities is an open question—some probably can; many others probably cannot. Yet, that they become viewed as good credit risks even though they remain completely unchanged managerially, organizationally, and physically suggests deeply distorted incentives all around.

Obviously, the potential efficacy of China’s debt-equity swaps was undercut from the start by administrative mistakes. Nonetheless, what often escapes notice is the degree to which many of the most problematic outcomes stem from as much “market failure” on the part of grass-roots economic actors as “government failure” on the part of state officials. The market failure side of the story manifests itself in a number of ways. Moreover, the types of market failure that we witness in China are virtually identical to the phenomena observable in virtually every case of widespread financial distress in capitalist systems. The point is that while the failure of China’s dept-equity swap program could have perhaps been predictable, it would be inaccurate to accord blame entirely to bad public policy. Similarly, it would be equally wrong to expect success if the government were to have retreated entirely and, in effect, left it up to the markets to decide.
Inflated Estimates of Asset Value and the Belief That “Insiders Know Best”

As is typical in situations of financial distress, the holders of non-performing assets often prove to be the poorest judge of the value of those assets. Governmental policy in the Chinese case—namely, the focus on ensuring control over managerial appointments—undoubtedly hampered restructuring efforts by AMCs. That said, in this author’s experience at the grass-roots level, asset managers—regardless of the fact of their limited control rights—expressed little desire to exercise control at all. In other words, asset managers routinely assumed that the enterprises they acquired had significant intrinsic worth, worth that the markets at present were not adequately honoring. The basic premise seemed to be first, that insiders were the best judge of asset values, and second, that outsiders—namely potential buyers in the marketplace—would come around ultimately. What that meant in reality was that the price realizable today was always understood as being inferior to the potentially greater price realizable tomorrow. AMC managers, in effect, ended up simply performing a custodial function, waiting for markets to catch up.

The assumptions on the part of AMC managers were girded by the profitability turnarounds experienced by the firms over which they gained control. Objectively, those turnarounds were due to simple accounting exercises. Yet, they fed into the already extent belief that the firms involved had great intrinsic value—in essence, that substantial restructuring was not needed. Often, this belief was expressed despite the evidence to the contrary provided by true outsiders. In the case of CCNFM, a French concern had expressed interest in purchasing the firm’s main aluminum operations but was willing to employ less than a tenth of the current workforce. The implication, of course, was that some of the firm’s assets had value, but much of the workforce and virtually all of the ancillary operations would have to be shed (presumably at a loss to the current AMC owners). Asset managers, however, while acknowledging the labor problem, dismissed this assessment as overly pessimistic. In effect, they felt the price being offered today was too low. The ease with which that outside offer was rejected was only bolstered by the view that insiders are always the best judges of value.

Similarly, in many cases, AMC officials routinely complain that buyers simply do not exist for the assets in question. Whether buyers exist is hardly the issue. The issue is price. At an appropriate price, buyers will most definitely appear. The problem is that the

24. For historical examples, see Sheng 1996 and Kindleberger 1996.
25. Because the AMCs were required to purchase assets at par (an essentially inflated book value), any subsequent market-based offer for these assets would, of course, be viewed as a discounted price. An interesting test of the power of “insiders know best” principles would be to examine AMC behavior under different pricing conditions. That said, the pricing conditions themselves reflected an “insiders know best” attitude—state policy makers assumed an inherent value in troubled SOEs and set the price at which AMCs acquired assets accordingly.
price expected by AMC officials far exceeds the price as currently determined by markets. Yet, the longer they wait for markets to catch up, the greater the carrying costs that asset managers incur. Moreover, the longer assets remain in a setting characterized by moral hazard and poor governance, the more likely the value of those assets will be further destroyed.

Frankly, it should come as no surprise that asset managers—or bankers, or enterprise officials, for that matter—overestimate asset values and resist restructuring over the near term. That is exactly what occurred initially in the American Savings & Loan Crisis and what has occurred in numerous instances of financial system distress historically. It would be illusory to expect those who have purchased assets at full value—whether banks or other intermediaries—willingly to unload those assets at substantial loss. Instead, as market actors subject to moral hazard and adverse selection, such intermediaries can be expected to do what they have always done historically—throw good money after bad in the hope that ultimately, losses could be avoided.

The point is that successful resolution occurs only when those interested parties are removed from the picture entirely or substantially constrained by regulatory policy. When bad loans have accumulated in the financial system, the system does not naturally and smoothly right itself through market measures. The incentives that bear down on those that have either accumulated or currently hold the distressed assets are simply too skewed to allow for such an outcome.

**Issues of Credit Culture**

Along similar lines, that state banks continue to pump loans into SOEs—especially the very SOEs that defaulted on loans and had to undergo equity conversion—cannot simply be blamed on failed public policy. Regardless of the quality of regulatory policy, China—like many emerging market economies—suffers all the problems associated with a nascent and still-evolving credit culture.

On the lender side, banks have had precious little time to develop the basic underpinnings of effective commercial operations, namely, proper credit risk analysis and effective portfolio management. Not surprisingly, bankers—like bankers everywhere—prefer to lend to traditional customers, the customers with whom they are familiar (customers whose operations are familiar to them—and thus can be more easily assessed in terms of credit risk—and customers more broadly who can be “trusted”).

The preference is then exacerbated by the fact that the traditional borrowers, either directly or indirectly, still hold significant liabilities owed to the banks. Should the borrowers fail in the near term, so, too, would the banks, at least on paper. That reality simply increases the incentives for bankers on their own volition to keep infusing the borrowers with funds.
Of course, bad public policy feeds into the situation. To the extent that the Ministry of Finance taxes excessively or the SETC limits options for restructuring, bankers will face fewer incentives to engage in value-creating activities and increasing incentives simply to maintain the status quo.

On the borrower side, there is also plenty of blame to be apportioned, some of it well beyond the state sector. In other words, the private sector hardly remains immune from this prevailing credit culture. That Chinese banks still loan primarily to SOEs is often interpreted as evidence of direct government mandate or banker bias, the implication either way being that banks remain essentially handmaidens of the state. The unfortunate reality, however, is that most Chinese private firms are not organized in such a way as to make them reasonable loan candidates. For a variety of reasons, most Chinese private firms keep their financial structure intentionally opaque and often do not have audited, reliable financial statement (IFC 2000, 33). While this lack of transparency allows the firms to accommodate market and regulatory uncertainties, it does not set them up to be prime borrowers. Chinese bankers are right to point out that the private sector, as currently constituted, offers relatively few opportunities for commercially sound debt financing. Bankers instead queue for the few “safe” opportunities, mostly those involving the nation’s largest, best-known firms.

Whether with regard to public or private borrowers, the Chinese economy, like many emerging systems suffering from inadequate regulation and poor information flows, in some respects exhibits behavior typical of “non-payment” systems (Pinto, Drebentsov, and Morozov 1999). Heavily indebted borrowers, believing the costs of reneging on their financial obligations to be minimal, slide into habitual patterns of default. As creditors who try to counter such behavior in the Chinese system complain, “You sue, but the court won’t accept your case; the court accepts your case but won’t begin the trial; the court begins the trial but won’t issue a judgment; the court issues a judgment but then doesn’t enforce it“ (qi gao bu shou li, shou li bu kai ting, kai ting bu xuan pan, xuan pan bu zhi xing) (Zhou 1999, 6). In such an environment, it is no wonder that non-payment proliferates. Well-managed firms, seeing their troubled competitors casually defaulting on loans, begin to wonder why they should pay. Firms borrow and extend credit haphazardly. Entrepreneurs seek connections to enforce contracts, but at the same time build impenetrably complex corporate organizations to stay one step ahead of their own contractual obligations.

Again, of course, much of this behavior has stemmed from problematic public policy and ill-advised governmental interventions in economic affairs. Nonetheless, it would be illusory to assume that the situation would simply right itself if exposed to “market forces” or, similarly, that such situations are not themselves completely characteristic of the operations of many market systems historically.
CONCLUSIONS

The situation surrounding Chinese financial restructuring is undoubtedly complex, involving intricate combinations of government and market failure. As in any instance of system-wide financial distress, ill-advised regulatory policies, ineffective governmental oversight, and financially troubled economic actors have combined to create ever-deepening patterns of moral hazard and adverse selection. In the process, the efficiency of financial allocation inevitably suffers. None of that should be surprising to us historically or analytically.

Yet, this is precisely what goes unnoticed so often in discussions of China’s particular predicament. Perhaps because of its socialist past, China—for better or worse—continually gets viewed through the lens of the unique analytical category of post-socialist transition. Problems inevitably get chalked up to the excesses of governmental intervention and the absence of markets. As the experience of China’s debt-equity swaps suggests, however, the system—for all its socialist past, and for all its instances of poorly-conceived public policy—bears many of the pathologies we have under other circumstances always associated with standard (albeit deeply troubled) market systems. In other words, because China’s financial system has failed to be commercially successful, we frequently jump to the conclusion that it is not a market system at all. The normative implication is that if only the system were freed up and marketized, efficiency of allocation would improve.

An alternative view—one to some extent borne out by the intricacies of the debt-equity swap failure—would suggest that for all its commercial failings, the Chinese system is essentially commercial in nature. At the very least, we need to draw a clear distinction between the systemic categorization “commercial” and the evaluative notion of “commercially successful.” The Chinese financial system’s key actors—lenders and borrowers—behave like standard market actors under conditions of extreme moral hazard and adverse selection, not to mention poor public policy.

Of more than mere semantic import, that distinction carries with it certain normative qualities. At the very least, it spreads blame for failures somewhat beyond the government and the public sector. It calls for greater skepticism regarding the ability of mere privatization and deregulation—state retreat, essentially—to solve current problems of allocation. Finally, while extremely critical of current interventionist policy, it urges for skepticism regarding simple distinctions between intervention and non-intervention. Governmental failure no doubt plagues China’s financial system. So too, however, does market failure. The amelioration of the latter will not happen spontaneously through the actions of grass-roots actors. In many respects, they are as much part of the problem as the solution. The solution, for better or worse, must come from the public sector, and
from public policies that must prove more innovative than they have in the past. The real question is not whether the Chinese state has the willingness to retreat, but rather whether it has the capacity to govern.

REFERENCES


Pinto, Brian; Vladimir Drebentsov; and Alexander Morozov. 1999. “Dismantling Russia’s Non-payments System: Creating Conditions for Growth.” World Bank. Excerpted in *Transition* 10, no. 6 (Dec.).


A Likely New Phase in China’s Economic Growth

From the vantage of 2003, China appears to have entered into a slower growth phase beginning in 1997. The first symptom is that the annual GDP growth rates from 1997 onward are below the average annual growth rate in the period since China embarked on its transition to a market economy. GDP grew an annual average of 9.5 percent in the 1978–2002 period, with the GDP growth rate dropping from 9.6 percent in 1996 to 8.8 percent in 1997, and then not exceeding 8 percent during 1998–2002. GDP growth is expected to be 7 percent in 2003 (Citigroup 2003b; Deutsche Bank 2003). The second symptom of a lower trend growth rate in the post-1996 period is the appearance and persistence of deflation. Retail price inflation fell from 6 percent in 1996 to 0.8 percent in 1997 and then was negative in the 1998–2002 period.

The growth slowdown from 1997 onward is the product of at least four factors. Two factors can be classified as temporary in nature: the austere macroeconomic program that was implemented from 1994 to mid-1998, and the negative export shock first from the Asian Financial Crisis of 1997–98 and then from the global cyclical downturn that commenced in 2001. The other two factors contributing to the lower growth rates appear to be more durable in nature: the continued rise in the private savings rate, which reached 40 percent in 2002 from about 30 percent in the early 1980s, and the stagnation (if not decline) of the rural industrial economy since 1997. The third factor, the phenomenon of a secularly rising savings rate, is popularly known as the “paradox of thrift.”

We will attempt in this chapter to contribute to the analysis of the post-1996 slowdown by examining the attenuated dynamism in the rural industrial sector, commonly referred to as the township-village enterprise (TVE) sector. Within that subtopic,
we focus on how the paucity and declining amount of formal financial intermediation in the rural areas has helped to sap the vitality of the TVE sector. We propose the hypothesis that the rising savings rate in the rural area is at least partly the result of inadequate financial intermediation in the rural area. This means that an improvement in rural financial intermediation will help to alleviate both the “paradox of thrift” problem and the “anemic TVE sector” problem.

THE SLOWING DOWN OF AN IMPORTANT ENGINE OF GROWTH

Up to the middle of the 1990s, the rural sector provided the main economic mechanisms to translate China’s market reforms and economic opening into higher output growth. The decollectivization of agriculture made that sector a bigger engine of growth than the state-dominated industrial sector in the 1979–83 period. Just as the one-time productivity gains from decollectivization were nearing exhaustion in 1984, a significant easing of restrictions on entry by non-state enterprises into the industrial sector allowed the emergence of a new engine of growth in China’s countryside—the township and village enterprises (TVEs).

The original policy of allowing diversification in the ownership of industrial enterprises was designed to prevent capitalist enterprises from taking over what Lenin called the “commanding heights of the economy.” In theory, non-state enterprises employing more than seven non-family employees had to be owned by the local community collectively, and those that had up to seven non-family employees could be registered as individually owned. So the term TVE originally applied only to collectively owned enterprises.

However, over time, with growing differences across localities in the registration requirements of TVEs, in the management of operations, and in supervision by local authorities, different species of TVEs appeared. By the end of the 1980s, some regions even differentiated between collective TVEs and non-collective TVEs, making it clear that the term TVE was not an analytic statement that connoted public ownership. Reading the literature on TVE ownership can be akin to listening to descriptions of an elephant from the three blind men of Hindustan who had each touched a different part of the beast.

Official statistics have increasingly referred to all rural enterprises as TVEs, and we have adopted this convention in this chapter. To prevent possible confusion, we should discuss the official nomenclature used for statistical categories. In data on output by ownership type, it is common for the ownership universe to be encompassed by (1) state-owned enterprises (SOEs), (2) collective-owned enterprises (COEs) (with a rural

2. Marx had stated (casually) that seven workers was the cutoff between a family workshop and a capitalist enterprise.
subcategory), (3) individual-owned enterprises (IOEs) (with a rural subcategory), and (4) enterprises with other ownership forms. These terms were coined in the mid-1980s when almost all rural enterprises fell within the rural subcategories of collective-owned and individual-owned.

So in our usage, the sum of rural COEs and rural IOEs is TVEs; and there are two types of TVEs, collective and non-collective. Since 1993, collective TVEs in many areas have implemented insider privatization to convert themselves into shareholding cooperatives. It appears that the statistical reporting system has continued to put rural enterprises under the two rural subcategories. Many times, however, the official statistics present data only under the headings of “collective-owned” (COEs) and “individual-owned” (IOEs). In these situations, we will use the data for these two categories to proxy for their rural components because, even up to today, the bulk of output from collective-owned and individual-owned enterprises are from the rural subcategory. The numbers will hence overstate the actual values of the rural enterprises, but the trend in the data is most probably correct.

The industrial sector has been the biggest contributor to growth in China since 1984. This feature is typical for a developing economy undergoing the industrialization process. Table 5.1 shows that by 1986, rural enterprises had contributed about as much as the state-owned enterprises (SOEs) to the growth rate of total industrial output. Rural enterprises have contributed more every year to the growth of industrial output than the SOEs since 1988. Recently, however, this rural engine of growth has shown signs of slowing down. In 1997–99, it contributed only 5.2 percentage points to the growth rate compared to 7.3 percentage points in 1984–88 and 13.0 percentage points in 1992–96. (We ignore the slow output growth in the 1989–91 period because it was caused by an unusually austere macroeconomic policy and by uncertainty over the future direction of economic policy.)

This slowdown in rural industrial growth was the result of a slowdown in the expansion of production capacity. Table 5.2 reports that there has been a secular decline in the investment of rural enterprises measured as a share of GDP. They invested an annual average of 8.5 percent of GDP in 1984–88, 7.8 percent in 1992–96, and 7.5 percent in 1997–99 and in 2001. What is unusual and could be of concern is that this stagnation, if not a secular slowdown, in rural fixed asset investment runs counter to the trend of overall investment spending. The national investment rate climbed from 31 percent of GDP in 1984–88 to 35 percent in 1992–99 and 1997–99, and then to 39 percent in 2001.

This slowdown in rural investment but acceleration in total investment is a country-wide phenomenon. Table 5.3 compares the average investment of TVEs and SOEs across provinces in the 1987–87 period with that in the 1998–99 period. TVEs in Beijing, Shanghai, and Tianjin, and in all the provinces in the coastal, central, and northeastern regions invested less in the second period. Omitting Tibet, TVEs invested less in 24 of the 30 provinces, SOEs invested less in 12 provinces, and total investment fell in only 7
provinces. The TVEs are clearly slowing down in their growth. Because the rural industrial sector has been an important engine of growth, it is important to understand the causes of its slowdown so that a decision can be made if a response by the government is desired, and if it is desired, what form the response should take.

There are many possible reasons why the slowdown in TVE growth has occurred. Perhaps the slowdown of TVE growth is the result of the general economic slowdown since 1994. The fact that export growth was low in 1998 and 1999 reinforced the general slowdown. Another possibility is that the TVE slowdown is the natural result of the increasingly porous nature of household registration. Employers can now set up factories in the cities and still obtain cheap labor from the illegal migrants. A third possibility is that the widespread reports of the arbitrary collection of fees from farmers by local officials apply also to the owners of the rural enterprises, who are certainly more lucrative targets. Lower investment is the outcome of this official predation.

There are many more possible reasons for the parlous state of the TVEs. Only a detailed empirical study can assess the relative contribution of each factor, and this is beyond the scope of this chapter. In the rest of this chapter, we will focus on how inadequate financial intermediation in the rural areas has discouraged investment.

**Motivation for Our Financial Sector Focus**

We focused on rural financial intermediation in order to understand the reason for the recent rise in the savings rates of urban and rural residents. Some observers have interpreted the rise in the savings rate to be a sign of general pessimism by the Chinese public. Their claim is that the urban workers are afraid of losing their jobs as a result of the forthcoming state enterprise reform. With the forthcoming cancellation of free housing, free medical care, and subsidized education, the workers are now saving more for the future. While this line of thinking may apply to urban residents, it is hard to see why it applies to the rural residents. This is because rural residents have little reason to fear losing their jobs in the state-enterprise sector because none of them are employed there. They do not have to fear losing free housing because they never had free housing. They do not have to fear losing their pensions and other subsidies because they never had them in the first place.

We suspect that one important factor for why the rural savings rate has increased is because the most dynamic industrial expansion in China since 1984 occurred in the rural areas. Since these non-state firms in the rural areas could not borrow from the banks, the only way they could establish themselves or expand their production capacity was through self-financing, which required the would-be entrepreneurs to save first. In the very first phase of rural industrialization, the amount of capital that was needed to start a factory workshop was very low. After sixteen years of rapid industrial growth, the Chinese countryside is now saturated with labor-intensive enterprises. Competition is very
fierce, and rural enterprises have to move up to the next level on the value-added production chain. This new generation of rural enterprises will be much more capital-intensive, thus requiring a much larger amount of startup investment.

Rural residents have responded to the higher capital requirements by increasing their savings rates. The rising rural savings rate reflected not pessimism about the future but optimism about the future. This phenomenon of investment-induced savings is not new. It had happened earlier in Taiwan. Up until the mid-1980s, all Taiwanese banks were state-owned. Every Taiwanese loan officer was personally responsible for any loan that went bad, and so every loan officer minimized lending to small and medium-size enterprises, and lent readily only to big business groups. During the 1960 to 1985 period, there was a steady rise in the savings rate in Taiwan.

We now turn to look at the formal financial system in rural China, and at the sources of investment funds available there.

**The Financial System in Rural China**

The Agricultural Bank of China (ABC) was established in 1955 to provide financial services to the rural sector and channel funds for the grain procurement purchases. Small-scale collectively owned rural credit cooperatives (RCCs, nongcun xindai hezuoshe) were started in the early 1950s, under the supervision of ABC, to be the primary financial institutions serving the rural areas. Although RCCs are independent accounting units owned by townships, or towns, or villages or by several villages jointly, they are, in practice, grass-root units of the ABC. RCCs operate an extensive network of branches, savings deposit offices, and credit stations in market towns and remote areas. The number of RCC units rose from 389,726 in 1981 to 421,582 in 1984 and then fell steadily to 365,492 in 1995. We want to highlight this decline in the number of RCC units after 1984 because this decline means decreases both in the effort to mobilize rural saving and in the access of the rural community to investment financing.

Table 5.4 outlines the changes in the operations of RCCs in the reform era. It shows three turning points that coincide with other changes in China’s economy. In 1978, RCCs lent only 27 percent of the deposits they collected in the rural area to finance rural economic activities. The first turning point was 1984 when the legal barriers against non-agricultural economic activities undertaken by farm households, and the establishment of rural enterprises were lowered, and the RCCs were allowed to make more loans in the

---

3. See Liu and Woo 1994 for theoretical discussion and empirical verification.
4. The number of RCC units is the number of RCCs plus the number of branches, savings deposit offices, and credit stations. The number of RCCs (i.e., institutions with independent accounting systems) rose from 55,044 in 1981 to 60,897 in 1988 and then declined to 50,219 in 1995. In 1995, RCCs accounted for 13 percent of deposits in all financial institutions, and 10 percent of all the loans made.
rural areas. RCCs’ loans to rural areas jumped from 34 percent of RCC deposits in 1983 to 57 percent in 1984. The proportion of RCC deposits going to rural loans increased every year in the 1984–88 period, reaching 65 percent in 1988.

The second turning point was 1989 when the incremental dismantling of discrimination against rural lending was suspended. It marked the beginning of a period of tight credit, reintroduction of some administrative curbs on investment spending, and uncertainty as to future state policies on economic reform and trade opening. The loan-deposit ratio of RCCs stayed at about 66 percent in the 1989–91 period. The third turning point was 1992, when economic deregulation accelerated after Deng Xiaoping’s inspection tour of southern China (nanxun) in early 1992 and enabled the loan-deposit ratio to continue increasing.

These three turning points produced distinctive economic responses. The suspension of reform in 1989 saw average annual investment (fixed capital formation) decline from 31 percent of GDP in 1984–88 to 27 percent in 1989–91, and the restarting of economic deregulation saw the RCCs’ loan-deposit ratio jump to 71 percent in 1992 and investment to rise to 35 percent of GDP in 1992–99.

It would be right to say that until the mid-1980s, the RCCs, by relending the bulk of their deposits to the ABC, serve primarily as tributaries by which rural savings were channeled to finance economic activities in the urban areas. RCCs still divert a significant proportion of their deposits to finance activities outside rural areas—27 percent of their deposits in 1995. The general fact is that non-SOEs face great difficulties in raising funds. The financial system is dominated by the state banks, and the state banks lend primarily to the SOEs. Access to bank loans by non-SOEs grows particularly bad during periods of tight credit. In 1989, ceilings were imposed on loans to rural enterprises, and working capital credits from banks to private enterprises were severely curtailed. (Banks gave virtually no fixed capital credits to private enterprises before then.) The result was that the number of private enterprises dropped from 225,000 in mid-1988 to 98,000 in early 1991.

Private and small collective enterprises have always paid higher interest rates in the informal credit markets. A 1992 field investigation reported that a fast-growing private electronic company paid an interest rate of 2.5 percent each month on its working capital; and its original start-up capital came from the savings of the partners and informal loans from friends. These informal credit markets, popularly referred to as “folk finance” (minjian rongzhi), appeared to have increased greatly in scope in recent years.

Given the heavy reliance by rural enterprises on non-formal investment financing, a new informal financial instrument called employee bond (jizi) has emerged as a significant source of funds. An employee bond is purchased by the new employee when she joins the enterprise, and it carries an interest rate at least equal to that of a time deposit

with the same maturity. Many non-SOEs also issue a hybrid equity-bond instrument, which, in addition to paying a fixed base rate, also pays a bonus rate—the size of which is contingent on the profitability of the enterprise. In many cases, especially with rural collectives, tax exemption turned out to be an important source of investment financing. Since many counties, towns, and villages have tax contracts with their superordinate levels that specify a fixed amount of taxes, they typically start exempting taxes once their tax quotas are reached, provided that the extra retained funds are invested. 6

**SOURCES OF INVESTMENT FUNDING FOR RURAL ENTERPRISES**

Table 5.5 tracks the financing of investments undertaken by enterprises of different ownership type. Part A focuses on where enterprises of each type of ownership obtained their investment funds by calculating the percent of investment that is funded by each financing source. Part B emphasizes the destination of the funds from each financing source by calculating the share of funds from each source received by enterprises of each ownership type. The definitions of the funding sources are as follows:

(a) *State budget*: This source finances primarily projects specified in the state investment plan. The funds come from (1) direct budget appropriations and (2) policy loans from state banks (that are, many times, backed by government deposits). The Chinese economic reforms have drastically reduced the scope of the state investment plan, and hence reduced “state budget” as a source of investment funding.

(b) *Domestic loans*: Until the early 1990s, domestic loans were largely loans from the state banks that were backed by the banks’ own funds and non-government deposits. Domestic loans also include investment loans from local governments and from finance companies.

(c) *Foreign investment*: Funds from (1) bonds and shares sold to foreigners (including Chinese from Taiwan, Hong Kong, and Macao)—who may hold the controlling shares—and (2) loans from international organizations that are managed or guaranteed by the government.

(d) *Self-raised funds*: These funds come mostly from (1) retained earnings, (2) bonds/shares sold to workers within the enterprises, and (3) the supervising agencies of the SOEs.

---

6. In my 1992 fieldtrip, one Chongqing firm raised RMB 3 million from *jizi* to acquire its RMB 14 million of fixed assets, and a Chengdu firm raised RMB 1.5 million from *jizi* for the required fixed asset investment of RMB 8 million; cases A39 and A34, respectively. One big Chengdu company was given tax concessions worth RMB 3.5 million a year to allow it to accumulate funds to double its present output; case A35.
(e) *Other funds*: This is more than a residual category. It also encompasses funds that are raised in the formal and informal bond and stock markets.

The withdrawal of the state from direct participation in the economy is mirrored in the decreasing share of the state budget in funding investment, from 13.8 percent in 1985–88 to 3.4 percent in 1992–96—see Part A of Table 5.5. The state is no longer collecting all earnings from the SOEs and then reallocating them back to the SOEs in the form of directed investment expenditure, it is now leaving the funds in the SOEs and letting them decide on the use of them. This is why the share of “self-raised funds” (mostly retained earnings) accounted for 39.4 percent of SOE investment in 1985–88 and 48.9 percent in 1992–96.

While Part A of Table 5.5 tells us that more of rural capital formation was covered by domestic loans (mostly bank loans) in 1992–96 than in 1985–88—17.2 percent and 13.4 percent, respectively—it is disconcerting to find out in Part B of Table 5.5 that the rural enterprises actually had slightly less access to domestic loans over time. TVEs received 17.63 percent of all domestic loans in 1985–88 but only 17.04 percent in 1992–96. Overall, the data in Table 5.5 suggest two immediate policy issues in the promotion of TVE growth. The first policy issue is that the 11 percentage-point decline in the SOE share of domestic loans in the 1985–96 period is much smaller than the more than 30 percentage-point drop in the SOE share of industrial output over the same period. The finding that the SOEs continue to have disproportionate access to domestic loans means that the SOEs are retarding the growth of the more efficient TVEs. The second policy issue is that despite the drop in the SOE share of total domestic loans, the rural sector’s share did not go up. The rural sector’s share averaged less than 18 percent in both the 1985–88 and 1992–96 periods. The loan share “released” by the SOEs went entirely to help finance the investments of foreign-owned firms. The absolute amount of resources transferred by domestic loans to rural enterprises showed little change over time, 1.1 percent of GDP in 1985–88 and 1.3 percent in 1992–95.

**REGIONAL CONTRAST IN THE FINANCING OF INVESTMENTS BY RURAL COLLECTIVES**

The only data set that is consistent over time on the sources of investment financing for rural enterprises in different provinces is from the *Township-Village Enterprises Yearbook* (TVEY) published by the Ministry of Agriculture, and there are three major difficulties in this data set. The first difficulty is that the TVEY data cover only the component of the TVE sector that is registered as collectively-owned.

7. Since the 1989 TVEY does not contain the investment financing information for 1998, there is a gap in the data set.
The second difficulty is that the classification scheme for the sources of funds in TVEY is also different from the classification scheme in the China Statistical Yearbook (CSY), with the former being more detailed. From our analysis of the data and from our conversations with the statistical authorities, it appears that the approximate correspondence between the two classification schemes is as follows:

<table>
<thead>
<tr>
<th>CSY</th>
<th>TVEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>State budget</td>
<td>State budget</td>
</tr>
<tr>
<td>Domestic loans</td>
<td>Bank and credit union loans</td>
</tr>
<tr>
<td>Foreign investment</td>
<td>Foreign funds</td>
</tr>
<tr>
<td>Self-raised funds</td>
<td>Funds from supervising agency + bonds sold to employees + other internal funds</td>
</tr>
<tr>
<td>Other Funds</td>
<td>Other sources + other funds raised outside of the firm</td>
</tr>
</tbody>
</table>

The third difficulty with TVEY data is that, in some years, their values differ significantly from the investment data from the CSY. If the data in both sources are correct, then the data on investments by collective TVEs in TVEY should always be smaller than the data investment by all (rural and urban) COEs in CSY. Such is not the case, however. The TVEY data on investment by collective TVEs is smaller than the CSY data on investment by all COEs in the 1987–91 period but larger in the 1992–96 period. The former is 66 percent of the latter in 1987 and 112 percent in 1996.

The larger investment figures in TVEY in the first half of the 1990s could be due to exaggerations by local officials to make themselves look good in order to get themselves promoted. The exaggeration of TVE output is a well-documented phenomenon. For example, the 1996 CSY revised significantly downward the 1991–1994 gross industrial output from COEs and IOEs reported in the 1995 CSY, which were compatible with the numbers in TVEY. After the data revision, CSY reported 1993–95 gross industrial output from COEs and IOEs that were smaller than the figure in TVEY. So it is likely that the TVEY investment data are also exaggerated. The implication is that we should not draw any conclusions based on the levels of investment reported in TVEY (e.g., investment as a percentage of GDP). To the extent that the degree of exaggeration in values are roughly uniform across provinces and across funding sources, then some ratios of these numbers could provide some useful information.8

With this point in mind, Table 5.6 is constructed to contrast the financing of investments by rural collectives in the coastal provinces and in the middle provinces in the

---

8. The difference in magnitude between the TVEY data and the CSY data could also be due to many other reasons, e.g., possible differences in definition, changes in definitions over time in one source but not the other. We do know that the two sources generated their estimates from different samples—the TVEY relied on annual reports submitted to the TVE Bureau in the Ministry of Agriculture, and the CSY relied on a survey conducted by the Rural Socio-Economic Survey Organization in the State Statistical Bureau.
1987–95 period in two ways: (a) the group’s share of funds from each source, i.e., the group’s share of the national total of each type of fund; and (b) the proportion of each group’s total investment that is funded by each of the funding sources. Since the use of the group average can misstate the situation of a particular member of the group, we have also included the data for Shandong and Sichuan. Shandong is the most populous coastal province, and Sichuan was the most populous inland province until Chongqing was given province-level status in 1997. Since Shandong is the poorest of the coastal provinces, and Sichuan has a per capita income that is lower than the average per capita income of the central provinces, our discussion will be more sensitive to the financing situation in the poorer provinces within each provincial grouping.

The detailed data (available from the author) show a highly unequal distribution of investment funds. Up to 1994, rural collectives in the five coastal provinces raised more funds from each financing source than rural enterprises in the eight central provinces. During the 1987–96 period, the coastal provinces attracted 47 to 60 percent of the national total of investment funds going to rural collectives, while the central rural collectives attracted 16 to 28 percent. The disparity is even greater when we compare the poorer provinces within each provincial grouping. In 1996, rural collectives in Shandong accounted for 17 percent of the investment by all rural collectives, while rural collectives in Sichuan accounted for just 4 percent.

The data also show that state-directed investment funds did not seek to ameliorate this disproportional flow of funds to the coastal rural collectives. Until 1995, the state budget had always invested much more in the coastal rural collectives (over 40 percent) than in the central rural collectives (under 30 percent). The disbursement of investment funds by the supervising agencies is even more skewed than the state budget allocations, and the volume of funds from the supervising agencies is two to three-and-a-half times higher than that from the state budget.

We think that the unequal outcome is due largely to incomplete economic reforms, unequal regional policies, and natural geography, which together rendered the rate of return to capital higher in the coastal provinces than in the central provinces. The gradual dismantling of the central credit allocation plan started in the second half of the 1980s, and the permitted degree of financial market liberalization differed across provinces. The official toleration of informal financial markets occurred earliest, and is greatest, in the coastal provinces, and hence the informal financial markets in the coastal provinces have become the most developed in China. Because the interest rates in the liberalized financial markets are higher than the regulated interest rates of the state banking system, funds have flowed to the coastal provinces from the provinces that lag in financial deregulation and financial development.

The central government has extended special development incentives to many regions in the coastal provinces. These coastal regions are exempted from many economic regulations (e.g., those governing foreign investments) and from several type of taxes
(e.g., import duties). The central government also allocates more funds (via the budget and state banks) for infrastructure investment in the coastal provinces. In short, throughout the 1980s and the beginning of the 1990s, central government actions raised the rate of return on capital in the coastal provinces relative to the rate of return on capital in the central provinces by deregulating and favoring the coastal provinces more than the central provinces.

Finally, natural geography has also contributed to the higher rate of return to capital in the coastal provinces. The inadequate transportation network in China naturally meant that the economic opening of China allowed the coastal provinces not only to be the first to be integrated into the international division of labor, but also to be the only provinces (for a considerable period of time) to be integrated into the international economy.9

CONCLUSION

The two most important issues in improving the financing of rural enterprises are: the financial system is overregulated, and the RCC-ABC system lacks the organizational flexibility and incentive to focus on efficient local financial intermediation.

The deregulation of the financial sector must be accompanied by the introduction of adequate banking supervision and of prudential standards that comply with international norms. Deregulation involves at the minimum: (1) allowing the establishment of privately owned financial institutions; (2) freeing deposit and loan rates; (3) imposing identical supervisory oversight and prudential standards on state-owned and private-owned banks; and (4) instructing the state banks to process loan applications equally without regard to ownership forms of the enterprises.10

These financial reforms will stop the disproportionate flow of credit to the SOE sector, free up funds for the more productive projects in the non-state sector; and allow the appearance of new small-scale local financial institutions that will mobilize local savings to finance local TVE investments. Folk finance (minjian rongzhi) was definitely the source of the development of TVEs in Wenzhou city in Zhejiang Province. Liu (1992) reported that “ninety-five percent of the total capital needed by the local private sector

9. See Demurger et al. 2002 for estimates on the relative effects of preferential policies and geographical location.

10. The Export and Import Bank of China has recently decided “to gradually expand its financial services to collectively owned firms and joint-stock companies” and to continue making “the large- and medium-sized State-owned firms . . . as its major clients” (“Bank loans to Non-State Enterprise,” China Daily, Jan. 22, 1998). This decision is a step in the right direction, but it is a very inadequate one because of the continued discrimination against private enterprises—which makes a mockery of the heading of the article.
has been supplied by ‘underground’ private financial organizations, such as money clubs, specialized financial households and money shops.”

In the face of strong rural industrial growth in China up to 1996, many informal rural financial institutions have sprouted to meet the financing needs of the rural industries. Since these illegal rural financial institutions lived under the constant threat of closure, they have tended to focus only on the short run and take more risks. It is therefore not surprising that these risky rural financial institutions often failed. Whenever they failed, the government had to bail them out in order to maintain political stability. The government has therefore been clamping down even harder on these illegal financial intermediaries, because the government does want to choose between the risk of bailing them out or the risk of having social instability. The government’s increasingly strict enforcement of the ban on private financial intermediation is exactly opposite to what ought to be done. The efficient solution is to allow private financial intermediaries in rural areas and bring them under proper prudential supervision.

The reorganization of the RCC-ABC system can usefully draw upon the wealth of international experiences with various schemes in developing countries to direct investment credit to rural areas. In particular, we wish to draw attention to the successful Indonesian experience of establishing a self-sustaining and profitable banking system (the Unit Desa system) in the countryside to provide a starting point for discussing how to accelerate financial development in rural China. Indonesia is very similar to China in key economic and institutional features. Like China, Indonesia is a geographically vast and heavily populated economy, and its rural financial system is dominated by branches of a state bank (Bank Rakyat Indonesia [BRI]) that has been designated to serve the rural areas.

The Indonesian experience with the Unit Desa system suggests that the reorganization of the RCC-ABC system should be guided by five principles:

1. A large-scale subsidized credit program for the rural areas cannot be sustained because it is both too expensive and too inefficient.
2. The government must provide seed money to enable technical training, start the credit units’ lending activities, and cover losses for the first few years.
3. The rural credit unit must be given the incentive to maximize profits in a prudent manner, which means that each credit unit be given a large degree of operational autonomy in return for being financially accountable to the supervising branch of ABC.

11. The power of market forces (when tolerated by the local authorities) to induce financial institutional innovations is an old story. Taiwan’s small and medium private enterprises exhibited dynamic growth in the 1960–85 period even though they were heavily discriminated against by the (wholly state-owned) banking system because informal financial markets (curb markets) appeared to cater to their needs (Shea and Yang 1994).
4. Rural loan rates are generally higher than those in the urban areas because they reflect the higher costs of making many small loans and the absence of collateral to cover losses.

5. No rural bank should be given privileges that allow it to monopolize the local market because the rural poor are many times unaware of their eligibility for loans, and only a bank that is facing competition will attempt to reach these groups with advertisement campaigns and with mobile teams.\(^{13}\)

We want to re-emphasize that the proposed RCC-ABC credit unit system could work satisfactorily only with competition from other rural financial institutions. Wenzhou’s experience with investment financing in the 1980s leaves no doubt about the beneficial effects of vigorous competition from folk finance on state-owned financial institutions:

In order to compete with [the new folk finance institutions] . . . as early as 1980 a local collective credit union, without informing the superior authority, abandoned for the first time the fixed interest rate and adopted a floating interest rate which fluctuated in accordance with market demand but remained within the upper limit set by the state. Despite the dubious legality of the floating interest rate, the local state bank branches and all the credit unions in Wenzhou had already adopted it before the central state officially ratified it in 1984. (Liu 1992)

We are fortunate in that we are able to end this chapter on a guardedly optimistic note. This is because the government now appears (finally!) to be seriously considering the adoption of most of the suggestions above. In early 2003, the People’s Bank of China launched a financial reform experiment in Wenzhou, where, among other measures, it\(^{14}\)

- implements a lending responsibility system to link the income of the employees to the return to capital;
- allows the rural credit cooperatives larger float margins from the controlled interest rates—for deposit rates, a maximum upward float of 50 percent; and for lending rates a upward maximum of 100 percent and a downward maximum of 10 percent; and
- transforms the rural credit cooperatives into joint-equity commercial banks by permitting private investment.

We, of course, applaud the direction that the government is moving in and understand the need for caution in establishing an industry that is intrinsically fraught with the incentive to earn high returns by overinvesting in risky projects (after all, the bank is using someone else’s money); and that is also intrinsically vulnerable to speculative runs.

---

\(^{13}\) Without competition, a bank may even reduce its presence in the rural areas—an example is the 13 percent reduction in the number of RCC units in the 1984–95 period—echoing the textbook monopolist who maximizes profit by restricting supply.

\(^{14}\) Details are from Citigroup 2003a.
However, we must mention that China does not really need to engage in extensive and prolonged experimentation because China can draw upon the rich cache of experiences from other countries. There is, in short, no necessity for China to reinvent the wheels of the rural financial industry, and delay the recovery of the rural industrial sector.
### Table 5.1: Contribution to Industrial Sector Growth by Ownership

<table>
<thead>
<tr>
<th>Year</th>
<th>Total (a)</th>
<th>State-Controlled Enterprises (b)</th>
<th>Collectively-Owned Enterprises (c)</th>
<th>Individually-Owned Enterprises (d)</th>
<th>Other (e)</th>
<th>Rural Sector Proxy (e) = (b) + (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>13.85</td>
<td>12.21</td>
<td>1.63</td>
<td>0.00</td>
<td>0.00</td>
<td>1.63</td>
</tr>
<tr>
<td>1979</td>
<td>8.83</td>
<td>7.55</td>
<td>1.28</td>
<td>0.00</td>
<td>0.00</td>
<td>1.28</td>
</tr>
<tr>
<td>1980</td>
<td>8.06</td>
<td>4.77</td>
<td>2.87</td>
<td>0.07</td>
<td>0.34</td>
<td>2.95</td>
</tr>
<tr>
<td>1981</td>
<td>3.78</td>
<td>2.10</td>
<td>1.48</td>
<td>0.09</td>
<td>0.10</td>
<td>1.58</td>
</tr>
<tr>
<td>1982</td>
<td>7.67</td>
<td>5.79</td>
<td>1.65</td>
<td>0.12</td>
<td>0.11</td>
<td>1.77</td>
</tr>
<tr>
<td>1983</td>
<td>10.87</td>
<td>7.67</td>
<td>2.73</td>
<td>0.31</td>
<td>0.16</td>
<td>3.04</td>
</tr>
<tr>
<td>1984</td>
<td>14.40</td>
<td>7.19</td>
<td>6.39</td>
<td>0.49</td>
<td>0.33</td>
<td>6.89</td>
</tr>
<tr>
<td>1985</td>
<td>18.09</td>
<td>9.93</td>
<td>7.07</td>
<td>0.78</td>
<td>0.31</td>
<td>7.85</td>
</tr>
<tr>
<td>1986</td>
<td>10.16</td>
<td>4.53</td>
<td>4.37</td>
<td>0.95</td>
<td>0.32</td>
<td>5.31</td>
</tr>
<tr>
<td>1987</td>
<td>15.99</td>
<td>7.99</td>
<td>6.05</td>
<td>1.20</td>
<td>0.75</td>
<td>7.25</td>
</tr>
<tr>
<td>1988</td>
<td>18.70</td>
<td>8.56</td>
<td>7.79</td>
<td>1.36</td>
<td>1.00</td>
<td>9.15</td>
</tr>
<tr>
<td>1989</td>
<td>7.40</td>
<td>2.48</td>
<td>3.13</td>
<td>0.85</td>
<td>0.94</td>
<td>3.98</td>
</tr>
<tr>
<td>1990</td>
<td>6.63</td>
<td>1.84</td>
<td>2.77</td>
<td>0.87</td>
<td>1.15</td>
<td>3.64</td>
</tr>
<tr>
<td>1991</td>
<td>14.06</td>
<td>5.18</td>
<td>5.78</td>
<td>1.18</td>
<td>1.92</td>
<td>6.96</td>
</tr>
<tr>
<td>1992</td>
<td>23.63</td>
<td>7.10</td>
<td>10.85</td>
<td>2.41</td>
<td>3.27</td>
<td>13.26</td>
</tr>
<tr>
<td>1993</td>
<td>25.52</td>
<td>2.97</td>
<td>12.30</td>
<td>4.04</td>
<td>6.21</td>
<td>16.34</td>
</tr>
<tr>
<td>1994</td>
<td>24.46</td>
<td>2.65</td>
<td>9.41</td>
<td>4.55</td>
<td>7.65</td>
<td>13.96</td>
</tr>
<tr>
<td>1995</td>
<td>19.43</td>
<td>3.07</td>
<td>5.77</td>
<td>5.22</td>
<td>5.37</td>
<td>10.99</td>
</tr>
<tr>
<td>1996</td>
<td>15.89</td>
<td>1.74</td>
<td>7.64</td>
<td>2.57</td>
<td>3.94</td>
<td>10.21</td>
</tr>
<tr>
<td>1997</td>
<td>11.60</td>
<td>0.32</td>
<td>3.90</td>
<td>2.05</td>
<td>5.34</td>
<td>5.94</td>
</tr>
<tr>
<td>1998</td>
<td>10.70</td>
<td>0.03</td>
<td>3.43</td>
<td>2.02</td>
<td>5.22</td>
<td>5.45</td>
</tr>
<tr>
<td>1999</td>
<td>12.94</td>
<td>2.22</td>
<td>2.23</td>
<td>2.05</td>
<td>6.45</td>
<td>4.28</td>
</tr>
</tbody>
</table>

**Part A: Percentage Point Contribution to Overall Growth Rate, %**

- Average 1978-1983: 8.84% (6.68% State-Controlled, 1.94% Collectively-Owned, 0.10% Individually-Owned, 0.12% Other, 2.04% Rural Sector Proxy)
- Average 1984-1988: 15.47% (7.64% State-Controlled, 6.33% Collectively-Owned, 0.96% Individually-Owned, 0.54% Other, 7.29% Rural Sector Proxy)
- Average 1989-1991: 9.36% (3.17% State-Controlled, 3.89% Collectively-Owned, 0.97% Individually-Owned, 1.34% Other, 4.86% Rural Sector Proxy)
- Average 1992-1996: 21.79% (3.55% State-Controlled, 9.19% Collectively-Owned, 3.76% Individually-Owned, 5.29% Other, 12.95% Rural Sector Proxy)
- Average 1997-1999: 11.75% (0.86% State-Controlled, 3.18% Collectively-Owned, 2.04% Individually-Owned, 5.67% Other, 5.22% Rural Sector Proxy)
Table 5.1: Contribution to Industrial Sector Growth by Ownership, cont.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>State-Controlled Enterprises (a)</th>
<th>Collectively-Owned Enterprises (b)</th>
<th>Individually-Owned Enterprises (c)</th>
<th>Other (d)</th>
<th>Rural Sector Proxy (e)=(b)+(c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>88.22</td>
<td>11.78</td>
<td>0.00</td>
<td>0.00</td>
<td>11.78</td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td>85.48</td>
<td>14.52</td>
<td>0.00</td>
<td>0.00</td>
<td>14.52</td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>59.22</td>
<td>35.65</td>
<td>0.91</td>
<td>4.23</td>
<td>36.56</td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>55.67</td>
<td>39.29</td>
<td>2.41</td>
<td>2.64</td>
<td>41.70</td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>75.46</td>
<td>21.52</td>
<td>1.57</td>
<td>1.45</td>
<td>23.09</td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>70.55</td>
<td>25.16</td>
<td>2.82</td>
<td>1.48</td>
<td>27.97</td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>49.91</td>
<td>44.41</td>
<td>3.42</td>
<td>2.26</td>
<td>47.83</td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>54.88</td>
<td>39.09</td>
<td>4.32</td>
<td>1.72</td>
<td>43.41</td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>44.61</td>
<td>42.97</td>
<td>9.30</td>
<td>3.12</td>
<td>52.27</td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td>49.96</td>
<td>37.82</td>
<td>7.53</td>
<td>4.69</td>
<td>45.35</td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td>45.75</td>
<td>41.64</td>
<td>7.27</td>
<td>5.33</td>
<td>48.91</td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>33.56</td>
<td>42.26</td>
<td>11.45</td>
<td>12.72</td>
<td>53.72</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>27.78</td>
<td>41.76</td>
<td>13.08</td>
<td>17.38</td>
<td>54.85</td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>36.86</td>
<td>41.10</td>
<td>8.40</td>
<td>13.65</td>
<td>49.50</td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>30.04</td>
<td>45.94</td>
<td>10.20</td>
<td>13.82</td>
<td>56.14</td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>11.62</td>
<td>48.20</td>
<td>15.82</td>
<td>24.35</td>
<td>64.02</td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>11.65</td>
<td>38.48</td>
<td>18.59</td>
<td>31.29</td>
<td>57.06</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>15.83</td>
<td>29.67</td>
<td>26.88</td>
<td>27.62</td>
<td>56.55</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>10.96</td>
<td>48.06</td>
<td>16.19</td>
<td>24.79</td>
<td>64.25</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>2.74</td>
<td>33.58</td>
<td>17.65</td>
<td>46.03</td>
<td>51.23</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>0.26</td>
<td>32.04</td>
<td>18.91</td>
<td>48.79</td>
<td>50.95</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>17.15</td>
<td>17.21</td>
<td>15.82</td>
<td>49.82</td>
<td>33.03</td>
<td></td>
</tr>
</tbody>
</table>

Part B: Share of Contributions to Growth, %

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>State-Controlled Enterprises (a)</th>
<th>Collectively-Owned Enterprises (b)</th>
<th>Individually-Owned Enterprises (c)</th>
<th>Other (d)</th>
<th>Rural Sector Proxy (e)=(b)+(c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>88.22</td>
<td>11.78</td>
<td>0.00</td>
<td>0.00</td>
<td>11.78</td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td>85.48</td>
<td>14.52</td>
<td>0.00</td>
<td>0.00</td>
<td>14.52</td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>59.22</td>
<td>35.65</td>
<td>0.91</td>
<td>4.23</td>
<td>36.56</td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>55.67</td>
<td>39.29</td>
<td>2.41</td>
<td>2.64</td>
<td>41.70</td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>75.46</td>
<td>21.52</td>
<td>1.57</td>
<td>1.45</td>
<td>23.09</td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>70.55</td>
<td>25.16</td>
<td>2.82</td>
<td>1.48</td>
<td>27.97</td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>49.91</td>
<td>44.41</td>
<td>3.42</td>
<td>2.26</td>
<td>47.83</td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>54.88</td>
<td>39.09</td>
<td>4.32</td>
<td>1.72</td>
<td>43.41</td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>44.61</td>
<td>42.97</td>
<td>9.30</td>
<td>3.12</td>
<td>52.27</td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td>49.96</td>
<td>37.82</td>
<td>7.53</td>
<td>4.69</td>
<td>45.35</td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td>45.75</td>
<td>41.64</td>
<td>7.27</td>
<td>5.33</td>
<td>48.91</td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>33.56</td>
<td>42.26</td>
<td>11.45</td>
<td>12.72</td>
<td>53.72</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>27.78</td>
<td>41.76</td>
<td>13.08</td>
<td>17.38</td>
<td>54.85</td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>36.86</td>
<td>41.10</td>
<td>8.40</td>
<td>13.65</td>
<td>49.50</td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>30.04</td>
<td>45.94</td>
<td>10.20</td>
<td>13.82</td>
<td>56.14</td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>11.62</td>
<td>48.20</td>
<td>15.82</td>
<td>24.35</td>
<td>64.02</td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>11.65</td>
<td>38.48</td>
<td>18.59</td>
<td>31.29</td>
<td>57.06</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>15.83</td>
<td>29.67</td>
<td>26.88</td>
<td>27.62</td>
<td>56.55</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>10.96</td>
<td>48.06</td>
<td>16.19</td>
<td>24.79</td>
<td>64.25</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>2.74</td>
<td>33.58</td>
<td>17.65</td>
<td>46.03</td>
<td>51.23</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>0.26</td>
<td>32.04</td>
<td>18.91</td>
<td>48.79</td>
<td>50.95</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>17.15</td>
<td>17.21</td>
<td>15.82</td>
<td>49.82</td>
<td>33.03</td>
<td></td>
</tr>
</tbody>
</table>

average 1978-1983 | 72.43 | 24.65 | 1.28 | 1.63 | 25.94 |
average 1984-1988 | 49.02 | 41.18 | 6.37 | 3.42 | 47.55 |
average 1989-1991 | 32.73 | 41.71 | 10.98 | 14.58 | 52.69 |
average 1992-1996 | 16.02 | 42.07 | 17.53 | 24.37 | 59.61 |
average 1997-1999 | 6.71  | 27.61 | 17.46 | 48.21 | 45.07 |
### Table 5.2: Fixed Asset Formation by Ownership as Percent of GDP

