CHAPTER 5

Finance for Urban Centers

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A major characteristic of China's economic transformation is urbanization on an unprecedented scale. The construction and real estate sectors now account for nearly 20 percent of GDP; investment in housing, the bulk of it in urban areas, grew almost 19 percent a year between 2000 and 2004. Gross investment in urban infrastructure by Shanghai alone amounted to almost $300 billion between 1990 and 2004 (Yusuf, Nabeshima, and Perkins 2006). Financing the infrastructure, housing, and working and fixed capital needs of an increasingly diverse set of enterprises—industrial and service—presents a huge challenge, in terms of both the volume and efficient allocation of resources.

Thanks to China's deep banking system and high level of household and corporate savings, funds are available in the aggregate, but the financial sector has succeeded only partially in guiding these funds to where they are needed for greatest economic efficiency. This problem is becoming a matter of greater concern as urbanization increases the flow of resources into very long-lived assets.

By far the largest component of China's financial system is banking, a sector whose structure has been evolving rapidly over the past few years. Four enormous state-controlled commercial banks represent the

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core of the system; together they control assets equivalent to about 100 percent of GDP. While in practice each bank still retains a degree of the sectoral specialization implied by its names (agriculture, construction, industry and commerce, and foreign trade), all four now offer commercial banking services on a nationwide basis. In the past, these banks were tasked with supporting state-owned enterprises (SOEs). They paid little attention to the ability of those enterprises to repay. As a result of the proliferation of the resulting nonperforming assets, public funds on the order of $400 billion have been applied to recapitalizing the banks ahead of their partial privatization to strategic foreign investors and the investing public on the Hong Kong and Shanghai exchanges ("China to Open" 2006).[1]

While the four banks still account for some 60 percent of deposits (and a somewhat smaller percentage of loans, following the sale of a sizable chunk of their nonperforming loans), other banks are making steady inroads into the urban financial market. Some have national licenses, although they concentrate on the largest cities; 113 cities also have city commercial banks.[2] The China Development Bank, funded largely by bonds sold to other intermediaries, is the most important player in credit and investment banking at the longer-term end of the market.

At first glance, China's banks, stock exchanges, and large insurance companies and the impressive physical presence of financial firms in Shanghai, Beijing, and other centers might suggest that the country's cities have the main elements of a financial system that can provide credit and risk capital. But a closer look reveals important shortcomings in the functioning of these institutions—shortcomings that can be traced to continued ambiguity over the role of the government in finance.

Not enough bank credit seems to be going to the cities and provinces where it is most needed, in part, no doubt, because locally owned private banking has faced significant regulatory obstacles and has hardly begun to be established. As for the securities markets, more than 1,430 equities are listed on the Shanghai and Shenzhen markets, most of them representing subsidiaries carved out of the more-saleable assets owned by a larger state- or collectively owned group. Typically, only about a third of the subsidiary's shares were sold on the market. In effect, the

1 At the time of writing, only the Agricultural Bank had not yet been partially privatized.

2 Thirteen banks have national licenses. All but one is majority controlled by the government or government-owned enterprises, though several also have foreign equity stakeholders. Foreign banks also operate in China, although they remain small, especially in the local currency market, where they accounted for less than one percent of loans in yuan in 2006 ("Not Too Big" 2007).

stock exchange is still dominated by government-controlled enterprises; it does not primarily provide a channel through which entrepreneurs can tap China's ample savings. This will change in the future, because firms that account for 93 percent of market capitalization have abolished the nontradable share categories and the government has lifted the ban on new listings ("China: Stock Market" 2006).

The growing housing finance market is also subject to constraints, in part because of the persistence of efforts to plan and manage the functioning of the market. Meanwhile, though urban infrastructure is being built, it is being done so without the full benefit of modern techniques of infrastructure finance that could harness a spectrum of maturities and instruments and reassign costs and risks so that they are transparently borne by those who can best absorb them.

Allocating Financing Efficiently across Provinces

Ample though its savings are, China cannot afford to misallocate them. Despite the enormous investment needs of the urban explosion, banks have not been performing their classic function—familiar from numerous historic episodes of urbanization around the world—of channeling investable funds from mature surplus regions to dynamic urban economies. Indeed, it is far from clear that credit is flowing smoothly to the right borrowers in the right cities. Recent research reveals the limited interprovincial capital mobility in China and the fact that the net banking flows that do occur do not flow to the provinces—and presumably by extension to the cities—with the most-rapid growth prospects.