<table>
<thead>
<tr>
<th>Year</th>
<th>National total</th>
<th>State-owned enterprises</th>
<th>Rural collective</th>
<th>Rural individuals</th>
<th>Solely Hong Kong, Taiwan and Macao</th>
<th>Other Foreign -Financed Firms</th>
<th>Other Ownership Forms</th>
<th>Rural enterprises ( h=(c)+(d) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983</td>
<td>28.13</td>
<td>18.72</td>
<td>2.18</td>
<td>5.92</td>
<td>0.00</td>
<td>0.00</td>
<td>1.30</td>
<td>8.10</td>
</tr>
<tr>
<td>1984</td>
<td>29.67</td>
<td>19.18</td>
<td>2.83</td>
<td>6.14</td>
<td>0.00</td>
<td>0.00</td>
<td>1.52</td>
<td>8.97</td>
</tr>
<tr>
<td>1985</td>
<td>30.04</td>
<td>19.85</td>
<td>2.35</td>
<td>5.65</td>
<td>0.00</td>
<td>0.00</td>
<td>2.19</td>
<td>8.00</td>
</tr>
<tr>
<td>1986</td>
<td>30.57</td>
<td>20.37</td>
<td>2.40</td>
<td>5.63</td>
<td>0.00</td>
<td>0.00</td>
<td>2.17</td>
<td>8.04</td>
</tr>
<tr>
<td>1987</td>
<td>31.75</td>
<td>20.51</td>
<td>3.06</td>
<td>5.82</td>
<td>0.00</td>
<td>0.00</td>
<td>2.36</td>
<td>8.89</td>
</tr>
<tr>
<td>1988</td>
<td>31.45</td>
<td>19.98</td>
<td>3.02</td>
<td>5.72</td>
<td>0.00</td>
<td>0.00</td>
<td>2.72</td>
<td>8.75</td>
</tr>
<tr>
<td>1989</td>
<td>26.35</td>
<td>16.78</td>
<td>2.30</td>
<td>5.33</td>
<td>0.00</td>
<td>0.00</td>
<td>1.95</td>
<td>7.63</td>
</tr>
<tr>
<td>1990</td>
<td>25.83</td>
<td>17.08</td>
<td>2.09</td>
<td>5.01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.65</td>
<td>7.11</td>
</tr>
<tr>
<td>1991</td>
<td>27.91</td>
<td>18.53</td>
<td>2.46</td>
<td>5.20</td>
<td>0.00</td>
<td>0.00</td>
<td>1.72</td>
<td>7.67</td>
</tr>
<tr>
<td>1992</td>
<td>32.16</td>
<td>21.88</td>
<td>3.96</td>
<td>4.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.31</td>
<td>7.96</td>
</tr>
<tr>
<td>1993</td>
<td>37.62</td>
<td>22.81</td>
<td>4.88</td>
<td>3.27</td>
<td>0.13</td>
<td>2.12</td>
<td>4.41</td>
<td>8.15</td>
</tr>
<tr>
<td>1994</td>
<td>36.10</td>
<td>20.37</td>
<td>4.21</td>
<td>3.22</td>
<td>1.10</td>
<td>2.94</td>
<td>4.26</td>
<td>7.43</td>
</tr>
<tr>
<td>1995</td>
<td>34.70</td>
<td>18.89</td>
<td>4.10</td>
<td>3.48</td>
<td>1.17</td>
<td>2.70</td>
<td>4.36</td>
<td>7.58</td>
</tr>
<tr>
<td>1996</td>
<td>34.15</td>
<td>17.89</td>
<td>4.18</td>
<td>3.79</td>
<td>1.24</td>
<td>2.80</td>
<td>4.25</td>
<td>7.97</td>
</tr>
<tr>
<td>1997</td>
<td>33.59</td>
<td>17.63</td>
<td>4.11</td>
<td>3.62</td>
<td>1.26</td>
<td>2.63</td>
<td>4.32</td>
<td>7.74</td>
</tr>
<tr>
<td>1998</td>
<td>34.97</td>
<td>18.92</td>
<td>3.98</td>
<td>3.30</td>
<td>1.64</td>
<td>2.02</td>
<td>5.11</td>
<td>7.28</td>
</tr>
<tr>
<td>1999</td>
<td>35.76</td>
<td>19.10</td>
<td>4.00</td>
<td>3.33</td>
<td>1.46</td>
<td>1.72</td>
<td>6.15</td>
<td>7.33</td>
</tr>
</tbody>
</table>

Average 1984-88: 30.70 19.98 2.73 5.79 0.00 0.00 1.72 1.65 9.79 8.53
Average 1989-91: 26.70 17.46 2.28 5.18 0.00 0.00 1.77 1.77 7.47
Average 1992-96: 34.95 20.37 4.27 3.55 0.73 2.11 3.92 7.82
Average 1997-99: 34.77 18.55 4.03 3.42 1.45 2.12 5.19 7.45

2001: 38.79 18.35 4.42 3.10 1.65 1.48 9.79 7.52
Table 5.3: Investment according to Ownership By Provinces in 1987-1988 and 1998-19999, percent of GDP (page 1 of 2)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Enterprises</td>
<td>Rural Enterprises</td>
</tr>
<tr>
<td>Beijing</td>
<td>41.26</td>
<td>5.18</td>
</tr>
<tr>
<td>Tianjin</td>
<td>34.74</td>
<td>5.19</td>
</tr>
<tr>
<td>Shanghai</td>
<td>37.32</td>
<td>6.77</td>
</tr>
<tr>
<td>Liaoning</td>
<td>30.39</td>
<td>4.49</td>
</tr>
<tr>
<td>Jilin</td>
<td>25.85</td>
<td>5.00</td>
</tr>
<tr>
<td>Heilongjiang</td>
<td>29.62</td>
<td>3.19</td>
</tr>
<tr>
<td>Hebei</td>
<td>34.16</td>
<td>15.61</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>32.77</td>
<td>15.74</td>
</tr>
<tr>
<td>Zhejiang</td>
<td>30.39</td>
<td>16.27</td>
</tr>
<tr>
<td>Shandong</td>
<td>33.23</td>
<td>12.38</td>
</tr>
<tr>
<td>Fujian</td>
<td>25.99</td>
<td>7.77</td>
</tr>
<tr>
<td>Guangdong</td>
<td>34.83</td>
<td>10.23</td>
</tr>
<tr>
<td>Hainan (a)</td>
<td>25.65</td>
<td>5.98</td>
</tr>
<tr>
<td>Shanxi</td>
<td>37.04</td>
<td>7.38</td>
</tr>
<tr>
<td>Anhui</td>
<td>25.67</td>
<td>11.29</td>
</tr>
<tr>
<td>Jiangxi</td>
<td>23.36</td>
<td>9.26</td>
</tr>
<tr>
<td>Henan</td>
<td>27.11</td>
<td>11.08</td>
</tr>
<tr>
<td>Hubei</td>
<td>26.22</td>
<td>6.48</td>
</tr>
<tr>
<td>Hunan</td>
<td>24.83</td>
<td>9.80</td>
</tr>
<tr>
<td>Guangxi</td>
<td>25.69</td>
<td>6.27</td>
</tr>
<tr>
<td>Sichuan (b)</td>
<td>25.34</td>
<td>7.13</td>
</tr>
<tr>
<td>Guizhou</td>
<td>22.04</td>
<td>4.94</td>
</tr>
<tr>
<td>Yunnan</td>
<td>25.55</td>
<td>6.75</td>
</tr>
<tr>
<td>Inner Mongolia</td>
<td>23.04</td>
<td>3.94</td>
</tr>
<tr>
<td>Shaanxi</td>
<td>30.15</td>
<td>7.39</td>
</tr>
<tr>
<td>Gansu</td>
<td>28.16</td>
<td>3.93</td>
</tr>
<tr>
<td>Qinghai</td>
<td>48.99</td>
<td>4.62</td>
</tr>
<tr>
<td>Ningxia</td>
<td>38.25</td>
<td>7.02</td>
</tr>
<tr>
<td>Xinjiang</td>
<td>37.44</td>
<td>5.49</td>
</tr>
<tr>
<td>Tibet</td>
<td>3.61</td>
<td>1.29</td>
</tr>
</tbody>
</table>

Notes
(a) Hainan, only 1988 data used for 1987-88 average
(b) Sichuan includes data for Chongqing
Table 3: Investment according to Ownership By Provinces in 1987-1988 and 1998-19999, percent of GDP (page 2 of 2)

<table>
<thead>
<tr>
<th>Change in Period Average</th>
<th>Total</th>
<th>Rural Enterprises</th>
<th>State-Owned Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolis with province-level status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beijing</td>
<td>13.63</td>
<td>-1.77</td>
<td>1.03</td>
</tr>
<tr>
<td>Tianjin</td>
<td>6.50</td>
<td>-0.45</td>
<td>-5.16</td>
</tr>
<tr>
<td>Shanghai</td>
<td>12.34</td>
<td>-2.99</td>
<td>-2.49</td>
</tr>
<tr>
<td>Northeastern provinces</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liaoning</td>
<td>-3.35</td>
<td>-0.31</td>
<td>-7.59</td>
</tr>
<tr>
<td>Jilin</td>
<td>2.98</td>
<td>-1.17</td>
<td>-1.30</td>
</tr>
<tr>
<td>Heilongjiang</td>
<td>-2.90</td>
<td>-1.31</td>
<td>-4.00</td>
</tr>
<tr>
<td>Coastal provinces</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hebei</td>
<td>3.91</td>
<td>-2.44</td>
<td>1.21</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>0.11</td>
<td>-5.86</td>
<td>0.53</td>
</tr>
<tr>
<td>Zhejiang</td>
<td>5.92</td>
<td>-4.69</td>
<td>4.01</td>
</tr>
<tr>
<td>Shandong</td>
<td>-5.23</td>
<td>-2.55</td>
<td>-3.96</td>
</tr>
<tr>
<td>Fujian</td>
<td>5.30</td>
<td>-2.04</td>
<td>-3.21</td>
</tr>
<tr>
<td>Guangdong</td>
<td>-0.79</td>
<td>-4.81</td>
<td>-5.61</td>
</tr>
<tr>
<td>Hainan (a)</td>
<td>14.77</td>
<td>-2.38</td>
<td>0.04</td>
</tr>
<tr>
<td>Central provinces</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shanxi</td>
<td>-5.88</td>
<td>-4.26</td>
<td>-5.60</td>
</tr>
<tr>
<td>Anhui</td>
<td>-0.70</td>
<td>-4.24</td>
<td>-0.67</td>
</tr>
<tr>
<td>Jiangxi</td>
<td>-0.97</td>
<td>-3.51</td>
<td>0.44</td>
</tr>
<tr>
<td>Henan</td>
<td>0.88</td>
<td>-2.38</td>
<td>0.56</td>
</tr>
<tr>
<td>Hubei</td>
<td>5.46</td>
<td>-0.84</td>
<td>1.57</td>
</tr>
<tr>
<td>Hunan</td>
<td>1.24</td>
<td>-1.53</td>
<td>1.45</td>
</tr>
<tr>
<td>Southwestern provinces</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guangxi</td>
<td>3.90</td>
<td>1.16</td>
<td>-1.95</td>
</tr>
<tr>
<td>Sichuan (b)</td>
<td>7.87</td>
<td>-0.31</td>
<td>1.52</td>
</tr>
<tr>
<td>Guizhou</td>
<td>11.60</td>
<td>1.66</td>
<td>5.51</td>
</tr>
<tr>
<td>Yunnan</td>
<td>10.75</td>
<td>-0.33</td>
<td>8.11</td>
</tr>
<tr>
<td>Northwestern provinces</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inner Mongolia</td>
<td>3.97</td>
<td>0.63</td>
<td>0.04</td>
</tr>
<tr>
<td>Shaanxi</td>
<td>8.34</td>
<td>-1.46</td>
<td>4.45</td>
</tr>
<tr>
<td>Gansu</td>
<td>8.25</td>
<td>0.66</td>
<td>2.68</td>
</tr>
<tr>
<td>Qinghai</td>
<td>0.28</td>
<td>-1.13</td>
<td>-3.94</td>
</tr>
<tr>
<td>Ningxia</td>
<td>11.74</td>
<td>1.37</td>
<td>3.80</td>
</tr>
<tr>
<td>Xinjiang</td>
<td>8.15</td>
<td>-1.17</td>
<td>7.38</td>
</tr>
<tr>
<td>Tibet</td>
<td>44.37</td>
<td>na</td>
<td>43.19</td>
</tr>
</tbody>
</table>

Notes
(a) Hainan, only 1988 data used for 1987-88 average
(b) Sichuan includes data for Chongqing
Table 5.4: Sources and Uses of Funds in Rural Credit Cooperatives

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Deposits</th>
<th>Total Loans</th>
<th>Loans to agricultural units</th>
<th>Loans to township enterprises</th>
<th>Loans to farmer households</th>
<th>Loans as proportion of deposits, %</th>
<th>Distribution of loans across borrowers, %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a)</td>
<td>(b)</td>
<td>(c)</td>
<td>(d)</td>
<td>(e)</td>
<td>(b)/(a)</td>
<td></td>
</tr>
<tr>
<td>1978</td>
<td>166.0</td>
<td>45.1</td>
<td>21.8</td>
<td>12.1</td>
<td>11.2</td>
<td>27.2</td>
<td>48.3</td>
</tr>
<tr>
<td>1979</td>
<td>215.9</td>
<td>47.5</td>
<td>22.4</td>
<td>14.2</td>
<td>10.9</td>
<td>22.0</td>
<td>47.2</td>
</tr>
<tr>
<td>1980</td>
<td>272.3</td>
<td>81.6</td>
<td>34.5</td>
<td>31.1</td>
<td>16.0</td>
<td>30.0</td>
<td>42.3</td>
</tr>
<tr>
<td>1981</td>
<td>319.6</td>
<td>96.4</td>
<td>35.7</td>
<td>35.5</td>
<td>25.2</td>
<td>30.2</td>
<td>37.0</td>
</tr>
<tr>
<td>1982</td>
<td>389.9</td>
<td>121.2</td>
<td>34.8</td>
<td>42.3</td>
<td>44.1</td>
<td>31.1</td>
<td>28.7</td>
</tr>
<tr>
<td>1983</td>
<td>487.4</td>
<td>163.7</td>
<td>28.2</td>
<td>60.1</td>
<td>75.4</td>
<td>33.6</td>
<td>17.2</td>
</tr>
<tr>
<td>1984</td>
<td>624.9</td>
<td>354.5</td>
<td>38.4</td>
<td>135.0</td>
<td>181.1</td>
<td>56.7</td>
<td>10.8</td>
</tr>
<tr>
<td>1985</td>
<td>724.9</td>
<td>400.0</td>
<td>41.4</td>
<td>164.4</td>
<td>194.2</td>
<td>55.2</td>
<td>10.4</td>
</tr>
<tr>
<td>1986</td>
<td>962.3</td>
<td>568.5</td>
<td>44.6</td>
<td>265.9</td>
<td>258.0</td>
<td>59.1</td>
<td>7.8</td>
</tr>
<tr>
<td>1987</td>
<td>1225.2</td>
<td>771.4</td>
<td>64.5</td>
<td>359.3</td>
<td>347.6</td>
<td>63.0</td>
<td>8.4</td>
</tr>
<tr>
<td>1988</td>
<td>1399.8</td>
<td>908.6</td>
<td>80.1</td>
<td>456.1</td>
<td>372.4</td>
<td>64.9</td>
<td>8.8</td>
</tr>
<tr>
<td>1989</td>
<td>1669.5</td>
<td>1094.9</td>
<td>107.3</td>
<td>571.9</td>
<td>415.7</td>
<td>65.6</td>
<td>9.8</td>
</tr>
<tr>
<td>1990</td>
<td>2144.9</td>
<td>1413.0</td>
<td>134.1</td>
<td>760.7</td>
<td>518.2</td>
<td>65.9</td>
<td>9.5</td>
</tr>
<tr>
<td>1991</td>
<td>2709.5</td>
<td>1808.6</td>
<td>169.9</td>
<td>1007.3</td>
<td>631.4</td>
<td>66.8</td>
<td>9.4</td>
</tr>
<tr>
<td>1992</td>
<td>3477.7</td>
<td>2453.9</td>
<td>222.6</td>
<td>1471.8</td>
<td>759.5</td>
<td>70.6</td>
<td>9.1</td>
</tr>
<tr>
<td>1993</td>
<td>4297.3</td>
<td>3143.9</td>
<td>262.1</td>
<td>2001.2</td>
<td>880.6</td>
<td>73.2</td>
<td>8.3</td>
</tr>
<tr>
<td>1994</td>
<td>5681.1</td>
<td>4168.6</td>
<td>808.4</td>
<td>2279.4</td>
<td>1080.8</td>
<td>73.4</td>
<td>19.4</td>
</tr>
<tr>
<td>1995</td>
<td>7172.8</td>
<td>5234.2</td>
<td>1094.9</td>
<td>2779.1</td>
<td>1360.2</td>
<td>73.0</td>
<td>20.9</td>
</tr>
</tbody>
</table>

*Constructed from the 1993 and 1995 issues of China Statistical Yearbook*
### Table 5.5: Investment Financing According to Ownership Forms

<table>
<thead>
<tr>
<th>Memo item:</th>
<th>National Rural</th>
<th>State-owned Rural</th>
<th>Rural Kong, Taiwan &amp; Macao Firms</th>
<th>Foreign Financed Rural (collectives &amp; individuals)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total enterprises</td>
<td>collectives</td>
<td>individuals</td>
<td>Other forms</td>
</tr>
</tbody>
</table>

#### Part A: Funding for Investment by Each Type of Enterprise According to Source, in percent

(for each year, elements within each column sum to 100)

<table>
<thead>
<tr>
<th>Year</th>
<th>a) State Budget</th>
<th>b) Domestic Loans</th>
<th>c) Foreign Investment</th>
<th>d) Self-raised funds</th>
<th>e) Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17.65</td>
<td>26.42</td>
<td>0.00</td>
<td>0.00</td>
<td>2.59</td>
</tr>
<tr>
<td></td>
<td>20.06</td>
<td>23.04</td>
<td>32.12</td>
<td>0.00</td>
<td>31.96</td>
</tr>
<tr>
<td></td>
<td>1.98</td>
<td>2.83</td>
<td>0.00</td>
<td>0.00</td>
<td>1.58</td>
</tr>
<tr>
<td></td>
<td>53.62</td>
<td>40.43</td>
<td>51.49</td>
<td>100.00</td>
<td>55.85</td>
</tr>
<tr>
<td></td>
<td>6.68</td>
<td>7.29</td>
<td>16.39</td>
<td>0.00</td>
<td>8.01</td>
</tr>
<tr>
<td>1996</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.69</td>
<td>4.61</td>
<td>1.77</td>
<td>0.00</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>19.54</td>
<td>23.58</td>
<td>19.68</td>
<td>4.67</td>
<td>15.21</td>
</tr>
<tr>
<td></td>
<td>11.73</td>
<td>6.71</td>
<td>9.67</td>
<td>0.00</td>
<td>50.42</td>
</tr>
<tr>
<td></td>
<td>53.22</td>
<td>50.79</td>
<td>58.49</td>
<td>93.35</td>
<td>17.33</td>
</tr>
<tr>
<td></td>
<td>12.82</td>
<td>14.32</td>
<td>10.39</td>
<td>1.98</td>
<td>16.90</td>
</tr>
<tr>
<td>Average 1985-96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.00</td>
<td>12.41</td>
<td>0.53</td>
<td>0.00</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>21.53</td>
<td>24.62</td>
<td>29.22</td>
<td>4.18</td>
<td>14.96</td>
</tr>
<tr>
<td></td>
<td>6.77</td>
<td>7.28</td>
<td>2.82</td>
<td>0.00</td>
<td>51.69</td>
</tr>
<tr>
<td></td>
<td>51.78</td>
<td>44.16</td>
<td>43.75</td>
<td>88.67</td>
<td>18.49</td>
</tr>
<tr>
<td></td>
<td>11.92</td>
<td>11.53</td>
<td>23.69</td>
<td>7.15</td>
<td>14.69</td>
</tr>
<tr>
<td>Average 1985-88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13.84</td>
<td>21.33</td>
<td>0.00</td>
<td>0.00</td>
<td>1.48</td>
</tr>
<tr>
<td></td>
<td>21.18</td>
<td>23.63</td>
<td>34.06</td>
<td>3.53</td>
<td>14.96</td>
</tr>
<tr>
<td></td>
<td>3.98</td>
<td>6.02</td>
<td>0.00</td>
<td>0.00</td>
<td>51.69</td>
</tr>
<tr>
<td></td>
<td>51.30</td>
<td>39.39</td>
<td>44.71</td>
<td>90.24</td>
<td>61.70</td>
</tr>
<tr>
<td></td>
<td>9.70</td>
<td>9.63</td>
<td>21.22</td>
<td>6.23</td>
<td>5.23</td>
</tr>
<tr>
<td>Average 1989-91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.91</td>
<td>12.26</td>
<td>0.00</td>
<td>0.00</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>20.11</td>
<td>24.18</td>
<td>25.26</td>
<td>4.39</td>
<td>20.92</td>
</tr>
<tr>
<td></td>
<td>6.21</td>
<td>9.20</td>
<td>0.00</td>
<td>0.00</td>
<td>51.69</td>
</tr>
<tr>
<td></td>
<td>53.85</td>
<td>42.69</td>
<td>47.36</td>
<td>86.79</td>
<td>69.26</td>
</tr>
<tr>
<td></td>
<td>11.92</td>
<td>11.67</td>
<td>27.38</td>
<td>8.82</td>
<td>4.62</td>
</tr>
<tr>
<td>Average 1992-96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.38</td>
<td>5.35</td>
<td>1.27</td>
<td>0.00</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>22.65</td>
<td>25.67</td>
<td>27.71</td>
<td>4.58</td>
<td>14.96</td>
</tr>
<tr>
<td></td>
<td>9.34</td>
<td>7.14</td>
<td>6.76</td>
<td>0.00</td>
<td>51.69</td>
</tr>
<tr>
<td></td>
<td>50.92</td>
<td>48.86</td>
<td>40.81</td>
<td>88.54</td>
<td>18.49</td>
</tr>
<tr>
<td></td>
<td>13.71</td>
<td>12.97</td>
<td>23.44</td>
<td>6.89</td>
<td>14.69</td>
</tr>
</tbody>
</table>
Table 5.5: Investment Financing According to Ownership Forms, cont.

<table>
<thead>
<tr>
<th>Ownership Form</th>
<th>National total</th>
<th>State-owned</th>
<th>Rural enterprises</th>
<th>Rural collectives</th>
<th>Rural individuals</th>
<th>Foreign-owned firms</th>
<th>Other forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memo item:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solely Hong Kong, Taiwan Financed</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>1.07</td>
<td>1.25</td>
<td>0.00</td>
</tr>
<tr>
<td>Foreign-owned firms</td>
<td>12.54</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>11.59</td>
<td>12.54</td>
<td>0.00</td>
</tr>
<tr>
<td>Rural sector (collectives &amp; individuals)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>5.79</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Part B: Destination of Funds from Each Source, percent going to each ownership type.**

(each row, excluding Memo item, sums to 100)

<table>
<thead>
<tr>
<th>Year</th>
<th>State Budget</th>
<th>Domestic Loans</th>
<th>Foreign Investment</th>
<th>Self-raised funds</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>98.93</td>
<td>75.87</td>
<td>94.21</td>
<td>49.82</td>
<td>72.07</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>12.54</td>
<td>0.00</td>
<td>7.52</td>
<td>19.21</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>35.08</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>1.07</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>8.72</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>12.54</td>
<td>5.79</td>
<td>7.58</td>
<td>19.21</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>42.61</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>1996</td>
<td>88.44</td>
<td>62.30</td>
<td>29.52</td>
<td>49.28</td>
<td>57.68</td>
</tr>
<tr>
<td></td>
<td>7.86</td>
<td>12.05</td>
<td>9.86</td>
<td>13.15</td>
<td>9.70</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>2.60</td>
<td>0.00</td>
<td>19.05</td>
<td>1.68</td>
</tr>
<tr>
<td></td>
<td>0.21</td>
<td>3.15</td>
<td>17.38</td>
<td>1.32</td>
<td>5.33</td>
</tr>
<tr>
<td></td>
<td>0.94</td>
<td>6.50</td>
<td>38.53</td>
<td>3.41</td>
<td>6.89</td>
</tr>
<tr>
<td></td>
<td>2.54</td>
<td>13.40</td>
<td>4.70</td>
<td>13.78</td>
<td>18.72</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>14.65</td>
<td>9.86</td>
<td>32.20</td>
<td>11.38</td>
</tr>
<tr>
<td></td>
<td>7.86</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Average 1985-96</td>
<td>96.35</td>
<td>70.57</td>
<td>76.28</td>
<td>52.38</td>
<td>59.86</td>
</tr>
<tr>
<td></td>
<td>2.10</td>
<td>13.87</td>
<td>3.41</td>
<td>8.56</td>
<td>9.44</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>2.99</td>
<td>0.00</td>
<td>19.05</td>
<td>1.68</td>
</tr>
<tr>
<td></td>
<td>0.03</td>
<td>6.71</td>
<td>38.53</td>
<td>1.32</td>
<td>5.33</td>
</tr>
<tr>
<td></td>
<td>0.28</td>
<td>2.04</td>
<td>11.61</td>
<td>3.41</td>
<td>6.89</td>
</tr>
<tr>
<td></td>
<td>1.24</td>
<td>9.86</td>
<td>4.71</td>
<td>13.78</td>
<td>18.72</td>
</tr>
<tr>
<td></td>
<td>2.10</td>
<td>16.87</td>
<td>3.41</td>
<td>35.28</td>
<td>11.38</td>
</tr>
<tr>
<td>Average 1985-88</td>
<td>99.14</td>
<td>71.41</td>
<td>95.49</td>
<td>49.16</td>
<td>59.86</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>14.57</td>
<td>0.00</td>
<td>7.79</td>
<td>20.54</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>3.06</td>
<td>0.00</td>
<td>33.50</td>
<td>9.44</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>3.99</td>
<td>0.00</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>11.61</td>
<td>1.93</td>
<td>1.93</td>
</tr>
<tr>
<td></td>
<td>0.86</td>
<td>10.96</td>
<td>4.51</td>
<td>9.54</td>
<td>7.09</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>17.63</td>
<td>0.00</td>
<td>41.30</td>
<td>29.98</td>
</tr>
<tr>
<td>Average 1989-91</td>
<td>99.35</td>
<td>77.25</td>
<td>95.06</td>
<td>51.07</td>
<td>64.22</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>11.19</td>
<td>0.00</td>
<td>7.76</td>
<td>20.27</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>4.39</td>
<td>0.00</td>
<td>32.35</td>
<td>10.87</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>3.99</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>11.61</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>0.65</td>
<td>7.17</td>
<td>4.94</td>
<td>8.81</td>
<td>2.75</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>15.58</td>
<td>0.00</td>
<td>40.11</td>
<td>34.14</td>
</tr>
<tr>
<td>Average 1992-96</td>
<td>92.32</td>
<td>65.88</td>
<td>49.63</td>
<td>55.75</td>
<td>63.10</td>
</tr>
<tr>
<td></td>
<td>5.04</td>
<td>14.93</td>
<td>8.18</td>
<td>9.66</td>
<td>20.43</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>2.11</td>
<td>0.00</td>
<td>17.91</td>
<td>13.71</td>
</tr>
<tr>
<td></td>
<td>0.08</td>
<td>1.60</td>
<td>9.57</td>
<td>0.82</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>0.66</td>
<td>4.89</td>
<td>27.88</td>
<td>2.99</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>1.90</td>
<td>10.59</td>
<td>4.74</td>
<td>12.87</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>5.04</td>
<td>17.04</td>
<td>8.18</td>
<td>27.57</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
### TABLE 6: INVESTMENT FINANCING OF COLLECTIVELY-OWNED TVES IN THE COASTAL AND CENTRAL PROVINCES (Page 1 of 2)

| Year | Coastal Provinces | | Central Provinces | | Shandong (a coastal province) | | Sichuan (a central province) |
|------|-------------------|-----------------|-------------------|-----------------|-------------------|-------------------|
| 1987 | 39.0%             | 37.9%           | 50.6%             | 73.9%           | 56.9%             | 55.6%             |
| 1996 | 27.4%             | 35.9%           | 46.0%             | 58.7%           | 22.2%             | 40.8%             |
| avg 89-91 | 42.4% | 43.6% | 51.3% | 65.8% | 44.5% | 59.3% |
| avg 92-96 | 36.9% | 42.3% | 51.5% | 68.4% | 37.5% | 45.9% |
| 1987 | 27.2%             | 20.9%           | 24.7%             | 17.5%           | 22.3%             | 30.0%             |
| 1996 | 45.5%             | 27.3%           | 28.9%             | 12.6%           | 44.9%             | 34.4%             |
| avg 89-91 | 26.4% | 19.3% | 19.4% | 3.6% | 20.5% | 27.3% |
| avg 92-96 | 32.2% | 23.8% | 24.1% | 10.9% | 32.4% | 30.9% |
| 1987 | 11.5%             | 10.5%           | 12.6%             | 10.0%           | 5.2%              | 14.6%             |
| 1996 | 8.9%              | 8.5%            | 17.1%             | 6.6%            | 7.4%              | 11.6%             |
| avg 89-91 | 7.6% | 11.0% | 14.1% | 8.7% | 4.7% | 17.8% |
| avg 92-96 | 7.0% | 11.9% | 15.8% | 9.8% | 9.7% | 12.9% |
| 1987 | 5.1%              | 3.1%            | 6.3%              | 1.7%            | 5.9%              | 10.5%             |
| 1996 | 4.6%              | 1.7%            | 4.1%              | 0.5%            | 4.7%              | 3.0%              |
| avg 89-91 | 4.2% | 3.3% | 3.3% | 0.1% | 5.4% | 7.0% |
| avg 92-96 | 4.4% | 2.3% | 4.4% | 1.2% | 6.1% | 4.0% |
### TABLE 6: INVESTMENT FINANCING OF COLLECTIVELY-OWNED TVES IN THE COASTAL AND CENTRAL PROVINCES (Page 2 of 2)

<table>
<thead>
<tr>
<th>Source</th>
<th>State budget</th>
<th>Funds from supervising agency</th>
<th>Bank and credit union loans</th>
<th>Foreign funds</th>
<th>Other funds raised outside of the firm</th>
<th>Bonds sold to employees</th>
<th>Other internal funds</th>
<th>Other Sources</th>
<th>Total Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. State budget</td>
<td>3.6%</td>
<td>7.1%</td>
<td>48.4%</td>
<td>1.2%</td>
<td>5.6%</td>
<td>4.7%</td>
<td>21.8%</td>
<td>7.7%</td>
<td></td>
</tr>
<tr>
<td>2. Funds from supervising agency</td>
<td>0.6%</td>
<td>1.8%</td>
<td>24.6%</td>
<td>10.3%</td>
<td>10.8%</td>
<td>6.6%</td>
<td>36.4%</td>
<td>8.9%</td>
<td></td>
</tr>
<tr>
<td>3. Bank and credit union loans</td>
<td>3.3%</td>
<td>6.7%</td>
<td>37.5%</td>
<td>5.7%</td>
<td>8.5%</td>
<td>3.7%</td>
<td>25.9%</td>
<td>8.8%</td>
<td></td>
</tr>
<tr>
<td>4. Foreign funds</td>
<td>1.0%</td>
<td>3.0%</td>
<td>29.6%</td>
<td>8.8%</td>
<td>9.0%</td>
<td>7.4%</td>
<td>31.9%</td>
<td>9.4%</td>
<td></td>
</tr>
</tbody>
</table>

#### Part B: TVE Investment: Composition of Funding from Each Source (in percent)

(Each row sums to 100)

<table>
<thead>
<tr>
<th>Region</th>
<th>1987</th>
<th>1996</th>
<th>avg 89-91</th>
<th>avg 92-96</th>
<th>avg 89-91</th>
<th>avg 92-96</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td>3.6%</td>
<td>7.1%</td>
<td>48.4%</td>
<td>1.2%</td>
<td>5.6%</td>
<td>4.7%</td>
</tr>
<tr>
<td>1996</td>
<td>0.6%</td>
<td>1.8%</td>
<td>24.6%</td>
<td>10.3%</td>
<td>10.8%</td>
<td>6.6%</td>
</tr>
<tr>
<td>avg 89-91</td>
<td>3.3%</td>
<td>6.7%</td>
<td>37.5%</td>
<td>5.7%</td>
<td>8.5%</td>
<td>3.7%</td>
</tr>
<tr>
<td>avg 92-96</td>
<td>1.0%</td>
<td>3.0%</td>
<td>29.6%</td>
<td>8.8%</td>
<td>9.0%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Coastal Provinces</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td>3.5%</td>
<td>5.8%</td>
<td>46.3%</td>
<td>1.7%</td>
<td>6.7%</td>
<td>5.4%</td>
</tr>
<tr>
<td>1996</td>
<td>0.3%</td>
<td>1.4%</td>
<td>23.9%</td>
<td>12.8%</td>
<td>5.1%</td>
<td>5.7%</td>
</tr>
<tr>
<td>avg 89-91</td>
<td>2.8%</td>
<td>5.7%</td>
<td>33.5%</td>
<td>8.2%</td>
<td>6.2%</td>
<td>4.4%</td>
</tr>
<tr>
<td>avg 92-96</td>
<td>0.8%</td>
<td>2.4%</td>
<td>27.2%</td>
<td>13.4%</td>
<td>6.2%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Central Provinces</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td>4.9%</td>
<td>7.4%</td>
<td>51.5%</td>
<td>0.9%</td>
<td>5.1%</td>
<td>5.1%</td>
</tr>
<tr>
<td>1996</td>
<td>0.9%</td>
<td>1.8%</td>
<td>25.6%</td>
<td>4.7%</td>
<td>17.4%</td>
<td>8.2%</td>
</tr>
<tr>
<td>avg 89-91</td>
<td>5.3%</td>
<td>7.7%</td>
<td>41.3%</td>
<td>0.9%</td>
<td>8.3%</td>
<td>5.3%</td>
</tr>
<tr>
<td>avg 92-96</td>
<td>1.4%</td>
<td>3.2%</td>
<td>31.3%</td>
<td>4.9%</td>
<td>12.2%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Shandong (a coastal province)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td>3.2%</td>
<td>5.9%</td>
<td>48.1%</td>
<td>1.0%</td>
<td>2.3%</td>
<td>5.4%</td>
</tr>
<tr>
<td>1996</td>
<td>0.4%</td>
<td>1.1%</td>
<td>30.7%</td>
<td>5.0%</td>
<td>5.8%</td>
<td>5.6%</td>
</tr>
<tr>
<td>avg 89-91</td>
<td>1.9%</td>
<td>5.6%</td>
<td>40.7%</td>
<td>3.1%</td>
<td>3.0%</td>
<td>5.1%</td>
</tr>
<tr>
<td>avg 92-95</td>
<td>0.5%</td>
<td>2.6%</td>
<td>31.6%</td>
<td>5.7%</td>
<td>5.8%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Sichuan (a central province)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td>3.1%</td>
<td>3.7%</td>
<td>51.4%</td>
<td>0.3%</td>
<td>5.5%</td>
<td>8.4%</td>
</tr>
<tr>
<td>1996</td>
<td>0.7%</td>
<td>0.8%</td>
<td>25.6%</td>
<td>1.3%</td>
<td>13.0%</td>
<td>5.1%</td>
</tr>
<tr>
<td>avg 89-91</td>
<td>3.8%</td>
<td>6.2%</td>
<td>33.4%</td>
<td>0.1%</td>
<td>13.0%</td>
<td>7.3%</td>
</tr>
<tr>
<td>avg 92-96</td>
<td>1.0%</td>
<td>1.5%</td>
<td>28.7%</td>
<td>2.2%</td>
<td>12.1%</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

Data from various issues of TVE yearbooks. 1988 data are not available.
REFERENCES


Demurger, Sylvie; Jeffrey Sachs; Wing Thye Woo; Shuming Bao; Gene Chang; and Andrew Mel-linger. 2002. “Geography, Economic, Policy and Regional Development in China.” *Asian Economic Papers* 1 (1).


In this chapter I will review financial sector reform issues from the angle of public debt management and fiscal policy. I will discuss the size and composition of the state’s external and internal debt (formal, contingent, implicit, guaranteed, non-guaranteed), strategies for the absorption of bad debt in the system, the role of stock exchanges in this process and in corporate development, and the solvency of the state. At the end I will propose elements of a strategy for the restructuring and recapitalization of the four large state-owned commercial banks (SOCB), which at the end of 2000 together still accounted for 62 percent of total banking system assets, 60 percent of loans, and 70 percent of deposits.

A healthy financial sector (including sound corporate financial structures) is essential for sustaining high and efficient growth as the economy opens up further under the commitments that China has made to WTO partners. China’s financial sector has to overcome many problems before it can be given a clean bill of health. A substantial further liberalization of the financial sector from direct and indirect state controls will be needed, but such liberalization should only be undertaken as part of an overall strategy that integrates financial, fiscal, and corporate development objectives and constraints. Many state-owned enterprises (SOEs), clients of the state-owned commercial banks, remain relatively inefficient and/or seriously undercapitalized. Although loans to non-state firms and private borrowers are rapidly increasing as a proportion of SOCB lending, recent statistics indicate that loans to SOEs still account for almost 70 percent of new loan commitments and a higher percentage of the SOCBs’ outstanding loan portfolio. A large proportion of the SOE loan portfolio is non-performing. There is little information on the quality of non-state loan portfolios. With the important exception of the portfolios of rural credit cooperatives, it is generally believed to be much better than that of the SOCBs.

1. In order of their balance sheet total: Industrial and Commercial Bank of China (ICBC), Bank of China (BOC), Construction Bank of China (CBC), and Agricultural Bank of China (ABC).
2. In 2001 about 30 percent of new loan commitments were made to non-state clients (which includes some companies with significant government ownership). Consumer credit is the most rapidly growing segment of SOCB loan portfolios; about 80 percent of consumer credit is accounted for by mortgage loans for private house/apartment purchases.
WTO membership increases the urgency of both SOE and financial sector reform. Five years after accession, foreign banks are entitled to full “national treatment,” while all restrictions on the kind of customers they may serve, domestic currency transactions, and geographical location are required to be lifted. Two years after accession, foreign banks are to be allowed to conduct local currency business with Chinese corporate customers. These commitments mandate significant institutional change in China’s financial sector and underline the need for SOCB recapitalization in order to prepare the state banks for greater competition, not only with foreign banks, but also among domestic banks. These institutional and recapitalization requirements are merely accelerated, not determined by China’s entry into the WTO. Even without WTO membership, China’s continued modernization with rapid growth would entail substantially the same reform requirements.

IS THE NPL PROBLEM PEAKING?

The most pressing public sector debt problem that needs to be resolved (with or without WTO) relates to the non-performing loans (NPLs) on the balance sheets of SOCBs. This is not a formal \textit{de jure} debt, but an implicit or contingent debt of the public sector. To the extent the banks themselves are unable to absorb the losses, NPLs constitute a contingent liability of their owner, the state. Without an implicit government guarantee of SOCB deposits, a large proportion of which has been used to finance NPLs, those banks would collapse. The implicit guarantee represents the state’s contingent liability. Resolution of this problem is a complex matter requiring change in many areas of government policy. As owner of the state banks, the government is responsible for their recapitalization in accordance with internationally agreed capital adequacy and accounting standards. But recapitalization is not enough. It is also essential to strengthen China’s credit culture and to improve the profitability of the banks.

The precise magnitude of the state’s contingent NPL-related debt is hard to measure.\footnote{China’s loan classification system for commercial banks was recently changed from four categories (normal, overdue, doubtful, and bad) to five (performing, special mention, sub-standard, doubtful, and loss). The central bank assigns loan recovery probability rates to each category, but the banks themselves determine in which category each of their outstanding loans falls. In this process they tend to be guided more by past performance than the projected future creditworthiness of their clients. Actual recovery rates are rather unpredictable and vary with changing circumstances and collection effort. Another reason why the NPL portfolio is hard to measure is that much loan delinquency is believed to be caused by unwillingness to pay rather than inability to pay. Perverse incentives facing both borrowers and lender were indeed a part of the problem until recently.} With the exception of the overseas subsidiary of Bank of China (BOC) incorporated

\footnote{3. This means that five years after China’s WTO entry, i.e., January 2007, there should be no distinction between market entry- or prudential requirements for foreign and domestic banks.}
in Hong Kong, the financial accounts of the four large SOCBs\textsuperscript{5} have thus far not been audited according to international standards. BOC is the only one of the four that publishes consolidated accounts for all of its national and international holdings and operations. It is more difficult to assess the overall financial condition of the other three. It is clear, however, that all four (excluding BOC international) remain very seriously under-capitalized. This is true in spite of the RMB 270 billion bank-restructuring bonds issued by the Ministry of Finance (MOF) in 1998 and the subsequent partial recapitalization through NPL purchases at par totaling RMB 1.4 trillion by state-owned Asset Management Companies (AMCs).\textsuperscript{6}

After more than eighteen years of SOE and bank reform in China, the stock of NPLs appears to be still growing in absolute terms, although not necessarily in relative terms. All SOCBs, except BOC, reported a drop in their NPL ratio from 2000 to 2001 (and projected further drops in line with central bank instructions). The aggregate SOCB NPL portfolio as a percentage of GDP has declined slightly in 2001 (from 25.5 to 24.3 percent). In absolute terms, however, the NPL stock is still growing, because the total loan portfolio is growing faster than GDP.\textsuperscript{7} A relatively stable or declining aggregate NPL/GDP ratio represents a significant improvement over the past. For a variety of social and political reasons, however, it is apparently not possible for China to “freeze” the stock of NPLs in absolute terms, at least not yet. The best that can be planned for is a rapid reduction in the rate at which the NPL stock is growing and a slow reduction in the NPL/GDP ratio.

It is evident from their published financial accounts that the four large SOCBs are not progressing toward the goal of reducing their NPL/loan portfolio ratio at the same rate. CBC has the lowest overall NPL/loan portfolio ratio (19.4 percent at the end of 2001, slightly lower than in 2000), while ICBC appears to be making the most rapid progress in reducing its ratio (from 34.4 percent in 2000 to 29.8 percent in 2001). ABC had the highest rate (42.1 percent) in 2001, while BOC reported a slight increase in its rate, from 27.2 percent in 2000 to 27.5 percent in 2001. Since loan classification is the responsibility of each individual bank, it is not clear that the ratios are comparable. China’s state banks have traditionally hidden their NPL problems. It is only recently (since 2001) that SOCBs have begun to be more transparent on this issue in their published accounts.

\textsuperscript{5} These are indeed very large banks by any standard. Three of them belong to the forty largest banks in the world, and all four rank among Asia’s top ten.

\textsuperscript{6} MOF’s 1998 bank-restructuring bonds were financed from excess reserves held by the SOCBs with the Central Bank. This form of recapitalization differs from the subsequent recapitalization through the purchase of NPLs at par by the AMCs in the sense that the latter approach adds to the net stock of public debt while the former did not.

\textsuperscript{7} At the end of 2001, ICBC, BOC, CBC and ABC reported NPL ratios of 28.9, 27.5, 19.3, and 42.1 percent respectively. In the aggregate this amounted to 29.9 percent of their combined domestic loan portfolio or about 24.3 percent of GDP for 2001. A year earlier, at the end of 2000, the corresponding aggregate NPL ratios for the four banks were 32.9 percent and about 25.5 percent.
In China’s case a falling NPL/loan portfolio ratio does not imply a falling NPL/GDP ratio, because outstanding loans have been growing considerably faster than GDP. The main objective, of course, should be to stabilize and then reduce the NPL/GDP ratio. It would be very dangerous for China if the overall NPL/GDP ratio were to start growing again. In that case China might reach a “point of no-return” beyond which a deep crisis will become unavoidable. This is not a fixed point that can be calculated ex-ante, except in a model under highly restrictive assumptions—crises are by definition unpredictable. In 2000 and 2001, the aggregate NPL/GDP ratio for the four SOCBs appears to have stabilized around the 25 percent level. It may even have declined somewhat in 2001. Although weaknesses in China’s financial system remain pervasive, a crisis is not preordained. As long as bank liquidity remains high, adjustment is moving in the right direction and public confidence remains strong, China has some space to sort out the deep financial problems of state-owned banks.

The analysis so far has focused exclusively on the NPL portfolios of the four SOCBs. Most other banks in China’s are also publicly owned; private domestic and foreign banks accounted for only about 2.5 percent of all domestic bank assets in 2000. Many other public financial institutions also face portfolio quality problems. By far the most serious problems are found in the group of over 40,000 rural credit cooperatives, which together account for about 10 percent of total banking system loans. Assuming that the weighted average NPL ratio of non-SOCB members of China’s banking is half the weighted average ratio for SOCBs, the total NPL ratio for the entire banking system in China would be 24.8 percent of the aggregate banking system loan portfolio and 33.5 percent pf GDP. In relative terms the NPL problem is much larger in China than it is in Japan or was in the United States during the Savings and Loan Crisis of the late 1980s/early 1990s.

Although China’s NPL problem is very large in both absolute and relative terms, the analysis of published NPL numbers suggests that the relative size of the problem—overall NPL/loan portfolio and NPL/GDP ratios—may have peaked. If confirmed, this is good news. It would make it in principle possible to begin working toward comprehensive solutions, including, as an extreme possibility, a once-for-all upfront recapitalization of all four SOCBs through a massive government bond issue. However, other avenues toward recapitalization should be pursued as well. I am concerned that comprehensive upfront recapitalization, as recommended in a recent report by the OECD (2002), might be suboptimal in the sense that it might reduce bank incentives to collect on delinquent loans and strengthen their capital base through other internal efforts. Recapitalization in

8. The latter ratio is much higher than the first, because the aggregate loan portfolio of all banks in China is much larger than GDP.

9. A full recapitalization of all four SOCBs at the end of 2001 with the NPLs that remain on their balance sheet written down to market value and a capital adequacy ratio of 8 percent, would have cost on the order of $350–400 billion. If this had been financed with a long-term bond issue carrying a market rate, the incremental interest burden on the budget would amount to the equivalent of a relatively modest 2 per-
China’s case should in my view be conceived of as a process, tailored to the needs and circumstances of each bank. In some cases it may be better to delay full recapitalization, whereas in other cases bank closure may be preferable to recapitalization.

Premature recapitalization may create adverse selection and moral hazard problems. The top priorities in my view are to formulate and announce a comprehensive recapitalization strategy, to maximize incentives and opportunities for building loan-loss reserves in the state banks, and to attract shareholder capital from sources other than the state. The question of how soon China’s NPL problem needs to be cleaned up is hard to answer in general terms. It depends on the risk profile of the various contingent liabilities facing the state, on the relative strength of China’s external economic position, and on confidence factors. The issues are pressing, but it is not imperative for their current owner to fully recapitalize all state banks upfront. It is more important to get the strategy right than to do it quickly.

**DISTRIBUTING THE NPL CLEAN-UP BURDEN**

A major issue in the NPL clean-up process is the distribution of costs among the various stakeholders—governments (central and local), the banks themselves, SOEs, taxpayers, owners of bank deposits, shareholders, and foreign creditors. Burden sharing will not be voluntary. Through its policies and actions, the central government will be the main arbiter of outcomes in this process. There will often be conflicting pressures on the government; struggles between stakeholders to shift the burden to others will be hard to avoid. The massive financial clean-up task that lies ahead will require not only financial and economic expertise but also great political skill and strong leadership.

Given the expectation that foreign banks should be able to compete freely in the Chinese market from January 2006, the timetable for domestic financial system adjustment is very tight. There is virtually no room for policy mistakes. The fact that China is entering WTO at a time of great international uncertainty and economic recession in several major OECD countries magnifies the challenges. China’s overall NPL clean-up strategy should closely link financial system reform to fiscal and capital market development. The plan for burden distribution should place emphasis on the need for the banks themselves to increase their internal savings capability.

---

cent of 2001 GDP. It would have raised the budget deficit for 2002, currently projected at about 3 percent, to about 5 percent.
THE EVOLUTION OF CHINA’S FINANCIAL SECTOR REFORMS

Financial sector reforms in China have traditionally lagged behind market reforms in the real economy. This is partly due to the fact that, at the political level, the issues were not well understood until recently, but also because it was convenient to delay financial sector reforms as long as banks and other financial institutions could be shielded from international competition and accounting norms. Many in the leadership did not begin to appreciate the risks associated with a weak banking system, inadequate supervision, and poor corporate governance until the Asian Financial Crisis of 1997–98. This crisis, together with the final stages of WTO-entry negotiations with the United States in 1999 forced many of the issues into the open. Not only did financial sector reform and concerns about inadequate corporate governance move to center stage, but significant changes in industrial policy were made as well.\(^\text{10}\)

From the time that the responsibility for providing investment capital to (and supporting loss-making) SOEs was shifted from the state budget to SOCBs around 1984 until recently, SOCBs served as financial agents of the state. They became in fact financial “dustbins” of the reform process. This approach permitted preserving full employment in cities and kept alive the illusion that China could avoid much of the pain of reform. In a more positive vein, China’s incrementalist approach to economic reform bought time for people and institutions to adjust to the emerging realities of a market economy while incomes were growing and social stability was preserved. Meanwhile, accumulating financial losses in the state banks could be easily hidden and did not seem to hurt anybody. The day of reckoning could be postponed, perhaps indefinitely, it seemed. Thanks to China’s very high household savings deposited in bank accounts, SOCBs remained on average very liquid while potential solvency problems were building below the surface.

Since the macroeconomic policy reforms of the mid-1990s, the pressure on SOEs to reform gradually increased through hardening budget constraints. Greater economic and financial discipline was also imposed on the banks themselves, especially after the South Korean financial crisis of 1997–98. The adjustment process is still ongoing; budget constraints are still not really hard in all situations.

Had China’s fiscal system been stronger, it might have been possible for the state banks to build larger reserves against future losses. This did not happen, in part because MOF—owner of the banks on behalf of the state—for many years limited provisioning

---

\(^\text{10}.\) South Korea’s chaebōl structure appears to have served as a model for China’s new industrial policy announced in President Jiang Zemin’s speech at the opening of the 15th Party Congress in September 1997 (Jiang 1997)—three months before the South Korean financial crisis broke. The model appears to have been quietly dropped from China’s plan or adjusted so as to avoid the problems encountered in South Korea.
by state banks to 1 percent of their loan assets. For budget reasons, MOF had to maximize tax revenues from state banks. Fiscal considerations were in direct conflict with key financial system reform requirements. An important implication of this is that the performance of China’s state budget has been consistently weaker than official numbers indicate while taxable state bank profits were systematically overstated.

MOF’s policy has recently changed. Partly as a result of improving tax collection (budget revenues as a share of GDP increased from an all-time low of 11 percent in 1995 to an estimated 18 percent in 2002), the 1 percent provisioning restriction was lifted, and the banks are now encouraged to absorb more losses themselves. At the same time, efforts are being made to increase the profitability of the state banks through internal restructuring and (business) tax reductions. This is consistent with my earlier observation that a planned burden sharing in NPL clean-up should place emphasis on internal savings generation by the banks themselves.

Interest liberalization should be pursued with vigor once the state banks are fully accountable for their own bottom line. It will enable these banks to increase their profit margins while contributing more proactively to private sector development. Premature interest liberalization risks that state banks will compete for market share at the expense of their bottom line. The greatest potential for increasing bank profitability in China, however, lies in fees for services. Most state banks in China earn less than 5 percent of their income from non-interest sources. Major banks in OECD countries typically derive between 40 to 55 percent of their operating income from such sources.

**AMCs, Bank Recapitalization, and Debt/Equity Conversions**

In 1998 and 1999 four newly created state-owned Asset Management Companies (AMCs) purchased RMB 1.4 trillion (about US$170 billion) worth of NPLs at face value from the four SOCBs and the State Development Bank. This massive NPL transfer within the public sector took place before the state banks had begun to be more transparent in published accounts about their NPL portfolios and before clear regulations and guidelines for the disposal of the NPLs by the AMCs had been issued. NPL purchases by the AMCs were intended to help recapitalize the state banks and accelerate SOE reform. They were financed by the central bank (for a total of about RMB 600 billion) and by the issue of AMC bonds (about RMB 800 billion). The transactions were kept out of the state budget entirely. MOF did not guarantee the AMC bonds but indicated that it would as-

---

11. It was announced at the time that the transfers of 1998–99 concerned NPLs accumulated before 1997. No announcement was made regarding how the remaining NPL portfolios (accumulated since 1997) would be dealt with.
sume ultimately responsible for AMC losses. MOF’s total contingent liability did not change as a result of this substitution of contingent liabilities within the public sector.

As part of the large initial (and so far only) NPL purchases by state-owned AMCs, the State Economic and Trade Commission (SETC), which is responsible for SOE reform, authorized parallel debt/equity conversions at par between the AMCs and their SOE debtors for a substantial amount. This created the illusion that a substantial part of AMC liabilities was backed by AMC assets. The AMC bonds together with central bank financing were considered as bank recapitalization. Since the bonds carried no formal MOF guarantee, and since it was obvious that AMC assets could not be disposed of without losses (they were acquired at nominal book value), it is difficult to see how those bonds could contribute to bank recapitalization at full face value. Growing awareness of these anomalies created enormous pressure to increase the transparency of bank reform and the strategic relevance of specific recapitalization measures.

It was in these rather confusing circumstances that Liu Mingkang, former president of BOC, the most prestigious, most international, and second largest of the SOCBs (in terms of assets) announced in May 2001 that the bank’s NPL portfolio amounted to 28.8 percent of loan assets (subsequently reduced to 27.2 percent) at the end of 2000. The announcement came as a surprise and a shock; the stock of BOC’s NPLs was admitted to be much larger that anyone in official position in China had previously acknowledged. At the time of the announcement, BOC had already transferred a significant amount of NPLs—RMB 267.4 billion—to its AMC (Dongfang). Given its domestic loan portfolio of RMB 1,150 billion at the end of 2000, BOC’s stock of NPLs must have accounted for well over half of the bank’s domestic loan assets before the transfer. Prior to the NPL transfers to AMCs in 1998–99, the four large SOCBs probably had a combined NPL ratio of 50–60 percent of their domestic loan portfolios.

Since BOC’s pioneering with greater transparency in published accounts, other SOCBs have followed suit. The central bank has issued new accounting instructions and expects state banks to reduce their NPL ratio by a certain minimum percentage each year. The changed circumstances, pressing for accelerated state bank reform, have also led to greater reluctance on the part of the banks to approve new loans or roll over old ones. Their general reluctance to lend has led to a reduction of the average SOCB loan/deposit ratio from well over 80 five years ago to less than 70 in 2001. Much of their surplus liquidity has been used instead to purchase government securities. Lending to the private sector is concentrated in secured consumer credits (mortgages in particular) and in foreign currency loans to large multinational corporations with an international credit rating. SOCB lending to domestic private companies has remained minimal. Most such lending is undertaken by joint-stock commercial banks, city commercial banks, and China’s only truly private bank, Minsheng.
ESTIMATING NPL-RELATED LOSSES AND OTHER LIABILITIES OF THE STATE

If the stock of NPLs could have been frozen at the end of 2001, the Chinese economy would have to deal with a combined SOCB NPL/AMC portfolio of the order of US$400–450 billion. Assuming an average 20 percent recovery rate (including debt/equity conversions),12 SOCB losses of US$320–360 billion will have to be absorbed. The total NPL/AMC portfolio that may eventually have to be dealt with by the state and its agents is even larger, because it includes at least a part of NPLs accumulated in other state-owned or state-controlled banks. The total NPL/AMC stock for the account of the state may be over US$500 billion, of which the irrecoverable component could be around US$400 billion (about 40 percent of 2001 GDP). These losses have already been incurred; they are like a sunk cost to the economy. There are in addition substantial hidden liabilities in the public sector in the form of overdue and unpaid bills by lower-level governments, but no reliable aggregate information is available on that subject. Few countries have ever had to deal with accumulated losses in the public sector of the magnitude that China will have to tackle. Loss absorption on this scale will inevitably take many years or even decades.

In addition to the irrecoverable portion of state bank NPLs and de facto lower-level government debt, the Chinese state also faces large unfunded pension obligations as a result of pension reform in the late 1990s. This so-called implicit pension debt is sometimes included in estimates on the state’s total contingency debts. It is evident that the Chinese state has a lot more domestic debt than the officially registered de jure state (sovereign) debt. Even after years of domestic borrowing for the financing of fiscal stimulus programs (since mid-1998), domestic sovereign debt still accounts for only about 17 percent of GDP. Sovereign external debt accounts for an additional 5 or 6 percent of GDP, bringing total internal and external sovereign debt to only about 23 percent of GDP. This is an extremely modest ratio by international standards. The real challenge lies in the much larger contingency or implicit domestic state debt, which may be estimated at 2–3 times official sovereign debt. If unfunded pension debt were to be included, China’s state debt amounts to well over 100 percent of current GDP.

12. The AMCs are disposing of their assets in various ways. The process is likely to go on for several years. Huarong was the first to hold an international auction (2001). The recovery rate achieved so far is believed to have averaged well below 10 percent. The 20 percent recovery rate assumption used in the text is based on AMC expectations and includes the debt/equity conversions (mostly at par) authorized by SETC.
China’s large contingency state debt requires a comprehensive long-term strategy. All avenues toward loss absorption will have to be pursued, including debt redemption, debt/equity conversions, new bond and share issues, as well as write-offs against reserves or future provisioning. State assets will almost certainly have to play a central role in the unwinding process, and asset management companies will be important vehicles. However, the government’s AMC program as employed so far has serious shortcomings and should not be repeated in the same form:

1. If NPL/AMC bond substitution is to be regarded as state bank recapitalization, MOF has to guarantee the bonds and add the guarantee to (contingent) state debt.

2. Debt/equity conversions between AMCs and SOEs at par can easily lead to the undesirable result that the accounts of participating, but poorly performing, SOEs suggest renewed creditworthiness for state bank loans, thus continuing the vicious circle. Such conversions may therefore lead to adverse selection (giving priority to companies that are hardest to sell) and moral hazards (reduced incentives for meaningful reform if the problem can be shifted to another part of the public sector with the stroke of a pen).

Nonetheless, there is a role for state-owned AMCs and for public/private joint ventures in NPL clean-up. The process would be more transparent and easier to manage, however, if such AMCs were properly capitalized upfront and required to purchase soft bank assets at a market price. Private AMCs should also be encouraged to enter the market and participate in the clean-up process. More private international capital would become available for this if restrictions on the acquisition of Chinese assets by foreign companies were further relaxed.

China’s stock exchanges will have to play a major role in the loss-absorption process through debt/equity conversions. This is one of the reasons why the rapid and sound development of China’s stock exchanges (including Hong Kong) and other capital markets, is critical. It has also been suggested that China’s NPL/AMC portfolio is so large relative to the size of the Chinese economy that it will not be possible to absorb all losses within a reasonable period of time, unless the government opens up the possibility for state bank deposit holders to voluntarily convert part of their deposits into equity. This would be a very unorthodox approach to bank recapitalization, but it is worth exploring under what circumstances it might be a legitimate option.
About 70 percent of all deposits in SOCBs (RMB 10 trillion [US$1.2 billion] at the end of 2001) is owned by households. Around 10 percent of that amount is held in foreign currency (mostly US$) accounts, which is the source of rapidly expanding foreign currency lending by SOCBs. The potential of voluntary SOCB debt/equity swaps may therefore be significant. Any such voluntary conversions at discounted share prices would presumably require government compensation to the depositors.

Voluntary debt/equity conversions will be easier to arrange when there is confidence in the stock markets and when share prices are stable or rising. Ongoing efforts by China’s Securities Regulatory Commission (CSRC) to improve the quality and transparency of new listings, corporate governance, accounting and auditing standards, as well as trading supervision on the Shanghai and Shenzhen stock exchanges, are critical in this regard. Good progress is being made, but many problems remain. With respect to share prices, the government faces a dilemma and a potential conflict of interest. As majority shareholder in most listed companies, the government naturally has an interest in high share prices, but as market regulator and supervisor of the financial system (through the regulatory agencies), it has to ensure that there is confidence in its ability and willingness to set and enforce high governance standards. The actual situation with regard to share prices and governance standards (for listed companies and for the stock exchanges themselves) remains anomalous in several ways.

LEVERAGING CHINA’S EXTERNAL FINANCIAL STRENGTH FOR DOMESTIC FINANCIAL CLEAN-UP

The contrast between China’s external financial strength on the one hand—a stable currency supported by an unusually strong balance of payments and high international reserves—and the weakness of its domestic fiscal and financial system on the other, is striking. Without its considerable external financial strength, China’s economy could

13. The government owns (directly and indirectly) an average of 68 percent of the 1,212 companies that were listed on the Shanghai and Shenzhen stock exchanges in September 2002. It also owns majority shares in Chinese companies listed in Hong Kong (H shares and red chips).

14. For example, due to currency inconvertibility (for capital account transactions) and other factors, A shares in Shanghai and Shenzhen often trade at a multiple of the value of H shares in Hong Kong in the same Chinese companies. The average P/E ratio of A shares, though lower than a few years ago, was still between 40.4 (Shanghai) and 45.2 (Shenzhen) in September 2002, much higher than sustainable long-term levels. After the opening of the B-share market to local investors in February 2001, the average P/E ratio and turnover rate of B shares increased sharply, but remains well below the rates for corresponding A shares in the same companies.

15. China’s balance of payments has shown both current and capital account surpluses in most years since 1994. Official reserves amounted to over US$250 billion in September 2002, which was more than twelve-months import equivalent. In addition, there are substantial hidden reserves in the state banks. In light of this great external financial strength and strong balance of payments prospects, China’s currency is more likely to appreciate than depreciate in the coming years.
quickly become vulnerable to externally induced shock. Maintaining external financial strength during economic transition is imperative for China.

The government has to find ways to leverage external financial strength to help resolve domestic financial weakness. External debt is at present the least of China’s financial worries. China can afford to borrow more abroad for domestic recapitalization purposes. In addition, the sale of assets abroad reduces claims on domestic financial resources. These avenues are already being used or explored by the AMCs; the government is relaxing restrictions on the purchase of existing Chinese assets by foreigners. CSRC has recently announced that it will issue regulations that would permit foreign majority ownership in domestic companies listed in Shanghai or Shenzhen. This would be a breakthrough of great significance, since it would enable the completion of partial privatizations started in the 1990s.

In this context, a further appreciation of the RMB against the US dollar, as indicated by China’s continued large balance of payments surpluses, may help, provided there is no risk of deflation. It would increase the dollar value of domestic assets sold abroad, reduce the cost of external debt service, reduce the cost of imported inputs and enhance disposable incomes. It would also project an image of economic strength and thus enhance investor confidence. On the other hand, currency appreciation may reduce export competitiveness and growth prospects, unless it is matched by lower domestic inflation and/or productivity gains. Given the great competitive strength of many of China’s exports, as evidenced by the 16 percent export growth rate in 2002 registered so far in the face of stagnating global trade, a mild appreciation of the RMB against the US dollar can be relatively easily absorbed by most exporters.

Fortunately, there are important synergies between China’s pressing domestic financial needs and incentives to improve accounting, auditing, and governance standards. China cannot expect to access foreign stock exchanges for the listing of a substantial number of SOEs that are to be privatized unless disclosure and governance standards are adjusted to international norms. The dynamics of the reform process itself may contribute to the solution of China’s domestic financial problems as long as a strong growth momentum is maintained. Exchange rate appreciation could boost the reform process, provided a strong balance of payments can be maintained. Helpful synergies may also lie in the gradual integration of the A and B share markets domestically (as is already happening) and in the gradual reduction of capital account restrictions (growing currency convertibility). Once full currency convertibility has been achieved (which may take another decade or more), mobilization of foreign financial resources for domestic investment and debt clean-up will be easier than it is at present.
IS THE CHINESE STATE SOLVENT?

Given the large implicit and contingent public sector debts in China, the question arises whether the state has the fiscal capability (through taxes, borrowing, and/or asset sales) to meet its de facto financial obligations. States are solvent as long as they can pay their bills and service their debt on time. Technically, states, unlike corporations, cannot go bankrupt, but in practice they (especially smaller countries, as the recent Asian financial crisis has amply demonstrated) can come close to it. Under present economic conditions there is no risk that China’s central government would be unable to meet its external financial obligations. The situation is different and more complex with regard to the state’s domestic financial obligations. Some components of the Chinese state, including state-owned corporations and lower-level governments, have defaulted on part of their financial obligations (sometimes external as in the case of the Guangdong International Trust and Investment Corporation, but usually internal, as with wages, pensions, local suppliers, and/or utilities). Local government budget problems intensified in poor areas after the fiscal reforms of 1994, and many local governments are essentially broke.

In principle the central government can make good on unmet financial obligations of components of the state—and is doing so in a limited way for social security obligations—but it is understandably concerned about perverse and adverse consequences if it did so indiscriminately. Moral hazard problems and the risk of inflation are obvious. The Chinese government appears to have no inclination whatsoever to use the inflation tax as part of the solution of its domestic debt problems. Mild inflation will probably not be resisted, provided it does not threaten social stability. Should domestic financial problems of the state become unmanageable, high inflation may be hard to avoid. This could spell disaster for the regime. Protecting the solvency of the state is obviously critical.

The solvency of the central government for domestic financial obligations is apparently not in doubt. Otherwise there would be a run on deposits in state banks, and Treasury bonds would sell at a deep discount. Doubts about the solvency of the government can quickly lead to acute liquidity problems and thus provoke a financial crisis. It is therefore essential for the authorities to prevent such doubts from ever arising. This explains why on the few occasions that local bank branches ran into acute liquidity problems, the center never hesitated to transfer additional cash to such branches immediately.

16. This deterioration is due to many factors, including the fact that the central government has so far been unable to generate the redistributable fiscal resources of about 10 percent of total revenues that were projected when the 1994 tax reforms were introduced. Another factor is the demise of numerous locally owned “township and village enterprises” that contributed so much to rural growth in the 1980s and early 1990s, before competition from imports and more efficient coastal industries began to undermine them.
Government officials often make the point that there is no reason to worry about the solvency of the state, because state assets are alleged to exceed state liabilities by a large margin. To demonstrate this in a comprehensive national balance sheet of assets and liabilities for the Chinese state as a whole, including state-owned companies and lower level governments, would be very difficult. Many of the state’s assets, such as land and buildings, are not liquid or are encumbered in various, often non-transparent ways. It is moreover doubtful that a balance sheet for the state as a whole, even it could be constructed, would conclusively demonstrate solvency (or the lack thereof).¹⁷ In China’s case it is most useful to focus on the central government as the most important agent of the state.

In normal circumstances, central governments do not have to own or use assets to protect their solvency, except in some cases (e.g., state-mandated social security systems). In a growing economy, normal financial obligations of the government, including debt service, can usually be financed from current revenues and increases in the stock of debt that leave the ratio of interest payments/GDP unchanged. Like other transition economies, however, China is a special case. A large part of the central government’s financial obligations is related to the country’s economic transition. This “transition debt” includes the bonds issued by state-owned AMCs, part of the long-term debt of the three state-owned Policy Banks, the irrecoverable part of NPL portfolios that remain on the books of state banks, recapitalization needs of SOEs owned by the central government, and perhaps also a part of the unfunded pension debt. Against these transition-related liabilities, the government has transition-related assets such as the shares it owns in listed SOEs, SOEs that are to be listed or sold outright, other marketable assets, net foreign investments, and expected proceeds from NPL/AMC sales.

It is of interest to compare transition-related liabilities to the value of assets that the government could use to finance such liabilities outside the normal budget. A highly simplified balance sheet of transition debt and transition assets at the end of 2001 is shown in Table 6.1.¹⁸

¹⁷. For example, the national balance sheet of state assets and liabilities for Japan shows a large net-deficit. Even though its international sovereign debt was repeatedly downgraded by rating agencies, the Japanese state is not regarded as insolvent.

¹⁸. It should be emphasized that these are at best rough approximations for illustrative purposes only. The numbers are based on various sources and author estimates. For the sake of simplicity, point estimates are given rather than ranges. The valuation of non-tradable government shares is based on September 2002 market values at the stock exchanges of Shanghai, Shenzhen, and Hong Kong. The proportion of the Hong Kong stock exchange capitalization accounted for by mainland companies (H shares and red chips) is a little over 30 percent, projected to rise to almost 33 percent after the proposed (recently reduced) share issue by China Telecom. Modest amounts of Chinese shares trade at other stock exchanges—mainly New York. The Chinese government owns (directly and indirectly) about 68 percent of listed SOEs. These government shares are not tradable on the exchanges.
Table 6.1
Approximate Balance Sheet

<table>
<thead>
<tr>
<th>Liabilities (RMB billion)</th>
<th>Assets (RMB billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMC bonds</td>
<td>Market value of govt.-owned shares in listed SOEs</td>
</tr>
<tr>
<td>800</td>
<td>3,600</td>
</tr>
<tr>
<td>Policy Bank bonds</td>
<td>Market value of SOEs to be listed in next five years</td>
</tr>
<tr>
<td>600</td>
<td>2,300</td>
</tr>
<tr>
<td>NPLs (remaining)</td>
<td>Other marketable assets</td>
</tr>
<tr>
<td>2,800</td>
<td>400</td>
</tr>
<tr>
<td>Debt to central bank</td>
<td>Cash value of NPL/AMC sales</td>
</tr>
<tr>
<td>600</td>
<td>300</td>
</tr>
<tr>
<td>SOE re-capitalization needs</td>
<td></td>
</tr>
<tr>
<td>1,200</td>
<td></td>
</tr>
<tr>
<td>Local government debt</td>
<td></td>
</tr>
<tr>
<td>800</td>
<td></td>
</tr>
<tr>
<td>Estimated present value</td>
<td>Estimated present value</td>
</tr>
<tr>
<td>3,800</td>
<td>5,400</td>
</tr>
</tbody>
</table>

NOTE: Estimated present value of the unfounded pension debt: at least RMB 4500.

**ASSET-BASED VERSUS BUDGET-BASED SOLUTIONS**

Table 6.1 suggests that the capacity of the central government to finance non-pension “transition debt” from assets is in principle sufficient provided—

1. asset markets do not collapse;
2. the stock of NPLs does not grow much bigger;
3. the government is willing to sell all or a very large proportion of the “transition assets” it holds and accept a sharply reduced ownership role in the economy through privatization.

Since the lion’s share of transition assets in the table is accounted for by non-tradable public sector shares in listed SOEs, it is critical that those shares be made tradable or that their market value be mobilized in some other fashion. This has, of course, major potential implications for the domestic and Hong Kong stock exchanges.

Alternatively, the government could aim at financing its transition debt directly through the budget by borrowing the funds required and paying interest on the debt. In theory (assuming normal returns on investments), there should be financial equivalency between use of state assets for debt redemption and placing the burden on the budget. In practice there are major social, political, and institutional differences between these alternative approaches. A sharp reduction in the state’s ownership role in China’s economy is consistent with reform objectives and, in my opinion, preferable in principle to the direct budget approach in China’s case. A combination of the two approaches may be optimal.
If the implicit pension debt (IPD) is included in the transition debt, the table suggests that the state faces a potentially serious solvency problem. Since the IPD is not a sunk cost, however, and can be paid off over a very long period, it need not cause undue financial pressures in the near term. Moreover, it is possible to change the design and the parameters of the pension system such that the present value of unfunded future liabilities is reduced or matched by future incremental revenue flows.\(^{19}\) Pension benefits may have to be further reduced and new revenue sources may have to be identified and earmarked for the pension fund to protect the solvency of the state. For all these reasons, I prefer to treat the IPD separately from other transition debt and keep it out of the solvency analysis. The table does suggest, however, that the upfront funding of IPD through asset sales, as was briefly tried in 2000/2001, is going to be very difficult if not impossible. There simply are not enough state assets (by my calculations) to absorb both the IPD and all other transition debt.

Non-tradable state-owned shares are evidently a key element in possible asset-based solutions for China’s huge transition debt. The only serious attempt made by the government so far to use these shares for such purchases was a failure. In late 2000 the government decided to reserve 10 percent of new IPOs and existing shareholdings to help fund the newly established National Social Security Fund (2000). A strongly adverse market reaction to this initiative (sharp drops in share values) caused the government to suspend the experiment within a few months and to cancel it entirely in June 2002. The government has since announced that it would begin to permit foreign agents to acquire majority shareholdings in SOEs listed on domestic stock exchanges. To ensure that such share acquisitions would not have a depressing effect on current share prices, they would have to be negotiated outside the exchanges and the new owners would have to agree to hold the shares for an extended period before resale. The CSRC is preparing a regulatory framework for such transactions. In my view, this is an innovative and very welcome new development, which should make it easier for China to unwind transition debt in ways that are consistent with overall reform objectives and economic adjustment. The proposed new approach amounts to a major new step in China’s gradual privatization of state assets.

Yet, an additional approach to the use of state assets for financing transition debt would be to use them as security for new financial instruments. This should enable the state to deal with at least part of the transition debt without unduly depressing current market values of state assets. This approach requires legislative changes to ensure that asset-backed securities are in fact freely tradable and that holders of such new debt instruments have quick and reliable access to underlying assets in the event of a default. Compared to equity markets, China’s debt markets are at present underdeveloped. The

\(^{19}\) The ongoing pilot pension-reform project in Liaoning Province may provide useful guidance on pension system design and parameters. Incremental revenues might be raised through a social security tax, as is under consideration.
use of state assets for the promotion of both primary and secondary debt markets would be consistent with the emerging needs of the economy and with overall reform objectives.

The financial tightrope that China’s government will have to walk in the coming years presents enormous challenges. Successful resolution of the transition debt problem requires not only further bank and SOE reform, but also fiscal and capital market development. Avoiding a stock exchange collapse while building confidence in the market and broadening the range of tradable financial instruments is critical. The dynamics of China’s reform processes suggest that the government’s current majority ownership in listed companies will gradually change to minority ownership as a result of financial pressures. At the same time the relative importance of the state banks in the overall financial system will gradually diminish, while the share of bank deposits in total financial assets will similarly decline. These changes will have major consequences for the exercise of share ownership rights by non-state (including foreign) agents and for the development of corporate governance standards in China. The potential for positive synergies between related reform measures is enormous.20

CONSTRAINTS ON NEW IPOS AND GOVERNMENT SHARE SALES

The need for a further rapid expansion of the Chinese stock exchanges21 has to be balanced against the equally urgent need for further institutional improvements,22 greater stability in the markets, and protection of the deposit base in the SOCBs. The Chinese government cannot afford to create a situation in which deposits in the state banks would be drawn down overly rapidly (for share purchases or other purposes), because those deposits are critical for the protection of the liquidity of the state banks under current circumstances.

The main constraint on accelerating the listing of new companies (new IPOs) in China lies on the supply side. There is a shortage of high-quality companies ready to be listed. Under the leadership of its chairman, Zhou Xiaochuan, CSRC is making every ef-

20. For an excellent discussion of corporate governance issues in China, see Tenev et al. 2002.
21. The combined market capitalization of the Chinese stock exchanges (including the value of government-owned non-tradable shares in most of the 1,212 listed companies) rose from virtually nothing in the early 1990s to well over US$500 billion in September 2002. This is an astonishingly rapid expansion by any standard. Since such a large proportion of the shares is not tradable, a comparison with the Hong Kong stock exchange (valued at about the same amount) hides as much as it reveals. Another factor that makes comparison difficult is that P/E ratios in Shanghai and Shenzhen are substantially higher than in Hong Kong, even for shares in the same mainland SOEs. If P/E ratios and share prices (for the same companies) in Shanghai and Shenzhen were about the same as in Hong Kong, the combined market capitalization of the two mainland stock exchanges would be considerably smaller than that of Hong Kong.
22. Many feel that the stock exchanges of Shanghai and Shenzhen were opened prematurely (in 1990 and 1991, respectively) in the sense that trading started before a proper legal and regulatory framework had been established.
fort to ensure that new listings meet adequate standards. On average, during the past twelve months only five new companies were listed on the domestic exchanges per month. During the preceding year the average had been ten. Only one company was de-listed, but others may follow under new, more stringent regulations issued recently. On the demand side, CSRC is preparing regulations to govern the acquisition by foreign agents of A shares, including majority positions. This would amount to a partial liberalization of the capital account.

The supply of equity shares in non-state enterprises has been very small so far, but may increase rapidly if and when the government proceeds with a plan to open a second board in Shenzhen for private enterprises, particularly in the high-tech sectors. Plans for such a board have been delayed for a number of reasons, including fear that market instability would be too great. The draft investment law that has been under consideration for some time needs to be brought forward.

**Restructuring the Four Large SOCBs**

In accordance with WTO provisions, it is likely that many new private banks—both foreign and domestic—will enter China’s domestic market over the next three to five years. This will increase competition for quality borrowers, deposits, and the provision of financial services; financial sector reform and modernization will thus be enhanced. However, the market share of the four large SOCBs is likely to remain dominant during this period. For the overall reform effort, it is therefore of great importance to formulate a strategy for those banks that is fully consistent with sector requirements.23

Because of their size (in terms of assets, number of branches, and personnel) and relatively poorly developed internal management information systems, these banks are difficult to manage. It may be advisable to break some of them up into smaller units that could reform at unequal speeds, depending on their location and management capability. This approach would facilitate recapitalization and privatization. NPLs that remain on the balance sheets of the four large SOCBs could be centralized in a non-bank holding company. Smaller state banks located in areas where competition from foreign and private domestic banks is likely to intensify could be equipped with adequate capital, management, and staff first.

Smaller state banks have less market power, but they will be easier to privatize than very large, unmanageable banks. It will also be easier to enforce quality standards through banking supervision. BOC is the first of the four that has acquired a stock exchange listing. Its IPO in Hong Kong for part of the shares in its separately incorporated international subsidiary was a success. The other three SOCBs do not have significant

23. A similar recommendation was recently made by Yiping Huang of Salomon Smith Barney in Hong Kong in an SSB company document.
international holdings. The listing and partial privatization of all four SOCBs are under consideration but cannot proceed until their balance sheets have been cleaned up further and audited according to internationally accepted standards.

The franchise value of domestic branch networks of state banks could be considerable if such networks are consistent with the requirements of foreign banks who wish to enter the Chinese market through acquisition. Such banks may find it more attractive to buy into an existing branch network than to build one from scratch. Franchise value is a resource that could be exploited in financial sector reform. This asset would be easier to mobilize for regional branch networks than for national ones. Potential franchise values are not included in the balance of central government assets and liabilities in the preceding section of this chapter.

REFERENCES

Interest Rate Liberalization in China and the Implications for Non-State Banking

China has taken a cautious approach to financial market liberalization, opting to delay major reforms until after the liberalization of goods and other factor markets was complete. While the reform program may be following the generally preferred sequence, evidence suggests that the financial sector is lagging well behind other parts of the economy. A modern, well-functioning financial system is an essential part of a market economy, and China has arrived at the stage where further financial market reform is critical to its ability to achieve greater structural economic change.

Banking, rather than capital market, reform is most pressing at this stage, as capital markets are relatively small. One of the main issues on the agenda is the need to liberalize interest rates to remove the price distortions that exist in the banking sector. China’s central bank, the People’s Bank of China (PBOC), has recognized the importance of this task, but has been cautious about the pace of reform. The main barriers to liberalizing interest rates have been a weak banking sector, which is weighed down with bad loans, and the lack of financial infrastructure, such as an effective supervisory system. Solving the non-performing loan problem is likely to require a major recapitalization of the state-owned banks (SOBs) and state-owned enterprises (SOEs), which will take time. However, serious side effects have been caused by the decision to maintain strict controls over interest rates, and the pressure for change is now compelling.

Interest rate controls have served to maintain the market dominance of the state banks, which have long directed most of their lending to state-owned enterprises. This practice has distorted the behavior of lenders and borrowers and restricted competition among financial institutions. Non-state financial institutions have been slow to emerge, resulting in an inefficient use of funds and serious structural imbalances in the financial sector. Furthermore, there are “moral hazard” problems that are likely to delay the deepening reform of the SOBs and SOEs.

Without a proper market mechanism that allows financial institutions to set prices according to the demand and supply of funds, banks and other financial institutions will not be efficient intermediators of funds. Only a small share of lending is available to the
private sector, which is now the most dynamic part of the economy, contributing more to industrial output than the SOEs.

The mismatch between the lending and financing needs of the emerging private sector highlights the urgency of resolving the problems in the financial sector. Further reform, including interest rate liberalization, will undoubtedly help channel funds to private firms, leading to more efficient investment decisions and consequently raising production and economic growth.

China is also aware of the need to fulfill the terms of its accession to the World Trade Organization (WTO). Its commitment to open the financial sector to foreign competition, which will allow foreign institutions to conduct both renminbi and foreign exchange transactions, calls for a scheduled program of interest rate liberalization. The entry of foreign banks will force domestic banks to become more competitive, but will also create great challenges for managing the complex process of financial system liberalization—especially banking sector reform.

This chapter looks at the importance of interest rate liberalization to the banking sector. An analytical approach is presented to explain why China needs to liberalize interest rates as part of the overall program of financial reform. The government is facing a number of constraints, however. These include market fragmentation, the large number of non-performing loans held by state banks, the risks to the domestic banking sector from greater financial competition, the need to meet macroeconomic policy goals and an inadequate financial infrastructure. These constraints and China’s experience so far with changes in interest rate policy will affect the approaches that it is likely to take to liberalize its interest rate regime. The development of a non-state banking sector will be a significant factor in rectifying the structural imbalance in the financial sector and aiding the further development of the private sector. The implications of interest rate liberalization for non-state banks is also discussed.

**INTEREST RATE LIBERALIZATION:**
**AN ANALYTICAL APPROACH**

China has gradually liberalized domestic prices during the reform period, releasing control over commodity prices and partially liberalizing the exchange rate through allowing a devaluation and unifying the system of multiple exchange rates. Incentives for agricultural and manufacturing producers have increased. However, the state’s continued dominance of the banking sector, and its control over interest rates, have meant that the efficiency of the financial market has not improved.

A well-functioning financial market channels savings efficiently to the most productive opportunities. A trade-off exists between expected return and risk. As Horne (1984, 294) explains, “When the government explicitly directs funds to certain invest-
ments which would either not be able to attract funds on their own or would attract them only at a higher rate of interest, it tampers with the workings of the marketplace.” The usual way for a government to support particular activities is by controlling interest rates. China’s central bank has been keeping interest rates low to meet its development goals, as Table 7.1 shows.¹

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve requirement</td>
<td>8.82</td>
<td>8.28</td>
<td>7.56</td>
<td>5.22</td>
<td>3.51</td>
<td>3.24</td>
<td>2.07</td>
</tr>
<tr>
<td>Excess reserves*</td>
<td>8.82</td>
<td>7.92</td>
<td>7.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans to financial inst.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 year</td>
<td>10.98</td>
<td>10.62</td>
<td>9.36</td>
<td>7.92</td>
<td>5.67</td>
<td>5.13</td>
<td>3.78</td>
</tr>
<tr>
<td>6 months or less</td>
<td>10.17</td>
<td>10.17</td>
<td>9.09</td>
<td>7.02</td>
<td>5.58</td>
<td>5.04</td>
<td>3.69</td>
</tr>
<tr>
<td>3 months or less</td>
<td>10.08</td>
<td>9.72</td>
<td>8.82</td>
<td>6.84</td>
<td>5.49</td>
<td>4.86</td>
<td>3.51</td>
</tr>
<tr>
<td>Less than 20 days</td>
<td>9.00</td>
<td>9.00</td>
<td>8.55</td>
<td>6.39</td>
<td>5.22</td>
<td>4.59</td>
<td>3.24</td>
</tr>
<tr>
<td>Rediscount*</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>6.03</td>
<td>4.32</td>
<td>3.96</td>
<td>2.16</td>
</tr>
</tbody>
</table>

*In March 1998 excess reserves were combined into reserve requirements.
**Floating by 5–10 percent lower than central bank lending rates of corresponding maturity.


The Chinese government has instructed financial institutions that they should become independent. However, state banks are extremely fragile: non-performing loans are heavy, and operating costs are high. Interest rate controls have limited the ability of banks to become commercial operations and hampered the response of borrowers to price changes, leading to a highly fragmented financial market.

The effect of carrying over bad loans after interest rate liberalization can be illustrated by using a simple model. In the model it is assumed that the domestic banking sector has been liberalized; that is, that banks can determine interest rates and the volume of their activities (Buch 1997). ² The previous regime of controlled interest rates is captured through a variable that represents the stock of bad debt that the bank carried forward as a loss from the previous period, $S_i = -\pi_i(t-1) > 0$, where $\pi_i$ is bank profits.

The model assumes that bank $i$ competes in the market with $n$ other banks and that banks invest their deposits $(D)$ as loans $(L)$ only. The bank receives a return on lending $(r^L)$, which is identical to the market rate of interest. The bank’s costs consist of the interest payments on its deposits $(r^D)$, which are considered exogenous to the bank, and operating costs $(K_i)$. The loss $(S_j)$ that has been carried forward from the previous period enters the profit equation as a fixed cost. Because banks hold only deposits and loans, the expected profit can be written as a function of the loan volume:

1. However, the reforms have been real and genuine in that the capacity for political manipulation in the government’s dealings with financial institutions has declined over time.
2. This model was originally developed in Baltensperger and Milde 1987.
\[ \pi_i(L_i) = r^L(L)L_i - r^D L_i - K_i(L_i) - S_i \quad (1) \]

The bank maximizes profit by determining the optimal supply of loans, as given by the first order conditions for a profit maximum:

\[ \frac{\partial \pi_i}{\partial L_i} = \frac{\partial r^L}{\partial L} \frac{\partial L}{\partial L_i} L_i + r^L - r^D - K_{il} = 0 \quad (2) \]

Assuming that all banks are identical, aggregating (2) over all n banks and solving for \( r^L \) reveals that the oligopoly price for loans is set above marginal cost. The size of this margin depends on the interest rate elasticity of loan demand \( \varepsilon(L, r^L) \) and on the number of competitors in the market. This gives a modified version of the Amoroso-Robinson pricing rule (Buch 1997, 342):

\[ r^L = \frac{K_{il} + r^D}{1 + \frac{1}{n \varepsilon(L, r^L)}} \text{, provided that: } \varepsilon(L, r^L) < -\frac{1}{n} \]

\[ \Rightarrow \frac{\partial r^L}{\partial n} = \left[ K_{il} + r^D \right] \frac{\varepsilon(L, r^L)}{\left[ 1 + n \varepsilon(L, r^L) \right]^2} < 0 \quad (3) \]

As the number of competitors rises, the equilibrium loan rate converges to the bank’s marginal costs. The entry of new banks therefore narrows interest rate spreads (the difference between lending and deposit rates). It can also be shown that the partial derivative of \( r^D \) with respect to \( n \) is positive, meaning that the deposit rate tends to rise as the number of banks increases.

The model tells us a number of things. First, it shows that in order to maximize profit in a liberalized environment, banks need to set interest rates according to a correct assessment of risk. Second, the wider the interest spreads, the higher bank profit will be. Third, a reduction in operating costs and in the level of bad debt, other things being equal, will increase profits. Fourth, an increase in the number of banks (increased competition), including foreign banks, tends to reduce profit margins by decreasing the lending rate and raising the deposit rate. Finally, the interest rate elasticity of loan demand comes
into the equation in determining profit margins which, as discussed later, are affected by various institutional restrictions.

The main purpose of financial reform is to improve the efficiency of the banking system. Banks may prefer wide interest rate spreads, but this is unlikely to mean that the banking system is efficient. Wide spreads may reflect the high costs of banking intermediation. Interest rate liberalization should make interest rates more responsive to market forces and reduce the costs of intermediation by narrowing the interest rate spread (Chant and Pangestu 1996). The best way to achieve this goal is to allow greater market competition while liberalizing interest rates. In China’s case, however, there are some major constraints on achieving the goal of market-determined interest rates. These have to do with financial competition and have implications for policy design.

**MAJOR CONSTRAINTS AND CHALLENGES**

Major constraints in liberalizing interest rates in China include market fragmentation and the lack of competition in the market, the high level of non-performing loans held by state banks, macro policy considerations, and the lack of financial infrastructure.

**Market Fragmentation**

The controls on interest rates, together with government restrictions on bank lending, have resulted in a segmented financial market. Substantial differences exist between the interest rates charged by official lenders and informal lenders and between the ability of state borrowers and private borrowers to access loans. The maintenance of interest rates at artificially low levels to support the activities of state-owned enterprises has made it difficult for domestic savers and investors to see the true price of capital. Demand and supply behavior has been distorted as a result, leading to a misallocation of investment funds and discrimination against the private sector. As the private sector’s role in the economy has become more significant, these distortions have become an increasing problem.

Bank loans are the main source of finance in China. In 1998 bank loans represented 70 percent of total financing, while equity financing accounted for only 6 percent (PBOC 2000). Most finance is supplied by the four state-owned banks, which hold 70 percent of the assets of the banking sector (Fig. 7.1). Private commercial banks are a very small part of the market. Under the government’s guidance, the state banks have directed most of their funds to the SOEs through “policy loans” and direct credits at interest rates far below the market value. Loans are mainly short-term, although there has been a trend toward medium- and long-term lending (Fig. 7.2).
Figure 1 Assets distribution of financial institutions (end of 1999)

State owned commercial banks: 69%
Urban credit cooperatives: 5%
Rural credit cooperatives: 9%
Other commercial banks: 9%
Other financial institutions: 8%


Figure 2 Structure of loans of financial institutions (%)

NOTE: Short-term loans mature within one year, and medium- and long-term loans usually have a maturity of more than one year.

SOURCE: Calculated from Table 2.4(2) in PBOC 2001: 13.
Table 7.2
Bank Lending to Private Enterprises, 1999
(RMB 100 million; %)

<table>
<thead>
<tr>
<th>Items</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>State banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total loans</td>
<td>69,409.2</td>
<td>71,589.5</td>
<td>73,757.3</td>
<td>73,695.9</td>
</tr>
<tr>
<td>Loans to private sector</td>
<td>222.8</td>
<td>256.5</td>
<td>282.7</td>
<td>301.0</td>
</tr>
<tr>
<td>(percent)</td>
<td>0.32</td>
<td>0.36</td>
<td>0.38</td>
<td>0.41</td>
</tr>
<tr>
<td>All banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total loans</td>
<td>87,825.5</td>
<td>90,620.3</td>
<td>93,390.4</td>
<td>93,734.3</td>
</tr>
<tr>
<td>Loans to private sector</td>
<td>483.5</td>
<td>518.1</td>
<td>556.0</td>
<td>579.1</td>
</tr>
<tr>
<td>(percent)</td>
<td>0.55</td>
<td>0.57</td>
<td>0.60</td>
<td>0.62</td>
</tr>
</tbody>
</table>

NOTES: The figures are end-of-quarter balances, and loans made to private enterprises include loans to sole proprietors.
SOURCE: Calculated from PBOC 2001: 89–90, tables 3.7 and 3.8.

The private sector’s access to bank loans has been extremely limited. Table 7.2 shows that in the fourth quarter of 1999, private enterprises received only 0.62 percent of the loans from all banks, and less than 0.5 percent of all loans from state banks. This is despite the fact that private enterprises contributed nearly 35 percent to industrial output in 1998.3

The discrepancy between the private sector’s share of output and its share of bank finance suggests the extent of its latent demand for credit. Unable to obtain loans from the state banks, and with limited access to equity markets, private enterprises have had to rely on self-finance or informal sources of financing—usually at much higher interest rates. A recent survey suggested that financial constraints may be influencing the investment behavior of private enterprises, especially small and medium-sized enterprises (SMEs),4 in that firms tie investment demand to the availability of internal funds (Gregory et al. 2000; Garnaut et al. 2001).5

Another obstacle to obtaining formal finance is that private firms find it difficult to communicate information about the firm to financial intermediaries. Financial institutions, particularly SOBs, have little experience in assessing credit risk or the potential for profitable investment opportunities. And, even if banks do price risk correctly, the controls on interest rates restrict them from charging higher interest rates. Higher transaction costs are involved in lending to private enterprises, as there is a need to monitor the com-

3. See figs. 5.2 and 2.4 in Gregory et al. 2000: 46, 17.
4. The latest estimate is that there are now 8 million SMEs in China and that they account for 99 percent of total enterprises. SMEs contribute 76 percent of industrial output, 60 percent of overall output, 40 percent of tax revenue, 60 percent of exports, and 75 percent of urban employment (People’s Daily, Aug. 2, 2001).
5. As McKinnon (1996) argues, forcing a reliance on self-finance is a good way of imposing financial restraint on liberalized enterprises. Bankruptcy is virtually automatic if internal cash flows become negative for a significant length of time (1996: 139), and it means that the non-state sector is not a major claimant on the state banking system (1996: 199).
petence of entrepreneurs and the return on the investment, and a greater risk of default. For these and other reasons, long-term loans are not offered to private enterprises.

Although SOEs have been less restricted in their access to bank finance, in recent years banks have imposed tougher criteria on SOE loans. Subject to increased financial discipline, many SOBs have become quite conservative in their lending decisions—a phenomenon described as *xidai* (a reluctance to lend). Although many financial institutions, especially state commercial banks, have cut back lending to loss-making SOEs, they have not increased their loans to the more profitable private sector, instead depositing excess funds with the central bank (Fig. 7.3). The controls on interest rates have meant that the fall in the supply of funds cannot feed through into higher interest rates to make bank lending more profitable.

Because the central government has continued to own and control state banks, it is likely that banks are making zero profits on the margin or even losses by lending to the SOEs. They have less incentive to monitor borrowers’ performance or manage liquidity risk. And, because the central bank has set a ceiling on deposit rates, there are no large benefits in attracting new customers, although banks are required to fulfill deposit quotas.\(^6\) The SOBs are not well placed to mobilize domestic savings.

The fragmentation of the financial market, which has been largely the result of government policy, has created several major problems. The distorted interest rate structure and bias toward lending to state enterprises has tended to reduce the net worth of non-state enterprises (which have paid much higher interest rates) and has hampered their prospects to become creditworthy borrowers. For this reason, interest rate liberalization will be less effective than it should be. Market fragmentation is a major obstacle standing in the way of creating private markets for capital, including long-term investments, since such markets “require large numbers of quality borrowers—that is, borrowers with high net worth” (Gertler and Rose 1996: 35). This highlights the importance of developing a non-state banking sector to meet the needs of the large pool of unsatisfied borrowers. The most effective way of reducing market fragmentation is to build a financial system that can transfer the resources currently blocked in the state sector to the emerging private sector, which is better able to generate growth.

The interest rate differential between the formal and informal financial sectors has distorted lending and borrowing behavior. Without interest rate liberalization and greater competition in the financial sector, the proper channels for financial arbitrage cannot exist. Financial arbitrage should lead to a convergence of interest rates between the formal and informal sectors and a reduction in market fragmentation. In other words, as interest rates converge and competition increases, arbitrage transactions are likely to create an equilibrium price for funds that takes into account the market demand and the supply of investment funds.

\(^6\) Unable to adjust deposit rates, banks have adopted various means to attract deposits to meet these quotas.
The liberalization of interest rates will gradually lead to the convergence of official and market rates, similar to the way commodity prices and foreign exchange rates changed after liberalization. The demand for funds should increase because interest rates will reflect the true scarcity of capital, and commercial banks will be able to set lending rates on the basis of costs. Banks will be more likely to focus on creditworthiness rather than ownership type in making lending decisions, increasing the funds available to private entrepreneurs. By raising the efficiency of investment and transferring more resources into the private sector, financial reform can play a valuable role in boosting growth and the structural transformation of the economy.

Non-Performing Loans

The four state-owned banks dominate the banking sector, with a combined market share of both loans and deposits of over 70 percent (Bonin and Huang 2000). The banks are carrying a large amount of non-performing loans. Figures released by the People’s Bank of China suggest that by 1999 non-performing loans made up 26 percent of state bank loans.7

Although most bad debts were accumulated in the past, lending to loss-making SOEs has continued and new debts have been building up. The SOEs require low-interest loans to maintain their operations—if they had to pay the true costs of the funds

7. PBOC (2000: 21, 24) estimated non-performing loans held by the four SOBs to be RMB 1.65 trillion of the total outstanding loans of RMB 6.24 trillion in 1999.
borrowed from banks, most would become insolvent. The dilemma for the state banks is that they have been requested by the authorities to be responsible for their own profits and losses, but do not have the means to do so because they have no control over the setting of interest rates. As a result, SOBs receive the lowest profit margins that commercial banks can get (Tables 7.3 and 7.4).

The fact that new debts have been added to old ones is a particular concern. It is likely that SOEs have been investing at levels lower than will be required to generate sufficient profits to pay back the loans when interest rates finally rise. Since state banks are still being directed to make policy loans and provide direct credits, they have been unable to assess the risks involved or impose tougher financial discipline on borrowers.

When banks hold non-performing assets, they need to earn sufficiently high interest rate spreads on the profitable part of their operations in order to offset past losses and maintain their operations (Buch 1996). When interest rates are controlled, profits are limited (Table 7.4). The question is how the behavior of banks will change after interest rates are liberalized.

When interest rates are no longer controlled, there will be strong incentives for SOBs to factor both past and current losses into current interest rates. Such incentives stem mainly from the increased demand from the financial authorities for banks to be commercially viable. Banks may be able to do this when they monopolize financial markets, but their ability to raise lending rates is more limited when markets are competitive.

The liberalization program will therefore be more effective if financial institutions do not have to factor their accumulated bad debts into interest rate settings. There is a
Table 7.4
Financial Institutions: Nominal Interest Rates on Loans (% per annum)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 months</td>
<td>9.72*</td>
<td>9.18*</td>
<td>7.65</td>
<td>7.02</td>
<td>6.57**</td>
<td>6.12**</td>
<td>5.58***</td>
</tr>
<tr>
<td>1 year</td>
<td>10.98*</td>
<td>10.08*</td>
<td>8.64</td>
<td>7.92</td>
<td>6.93**</td>
<td>6.39**</td>
<td>5.85***</td>
</tr>
<tr>
<td>Medium- and long-term</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 years or less</td>
<td>13.14</td>
<td>10.98</td>
<td>9.36</td>
<td>9.00</td>
<td>7.11</td>
<td>6.66</td>
<td>5.94</td>
</tr>
<tr>
<td>5 years or less</td>
<td>14.94</td>
<td>11.70</td>
<td>9.90</td>
<td>9.72</td>
<td>7.65</td>
<td>7.20</td>
<td>6.03</td>
</tr>
<tr>
<td>Longer than 5 years</td>
<td>15.12</td>
<td>12.42</td>
<td>10.53</td>
<td>10.35</td>
<td>8.01</td>
<td>7.56</td>
<td>6.21</td>
</tr>
</tbody>
</table>

* The lending rate could be 10 percent higher or lower than the nominal interest rate, while for rural credit cooperatives, the lending rate could be 40 percent higher or lower.
** As of November 1998, the lending rate for small enterprises could be 20 percent higher than the nominal rate; while for rural credit cooperatives, the lending rate could be 50 percent higher.
*** As of September 1999, the lending rate for small and medium-sized enterprises could be 20 percent higher than the nominal interest rate.


genuine need to level the playing field for SOBs by recapitalizing their non-performing loans. It is also necessary to reduce and then gradually eliminate policy loans and direct credit if state banks are to cope with the increase in competition after liberalization. This will require further progress in reforming the SOEs.

**Competition**

Market competition constrains the ability of banks to reap profits from interest rate liberalization. As equation 1 shows, bank profits tend to increase after lending rates are relaxed. However, the opening of the banking sector to both foreign and domestic banks will increase the supply of funds and the choices for depositors. This should reduce the lending rate and raise the deposit rate, therefore lowering profit margins.

Table 7.5 shows that bank gross interest margins widened dramatically between July 1998 and June 1999, from 2.16 percentage points to 3.6 percentage points for a loan with a maturity of one year. Because inflation has been negative (Table 7.6), real interest margins could have been even higher. However, the ability of banks to achieve a positive return on their assets critically depends on the competitiveness of the banking sector, operating costs such as overheads (particularly staff costs), and the level of bad debt.

Greater competition in the banking sector lowers the cost of financial intermediation and should improve economic growth. However, it also increases the risk of bank insolvency, which may dampen growth if the government decides to ration credit (Berthelemy and Varoudakis 1996). The risk of insolvencies is the main reason why the Chinese government has wanted to postpone external financial liberalization until internal financial liberalization has taken place and until domestic banks have recapitalized themselves through current profits (Buch 1997).
There is a dilemma for the authorities in deciding whether to allow greater competition, especially from foreign financial institutions, as the desire for efficiency has to be balanced against the risk of insolvencies. There has already been a significant increase in the number and market share of foreign financial institutions. By the end of 1999, 177 foreign banking institutions were operating in China—157 foreign banks, 12 locally incorporated banks (six foreign owned and seven joint ventures) and seven foreign finance companies. The assets of foreign banks totaled US $31.787 billion, or 1.53 percent of the banking sector’s total assets. The foreign exchange loans of foreign banks totaled US $21.83 billion, which was 12.81 percent of China’s total foreign exchange loans. In 1999, 25 foreign banks (19 in Shanghai and six in Shenzhen) had been allowed to conduct business in renminbi. The number of domestic-currency assets, loans and deposits of foreign banks is also on the rise.8

The WTO’s national treatment principle means that China will be compelled gradually to eliminate the limits on the location of operations and range of customers of foreign banks. The participation of foreign banks in local markets will force domestic banks to deepen reform, improve their management, and provide new financial services. The pressure for change from foreign institutions is enormous, and given the fragmentation of the financial market and the level of non-performing loans, the risk of insolvency constitutes another major constraint on China’s plan to liberalize interest rates. However, because it has committed to financial sector liberalization, China cannot delay banking sector reform until the state banks have all been recapitalized and the financial market is less fragmented.

China has handled this dilemma by gradually liberalizing interest rates. The government has recognized that controlled interest rates cannot coexist with the opening of the domestic banking sector to foreign competition and that the “price protection” of domestic banks is not sustainable in a market environment. There is a general consensus that liberalization should be a controlled and orderly process.

The authorities plan to liberalize interest rates in the following sequence: loan rates will be liberalized before deposit rates; foreign currency rates before renminbi rates;

8. These data are all from PBOC 2000: 39.
and interest rates in rural areas before those in urban areas. This has been the sequence followed by many other countries. What makes China different is that the banking sector is dominated by the state banks, the inefficiency of which makes them highly vulnerable to foreign competition. A solution to this dilemma would be to allow greater competition by developing domestic non-state institutions, including non-bank financial institutions. China should waste no time in doing so since foreign competition is imminent under the WTO agreements.

Macroeconomic Considerations

Interest rate policy can be used to achieve macroeconomic goals, including maintaining the stability of the renminbi, reducing unemployment and inflation (or deflation), and balancing the payments of international transactions. In a liberalized environment, rather than directly controlling the level (and range) of interest rates for banks and other financial institutions, the central bank has to rely on indirect means to influence interest rates. The instruments available to it to achieve its macroeconomic targets include open market operations and adjustments of rediscount and benchmark rates. Open market operations can be used to influence interbank rates and therefore investment demand, but the current system is far from allowing the authorities to do so.

Financial authorities lack the means to influence interest rates through the market. The issuing of treasury bonds is driven more by the government’s need to make long-term investments than by changes in investment demand. Treasury bond markets are not fully functioning and cannot provide enough information on the economy (with regard to inflation, for example) for the government to be able to use benchmark interest rates to direct the economy.

The development of interbank markets in recent years has improved the liquidity of banks and other financial institutions and has aided the ability of the central bank to conduct monetary policy through open market operations. Open market operations have become a key policy instrument (Table 7.6). However, interest rates in interbank markets are not determined by market forces, and therefore do not reflect the market supply and demand of funds (Table 7.7). Furthermore, because interbank interest rates do not respond to changes in base money and relending, they are not a reliable mechanism for transmitting monetary changes. This reduces the effectiveness of monetary policy (Wang 2000).

The central bank has lowered official interest rates seven times in recent years (Table 7.1). The aim has been to help the SOEs, which are financially weak, and to fight deflation (Table 7.8) by boosting consumption. Liberalizing interest rates at a time when there is price deflation poses new challenges to the authorities. There will be a limit to

Table 7.6
The Composition of the Monetary Base, 1993–99 (% of total)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lending by financial institutions</td>
<td>84</td>
<td>21</td>
<td>25</td>
<td>49</td>
<td>-3</td>
<td>334</td>
<td>33</td>
</tr>
<tr>
<td>Of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy banks</td>
<td>0</td>
<td>18</td>
<td>103</td>
<td>27</td>
<td>53</td>
<td>270</td>
<td>6</td>
</tr>
<tr>
<td>Wholly SOBs</td>
<td>81</td>
<td>-2</td>
<td>-79</td>
<td>21</td>
<td>-54</td>
<td>72</td>
<td>-9</td>
</tr>
<tr>
<td>Rural credit cooperatives</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Designated loans</td>
<td>4</td>
<td>1</td>
<td>-1</td>
<td>0</td>
<td>-13</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>RMB counterpart of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reserves, gold and silver</td>
<td>-8</td>
<td>78</td>
<td>66</td>
<td>45</td>
<td>87</td>
<td>-80</td>
<td>29</td>
</tr>
<tr>
<td>Net fiscal overdraft</td>
<td>2</td>
<td>-7</td>
<td>-7</td>
<td>-4</td>
<td>-5</td>
<td>108</td>
<td>2</td>
</tr>
<tr>
<td>Portfolio and investment</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>30</td>
<td>-148</td>
<td>0</td>
</tr>
<tr>
<td>Sale and purchase of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Securities</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-119</td>
<td>52</td>
</tr>
<tr>
<td>Other net assets</td>
<td>241</td>
<td>6</td>
<td>17</td>
<td>11</td>
<td>4</td>
<td>-8</td>
<td>-16</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

SOURCE: Adapted from Tables 1 and 2 in PBOC 2000: 12.