Conditions in China would seem to be ideal for an integrated financial market. Not only are the main banks in each city and province the same, but the two organized securities markets seem open to enterprises from all provinces. The legal and regulatory system is common across provinces, and language problems are of relatively minor importance. Given these favorable conditions, why are funds not flowing to the places where they are needed to promote the development of China's most promising cities?

One reason relates to the governance of the state-owned commercial banks. Although each is apparently a single legal entity, these banks have operated in a highly decentralized way, and their regional management has been strongly influenced by provincial and local governments (Yi 2003). Recent steps to centralize management control, notably through the appointment process for managers, have reportedly not yet fully eliminated the divided loyalties of regional management. And by all accounts, it would be a mistake to assume that the arrival of technical support and

board representation from foreign strategic shareholders will have solved all of these problems.

One apparent consequence of this governance structure can be detected from the pattern of financial flows. The evidence suggests that a part of the savings of Chinese households has been wasted by being invested in the wrong geographical areas. If the allocation of loanable funds across provinces is wasteful, it would not be surprising if the pattern of allocation within provinces (between urban and rural areas, between different cities and different borrowers) is also prone to waste. While this conjecture must be qualified by the finding of Cull and Xu (2003) that access of enterprises to bank lending is correlated on a firm-by-firm basis with the enterprise's profitability, productivity, and employment growth, Cull and Xu (2000) also find that this relation has weakened over time.

One indication of the inefficiency of the banking sector comes from banking statistics and the allocation of bank loans across provinces. In international comparisons, deeper national financial systems are systematically associated with more rapid growth.[3] In China, however, provincial banking depth and provincial output growth are inversely related (Boyreau-Debray 2003), and provincial enterprise profitability is negatively associated with lending growth (Podpiera 2006). A perverse relation is also apparent in the market valuation of tradable shares in companies listed on the Shanghai or Shenzhen stock exchanges compared with estimates of provincial capital productivity. These anomalous patterns strongly suggest that the flow of investable funds from China's formal financial system[4] is not governed solely by the logic of the market.[5]

3 For a summary of this literature, see Honohan (2004). Most of the cross-country studies do not include China, apparently because of difficulty in matching the authors' preferred concepts of financial depth. China's exceptionally deep financial system and rapid economic growth at first sight suggest that its experience is fully consistent with the global correlation. However, more complex econometric models that take account of additional dimensions of financial sector development reduce China's ranking in this regard.

4 This is not necessarily true of investment funds from nonbanking sources, which are becoming increasingly important in China. Boyreau-Debray and Wei (2004) show that, in contrast to bank- or government-financed funds, self-financed corporate investment is higher in areas in which the marginal productivity of capital is higher. For a perspective on the institutional background that could ensure that nonstate and nonbank finance in China is more effectively channeled, see Allen, Qian, and Qian (2002).

5 The interprovincial pattern of some alternative indicators of financial development, such as greater diversity in sources of finance, is correlated with growth, as predicted by conventional theory (Boyreau-Debray 2003). These points are foreshadowed by Lardy (1998). The idea of a dividing line between coastal and noncoastal provinces should not be taken too simplistically, however, given the findings of Cull, Shen, and Xu (2003) on Sichuan Province.

One possible explanation for the peculiar pattern of investment is that the allocation of financial resources across provinces reflects the desire to ensure that adequate credit is available in poorer regions. However, the data do not support this view. Indeed, regression analysis fails to detect any significant correlation between mean provincial output per capita and bank credit.[6] Credit is thus not being systematically channeled to poor regions.[7]

The concentration of SOEs, rather than income, appears to be the most important determinant of net banking inflows. Lending is not going to where it achieves the best pay off in terms of economic growth but instead to where the state-owned banks' traditional clients are found. Presumably, the progressive commercialization of the state-owned commercial banks will eventually weaken this link, but while it persists, a price is being paid in terms of provincial growth. Poor provinces with good growth potential but relatively few state enterprises are receiving a suboptimal supply of funds. It is likely that even in provinces that are net recipients of funds, many enterprises with promising growth prospects are also being starved of funds. The empirical evidence points not only to problems in the geographic distribution of the volume of funds but to deeper contrasts between how financial intermediation has been functioning in China and how market finance is supposed to function. The most obvious structural difference that might explain this contrast is the continuing predominance of state ownership in banking in China, especially in noncoastal provinces.