Table 7.7
Interbank Money Market Monthly Weighted Average Interest Rates (%)

<table>
<thead>
<tr>
<th></th>
<th>Overnight</th>
<th>7 days</th>
<th>20 days</th>
<th>30 days</th>
<th>60 days</th>
<th>90 days</th>
<th>120 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>11.35</td>
<td>11.78</td>
<td>11.88</td>
<td>12.04</td>
<td>12.17</td>
<td>12.33</td>
<td>12.60</td>
</tr>
<tr>
<td>1997</td>
<td>10.40</td>
<td>11.13</td>
<td>10.64</td>
<td>11.09</td>
<td>11.00</td>
<td>11.01</td>
<td>10.60</td>
</tr>
<tr>
<td>1998</td>
<td>5.16</td>
<td>6.04</td>
<td>6.90</td>
<td>6.25</td>
<td>6.34</td>
<td>7.11</td>
<td>7.58</td>
</tr>
<tr>
<td>1999</td>
<td>3.60</td>
<td>3.71</td>
<td>3.81</td>
<td>4.14</td>
<td>3.99</td>
<td>6.43</td>
<td>5.97</td>
</tr>
</tbody>
</table>

SOURCE: Table 3.1 in PBOC 2001: 34.

how far the authorities can lower the official interest rates to boost demand. Major constraints in the economy, particularly the fragmented financial market, limit the effectiveness of interest rate policy. And, as long as deflation continues, interest rates will need to stay low, imposing a constraint on interest rate adjustments.

With the restraints on monetary policy, the government has no choice but to rely on fiscal policy. Government spending has sustained the growth of the economy since the East Asian economic crisis. There is a potential risk in this strategy. The massive investment drive, coupled with the continued commitment to support the loss-making SOEs, may jeopardize macroeconomic stability. As Berthelemy and Varoudakis (1996, 24) state, “The higher the budget deficit, the more financial repression policies will be considered optimal. This bears out the viewpoint put forward by McKinnon (1982) who stressed the priority in timing of controlling the budget deficit over liberalization of the financial system.”
Table 7.8
Selected Economic Indicators, 1994–99
(%)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross domestic product</td>
<td>12.6</td>
<td>10.5</td>
<td>9.6</td>
<td>8.8</td>
<td>7.8</td>
<td>7.1</td>
</tr>
<tr>
<td>Value added in primary industry</td>
<td>4.0</td>
<td>5.0</td>
<td>5.1</td>
<td>3.5</td>
<td>3.5</td>
<td>2.8</td>
</tr>
<tr>
<td>Value added in secondary industry</td>
<td>18.4</td>
<td>13.9</td>
<td>12.1</td>
<td>10.5</td>
<td>9.2</td>
<td>8.1</td>
</tr>
<tr>
<td>Industrial value added</td>
<td>18.9</td>
<td>14.0</td>
<td>12.5</td>
<td>11.1</td>
<td>8.9</td>
<td>8.5</td>
</tr>
<tr>
<td>Value added in tertiary industry</td>
<td>9.6</td>
<td>8.4</td>
<td>7.9</td>
<td>9.1</td>
<td>7.6</td>
<td>7.5</td>
</tr>
<tr>
<td>Fixed assets investment</td>
<td>30.4</td>
<td>17.5</td>
<td>14.8</td>
<td>8.8</td>
<td>13.9</td>
<td>5.2</td>
</tr>
<tr>
<td>Retail sales</td>
<td>30.5</td>
<td>26.8</td>
<td>20.1</td>
<td>10.2</td>
<td>6.8</td>
<td>6.8</td>
</tr>
<tr>
<td>Exports</td>
<td>31.9</td>
<td>22.9</td>
<td>1.5</td>
<td>21.0</td>
<td>0.5</td>
<td>6.1</td>
</tr>
<tr>
<td>Imports</td>
<td>11.2</td>
<td>14.2</td>
<td>5.1</td>
<td>2.5</td>
<td>-1.5</td>
<td>18.2</td>
</tr>
<tr>
<td>Government revenue</td>
<td>20.0</td>
<td>19.6</td>
<td>18.7</td>
<td>16.8</td>
<td>14.2</td>
<td>15.2</td>
</tr>
<tr>
<td>Government expenditure</td>
<td>24.8</td>
<td>17.8</td>
<td>16.3</td>
<td>16.3</td>
<td>16.9</td>
<td>21.7</td>
</tr>
<tr>
<td>Per capita urban household disposable income</td>
<td>35.6</td>
<td>22.5</td>
<td>13.0</td>
<td>6.6</td>
<td>5.1</td>
<td>9.3</td>
</tr>
<tr>
<td>Per capita rural household net income</td>
<td>32.5</td>
<td>29.2</td>
<td>22.1</td>
<td>8.5</td>
<td>3.4</td>
<td>3.8</td>
</tr>
<tr>
<td>Retail price</td>
<td>21.7</td>
<td>14.8</td>
<td>6.1</td>
<td>0.8</td>
<td>-2.6</td>
<td>-3.0</td>
</tr>
<tr>
<td>Consumer price</td>
<td>24.1</td>
<td>17.1</td>
<td>8.3</td>
<td>2.8</td>
<td>-0.8</td>
<td>-1.4</td>
</tr>
</tbody>
</table>


Macroeconomic considerations can exercise a decisive influence on the course and pace of financial reform (Yusof et al. 1996). Specifically, financial liberalization requires a macroeconomic environment that is stable and creates no further financial distortions at either the government or enterprise level. The gains from interest rate liberalization can be achieved only if macroeconomic policies are stable and consistent.

Finally, because of the existence of capital account controls, the liberalization of interest rates will not directly change the exchange rate. However, the gradual elimination of capital controls will lead the real exchange rate to appreciate, increasing the difficulty of managing the macroeconomy.

Financial Infrastructure

The lack of financial infrastructure is the main institutional constraint on liberalizing interest rates in China. A strong regulatory and supervisory framework is necessary for the smooth operation of the financial sector, helping to improve efficiency, safety, liquidity, transfer of information, diversity, and financial discipline. All these elements are important for conducting financial transactions in a liberalized environment.

A regulatory and supervisory framework is needed to constrain risky behavior that has external costs and to alert the authorities to potential problems, while still encouraging financial institutions to diversify and innovate. The central bank could become responsible for monitoring financial institutions, asset quality, management, the types and
size of various liabilities, compliance with legal and regulatory requirements and national policies, and the quality of records, systems and internal control (Yusof et al. 1996).

High-quality financial legislation will be critical to the central bank’s ability to supervise financial institutions and maintain stability and order in the financial system (PBOC 2000). Legislation needs to cover issues such as market entry and exit. The government has an important role to play in strengthening financial legislation and enforcing compliance with the law. Gertler and Rose (1996: 34) point out that “a well-functioning financial system features private contracts and private institutions designed to minimize the problems of limited information and enforcement. The most direct way a government can contribute to this process is by offering an efficient judicial/regulatory system, one that facilitates the enforcement of private contracts and punishes fraud effectively.”

Another way of enhancing efficiency and reducing financial risks is for commercial banks and other financial institutions to establish their own mechanisms for credit and risk management. Such mechanisms should highlight the importance of internal discipline and incentives to encourage commercial behavior. Efficiency can also be improved by providing new financial services, resolving information asymmetries, strengthening banking management (governance) and recruiting qualified bank employees.

The existence of the constraints outlined in this chapter suggests that for interest rate liberalization to work, certain conditions need to be met. These conditions include, among others, reducing financial market fragmentation, maintaining macroeconomic stability, carrying out bank recapitalization (with regard to non-performing loans), phasing out policy loans and directed credit, building sound financial institutions, and allowing greater financial competition especially from non-state banks.

IMPLICATIONS FOR NON-STATE BANKING

China’s state-banking sector includes the four wholly state-owned commercial banks and the three policy banks (the State Development Bank, the Export and Import Bank, and the Agricultural Development Bank). The non-state banking sector consists of small and medium-sized banking institutions (joint-equity commercial banks, city commercial banks, and the prefecture-level urban credit cooperatives), foreign banks, rural credit cooperatives, trust and investment corporations, and finance and leasing companies.

At the end of 1999, there were 10 joint-equity commercial banks, 90 city commercial banks, 836 urban credit cooperatives, 41,755 rural credit cooperatives, 238 trust and investment corporations, 70 finance companies, and 15 leasing companies (PBOC 2000: 24–25). China has no true private banks. As shown in Fig. 7.1, non-state financial institutions accounted for 31 percent of the banking sector’s total assets. These institutions have played an important role in enhancing competition and providing much-needed investment finance to the non-state sector. There are several reasons why the fur-
The development of the non-state banking sector, including private financial institutions, will allow interest rate liberalization to exert its fullest impact on the banking sector. A strong non-state banking sector will enhance domestic financial competition, help break the state monopoly and raise efficiency. Non-state banks can provide alternatives and a source of competition to China’s inefficient state-owned banks. As McMillan (1997: 219) states: “Competition among banks . . . creates the ability to make commitments: a decentralised banking system can commit to abandon any project if it is revealed to be unprofitable, while a monopoly bank cannot. A monopoly bank might have an incentive, once started, to prop up an unprofitable project. . . . The ultimate solution to the soft budget constraints, then, is to develop private, competitive banks.”

The further development of non-state banking will give private enterprises greater access to long-term investment finance, which the state banks have been unable to provide. As Gertler and Rose (1996: 36) put it, “Unfortunately, because of the incentive problems inherent in the process, a system of publicly managed and subsidised funds is unlikely to create a core of borrowers who would be creditworthy in the absence of government help. Not surprisingly, state development banks have generally failed to produce well-functioning private markets for long-term finance.”

The current system of controlled interest rates has not met the needs of entrepreneurs and has slowed the shift of resources from the state to non-state sector. Allowing greater competition in the financial services market is likely to increase the quantity and quality of financial services available to both depositors and borrowers (Zank 1990).

There are two main approaches to increasing competition in the financial sector. One is to privatize the SOBs; the other is to allow more non-state, including private, financial institutions to enter the financial sector. The latter approach appears to be more feasible in China. The existing non-state banking sector can help resolve the lack of incentives for SOBs to act commercially. In order for this strategy to work, an effective institutional structure must be in place that imposes financial discipline on the decentralized banks. Financial institutions must be subject to tight prudential control by the financial authorities to ensure the safety and stability of the financial system.

There is also a role for non-bank financial institutions in financial system reform. As Demirguc-Kunt and Levine (1996: 252) argue, non-bank financial institutions can complement the role of commercial banks in functioning as effective substitutes when the commercial banking sector is suppressed by government regulations or high taxes. A growth in non-bank financial institutions will reflect the broadening and deepening of the financial system.

After studying various countries’ experiences with financial sector liberalization, Zank (1990: 37) concluded that “much of the economic activity that should take place in developing countries does not occur because of the constraints placed on private sector activity or the preferences given to SOEs. If these constraints are removed, the playing field will be leveled, and new participants could begin to take part, leading to increased
economic growth.” China is facing exactly the same problem with market fragmentation, and a shift in the distribution of assets from state to non-state financial institutions is likely to result in a marked increase in bank lending to the private sector.

For example, Bangladesh’s experience shows that a major shift in banking assets from the public to the private sector resulted in more credit being made available to the private sector. The share of bank credits to the private sector increased to 16.7 percent of total credit in 1987, compared with only 6.2 percent in 1981 (Zank 1990: 136). The same study also shows that after the Costa Rican government encouraged private entrants into the banking system, the share of private banks in total bank lending to the private sector increased from 3 percent in 1982 to about 25 percent in 1988. As a result, the demand for term credit in the economy is being met, and subsidized credit has been reduced to less than 16 percent of available credit (1990: 132).

**CONCLUSIONS**

China has just begun the process of establishing a financial system that will allow borrowing and lending to be undertaken at market-determined interest rates. Price distortions will be gradually removed through a program of ordered interest rate liberalization. Only when prices reflect the true economic scarcity of financial resources can resources (including foreign capital after the capital account is liberalized) be channeled into the most profitable investment opportunities. The further development of the real economy therefore depends on the reform of the financial sector.

The various constraints on financial liberalization reviewed in this chapter show that liberalizing the interest rate is a necessary but not sufficient condition for banks to become profitable. Reforms in other areas, such as lowering operational costs and reducing non-performing assets, strengthening financial supervision and regulation, and allowing wider financial competition, are also important. Once these reforms are complete, there will be less need to subsidize domestic state-owned industries through providing direct finance at low interest rates.

Because the necessary institutional structure is not yet in place, a gradual approach to interest rate liberalization would be appropriate in China. However, because of the pressure for change from the private sector and from potential foreign competitors, and the likely costs of maintaining the current policy, interest rate reform cannot wait until all the desirable conditions are met. The main goal for policymakers, therefore, should be to press ahead steadily with reform, avoiding a stop–go cycle in the reform process.
REFERENCES


From 1979 to 2002, on a cumulative basis, China absorbed a total of $448 billion in foreign direct investment (FDI) on a materialized basis. By any measure, China’s record of attracting FDI is impressive. During many years in the 1990s, China claimed to be the world’s second-largest recipient of FDI, after the United States. Between 1992 and 1999, FDI flows into China accounted for 8.2 percent of worldwide FDI and 26.3 percent of FDI going to developing countries.¹ Of this huge amount of FDI inflows into China, it is estimated that about 50 percent of the inflows have financed production of labor-intensive and export-oriented products (Tseng and Zebregs 2002). Another indication of the importance of labor-intensive FDI in China’s FDI story is the heavy composition of firms based in three ethnically Chinese economies (ECEs)—Hong Kong, Macao, and Taiwan. These firms typically invest in low-tech and labor-intensive industries. In 1992, Hong Kong investments alone accounted for 68 percent of China’s total FDI inflows. Although this share has since declined, Hong Kong is still the single most important investor in China. In 2001, Hong Kong’s investment was about 36 percent of China’s total FDI flows, and the three ECEs together supplied just under 43 percent of Chinese FDI.²

Many have argued that this huge absorption of FDI has propelled China’s economic growth. For example, scholars view labor-intensive FDI as bringing much-needed know-how to China and allowing it to produce products that satisfy the exacting fashion and quality requirements of international markets.³

The argument of this chapter is that this perspective on China’s FDI inflows is at best partially correct and at worst misses some of the important institutional drivers of FDI inflows. The institutional drivers are particularly relevant in explaining the FDI inflows that have financed China’s production of labor-intensive and export-oriented prod-

¹ Data on global FDI flows and on FDI going to developing countries are from the United Nations Conference on Trade and Development 2000.
³ For example, Richard Pomfret (1991: 135), when arguing for the benefits of low-tech FDI from Hong Kong and Taiwan, comments: “What was missing in PRC, rather than capital, was the knowledge of how to make bags or teddy bears or wind-up pandas or cigarette lighters in attractive designs to reasonable quality standards and of how to market them overseas.”
ucts. I have examined a whole range of institutional drivers of China’s FDI inflows elsewhere;⁴ here let me focus on the institutional factor that is closely linked to the theme of this volume—the operation of China’s financial system.

The basic argument runs as follows. First, labor-intensive FDI is in fact more of an anomaly than a normal business practice in many conceptual and empirical settings. Second, an important reason why labor-intensive FDI materializes on the scale that one witnesses in China is that labor-intensive FDI is one of the few vehicles for private entrepreneurs to raise financing for their businesses. Until quite recently, Chinese private entrepreneurs’ access to the vast pool of savings assets in the banking system was extremely restricted. This financing bias renders a normal business practice in labor-intensive industries—contract production carried out on behalf of foreign buyers—infeasible and has created a huge demand for an equity financing mechanism, which FDI has filled.

There are two important implications of this way of analyzing China’s labor-intensive FDI. The first is that labor-intensive FDI is really a substitute for contract production and that in labor-intensive industries it is not superior—indeed some have argued that it is inferior—to contract production in terms of its benefits to a host economy, such as know-how transfer and provision of market access. The second claim is that contract production, while perfectly feasible on technical grounds in labor-intensive industries, is less feasible when there is a financing bias against local private producers. Viewed from this perspective, labor-intensive FDI should be properly cast as an outcome of the poor efficiency of China’s financial system, rather than as a result of China’s low labor costs, a commonly cited driver of this type of FDI.

This chapter begins with a description of the financing bias against private firms in China and a discussion of the links between this financing bias and labor-intensive FDI. The facts about the financing bias are well known and are discussed in greater detail elsewhere in this book. The purpose here is to stress the important institutional context in which labor-intensive FDI inflows have occurred in China—that labor-intensive FDI has materialized amid a severe financial repression of local private firms. The second section presents data, drawn from a unique database, to illustrate the effects of financing bias on labor-intensive FDI. The final section concludes with an update on some of the recent changes in China’s FDI patterns—specifically a decline of labor-intensive FDI in the FDI composition—and attributes this decline to the improvement in the financing treatment of private firms in recent years.

---

⁴ See Huang 2003.
FINANCING BIAS IN CHINA
AND LABOR-INTENSIVE FDI

A premise that underlies the analysis in this chapter is that a foreign firm faces a choice between direct production—FDI—and contract production when going abroad to do business. This way of examining FDI is deeply rooted in the theoretical literature. Richard Caves, one of the foremost theorists on FDI, defines FDI analysis as an effort to answer the following question: “why some allocation decisions are made through spot transactions or arm’s-length contracts, while others are internalized within business organizations” (Caves 1998: 6).

This is an important observation because in the popular press, and even in some business studies, people frequently confuse studying FDI as an economic activity with studying FDI as a geographic activity, i.e., studying where the particular FDI activities are located. The geographic question, arguably, is the least interesting for understanding FDI. The theoretical model of FDI approaches the question quite differently; it casts FDI as a choice among several transaction mechanisms that a firm can resort to when going abroad (wherever the geographic destinations are). Once the analytical anchor is clearly defined, it is easy to illustrate the effects of the financing bias on labor-intensive FDI.

Ownership Vis-à-vis Contractual Arrangements

FDI is an ownership arrangement. Foreign investment is most commonly defined as “direct” when the investment gives rise to “foreign control” of domestic assets. According to the IMF, FDI “is made to acquire a lasting interest in an enterprise operating in an economy, other than that of the investor, the investor’s purpose being to have an effective voice in the management of the enterprise.” In the United States, the Department of Commerce defines inward FDI when a foreign investor’s stake exceeds 10 percent. In China, the legal and definitional hurdle is set at a higher level—25 percent. As such, FDI is simply one of many forms of cross-border relationships between a foreign firm and a domestic firm. Other relationships—commonly called alliances in business studies—include subcontracting (such as export processing), licensing, and asset leasing, which are fundamentally contractual in nature. In labor-intensive industries, contract production, in which a foreign firm contracts with a domestic firm to produce and deliver products to the specifications of the foreign firm, is widely popular. Analyzing labor-intensive FDI is thus equivalent to analyzing the reasons why such contract production is unviable.

5. Some of these definitional issues involving FDI inflows are discussed in Graham and Krugman 1994.
Some scholars have argued that even in labor-intensive and low-tech industries FDI is superior to contract production, because FDI is a more effective mechanism to transfer production know-how, provide marketing access, and deal with problems associated with a poor legal environment in developing countries.\(^6\) Both analytical reasoning and a wealth of empirical data directly contradict this view of labor-intensive FDI. Labor-intensive industries are perfectly competitive, and foreign buyers incur little or no switching costs when changing their sources of supplies in those situations in which a supplier churns out defective products. Contract production, which grants a local producer a product order, provides exactly the same marketing access as labor-intensive FDI. (Labor-intensive FDI, in essence, is a product order plus some financing.) The legal and institutional requirements for executing contract production in labor-intensive industries are not exacting. Contracts are easy to write and easy to break in this business, and contracting parties seldom rely on an outside party such as a court to settle legal disputes. Indeed, contract production has flourished in poor legal settings, such as Korea and Taiwan in the 1960s and 1970s.\(^7\)

Yet, for some reason, labor-intensive FDI completely dominates cross-border transactions in China. One indicator is the relative importance of exports controlled by firms funded by FDI (i.e., foreign-invested enterprises or FIEs) relative to the exports produced by Chinese-owned export-processing firms. In 1992, export-processing firms still accounted for a larger share of Chinese exports than FIEs; in 1996, within only four years, their share declined to 16 percent and the share of FIE exports rose to 34 percent.\(^8\) The substitution of market transaction mechanisms such as export processing with non-market transactions through intra-affiliate cross-border sales was even more substantial in some provinces. In Fujian province, in 1988, FIE exports amounted to 3.6 times the exports by export processing; the ratio rose sharply to 22.5 in 1990 and then to 45.5 in 1992. In Guangdong, the FIE exports rose less dramatically but still far faster than export processing. In the early 1990s, FIE exports were about seven times the value of export processing.\(^9\)

Another indicator is the substantial control by foreign firms of China’s export channels. As of 1995, FIEs controlled 51 percent of China’s manufactured exports, which far exceeded the exports controlled by FIEs in Taiwan. Because FIEs are restricted in primary industries and are not allowed to be pure trading corporations, their share of total

---

\(^6\) Beginning in the late 1970s, scholars began to analyze what is known as third-world FDI, much of which materialized in labor-intensive industries. For a summary of the views on third-world FDI, see Wells 1983.


\(^8\) Huang 2003 reports detailed data on export shares of FIEs for China and a number of other Asian economies.

\(^9\) *Statistical Yearbooks* for Fujian and Guangdong, various issues.
exports is smaller; in 1995, it was 31.5 percent, and in 2002 it rose to 52 percent. In Guangdong province, FIEs have established a more dominant export position. FIEs accounted for 45.5 percent of Guangdong’s exports in 1995, 49.4 percent in 1997, 51.8 percent in 1998, and 50.7 percent in 1999 (Guangdong Statistical Bureau 2000).

It is easier to illustrate the substantial role of labor-intensive FDI in the Chinese export sector by benchmarking China against other economies. FIEs in China have established a far more dominant position in export production than their counterparts in Taiwan. As of the mid-1970s, FIEs in Taiwan accounted for only 20 percent of Taiwan’s manufactured exports. The share of FIEs in China’s exports not only exceeds that of Taiwan but of other Asian countries as well during comparable stages of development. Two authors, Seiji Naya and Eric Ramstetter, provide some of the most complete statistics on this subject. Their paper shows that, except for Singapore, where foreign firms have traditionally dominated domestic firms, no other Southeast Asian country came close to the 51 percent share of manufactured exports claimed by Chinese FIEs. In Korea, between 1974 and 1978, foreign firms accounted for 24.9 percent of manufactured exports. In Thailand, in the 1970s, the share ranged from 11 to 18 percent, and in 1984 it was 5.8 percent.

Table 8.1 presents FIE shares of total exports in three economies, China (1995), Taiwan (1980), and Indonesia (1995). The table breaks down export data by labor-intensive and capital- (or technology-)intensive industries. Two patterns emerge. One is that the FIE shares of exports in labor-intensive industries are much higher in China than in Taiwan or Indonesia. For example, garment and footwear FIEs accounted for 60.5 percent of exports in China, but only 5.7 percent in Taiwan and 33 percent in Indonesia. FIEs similarly dominated exports in leather and furniture in China to a far greater extent than they did in Taiwan and Indonesia. The second pattern is that in capital- or technology-intensive industries, FIEs in China and Indonesia dominated exports to a far greater extent than they did in Taiwan. This is a more common pattern in developing countries, not only because the local capabilities in modern industries are low, but because the goods being produced are intermediate inputs, such as electronic components. Japanese firms, for example, have invested heavily in Southeast Asia to produce electronic components, which are re-exported to the parent firms. Ownership arrangements are more common for


11. The export share data for Taiwan come from Ranis and Schive 1985.

12. All the data on Korea and the Southeast Asian countries are from Naya and Ramstetter 1988. Data for later years are more difficult to find, except for the export production data by FIEs in Indonesia cited in the text.

Table 8.1  
Export Shares of FIEs in Total Exports of Three Economies: China, Taiwan, and Indonesia  
(%)  

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor-intensive industries</td>
<td>Garments and footwear, 60.5</td>
<td>Garments and footwear, 5.7</td>
<td>Garments and footwear, 33</td>
</tr>
<tr>
<td></td>
<td>Leather and fur products, 73.2</td>
<td>Leather and fur products, 9.6</td>
<td>Leather and related products, 19.7</td>
</tr>
<tr>
<td></td>
<td>Furniture, 75.1</td>
<td>Lumber and bamboo products, 2.7</td>
<td>Furniture, 14.0</td>
</tr>
<tr>
<td>Capital- or technology-intensive industries</td>
<td>Electronics and electrical appliances, 83.4</td>
<td>Electronics and electrical appliances, 50.5</td>
<td>Electric, measuring, and photographic apparatus, 78.8</td>
</tr>
<tr>
<td></td>
<td>Paper and paper products, 53.4</td>
<td>Pulp paper and paper products, 4.5</td>
<td>Paper and paper products, 29.8</td>
</tr>
<tr>
<td></td>
<td>Chemical materials and products: 31.6</td>
<td>Chemicals, 34.9</td>
<td>Chemical materials, 42.3</td>
</tr>
<tr>
<td>Manufacturing industries</td>
<td>51.2</td>
<td>20.6</td>
<td>29.0</td>
</tr>
</tbody>
</table>

Sources: Chinese data, Office of the Third Industrial Census 1997. Taiwanese data, Ranis and Schive 1985: 109. Indonesian data are unpublished and were provided to the author by the Indonesian government through the kind assistance of Timothy S. Buehrer and Lou Wells.

this type of goods because often the only way for local producers to gain access to the supply chain of the foreign firms is to be part of their system. (In contrast, garments, footwear, and furniture are final or near-final goods).

The export dominance of Chinese FIEs is not because they are more export-oriented than Taiwanese FIEs at the firm level. In fact they are less export-oriented. On average, FIEs in China in 1995 exported 38.6 percent of their output, but FIEs in Taiwan in 1976 exported a much higher share, at 46 percent (Ranis and Schive 1985). Thus, at least compared with Taiwan, that FIEs in China export so much output results from their sheer dominance of Chinese export production, not from export-orientedness at the firm level. This distinction is critical. The export dominance of FIEs in China is the result of their substantial overall role in the Chinese economy rather than of export efficiency at the firm level.

**Financing Bias and Labor-Intensive FDI**

For contract production to work, a local producer needs to have access to capital—for example, working capital to pay workers and to purchase production materials. A product contract from a foreign buyer is a promise of revenue, but it is not revenue itself. Considerable expenses have to be incurred before the product is produced and delivered in exchange for payment. The ability of a domestic entrepreneur to obtain financing is a key
factor in making a contractual arrangement work. According to a study on Taiwan’s footwear industry by Brian Levy, a World Bank economist, many of the Taiwanese producers in the industry were doing contract work for Japanese trading corporations, which controlled access to Western markets in the 1960s and 1970s (in the same way Hong Kong and Taiwanese firms do today). Japanese firms did not need to invest in Taiwan, because Taiwanese producers could raise capital easily on their own. As Levy explains: “There was little need for the Japanese to provide technical or financial support: the technology of footwear production is simple; the initial investment requirements are small; and . . . working capital was made available automatically in both Taiwan and Korea to exporters” (Levy 1991: 156n10; italics added).

The linkage between financing bias and labor-intensive FDI is thus twofold. On the one hand, the financing bias against domestic private firms creates difficulties for them in structuring and executing product contracts with foreign buyers, creating a situation in which foreign firms are motivated to supply the financing as well as a product contract. When foreign firms choose to extend equity financing, rather than debt financing, to the domestic private firms, then this type of financing becomes FDI. The other linkage is that domestic firms may be too financially constrained to grow and expand their production because of their lack of easy access to capital. In this situation, domestic private firms, even those endowed with know-how and skills, are uncompetitive when faced with better-financed FIEs. Over a period of time, less-competitive domestic private firms lose out to more-competitive FIEs, thus increasing the share of exports by FIEs.

There is a substantial body of evidence that domestic private firms in China are severely financially constrained. First, there is the lending bias against private firms in favor of SOEs, as a number of researchers have pointed out. Until 1998, the four commercial banks, which control most banking assets, were instructed to lend to SOEs only, while the much smaller credit cooperatives were instructed to serve private firms as their clients (Institute of Industrial Economics 1998: 87). But numerous restrictions were put on the credit cooperatives. The deposit base of the Rural Credit Cooperatives (RCCs) and Urban Credit Cooperatives (UCCs) was restricted to nonstate firms in the regions where their bank branches were located. They were also restricted to lending to firms in the same regions. These restrictions hampered the ability of RCCs and UCCs to perform a significant financial intermediation function. The shares of the total loans by these two types of institutions were correspondingly small. In 1996 UCCs accounted for 4 percent of total loans; RCCs accounted for 10 percent (China Finance Association 1997). UCCs and RCCs also do not have the level of branch networks of the four state-owned com-

14. There are complicated reasons why foreign firms may choose to extend equity rather than debt financing. The main reason is that the domestic private firms are not secure in their legal status, which creates difficulties for debt financing.

15. The phenomenon of a lending bias on the part of the Chinese banking system in favor of SOEs has been widely documented. See McKinnon 1994 and Lardy 1998.
mercial banks. In effect, this division of client base between state-owned commercial banks and credit unions constitutes an explicit lending bias against private firms.

Because of the restrictions, lending to nonstate firms by the four commercial banks remained a minuscule portion of their loan portfolio. In 1996, 3 percent of the newly extended working capital loans went to urban collective firms and only 0.1 percent went to purely private enterprises. In comparison, FIEs accounted for about 3 percent of the new lending from the commercial banks in the same year (China Finance Association 1997). At the end of 1998, the private sector claimed less than 1 percent of working capital loans outstanding from Chinese banks and non-financial institutions (International Finance Corporation 2000: 45). Even banks specifically authorized to lend to private firms lent very little. In 1997, only 6.87 percent of the total credits outstanding at the Minsheng Bank went to the private sector (Institute of Industrial Economics 2000: 443). The reason is that banks often consider private firms high risks. Private firms have low prestige and their guarantors may be unreliable (Gao and Chi 1996).

The credit constraints force private firms to turn to usurers for loans at very high rates (Gao and Chi 1996). Or they have to finance their activities from internal sources. A study by the International Finance Corporation finds that Chinese entrepreneurs rely on insider financing to a far greater extent than entrepreneurs in the United States, the Czech and Slovak republics, Russia, and even Vietnam (International Finance Corporation 2000, 48–50).

Like bank credits, foreign exchange is a financial resource a firm needs for production. The special nature of foreign exchange, however, warrants some emphasis here because labor-intensive FDI plays a major role in alleviating the foreign exchange constraints of the private firms. The financing bias against private firms is even more stringent when it comes to the allocation of foreign exchange. Survey data suggest that SOEs have been the overwhelming beneficiaries of an administrative allocation of foreign exchange. According to a study based on 1,966 firms in Jiangsu province, between 1984 and 1988, SOEs accounted for 934 out of 1,890 turnkey projects; collective enterprises accounted for 735; and the rest were accounted for by FIEs and private firms. This comparison of absolute numbers of turnkey projects between SOEs and non-state firms is a bit misleading because SOEs were fewer in number than non-state firms. When measured against the ratio of SOEs with turnkey importation programs to the entire SOE population, SOEs stood out even more as the beneficiaries. The ratio of firms with turnkey projects to their entire population was 19 percent for the SOEs and only 1.73 percent for the collective firms (He et al. 1996). This policy bias in favor of SOEs persisted well into the 1990s. According to a 1995 survey, 25 percent of sampled SOEs imported technology from abroad, as did 18.4 percent of collective firms. However, only 12.5 percent of private firms reported having imported technology from abroad (Development Center of the State Council 1996).
Along with the lending bias, there has also been a severe legal bias against domestic private firms. This legal bias reinforces the financing bias in that it makes it harder for private firms to collateralize their assets to obtain loans or it makes lending institutions more wary of extending loans to a firm with an insecure legal status. Until 1988, there was no constitutional recognition of the property rights of private firms. Article 11 of the 1982 Constitution only acknowledged the property rights of individual businesses—defined as self-employed family businesses. The conspicuous silence on the property rights of private firms stemmed from an ideological consideration. Since private firms were defined as those with more than eight hired employees, their operations raised the specter of exploitation by private capital owners. In 1988, Article 11 was amended to include a clause that the state permitted private firms and that the state was to protect their “lawful rights and interests.” However, the amended article reserved the right of the state to exercise “guidance, supervision and control over the private sector of the economy.” As if the vested power of the state to supervise the private sector was not sufficient, the amendment also carefully subordinated the private sector to “a supplement to the socialist public economy.” This phrase carefully limited the private sector to a subordinate role in the Chinese economy. Only in March 1999 did the Chinese constitution acknowledge the private sector to be an integral part of the Chinese economy and confer an equal status on private firms as on other firms. Private economy is now a “component” of, rather than a supplement to, the Chinese economy.

To put this shoddy legal treatment in perspective, one can compare the legal treatment of private firms with that of FIEs. China’s current constitution, adopted in 1982, only six years after the Cultural Revolution, clarified and offered protection to the legal status of foreign enterprises operating in China (Article 18). Foreign enterprises were permitted “to invest in China and to enter into various forms of economic cooperation with Chinese enterprises and other Chinese economic organizations.” Article 18 also swore to protect their “lawful rights and interests.” Thus, from the very beginning of economic reforms, FIEs were accorded a superior legal status as compared with private firms, despite the fact that FIEs, theoretically at least, could be 99 percent owned by foreign—and private—investors.

**Statistical Evidence: The Garment Industry**

A good place to demonstrate the argument that credit and other constraints have motivated Chinese private firms to seek out FDI is the garment industry. In this industry, FDI


has come to play a substantial financing role. By 1995, FIEs producing garments and fiber products accounted for 61 percent of China’s exports and 51 percent of sales. Foreign firms were the majority shareholders of these FIEs. In 1995, the foreign equity share of these FIEs was 63.3 percent on average. FIEs in an affiliated industry, leather and related products, were similarly dominant. In 1995, they accounted for 73.2 percent of exports and 54.1 percent of sales. Foreign equity share of these firms was 63.9 percent. To put these numbers in perspective, in 1995, FIEs exported RMB 49.1 billion of garment products, compared to RMB 28.5 billion by collective firms and RMB 28.6 billion by village enterprises in the same year. (SOEs, in contrast, exported only RMB 3.2 billion.)

Not only do FIEs export more than indigenously owned firms, but they have a far more significant control over exporting channels than did FIEs in the Taiwanese economy in the 1970s, when Taiwan also heavily courted labor-intensive FDI. In 1976, FIEs accounted for 22.1 percent of Taiwanese garment exports, about one-third of export share by the Chinese FIEs. Again, this preponderant export position of FIEs is not because they are efficient at the firm level. In fact, Taiwanese garment FIEs were more efficient exporters than Chinese FIEs. On average, the export/sale ratio for the Taiwanese garment FIEs was 83.7 percent, compared to 71.7 percent for the Chinese FIEs (Ranis and Schive 1985).

A number of attributes of the garment industry make it an appropriate industry to illustrate the connections between financing bias and labor-intensive FDI. First, the garment firms employ simple technology and production processes. Typically a couple of sewing and knitting machines would be sufficient to start a business. Proprietary assets, such as patents and sophisticated organizational and managerial know-how, are not defining characteristics of this industry, and the rationale for FDI associated with transferring proprietary or firm-specific know-how does not readily apply here. To be sure, there are situations in which brand names are involved, but it is important to point out that even in those facilities that involve premium brand names, cross-border contract production is both theoretically feasible and observed empirically.

Second, there is no a priori reason why firms would naturally prefer an ownership arrangement to a contractual arrangement. The garment industry is perfectly competitive and is free of the “hold-up problems” and “opportunism” that theoretically call for an ownership solution. Cross-border contract production is widely adopted and has proved successful in raising the export capabilities of host nations. Third, in this industry, as in every other industry in the Chinese economy, a financing bias against private firms is present. Firms ranked high on a political pecking order, such as SOEs and TVEs, have an advantageous access to financial resources compared to the lower-tiered private firms.

Viability of Contract Production

China’s rather anomalous dependency on FDI in the garment industry is contrasted with the fact that contract production in this industry is eminently viable on theoretical grounds and is widely adopted in actual business practices. Many developing countries have relied on contract production to develop their production capabilities and to acquire access to international markets. Referring to cross-border contract production as outward processing (OP), two German economists, Petra Naujoks and Klaus-Dieter Schmidt, drew the following conclusion: “A subcontractor firm gets the opportunity to climb on a running tandem. The success story of labour-intensive industries in many developing countries cannot be written without OP” (Naujoks and Schmidt 1994).

In a labor-intensive and technologically simple industry, subcontracting yields many of the same benefits as equity investments and is not afflicted with those problems that give rise to hold-up problems and opportunistic behavior, scenarios economists theorize to warrant ownership arrangements. Access to overseas markets and to technical and managerial know-how accompany this form of cross-border alliance. In some situations, from the point of view of a foreign firm, the benefits of subcontracting exceed those associated with an equity investment. In an equity investment arrangement, the investor is stuck with one group of managers and workers, which might be undesirable given the fast-changing nature of the garment business. In a contractual arrangement, a contractor often plays one subcontractor against another to extract the most favorable conditions. The built-in flexibility associated with a contractual arrangement holds a special appeal, especially considering the fact that many of the foreign investing firms in the garment business are fairly small. According to Kitty G. Dickson, an expert on the garment industry, although contracting entails some loss of control as compared with direct manufacturing, in recent decades, contracting has become more popular and has grown relative to the use of direct manufacturing.

Several factors mitigate against hold-up problems and opportunistic behavior in this industry. One is that when a supplier does breach a contract, the contracting foreign firm can turn to another supplier relatively quickly. One prominent characteristic of the garment industry—and its close affiliate, footwear—is geographic clustering of production facilities. Small producers tend to congregate. This is true everywhere—for example, in the United States in the 1960s and 1970s (Yoffie and Austin 1983), in Brazil (Schmitz 1995), in Mexico (Rabellotti 1995), in India (Ghemawat and Patibandla 1999), in Taiwan (Hsing 1993), and in Turkey (Ghemawat and Baird 1998). In China, three southern provinces, Guangdong, Jiangsu, and Zhejiang, accounted for about half of garment output as

of the early 1990s. In Guangdong province alone, there were over 4,000 garment town-
ship and village enterprises (TVEs), located only miles away from Hong Kong.

Everywhere outside China, the industry consists of numerous indigenous mom-
and-pop operations. In India, most of the garment makers ranged from 5 to 500 workers,
competing fiercely with each other. This situation is as close as one can get to the text-
book version of perfect competition. Whereas garment design, especially involving high-
fashion goods, requires sophisticated know-how and utilizes computer-aided devices,
manufacturing is low-tech. It uses mature, standard, and general-purpose manufacturing
technology and capital equipment. Skill requirements are quite low and of a general type.
Barring government-imposed restrictions, labor substitution is easy and swift. These
characteristics—geographic clustering, the numeracy of firms, and the general nature of
the requisite physical and human capital—have important implications for the nature of
firm alliances in this industry. Switching suppliers is costless, and no individual reneging
garment maker can present much of a “hold-up problem.” There is no economically comp-
pelling reason why a garment retailer, or a retailer’s agent or a designer or a downstream
manufacturer, has to vertically integrate backward. According to Pankaj Ghemawat and
Murali Patibandla (1999), the geographic cluster “improved the flow of information
about export markets and how to serve them, reduced fears about buyer/supplier holdup
that might prevail in smaller number situations, and facilitated organized cooperative ef-
forts in areas such as lobbying the government for infrastructure.”

The organization of the industry is one factor mitigating against the theoretically
derived “contract problems”; another factor is that contracting parties in this business
have developed a set of long-standing practices to manage relationships with suppliers
and to minimize the effects of voluntary or involuntary contractual breach. A buyer typi-
cally does not book 100 percent capacity of a supplier; instead he distributes the order
among a number of suppliers. In that case, if one supplier does not deliver, the supply
disruption will be minimized. Furthermore, a buyer goes to a stable network of suppliers
on a long-term basis. Reputational effects and repeated interactions would deter attempts
to seek gains from engaging in short-term opportunism. The buyer/supplier practices in
this business offer comfort not only to buyers but also to suppliers. Because fashions
change quickly and often unpredictably, to minimize risks to suppliers, a buyer offers a
mixture of fashion goods—say 30 percent—and staple goods (70 percent). That way, if
fashion style changes suddenly, the financial costs to each supplier would be less, as the
costs would be shared among a group of suppliers.22

22. For a fascinating insight into how sourcing operations in garment business work in practice,
see an HBS case study and an interview with Victor Fung in Harvard Business Review. Fung is the CEO of
Li & Fung, Hong Kong’s largest export trading company. In this interview, Fung describes the operation
of a “virtual supply chain” across the globe and some of the specific practices the firm uses to ensure on-
time delivery of quality products. For details, see Magretta 1998.
For all these reasons, garment buyers have no compelling reasons to shun contract production systematically in favor of ownership production. One indication of the prevalence of contract production is that it is even widespread in structuring buyer/supplier relations involving highly branded products as well. Levi is one of the best-known garment industry brands in the world.\textsuperscript{23} Even for a firm with such a premium brand, in 1993 contractor sourcing accounted for more than 50 percent of the global output that bears its name (Katz 1997).\textsuperscript{24}

Cross-border subcontracting in the garment industry serves not only the interests of contracting foreign firms but also the interests of producers in the host countries. Contract production has proven to be highly successful as a method for firms in developing countries to acquire marketing access and know-how. In the 1960s, Korea, Taiwan, and Hong Kong developed into garment export powerhouses on the basis of contract production. In more recent times, Turkey’s garment production has taken off with scarcely any FDI. In 1995, Turkey dislodged China as the number-one garment exporter to the European Union. As is typical in other developing countries, several thousand small firms dot the Turkish garment industry. Most of them are family-owned. They do not perform design work but bid on designs on an extremely competitive basis. These designs are usually accompanied by detailed specifications and standards provided by the large retailers in Europe and the United States.\textsuperscript{25}

Financing Bias in the Garment Industry

In China, the garment industry is one of the few industries that private entrepreneurs can enter relatively freely. The important success factors in this industry are attention to detail, flexibility in production organization and operation, and on-time delivery so as to suit different fashion trends or seasonal needs. These are the kind of attributes naturally and best suited to small private firms, but even in this industry, in which private firms

\textsuperscript{23} Levi, according to the vice president for corporate marketing, epitomizes “freedom, originality, youthfulness and the spirit of America.” Levi jeans are included in the permanent collection of the Smithsonian Institution. One study valued the Levi brand at $4.8 billion, making it the top apparel brand in the world. Levi jeans are market leaders everywhere they are sold. See Katz 1997.

\textsuperscript{24} Other brand-name firms also rely heavily on outsourcing. OshKosh, a specialist in children’s clothes, sources between 30 and 50 “captive contractors” worldwide. Haggar Clothing Co., another high-brand producer, also sources heavily from facilities worldwide in addition to its directly-owned facilities in the Dominican Republic and Mexico. See Mona 1998 and Winger 1998.

\textsuperscript{25} Among this group of firms, a few have become very large and are now able to do their own design work. They have invested heavily in automation and they reduced the average age of their capital stock from twelve years in the early 1990s to five years in 1995. They are active participants in the major European trade shows. One firm, IPAS, directly contracts with Marks and Spencer and Tommy Hilfiger. These large firms have begun to outsource labor-intensive components of their production in Eastern Europe by entering subcontracting arrangements with producers there. For information on the Turkish garment industry, see Ghemawat and Baird 1998.
possess a clear competitive edge over SOEs, there is a financing bias against them. The most systematic form of discrimination has to do with the allocation of foreign exchange. Research on Taiwanese garment exports shows that imported inputs constituted 70 percent of the production costs (Scott 1979). For a firm to successfully engage in export production, it needs to have access to foreign exchange to purchase the exact types of fibers and cloth to meet the design and textural specifications of the foreign buyer at a low cost. The firm may also need to import machinery and equipment from abroad to fulfill an export contract.

Until the early 1990s, very few firms other than SOEs and FIEs were allowed to export directly, and the vast majority of nonstate firms had to go through the cumbersome state-owned trading corporations. (Beginning in 1999, private firms began to export directly, a development I analyze in the concluding section of this chapter.) This is one of the most persistent complaints voiced by Chinese garment producers, as a report by the Office of International Trade Administration of the US Department of Commerce noted. The requirement to export through state-owned foreign trade intermediaries is highly unfavorable to small garment producers. First, the indirect trading system deprives them of access to market, fashion, and production process information that is critical to a garment producer. Fashions and market conditions change quickly, and just-in-time access to information is vital. Second, the garment producers were paid in RMB, not in foreign exchange. Since during much of the reform era, foreign exchange was rationed by the government bureaucracy to support import-substituting SOEs, private garment producers could not access foreign exchange even though they generated much of the foreign exchange earnings. Third, under the Chinese foreign exchange regulations, only those firms authorized to engage in foreign trade can open foreign exchange accounts at banks. This means that even if non-state garment producers could somehow acquire foreign exchange, it would be very difficult for them to keep it. This was costly. During much of the 1980s and 1990s, the Chinese currency was over-valued. Thus non-state firms took a loss each time they converted foreign exchange into RMB rather than retaining it in a bank account.

The extent of distortions in China’s foreign exchange allocation in the garment industry can be demonstrated by comparing the share of non-state firms in export production with the number of non-state firms formally authorized to market their products directly to foreign buyers. Until 1999, private firms were categorically banned from exporting directly. Other non-state firms, such as TVEs, fared better than private firms but were

26. As the report says, “Garment producers frequently complained that China’s indirect trading system, which forces garment sales to pass through authorized trading companies, distanced producers from their buyers and their markets. While a number of structural reforms have expanded the number of trading corporations authorized to conduct the garment trade, this limitation continues to inhibit the rapid transmission of market information to China’s producers.” See International Trade Administration 1993.
still restricted in terms of their direct export access as compared with SOEs. In 1991, TVEs accounted for 77.45 percent of garment exports. But in 1992, out of tens of thousands of TVE garment makers, only 20 of them were allowed to trade directly with foreign firms. In 1993, the number was increased to 156. But in Guangdong province alone, there were 4,214 garment-producing TVEs engaged in export production to varying degrees. In comparison, over 300 SOEs were permitted to trade directly with foreign firms despite the fact that they accounted for a tiny share of garment exports. In 1995, SOEs exported RMB 3 billion of their output, whereas TVEs exported ten times as much, RMB 26.27 billion.

**Statistical Evidence**

In this section, we attempt to demonstrate the effect of the financing bias on labor-intensive FDI. We rely on a database compiled by All China Marketing Research Corporation, a consulting arm of the Chinese Statistical Bureau (hitherto referred to as the FIE database). The State Statistical Bureau compiled the FIE database as part of the nationwide Third Industrial Census in 1995 but, unlike the Third Industrial Census, the data in this database are at the firm level. The FIE database contains a number of performance and balance sheet indicators of all industrial FIEs operating in China as of December 31, 1995. As such, this database presents the most detailed and most disaggregated depiction of FIEs to date.

There are two drawbacks, however. One is that more recent data are not available in the same detail. This hampers an analysis of more recent trends. The other drawback is more severe. A direct demonstration of the effect of the financing bias would be to correlate the extent of credit and other constraints on private firms with choices between an FDI arrangement, such as a joint venture, and contract production. Unfortunately, data on contract production are simply not available to allow such an analysis.

Instead, the FIE database contains firm-level data on foreign ownership of FIEs that have already been established. We can hypothesize that the financing bias affects the degree of foreign ownership of those FIEs jointly owned by foreign and domestic firms (i.e., joint ventures). The idea here is that a domestic private firm, being financially more

---

27. Note that TVEs occupied a higher position in China’s political pecking order than private enterprises, and in all likelihood, purely private firms fared even worse than TVEs. Jean Oi, a political scientist at Stanford, documented instances in which township and village officials derisively referred to private firms as “underground snakes.” See Oi 1999.

28. Data are reported in Office of the Third Industrial Census 1997.

29. According to the brochure of the company, the company has the most up-to-date commercial information and a nationwide data collection and analysis network. The FIE database was purchased from this consulting arm. There is no discernible bias in the data despite the commercial nature of this information source. The data are unprocessed, and I have aggregated some of the data to an industry level and found they are consistent with the data in the Third Industrial Census.
constrained compared to other domestic firms, is more willing to cede ownership controls to a foreign firm when setting up a joint venture. This is so because greater share concessions will bring more capital to a firm that cannot get capital from other sources. There is a positive correlation between the extent of financing bias and foreign ownership.

We need to control for a number of variables to implement this research strategy. First, it should be noted that foreign ownership of a joint venture is determined by the joint preferences of foreign and domestic firms. Thus we need to control for those factors that influence the ownership preferences of the foreign firm in order to accurately attribute observed foreign equity ownership to Chinese FDI preferences. Scholars in international business studies often use equity ownership as a measure of the bargaining dynamics between foreign and domestic firms. The advantage of this variable is its relatively easy availability and measurement uniformity across different firms.30

The standard perspective among scholars of international business studies is that technological and organizational know-how, proprietary assets, and control of market channels lead to greater foreign ownership controls. Here the selection of the garment industry helps control for a number of these factors. Because the garment industry does not involve sophisticated technology and proprietary assets, any variance in foreign ownership controls is independent of these factors. Probably the most important factor that increases foreign bargaining power in the case of garment FDI is foreign controls of marketing. Fortunately, our database records how much each firm exports. We can use the ratio of export to sales revenue as a measure of foreign marketing power. One can argue that organizational know-how may also bear on the extent of foreign ownership controls. We use two variables as proxies of foreign organizational know-how. One is the capital intensity of the FIE and the other is the size of the FIE’s employment. The underlying idea here is that when a joint venture is larger and more capital-intensive and thus, presumably, more complex to manage, the foreign investing firm has a bargaining advantage.

The other factor that needs to be controlled for has to do with any differences that may arise from technology and production processes. Fortunately, our research design helps impose controls on these differences. I deliberately choose a very narrow scope of the industry to ensure that both the human and physical capital deployed is as homogeneous as possible. This is to minimize the range of differences in capital equipment and production processes. The data are disaggregated at a four-digit Chinese Standard of Industry Classification level (the four-digit code for the garment industry being 1810) and are confined to garment makers using fiber and cotton-based materials. Leather, fur, and feather-based clothing are excluded, as are footwear and headgear products. The making of fiber and yarn is also excluded. This is a far more disaggregated treatment than many of the studies that use industry characteristics to estimate foreign bargaining power.

30. For a number of applications of using foreign equity ownership, see Krobin 1987 and Gomes-Casseres 1990.
The empirical analysis imposes an additional set of controls. All the FIEs included in the analysis are joint ventures. This is to ensure that the equity structure of these firms is a function of joint negotiations and decisions between foreign and domestic firms. In business studies literature, the assumption is that the equity preferences of foreign firms can vary across different countries. American firms often demand more equity controls than, say, Japanese firms. To control for the national variations in equity preferences, I have limited the FIEs to those with investors from Hong Kong, Taiwan, and Macao, with the idea that ethnically Chinese investors may have similar equity preferences.31

An additional factor that has been hypothesized to influence foreign ownership controls is the policy environment of the host country. A more liberal policy environment is associated with greater foreign ownership controls, while a more controlling one is associated with less foreign ownership controls. To control for any effects arising from changes in China’s FDI regulatory and policy environment, I have limited the FIEs to only those established between 1992 and 1995. During this period, the policy environment was more liberal than in the 1980s, in that the central government allowed investing firms more freedom to determine their own equity structures. This has the additional benefit of ensuring that the outcome we observe is driven by firm-level dynamics, rather than by policy and regulatory constraints. It should be noted, however, that even if policy constraints were a factor, they should not severely affect the equity structures of garment FIEs. For the garment industry, FDI controls were never a binding constraint as compared with those in, say, the automobile industry, in part because the garment industry has never been a priority sector for the central government.

Table 8.2 presents data on the possible influences on foreign ownership arising from firm size, capital intensity, and export propensity (as a proxy for foreign marketing controls)—standard variables in business studies literature. The FIEs are divided along three dimensions: employment size, fixed asset size per employee, and export propensity. The foreign equity ratios are ranked by these three categories. The hypothesis is that larger employment size, greater capital intensity, and greater export propensity tend to be associated with greater foreign ownership controls. Large firms and more capital-intensive firms may require more sophisticated managerial and organizational know-how, and foreign firms may be in a stronger bargaining position when this type of FIE is involved. For example, large firms may be more vertically integrated, and they may perform fabric weaving and finishing as well as garment fabrication operations. Smaller firms may be just “cut-and-sew” operations, which do not require sophisticated organizational management.

31. It would be ideal to further divide this group of investors, but data of further disaggregation are unavailable.
Table 8.2
Foreign Equity Ratios, Employment Size, Capital Intensity, and Export Propensity in the Chinese Garment Industry, 1992–95

<table>
<thead>
<tr>
<th>Ranked by employment size</th>
<th>Ranked by fixed assets per employee</th>
<th>Ranked by export/sale ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit: employee</td>
<td>Foreign equity ratios (%)</td>
<td>Unit: 10,000 RMB</td>
</tr>
<tr>
<td>Less than or equal to 50</td>
<td>50.4</td>
<td>Less than 1.034</td>
</tr>
<tr>
<td>Between 50 and 108</td>
<td>53.8</td>
<td>Between 1.034 and 1.809</td>
</tr>
<tr>
<td>Between 108 and 197</td>
<td>52.1</td>
<td>Between 1.809 and 3.328</td>
</tr>
<tr>
<td>Between 197 and 750</td>
<td>52.2</td>
<td>Between 3.328 and 20.14</td>
</tr>
<tr>
<td>More than M750</td>
<td>74.0</td>
<td>More than 20.14</td>
</tr>
</tbody>
</table>

NOTE: All the FIEs are joint ventures, established between 1992 and 1995. Foreign investors are firms based in Hong Kong, Macao, and Taiwan. Chinese investors are either TVEs or private firms. SOURCE: Based on data in All China Marketing Research Co. Ltd. 1999.

Empirical evidence does not bear out this hypothesis. Reading down the table, there is no positive correlation between the size of employment and capital intensity on the one hand and foreign equity shares on the other. If anything, the correlation is slightly negative. The foreign equity share is lower if the average employment size of an FIE is between 108 and 197 persons than if the firm employs between 50 to 108 persons. Only when the firms are extremely large—those with more than 750 persons—does foreign ownership increase substantially, to 74 percent, as compared to 52 percent at the next lower level (between 197 and 750 employees). The lack of a clear correlation holds when the export propensity of FIEs and when regional effects—of being in Guangdong—are controlled for, either in a descriptive or regression analysis of the data. 32

Capital intensity is even a poorer predictor of foreign equity holdings. On average, FIEs that are more capital-intensive seem to exhibit fewer foreign equity controls, as indicated by the nearly linear decrease in foreign ownership shares as the fixed assets per employee increase in size. The highest foreign equity share is found among the least capital-intensive firms, whereas the smallest foreign equity share is found among the FIEs with the highest fixed assets per employee ratio. On export propensity, there is

32. These results are reported elsewhere. See Huang 2003.
strong support for the standard bargaining perspective that associates foreign marketing controls with foreign bargaining power. When all the FIEs are divided into four categories—those exporting less than 25 percent of their output, those exporting between 25 and 50 percent, those exporting between 50 and 75 percent, and those exporting above 75 percent—foreign equity holdings increase almost proportionately. When an FIE exports less than 25 percent of its output, the average foreign ownership is about 44.2 percent, compared to 50.5 percent and 52.8 percent at the next two export levels, respectively. The high exporters, those exporting more than 75 percent, have an average foreign equity holding of 58.8 percent. Clearly, foreign marketing controls have a substantial and positive effect on foreign ownership controls.

Does this finding confirm the standard view in the literature on labor-intensive FDI that labor-intensive FDI is an effective mechanism for providing marketing access? Not at all. The reason is that this correlation can be entirely spurious. It is possible that the causation in fact runs in the other direction, a direction that is consistent with our financing bias hypothesis. For example, a financially constrained and export-oriented private firm would value labor-intensive FDI very highly. It could gain direct exporting rights by becoming an FIE, and it could legally hold export earnings in foreign exchange rather than in RMB. Thus export orientation, in the presence of a financing bias, causes high foreign ownership, rather than the other way around. Without more detailed data, I am unable to resolve the causal ambiguity, but it is important to note that the high correlation between export-orientedness and foreign ownership should not be taken as evidence of the marketing benefits of labor-intensive FDI.

We measure financial bias by the political status of the Chinese partners in the joint ventures analyzed here. Higher-tiered firms are less financially constrained than lower-tiered firms. Almost all Chinese firms, regardless of ownership, are assigned to different levels of the government, from the central government down to the township governments, the lowest administrative level. During the centrally planned era, the supervisory agencies had the power to allocate resources of value to firms, including production inputs. Now these agencies provide credit guarantees, regulatory relief, and legal and political protection. The government system consists of five administrative levels: central government, provincial government, prefecture, county, and township. (There is another layer of administration that provides some community services, but it is not a part of the governmental apparatus. It is called the neighborhood committee in the urban areas and the village committee in the countryside. These entities also operate their own firms.)

33. In the FIE database, the administrative levels refer to those of the FIEs and, strictly speaking, not to those of the Chinese partnering firms. But the classifications of the FIEs and of the Chinese FIE partners are consistent because the FIEs are classified according to the administrative levels of their Chinese partners.
The FIE database classifies all firms as belonging to one of six categories in the political hierarchy: central government, provincial governments, prefectures, counties, neighborhood committees (in the urban areas), townships, and villages (in the rural areas). The FIE database has a seventh category, which is denoted as “others.” On the basis of the classification conventions used at the State Statistical Bureau, I was able to determine that these firms are private firms not formally affiliated with any government agencies or community entities. (This determination was confirmed by an official from the State Statistical Bureau.) These are private firms in our analysis.

Not being affiliated with the bureaucracy entails both advantages and disadvantages. Such firms enjoy greater operating autonomy and less managerial interference from the government, but, on the other hand, they miss out on the valuable functions that government agencies may provide. Chinese banks often demand credit guarantees or sizable collateral assets. Most important, a bureaucratic affiliation confers legitimacy on private firms that operate in a murky legal and political environment. The value of a bureaucratic affiliation is demonstrated by the fact that private entrepreneurs are often willing to pay a hefty price, in the form of ceding a substantial equity stake in their firms, to acquire such an affiliation. It is safe to say that private firms without any bureaucratic affiliation are at the bottom of the political hierarchy of firms.

Column 1 of Table 8.3 presents foreign ownership ratios ranked by the political hierarchy of the firms. Firms at the top, such as those directly under the central government and provinces, are higher tiered, while firms at the bottom, such as TVEs and private firms, are lower tiered in terms of their political status. In general, top-tiered firms exhibit a lower foreign ownership ratio than bottom-tiered firms. For example, firms at or above prefectural level on average have a foreign ownership ratio less than 50 percent; firms below this level exhibit a foreign ownership ratio greater than 50 percent. FIEs cofunded with private firms have the second highest foreign ownership ratio in the table.

Two issues need to be addressed before we conclude that the financing bias seems to have affected the foreign ownership ratio in the direction postulated by our hypothesis. Because foreign marketing control strongly affects the foreign ownership ratio, we need to incorporate this variable to control for the bargaining power of foreign firms. Another important possibility is that since private garment firms cannot export directly, they may

34. For example, the Chinese Statistical Yearbook 1999 defines “enterprises of other types” as encompassing private enterprises, jointly owned private enterprises, shareholding cooperatives, and FIEs. (Shareholding cooperatives are employee-owned firms.) Thus, all the firms in this category are domestic private firms, except for the FIEs. Because all the firms in the FIE database are FIEs, this category would include all the firms in the category of “enterprises of other types” minus the FIEs. I thank Ms. Mei Jin, Director, Department of Economic Research, China Economic Monitoring and Analysis Center at the State Statistical Bureau, for a detailed explanation of firm categories in the Chinese statistical reporting system.

Table 8.3
Political Hierarchy of Firms and Equity Structures of FIEs in the Garment Industry
[percentage (number of firms)]

<table>
<thead>
<tr>
<th>Political hierarchy</th>
<th>(1) All FIEs</th>
<th>(2) High exporters(^a)</th>
<th>(3) Low exporters(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central level</td>
<td>50.0 (4)</td>
<td>—</td>
<td>50.0 (4)</td>
</tr>
<tr>
<td>Provincial level</td>
<td>42.5 (62)</td>
<td>41.3 (12)</td>
<td>41.8 (40)</td>
</tr>
<tr>
<td>Prefectural level</td>
<td>48.4 (218)</td>
<td>58.0 (63)</td>
<td>42.6 (133)</td>
</tr>
<tr>
<td>County level</td>
<td>52.5 (277)</td>
<td>62.3 (131)</td>
<td>43.8 (119)</td>
</tr>
<tr>
<td>Neighborhood level</td>
<td>66.5 (82)</td>
<td>73.1 (36)</td>
<td>60.7 (37)</td>
</tr>
<tr>
<td>Township and village level</td>
<td>51.6 (444)</td>
<td>55.9 (231)</td>
<td>45.2 (164)</td>
</tr>
<tr>
<td>Private firms</td>
<td>55 (143)</td>
<td>68.6 (68)</td>
<td>41.7 (64)</td>
</tr>
</tbody>
</table>

NOTES: Numbers in brackets refer to the number of FIEs in the given category. All the FIEs were established between 1992 and 1995. Foreign investors were from Hong Kong, Macao, and Taiwan.

\(^a\) High exporters: FIEs with export/sales ratios of above 75 percent.

\(^b\) Low exporters: FIEs with export/sales ratios of less than 25 percent.

SOURCE: Data are based on All China Marketing Research Co. Ltd. 1999.

especially value an FIE status and thus are more willing to “pay” for it by ceding greater equity shares. Thus, we need to distinguish between high and low exporters. Table 8.3 divides the FIEs into two categories, high exporters in column 2 and low exporters in column 3. High-exporting FIEs export more than 75 percent of their output, whereas low-exporting FIEs export less than 25 percent of their output.

By and large, the financing bias hypothesis is confirmed. Except for firms at the neighborhood level, to which I return below, high-exporting FIEs at the bottom of the political hierarchy—those at or below the township and village levels—show the largest foreign ownership, whereas firms at the top of the political hierarchy are the least foreign-owned. Private firms exhibit a higher average foreign ownership ratio (55 percent) compared with TVEs (51.6 percent), firms one rung above the private firms on the political pecking order.

The rank ordering in Table 8.3 suggests that the political pecking order seems to matter only when high exporters are involved (i.e., firms exporting more than 75 percent of their output). Given the import-intensity of garment exports, this pattern suggests that compared with RMB loans, the foreign exchange constraint is more binding on private firms. This is probably because foreign exchange control is tighter and more centralized and because informal credit markets in some regions in China can supply small short-term RMB loans to private entrepreneurs.\(^{36}\) Notice that the effect of financing bias

---

\(^{36}\) For example, Wenzhou has a large informal credit market, which reduces the need for local entrepreneurs to resort to foreign equity financing. See Huang and Wen 2003 for a more detailed illustration.
seems to have disappeared when only low-exporting FIEs are included, as indicated in column 3.

The second issue is that the rank ordering is not strictly one-directional. High-exporting TVEs, on average, have a lower foreign ownership ratio (55.9 percent) compared with politically higher-tiered county FIEs (62.3 percent) and neighborhood FIEs (73.1 percent). In fact, FIEs cofunded with domestic firms at the neighborhood level exhibit the highest foreign ownership ratio among all the firms in the table. This is a reminder that our analysis is unable to control for a number of factors that may also affect the foreign ownership ratio. In particular, the performance and operating capabilities of the domestic shareholding firms of these FIEs are not controlled for. In the 1990s, small urban firms, many of them SOEs under county governments or collective firms affiliated with neighborhood committees, performed very poorly because they could not compete with the TVEs and private firms. Their higher foreign ownership ratio is a sign that they were being acquired by foreign firms. A telling sign is that the low-exporting FIEs at the neighborhood level also have a very high foreign ownership ratio, at 60.7 percent, an indication that foreign control is unrelated to overseas marketing channels for this group of firms.

Given that the operating capabilities of the firms are not controlled for in Table 8.3, the results reinforce the financing bias hypothesis idea even more powerfully. Private firms are the most efficient firms and are probably the most desirable joint-venture partners from the point of view of foreign investors. Yet they seem to have ceded more substantial controls of their businesses (or future business opportunities) to foreign investors than all other firms in the table, except for the least efficient neighborhood firms.

**CONCLUSION**

The function of labor-intensive FDI in China is similar to venture capital in the American economy. Both provide financing to firms that are credit-constrained in exchange for sizeable equity stakes in the business. Of course, the difference is that in China the credit constraints on private firms are politically motivated rather than being a result of technological risks. Another similarity lies in the effect of these two types of financing. Venture capital allows some of the entrepreneurial firms to obtain critical seed capital, and labor-intensive FDI is a source of funds to otherwise efficient private firms. The effect of both types of financing is an alleviation of inefficiencies in the financial system.

Even though labor-intensive FDI has benefited the Chinese economy, one cannot argue that this way of attracting FDI, by suppressing domestic entrepreneurship, is a first-best option. After more than twenty years of continuous economic and export growth, and even though Chinese-made garments are found in all corners of the world, China still
does not have the likes of Li & Fung of Hong Kong, IPAS of Turkey, or Yuen Yuan of Taiwan, firms that engage in trading and design activities on an international scale. Much of the value-added in the garment business is in the design and branding. Although not based on the analysis developed here, the Chinese government reached a similar conclusion about its garment industry. A report in a publication by the State Council makes the following observation:

From the very beginning, our country’s garment export business has been on a purely manufacturing path. Our firms do not have our own brands or marketing channels. The high growth has been achieved on cost advantages, sheer quantity, and price competitiveness. Our market share is not stable, and our development lacks depth. Garment exports face some tough challenges, which will adversely affect the sustainable development of this industry. (Development Research Center of the State Council 1996)

Over time, however, the central government began to relax the financing bias against private firms. The first breakthrough occurred in 1992, when Deng Xiaoping called for a greater opening and scope of reforms during his famous southern tour. The number of private firms increased dramatically, but mainly as a rebound from the suppressive policies toward the private sector adopted by the central government between 1989 and 1991. The main changes involved policy; institutions and long-standing policy practices, such as lending quotas, were not fundamentally altered. The next breakthrough occurred in 1997 when, at the Fifteenth Party Congress, the government announced its policy of “grasp the big and release the small.” “Grasp the big” meant restructuring and consolidating China’s largest SOEs. “Release the small” meant that the government vowed support for privatization of small SOEs. The treatment of the private sector improved substantially after this policy change, and policy measures designed to neutralize some of the inherent biases against private firms were adopted in rapid succession. In 1998, the central bank replaced lending quotas with softer indicative guidance. The quota system had precluded private firms from even competing for a credit line. In 1999, the government began to grant export licenses to private firms (as well as, as pointed out before, revising the constitution to give better property rights protection to private firms). Access to the equity market was made easier for private firms when, in March 2000, the government abolished the listing quotas—reserved exclusively for SOEs—in favor of a system in which underwriters determine the timing and pricing of new issues.

Fundamentally, the lending bias against private firms did not operate in a vacuum. It reflects a well-entrenched and institutionalized ideological hostility toward private firms. Ultimately, it is the political status of the private firms, more than the specific financial policies of the government, that determines their treatment, not just by the government, but also by their customers, suppliers, and banks. In July 2001, in the most dramatic shift to date, President Jiang Zemin announced that the Communist Party would
welcome private entrepreneurs to join its ranks; in November 2002, the party constitution was revised and the Communist Party renounced the doctrine of “class struggle.”

The policy evolution has substantial implications for the development of the private sector in China and for labor-intensive FDI. If our analysis is correct that financing bias causes labor-intensive FDI, one should expect to see a decline of labor-intensive FDI since 1997, as the financing bias against private firms has been eased somewhat. This indeed has occurred, in a rather dramatic fashion. Capital flows that financed contractual alliances—such as export-processing and assembly operations owned by Chinese entrepreneurs—increased from $410 million in 1996 to $1.5 billion in 1997, $1.7 billion in 2000, $1.8 billion in 2001, and $2.1 billion in 2002. Consistent with this development has been the rapid increase in subcontracting and export-processing operations undertaken by private firms. Exports by processing and assembly operations undertaken by private firms increased 82-fold from 1996 to 2000 (from $6.3 million to $526 million). In Guangdong province, the share of exports by FIEs in 1999 declined slightly.

In the garment industry, in 1998, after the government removed some export restrictions on private firms, direct exporting by private producers increased by 140 percent. As a sign that private firms are able to carry out contract production, indirect exporting by private firms has also sharply increased. In the mid-1990s, the Import & Export Garment Corporation of Jiangsu province purchased about 20 percent of its garment supplies from private firms; in the late 1990s, this share increased to 65 percent. The share of FDI in textiles—as a proxy measure of labor-intensive FDI—declined from 7.8 percent to 4.5 percent. This is entirely to be expected. Domestic firms have become more competitive in some industries; foreign firms either decide not to invest or to contract with domestic firms in industries where domestic firms are perceived to be strong. In the late 1990s, China’s FDI dependency ratio—measured by FDI as a ratio to fixed asset investments—declined, especially as measured against domestic private investments, another development that is entirely consistent with our argument. This is a sign that the economy is getting healthier and the deep-seated institutional distortions are being eased.

38. The export-processing data are reported in General Administration of Customs of the People’s Republic of China 1996 and General Administration of Customs of the People’s Republic of China 2001.
39. In 1999, FIEs in Guangdong province exported $39.4 billion, but the export share by FIEs declined slightly, from 51.8 percent in 1998 to 50.7 percent (Guangdong Statistical Bureau 2000).
40. From Development Center of the State Council 1999.
41. This is based on an interview. See Huang 2003.
REFERENCES


China’s Rural Health System in Transition: Toward Coherent Institutional Arrangements?

China has been in transition to a market economy since the late 1970s. This attempt to establish a market economy rapidly and protect the population against excessive dislocation and suffering is a complex process for which there are few precedents (Nolan 1995; Rawski 1999). The Chinese approach to transition can be understood as a complex and continuing negotiation. It has benefits and costs. The economy has grown rapidly and household incomes have risen substantially. There is a relatively stable environment, within which stakeholders have adapted to change. People have had time to revise their views of how to order social relationships as markets have emerged. China has avoided the kind of institutional collapse that some other transitional economies have experienced (Reddaway and Glinski 2001).

Some argue that that the gradualist approach has resulted in substantial economic losses (Woo 1999a). The absence of a well-defined regulatory framework has encouraged certain kinds of opportunistic behavior. Interest groups have been able to retard change, and individuals and institutions have taken advantage of incentives provided by partially liberalized markets. Inequalities have risen between regions and social groups (Khan and Riskin 2001).

This chapter explores the transition from the perspective of rural health. It reviews the development of the health sector before and after the commencement of the transition to a market economy, situates it in the context of transition and explores recent debates about strategies for the reconstruction of a coherent rural health system. It pursues two main arguments. The first is that the health system has to be understood as a complex set of relationships between stakeholders with different interests and positional power. These stakeholders must share expectations about appropriate behavioral norms for it to perform well. This means that health reform has to be situated in the broader context of economic and institutional transition. The second is that transition implies profound changes at a dis-
course level in how institutional arrangements and relationships are constructed. Transition changes the rules for negotiating behavioral norms, establishing and internalizing contracts (implicit and explicit), and understanding accountability. This is a profound challenge, and we can expect to see diverse responses, multiple experiments, and considerable turbulence, at least in the short term.

FIFTY YEARS OF RURAL HEALTH DEVELOPMENT

The Three-Tier Rural Health System

In the thirty years after 1949, China greatly reduced its population’s burden of sickness and premature death. This was largely due to a lessening of severe poverty, improvements to the rural environment, and increases in literacy. The health sector contributed by providing preventive programs and effective and affordable basic medical care (World Bank 1997).

By the mid-1970s China had established a rural health system with the institutional arrangements that analysts consider necessary for it to perform well. These include a network of appropriate facilities and personnel, social financing of a large proportion of health expenditures, and mechanisms to coordinate service providers and encourage health workers to act in the community’s interest (Chernichovsky 1995). The specific arrangements reflected the prevailing economic and institutional realities (Tang et al. 1994).

Most villages had a health station with several part-time health workers. They organized public health campaigns and provided basic health services. Each commune (now called townships) had a health center, with several doctors and assistant doctors. These facilities coordinated and supervised public health programs and provided medical care. The county health bureau was responsible for the performance of local health services. It prepared plans and allocated the annual government budget. County institutions supervised township and village facilities and provided referral services.

Village personnel were paid a share of collective production. Health center workers were paid either a share of collective production or a government salary. Village and township health facilities charged patients a small fee and sold drugs and other consumable items. People paid more at the county hospital. Most communes established local health insurance schemes, which derived revenue from household contributions and collective welfare funds. They provided some services free of charge and reimbursed a proportion of other medical costs.

Adjustment to the Emerging Market Economy

During the 1980s and 1990s, the rural health system had to adapt to the emerging market economy. It also had to adjust to demographic and epidemiological changes, urbanization,
and industrialization (Hussein 1999). The institutional arrangements for the rural health system changed a great deal during that period (Bloom and Gu 1997). The dotted lines in Fig. 9.1 indicate the functional relationships that became weaker. The following paragraphs describe these changes.

Public sector pay increased, reflecting income rises in rapidly growing regions. The government devolved financial management to lower levels (Wong 1995). Governments of poor rural areas experienced growing financial problems. By 1998 township health centers received only 10.5 percent of their expenditure from government, and village clinics received almost no government support (Fu et al. 2000).

Health facilities now compete for patients. Supervision and referral have diminished. Government officials no longer influence day-to-day management of health facilities. Many local governments do not have the resources to monitor and regulate the health sector effectively. Health facilities have a great deal of autonomy. There are an increasing number of private providers.

The rural health services increasingly resemble a poorly regulated market. The government has only begun to establish a regulatory framework to replace previous systems for influencing health providers. Government retains powers from the past. For example, it controls prices. It has kept charges for consultations and hospital days low, but has also allowed facilities to earn a surplus from drug sales and test fees. This has encouraged high levels of drug use (Zhan et al. 1997; Dong et al. 1999a).

Health facilities in rich areas provide an increasingly sophisticated mix of services, but at rising cost. Facilities in poor localities provide a smaller range of services than before, partly because they have lost their best personnel (Tang 1999; Gong et al. 1997). Preventive programs have deteriorated in some localities (Shu and Yao 1997). The cost of rural health services has risen more quickly than the income of farmers since the early 1980s (Liu et al. 1996; Fu et al. 2000). Meanwhile, most local health insurance schemes have col-
lapsed. In 1998, 87 percent of villagers had no health insurance (Meng and Hu 2000). There is evidence that decisions to consult a doctor, purchase a course of drug therapy, or accept admission to hospital are influenced by cost. Some borrow money to pay for treatment. A Ministry of Health (MOH) study claims that a family’s poverty can be attributed to disease or injury in 23 percent of cases (Meng and Hu 2000).

HEALTH DEVELOPMENT IN THE CONTEXT OF TRANSITION

The rural health system presents a paradox. There is a dense network of health facilities with many health workers (although the best qualified have moved to urban facilities). There are reasonably high levels of health expenditure. Despite this, many rural residents have difficulty gaining access to services. This section situates this poor performance in the context of the changing institutional environment and the need to negotiate new arrangements and behavioral norms.

The Institutional Environment

The pre-1980s rural health services were embedded in the institutions and behavioral norms of the command economy. This section describes how this environment has changed and continues to change.

Local administration. Townships have been established as the lowest level of government. They are integrated into the system of public administration. Village committees are not part of government. They manage local affairs, financed by informal levies and profits of local enterprises. The government has instituted elections to village committees. The performance of these local administrative and accountability structures varies a great deal.

Township and village administrations have considerable autonomy from central authorities. The latter establish broad development strategies and the legal framework within which localities operate, but local authorities have substantial control over resources. Oi (1999) argues that the ability to retain a large proportion of tax revenues for local purposes has encouraged local government leaders to support enterprise development.

The cadre responsibility system, whereby local government and party leaders sign contracts with a higher level of authority, also influences the performance of local government (Edin 2000). The county appoints and evaluates the township party secretary and mayor. Its contracts with them have tended to prioritize social stability and economic growth. The outcome of an annual evaluation strongly influences a leader’s remuneration and promotion prospects.

Some localities have experienced rapid economic growth and established quite sophisticated welfare systems, including local health insurance (Cook 1999; Carrin et al. 1999). Zhe (2000) describes some “super-villages,” which have become centers for eco-
nomic development. They organize a wide range of social benefits for their residents. There are a variety of institutional arrangements in these localities. The ownership of enterprises and the relationship between economic and administrative structures differ considerably.

Other localities have experienced less economic growth and their public services have deteriorated. They impose informal levies that put financial burdens on households and local enterprises (Young 1995). They spend up to 80 percent of their revenue on salaries, leaving few resources to fund services. Despite this, they have difficulty retaining skilled staff.

It is difficult to ascertain the relative contribution to these difficulties of economic backwardness, administrative weaknesses and problems with governance.

Labor market. The shift from a managed labor force with low pay and productivity to a market with growing differences in earnings between regions and categories of worker has strongly influenced the rural health system. When township governments were established, decisions were made about the treatment of people who had performed public tasks for the communes. Village health workers got access to land but did not become government employees. Most village health workers now provide care on a fee-for-service basis and also work their land. Workers in township health centers became salaried employees with full pension entitlements. This led to a differentiation between largely private village clinics and public township facilities.

The determination of government health-worker pay has reflected the need to adapt to growing inter-regional differences in earnings while maintaining an integrated public service. The government sets a national pay scale, but localities make their own adjustments. Successful facilities pay substantial bonuses; facilities in poor areas may not even pay basic salaries. The latter was initially experienced as a temporary phenomenon, and some health centers recorded underpayment of salaries as debt. Expectations have altered, and a differentiated pay structure has emerged. Employment contracts now embody an explicit or implicit understanding that levels of pay are related to a facility’s financial performance.

Facilities in poor areas cannot pay enough to retain skilled personnel. Nonetheless, government salaries and pension entitlements are high relative to average incomes in these localities (World Bank 2002). This has generated pressure on these facilities to employ many relatively unqualified personnel. These facilities also finance pensions for retired employees. The retirement age is low and many pensioners go into private practice. The pressure on health centers to share limited public resources with a growing number of employees and pensioners has compromised their ability to pay good salaries to skilled personnel or to pay for other inputs necessary for good quality services.

Public finance. There are substantial inter-regional differences in public expenditure (Ahmad 1997) According to a recent study by the World Bank (2002), inter-provincial
variation in per capita expenditure grew substantially in the 1990s. The same study compared inter-county variation within three provinces to inter-provincial variation. The former was greater in Gansu and less in Jiangsu and Hunan.

The devolution of public finance has given advantages to rapidly growing localities. They have acted strategically to limit the proportion of tax revenues they transfer to higher levels, and they have introduced informal levies outside the tax system. They have been able to fund substantial social benefits (Cook 1999). Governments of some poor townships, on the other hand, spend more than 80 percent of their budget on salaries and pensions and thereby provide few benefits to their residents (Zuo 1997).

During the late 1980s and early 1990s, townships and villages financed an increasing share of expenditure from informal levies. Fast-growing localities derived most of their revenue from enterprises. Other areas depended on household levies. There were protests in some localities that had imposed a high financial burden on farmers without providing commensurate benefits. In 1993 the government responded by limiting local levies to 5 percent of average household income. The government is now introducing reforms to integrate fees into the tax system. These changes reduce the opportunities for rent-seeking by local administrations. However, they also lessen the ability of well-run localities to provide additional services. For example, local administrations cannot introduce compulsory local health insurance.

Government-facility relationships. Oi and Walder (1999) describe a variety of relationships between rural enterprises and local government. In some localities collectively owned enterprises predominate. In others, private entities are more important. Oi (1999) argues that the performance of local administrative bodies strongly influences a locality’s development experience, whatever the formal relationship between enterprises and government. Whiting (2001) describes how local governments have developed different relationships with enterprises depending on whether private or collective enterprises previously predominated.

One finds a variety of relationships between government and health facilities. Half the village health stations are privately owned and most of the rest are leased to health workers. The status of many health centers is ill-defined. Township governments own most of them. They sign contracts with managers that focus largely on financial issues. Township governments have a limited capacity to monitor their performance. The manager negotiates an annual government grant based on the number of beds and staff. Facility managers have little control over hiring and firing of staff.

Some government facilities have developed more explicitly private characteristics. The author has visited ones where employees have invested in new equipment or where local businessmen were investors. There are increasing numbers of private providers of health services and producers and suppliers of pharmaceutical products. These private entities operate in a lightly regulated environment. The government is exploring options for
reform of facility ownership to give them more autonomy from direct government control (Li 2002). It has not clearly defined the implications of such reforms for its regulatory role.

The Management of Change

Woo (1999b) divides analysts of the post-command economy transition into “convergence” and “experimentalist” schools. He interprets their disagreements in terms of their views about the endpoint of transition. He argues that adherents to the convergence school expect a typical market economy to emerge and consequently urge government to create the appropriate regulatory framework as quickly as possible. He suggests that the experimentalists anticipate new forms of relationship between government and enterprises and consequently emphasize local initiatives. Woo’s focus on ultimate institutional arrangements does not adequately capture the issues involved in the creation of a functioning market economy. For example, it does not take sufficient account of the profound discourse changes needed for actors to internalize the rules of behavior to make the system work.

China’s transition can be understood as a series of local adaptations punctuated by changes to legal and institutional arrangements. The national government articulates broad development objectives and establishes a framework within which stakeholders adapt (Liu and Bloom 2002). Local leaders have a lot of leeway in translating policies into new practices (Lichtenstein 1993; Oi 1999; Shue 1988). Local stakeholders greatly influence development by testing boundaries and renegotiating relationships. This approach permits small-scale experiments with reform before the government alters the legal framework (Kelliher 1992).

Whiting (2001) illustrates how this process works with regard to the relationship between enterprises and local governments. She shows how different historical legacies led the governments of three eastern counties to evolve different relationships with enterprises. She also shows how growing decentralization and the increased autonomy of enterprises contributed to a fall in tax flows to higher levels of government. National authorities responded to this fall in the mid-1990s by reforming taxes and rules for enterprise ownership. She points out that these reforms altered the rules of the game at local level and will lead to further changes in government-enterprise relationships. She concludes that we need to develop a greater understanding of the politics of transition management.

Bloom et al. (2001) make a similar point about the system of health worker pay. They describe how health facilities and individual workers have tried a variety of strategies for increasing earnings. Some strategies push against the boundaries of accepted practice. These include selling a variety of goods and services and soliciting informal payments from patients, drug companies, and suppliers of medical services. The government identifies illegal practices and punishes transgressors harshly. It also penalizes some unethical practices, such as the acceptance of informal payments. It alters the legal framework, from time to time, to institutionalize practices that have become established. This process has
enabled health worker pay to adapt to growing inequalities between localities and between
categories of worker, without explicitly breaking with the concept of a national public ser-
vice and associated understandings about appropriate norms of behavior. It has allowed
new understandings of legitimate modes of behavior to emerge. Some argue that the
growth in inter-regional inequality will eventually make it impossible to maintain a na-
tional pay scale (World Bank 2002). It will then be particularly important that other prin-
ciples have been accepted for establishing appropriate levels of pay and establishing ethical
and legal rules of behavior.

There is a language in China, which contrasts hardware (buildings, trained person-
nel, and so forth) with software (systems). The latter includes the attitudes and understand-
ings of local stakeholders. The deputy mayor of a poor rural prefecture stressed the impor-
tance of software at a recent meeting about a health reform and development project. He
referred to three imbalances in implementation: (1) progress in rehabilitating infrastructure
contrasted with delays in reforming institutions; (2) different understandings by officials at
various levels of government of the meaning of health reform; and (3) persistence among
service providers of attitudes relevant to a command economy.

Mackintosh (1999) argues that health system rules and sanctions have to be com-
plemented by implicit agreements between stakeholders. She emphasizes the influence of
shared understandings and expectations on health system performance. She refers to the
importance of a service ethic in which health workers act in the interests of patients and
receive high social status in exchange. She points out that governments cannot encourage
these understandings by simply creating rules and monitoring adherence. They also need to
foster informal understandings that reinforce ethical and professional behavior. She sug-
gests that a number of formal and informal institutions can contribute to this process.

China’s rural health system has to re-establish the functional relationships in Fig.
9.1. These functions could be expressed through a variety of relationships between gov-
ernment, service providers, community structures, and local accountability mechanisms as
long as they fulfill the following conditions:

- the relevant actors know their roles and have the capacity to play them;
- stakeholders understand the rules of behavior and mostly can meet their aspira-
tions by conforming to them; and
- it is widely assumed that most people will follow the rules.

The creation of new social arrangements is complicated by the need to reconcile the
different interests of localities, age cohorts, and employment groups in a situation of in-
creasing income inequality. Two recent publications highlight new thinking about these
issues (CASS 1998, 2000). They implicitly acknowledge the political aspects of transition.
The government is giving high priority to measures that encourage lagging areas to catch
up. It is also paying more attention to the reconstruction of the social sector and the social
security system, which involves the establishment of rules-based entitlements to resources.
The translation of entitlements into clearly defined claims to present and future revenue flows is a highly contested process.

The government treads a fine line in changing the legal framework during a major transition. If it implements reforms that do not reflect local realities, people will ignore rules inconsistent with local livelihood strategies and live outside the formal framework. This can erode respect for rules and weaken constraints to opportunistic behavior. If government delays institutionalizing new relationships for too long, it prolongs a situation of vagueness that encourages stakeholders to pursue strategies for short-term gain. The lack of clear rules creates high transaction costs. It may lead to suboptimal outcomes because people have little assurance that particular social arrangements will persist. Zhang (2000) argues, for example, that the lack of a clear regulatory and fiscal framework for village institutions has become a constraint to the development of local services. Bloom and Tang (1999) argue similarly with regard to local health insurance.

**RECONSTRUCTING RURAL HEALTH SYSTEMS**

The government acknowledges that rural health services have serious problems (Li 2002). It has articulated the following vision of a reconstructed system (State Council 1997a, 1997b): all facilities provide competent services, preventive programs reach most of the population, there are functioning referral and supervision systems, drugs and diagnostic tests are used rationally, government is an important source of health finance, local health insurance protects families against the cost of serious illness, and special measures ensure access to essential health services for the poor. Few disagree with this vision, but people disagree about how to attain it.

![Diagram showing the vicious circle in rural health services in poor localities](image-url)
Many of the older health workers still see themselves as providers of a public service. If younger workers do not have similar attitudes, the constraints to opportunistic behavior could diminish, and the vicious circle could worsen. The challenge for policymakers and local managers is to construct an institutional environment and set of expectations that transforms the vicious circle into a virtuous one, whereby health workers meet their economic and social aspirations by providing good quality services that people need. This involves changes to formal rules and implicit contracts between stakeholders.

There are parallels between the creation of effective financial and health systems. In both cases, government must enable a pattern of incentives to emerge that encourages managers to provide good quality services at a competitive cost; it also must create a regulatory framework and social environment that discourages opportunistic behavior. This involves changes in attitudes and understandings of facility managers and government officials. The former have to think more like managers by taking responsibility for efficiency and meeting consumer demands, but they also have to understand their role as agents for the community. The latter have to learn which forms of interference are appropriate and which are not. The government has to provide incentives for officials to behave in desirable ways.

China faces the challenge of establishing an appropriate institutional framework, while the relationships of individuals, service providers, and government are changing radically. That makes it particularly difficult to convince relevant actors that newly established rules and institutional arrangements will persist. The following subsections outline some issues in managing institutional change in China’s health sector. They draw on presentations made by senior decision-makers, health administrators, and policy analysts to a conference on rural health development (Shi and Li 2000). These presentations revealed substantial disagreements about the roles of government, collective bodies and private providers. This chapter suggests that the disagreements are mostly about the management of change rather than about the desired endpoint.

**Reducing Direct Government Influence over Facility Management**

Local governments have changed their relationship with health facilities following similar changes in their relationship with productive enterprises. However, health has lagged behind, and the government still sets prices and strongly influences personnel management. Wu (2002) speaks about a semi-market-oriented economy in which facility managers seek economic advantage in an environment with many aspects of the command economy. The proposed strategies for reducing inappropriate controls are based on different understandings of the constraints to change.

One set of understandings focuses on the competing viewpoints and interests of government departments. Some suggest that local health bureaus respond more to the interests of their employees than to the needs of the community. Others focus on the influ-
ence of other sectors. The degree to which other sectors influence health facilities is one indicator of the low political importance attached to health.

The rationale for retaining price control has been to ensure access to essential services. These arrangements have actually encouraged increases in drug sales and rises in the cost of care. A recent study of government efforts to control hospital costs points to the involvement of influential stakeholders, some of whom benefit from the present system (Wu 2002). For example, drug suppliers have profited from the rapid rise in the volume of drug consumption since drug prices are high enough to encourage suppliers to give discounts to health facilities (Dong et al. 1999a, 1999b). Wu suggests there are substantial opportunities for rent-seeking by hospital managers and health workers. There is also evidence that some local governments require hospitals to employ more people as a way to reduce open unemployment.

The MOH has produced guidelines that define the legal status of government health facilities and their relationship with local government. But implementation of these guidelines has been uneven. There have also been experiments with the privatization of health facilities. The idea seems to be that government should remove inappropriate controls to encourage facility managers to tackle the most serious causes of inefficiency. In the meantime, it should create a regulatory framework to discourage opportunistic behavior. The critics of this approach suggest that it will take some time to create this framework and in the meantime undesirable medical practices could become strongly entrenched.

Zhe (2000) argues for an alternative approach to the reconstitution of government-facility relationships. She distinguishes between “vertical” and “community” patterns of development. She suggests that vertical structures are rigid and tend to represent the interests of employees. She argues that new relationships will develop out of village and township collective structures. She illustrates with examples from successful super-villages. She suggests that the best strategy for change is to encourage townships and villages to emulate successful localities.

Some townships do not have the capacity or inclination to support health services effectively. Tang and Bloom (2001) illustrate with a county in Guangxi, where devolution of control over health centers to township governments had a deleterious effect. This illustrates the problem of health development where local administrations are weak or not accountable to the population. Most analyses of the evolution of relationships between enterprises and local governments are based on the experiences of the more developed parts of the country. The influences on the behavior of government officials in poor localities may be quite different. Higher levels of government may need to intervene more actively in these areas. This could become particularly important if government decides to make substantial fiscal transfers earmarked for basic health services.
**Government Funding of Health Services**

The Chinese government spends little on rural health. A study in seven provinces in 1996 found that governments in poor counties spent between $0.24 and $0.62 per capita on health services outside the county hospital (Hicks et al. 1998). Despite affirming the need to reduce the financial burden of ill-health, the government funds a diminishing proportion of rural health expenditure. One reason is that it has not given high priority to health. It has not included health in the priorities for the Western China Development Program or in the criteria for monitoring performance of local government leaders. Recent statements about the importance of health by the highest political leaders may change this. The low priority given to health may also reflect a belief that rural health services are not performing well and that additional funds would not provide substantial benefits.

A government decision to finance health services in poor rural areas through increased fiscal transfers would raise questions about the channels of flow. Should higher levels of government earmark additional funds for specific purposes, such as health? Should the funds flow to local health departments, other local government departments, or community structures? It would also raise issues about how to maintain incentives for local governments to reduce inefficiencies. An increase in fiscal transfers would have to be accompanied by measures to make local governments more accountable for the performance of their health services. This would involve a major change in the relationship between higher and lower levels of government and/or between local government and community structures.

Such a decision would also raise questions about the services to be subsidized. One could simply increase the allocation to all government facilities. If the increase were substantial and accompanied by measures to diminish inappropriate practices, it could have a major impact on access. However, the funding is unlikely to be sufficient for all services. An alternative strategy is for the government to fund a limited number of preventive programs, high priority interventions and a safety net for the very poor.

There are debates about how additional social funding should be channeled to health service providers. Some argue that local health departments give too much weight to the interests of health workers. This is one reason why the government gave control over urban health insurance to the Ministry of Labor and Social Security. Some advocates of an increase in public funding of rural health services call for a similar split in rural areas (Liu 2000; Du 2000).

There are two broad ideas about who could purchase rural health services. One is that county and township governments should play this role. The advantage is that the systems are already in place. Problems might arise if governments were not able and willing to convince health facilities to rationalize their staffing levels. There is also a danger that a
level of government would favor its own facilities and employees over private ones or those belonging to other levels of government or government departments.

The alternative is to use community structures. This would involve the establishment of county and/or township health service boards that include representatives of county and township governments, health workers, and bodies of democratic supervision. Existing local health insurance schemes can be understood as early stages in the establishment of such boards. The problem with this arrangement is mostly associated with the creation of new institutional structures capable of formulating health budgets in conjunction with local governments, negotiating contracts with providers, and monitoring the performance of health facilities.

There has been a lot of debate about whether local administrations should be allowed to introduce compulsory local health insurance (Liu et al. 1996; Carrin et al. 1999). The health sector has supported this idea as a means of increasing demand and sharing risk (State Council 1997b). Others have opposed it to protect households against financial burdens that do not provide commensurate benefits (Du 2000).

Many localities have not been able to convince people to contribute to voluntary schemes, despite the fact that households spend a lot on health. The reasons include the high cost and low quality of services in health centers, poor management of funds, and the disincentives for the young and healthy to contribute (Bloom and Tang 1999). Ye et al. (2001) and Wang et al. (2001) report on interviews with local government officials and Communist Party cadres in counties with experimental schemes. They found problems of trust between the community, local government, and health facilities. They conclude that schemes would be more viable if these problems were addressed.

The belief by policymakers that serious illness is an important factor in the impoverishment of households has stimulated interest in risk-sharing arrangements. One proposal is for counties to organize hospital insurance with contributions from government and households. Issues of trust are even more important for these schemes, since they would ask young people to contribute in the expectation of claiming hospitalization benefits far in the future.

The experience of local health insurance illustrates how health systems are embedded in local institutions. Successful schemes are mostly in localities that have achieved rapid social, economic, and institutional development. Their success depends on the ability of local government to generate funds from enterprises and the ability of government and communities to ensure that schemes use money in the interest of their members and are seen to do so.

The Regulatory Role of Government

Discussions about government’s regulatory roles are at an early stage. These roles include regional planning and regulation of inappropriate behavior. The State Planning and Devel-
Development Commission is shifting its focus away from a previous emphasis on the attainment of quantitative targets for buildings, equipment, and personnel. The government issued guidelines for needs-based regional health planning in 1999. The plans concern mainly the allocation of public sector investment and human resources. A few localities have already implemented these guidelines to rationalize the distribution of specialist services between facilities and reduce duplication of expensive equipment. One problem is that government has limited influence over health facilities, since hospitals finance a high proportion of investment themselves. This highlights the need for government to define more clearly its regulatory responsibilities and powers.

The transition to a market economy involves legitimizing behavior formerly believed to be antisocial. The creation of new boundaries between acceptable and unacceptable behavior has proved to be a lengthy process. The greatest effort has been on defining acceptable economic behavior. Wu (2002) refers to the strong influence of economic incentives on hospital behavior and suggests that limits to opportunistic behavior are unclear. Bloom et al. (2001) draw similar conclusions regarding health worker livelihood strategies. They find that government has defined illegal behavior but has left a large gray area in which actors have a lot of discretion. One topic of particular importance is financial audit. Health facilities often keep separate sets of books for negotiating with government and allocating bonuses among departments. A common complaint against local health insurance schemes is that local officials have used their resources for other purposes. The lack of clear rules of financial probity and a means to enforce them is an important constraint to the establishment of effective health systems.

A second focus is on licensing health workers. During the 1980s there were no clear rules. The author recalls a conversation with a county health bureau director, who said that veterinarians were important suppliers of drugs. It is now government policy that village doctors should pass a licensing examination to retain the right to practice. Counties “clean the medical market” periodically to put unlicensed providers out of business. It is also government policy that doctors will eventually be licensed. Implementation of this policy will raise difficult issues regarding the appropriateness of a single set of regulations for the entire country. Poor localities may find it difficult to retain enough licensed health workers.

The third focus concerns dangerous practices. Dong et al. (1999a) describe how a series of scandals about counterfeit drugs led to the enactment of laws to regulate drug manufacturers during the 1980s. Recent scandals about the quality of blood products could lead to similar regulation. Another area of concern is the sale of drugs. Studies have documented that poorly qualified health workers routinely prescribe steroids and sophisticated antibiotics for minor illnesses. This practice can harm patients and encourage the emergence of drug-resistant organisms. This is another area for regulation.

Tang (1999) points out that financial incentives influence how local officials enforce regulations. For example, counties mostly ensure that food handlers have the statutory annual health check. This is because they earn money from the fees for this check.
They tend to enforce regulations concerning maternal and child health care less rigorously. Government needs to pay more attention to the creation of a pattern of incentives (financial and otherwise) to encourage local officials to enforce regulations.

**Exit and Voice**

The frustration of senior policymakers with the poor performance of local health systems has led them to become interested in the potential roles of individuals and local representative structures. There are two broad areas of discussion about how users can influence service providers. One focuses on improving the ability of consumers to choose health services well and the other on strengthening local accountability.

Some discussions focus on the need to strengthen people’s skills as consumers of health services. Some studies have documented the role of patients in demanding sophisticated drugs (Zhan et al. 1999). This has led to ideas about telling service users more about the choice of these products. For example, clinics and shops could be required to post guidelines for the treatment of common complaints on their walls. People would then know if a health worker or drug seller were offering inappropriate or unnecessarily expensive products. There are also discussions about the need to establish clearly differentiated categories of licensed practitioners to enable people to make informed choices about whom to consult.

Other discussions focus on democratic supervision. The government has established new mechanisms to enable rural people to express their grievances and influence local powerholders. These include elected village committees, public petitioning of higher-level officials about corrupt behavior by local cadres, and the introduction of rule by law and access by citizens to courts (Zweig 2000).

There are different opinions about the impact of these measures. O’Brien and Li (1995) state that the number of letters of complaint about local government increased during the early 1990s. They argue that this reflected both the magnitude of problems with local governance and the opportunities for influence that village elections and the appraisal of the performance of government leaders (cadre responsibility system) created. They suggest that this form of protest is most successful where it exposes violations of government policy and where higher government officials are interested in improving the performance of local leaders.

Edin (2000) emphasizes the importance of the cadre responsibility system and the high priority given by the political leadership to social stability in creating opportunities for protest letters and the views of elected village leaders to have an influence. Louie (2001) cautions that many villages have not implemented the law fully either because they have not yet held elections or because local party structures strongly influence the outcome. These factors have limited the impact of this initiative. Also, there is little evidence that village committees have paid much attention to health issues.
CONCLUSIONS

Leaders of China’s health sector have been aware for some time of growing problems. The government’s 1997 policy statement made many recommendations. The problems persisted and in late 2001 the prime minister himself emphasized the need for action. The persistence of problems, despite reform initiatives, reflects the degree to which the health system is embedded in local institutions. Its performance is strongly influenced by arrangements for government financial management, public sector employment, monitoring of local government performance, and so forth. The problems facing the health and financial sectors are interlinked.

Most analysts agree that government must play a major role in the health sector. Local governments need to redefine their relationship with health facilities to encourage them to perform better. Higher levels of government need to establish a regulatory framework that defines the rules of engagement within the health sector. It also needs to provide incentives for local governments to take health issues seriously. There are different opinions about how to manage the reduction of inappropriate interference, while strengthening government’s regulatory functions. The different viewpoints reflect differing assessments of the capacity of local governments and of their willingness to act in the interest of the community. There are also differences in understanding about how effective local administrations can be established. Some emphasize the role of higher levels of government; others believe that local administrations can be major drivers of change.

There is growing interest in the problems of poor localities. Governments in these areas cannot meet all basic needs unless they receive substantial fiscal transfers. The national government’s capacity to provide these transfers depends on its ability to increase tax revenues and on the outcome of negotiations about the translation of entitlements and needs into commitments to financial flows. Different levels of government will have to balance honoring the expensive entitlements of registered urban residents against meeting the needs of the rural poor.

If government increases fiscal transfers, it will have to create incentives for local officials to use additional resources in the interests of the community. This will involve monitoring the performance of local health services by higher levels of government. It will also involve improved local accountability mechanisms. This would imply major changes to the relationships between levels of government and between local administrations and representative structures.

The health sector illustrates the influence on outcomes of the expectations and understandings of key actors. People need to be able to trust service providers and health finance institutions to act in their interest. It is difficult to establish stable expectations when so many institutional arrangements are in flux. The experience of the past decade illustrates
the need gradually to introduce rules-based systems that are consistent with other aspects
of the institutional and economic environment. The government needs to complement this
with measures to strengthen both monitoring by higher levels of government and account-
ability to the organized community and individual users of services.

The development of local health systems depends on many contextual issues. A va-
riety of organizational arrangements are likely to emerge that combine decentralized man-
agement of facilities with measures to encourage providers to act in the interests of the
community, in the context of an evolving framework of regulation and public sector finan-
cial management. The lesson of the past 20 years is that particular organization forms are
less important than the creation of an environment within which local government officials
and local stakeholders have incentives to find constructive solutions to meeting needs.

REFERENCES

Medicine 45, no. 3: 351–60.
Bloom, G.; L. Han; and X. Li. 2001. “How Health Workers Earn a Living in China.” Human Re-
tive Role for Government.” Social Science and Medicine 48, no. 7: 951–60.
public of China: Interim Experience in 14 Pilot Counties.” Social Science and Medicine 48,
no. 7: 961–72.
of Developed Economies?” In P. Berman, ed., Health Sector Reform in Developing Countries.
Boston: Harvard School of Public Health.
Chinese Academy of Social Sciences (CASS). Project Group on Social Development in China.
1998. “Institutional Reforms and Challenges at the Middle Stage of China’s Reform.” Social
Chinese Academy of Social Sciences (CASS). Research Group on China’s Social Security System.
Rural China.” IDS Bulletin 30, no. 4: 60–70.
Dong, H.; L. Bogg; K. Wang; C. Rehnberg; and V. Diwan. 1999a. “A Description of Outpatient
Drug Use in Rural China: Evidence of Differences due to Insurance Coverage.” International
Journal of Health Planning and Management 14: 41–56.
Distribution in Rural Areas.” Social Science and Medicine 48: 777–786.


Li, Changming. 2002. “Presentation to Consultative Meeting of the China Health Development Forum.” Beijing, April (www.ids.ac.uk/ids/health/).


It is widely recognized that the fiscal decentralization that has been a key component of economic reforms in China has had a significant impact on the provision of public goods and services. Reforms have produced new inequalities, a dramatic rise in the disparity between welfare provision in rural and urban China, and an abandonment of the compact for cradle-to-grave social welfare for the privileged working class. While the reforms may have raised the standard of living for the vast majority and shifted China along the road to a market economy, they have also resulted in a significant restructuring of the provision of public goods and services. State and collective institutions in rural and urban China that carried much of the welfare burden have been dismantled. Like other transitional economies, Chinese policymakers have found it difficult to design new welfare systems, in major part because significant institutional change is inherently slower and more complex than macroeconomic stabilization and liberalization measures.¹

The changes in the financial system have had an unforeseen impact on public goods provision and the structure of that provision in poor rural areas. When reforms began in earnest in the 1980s, the weak fiscal system meant that China’s leaders used the financial system as a substitute. As a result, the banking system, rather than the government budget, was the main tool for the leadership to meet its development goals. Under the pre-reform system, it was relatively easy for state authorities to extract resources from state-owned and collective organs to meet the needs of production and to provide rudimentary welfare coverage. Many collective organizations in the countryside and state-owned enterprises (SOEs) in the urban areas provided basic education and medical facilities that were considered impressive given China’s level of economic development. This has changed with re-
form. Until the year 2000, China’s human development index rank was always above its GNP rank. In 1993 it was 41 places higher, but the rank was zero in 2000.

Financial pressures resulting from the reforms have caused many work units and local authorities to cut services or turn them over to a fee-for-service system. Individuals are left increasingly to find the best support available with their own resources. This has been particularly noticeable in the provision of health care. In the mid-1970s, China received frequent praise from international organizations for the level of health care provided, given its low-income level. In fact, China’s barefoot doctor approach was held up as the model for community-based health care at the World Health Organization (WHO) Alma Ata Conference in 1978, where the slogan “Health for all by the year 2000” was adopted. Yet in the World Health Report 2000 the WHO ranked China 188th out of 191 countries in terms of fairness in financial contribution, 144th for the overall performance of the health system, and 139th in terms of health care expenditure per capita in international dollars. While ranked above most African countries, it is ranked below other large developing countries such as India, Bangladesh, and Indonesia. In terms of health quality achieved, it ranks somewhat better (61st), but this may be because of the residual impact of the old collective medical system (WHO 2001).

The use of the banking system as a quasi-fiscal system has contributed significantly to the reduction in availability of certain public goods. Banks have played the key role in meeting the state’s developmental objectives. Not surprisingly, especially when combined with the Marxist legacy that stresses investment in the development of productive forces and the current developmental ideology that stresses high growth rates above all, the banks invest almost exclusively in the production of excludable goods, such as enterprise construction or plant upgrading. From the banks’ perspective, where is the value, with the exception of certain public works projects, in lending to the development of public goods?

Insofar as most bank lending still goes to SOEs, there is an indirect impact on the provision of social welfare since SOEs traditionally have been major urban providers of education, health, and housing. However, the assets of these SOEs are inherently excludable. In fact, the system has worked even more strongly against the use of government funds to provide public goods. The lack of an effective tax system, even after the 1993–94 reforms, has left the central state with too little funding to cover essential public goods or to deal successfully with redistributive issues. The government, lacking sufficient tax revenue, has relied on extracting resources from its citizens through mobilization of their bank deposits. These bank deposits, as noted above, when invested are used to create excludable goods. The financial reforms have meant that the government has in effect taken public funds (household deposits) and converted them into investments in private goods (assets in enterprises). This has become increasingly the case as many SOEs have begun to drop social welfare obligations either by privatizing them or transferring responsibility for their

provision to local governments. With China’s large non-performing loan problem, many of these household deposits are vulnerable. Some 50 to 75 percent of household savings mediated and directed by state banks have gone to financing SOE operations.

During the reform, the provision of public goods has never enjoyed a high priority on the policy agenda. This combined with the leadership’s belief in market-based solutions has resulted in the rise of significant inequality of access to public goods. While the introduction of markets and the privatization of much social welfare provision may have increased choice for some, it has led to increased costs for virtually all and the reduction of services for some groups, such as the rural poor. As the World Bank has shown (1998), unless the initial playing field is leveled and effective redistributive mechanisms are created to compensate the poor, there will be increased inequality of opportunity, assets, and consumption.

This chapter first reviews the nature of the impact of fiscal decentralization on local governments and how this and other reforms have affected the provision of health care in rural China. Then we outline the key findings from the 1994–95 survey of three rural townships in Yunnan province to understand how the reforms have impacted the provision and utilization of reproductive health services. Finally we conclude with a set of policy recommendations.

**FINANCIAL DECENTRALIZATION AND THE IMPACT ON LOCAL GOVERNANCE**

The reforms since 1978 have brought a progressive decline in direct state control over the economy, with powers devolved from state agencies to enterprises, a decrease in the use of mandatory planning mechanisms and a concomitant increase in the use of market forces to guide distribution and, increasingly, production choices. Local governments have been accorded greater control over local economic activity and the redistribution of economic rewards. However, there has been little incentive to prioritize access to health care. As State Council researcher Lu Mai (1999) has pointed out, policy has not favored investment in areas such as health, since the Marxist canon did not consider them a part of the productive forces.

Most writers have correctly pointed to the decline in central state revenue as a primary cause of the decline in the provision of public goods and services in poor areas. However, the more important factor is the shifting balance between central and local budgetary streams and the incentive system for local officials. Central state revenues as a percentage of GDP dropped dramatically from 36 percent in 1978 to a low of 11 percent
before reviving to 16 percent in 2000.\(^3\) This has severely restricted the central state’s redistributive capacity and has meant that local governments have been largely left to their own devices to raise the necessary funds for development priorities. The relative decline in state revenues has created pressures at all levels and in all Chinese government agencies to meet recurrent costs from the locally generated revenues or to pressure local banks to provide financing. This means that local resources and power structures increasingly determine political outcomes. Within the same province and even in adjacent counties, one can see radically different sociopolitical outcomes deriving from the reforms.

Before the most recent fiscal reforms, only about one-quarter of all state expenditures occurred at the central level. Moreover, the major responsibility for financing infrastructure and providing social welfare occurred and still occurs at the local level. Much research has seen the decline of state revenue as a percentage of GDP as a clear sign of weakening state capacity. This may be true for the central state, but if one adds the revenues that the local governments gather from a variety of resources, the percentage has not changed much over the past thirty years. There has not so much been a decline in the extractive capacity of the state under reforms as a realignment between the center and the localities, with the localities controlling far greater amounts of revenue than previously (Yang 1994). This realignment has had a significant impact on the nature of local government in China. By 1992, the central government’s share of revenue was almost 39 percent, having declined from 51 percent in 1980, while collection had risen to 28 percent from 20 percent, and expenditure had dropped from 51 percent to 31 percent (Zhang 1999). The 1994 fiscal reforms have redressed this situation somewhat. The ratio of the budget to GDP has been raised as well as the ratio of centrally collected revenue to total budget revenue. The share of centrally collected revenue rose from 22 percent in 1993 to 56.5 percent by 1997 (131). For 2001 centrally collected revenue exceeded locally collected revenue, with 52.4 percent collected centrally and 47.6 percent locally, thus overcoming the initial tendency of the localities only to collect for themselves.\(^4\) The center’s share of budgetary revenues grew from 2.8 percent of GDP to 6.2 percent in 1998 (Chung 2000: 46). This is not sufficient, however, for the central state to play a major role in redistributive policy, given its other financial obligations. The original objective was to provide the center with a sufficient financial surplus so that it could cover both its own obligations and certain redistributive needs. It was estimated that the center would need some 60 percent of collected revenues, of which 10 percent could be used to meet the redistributive and related goals.\(^5\) This objective of the 1994 reforms has not been met.

Thus, the localities are still dependent on their own income generation to fund activities. Some local governments have been able to use political pressure to persuade bank

\(^3\) Calculated from National Bureau of Statistics 2002.
\(^5\) Our thanks to Pieter Bottelier for this information.
branches to fund projects. This pressure was exerted primarily through local connections and control over appointments. The investment in enterprise development that resulted was a key factor in the dynamic initial growth of the township and village enterprises, especially in areas such as southern Jiangsu, Shandong, and Zhejiang. In effect, this resulted in pushing the investment risk upward through the national banking system and, hence, a lack of local responsibility for this risk. The emphasis is on excludable rather than public goods. With the exception of a few localities even where wealth has expanded, the emphasis has been on enterprise rather than social development. Thus, we can see that local political control over the banking system added to the debt burden by localizing assets and pushing liabilities off onto the banks and the nation’s household depositors. After the Asian financial crisis, China’s leaders realized the dangers inherent in this local control. In 1998 the local branches of the People’s Bank of China were reorganized along regional lines to reduce political interference by powerful provincial party chiefs in lending decisions. The former 31 provincial branches of the bank were reduced to nine regional centers. As Premier Zhu Rongji noted, the “power of provincial governors and mayors to command local bank presidents is abolished as of 1998.” Reduced rather than abolished is probably a more accurate assessment.

This development has caused local governments now to rely even more heavily on two other local funding sources: extra-budgetary funds (EBF) and self-raised funds (zichou zijin). Not surprisingly, it is difficult to calculate the real value of the EBF, and one official review reported that the real amount for 1995 was probably 1.6 times that recorded in official statistics. Christine Wong (2000) has estimated that the EBF amounts to 12 percent of GDP, compared to an official budget of 14 percent. If one adds the self-raised extra funds that by their very nature do not turn up in the statistics, the total sum of revenues available were the same in the early 1990s as at the start of the reforms; 39.5 percent as compared with 40 percent (Zhang 1999: 123). This means that those observers who have suggested that there has been a major decline in the state’s extractive capacity have relied on the official budgetary revenue, which has indeed declined by almost 60 percent (but not in absolute terms, since the economy has been growing at a rapid rate). What is important is the changing nature of the center-local fiscal relationship and the changing role and importance of the different funds as controlled by the center and the localities.

This is of vital importance for understanding the incentives for the local state. One inheritance of the Soviet fiscal system has been that the local government has always

---

6. Barry Naughton (1995: 154) has calculated that in 1988 these three provinces with just 17 percent of the rural population had 43 percent of the rural industry, with one-half of all township- and village-level industrial output.
7. See Lou et al. 1998. The authors are grateful to Edward Steinfeld for both pointing out this issue and referring us to this source.
8. For further discussion of this point, see below.
10. For township revenue sources, see Li, Wang, and Tang 1985: 35–36.
provided basic public goods, with very few exceptions. Apart from nationally designated poor counties that receive transfers and those that receive such transfers from the province, localities are by and large on their own. This concern with revenue generation is exacerbated by the fact that despite fiscal decentralization the central government has retained control over the policy agenda. While accounts of localities avoiding or deflecting central policy are many, the center still sets many tasks that must be carried out and imposes burdens to be met.

The interest for local governments is still to concentrate on raising EBF and self-raised funds. Once a fee collected by a local government is reclassified as a tax, it is subject to revenue-sharing agreements with higher-level administrations. The fees are the funds that the localities can use to finance their own requirements, including their own salaries and related administrative costs. Particularly important are the management of local enterprises that can provide revenue to the local government and the use of other state assets such as land to rent out for commercial activities. In fact, rather than frowning on commercial activity, local governments are positively encouraged to use state assets to raise funds to cover their management and operational costs. The 1994 reforms have heightened the tendency to seek off-budget revenues, since they require local counties to hand over 75 percent of value-added taxes.

The use of extra-budgetary and self-raised funds has clearly been increasing. In poor and remote communities where marketization has barely begun and where the scope of economic activities will always remain limited, local treasuries have little recourse other than the reduction or elimination of services, reduction of salary support, or the contracting out of services to private operators. In many poorer parts of China, rural medical health schemes have been effectively wiped out, and access to schooling has been drastically reduced.

Increasingly, many poor regions rely on extra-budgetary revenues for even the reduced services they can provide, and evidence suggests that this is increasing. According to Yasheng Huang (2001), in 1991 extra-budgetary expenditures for education were around 15 percent of budget expenditures as compared with 8 percent in 1979. Guizhou province derives fully 80 percent of its educational funding from such sources. Albert Park and his colleagues (1996: 767) calculated that in Shaanxi 86 and 89 percent, respectively, of provincial consolidated revenues and expenditures were from EBF. It is precisely this kind of funding that is most vulnerable in an economic downturn.

11. This tendency was increased by the decollectivization of agriculture and a return to a household-based farming system that removed agriculture as a source of viable financing for local governments. See Oi 1992: 115.
THE IMPACT ON HEALTH CARE PROVISION

Combined with rising income inequality, the financial pressures on the local state in China account for the huge variation in the provision of public goods and services during the transition. As the World Bank has shown, access to health and education services was still widely available in the 1980s but became more dependent on household incomes in the 1990s (1997b: 23). In 1998, 22.2 percent of those in high-income areas were covered by cooperative medical facilities, but only 1 to 3 percent in poorer areas were covered (Zhu 2000: 41–43). This despite the intention of the Ministry of Public Health to have 70 percent of the population in some form of cooperative health care scheme by the year 2000 (Bloom, Tang, and Gu 1995: 426). In 1999, the number of rural residents not covered by any health security system was 87.32 percent, and while 82 percent of villages reduced or exempted villagers’ medical expenditures in 1978, this dropped to a low of 7.6 percent before rising again to 22.3 percent (W. Li 2002: 18).

Prior to the 1980s, the central government had used surplus revenues from state enterprises to fund social services throughout the country. After the economic reforms beginning in the late 1970s, SOEs were allowed to keep their profits, and these revenues declined, contributing to the above-mentioned drop in central government revenue. Before 1980 the cooperative health care schemes were funded by a combination of these subsidies (about half of all costs) from higher levels, commune welfare funds generated from yearly mandatory contributions by the population (0.5–2 percent of annual income), and small co-payments at the point of service (covering the remaining half of costs, on average). After 1980 the major financing burden fell to local government and individuals (Carrin, Ron, et al. 1996).

Government health spending has been inadequate and the budgetary allocations are heavily biased toward urban areas. Annual health care spending is only around 3.8 percent of GDP, as against WHO-recommended levels for developing countries of 5 percent (Bland 2000: 273). In fact, the state’s financial commitment to rural health services has been declining as a percentage of the total medical and health expenditure, from 21.5 percent in 1978 to 12.1 percent in 1985 to 10.5 percent in 1991 (Wong and Chiu 1998: 274). In 1998 per capita health expenditure for rural China was RMB 193.91 (up from 38.81 in 1990), while that for urban China was RMB 595.27 (up from 158.82). Rural spending for health care was two-thirds of the national average, and that for urban China was almost twice the national average (Ministry of Public Health 2000: 25). During roughly the same period, the actual cost of care increased dramatically. In 1998 the unit cost of an outpatient

13. The Gini ratio for urban-rural per capita income inequality was 0.452 in 1995, higher than for India and Pakistan and roughly the same as the Philippines. For the rural areas, the coefficient for 1995 (0.416) is at the high end for developing countries (Khan and Riskin 1998: 246, 238).
visit at a county hospital was roughly four times higher than the cost in 1993. At the township level, the cost in 1998 was more than twice what it was in 1993 (Ministry of Public Health 2000). Annual medical expenses per capita rose from 2–3 percent of total income around 1990 to 8–11 percent of income in poor areas in 1998 and has continued to rise (Liu, Zhen, and Wen 2000).

The effects of this are becoming readily apparent. Thus, in relatively wealthy Zhejiang province infant mortality per 1000 live births was around 20, whereas in poor Guizhou it was 60. This mirrors the findings in a study of health conditions in 30 poor counties that found an infant mortality rate of 52.3 per 1,000 live births compared to a national average for rural areas of 21.5. The rate of maternal death during childbirth was 216.8 per 100,000 as compared to a rural average of 114.9 (Meng and Hu 2000: 67). Both the infant mortality rate and maternal mortality rate are closely correlated with the use of prenatal care and attended safe delivery, two preventive services that have been adversely affected by the privatization of health care in rural China (see data below).

The focus on cost recovery has hampered poorer areas from providing good facilities and the capacity for richer areas to invest more in education, health, and infrastructure means that the inequalities will increase further over time. For example, while a strong logic for the establishment of the elected villagers’ committees might have been to enforce state policy, those in richer areas actually preside over quickly growing revenues. Even those in poor areas have the fees they collect and, when market price is above state price for grain, the differential in price to distribute. While villagers’ committees in poorer areas might be more concerned with how to raise the revenues to cover basic welfare requirements, richer villages preside over an extensive income from local enterprises and make decisions that concern village investment in road building, hospital development, and the like. According to John Dearlove (1995: 126–27), in the early 1990s in Fujian, committees had revenues for public expenditure that amounted to 44 percent of total per capita village income. In Guankou village, Henan, the committee presides over 13 companies ranging from building materials to processing agricultural products to a 1,000-head pig farm. This has enabled the committee to avoid illegal levies and fines and have one agricultural tax for all. In addition, funds cover all road-building costs, and it was able to build a two-story, 100-bed hospital. Even in the nearby and poorer Fangshan village RMB 350,000 had been invested for road repair and relieving farmers from forced unpaid labor.

The impact for poor rural households on health care access is particularly dramatic. With the loss of the pre-paid collective medical system after communes were disbanded in the early 1980s, some 90 percent of rural households have to pay directly for almost all health services used (World Bank 1997a: 47). Thus, not surprisingly, illness has a close

14. Liu, Hsiao, and Eggleston (1999: 1351) report similar findings in a study of rural infant mortality according to the 1990 census; the rate ranges from 29.3 to 72 per 1,000 live births, and with Zhejiang having a maternal death rate of 23.74 per 100,000 and Qinghai 215.37.

15. Interviews with village officials, June 1996.
correlation with poverty, and cost of provision is a major factor influencing utilization by the poor. One 1995 survey of 60 poor families cited major medical expenses as the most important cause of poverty (Kaufman 1998: 68). A 1999 survey of poor households found 23.28 percent of rural households citing illness as the main reason for being poor (for urban poor, the figure was 13.27 percent), second only to insufficient labor power (25.73 percent) (Meng and Hu 2000: 68).  

Cost affects hospital utilization, with one survey finding that 65.25 percent of rural dwellers cited economic hardship as the reason for not staying in hospital (63.13 percent in urban areas) (67). Bloom and his colleagues (1995: 430) note that 45 percent of people in moderately poor counties did not receive hospital care when needed (only 9 percent in rich counties), and 63 percent of these said the reason was cost. The 1998 National Health Survey found that in rural China 35 percent of those who needed to see a doctor were unable to because of financial difficulties, while 65 percent of those requiring hospitalization could not receive it (C. Li 2002: 25).

From 1981 health care facilities were instructed that they should cover recurrent costs, with the exception of staff, from user charges and by the mid-1980s preventive care facilities were also charging on a fee-for-service basis (Shanlian and Jiang 1998: 192). Coverage in the collective system has dropped dramatically, from almost 80 percent in 1979 to only 2 percent in 1987 before improving to 6.57 percent by 1997. Thus, in terms of national health spending, while the collective schemes accounted for 20 percent in 1978, by 1993 they only accounted for 2 percent (UNDP 1998: 37). As the World Bank con-

16. Other data notes that 21.6 percent of poor rural households attributed their poverty to illness, with the figure rising to 40 to 50 percent in provinces such as Henan, Shaanxi and Sichuan (C. Li 2002: 13).

17. See Ministry of Public Health 2000: 21 and Kaufman 1998: 68. However, it is debatable whether the commune-based medical system would have survived intact. According to Du Ying (2000: 36–37), by the mid-1970s the majority of commune- and brigade-run health cooperatives had already collapsed or existed in name only. He attributes the lack of sustainability to a limited capacity to raise funds, poor financial supervision, and misuse of the system. In particular, peasants were unwilling to entrust cadres to manage their funds, and many officials took advantage of the system to gain priority access for their family and friends. This resulted in a moral crisis and a breakdown in trust. Thus, he sees the main cause of the collapse as lying with the structural logic of the system rather than the economic reforms and implies that collapse would have happened in any case.

18. Before the communes were dismantled, these cooperative medical schemes relied on yearly contributions from participants, ranging from 0.5 percent to 2 percent of annual income, with subsidies from collective welfare funds covering about 50 percent of medical costs. When revived, one of the first experiments was in Sichuan in 1989–90 involving 26 villages in two counties. Premiums were 1.5 percent of average income, and those insured could freely visit village and township facilities, but visits to the county level were only in emergency or on referral from the township. Participation rates were high: 90 percent with a re-enrollment of 95 percent after the first year. Administrative costs were kept low, at only 8 percent of total reimbursements. The need for some kind of catastrophic insurance was clearly shown, as 11.5 percent of the covered population used 70 percent of total health expenditures. In poor areas for such a scheme to work, it is necessary to diversify contributions away from the household and to use the village social welfare funds, if they exist, and government allocations for poverty relief. One study of 30 poor counties in the mid-1990s found that household contributions to funding cooperative health funds make up about 50 percent, with about 20 percent from the village funds and 16 percent from the government. See World Bank 1997 a: 49–50 and Saich 2001: 262.
cluded in its 1996 report, “The downturn in China’s health performance relative to its income level coincided with agricultural reform that reduced the ability of the village to tax the peasants” (127).

The basic problem of health care delivery derives from the change of the ownership structure of village networks and the nature of the incentive system that has arisen from these changes (UNDP 1998: 36, 38). With medical facilities there has been a growth in private medical provision and a shift away from preventive medical care to fee-for-service, with local governments in poor areas less able to provide adequate support. This increases the financial burden on the rural household, which, in the absence of sufficient state financing, must provide the necessary social support. According to Ministry of Health data for 1998, the average cost of hospitalization was RMB 1532, while 33.5 percent of rural households had a net income below RMB 1,500 per capita (C. Li 2002: 24). The rural health care apparatus has a three-tier structure. At the village level, there are some 1.44 million health workers supposedly trained in the basics of care, but often really only self-trained traditional doctors or former barefoot doctors with only minimal supplemental training by township or county health institutions. For example, in the Yunnan counties covered by the survey, 68 percent of rural doctors providing reproductive health services had less than six months of one-time training (Fang 2001). Supervision by higher levels is irregular or often nonexistent. Essentially, rural doctors are supposed to provide a referral system to the higher levels, but rarely do anymore since most rural citizens cannot afford care at higher levels. Importantly, they charge a fee for their services, unless it is a specifically subsidized service, and are allowed to prescribe medicines for which they can charge. At the township level, there are some 49,694 hospitals that carry out basic medical tasks such as simple surgery and treatment of infections. At the county level, there are 3,687 hospitals that carry out major operations and care. Above this, the province funds the referral and specialist hospitals, but most of the recurrent funds are used to support staff salaries.

As noted, in the villages most of the health workers no longer work in a cooperative but for themselves, and the number of private clinics has risen rapidly. This is also true for the urban areas, and the quality is very variable. The number of health professionals in private practice rose from 18,000 in 1981 to 172,185 in 1995 (Hu and Jiang 1998: 194). Of 796,234 health clinics, by 1992 about 52 percent had been sold to individuals or contracted to private practitioners on an individual or group basis. The number of village doctors

19. The provision of medicines is a major source of income at all levels. Sellers of medicine receive a 15 percent markup for Western drugs and a 20 percent markup for Chinese drugs. However, given the higher price of Western drugs there is a tendency to prescribe them. This has caused an overuse of drugs on prescription and has been a major factor contributing to the rapid increase of health costs during the 1990s (Bloom, Tang, and Gu 1995: 433). Drug costs are estimated to constitute 55 percent of total hospital costs, much higher than in the West (Bland 2000: 272). Importantly, the fact that doctors provide drugs to generate income has contributed to the problem of antibiotic resistance in rural China.

dropped from 1.8 to 1.3 million between 1978 and 1993 (Wong and Chiu 1998: 272–73). Indeed, by 1999 the number of health clinics had dropped to 716,677 (Ministry of Public Health 2000: 22). The buildings they use are often unsanitary, staff can be poorly trained, and there is little incentive to upgrade facilities.

Correspondingly, direct government support has been dropping. One intent of the financial decentralization was to allow townships to increase health care funding. This may have been the case, as noted above, in wealthier areas, but on average it has not been the case, especially in the poorer townships. In Donglan county, Guangxi autonomous region, the government covered 46 percent of the income of the county’s health centers in 1981, but this declined to only 32 percent in 1994 (Tang and Bloom 2000: 194). A 1992 study of three poor counties showed that government funds supported 18 percent of county hospital budgets and 26 percent of budgets for township health centers, down from 34 and 38 percent eleven years earlier. This means that increasingly such facilities are raising funds from fees from patients and from drug prescriptions. These made up 63 percent of the county hospital budgets and 61 percent of the health center budgets in 1981, rising to 78 and 74 percent, respectively, in 1992 (Bloom, Tang, and Gu 1995: 426–27). Drug fees accounted for around 90 percent of outpatient fees at the village level in one study conducted by Shanghai Medical University and published in the mid-1990s (Gu and Yu 1995).

Before reviewing the survey data, two further institutional disincentives for providing good health care need to be mentioned. Where attention is paid to health, both favor family planning activities over broader-based health care and reproductive health. Beyond the need to derive revenue, the other major pressure on local officials is the political contract system and the performance contracts (gangwei mubiao zerenshu) that local governments and officials have to sign (Saich 2002: 92–96). The precise nature of the contracts varies across time and place, but they do set performance expectations that provide the basis for official evaluation. Each county compiles performance contracts for the mayors and party secretaries of the townships under its jurisdiction to sign. Then contracts are signed between the towns and townships and the functional departments under their jurisdiction and then finally between the heads of these functional departments and their work personnel. Work personnel are often required to make a financial deposit when they sign their contract, and this will be returned if they accomplish their tasks. This weakens the capacity for comprehensive development by township governments and disfavors social devel-

21. This drop refers to certified rural doctors. Those that did not pass the county certification process end up as health aides. The figure probably does not include midwives.

22. A 1998 survey revealed that of medical and technical staff working at the county level only 10.6 percent had completed a basic college training with 57 percent having completed technical middle school and some 15 percent having had no specialized training. For the township level, the percentages are 1.4, 53.2, and 36.4, respectively. At the village level, the average training period received is 7.3 months (only three months training to prescribe drugs), with the average rising to 7.8 months in wealthier areas and dropping to 5.7 months in poor areas (Ministry of Public Health 2000: 22).

opment. The party and administrative organizations at the county level divide up the tasks and set the targets for the organization and individuals at the lower levels and require them to accomplish these goals within a prescribed period of time. There are usually one-, three-, and five-year contracts. The higher level makes its decision on political and economic rewards and penalties for organizations and individuals at the lower levels according to how well they have accomplished these tasks.24

The targets are divided into a mixture of priority, hard, and soft targets. The priority targets are set nationwide and usually are more political or policy oriented in nature. They would include, for example, the maintenance of social order, most recently including the eradication of the influence of Falun gong practitioners, and of course meeting the targets for family-planning quotas. The hard targets concern primarily economic ones set by the county for the township and would include meeting tax revenue goals and certain levels of growth. The soft targets tend to relate to questions of social development such as health and education provision and environmental protection. Clearly meeting the hard and priority targets is most important, since failure to meet them will mean that other work for the entire period will be discounted and there will be no promotions, titles, or economic rewards. It is especially important to meet the targets for family planning, and failure to do so will annul good performance in other areas of work (this is known as the “one veto system”). This system produces a number of perverse outcomes and explains why officials will often pursue unpopular policies with such zeal. One survey of 89 villages in Fuquan county (Guizhou province) found that village leaders spent 80 percent of their energy and 70 percent of their time on “the most disliked” administrative affairs, such as enforcing birth control (Li 1994).

The tendency to concentrate on family planning is exacerbated by the division of family-planning services from maternal and child health care in the early 1980s. Prior to this time all reproductive health services, including family planning, were the responsibility of the Ministry of Public Health and its network of health bureaus and institutions at the provincial, county, township, and village levels. Subsequently a new system was set up under the Family Planning Commission, with its own network of offices and personnel at the various administrative levels (Kaufman et al. 1992). Since family planning is a state-subsidized national program, resources for service provision are guaranteed from higher levels. The withdrawal of most family-planning funds from the health system has removed a guaranteed funding stream that helped subsidize related services such as gynecological care and follow-up for contraceptive side-effects and problems. The separation of family planning from maternal and child health and other women’s health services has to a great extent fragmented the care that rural women receive. This has resulted in an increase of scarce resources going to family planning and a decrease in funding for maternal and child

24. It is rare to use financial penalties for officials at the township level, since their salaries are considered too low. However, a failure to meet priority targets will lead to demerits recorded in one’s personnel file, possible transfer, and certainly to future financial gains forgone.
health provision. By 1990 budgetary expenditure on family planning increased to RMB 1,345 million, over five times the amount expended on maternal and child health.25

**The Results of the Survey**

The trends outlined above are, not surprisingly, reflected in the results of the survey that was conducted in 1994–95.26 The three rural townships involved in the survey are situated in Yunnan province in southwestern China. The province as a whole is relatively poor with rural per capita net income in 1998 amounting to RMB 1,387.25, compared with a national average pf 2,161.98. Only Tibet and Guizhou have a lower average (National Bureau of Statistics 1999: 339). The province borders Burma, Laos, and Vietnam, and the mountainous terrain complicates the extension of health services to the rural poor. By the end of 1991, already 71 percent of counties in Yunnan had shifted to a fee-for-service financing mechanism, and 28 percent maintained a combined system under which some services were provided free while a fee was required for others.

The study was designed to look at how the macro–policy changes outlined above had impacted the delivery of reproductive health services in rural China.27 Six major objectives were set in the survey:

- to identify reproductive health morbidity and the use of services for reproductive health problems;
- to assess the impact of fees on the use of reproductive health services;
- to identify other constraints to service utilization;
- to assess the impact of fees on providers’ time allocation and motivation to provide preventive versus curative services;
- to assess the impact of the loss of revenue to maternal and child health that accompanied the separation of family planning and health services; and

---


26. These data are drawn from a larger survey conducted in 1994–95 in five rural Yunnan counties entitled “The Financing, Provision, and Utilization of Reproductive Health Services in Rural China,” funded by the Ford Foundation and conducted by researchers at Shanghai Medical University (Gu Xingyuan, Su Baogang), Kunming Medical College (Zhang Kaining, Fang Jing, Liu Wei, Li Xiaomei, Qi Bingxian, Wang Ailing, Tang Songyuan), Abt Associates, Inc. (Joan Kaufman, Anne Faulkner), and the Institute for Development Studies at the University of Sussex (Gerald Bloom).

27. Reproductive health services comprise a wider range of preventive and curative activities than maternal and child health. However, given the lack of equipment and trained personnel, it would be unrealistic to expect that the whole range of services would be available in a poor rural setting. As a result, a minimum set of low-technology services aimed at screening for common reproductive problems of rural Chinese women are included in the definition. This consisted of the provision of contraceptive services, follow-up for contraceptive side-effects, diagnosis and treatment of common reproductive tract infections (candida, trichomonas, bacterial vaginosis), and gynecological problems (prolapsed uterus and urinary fistulas), prenatal and postnatal care and delivery, and health education related to family planning, pregnancy, and gynecological health.
to assess the effectiveness of certain financial mechanisms that have been instituted in several parts of China, including the maternal and child health (MCH) prepay schemes to see if they ensure coverage of preventive MCH services.

The survey used a variety of methods, including household surveys of reproductive-age women; interviews with health and family-planning service providers; collection of routine financial data and service statistics; and qualitative interviews to investigate the resource flows for reproductive health services, service needs, and availability and the constraints to optimal utilization of the services that exist. Information was collected on user needs and utilization; pregnancy and delivery; current contraceptive use; gynecological problems and checkups; perceived needs for services; expenditures for reproductive health and other services; attitudes toward fee-for-service financing mechanisms; and willingness to pay for care. Qualitative interviews were also conducted with women and local service providers, including in-depth interviews and participatory rural appraisal techniques to gather information on reproductive health beliefs and behaviors and perceived barriers to service utilization (Kaufman, Zhang, and Fang 1997: 63).

The results presented here focus on three townships, two of which are in a poor county and one in a relatively better off county, albeit still extremely poor. All five enjoy varied access to the capital city of Kunming, although it entails several hours of travel in all cases. The poorest is Ejia township (Shuangbei county) with a per capita income of around RMB 325 per year. Dazhuang township, also in Shuangbei, had a per capita income of RMB 340; the richest township of the three was Pubei (Yimen county), with an annual per capita income of around RMB 905. Another factor contributing to their poverty is the distance from the county town, where the county hospital and reasonable medical care are to be found. Ejia is 176 kilometers from the nearest town, Dazhuang 31 kilometers, and Pubei only 8 kilometers.

The survey confirmed the expected distortion in the provision of services with family planning privileged over maternal and child health care (see Table 10.1). Family planning costs per married woman of reproductive age in Dazhuang increased from RMB 13.74 to 32.28 and in Ejia from RMB 10.00 to 22.22. By contrast, the MCH costs declined in Dazhuang from RMB 1.74 to 1.05 and, in Ejia, from RMB 1.59 to 0.66. When the data are broken down by county and use, the huge decrease in the spending on MCH compared with family planning is even more obvious. The budget allocation data show that when held to 1985 levels, there has been a decrease in the amount of funds allocated for MCH from the government’s health budget. This decrease was 6.6 percent in Yimen (Pubei township) and 1.2 percent in Shuangbei (Ejia and Dazhuang) from 1990 to 1995 (see Table 10.2). Family-planning funds were increased by 1.6 percent in Yimen and 8.9 percent in Shuangbei over the same period. While the financial resources are greater for the family-planning system, the greater burden of care falls on MCH workers. In addition, the client
Table 10.1
Family Planning (FP) and MCH Costs per Married Woman of Reproductive Age (MWRA) in Dazhuang and Ejia Townships, 1985–95
(cost in RMB, deflated to 1985 levels)

<table>
<thead>
<tr>
<th>Year</th>
<th>Dazhuang FP costs</th>
<th>Dazhuang MCH costs</th>
<th>Ejia FP costs</th>
<th>Ejia MCH costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>13.74</td>
<td>1.74</td>
<td>10.00</td>
<td>1.59</td>
</tr>
<tr>
<td>1987</td>
<td>14.19</td>
<td>1.77</td>
<td>22.30</td>
<td>1.27</td>
</tr>
<tr>
<td>1989</td>
<td>15.09</td>
<td>1.11</td>
<td>12.03</td>
<td>0.84</td>
</tr>
<tr>
<td>1991</td>
<td>26.58</td>
<td>1.48</td>
<td>20.88</td>
<td>1.07</td>
</tr>
<tr>
<td>1993</td>
<td>31.25</td>
<td>1.02</td>
<td>22.25</td>
<td>0.82</td>
</tr>
<tr>
<td>1995</td>
<td>32.28</td>
<td>1.05</td>
<td>22.22</td>
<td>0.66</td>
</tr>
</tbody>
</table>

Table 10.2
Costs of Reproductive Health Services (RHS) in Surveyed Counties (RMB 1000)

<table>
<thead>
<tr>
<th>Government RHS budget</th>
<th>Yimen</th>
<th>Shuangbei</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>841</td>
<td>650</td>
</tr>
<tr>
<td>1995</td>
<td>1288</td>
<td>1568</td>
</tr>
<tr>
<td>Annual increase, %</td>
<td>8.9</td>
<td>19.3</td>
</tr>
<tr>
<td>After deflation, %</td>
<td>-2.0</td>
<td>7.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Government RHS budget for MCH</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>406</td>
<td>118</td>
</tr>
<tr>
<td>1995</td>
<td>490</td>
<td>188</td>
</tr>
<tr>
<td>Annual increase, %</td>
<td>3.9</td>
<td>9.8</td>
</tr>
<tr>
<td>After deflation, %</td>
<td>-6.6</td>
<td>-1.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Government RHS budget for family planning</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>435</td>
<td>532</td>
</tr>
<tr>
<td>1995</td>
<td>798</td>
<td>1380</td>
</tr>
<tr>
<td>Annual increase, %</td>
<td>12.9</td>
<td>21</td>
</tr>
<tr>
<td>After deflation, %</td>
<td>1.6</td>
<td>8.9</td>
</tr>
</tbody>
</table>

The burden of cost for MCH is substantial when compared with income. The government MCH resources are too limited at the township and village level, where the need is immense, and too great at the county level, where there is less need. Subsidies are being used to finance county-level MCH salaries, which are disproportionately high. The subsidies for township- and village-level MCH workers are very low, creating incentives for providers to concentrate on curative care rather than on preventive care and education. In the Yunnan survey at the county MCH hospital, the government budget accounted for between 37 and 45 percent of total revenue, with more than 70 percent of it going to salaries for county-level MCH center doctors who serve mainly county-center residents. In Shuangbai county the annual county budget for MCH remained the same from 1983 to 1985: RMB 8,000. Of this only RMB 3,000 was used for the MCH system salary subsidies, an inadequate amount to fund MCH preventive work at the community level. There are also distortions in the family-
Table 10.3
Percentage of Family Planning (FP) and MCH Costs Generated from Client Fees in Dazhuang and Ejia Townships, 1985–95
(in RMB, deflated by overall consumer price index)

<table>
<thead>
<tr>
<th>Year</th>
<th>Dazhuang FP</th>
<th>Dazhuang MCH</th>
<th>Ejia FP</th>
<th>Ejia MCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>12.56</td>
<td>37.84</td>
<td>9.61</td>
<td>31.88</td>
</tr>
<tr>
<td>1987</td>
<td>13.77</td>
<td>43.33</td>
<td>28.27</td>
<td>32.52</td>
</tr>
<tr>
<td>1989</td>
<td>20.86</td>
<td>44.19</td>
<td>16.98</td>
<td>41.09</td>
</tr>
<tr>
<td>1991</td>
<td>25.76</td>
<td>53.81</td>
<td>19.71</td>
<td>51.76</td>
</tr>
<tr>
<td>1993</td>
<td>26.22</td>
<td>59.18</td>
<td>24.10</td>
<td>50.47</td>
</tr>
<tr>
<td>1995</td>
<td>25.15</td>
<td>54.57</td>
<td>21.96</td>
<td>51.31</td>
</tr>
</tbody>
</table>

planning system. The contraceptive services are oriented toward “acceptors,” with very little counseling and follow-up aimed at improving client satisfaction. Therefore, while contraceptive services are provided for free, follow-up has to be paid for by the client.

This structure and the associated incentives are having a significant effect on the percentage of costs that must be generated from client fees. We have seen above how the system has generated incentives to move to fee-for-service. Government contribution to health facilities can be as low as 10 to 15 percent, a marked contrast to other low- to middle-income countries, where government funds make up as much as 80 percent of support (Bloom and Tang 1999: 954). In a study of three poor counties, Bloom and Gu (1997: 352) found that in 1992 client fees accounted for over 75 percent of revenue of county hospitals and township health centers up from 50 percent in 1981.

The survey did not discover such high percentages, but it is clear that the percentages have risen rapidly (see Table 10.3). They are also, not surprisingly, much higher for MCH than for family planning. In Dazhuang the percentage of costs derived from client fees for family planning rose from 12.5 percent to 25.15 percent, while in Ejia it rose from 9.61 percent to 21.96 percent. The corresponding figures for MCH are a rise from 37.84 to 54.57 percent in Dazhuang and from 31.88 to 51.31 percent in Ejia. Thus, while around one-quarter of costs in family planning is derived from client fees, over one-half is now derived for MCH activities.

These financial changes are impacting the use of the services that are available. The survey was also designed to answer this by interviewing women about their reproductive morbidities in order to learn whether the services available to them were appropriate to their needs. A list was developed of specific morbidity-related symptoms associated with common problems of five reproductive periods (pregnancy, delivery, postpartum period, post–IUD insertion and post-abortion), and women were asked if they had experienced any of these symptoms in the recent past. These included problems such as excess bleeding, swelling, or headache during pregnancy (signs of hypertension of pregnancy), vulval itch or abdominal discharge (signs of reproductive tract infection), backache within the last six

28. On this more general issue, see Creese and Kutzin 1997.
months, ruptured uterus, and vaginal tearing or prolonged labor during delivery. Women were also asked if they had observed any gynecological symptoms in the last six months. This is included as a sixth category for which data were collected. These common symptoms do not always represent a genuine medical problem, but they do require assessment by a doctor to rule out potential serious medical conditions.

Figures 10.1 and 10.2 show a striking gap between women’s self-reporting of a symptom and the likelihood that they would seek help. In Ejia, the poorest township, 55–60 percent of women reported at least one symptom during pregnancy, delivery, or the postpartum period, 80 percent reported at least one gynecological symptom suggestive of reproductive tract infections (RTIs) during the past six months, and 90–95 percent of women reported a contraceptive problem. As many as 45 percent of women in Ejia township experienced vaginal tearing during delivery, and RTIs caused the greatest morbidity. By contrast the use of reproductive health services was extremely low. In particular, there were low rates of attended delivery (only 22 percent had a “safe delivery”), few repairs of vaginal tears (9 percent), and a poor level of seeking service for problems related to pregnancy or contraception and for symptoms of RTIs. Only 26 percent of women sought care for self-reported symptoms during pregnancy, delivery, or the postpartum period, 17.5 percent for gynecological symptoms, and only 25–31 percent for problems following IUD insertion or abortion. Interestingly, Pubei, the richest township, had no better care seeking for problems after IUD insertion or abortion (a family-planning follow-up service that must be paid for), even though the rates are considerably higher in all other categories, reaching over 50 percent for help during the period of pregnancy and during delivery.

The data show that in the poorest township, Ejia, only 5 percent of women had an in-hospital delivery (see Table 10.4). The rate for delivery in hospital for Pubei was 42.55 percent, and 61.64 percent had a modern delivery. This is not only related to proximity to a facility but also to cost and perception about the poor quality of service provision. In Ejia, a delivery in a township hospital costs approximately RMB 200, an amount that is beyond the financial capability of the vast majority of families in poor areas. In addition, the inadequate financing of the system means that local practitioners are poorly trained, and women therefore correctly perceive the quality of service to be poor.

Certainly, the lack of financing means that health education has suffered in these townships, as there is no subsidy available to health workers to cover their time. This causes them to concentrate on revenue-generating aspects of their job. This is reflected in the reasons given by women for not seeking any prenatal care (see Table 10.5). In Ejia, almost 75 percent of the women responded that they did not seek care either because they did not think it necessary or because they did not think that it was serious. The percentages for Dazhuang (77.5 percent) and Pubei (72.7 percent) are similar.

The newly established MCH insurance schemes did little to improve the utilization of prenatal care and attended delivery. A review of this system in Yimen county revealed
Women's Self-Reported Symptoms by Reproductive Period
(Reported at least one symptom)

Women Seeking Care For Symptoms, By Reproductive Period
Table 10.4
Service Utilization During Delivery, 1988–1995

<table>
<thead>
<tr>
<th>Service</th>
<th>Ejia Number</th>
<th>Ejia Percentage</th>
<th>Dazhuang Number</th>
<th>Dazhuang Percentage</th>
<th>Pubei Number</th>
<th>Pubei Percentage</th>
<th>x²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery in hospital</td>
<td>28</td>
<td>5.14</td>
<td>56</td>
<td>13.24</td>
<td>234</td>
<td>42.55</td>
<td>252.36 &lt;0.01</td>
<td></td>
</tr>
<tr>
<td>Modern delivery*</td>
<td>92</td>
<td>16.88</td>
<td>100</td>
<td>23.64</td>
<td>339</td>
<td>61.64</td>
<td>381.15 &lt;0.01</td>
<td></td>
</tr>
</tbody>
</table>

*Modern delivery: woman is lying down for delivery and the hands of birth attendant, tools, vulva of woman, and umbilical cord are sterilized.

Table 10.5
Reasons Women Gave for Not Having Any Prenatal Care

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Ejia Number</th>
<th>Ejia Percentage</th>
<th>Dazhuang Number</th>
<th>Dazhuang Percentage</th>
<th>Pubei Number</th>
<th>Pubei Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Didn’t think it necessary</td>
<td>148</td>
<td>48.84</td>
<td>49</td>
<td>67.61</td>
<td>29</td>
<td>63.64</td>
</tr>
<tr>
<td>Didn’t know should have</td>
<td>81</td>
<td>26.07</td>
<td>7</td>
<td>9.86</td>
<td>4</td>
<td>9.09</td>
</tr>
<tr>
<td>Far away</td>
<td>16</td>
<td>5.28</td>
<td>6</td>
<td>8.45</td>
<td>4</td>
<td>9.09</td>
</tr>
<tr>
<td>Too busy</td>
<td>17</td>
<td>5.61</td>
<td>8</td>
<td>11.27</td>
<td>7</td>
<td>15.91</td>
</tr>
<tr>
<td>Too expensive</td>
<td>5</td>
<td>1.98</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Shy</td>
<td>21</td>
<td>6.93</td>
<td>2</td>
<td>1.41</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Others</td>
<td>16</td>
<td>5.28</td>
<td>2</td>
<td>1.41</td>
<td>1</td>
<td>2.27</td>
</tr>
</tbody>
</table>

that many women who had contributed to the scheme did not realize that they were entitled to prenatal checkups. In addition, in some cases the scheme requires that women utilize the services at the county level, which often requires substantial amounts of travel for rural women. Under these circumstances, the funding has become a way to support salaries at the county MCH hospital, which has lost its guaranteed funding under the financial reforms. However, the salary support has come at the cost of locating the services conveniently for the rural poor, even for those women who are willing to prepay for MCH insurance. Where the prepay scheme is located at the township level, township MCH providers, whose salaries are paid by the MCH prepay schemes, more actively provide prenatal and postnatal care in communities nearest to the township center in order to meet provincial MCH targets, rather than providing badly needed outreach to more remote rural villages. Last but not least, the Yimen scheme does not provide coverage for delivery. Reluctant to pay, families frequently chose to deliver at home, especially for second births that are thought to be easier. It is noticeable that the rate for Pubei, the richest township and closest to a county town, has a much higher rate of delivery at hospital than the poorer townships.

CONCLUDING COMMENTS

The problems that China has encountered in a bank-dominated financial system are common throughout much of East Asia. As in a number of East Asian neighbors, banks have been a primary instrument to realize the state’s development priorities. In terms of GDP,
we see relatively low levels of social welfare provision. As Australian researcher Sally Sargeson has pointed out, many leaders in East and Southeast Asia attributed the low level of provision of public goods, compared to Western countries, as a significant factor in their rapid economic growth (2002: 1). Markets and public goods have been used to serve nationalist and developmental goals, with economic investment needs prioritized over social development priorities. The same trend is evident in China.

In the current round of reforms, despite increased awareness of the problems of inequality and the need to develop the poorer parts of China, it is likely that investment in social development will suffer because of the overriding need to salvage the financial sector. China’s leaders have recognized the need to deal with non-performing loans, and the failure of the asset management corporations to deal with the problem has added to the sense of urgency. In particular there have been attempts to recentralize the banking sector and to stem the flow of politically directed loans with the appointment of local bank officials removed from the fiefdom of local powerholders. This makes it more difficult, if not impossible, for local officials to use bank loans to meet their development priorities. This will increase the financial shortfall for many local administrations, thus adding pressure to increase extraction from the local population. With the central government trying to cap the tax on farmers at 5 percent, something will have to give. Unless the central government provides substantial, directed funds, it is likely to be social welfare provision. However, the central government is likely to direct any surplus funds to cleaning up the bad loans in the banking sector before the impact of the WTO regulations increases foreign competition in the sector.

The changes in the financial system and their impact on rural health care have had a detrimental effect on the provision and utilization of reproductive health services for the poor. The major reproductive health problems center around childbirth, use of contraception, and chronic reproductive infections. The need by doctors to focus on curative care to derive income and cover salary, the lack of funds and provider incentives for health education activities, and the shortage of female doctors contribute to very poor utilization by women for the services that do exist. Moreover, service availability does not adequately match need. Child delivery is not covered by prepayment schemes, and family-planning services are too oriented toward the promotion of contraceptive use and do not pay enough attention to the follow-up of problems from use in many poor rural areas. Last but not least, the screening and treatment for RTIs is virtually nonexistent. This takes on greater import with the spread of HIV/AIDs. Chinese official figures significantly underestimate the spread not only because of local official reluctance to admit the true number of cases but also because of the lack of HIV-testing capacity and incentive for local officials. With infection spreading beyond IV drug users and sex workers to the public at large, including through contaminated blood supplies, the cost of care will overwhelm the financial capac-

29. See the chapter by Steinfeld in this volume.
ity of local governments, leaving the central state with a major dilemma about what kind of support to provide.\textsuperscript{30}

The central government has now recognized that its health system is in significant distress, especially in the rural areas. The change in tone at the December 1996 National Conference on Health was remarkable, as the leadership shifted from presenting its system as a shining example to other developing countries to one approaching collapse.\textsuperscript{31} This conference led to the January 1997 legislation issued by the State Council and the Chinese Communist Party Central Committee, “Decisions on Health Reform and Development: Focus on Rural Health and Prevention.” However, its proposals alone will not remedy the situation. The conference called for spending in the national budget to be raised from 2 to 5 percent, something that has not been achieved. It is unlikely to rise, given both the fact that the central leadership does not consider health to be a productive force and that it does not seem aware of the relationship between good health and economic development.\textsuperscript{32} In addition, the Ministry of Public Health is a weak player institutionally and does not have the power to keep health care at the top of the political agenda. It may only be once the full impact of the economic cost of an AIDS pandemic becomes clear that the leadership will be forced to shift more resources to this sector. Most recently, the State Family Planning Commission has begun to address the widespread problem of untreated RTIs as part of routine family-planning services and has included this as part of its plans for delivering comprehensive reproductive health services during the next five-year plan.\textsuperscript{33}

In a very traditional approach, the leadership has sought to revive preventive health care and public hygiene awareness through education. The proportion of the government’s budget for spending on preventive care dropped from 23 percent in 1978 to 18 percent in 1994 (Hu and Jiang 1998: 192).\textsuperscript{34} However, as we have seen, without a shift in incentives this is unlikely to be effective. Nor will the declared pay boost for village doctors help. This was intended to bring them into line with government officials and to stop the reliance on kickbacks and other nonsanctioned revenues. The problem is that in poor areas the local government does not have the funds available to cover such a pay increase, and it also has to contend with Premier Zhu Rongji’s instruction to increase all local government officials’ salaries. At the same time, local governments are not meant to levy more than 5 percent of the annual income on the farmers under their jurisdiction. This is honored more in


\textsuperscript{31} Discussions with participants. See also Cailliez 1998: 42–43. For the Joint Central Committee and State Council Decision, see \textit{Health Daily}, Feb. 18, 1997.

\textsuperscript{32} In this respect, it is interesting to note that in the center’s ambitious plans to develop the poorer western provinces, little attention is paid to investing in health.

\textsuperscript{33} National Conference on Comprehensive Reproductive Health Services, State Family Planning Commission and WHO, Beijing, June 2001.

\textsuperscript{34} As a result, we see the morbidity of viral hepatitis increasing 4.8 percent in 1999 from 1998, while the total number of cases of TB in 1999 was 4.7 times greater than in 1982. Most of these cases are in the rural areas, and there is a close correlation to the prevalence of AIDS (C. Li 2002: 9).
the breach than the observance, but it does constrain the financial base of the local authorities. Given the reality, village doctors in poor communities will remain on their own to raise income. The government has also committed itself to supporting the revival of the cooperative medical system, but, as noted above, this has been slow in expanding and cannot be counted on any time soon.

There a number of things that could be done to improve the lot of the poor regions, but without a strong constituency of support at the political center, it will be very difficult. The tension between resource spending for urban over rural health has strong historical roots, and one of the underlying criticisms of Mao Zedong when he launched the Cultural Revolution was of the urban bias of the health system. The most beneficial change would be to abandon the urban bias of development policy that has been a hallmark of Chinese Communist Party (CCP) rule since 1949. This will not happen given the strong vested interests of the CCP and the marginality of rural constituents in the policy process. However, if the CCP could clear up the SOE sector, a prime destroyer of state assets, this could have enormous beneficial effects for rural China if part of the current subsidies were diverted to productive investment in the countryside.

More possible measures would be to integrate the family-planning network with the health system at the local level. This would have the effect of restoring funding to the impoverished MCH system. This revived funding stream could help subsidize related service such as gynecological care and follow-up for contraceptive side-effects and problems. This topic has been the subject of much discussion and debate in recent years, was hotly debated at the November 2000 conference on Health Reform and Development, and has been identified as one for further immediate policy analysis and discussion through the newly launched China Health Development Forum.35 China has been moving in the opposite direction to most of the world, which has sought to better integrate health services. However, China’s engagement in international health discussions and its acceptance of the international reproductive health agenda have caused some to realize that this fragmentation may not be beneficial.

Finally, rural reproductive health care provision appears to be a clear case where the “public goods” argument applies. The central government needs to tighten the regulatory framework to ensure that guidelines on health are followed and that in poor areas better provision needs to be provided at central government expense. The central government would be better served to be the provider and supporter of public health, ensuring more equitable access, rather than focusing its efforts on subsidizing the salaries of those in the health system.

REFERENCES


Meng Qingguo and Hu An’gang. 2000. “Xiaochu jiankang pinkun ying chengwei nongcun weisheng gaige yu fazhan de youxian zhanlue” (Eliminating health poverty ought to be a top strategic priority in rural health reform and development). Paper presented at the conference Zhongguo nongcun weisheng gaige yu fazhan guoji yantaohui (International conference on China’s rural health reform and development), Beijing, November.


Wong, Christine. 2000. Presentation at the workshop on “Mapping the Local State in Reform-Era China.” Los Angeles, June 8–9.


Since economic reforms began, the Chinese state has shifted the locus of control over the allocation of resources from the fiscal to the financial ledger (Sehrt 1999). Under the planning system, funds were mobilized by setting prices to concentrate profits in state-owned enterprises (SOEs) (Naughton 1995). During the reform period, market competition eroded the profitability of SOEs, and the government struggled to establish an effective taxation system to generate revenue (Wong, Heady, and Woo 1995). However, by asserting its control over the banking system, the state was able to continue directing national resources to support its most important political constituencies, in particular urban workers in state-owned enterprises (Brandt and Zhu 2000). This strategy was facilitated by the rapid growth of individual private savings in state-owned banks, which have come to dominate China’s national savings (Kraay 2000). Thus, during the reform period, the financial system increasingly became the key mechanism by which the government realized its distributional goals.

Government control over financial resource allocation can either increase or decrease inequities in credit access associated with differences in individual wealth or regional level of development. For example, as in many other developing countries, state policies in China, including lending by state-owned banks, have been biased against rural areas in favor of urban areas (Putterman 1992; Nyberg and Rozelle 1999). However,

An earlier draft of this paper was prepared for the conference on “Financial Sector Reform in China,” John F. Kennedy School of Government, Harvard University, September 11–13, 2001.

1. According to official data, most of the increase in deposits was attributable to urban residents, although the urban-rural distinction is not always clear because rural residents may deposit funds in any bank. In 1998, the percentage of individual deposits from rural areas (defined as deposits in rural credit cooperatives) was 20 percent, compared to 26 percent in 1990. In 1998, the percentage of urban deposits was 8.1 times greater than in 1990; the percentage of rural deposits was 5.7 times greater. On a per capita basis, the deposits of urban residents in 1998 were nearly 10 times that of rural residents. Individual deposits accounted for 55 percent of all deposits in all financial institutions in 1999, with the second-largest category being enterprise deposits (34 percent).
across provinces, there has been an inverse relationship between the degree of financial intermediation and the level of economic development, suggesting that richer, faster-growing provinces have been implicitly taxed (Park and Sehrt 2001). The lack of a free interbank market may have prevented the outflow of funds from poorer regions, especially from rural credit cooperatives (RCCs, or xinyongshe), which account for a large share of rural savings but do not have a hierarchical structure to facilitate inter-regional transfers. In poor areas, political goals of supporting local development also may have led bank officials to lend more than they might in a more commercialized system.

By the mid-1990s, policy-driven lending proved to be unsustainable. Slower overall growth and skyrocketing SOE losses in the 1990s, and the resulting deterioration in the financial performance of banks, led to aggressive new reform efforts to restructure enterprises and to reduce the stock of non-performing loans in state banks (Lardy 1998). At a deeper level, the reforms recognized the high cost of pursuing distributional objectives at the expense of efficiency objectives. An excessive amount of non-performing loans becomes unsustainable and eventually crowds out new lending, suggesting the need for balance. Banking reforms included efforts to promote bank independence and commercialization by separating banks into policy and commercial banks, and by increasing the economic and political incentives to make loans based on profitability criteria rather than to support failing enterprises (Park and Sehrt 2001).

These changes altered the way in which banks allocate scarce financial resources. One concern is that the flow of resources out of poor areas and into rich areas may increase as money chases higher returns and banks abandon lending in places where transaction costs are high and good projects are hard to find. Commercial financial institutions worldwide often exclude the poor because they lack collateral, engage in riskier projects, and demand small loans that are expensive to administer (Besley 1994). In fact, there may be sound efficiency reasons for encouraging financial flows out of poor areas if the marginal returns to capital are higher elsewhere.

On the other hand, recent research has questioned the assumption that the poor are not creditworthy or lack demand for loans. China’s own flagship poverty alleviation program, which provides subsidized loans to poor regions, is premised on the conviction that such loans can be used productively. If the unprofitability of lending in poor areas in a more commercial policy environment is due to institutional inflexibility (e.g., strictly enforced interest ceilings) or weak governance structures, rather than the lack of good projects, there may be both efficiency and distributional grounds for concern if financial reform leads to more funds flowing out of poor areas. Thus, distinguishing among the reasons for poor loan performance becomes a fundamental question in assessing the consequences of reform. Even if project returns were lower in poor areas, the government

---

2. Park and Sehrt (2001) find that the most significant factor affecting intermediation across provinces is the size and profitability of the state sector, and these regional transfers may reflect transfers from the nonstate to the state sectors.
could choose to subsidize lending in such areas if expected social returns were sufficiently high (Morduch 2000).

This chapter examines the distributional consequences of financial reform and bank performance in China’s rural areas. Specifically, we describe and analyze changes in the degree of financial intermediation by rural financial institutions in rich and poor areas during the mid-1990s, when key financial reforms were being implemented. This is an important question because it addresses the key efficiency-equity tradeoff of market reform. It is now well established that financial intermediation plays an important role in growth, and consequently current disparities in the allocations of financial resources can lead to growth differences that shape future patterns of inequality (Gertler and Rose 1996; Levine 1997; King and Levine 1993; Levine and Zervos 1998; Rajan and Zingales 1998). Given rapidly rising regional income inequality in China and the concern shared by many that credit access is a key constraint to development in China’s poorest areas, better understanding of the distributional consequences of financial reform takes on added importance. This is especially true given the lack of any systematic empirical study of this issue.

In this chapter, we study changes in financial intermediation and financial performance over time using a unique data set from surveys of rural financial institutions conducted by the authors in two rich, coastal provinces (Zhejiang and Jiangsu) and in two poor, interior provinces (Sichuan and Shanxi) in 1998 and 1999. Subsequent data collection from RCCs in Sichuan and Shanxi allows us to update some of our financial performance measures to 2002. The chapter focuses on the financial role played by the two main rural financial institutions in China, the RCCs and the branches of the Agricultural Bank of China (ABC, or Nongye yinhang). Because of data limitations, we do not consider informal borrowing or lending and saving in other financial institutions. However, informal networks tend to be highly segmented, and informal organizations such as rural cooperative foundations (RCFs, or nongcun hezuo jijinhui) that reached a large scale in rural areas have been shut down. Therefore, ABC branches and RCCs play a pivotal role in achieving effective financial intermediation in rural areas.

Focusing on rural financial institutions has several motivations. First, rural China remains the home of 70 percent of China’s population. Rural financial institutions are the primary source of formal credit for millions of farmers and self-employed workers in rural areas whose production and consumption activities create demand for credit services.Second, since most of China’s poor live in remote rural areas, their access to credit is of particular importance in assessing the distributional impacts of financial reform. The in-

3. Until 1999, RCFs could be found in many townships, especially in richer areas (38 percent of all townships in 1996). The RCFs were quasi-governmental organizations under the administrative supervision of the Ministry of Agriculture. In 1996, RCF deposits were estimated to be one-ninth that of RCCs. A national survey found that 24 percent of RCF loans went to TVEs and 45 percent to households (Park, Brandt, and Giles, forthcoming). RCFs often had significant involvement by township officials but lacked legal status as financial institutions. Following a 1998 State Council circular, they were dissolved in 1999.
ternational development community and the Chinese government have emphasized credit provision, through subsidized loans and micro-finance programs, as a key part of China’s poverty alleviation strategy (Park and Ren 2001). Third, rural China is also the location of many of China’s most dynamic industrial enterprises, including township-owned, village-owned, and private enterprises. Rural enterprises accounted for 45 percent of Chinese exports in 1998, and because they are labor-intensive, in line with China’s comparative advantage, their future success will be critical to China’s ability to gain the benefits of WTO accession. Recently, many have expressed concern about the difficulty that non-state enterprises, especially private enterprises, face in obtaining formal credit (Nyberg and Rozelle 1999; Brandt and Li, forthcoming). Finally, rural financial institutions account for a large share of total deposits and loans in China, but thus far, much less is known about the lending performance and behavior of these institutions than of the larger specialized banks that provide most of the loans to industrial state-owned enterprises.

The chapter is organized as follows. In section 2, we describe the survey of rural financial institutions that are the main data sources for the study. China’s rural financial institutions and financial reforms are introduced in section 3. The empirical analysis is presented in the next two sections. Section 4 describes changes in the extent of financial intermediation in areas with different income levels and in different provinces, and for different financial institutions, from 1994 to 1997, a period when many key reform initiatives were introduced. The main analysis decomposes these changes into changes in loan repayment performance, inter-regional fund flows, and deposit mobilization. In section 5, we analyze the relationship between bank governance, or institutional practices, and loan repayment performance to better assess the reasons for different outcomes in rich and poor areas. We discuss reforms and performance since 1997 in section 6, and summarize the main results and discuss policy implications in section 7.

**Survey Data**

Our data come from surveys we conducted of RCCs and township branches of the ABC in four provinces. These township-level institutions are the lowest tier of China’s hierarchical banking structure and account for the large majority of formal lending in rural areas. The surveys were conducted in 1998 in two affluent coastal provinces (Zhejiang and Jiangsu), known for their highly successful township and village enterprises, and in 1999 in two poor interior provinces (Sichuan and Shanxi), where the rural economy relies

4. The surveys in Zhejiang and Jiangsu were supervised by Li Hongbin and Shen Minggao, whom we thank for this work and for processing the data. The surveys in Sichuan and Shanxi were supervised by Wang Sanguai.

5. Our survey estimates that 78 percent of bank loans within the township were granted by these two financial institutions in the coastal provinces, and 84 percent in the interior provinces.
more on agriculture and labor out-migration. Mean income per capita (in 1997) in surveyed townships was highest in Zhejiang (RMB 4,470), followed by Jiangsu (RMB 3,650), Sichuan (RMB 2,060), and Shanxi (RMB 1,558).6

In each province, a representative sample of counties was selected from different regions of the province, in areas with different levels of economic and industrial development. Eight counties were selected in Jiangsu, seven in Zhejiang, and six in both Sichuan and Shanxi. Within each county, four townships were randomly selected after stratifying by industrial output per capita. In total, 108 townships in 27 counties were chosen, and all ABC branches and RCCs in these townships were surveyed. Since not all townships have ABC branches, the sample of ABC branches is smaller than the sample of RCCs. Most of the information was garnered from face-to-face interviews with bank managers, and available historical data on assets, liabilities, income, and expenditures were copied from accounting books. Basic economic data, including township income per capita, were also collected from each township government.

In this chapter we restrict attention to financial institutions that have complete data for all variables required to decompose the changes in financial intermediation performance from 1994 to 1997. Because the surveys in Sichuan and Shanxi were conducted a year later, an additional year of data was collected (for 1998).

The data have several unique features. First, the data cover a period of major reform in China’s financial system and in the operation of China’s rural financial institutions. Second, the surveys provide very detailed information on the financial performance, regulation, and governance of China’s rural financial institutions. Third, the surveys in rich and poor provinces provide an excellent basis for a regional comparison of financial performance and bank behavior, facilitating a study of the distributional consequences of financial reform.

**FINANCIAL REFORM AND CHINA’S RURAL FINANCIAL INSTITUTIONS**

China’s two main rural financial institutions, the ABC and RCCs, accounted for 14 and 12 percent of deposits, respectively, in all financial institutions in 2001 and for a similar share of loans. The ABC is one of China’s four specialized banks and has the largest branch network of the four, extending to most but not all townships. Most of its lending is in the form of working capital loans for state commercial enterprises, but significant shares also are lent to township and village enterprises (TVEs)7 and to agriculture (including households). The RCCs are cooperatives in name only, not in governance. Origi-

---


7. Following Chinese convention, we define TVEs to include both collective and private enterprises.
nally under the supervision of the ABC, since 1996 they have been under the administrative supervision of the People’s Bank of China. RCCs are the only financial institutions with branch outlets in nearly all townships as well as many villages. They are by far the most important source of formal credit in rural areas, lending over half of their funds to rural enterprises and most remaining funds to rural households.

The political, economic, and regulatory environment in which local ABC branches and RCCs operate is an important backdrop to our analysis of their performance. Historically, ABC branches were a source of policy loans for the rural sector, mainly for agricultural commodity procurement. Although these policy loans were transferred to the Agricultural Development Bank of China (ADBC, or Nongye fazhan yinhang) in 1994, ABC branches and RCCs have not been immune to local political pressure, especially from local government officials keen to support revenue-generating industrial projects. ABCs also carry a small portfolio of explicit policy loans (including poverty alleviation loans) and on occasion are pressed to support state marketing agencies. Nonetheless, most managers in both institutions report that by 1994 profitability had become the most important criteria for approving loans. This commercial orientation increased steadily over time. A Commercial Banking Law was passed in 1995 that strengthened managerial performance incentives in state-owned banks. By 1997, profits were overwhelmingly the main stated concern of ABC and RCC bank managers (Park and Shen, forthcoming). Overall, we expect less policy lending in rural financial institutions than in other large specialized banks and policy banks, and for policy lending to decline over time.

Despite efforts to increase profit incentives, most bank managers operate in a highly circumscribed regulatory environment. All deposit and lending interest rates are controlled at below market-clearing levels, adjustable within relatively narrow margins. After nearly uncontrolled inter-bank lending in the early 1990s, the government shut down, and subsequently reformed, the inter-bank market in 1993. Participation in the inter-bank market, which reopened in 1996, is tightly restricted to the headquarters of major financial institutions. Currently, most transfers of financial resources of local branches are through vertical deposits of surplus funds in higher-level branches of the same bank. Thus, township ABC branches deposit funds with the county ABC branch, and RCCs deposit funds with the county RCC association (lianhehui). Aside from local lending, managers have virtually no alternative options for fund use.

Lending by bank managers is further restricted by credit quotas, which are typically based on a county plan or, with increasing frequency, on an agreement linking lending amounts to the amount of deposits. In most cases, however, the quota can be margin-

---

8. The ADBC separated from the ABC as one of three policy banks established in 1994, with branches at the county level. In 1996, the ADBC accounted for 10 percent of national lending. Ninety percent of loans were for agricultural procurement, mainly grain.

9. The ABC is a national bank, implying the potential for inter-regional transfers, but transfers among RCCs typically occur only among branches within the same county.
ally adjusted if the manager can justify the need for more funds. Since 1995, all official plans have been “guidance,” or recommended, plans rather than “indicative,” or mandatory, ones. Managers also are often restricted in the size of loans that can be issued without authorization from the county ABC branch or RCC association. Local discretion in individual loan decisions has decreased over time (Shen and Park 2001). County branches play an important role in regulating and supervising township bank branches, although the township banks remain independent accounting units. Thus, upper-level banks play a key role in intermediating funds across regions.

In Table 11.1, we provide summary balance sheet information from the rural financial institutions we surveyed. Financial institutions differ considerably in terms of size, with those in the richest quartile of our regions, for example, nearly eight times as large as those in the poorest quartile. The rural financial institutions in Zhejiang are significantly larger than those in the other three provinces, and ABC branches are bigger than RCCs. Deposits are the primary source of funds. Between 1994 and 1997, the ratio of deposits to total assets increased from 58 percent to 64 percent. In poor areas, the deposit shares are particularly high, suggesting that deposit mobilization may play a more critical role in determining the amount that financial institutions in such areas can lend.

Most rural lending is to firms, not farmers. This suggests that richer areas require greater financing since they have more firms, which in general are more capital-intensive. In our sample, 65 percent of outstanding loans went to firms in 1994 and 68 percent in 1997 (Table 11.1). However, in the poorest quartile, where the non-agricultural sector is much less developed, less than 40 percent of loans go to enterprises, and share decreased from 1994 to 1997. RCCs lend more to firms than do ABC branches, but between 1994 and 1997 the difference between the two institutions narrowed. For Sichuan and Shanxi, we have a more detailed breakdown of lending categories (Appendix Table 11.1). Enterprise lending is predominant in Sichuan, while household lending is dominant in Shanxi. RCCs lend a much greater share of funds to enterprises than ABCs.10 Household lending also accounts for a much higher share of lending in poorer townships (over two-thirds in the poorest quartile in 1998), largely reflecting the weakness of the enterprise sector in such areas. Between 1994 and 1998, the percentage of lending to firms in the richest quartile increased; however, in the three remaining quartiles, an increasing share of loans went to households. These findings are consistent with other research that finds that a relatively high proportion of farmers in poor regions have at least some access to formal credit (Park and Wang 2000). Ironically, it may be households in richer areas that have greater difficulty obtaining individual loans because banks strongly prefer lending to enterprises.11

__________

10. This is likely due to significant lending by ABCs to marketing agencies such as supply and marketing cooperatives (gongshaoshe) and grain-trading companies (liangshi maoyi gongs).  
11. This may be offset by the fact that richer households have greater savings (and deposits) and so generally are better able to self-finance common expenditures such as fertilizer and school fees. From this perspective, household credit demand does not necessarily rise with income.
### Table 11.1

<table>
<thead>
<tr>
<th></th>
<th>1994</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assets (million RMB)</td>
<td>Deposits/assets</td>
</tr>
<tr>
<td>Full sample</td>
<td>125</td>
<td>4641</td>
</tr>
<tr>
<td>Income quartiles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>31</td>
<td>9493</td>
</tr>
<tr>
<td>II</td>
<td>32</td>
<td>4776</td>
</tr>
<tr>
<td>III</td>
<td>31</td>
<td>3019</td>
</tr>
<tr>
<td>IV</td>
<td>31</td>
<td>1270</td>
</tr>
<tr>
<td>Provinces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zhejiang</td>
<td>30</td>
<td>11440</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>43</td>
<td>3314</td>
</tr>
<tr>
<td>Sichuan*</td>
<td>21</td>
<td>2168</td>
</tr>
<tr>
<td>Shanxi*</td>
<td>31</td>
<td>1578</td>
</tr>
<tr>
<td>Bank type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABC</td>
<td>47</td>
<td>6369</td>
</tr>
<tr>
<td>RCC</td>
<td>78</td>
<td>3599</td>
</tr>
</tbody>
</table>

**Notes:** All means are weighted by the amount of funds.

*In 1998, the share of funds from deposits was 0.87 in Sichuan and 0.92 in Shanxi, and collective firms, private firms, and others accounted for loan shares of 0.69, 0.02, and 0.28 in Sichuan and 0.47, 0.07, and 0.46 in Shanxi.

---

**Changes in Financial Intermediation in Rich and Poor Areas from 1994 to 1997**

**Financial Intermediation**

To assess whether China’s financial reforms are leaving poor regions behind, we require a financial performance measure that enables us to compare the extent of financial intermediation in rich versus poor areas over time. Financial development is frequently measured by the amount of financing normalized by the value of economic output, e.g., the ratio of total loans to GDP. In this chapter, we restrict attention to formal financial intermediation in the form of credit, excluding equity financing and informal borrowing.\(^{12}\)

Because GDP is not calculated at the township level in China, we use the ratio of outstanding loans per capita to rural income per capita. Income per capita is a net rather

---

\(^{12}\) During this period, TVEs could not be listed in capital markets. Informal borrowing is probably at least as important as formal financing for households in rural areas (Park, Brandt, and Giles 1997), but relatively unimportant for firms.
Financial Intermediation Indicators, 1994 and 1997

<table>
<thead>
<tr>
<th></th>
<th>1994</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full sample</td>
<td>0.383</td>
<td>0.315</td>
</tr>
<tr>
<td>Income quartiles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>0.413</td>
<td>0.359</td>
</tr>
<tr>
<td>II</td>
<td>0.318</td>
<td>0.258</td>
</tr>
<tr>
<td>III</td>
<td>0.403</td>
<td>0.310</td>
</tr>
<tr>
<td>IV</td>
<td>0.432</td>
<td>0.296</td>
</tr>
<tr>
<td>Provinces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zhejiang</td>
<td>0.488</td>
<td>0.430</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>0.270</td>
<td>0.212</td>
</tr>
<tr>
<td>Sichuan*</td>
<td>0.314</td>
<td>0.238</td>
</tr>
<tr>
<td>Shanxi*</td>
<td>0.605</td>
<td>0.431</td>
</tr>
<tr>
<td>Bank type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABC</td>
<td>0.358</td>
<td>0.293</td>
</tr>
<tr>
<td>RCC</td>
<td>0.400</td>
<td>0.329</td>
</tr>
</tbody>
</table>

NOTES: All values are in 1994 RMB, deflated by using provincial consumer price indices. Means for per capita variables are weighted by township population. Means for loans/income and performing loans/income are weighted by total income (income per capita x population).

*In 1998, loans p.c., performing loans p.c., and deposits p.c. were RMB 467, RMB 339, and RMB 870 for Sichuan, and RMB 731, RMB 387, and RMB 1153 for Shanxi. The ratio of loans p.c. to income p.c. and the ratio of performing loans p.c. to income p.c. was 0.27 and 0.19 for Sichuan and 0.50 and 0.27 for Shanxi.

than gross measure and does not include retained earnings in enterprises, village collective income, or other income not accruing to households. Insofar as GDP per capita in China during this period is positively correlated with the size of the local collective sector, our income measure could underestimate the level of development. Relative to a measure using GDP, this could lead us to overstate the linkage between the level of development and depth of financial intermediation.

We also make a second adjustment. The portfolios of many banks in China have large amounts of overdue loans with dubious repayment prospects. If loans that should be written off as losses are kept on the books, they can present a misleading picture of the true extent of financial intermediation and net flow of funds. Fortunately, our survey provides information on overdue, or non-performing loans. We thus divide total outstanding loans into “performing” and “non-performing” loans. Even though some overdue loans may provide a meaningful intermediation function, we consider the amount of performing loans relative to income to be a superior measure of effective financial intermediation.

In Table 11.2, we report financial intermediation levels for 1994 and 1997 using both total outstanding loans and performing loans. There does not appear to be a strong pattern of effective financial intermediation (using performing loans) across income groups in 1994, although the richest income quartile does have the greatest effective intermediation. By 1997, however, the pattern looks fairly systematic, with effective intermediation rates increasing with higher income levels. This suggests that rich areas gained
relative to poor areas over this period, which is confirmed by looking at the change in effective intermediation rates for each income quartile. The lower income quartiles suffer quite striking declines in effective intermediation, from 31 and 30 percent in 1994 to 24 and 23 percent in 1997, while the richer quartiles see negligible changes. If we look at intermediation rates using total outstanding loans, the patterns just described are much less pronounced. However, it is still the case that the richest quartile sees increasing intermediation from 1994 to 1997 while the other groups see decreasing intermediation. Part of the reason for the lack of clear trends is the large provincial differences in intermediation rates. In 1994, using either measure of intermediation, Shanxi (Jiangsu) exhibits the highest (lowest) level of intermediation.

To see more clearly how different factors influence the extent of effective financial intermediation in localities, we decompose our measure of effective financial intermediation in the following way:

\[
\frac{PL}{Y} = \frac{PL}{L} \times \frac{L}{D} \times \frac{D}{Y},
\]

where \( PL \) is performing loans, \( Y \) is income, \( L \) is total outstanding loans, and \( D \) is deposits. The rate of effective financial intermediation at any given point in time is the product of the share of performing loans in total loans, the loan to deposit ratio, and the ratio of deposits to income. These three variables measure loan performance, net fund flows, and deposit mobilization, respectively, and all are positively correlated with effective financial intermediation rates.

In Tables 11.3, 11.4, and 11.5, we provide summary information for each of these variables in 1994 and 1997, organized by income group, province, and bank type. This is supplemented by regression results reported in Table 11.6, which test if these financial performance variables are significantly correlated with income per capita levels after controlling for other factors.

**Loan Performance**

Non-performing loans include three categories: overdue, inactive (overdue for more than two years), and dead (overdue for more than three years or confirmed for other reasons to be unrecoverable). Most non-performing loans are classified as overdue, but nearly half fall in the two more delinquent categories. Clearly, the problems that banks currently face are a product of past lending decisions. In 1994, the share of outstanding loans that were
Table 11.3
Share of Outstanding Loans That Are Nonperforming and Performing, 1994 and 1997

<table>
<thead>
<tr>
<th>N</th>
<th>1994</th>
<th></th>
<th>1997</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nonperforming</td>
<td></td>
<td>Nonperforming</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over</td>
<td>Inact.</td>
<td>Dead</td>
<td>Over</td>
</tr>
<tr>
<td>Full sample</td>
<td>125</td>
<td>0.094</td>
<td>0.070</td>
<td>0.015</td>
</tr>
<tr>
<td>Income quartiles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>31</td>
<td>0.064</td>
<td>0.055</td>
<td>0.010</td>
</tr>
<tr>
<td>II</td>
<td>32</td>
<td>0.108</td>
<td>0.073</td>
<td>0.006</td>
</tr>
<tr>
<td>III</td>
<td>31</td>
<td>0.126</td>
<td>0.084</td>
<td>0.022</td>
</tr>
<tr>
<td>IV</td>
<td>31</td>
<td>0.147</td>
<td>0.116</td>
<td>0.053</td>
</tr>
<tr>
<td>Provinces</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zhejiang</td>
<td>30</td>
<td>0.084</td>
<td>0.031</td>
<td>0.004</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>43</td>
<td>0.074</td>
<td>0.113</td>
<td>0.029</td>
</tr>
<tr>
<td>Sichuan*</td>
<td>21</td>
<td>0.153</td>
<td>0.085</td>
<td>0.004</td>
</tr>
<tr>
<td>Shanxi*</td>
<td>31</td>
<td>0.139</td>
<td>0.114</td>
<td>0.034</td>
</tr>
<tr>
<td>Bank type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABC</td>
<td>47</td>
<td>0.077</td>
<td>0.091</td>
<td>0.013</td>
</tr>
<tr>
<td>RCC</td>
<td>78</td>
<td>0.104</td>
<td>0.057</td>
<td>0.016</td>
</tr>
</tbody>
</table>

NOTE: All means are weighted by the amount of outstanding loans.
Definitions: Over=overdue loans, Inact=inactive loans (overdue more than 2 years), Dead=loans with no expectation of repayment because of the following reasons: a) the borrower has died or cannot be located; b) the borrower has gone bankrupt; or c) the loan is more than three years overdue.

*In 1998, Sichuan and Shanxi overdue loans were 0.28 and 0.48 of outstanding loans.

overdue in the full sample was 17 percent; by 1997, this had increased to 24 percent (Table 11.3). These estimates of non-performing loans are comparable to the 22 percent figure cited by Lardy (1998) for China’s four large state-owned banks in 1995.13

The non-performing rates are substantially higher in poorer townships and provinces.14 In 1994, non-performing loans in the bottom two quartiles were 23 and 32 percent, while in the upper two quartiles they were only 13 and 19 percent. The non-performing rates in Sichuan and Shanxi were 24 and 30 percent, and only 12 percent in Zhejiang. In 1997, the problem of non-performing loans continued to be the most severe in the poorer provinces and income quartiles, with 43 percent of all loans overdue in the lowest quartile. Looking at trends, the richest quartile surprisingly saw the largest increase in non-performing loans, probably because of poor enterprise performance, and the second quartile was the only one to achieve better performance over time.

13. Note, however, that both estimates may understate the true magnitude of the repayment problem if banks roll over loans through “ever-greening” or otherwise conceal repayment problems (Lardy 1998).

14. The full sample average reflects the greater number of financial institutions surveyed in the coastal provinces and the greater amount of funds per financial institution.
Are Funds Flowing Out of Poor Areas?

We measure the net flow of funds by the ratio of outstanding loans to deposits in each financial institution. If deposits were the only source of funds, a financially self-sufficient bank should have a loan-deposit ratio of less than one because of reserve requirements. People’s Bank of China (PBOC) regulations mandate reserves of 13 percent of loans for all financial institutions. This can be higher for some local branches, especially RCCs before 1996 when they were regulated by ABC. Higher loan-deposit ratios imply that more local resources are being lent locally rather than being intermediated for use in other areas, which occurs when branches deposit funds in higher-level branches, lend on the inter-bank market, or buy government bonds. Banks borrowing funds from their headquarters or from other banks through an inter-bank market could, in principle, have loan-deposit ratios exceeding one. If funds tend to flow out of poor and into rich areas, we expect poor (rich) areas to have lower (higher) loan-deposit ratios. This, in turn, would contribute to lower (higher) intermediation rates in poor (rich) townships.

Table 11.4 presents loan-deposit ratios broken down by income per capita quartile, province, and bank type. In 1994, the loan-deposit ratio in our sample of banks was 0.71, falling to 0.64 in 1997. This decline is in line with that observed for all financial institutions nationwide, which experienced a drop in the ratio of loans to deposits from 1.01 to 0.91 over this same period (China Financial Yearbook, 1999 2000). In 1994, the differences across the four provinces are relatively modest; however, the ratio is significantly lower in the lowest income quartile. In 1997, the gap between income groups narrowed, largely because of a pronounced decline in loan-deposit ratios in the upper two income quartiles. In the poorest quartile, the percentage of deposits that was being lent out in 1997 was actually slightly higher than in 1994. Although differences in loan-deposit ratios narrowed across income quartiles, it remains the case that in both 1994 and 1997 lower loan-deposit ratios contributed to lower intermediation rates in the poorest quartile.

Deposit Mobilization

We measure deposit mobilization by the ratio of deposits per capita to current income per capita. A high ratio could reflect a number of factors, including high household savings

15. The high loan-deposit ratios for all banks and its subsequent decline largely reflect re-lending by the PBOC to state-owned banks, which through the 1980s accounted for as much as 30 percent of funds, but since the mid-1990s has decreased considerably.
rates over time as well as a high percentage of savings that are intermediated through formal financial institutions.\textsuperscript{16} A well-developed informal credit market or other sources of financial competition, as well as low savings rates, would have the opposite effect. Table 11.5 reports deposits and incomes per capita, and the ratio of the two. Considerable differences exist across provinces, but there is no clear pattern across income groups. In fact, deposit mobilization in 1994 is highest in the poorest quartile, followed by that in the richest. The former may reflect unobservable features of rich and poor areas (e.g., alternative investment options) or more limited opportunities in poor areas for households to use their own funds in activities such as family-run businesses. What is apparent from Table 11.5 is that richer townships experience an increase in the ratio of deposits to income, but poorer townships see a decline. This should widen differences in financial intermediation between rich and poor regions.

\textbf{Financial Intermediation and Rural Income Per Capita}

We can look more systematically at the relationship between financial intermediation and income levels by estimating multivariate specifications for the determination of effective intermediation rates and performance measures that affect the extent of intermediation. We regress these variables on the log of rural income per capita controlling for bank type,  

\textsuperscript{16} Savings are a stock and reflect accumulated behavior over time. Income, on the other hand, is a current flow.
Table 11.5
Deposits and Income Per Capita, 1994 to 1997

<table>
<thead>
<tr>
<th></th>
<th>1994</th>
<th></th>
<th></th>
<th>1997</th>
<th></th>
<th></th>
<th>Annual %Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Dep. p.c</td>
<td>Income p.c</td>
<td>D/Y Dep. p.c</td>
<td>Income p.c</td>
<td>D/Y Dep. p.c</td>
<td>Income p.c</td>
</tr>
<tr>
<td><strong>Full sample</strong></td>
<td>125</td>
<td>1002</td>
<td>1860</td>
<td>.54</td>
<td>1487</td>
<td>2515</td>
<td>.59</td>
</tr>
<tr>
<td><strong>Income quartiles</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>31</td>
<td>1853</td>
<td>3169</td>
<td>.58</td>
<td>2801</td>
<td>3910</td>
<td>.72</td>
</tr>
<tr>
<td>II</td>
<td>32</td>
<td>772</td>
<td>1876</td>
<td>.41</td>
<td>1304</td>
<td>2709</td>
<td>.48</td>
</tr>
<tr>
<td>III</td>
<td>31</td>
<td>718</td>
<td>1308</td>
<td>.55</td>
<td>901</td>
<td>1844</td>
<td>.49</td>
</tr>
<tr>
<td>IV</td>
<td>31</td>
<td>590</td>
<td>748</td>
<td>.79</td>
<td>771</td>
<td>1111</td>
<td>.69</td>
</tr>
<tr>
<td><strong>Provinces</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zhejiang</td>
<td>30</td>
<td>1572</td>
<td>2357</td>
<td>.67</td>
<td>2377</td>
<td>3301</td>
<td>.72</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>43</td>
<td>816</td>
<td>2160</td>
<td>.38</td>
<td>1309</td>
<td>2844</td>
<td>.46</td>
</tr>
<tr>
<td>Sichuan*</td>
<td>21</td>
<td>593</td>
<td>1242</td>
<td>.47</td>
<td>741</td>
<td>1612</td>
<td>.46</td>
</tr>
<tr>
<td>Shanxi*</td>
<td>31</td>
<td>785</td>
<td>871</td>
<td>.90</td>
<td>998</td>
<td>1202</td>
<td>.83</td>
</tr>
<tr>
<td><strong>Bank type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABC</td>
<td>47</td>
<td>889</td>
<td>1882</td>
<td>.47</td>
<td>1488</td>
<td>2526</td>
<td>.59</td>
</tr>
<tr>
<td>RCC</td>
<td>78</td>
<td>1076</td>
<td>1846</td>
<td>.58</td>
<td>1485</td>
<td>2508</td>
<td>.59</td>
</tr>
</tbody>
</table>

**Notes:** All values are converted to 1994 RMB using provincial CPIs. Means for deposit and loan growth rates are weighted by base year starting values. Mean income p.c. growth is weighted by 1994 township population.

Controlling for provincial differences, higher income per capita is significantly associated with higher intermediation rates, measured by either performing loans or total loans. This positive association was greater in 1997 than in 1994, suggesting increasing disparities associated with income levels. A 1 percent increase in income increased the effective financial intermediation rate by 0.15 percent in 1994 and 0.21 percent in 1997 (Table 11.6). However, without provincial controls, the relationships are no longer statistically significant.

We also examine the effect of income differences on loan performance, loan-deposit ratios, and deposit mobilization. The effect of rural income per capita on loan performance increases from 1994 to 1997. With provincial controls, a 1 percent increase in income per capita increases the share of performing loans by 0.08 percent in 1994 and by 0.21 percent in 1997. When we drop controls for provincial differences, we find roughly similar results. There is a consistent negative relationship between incomes and the loan-deposit ratio, but this shows up significantly only in the specification without provincial controls, suggesting that these differences are due in part to differences in provincial characteristics other than average income, e.g., quality of alternative investment projects or financial regulation. Third, higher income per capita is associated with a more than proportionate increase in the deposit-income ratio. A 1 percent increase in income per capita is associated with an increase in the deposit-income ratio of 1.36 percent in 1994 and 1.79 percent in 1997. Without provincial controls, the effects are smaller but still significant.

---

17. The specification without provincial controls includes a dummy variable for bank type. When controlling for provincial differences, dummy variables for provinces and bank type are interacted, so that the effects of income per capita are identified by variation among banks of the same type in the same province.
Table 11.6
Financial Performance and Level of Economic Development
(estimates from OLS regressions of performance indicators on income per capita)

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>With controls for provincial differences (1)</th>
<th>No controls for provincial differences (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Performing loans per capita/income per capita</strong></td>
<td><strong>0.142</strong> *<strong>0.211</strong> 0.016 0.044</td>
<td></td>
</tr>
<tr>
<td><strong>Performing loans/total loans</strong></td>
<td><strong>0.109</strong> *<strong>0.201</strong> <em><strong>0.150</strong></em>0.188</td>
<td></td>
</tr>
<tr>
<td>Loans/deposits</td>
<td>–0.397 –0.564 *–0.456 **–0.441</td>
<td></td>
</tr>
<tr>
<td>Deposits per capita/income per capita</td>
<td>***1.36 ***1.79 ***0.911 ***1.03</td>
<td></td>
</tr>
</tbody>
</table>

Notes: N=125, independent variable is log of income per capita (in 1994 RMB).
*10 percent significance level, **5 percent, ***1 percent
Specification (1) includes province-bank type interaction dummy variables.
Specification (2) includes dummy variable for bank type only.

Overall, the results suggest that the relationship between financial intermediation rates and income levels is stronger within provinces than between provinces. In other words, a poor township is worse off relative to a rich township in the same province than it is relative to an equally rich township in another province. In particular, provincial differences appear to be muting the measured response of per capita deposits and loans to income, which may be due to greater financial competition in these areas. One plausible explanation is that households in coastal provinces are more likely to deposit funds in other financial institutions or in other investment vehicles.

Decomposing the Sources of Change in Financial Intermediation Between 1994 and 1997

Table 11.2 reveals a marked deterioration in effective intermediation in poorer areas. Although all provinces experienced a decline in the rate of effective intermediation between 1994 and 1997, the deterioration was most severe in Sichuan and Shanxi. This decline is generally mirrored in the behavior of the bottom two quartiles, in which the share of performing loans fell from 0.31 to 0.23. In terms of growth rates, the effective financial intermediation rate fell at an annual rate of 8.1 and 9.1 percent in the bottom two quartiles. In the upper quartile, it fell by only 2.0 percent per year, while it actually rose slightly by 0.9 percent per year in the second quartile.

From (1), it is straightforward to express the change in the effective intermediation rate as the sum of the growth rates of its components:

\[
\log \left( \frac{PL_{97}}{Y_{97}} \right) - \log \left( \frac{PL_{94}}{Y_{94}} \right) = \{ \log \left( \frac{PL_{97}}{L_{97}} \right) - \log \left( \frac{PL_{94}}{L_{94}} \right) \} + \{ \log \left( \frac{L_{97}}{D_{97}} \right) - \log \left( \frac{L_{94}}{D_{94}} \right) \}
\]
\[
+ \{\log\left( \frac{D_{97}}{Y_{97}} \right) - \log\left( \frac{D_{94}}{Y_{94}} \right)\}
\]

The difference in logs for each variable is equal to the exponential growth rate, which can be annualized by dividing by the number of years. Table 11.7 summarizes the annual growth rates in (2) and reports the percentage of the overall rate of change in effective financial intermediation accounted for by each factor.

Two factors contributed fairly evenly to the sharp decline in effective intermediation in the poorest two quartiles: the deterioration in the performing component of the loan portfolio and the much slower growth of deposits relative to the growth in incomes. It is, of course, possible that the bad loan performance and low deposit mobilization in poorer areas are related, if depositors lose confidence in institutions perceived to be in financial distress. We have no direct evidence on whether this is in fact the case. Between 1994 and 1997, deposit growth was only half that of reported income in poorer areas, despite the fact that poor areas had significantly higher levels of deposit mobilization in 1994. In the richest quartile, on the other hand, the share of performing loans also fell sharply, as did the loan-deposit ratio. This was largely offset, however, by the rapid growth in deposits in local financial institutions relative to income growth. In the second income quartile, on the other hand, we actually see a small increase in intermediation rates. An improvement in the loan portfolio and rapid deposit growth more than made up for the decline in the loan-deposit ratio over this three-year period, so that the rate of growth of performing loans exceeded that of incomes.

**Bank Governance and Loan Performance**

The high and increasing percentage of non-performing loans is an essential component of the intermediation failure we have described in poorer areas. How much of this can be linked to problems in bank governance? In this section of the chapter, we examine the links between non-performing loans and governance structures and the conditions that lead to changes in governance structures.

From the bank surveys, we capture governance in a variety of ways, including loan authorization limits of branch managers; ex-ante bonus incentives of branch managers measured as a percentage of the manager’s base wage; the percentage of loans with collateral; government pressure to renegotiate overdue loans; quarterly reporting requirements of branches; and the time required to resolve overdue loan issues through the courts. *A priori*, we associate more powerful income incentives, the use of collateral, freedom from government intervention, stricter and more frequent reporting requirements, and the ability to take legal action against defaulting borrowers as key ingredients...
Table 11.7
Decomposition of Changes in Financial Intermediation (annual growth rates, 1994 to 1997)

<table>
<thead>
<tr>
<th></th>
<th>Annual growth rates</th>
<th>Share of growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Perf. PL/Y</td>
<td>Perf. PL/L</td>
</tr>
<tr>
<td></td>
<td>loans/loan share</td>
<td>loans/share</td>
</tr>
<tr>
<td></td>
<td>Dep. PL/Y</td>
<td>Dep./Income</td>
</tr>
<tr>
<td></td>
<td></td>
<td>loans/dep</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dep./Income</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>1</td>
</tr>
<tr>
<td>Full sample</td>
<td>125</td>
<td>–3.10</td>
</tr>
<tr>
<td>Income quartiles</td>
<td></td>
<td>–2.97</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–3.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.97</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–1.01</td>
</tr>
<tr>
<td>Provinces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zhejiang</td>
<td>30</td>
<td>–2.66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–3.34</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–1.88</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–0.96</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>43</td>
<td>–2.28</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–1.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–7.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.58</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.76</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.09</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–2.85</td>
</tr>
<tr>
<td>Sichuan*</td>
<td>21</td>
<td>–7.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–3.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–2.69</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–1.26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.48</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.17</td>
</tr>
<tr>
<td>Shanxi*</td>
<td>31</td>
<td>–8.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–5.53</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–2.73</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–0.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.34</td>
</tr>
<tr>
<td>Bank type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABC</td>
<td>47</td>
<td>2.73</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–1.37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–3.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.36</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–0.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–1.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.76</td>
</tr>
<tr>
<td>RCC</td>
<td>78</td>
<td>–6.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–4.14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–0.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>–0.18</td>
</tr>
</tbody>
</table>

Note: Slight discrepancies between column 1 and the sum of columns 2, 3, and 4 are due to rounding errors.

of better governance structures. Managerial autonomy to make loans can also be a key component of bank governance, especially when combined with income incentives that penalize bad managers for making bad loans and reward them for decisions that increase branch profitability. Unconstrained autonomy, however, can lead to moral hazard problems that might undermine banking profitability and efficiency. We expect better governance, in turn, to translate into a lower percentage of non-performing loans.

Simple descriptive statistics on all of the governance-related variables are presented in Table 11.8, which breaks the data down by income quartiles of the townships. We report both levels in 1997 and changes between 1994 and 1997. The much larger sample size for the former reflects the more complete information we have for 1997.18 In some important respects, poor areas appear to be handicapped by poorer institutional practices. The size of loans that can be approved is much lower in the poorest areas, collateral requirements and reporting requirements are more lax, and government influence on lending is higher. However, there are other factors that favor poor areas. Bonus incentives are stronger, perhaps reflecting budgetary shortages, and the time it takes to complete lawsuits is shorter, perhaps because there are fewer cases backlogging the system.

18. Frequent managerial turnover in the bank branches handicapped our efforts to obtain information for 1994.
Table 11.8
Governance by Income Quartiles

<table>
<thead>
<tr>
<th>Variable</th>
<th>Governance in 1997</th>
<th>Change in governance, 1994–97</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Income quartiles</td>
<td>Income quartiles</td>
</tr>
<tr>
<td></td>
<td>I  II  III  IV</td>
<td>I  II  III  IV</td>
</tr>
<tr>
<td>Loan authorization</td>
<td>9.64  0.83  1.82  0.93</td>
<td>5.00  0.31  –0.83  –1.21</td>
</tr>
<tr>
<td>Bonus incentive</td>
<td>0.56  0.48  0.47  0.63</td>
<td>NA   NA   –0.09  0.34</td>
</tr>
<tr>
<td>Collateral</td>
<td>49.6  53.1  62.3  38.7</td>
<td>33.2  31.1  16.1  7.2</td>
</tr>
<tr>
<td>Gov’t pressure</td>
<td>3.71  3.58  3.88  3.45</td>
<td>1.2   1.1   1.5   0.28</td>
</tr>
<tr>
<td>Rep. require.</td>
<td>0     –0.6  –0.1  0</td>
<td>NA   NA   NA   NA</td>
</tr>
<tr>
<td>Time to end lawsuit (months)</td>
<td>4.71  4.35  5.49  1.98</td>
<td>NA   NA   NA   NA</td>
</tr>
<tr>
<td>Number of obs.</td>
<td>14    24    26   20</td>
<td>NA   NA   NA   NA</td>
</tr>
</tbody>
</table>

NOTES: Loan authorization limits are reported in 10,000 RMB. Bonus incentives measure the ex-ante bonus in event of target fulfillment as a percentage of the base wage. Collateral is the percentage of loans to TVEs secured with collateral. Government pressure is measured on a decreasing scale from 1 to 6.

given lower levels of economic activity. In general, changes in governance variables is occurring more rapidly in richer areas than in poorer areas.

Table 11.9 reports the results of OLS regressions analyzing the percentage of non-performing loans in 1997 as a function of bank governance variables in 1997 and the change in non-performing loans between 1994 and 1997 as a function of governance variables in 1994. We recognize the multiple endogeneity problems associated with relating institutional change and economic performance and so treat the relationships as correlations rather than making strong causal inferences. Columns 5-8 of Table 11.9 report the results linking non-performing loans in 1997 to bank governance. In each of the regressions, we also include township per capita income as an additional control variable. For comparison, column 5 reports the results of the bivariate regression of non-performing loans on income. The regressions are nicely suggestive of the role of governance. We find that the percentage of non-performing loans is negatively correlated with branch manager bonus incentives, the use of collateral, freedom from government pressure, and authorization limits (insignificantly), and positively correlated with the length of time required to resolve cases legally. The percentage of non-performing loans is also significantly lower in higher-income areas. This may be picking up overall higher loan quality and possibly unobserved dimensions of local governance structures that are correlated with incomes.19

In column 7, we include as an additional explanatory variable the interaction between loan authorization limits and managerial bonus incentives. As in column 6, the individual coefficients on these two variables remain negative, and now are significant at 5 percent. The positive coefficient on the interaction term, however, suggests that a combi-

19. The results are robust to including provincial fixed effects, controlling for branch type, and excluding the income variable.
Table 11.9
Governance and Non-Performing Loans in Township Branches

<table>
<thead>
<tr>
<th></th>
<th>Change in non-performing loans</th>
<th>Non-performing loans in 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Income, 1994</td>
<td>0.102 (-2.70)</td>
</tr>
<tr>
<td></td>
<td>Income 1997</td>
<td>0.102 (-5.05)</td>
</tr>
<tr>
<td></td>
<td>Loan authorization, 1994</td>
<td>-0.001 (-0.21)</td>
</tr>
<tr>
<td></td>
<td>Loan authorization, 1997</td>
<td>-0.001 (-0.21)</td>
</tr>
<tr>
<td></td>
<td>Bonus incentive, 1997</td>
<td>0.008 (2.13)</td>
</tr>
<tr>
<td></td>
<td>Authorization* bonus</td>
<td>0.001 (0.04)</td>
</tr>
<tr>
<td></td>
<td>Loans w/ collateral, 1997</td>
<td>0.002 (0.04)</td>
</tr>
<tr>
<td></td>
<td>Gov’t intervention, 1994</td>
<td>-0.024 (1.54)</td>
</tr>
<tr>
<td></td>
<td>Gov’t intervention, 1997</td>
<td>-0.029 (2.01)</td>
</tr>
<tr>
<td></td>
<td>Rep. requirements, 1994</td>
<td>-0.077 (2.77)</td>
</tr>
<tr>
<td></td>
<td>Rep. requirements, 1997</td>
<td>-0.051 (1.85)</td>
</tr>
<tr>
<td></td>
<td>Time to end lawsuit</td>
<td>0.010 (2.69)</td>
</tr>
<tr>
<td></td>
<td>Non-performing loans, 1994</td>
<td>-0.485 (3.06)</td>
</tr>
<tr>
<td>Number of obs.</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td>R²</td>
<td>0.10</td>
<td>0.14</td>
</tr>
</tbody>
</table>

The results are informative, however. First, governance seems to matter. The increase in non-performing loans is smaller in townships in which government influence is less, there is more frequent reporting to higher-level county branches, and managers have more discretion in extending new loans. Second, the increase is less in townships with higher incomes. Since the change in non-performing loans is not correlated with the

determination of high authorization limits and powerful incentives contributes to a weakening of the quality of the loan portfolio. One interpretation for this result is that the combination leads to excessive risk-taking on the part of branch managers that ultimately leads to an increase in the percentage of non-performing loans. It also suggests the need for higher authorities to properly balance incentives and prudential regulation.

In columns 1-4, we analyze the effect of governance structures present in 1994 on the change in non-performing loans between 1994 and 1997. We also include township income in 1994 and, in column 4, add the level of non-performing loans in 1994. Limited information on governance in 1994 restricts our attention to a much smaller set of variables than that used above and to a relatively small sample of RCC and ABC branches. The results are informative, however. First, governance seems to matter. The increase in non-performing loans is smaller in townships in which government influence is less, there is more frequent reporting to higher-level county branches, and managers have more discretion in extending new loans. Second, the increase is less in townships with higher incomes. Since the change in non-performing loans is not correlated with the
growth in our income measure (result not reported here) over the same period, one interpretation for this result is that the income variable is picking up “unobserved” dimensions of governance at the township level that are positively correlated with incomes. Third, we find that the increase in non-performing loans over this three-year window is lower in branches with a higher stock of non-performing loans in 1994. This may reflect additional actions being taken by these branches to address the non-performing loan problem. Note that the inclusion of the stock of non-performing loans in the regression does not significantly affect the remaining coefficients.

In Table 11.10, we examine changes in governance levels between 1994 and 1997. We keep the regressions simple and examine the effect of incomes in 1994, the level of governance in 1994, and the stock of non-performing loans in 1994 on the changes in governance between 1994 and 1997. Three key questions motivate this exercise: (1) Are the changes in governance greatest where they are most needed, i.e. branches with the highest stock of non-performing loans? (2) Are governance structures converging across localities? (3) Are poorer areas lagging behind in the pace of reform, all else held constant?

In general, it appears that there is some convergence, as suggested by the negative coefficients on the governance variables in 1994. The overall trend appears to be toward better governance, with the greatest changes occurring in those areas with lower measures of governance in 1994. For three of the five governance variables (loan authorization, incentives, and reporting requirements), it is also the case that the improvement in governance is positively related (but not statistically significant) to the stock of non-performing loans in 1994. In other words, the changes are greatest where they are probably most needed. However, government pressure on branches appears to be increasing in areas with a higher stock of non-performing loans. The likely reason for this correlation is that it reflects government efforts to obtain relief for firms under their administration. Contrary to our expectation, we also find that the increase in the use of collateral appears to be lower in areas with a higher stock of non-performing loans. Finally, it also appears that with the exception of bonus incentives, the changes in governance are occurring most rapidly in higher-income areas.

What then are the implications of our analysis for poorer areas? Several things bode well. First, localities with higher stocks of non-performing loans appear to be slightly more aggressive in carrying out reform. Since it is poorer regions that have the highest stock of non-performing loans, this suggests that governance reform in these regions may be responsive to the pressures of non-performing loans. Second, the increase in non-performing loans is inversely proportional to the stock of bad loans in 1994. This

---

20. This result should be interpreted carefully, however, because a regression of a change in a variable on its lagged value automatically imparts a negative bias. A number of the variables are also truncated. Unfortunately, there is not much we can do to correct these problems.
Table 11.10
Changes in Governance Between 1994 and 1997

<table>
<thead>
<tr>
<th></th>
<th>Loan authorization</th>
<th>Bonus</th>
<th>Collateral</th>
<th>Gov’t pressure</th>
<th>Rep. requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income, 1994</td>
<td>1.633</td>
<td>2.300</td>
<td>–1.014</td>
<td>10.79</td>
<td>5.12</td>
</tr>
<tr>
<td></td>
<td>(1.62)</td>
<td>(1.81)</td>
<td>(–2.57)</td>
<td>(2.58)</td>
<td>(1.13)</td>
</tr>
<tr>
<td>Loan authorization, 1994</td>
<td>–0.714</td>
<td></td>
<td>–0.377</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(–7.06)</td>
<td></td>
<td>(–3.71)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonus, 1994</td>
<td></td>
<td>–0.488</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(–1.82)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans w/ collateral, 1994</td>
<td></td>
<td></td>
<td>–0.377</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(–3.71)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gov’t pressure, 1994</td>
<td></td>
<td></td>
<td></td>
<td>–0.349</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(–4.49)</td>
<td></td>
</tr>
<tr>
<td>Rep. requirements, 1994</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>–0.363</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(–2.80)</td>
</tr>
<tr>
<td>Non-perf. loans in 1994</td>
<td>2.33</td>
<td>0.844</td>
<td>–25.94</td>
<td>–1.05</td>
<td>0.276</td>
</tr>
<tr>
<td></td>
<td>(1.47)</td>
<td>(1.65)</td>
<td>(–1.01)</td>
<td>(–1.47)</td>
<td></td>
</tr>
<tr>
<td>Number of observations</td>
<td>73</td>
<td>69</td>
<td>25</td>
<td>25</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>25</td>
<td>47</td>
<td>45</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>92</td>
<td>84</td>
<td>94</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>R^2</td>
<td>0.11</td>
<td>0.52</td>
<td>0.26</td>
<td>0.48</td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td>0.10</td>
<td>0.30</td>
<td>0.06</td>
<td>0.27</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>0.06</td>
<td>0.27</td>
<td>0.01</td>
<td>0.31</td>
<td></td>
</tr>
</tbody>
</table>
may be picking up some of the benefits of the improvement in government structures reported above. Yet possibly counteracting some of these trends is the tendency for changes in governance to be greatest in localities with the highest incomes. Despite better overall governance in these regions, the need for governance reform remains high.

**Performance Since 1997**

Since 1997, a number of new reforms have been undertaken that have affected the allocation of loans in rural China.\(^{21}\) For RCCs, these include new low-interest lending to RCCs by the PBOC to support agricultural loans by RCCs, which began in 1997, and a new micro-loan program for rural households featuring credit ratings for individual households, which began in 1999.\(^{22}\) The PBOC also has begun experiments to liberalize interest rates in eight counties nationwide and, in a province-wide experiment, has allowed township-level RCCs in Jiangsu to be merged into county unions, some of which have been converted to rural commercial banks. The share capital of RCCs has also been increased to make RCCs more financially viable and to allow them to be managed more like true cooperatives (i.e., to improve governance).

Table 11.11 reports on the financial performance of RCCs in poor regions of Sichuan and Shanxi from 1997 to 2002, based on data from over 100 township-level RCCs in the two provinces. This sample is unrelated to the sample of banks surveyed in 1998 in the same provinces. The trend toward greater reliance on own deposits as a source of funds seems to reverse itself by 1999, and lending as a share of total liabilities also peaks in 1999. These trends may in part reflect new sources of on-lending from the PBOC. Loan-deposit ratios rise and fall for Sichuan and exhibit no obvious pattern in Shanxi. Consistent with earlier trends, starting in 1997 the share of outstanding loans that are non-performing (overdue) increased in both Sichuan and Shanxi, reaching 68 percent in Sichuan and 75 percent in Shanxi. The large increases in non-performing loans in 1999 was likely due to mergers with disbanded RCFs. However, the worsening trend finally reversed after 2001 in Sichuan and after 2000 in Shanxi, and there is noticeable improvement in loan performance thereafter. This is consistent with reports showing that nationally RCCs reduced their nonperforming loans by 5 percent in 2001.\(^{23}\) In addition to better screening and enforcement of loan repayment, some of this improvement may be due to PBOC infusions of funds to take non-performing loans off the books and to profit

---

\(^{21}\) The reforms described in this paragraph come from Xie 2002.

\(^{22}\) After investigation by a credit rating task force, credit certificates are given to households, which allow households to borrow without restriction up to the defined credit limit, as long as they successfully repay loans.

\(^{23}\) Recent Chinese articles report improved performance in 2001 and 2002 in Shandong, Zhejiang, and Hubei provinces (Bai 2002; Liu et al. 2002; Gong 2002).
Table 11.11
Financial Indicators, Sichuan and Shanxi, 1997 to 2002

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deposits/assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sichuan</td>
<td>0.735</td>
<td>0.750</td>
<td>0.739</td>
<td>0.725</td>
<td>0.726</td>
<td></td>
</tr>
<tr>
<td>Shanxi</td>
<td>0.659</td>
<td>0.733</td>
<td>0.739</td>
<td>0.759</td>
<td>0.718</td>
<td>0.666</td>
</tr>
<tr>
<td><strong>Loans/liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sichuan</td>
<td>0.513</td>
<td>0.542</td>
<td>0.593</td>
<td>0.540</td>
<td>0.517</td>
<td></td>
</tr>
<tr>
<td>Shanxi</td>
<td>0.490</td>
<td>0.515</td>
<td>0.526</td>
<td>0.541</td>
<td>0.536</td>
<td>0.525</td>
</tr>
<tr>
<td><strong>Loans/deposit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sichuan</td>
<td>0.766</td>
<td>0.772</td>
<td>0.848</td>
<td>0.765</td>
<td>0.747</td>
<td></td>
</tr>
<tr>
<td>Shanxi</td>
<td>0.740</td>
<td>0.697</td>
<td>0.707</td>
<td>0.693</td>
<td>0.727</td>
<td>0.744</td>
</tr>
<tr>
<td><strong>Nonp. loan share</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sichuan</td>
<td>0.484</td>
<td>0.544</td>
<td>0.605</td>
<td>0.685</td>
<td>0.512</td>
<td></td>
</tr>
<tr>
<td>Shanxi</td>
<td>0.482</td>
<td>0.408</td>
<td>0.750</td>
<td>0.670</td>
<td>0.581</td>
<td>0.441</td>
</tr>
<tr>
<td><strong>Household loan share</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sichuan</td>
<td>0.681</td>
<td>0.725</td>
<td>0.719</td>
<td>0.700</td>
<td>0.732</td>
<td></td>
</tr>
<tr>
<td>Shanxi</td>
<td>0.546</td>
<td>0.554</td>
<td>0.558</td>
<td>0.569</td>
<td>0.590</td>
<td>0.620</td>
</tr>
<tr>
<td><strong>Enterp. loan share</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sichuan</td>
<td>0.179</td>
<td>0.152</td>
<td>0.149</td>
<td>0.165</td>
<td>0.185</td>
<td></td>
</tr>
<tr>
<td>Shanxi</td>
<td>0.373</td>
<td>0.363</td>
<td>0.365</td>
<td>0.357</td>
<td>0.346</td>
<td>0.311</td>
</tr>
</tbody>
</table>

opportunities from new PBOC lending to RCCs. A study of the Jiangsu experiment has found that further performance gains may be realized by organizational reforms that merge township RCCs into county RCC unions, which facilitates better intermediation of funds across regions (Cheng and Chu 2002).

Table 11.11 also reveals that the share of RCC lending to households and agriculture increased from 68 percent in 1997 to 73 percent in 2001 in Sichuan and from 55 percent in 1997 to 62 percent in 2002 in Shanxi. Lending to enterprises remained relatively stable in Sichuan but fell in Shanxi. Improved loan performance and greater propensity to lend to households suggests that the credit access of households in poor areas likely improved in the most recent period. It also suggests that governance reforms and institutional innovations (e.g., household credit ratings) have made lending in poor areas more profitable than before. However, important aspects of governance in rural financial institutions, especially RCCs, remain unresolved, such as whether RCCs should be governed as cooperatives or commercial banks and how remaining historical bad debts should be resolved (Watson 2002).

**CONCLUSIONS**

We summarize some of the main findings from the empirical analysis:

1. The ratio of loans to income, a measure of financial intermediation, was stable in rich areas but fell in poor areas. The ratio of performing loans to income, a better measure of effective intermediation, fell in all areas, but much more rapidly in poor areas.
2. Non-performing loans are significant in all areas, but greater in poor areas. They have increased over time in all regions, but faster in the richest and poorest areas. While the share of household loans that are non-performing has remained high but relatively stable, the share of TVE loans that are non-performing has increased rapidly to exceed that of household loans.

3. Loan-deposit ratios, measures of net fund outflow, are lower in rural financial institutions than in all banks and lower in poor areas than in rich areas. They have declined over time at a rate similar to that of all banks, but have declined more in richer areas.

4. Income per capita grew faster in poor areas relative to rich areas, but deposits grew more slowly.

5. Financial institutions in poor areas showed a greater willingness to lend to households, and this relative trend strengthened over time.

6. The non-performing loans problem is closely tied to institutional practices, or bank governance. While banks with greater repayment problems are reforming faster, all things held equal, it is still the case that richer areas tend to have better governance and to be reforming faster.

If we consider the motivating question for the chapter and its title, the most accurate answer is affirmative, but not for the anticipated reason, i.e., greater fund flows out of poor areas. While the increase in non-performing loans is undermining financial intermediation throughout rural China, the problem is worse in poor areas because of slower deposit growth and more serious repayment problems. However, the way the motivating question is posed may be misleading because these changes are not so much the result of financial reform as the inability of reform to reduce non-performing loans, even as many regulations (especially interest controls and restrictions on interbank lending) continue to constrain the decisions of bank managers and link lending volume closely to local resources (deposits). If this, in fact, is what is happening, or rather not happening, there is still ample scope for new changes and new distributional consequences as China continues to liberalize the financial sector in anticipation of WTO entry.

To draw policy implications, it is important to understand the reasons for poor loan performance, especially in poor areas. If poor performance reflects the lack of good projects, the efficiency-equity tradeoff becomes quite stark, and policymakers might be best advised to improve the economic environment to make investments more desirable. However, if poor performance reflects the failings of financial institutions in remote areas, because of either stifling regulation or poor management, there may be greater scope for reforms that can advance both equity and efficiency goals. While many identification problems make our empirical results more suggestive than definitive, we do find evidence that both the quality of projects and institutional practices matter. Some of the trends in the speed of institutional reforms are encouraging, others disquieting. Nonetheless, the evidence suggests there may be scope for improved performance with possibly beneficial distributional consequences from continued reforms. Indeed, the recent im-
Improvement in RCC loan performance nationwide and in poor regions in particular, which likely resulted in part from governance reforms and institutional innovations, provides additional encouraging evidence. The early experience of micro-finance institutions operating in China’s poor areas also has been very positive, supporting the notion that institutional reform and greater regulatory flexibility may encourage financial institutions to lend successfully in poor areas (Park and Ren 2001).

The prognosis for the future depends very much upon reforms that have yet to occur in China, in particular greater opening of the interbank market and interest rate liberalization. If the former occurs without the latter, the effects could be quite negative for poor areas. Lending to the poor is unlikely to be profitable unless interest rates are allowed to be higher than in other areas in order to compensate for the higher administrative costs and other risks. In this light, recent experiments with interest rate liberalization may be critical for keeping funds from flowing from poor areas, even though higher interest rates could reduce credit demand. Underlying institutional development to better enforce contracts, share credit histories, increase the effectiveness of collateral and guarantors as security for loans, increase the quality of managers and loan officers, and provide appropriate incentives will support more effective financial intermediation in both rich areas and poor, but their importance to lending in poor areas may be even greater because of the greater institutional challenges to banking with the poor.

Appendix Table 11.1
Loan Composition, Sichuan and Shanxi, 1994 and 1998

<table>
<thead>
<tr>
<th></th>
<th>1994</th>
<th></th>
<th>1998</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Firms</td>
<td>HH</td>
<td>Ag</td>
</tr>
<tr>
<td>Full sample</td>
<td>59</td>
<td>0.32</td>
<td>0.15</td>
<td>0.22</td>
</tr>
<tr>
<td>Income quartiles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>13</td>
<td>0.42</td>
<td>0.08</td>
<td>0.22</td>
</tr>
<tr>
<td>II</td>
<td>14</td>
<td>0.33</td>
<td>0.04</td>
<td>0.36</td>
</tr>
<tr>
<td>III</td>
<td>15</td>
<td>0.19</td>
<td>0.29</td>
<td>0.12</td>
</tr>
<tr>
<td>IV</td>
<td>14</td>
<td>0.05</td>
<td>0.51</td>
<td>0.09</td>
</tr>
<tr>
<td>Provinces</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sichuan</td>
<td>23</td>
<td>0.48</td>
<td>0.09</td>
<td>0.19</td>
</tr>
<tr>
<td>Shanxi</td>
<td>36</td>
<td>0.19</td>
<td>0.20</td>
<td>0.25</td>
</tr>
<tr>
<td>Bank type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABC</td>
<td>16</td>
<td>0.13</td>
<td>0.15</td>
<td>0.22</td>
</tr>
<tr>
<td>RCC</td>
<td>43</td>
<td>0.45</td>
<td>0.15</td>
<td>0.22</td>
</tr>
</tbody>
</table>

NOTE: All means are weighted by the amount of outstanding loans.
REFERENCES


There is a close relationship between the pension system and the capital market, which is evident in developed countries where pension funds with large amounts of assets are the key institutional investors in the capital markets. Although this topic has yet to receive much attention, the interaction between pension reform and capital market development is striking. In recent years we have witnessed the reform of pension systems from pay-as-you-go (PAYG) to funded systems in some Latin American and East European countries, where retirees’ pension benefits come mainly from their individual accounts, not from the contributions of the next generations. As a result, pension assets have expanded dramatically, accounting for an increasing percentage of GDP. Because of the immediate impact of the investment performance of pension funds on retirees’ pension benefits, many countries are paying close attention to the diversification of pension investments, resulting in the development of domestic capital markets. China is now undergoing a partial funded pension reform, which requires the support of the capital markets and will have a profound impact on them. Part I of this chapter provides a brief history of China’s pension reform. Part II analyzes problems and challenges in both the Chinese pension system and its capital markets. Part III presents the international experience, including an outline of the promotional impact of a funded pension system on capital markets and an analysis of the key factors influencing such an impact. Policy implications are provided in Part IV, and concluding remarks are presented in Part V.

I am most grateful to Tony Saich for his invitation to the conference, guidance on the revision of the preliminary draft, and all his help during the past several years. My sincere thanks also go to Ms. Nancy Hearst for her editing of the chapter, to Pieter Bottelier, Athar Hussain, Dali Yang, John Langlois, and Jun Ma for their useful comments at the conference. All views and errors in this chapter are my own and have nothing to do with any institution.

1. In 1987 the total assets of pension funds accounted for 29 percent of GDP in the OECD countries; in 1996, the ratio reached 38 percent. The annual growth rate of pension fund assets was 10.9 percent during the 1990–96 period.
THE EVOLUTION OF CHINA’S PENSION SYSTEM

Before China’s economic reform, which was initiated at the end of the 1970s, the provision of pension benefits to workers was the responsibility of individual state-owned enterprises (SOEs). Over the past two decades, China has undergone a series of experiments and reforms. Experimentation with municipal pooling tentatively began in 1982. In 1986, pooling was officially established across the SOEs at the municipal level, and an individual contribution scheme was implemented for contractual workers within the SOEs. In 1991, the State Council initiated experimentation with individual accounts, including contributions from both workers and enterprises. This led to the emergence of a three-tier system: a basic pension plan, a supplementary pension plan provided by some enterprises that were in sound financial condition, and individual savings. In 1995, the State Council proposed two choices—one emphasizing the pay-as-you-go public pension plan and the other allowing a greater role for a funded defined-contribution plan—and permitted municipal and prefecture governments to make their own decisions, as long as their respective provincial governments gave a green light. This unavoidably led to a highly fragmented system and resultant difficulties in management and monitoring.

In 1997, the State Council issued Document no. 26 to unify the different pension plans across the country and to establish a partial funded basic pension scheme. The scheme is a defined-benefit, pay-as-you-go system for older workers and retirees, but it is designed as a multi-pillar system combining social pooling and individual accounts for younger workers. It includes a mandatory defined-benefit paid out of the social pooling account, a monthly annuity paid out of the defined-contribution individual account, and a voluntary supplementary individual account. The most recent pension reform, under which a pilot program is being conducted in Liaoning province, was carried out at the end of 2000. In this program, the contributions to social pooling and individual accounts are derived only from enterprises and employees, respectively. At the end of 2001, the basic pension system covered 108 million workers and 33.8 million pensioners. The details of the various pension schemes are illustrated in Table 12.1.

MAJOR WEAKNESSES OF CHINA’S PENSION SYSTEM

Despite several reform experiments since the early 1980s, a partial funded pension system still suffers from several major problems, notably in the pension scheme financing and fund management arenas, which are closely related to capital market development.

Table 12.1
Comparison of Three Pension Plans

<table>
<thead>
<tr>
<th></th>
<th>Current system in China</th>
<th>Reform initiative of 1997</th>
<th>Reform initiative of 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social pooling</strong></td>
<td>Contribution: 23–34% from enterprises</td>
<td>Contribution: 17% from enterprises</td>
<td>Contribution: 20% from enterprises</td>
</tr>
<tr>
<td></td>
<td>Replacement rate: 80% or above</td>
<td>Replacement rate: 20%</td>
<td>Replacement rate: 30%</td>
</tr>
<tr>
<td></td>
<td>Coverage: SOE workers in urban areas</td>
<td>Coverage: formal sectors</td>
<td>Coverage: formal sectors</td>
</tr>
<tr>
<td><strong>Mandatory individual accounts</strong></td>
<td>Contribution: 3% from employees (Shanghai and Beijing 5%)</td>
<td>Contribution: enterprises 3%, employees 8%</td>
<td>Contribution: employees 8%</td>
</tr>
<tr>
<td></td>
<td>Replacement rate: 10%</td>
<td>Replacement rate: 38%</td>
<td>Replacement rate: about 30%</td>
</tr>
<tr>
<td><strong>Voluntary individual accounts (enterprise annuities)</strong></td>
<td>Contribution: enterprises</td>
<td>Contribution: employees</td>
<td>Contribution: employees, enterprises</td>
</tr>
</tbody>
</table>


Table 12.2
Projected Population of the Working-Age and the Elderly

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1995</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population in the 15-64 age group (millions)</td>
<td>808.3</td>
<td>845.8</td>
<td>955.9</td>
<td>988.6</td>
<td>989.4</td>
<td>962.2</td>
</tr>
<tr>
<td>Population in the 65 and older age group (millions)</td>
<td>75.9</td>
<td>8606</td>
<td>104.2</td>
<td>153.6</td>
<td>214.9</td>
<td>300.4</td>
</tr>
<tr>
<td>Demographic dependency ratio (percent)</td>
<td>9.4</td>
<td>10.2</td>
<td>10.9</td>
<td>15.5</td>
<td>21.7</td>
<td>31.2</td>
</tr>
</tbody>
</table>

* Ratio of 65 and older age group to 15–64 age group.
Source: Based on World Bank 1997.

**Financial Insufficiency**

The financial insufficiency problem stems mainly from the aging of the population, early retirements, generous benefits, and the like. According to a projection of the World Bank (1997), the demographic dependency ratio will increase from 8.7 percent in 1990 to 31.2 percent in 2050 (Table 12.2). By 2030 over one-quarter of all elderly people in the world will live in China. A PAYG system will require a contribution rate of 39.3 percent in 2033, when the dependency ratio reaches its peak. It is widely believed that even though the current partial funded system has been successfully implemented, the system will be unsustainable without further concrete reforms.

**The Severe Problem of the Implicit Pension Debt**

Implicit pension debt (IPD) refers to the benefit promises that a pension scheme makes to current workers and pensioners. The IPD is measured by adding up the present value of benefits that have to be paid to current workers and the present value of pension rights that
current workers have already earned and would have to be paid if the system were to be terminated today.

The World Bank (1996) estimated that China’s IPD would be 46–69 percent of GDP in 1994. A more recent estimate showed the IPD was as high as 94 percent of the 1998 GDP (Dorfman and Sin 2000). Calculation by Wang et al. (2001), based on the computable general equilibrium model, indicated an IPD level of 68 percent of GDP in 2000. In comparison, the recent actuarial results of the IPD provided by the task force of the State Council Office for Restructuring Economic Systems (SCORES) are much higher, at 145.4 percent of GDP in 1997 (Song et al. 2000). Taking a conservative estimate of the IPD reaching 80 percent of GDP in 1997, the total amount would be RMB 6 trillion.

The divergent estimations of the IPD are attributed mainly to different assumptions about many factors, such as coverage of the pension system, the level of pension benefits, retirement age, replacement rates, discount rates, and so forth. Since the IPD is calculated by the sum of the present value of promised benefits, the higher the discount rate (or the investment return rate of the pension reserves), the lower the IPD. The impact of the discount rate adjustment is striking. For instance, in the estimate made by SCORES, the ratio of the IPD over the GDP would be revised down dramatically from 145.4 percent to 80.8 percent, if the discount rate were to be raised from 4 percent to 6 percent.

**Notional Individual Accounts**

Due to the problem of the IPD and the lack of prefunding that is critical to the transition from the old PAYG system, the SOEs had to bear a double burden: contributions to both the social pooling and the individual accounts. In order to reduce the contribution rate of the SOEs and to enhance their competitiveness, the social pooling funds and individual accounts in the basic pension schemes in most areas are not completely separated; that is, the money in the individual accounts can be used to cover the shortfall in the social pooling funds, thus leaving the individual accounts empty. The individual accounts are supposed to be replenished promptly, but the reality is just the opposite: despite RMB 105.4 billion in the social pooling reserve at the end of 2001, the shortfall in the individual accounts is becoming larger and larger, making the partial funded pension system an illusion. On the other hand, given the rather poor performance of many SOEs and the roughly 83 percent replacement rate of the basic pension schemes, most SOEs have no capacity or incentive to sponsor enterprise annuity plans, the supplementary corporate pension schemes. As a result, only a limited amount of pension assets in the individual accounts is available for capital market investment.

From the second half of 2001, a pilot program for an urban social security system was implemented in Liaoning province. The most noteworthy aspects of this reform are the

4. At the end of 2000, 5.6 million workers participated in enterprise annuity schemes, with RMB 19.2 billion of reserves.
consolidation of social pooling and the separation of individual accounts from social pooling, which are essential measures to establish a real partial funded pension system. Both social pooling and individual accounts constitute the basic pension scheme. A supplementary corporate pension scheme, in the form of individual accounts, is encouraged as well\(^5\) and will be managed in a market-oriented manner. Despite taking the right steps, the pilot program in Liaoning is far from enough. The arrangement that 75 percent of the pension debt in the social pooling funds is paid by the central government is hardly applicable to the whole country because of the central government’s inability to bear the social pooling burden by using fiscal revenue. Moreover, the rate of contribution to the individual accounts (8 percent) is not high enough. At the end of 2001, the pension assets in the individual accounts amounted to RMB 1.3 billion and will have reached RMB 4.5 billion as of the end of 2002, which is hardly enough to meet the pension demand. Without parametric reforms\(^6\) and fundamental changes in pension management and regulation, the pension system is financially unsustainable.

**Limited Ways to Finance the IPD at Present**

There are several alternative ways for the government to finance the IPD, but none of them is easy. First, the government can adjust the budget expenditure structure, namely by transferring more general revenue to pension funds. However, given the rigid budget spending structure and the growing fiscal deficit, the affordability of this measure is quite limited. Second, the government can issue recognition bonds. In fact, however, this simply turns implicit debts into explicit debts without any reduction of the debts. The issuance and repayment of the bonds will result in higher interest rates and tax rates borne by future generations. Third, the government can make use of both welfare lotteries and sports lotteries. The problem is that the scale of such lotteries is some RMB 30–50 billion annually, only part of which can be mobilized for pension purposes. Fourth, the government can earmark state-owned assets and proceeds from selling shareholdings in listed companies for pension funds. Presumably, given the huge amount of stocks of state-owned assets,\(^7\) this is the most promising way to finance pension liabilities. In the past, listed companies made random experiments regarding the pension payment by listing proceeds.\(^8\) Aware that such actions would dampen investment interest, many firms declined to disclose related

\(^5\) It is stipulated that up to a certain level of the enterprises’ contributions to the supplementary pension schemes, or 4 percent of the employees’ payrolls, can be treated as accounting costs.

\(^6\) Such as lengthening the working period, increasing the contribution rate, lowering the benefit level, etc.

\(^7\) According to statistics from the Ministry of Finance, at the end of 1999 the aggregate of state-owned assets was RMB 9.1 trillion, of which operational assets amounted to RMB 6.8 trillion.

\(^8\) For instance, China National Offshore Oil Corporation, one of the largest oil companies in China, used $200 million of IPO proceeds for 7,000 retirees who had retired under a corporate reorganization before the company went public.
information, which had negative effects on the securities markets. After the promulgation of State Council Document no. 22 in June 2001, upon a joint stock company’s initial public offering (IPO) or new shares issuance thereafter, 10 percent of the state-owned shares in that company must be floated. All the proceeds from the state-owned share sales are earmarked for the National Social Security Fund (NSSF), the pool of assets coming from sources such as state-owned asset sales, fiscal appropriations, and the issuance of lottery tickets. As of the end of 2001, the total asset of the NSSF was RMB 80.5 billion, among which fiscal appropriations accounted for RMB 67.4 billion and proceeds from state-owned share sales RMB 12.2 billion. Unfortunately, due to the fear of a stock market dive and divergent opinions among several related government agencies, the pilot program ended only four months later; in June 2002, the state-owned share sales in the domestic stock markets were completely eliminated.

Although the renouncement of the state-owned share sales was well received by the stock markets, it has cast a long shadow on the deepening of the economic reform as a whole, not just of the single pension reform. It is true that state-owned shares cannot simply be poured into the markets at once at whatever price without any consideration of the impact on the markets. Such sales, however, would have been technically feasible had they been complemented by a step-by-step approach, the provision of some sort of subsidies to incumbent investors of tradable stocks for their losses after the market slide, and so on. As a shareholder, the government definitely has the right to sell its holdings in the stock markets, provided that there is a set of transparent and rational rules. The abandonment of the state-owned share sales signals a very worrisome fact—that the government is facing strong resistance in steering the economic reform. Even worse, it seems that the government has been “captured” by the vested interests of the vast majority of stock investors, especially of big players in the securities markets. Given the expectation that the government cannot withstand a fall in the stock markets, the financing of the IPD through a market mechanism and the correction of highly speculative stock markets will be extremely difficult, if not impossible, in the near future.

At present, it seems that the replenishment of the NSSF will be conducted mainly by asset sales to strategic investors and the direct transfer of part of the state shares of listed companies to the NSSF at no cost, leaving their flotation to the future. These measures obviously are not enough. Looking ahead, state asset sales by a market mechanism will be resumed at some point, after the 16th Communist Party Congress held in November 2002. Besides the state shares sales in IPOs, two other alternatives are worth considering.

One is state share sales of incumbent listed companies. At the end of 2001, almost 60 percent of the listed companies’ shares were state-owned, thus nontransferable. Until now, there has been no systematic strategy available for state share sales of incumbent listed companies due to its potentially destructive effect on the stock markets. The second

alternative is SOE asset sales to listed companies. A listed company would acquire a partial stake in a SOE, normally as its parent company and the controlling shareholder, with the proceeds from the share flotation. The earnings from the SOE asset sales would be turned over to the Ministry of Finance, and then to the NSSF.

**Ineffective Pension Fund Management**

At present, in sharp contrast to international norms, pension fund management and surveillance are combined, performed by social security agencies at various levels in the administrative regime. The immediate results are weak informational disclosure and a lack of monitoring, leading to the embezzlement of pension fund assets. It has been disclosed by the Ministry of Labor and Social Security that embezzlement of social security funds reached RMB 17.4 billion (around US$2.1 billion) during the period from 1996 to March 1998. Even though there were no asset misappropriations, given the investment restrictions that the pension funds can be invested only in government bonds and bank deposits and the downward trend of interest rates in recent years, the profitability of the pension funds is rather worrisome.

The reform initiative of 2000 is a step in the right direction in the sense that the management of supplementary pension schemes will be based on market principles. However, no concrete measures have followed this initiative. In addition, the management of individual accounts in the basic pension scheme remains unchanged; that is, it is in the hands of administrative agencies, with the assets allowed to be invested only in government bonds. This is sharply at odds with the trend of investment diversification.

Although there has been no fundamental change in the management regime of the partial funded pension assets, a pathbreaking event did take place in September 2000 when the National Council for the Social Security Fund (NCSSF) was established. The NCSSF is assigned the task of managing the NSSF. According to a regulation jointly issued by the Ministry of Finance and the Ministry of Labor and Social Security in December 2001, the NCSSF will not be involved in the direct investment management of the NSSF, but will delegate this responsibility to qualified asset managers, except for investment in bank deposits and the purchase of government bonds in the primary markets. The investment instruments of the NSSF are subject to draconian regulations, namely, that bank deposits and government bonds must account for 50 percent or more of investments, mutual funds and stocks 40 percent or less, and corporate and financial bonds 10 percent or less, compared with the total fund assets. Such a model is fairly professional and will have strong implications for the management of pension assets in the individual accounts.

However, it is naive to believe that the creation of the NCSSF will resolve the entrenched management problems. Management of the NCSSF still follows the outdated

model of state assets being managed by state-owned institutions. The NCSSF lacks the capacity and incentive to achieve optimal performance for the following reasons. First, the nature of the NCSSF as a direct affiliate of the State Council means that the intention of the government, rather than the interest of pensioners, is the most decisive factor in the operation of the fund. It cannot be ruled out that the government occasionally will intervene in the management of the fund for short-term purposes at the cost of the long-term interests of the pensioners. Second, the professional management of the fund is severely constrained by head-count shortages and unattractive benefit packages resulting from the strict rules on government-affiliated institutions. Third, the fact that the fund receives the pension assets without cost may weaken the fund’s incentive to achieve the highest investment return for the pensioners. Fourth, in spite of the possibility of pension assets being invested in the stock markets, a relaxation of the restrictions will take time (Wang 2002).

Unsurprisingly, at the end of 2001, government bond holdings accounted for 32.8 percent of the total assets of the NSSF, banking deposits 64.6 percent, and stock investments 1.57 percent. The return rate of the fund for 2001 was merely 2.25 percent (NCSSF 2002), just the same as the one-year household deposit rate.

**Lack of Appropriate Institutions for Pension Management and Services**

Until now, there have been no professional, market-oriented pension fund management institutions in China. The potential important players in pension management, such as commercial insurance companies and mutual fund management companies, are still afflicted with problems that cannot be neglected.12

There are several key problems in commercial companies. First, they are rather small and lack economies of scale, compared with their international competitors. The operation of commercial companies is based on the law of large numbers: the larger the scale, the easier it is for them to diversify risks and to make profits. Second, their capital bases are very weak. It has been estimated that the shortage of capital in China’s insurance

---

11. For example, local governments tend to overestimate the shortfall of pension payments in order to get more money from the central government. In the single year of 2001, the amount of pension subsidies from the central government was RMB 34.2 billion. Without strict surveillance procedures and an effective fiscal transfer system, pension assets in the fund may be taken out from time to time to cover the exaggerated pension deficit of the provinces, leaving a heavy burden on the fund.

12. On the one hand, insurance companies can sponsor pension plans and act as trustees, custodians, and/or fund managers, as in the case of the Mandatory Provident Fund in Hong Kong. On the other hand, pension funds invest heavily in disability insurance and survivorship insurance; after retirement, the pensioners often purchase life annuities. In some countries that are undertaking a three-pillar pension reform, the third pillar—the individual depository pension scheme—is managed by the insurance companies. In addition, the basic pension scheme and supplementary corporate pension scheme also require the involvement of insurance companies. As to mutual fund management companies, they are capable of accumulation, provision, and transfer of pension assets and are fully qualified for pension fund management.
companies will reach US$12 billion or more in the next five years (Ma 1999). As business expands, the capital shortage will become more serious. Third, they lack asset management capacities. Given the limitation over the past several years that insurance funds can be invested only in government bonds and bank deposits, it has not been necessary for insurance companies to have their own investment management teams. Despite the relaxation at the end of 1999, when insurance funds were allowed to enter stock markets by purchasing mutual funds, generally speaking, the investment venues of insurance companies are still very limited and the fostering of a qualified asset management team will take some time.

With regard to mutual funds, as of the end of 2001 China had 48 closed-end funds and three open-ended funds operated by fifteen fund management companies, with RMB 80.9 billion in aggregate net assets. The expansion of the mutual funds has been phenomenal, but their performance does not always surpass the market indexes. For example, in the first half of 2001, only five of the mutual funds outperformed the stock markets; even worse, 13 funds had negative returns. There are also several key problems in the mutual fund industry. First, there are conflicts of interest, manifested by insider trading by fund managers and the manipulation of their controlling shareholders, mainly securities firms. For instance, fund assets are used to purchase shares underwritten by the controlling shareholders and to buy and sell stocks together with the controlling shareholders. Second, fund managers manipulate the stock market with other financial institutions, the result not only of poor securities regulation but also of the nature of the stock market. As the stock market is extremely speculative and risky, the long-term perspectives of fund management have to give way to short-term profits; otherwise, the high level of cash distribution required by mutual fund investors cannot be met. Third, there is a lack of stock market index futures and other instruments that can be used for arbitrage by fund management companies in periods of a market downturn. Fourth, a serious shortcoming exists in the institutional design of the contractual mutual funds—namely, the lack of a distinction between the custodian and trustee of the fund—resulting in the absence of a trustee and therefore weak investor protection (Chen 2000).

Pension Investment Overshadowed by Problematic Stock Markets

China’s stock markets have been plagued with problems of large fluctuations and very weak investor protection, resulting from pervasive speculation, the low quality of listed companies, poor risk control in securities firms, and loose financial regulation. In addition, the corporate bond market is too small to provide sufficient investment instruments. As a result, pension investment prospects are largely overshadowed by underdeveloped stock markets.
In sum, a virtuous interaction between a pension scheme and capital markets hardly exists at this moment. On one hand, without the support of sound capital markets, it will be much tougher to finance pension schemes and increase the investment returns of pension funds. On the other hand, the partial funded pension system is still immature, resulting in a very small amount of assets available for capital market investment and a weak promotional impact of the funded system on the capital markets. Compared with some countries that have achieved parallel development of the pension system and capital market, China still has a long way to go.

THE INTERACTION OF A FUNDED SYSTEM WITH THE CAPITAL MARKETS: THE INTERNATIONAL EXPERIENCE

The Promotional Impact of a Funded Pension System on Capital Markets

*Increase in national savings and investment.* After the establishment of a funded pension system, pension assets grow very quickly (Table 12.3). As a result, social precautionary savings, as well as national savings, increase substantially. More money becomes available for capital market investment. In Chile, the ratio of social precautionary savings to GDP jumped from 1.9 percent in 1984 to 3.8 percent in 1994, and the ratio of national savings to GDP increased from 13.6 percent to 26.8 percent (Sanchez 1998). Managed by professional institutions, the precautionary savings are beneficial to the optimization of resource allocation and economic growth. Take venture capital as an example. In 1998, US$13.3 billion of venture capital came from the investment of pension funds, accounting for 60 percent of the venture capital commitment; in 1997, the ratio was only 33.1 percent. Without a doubt, pension funds have played a crucial role in the development of high-tech industries and the so-called “New Economy.” Another convincing example is provided by an econometric study: the blossoming of pension funds in Chile led to a rise of 1 percentage point in the total factor productivity (TFP) on a yearly basis, and the contribution factor of pension funds to the TFP was 50 percent (Aiyer 1997).

*Enhancement of financial competition and financial deepening.* The growth of pension funds represents a challenge to the dominant position of commercial banking and is beneficial to the expansion of financial markets, hence their liquidity and efficiency. A case in point is that of Chile in 1984, when the stock and bond markets were virtually negligible, compared to 1997, when the capitalization of these two markets were U.S.$7 billion and U.S.$80 billion, respectively. At the end of 1998, 63 percent of government bonds, 54 percent of mortgage bills and banking notes, 16 percent of bank deposits, and 10 percent of stocks were held by pension funds.
Table 12.3  
Private Pension Funds in Latin American Countries

<table>
<thead>
<tr>
<th></th>
<th>Total assets (billions U.S.$)</th>
<th>Percentage of GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>11.53</td>
<td>57.64</td>
</tr>
<tr>
<td>Bolivia</td>
<td>0.37</td>
<td>4.22</td>
</tr>
<tr>
<td>Brazil</td>
<td>78.31</td>
<td>104.58</td>
</tr>
<tr>
<td>Chile</td>
<td>31.37</td>
<td>60.13</td>
</tr>
<tr>
<td>Colombia</td>
<td>1.95</td>
<td>13.96</td>
</tr>
<tr>
<td>Mexico</td>
<td>9.26</td>
<td>53.11</td>
</tr>
<tr>
<td>Peru</td>
<td>1.72</td>
<td>8.01</td>
</tr>
<tr>
<td>Uruguay</td>
<td>0.36</td>
<td>1.65</td>
</tr>
<tr>
<td>Total amount/average</td>
<td>135.47</td>
<td>303.17</td>
</tr>
</tbody>
</table>

* Estimate  
SOURCE: Based on Salomon Smith Barney

Acceleration of financial innovation. The development of mortgage bonds, corporation bonds, and public agency bond markets in both Chile and Argentina has largely been attributed to pension system reforms. Recently, the emergence and growth of venture capital and infrastructure funds in these countries have attracted more and more pension investment. Furthermore, pension investment has been the driving force behind the evolution of financial derivatives. In Germany, pension funds are allowed to make alternative investments for the purpose of arbitrage. Such investments are limited to 10 percent of total pension assets in Hong Kong, but they are much more pervasive in the United States.

Reinforcement of financial regulation, resulting in better protection of investors. The safety and profitability of pension funds are critical to the pensioners’ benefits and social stability, thus posing increasing demands for sound financial regulation. Several years ago, in Chile, Argentina, and other countries where the pension systems were being overhauled, concrete steps were taken to strengthen information disclosure and fiduciary duty and to promote a crackdown on insider trading and out-of-line self-dealing so as to achieve better investor protection. A comprehensive risk evaluation system was established in Chile to compensate for the disadvantages of private risk-rating agencies and for the convenience of pension funds to choose appropriate investment instruments.

Stabilization of the securities markets and modernization of trading systems. Because of their long-term investments and predictable trading styles, pension funds are stabilizing forces in securities markets. During the 1988–92 period in Chile, the stock market variation coefficient, the ratio of the variance of monthly average returns of the market index to monthly average returns, was only 1.92, far lower than that of Mexico (2.44), Argentina (3.25), Peru (3.73), and Brazil (4.46), where pension markets were not yet flourishing (Sanchez 1998). Moreover, the large-scale investment of pension funds in securities markets resulted in substantial improvement in the market infrastructure in terms of a central depository agency, settlement and clearance system, bookkeeping system, and the like,
which led to a reduction in market transaction costs and a boosting of market liquidity and transparency. For instance, the Chilean electronic securities market that was established in 1989 reduced bond-trading costs from 0.015 percent in 1985 to almost zero at present.

An increasingly important role in corporate governance played by pension funds. As long-term investors and shareholders, pension funds pay close attention to the management of invested companies. In the United States, public pension funds are active in corporate governance. The California State Public Employee Retirement System (CalPERS) put forward a package of proposals to resolve some critical problems in corporate governance. The pension funds collaborate with one another to exclude unqualified management and to protect shareholders’ interests in M&A and other major events. Some giants in corporate America, including American Express, General Motors, and IBM, have had to change their senior management under pressure from the pension funds or other institutional investors. The growing role played by pension funds in corporate governance may be a big plus in the improvement of listed companies and the healthy development of securities markets.

Key Factors Influencing the Effects of a Funded Pension System on Capital Markets

The institutional design of the pension system. Although pension reform has been a global trend, various factors have different effects on capital markets. First, with respect to the importance of PAYG basic pension plans in the whole pension system, the dominance of basic pension plans with very high replacement rates in the whole pension system means that there is less room for funded pension plans and more gloomy prospects for capital market development, due to the much smaller asset accumulation for long-term investment and ineffective fund management by government agencies. As a result, the investment instruments are limited to government bonds and bank deposits. Second, with respect to mandatory contributions or voluntary contributions to individual accounts, mandatory contributions allow for the rapid accumulation of pension assets that then may be invested in the capital market. A private pension plan was initiated half a year later in Argentina than in Hungary, but the ratio of pension assets to GDP was 1 percent in Argentina, as opposed to 0.1 percent in Hungary, due to mandatory contributions. Third, with

13. According to statistics, the pension systems in 82 countries have been undergoing adjustment and restructuring in recent years; of these countries, 21 have initiated large-scale structural reform. The reform of a defined-benefit PAYG pension system may lead to three different systems: the first is the defined contribution and fully funded system with individual accounts after resolving the implicit pension debt (e.g., Chile, Argentina, Bolivia, Colombia, Mexico, Peru, Hungary, and Kazakhstan); the second is the notional defined contribution system without clearing the huge amount of pension liabilities (e.g., Poland, Latvia, and Sweden); the third is the occupational defined contribution pension scheme (e.g., Switzerland, Australia, and Denmark). It is noteworthy that an opposite strategy has been implemented in Singapore and Malaysia, where the defined contribution provident fund systems are being transformed into PAYG (Schwarz and Demurgic-Kunt 1999).
respect to defined-benefit or defined-contribution schemes, normally the retirement benefits from defined contribution plans are uncertain, depending to a great extent on the state of the capital market and the investment returns of the pension funds. The United States’ 401(k) plans and Chile’s private plans, typical defined-contribution plans, are playing a crucial role in the development of their respective domestic securities markets. Fourth, the market structure of the pension funds is also very important. If the pension funds are too dispersed and thus lack economies of scale, resulting from poor long-term programming, it is difficult for them to diversify their assets, not to mention to become strong institutional investors in the capital markets. For example, there were 179 pension funds in Hungary at the end of 1995, averaging merely US$0.3 million in assets per fund.

**Domestic capital market infrastructure.** A funded pension system requires such preconditions as market stability, sound commercial banking and commercial insurance systems, and effective financial regulation (Vittas 1998). Without such preconditions, it would be hard to imagine a deepening of the pension reform. Even though the capital market may have reached a certain scale at an early stage of the pension system reform, without a reasonable structure, the promotional effect is still insufficient, indicating evidence of path dependence. For instance, in some continental European countries, such as Switzerland, where the stock markets are relatively underdeveloped, the investments of the pension funds flow mainly to bonds and other fixed income financial instruments, and they have little impact on the development of domestic stock markets. In another example, 33 percent of Irish pension funds, the highest level in the industrialized countries, are invested in international stock markets because of the overconcentration of the domestic market; the largest five stocks take up close to 80 percent of the Irish share of the weighting in the MSCI EAFE Index (Gorman 1998).

**Government intervention in pension fund management.** First, the purpose of fund management may be diverted due to government policy. The fundamental objective of fund management is to provide maximum long-term returns to employees and their families, given an acceptable risk level. The absolutely clear stipulation of this point in California legislation facilitates the sufficient use of capital markets by pension funds to achieve the highest returns. But in some countries pension funds are accepted as special instruments of the government to achieve certain policy objectives. Until very recently, more than 90 percent of the provident funds in Singapore and Malaysia could be invested only in non-tradable government securities, mortgage credit agency bonds, and so on, whose interest rates were several percentage points lower than the market rates. Over the past two years, over 3.7 billion ringgit, roughly US$1 billion, from the Malaysian provident fund was spent to support state-sponsored programs, including airport construction, state-owned enterprise subsidies, and bailouts of nearly bankrupt financial institutions (Lopez 1999). It is obvious that the provident fund pool has been used for general purposes under government direction, having little impact on domestic stock market development.
The regulation of pension funds. Due to the underdevelopment of the capital market, it is quite understandable that developing countries implement draconian regulations at the beginning of their pension system reforms. But as the capital market matures, if the restrictions are not relaxed or lifted on a timely basis, they may become “bottlenecks,” inhibiting further development of the capital markets. The restrictions and their potential damages may be illustrated by several points. First, the stipulation that all pension funds can be managed only by specific pension fund management companies rules out business opportunities for insurance companies, mutual fund management companies, and so on. The immediate results of such restraints are the lack of competition in pension fund management and, as a result, higher costs and lower profitability.\footnote{Such a management style is most evident in Chile. Although the average investment return rate of pension funds was 12.7 percent over the 1982–95 period, considering the high start-up costs and sales costs, the internal return rate turned out to be negative during the first four years and merely 0.3 percent over the following five years (Shah 1997).} Second, the rigid restrictions on the pension funds’ portfolios, especially their investments in stocks, financial derivatives, and foreign securities, may suppress the development of these markets. Third, the mandate that pension fund management companies should achieve a certain level of investment return can easily lead to passivity on the part of the fund management companies and to the convergence of management styles, which is not helpful in fulfilling the pensioners’ different needs.

Fund management competition. In Chile, most of the pension funds are privately managed, characterized by “one person an account,” and “one company a fund,” meaning that if the employees are not satisfied, they are able to transfer their individual accounts to other pension funds. The resultant fund management competition leads to better services and more prudent management. In Mexico, in order to prevent a monopoly, the government mandates that the pension assets managed by a fund management company cannot exceed 20 percent of the total pension assets in the country. In sharp contrast, government agencies that manage pension funds may not be so active in pursuing higher returns for the pensioners because market competition is not a serious concern to them; even worse, they may embezzle funds if a sound monitoring system is not in place.\footnote{According to the World Bank, the performance of publicly managed pension funds is relatively poor. From 1980 to 1990, the average investment return rates of publicly managed pension funds in Egypt, Zambia, and so on were lower than –10 percent, while over the same period, the profitability of private pension funds in the United Kingdom, the United States, and the Netherlands were 8.8 percent, 8.0 percent, and 6.7 percent, respectively.} As a matter of fact, the privatization of pension fund management is a worldwide trend. In the United States, for instance, more and more regional public pension funds are managed by private asset management companies (Burton 1999).


PENSION SYSTEM REFORM AND CAPITAL MARKET DEVELOPMENT: CHINA’S REALISTIC CHOICES

Deepening the Pension System Reform

Given the unsustainability of the current system and the incomplete reform initiatives in China, a three-pillar pension system should be established, with a defined-benefit basic pension scheme as the first pillar, a supplementary corporate pension scheme as the second pillar, and an individual depository pension scheme as the third pillar.

Of the three pillars, the second, a supplementary corporate pension scheme, should play the most important role. There is some skepticism about the feasibility of such a system because it is argued that without a developed securities market in place, it is too early to talk about a three-pillar pension system. This pessimism is unfounded in the long run for several reasons. First, since asset accumulation in pension funds takes some time, only a very small amount of pension assets can initially be invested in the securities market. The government still has time to standardize and develop the securities market, presupposing a firm commitment and the right strategy. For instance, before Chile’s pension system reform in 1980, the total assets of the institutional investors, including those of the pension funds, accounted for less than 1 percent of GDP. By 1995, however, the ratio had risen dramatically to around 60 percent. Second, investment restrictions can be relaxed step by step in light of the situation in the securities market. At present, the draconian regulations can be justified. Third, at the early stage of pension system reform, the badly needed fund management experts and skills can be imported from abroad by establishing joint venture asset management firms; this is likely to take place after China’s impending accession into the WTO. According to the WTO agreement, the share of foreign partners in joint venture asset management firms can be up to 33 percent and can reach 49 percent within three years.

The keys to establishing a three-pillar pension system include a reduction in the extremely high replacement rate of social pooling, the development of supplementary corporate pension schemes, and mandatory contributions by enterprises and individuals. The most urgent step, as indicated by the State Council (2000), is to separate the individual accounts from the social pooling and to go even further by bringing them into the supplementary corporate pension schemes (Song et al. 2000).
Replenishment of the Pension Fund to Make the Individual Accounts Real

Without the pre-funding of the implicit pension debt, it is impossible to establish a sustainable pension system, let alone to boost the capital market, regardless of the blueprint for pension reform. Therefore, the replenishment of the NSSF in various ways, especially the sale and transfer of state-owned assets, should be carried out as soon as possible. Pension assets should not be transferred to the NSSF in a lump sum but broken down and injected into individual accounts. This means the ownership of the assets belongs to the account holders, instead of to the NSSF, which serves only as an agent to manage the pension assets in the best interests of the account holders, the principals. This institutional arrangement is theoretically legitimate in the sense that over the period of the planned economy, huge amounts of state assets were accumulated due to unusually high profits resulting from low worker wages, which did not include pension benefits. Therefore, this part of the so-called state assets belongs to the workers and should be returned to them as pension benefits.

No matter what measure is taken in the state asset sales and appropriations, it should be implemented in a transparent manner and should be fully in compliance with the law. Otherwise, investors, especially uninformed small investors, are likely to suffer great losses and ultimately to turn their backs on the securities market.

Improvement in Pension Management and Regulation

First, the fundamental objectives of pension fund management should be made clear by legislation: namely, to maximize the welfare of the pensioners by professional management and to avoid administrative intervention. Second, a sound fund management structure should be set up. Although the basic pension schemes are publicly managed, they should also be managed in a professional manner. Even though the management of individual accounts in the basic pension scheme is not yet on the radar screen due to their notional state, after the replenishment this issue will soon be on the horizon. As the NCSFF builds up its management capacities, it is reasonable that in the near future it will be assigned the task of individual account management. At an early stage, it may be justified for the NCSSF to contract out external portfolio management on a competitive and transparent basis, as opposed to the delegation of investment manager choice to individual enterprises or employees. The administrative costs will be much lower under such a relatively centralized management regime. However, the operation of the NCSSF should be subject to close monitoring by the pensioners. The financial statements of the NCSSF and changes in the individual accounts should be disclosed to the public more frequently, say, semi-annually or even quarterly, instead of annually as they are at present. As to the pen-
sion fund managers, I do not think it is necessary to set up specific institutions for pension fund management. The bottom lines are sufficient market competition, rigorous regulation, and the resultant sound internal risk control systems of fund managers. If they are qualified, the insurance companies and the mutual fund management companies should be allowed to bid for licenses to manage the pension assets accumulated in the individual accounts. Third, after the development of supplementary corporate pension schemes, as well as the securities market, corporate pension management committees, including representatives of management, trade unions, and social intermediaries, may be responsible for the delegation and surveillance of fund management by themselves. Fourth, by nurturing market intermediaries, including actuary, accounting, auditing, and risk rating agencies, the operation of the pension funds can be monitored more effectively. The intermediaries should accelerate the process of market-oriented reorganization by breaking away from the administrative agencies so as to eliminate intervention and to improve services in the market competition.

Relaxing Pension Fund Investment

The restrictions on securities market investment by the National Social Security Fund should be relaxed in the near future. As a first step, part of the fund assets should be invested in mutual funds. In addition, a pilot program of private-placed, open-ended funds that are specifically directed against pension funds can be carried out at this stage. The advantages of such mutual funds include easy purchase and redemption of shares, simple implementation of private placement, low sales costs, and convenient surveillance by pension funds. In order to encourage competition, two to three open-end funds can be launched. As the capital market continues to flourish, the restrictions should be eased step by step. Furthermore, the international investment of pension funds should be seriously considered for risk diversification and higher investment returns. Given the unconvertibility of RMB under the capital account, a special arrangement should be established so that a certain percentage of pension reserves can be converted into hard currencies and invested in risk-free foreign assets, for example, U.S. treasury bonds.

---

16. In order to alleviate investor redemption pressures, some initial measures may be taken: for instance, no redemption is allowed within a given period of time; only some percentage of the shares are available for redemption; the longer the investment frame, the lower the fund fees; and so on.
FURTHER DEVELOPMENT OF COMMERCIAL INSURANCE AND MUTUAL FUND INDUSTRIES

For insurance companies, several things need to be placed at the top of the agenda:

1. A strengthening of their capital bases by listing domestically or internationally, so that they are more capable of withstanding the risks. Given the insurance companies’ pressing demand for capital and the long process before listing in the domestic stock markets, international listings may be considered to be a more realistic alternative.

2. Allowing them to invest in a wide range of financial instruments and to build up their own asset management teams. Under the principle of business separation and international practice, a pilot program can be established whereby an insurance company and an asset management company are set up separately under a single holding company.

3. Encouragement of expansion by M&A on a market-oriented basis so as to increase competitiveness.

For mutual funds, it is essential to launch more financial instruments, including stock market index futures, for the purpose of risk arbitrage. Mutual fund management fees, which are relatively high compared with international standards, should be lowered even further, together with an expansion of the individual mutual fund scale. Last but not least, oversight of the mutual fund management companies should be strengthened by revising related out-of-date legislation and cracking down on the wrongdoings of the management companies, as well as those of their controlling shareholders.

Making Full Use of International Capital and Experience

In order to attract desperately needed management skills and capital, the financial opening and cooperation related to pension funds, mutual funds, and commercial companies should be accelerated. Given the fact that some joint-venture (JV) financial companies have not been successful because the Chinese partners are industrial companies and lack essential financial talent, only established financial companies in China should be allowed to form financial JVs, for the purpose of absorbing advanced managerial expertise and protecting our own interests.

CONCLUDING REMARKS

The pension system and capital market development are so closely connected that it is hard to answer the question of which comes first. On one hand, international experience shows
that a funded pension system has a profound impact on the capital market. On the other hand, without a supportive financial infrastructure and sound financial regulation, a funded system on its own cannot go far. At present, both China’s pension system and its capital markets are plagued with problems and are undergoing massive restructuring; hence, a virtuous interaction between the two has not yet been formed. The keys to a designated partial funded pension system are the separation of individual accounts from social pooling, the replenishment of individual accounts, and the pre-funding of the implicit pension debt by various means. Among these, the sale of state-owned assets is the most promising and should be promoted sooner rather than later. As a medium- to long-term goal, a three-pillar system should be established, in which the supplementary corporate pension schemes play the most important role. Investment management of pension assets in the Social Security Fund and individual accounts should be delegated to professional asset managers, and such delegation should be executed in a transparent and competitive manner. As to the capital market, it is most urgent that the major players, such as mutual funds and commercial insurance companies, accelerate the financial opening, and that financial legislation and regulation be improved.

REFERENCES