It has been argued that foreign direct investment (FDI) partially offsets the distortion of banking flows, by favoring some of China's more dynamic cities.[8] This offset is only partial, however.

Analysis of interprovincial patterns of finance suggests unexploited potential for better credit allocation. One of the main barriers to exploitation of this potential has been the de facto local government control or

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6 Dayal-Gulati and Husain (2002) make a similar finding, showing that more bank credit actually slowed the speed of interprovincial income convergence. The credit data they use refer only to state-owned commercial banks, however, not to the system as a whole.

7 Such a policy goal would be difficult to rationalize. Less-prosperous provinces might need support or subsidy from the rest of the country because of their poverty and hence their inability to generate the necessary tax revenues to cover the cost of essential public services, including income support of needy households. But such resource transfers should be on a grant basis, through mostly fiscal channels, if they are to redress the poverty imbalance.

8 See Huang and Di (2004) for an argument that FDI differentially substitutes for financial market deficiencies in different Chinese provinces.

influence over the allocation of credit. This control does not come solely through exercise of ownership rights. Instead, it derives from the influence of regional governments and elites on the behavior and decisions of regional bank managers, especially managers of state-owned banks but also managers of other banks, many if not most of which are largely controlled by regional governments or owned by SOEs. By capturing the allocation of credit in this way, these government and quasi-government bodies may have thought that they were advancing the public interest. In fact, they are retarding the long-term growth and full convergence of Chinese productivity and per capita output with levels of advanced economies.

The authorities have wisely acted to alter the lines of responsibility in the banks, centralizing decisions and appointment processes with a view to weakening the influence of local governments on banking policy (Yi 2003; Zhou 2004). They have sold strategic stakes in three of the large banks to foreign investors and launched initial public offerings. Other joint stock banks, including city commercial banks, have also been partially privatized. These measures need to be supplemented by a more open approach to the establishment of private banks not linked with government or SOEs. Expansion of existing banks into a wider geographic area could also be encouraged.[9]

It might be argued that China is growing so rapidly that improvements in the allocation of credit cannot credibly enhance its growth trajectory. There are several reasons why such an argument has less weight than appears. First, much of China's growth has been achieved by a shift of labor resources away from subsistence agriculture into the modern sector, supported by capital accumulation on a vast scale, as reflected in a national saving ratio sustained at more than 35 percent for two decades (Young 2000). The huge sacrifice in current consumption (and the willingness of households to place their savings in low-yielding bank deposits) has masked the considerable inefficiencies that have been involved in the process. Second, economic depreciation of the capital thus formed may be a good deal higher than it would have been with better investment decisions; if so, net national product is growing less rapidly than appears. Third, an efficient financial sector would reduce the vulnerability of the growth process to a financial crisis.

9 To date, only two of the city commercial banks have been allowed to venture outside their own city—Bank of Shanghai into Ningbo and Bank of Beijing into Tianjin.

Several types of policy action could help. Political appointment of top managers of state-owned banks could be terminated; these positions should be filled on the basis of relevant skills, not as part of a rotation of senior government officials. Removing the automatic revolving door between banking and policy would greatly reduce the risk of confusion of roles. While the partial privatization of state-owned commercial banks will help improve governance, control of these banks still lies in the political sphere. More needs to be done to establish and maintain a sharp distinction between the government's role as owner of these banks, aimed at maximizing their value as commercial concerns, and its role in developing and enforcing prudential, competition, and monetary policies. The long-established political links to bank management at the city level will be hard to dissolve entirely, but efforts to do so are highly desirable.

Ensuring that Urban Enterprises Are Well Run

Although governments provide the major economic base and rationale for a few great world cities, the dynamism of most cities comes from trade, commerce, finance, and production. Wholesale financial services agglomerate in urban centers. Partly because of the high skill levels and corresponding remuneration and the costly ancillary services that high finance can command, cities that excel in this field typically act as magnets for other leading enterprises, support cultural activities, and attract tourism in a virtuous circle. Hong Kong (China) is a classic example, now joined by Shanghai and other Chinese cities.

In general, the engines of urban dynamism are enterprises. Most urban economies can flourish only if enterprises have access to finance, and—even more important—existing enterprises make the most of their position and potential by being well managed.[10] One way of ensuring that enterprises are well managed is to allow corporate control to be contested. For medium-size and large enterprises, the equity market provides an important potential tool for enabling corporate control to pass into more-effective hands.

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10 Following the approval of bill issuance by the People's Bank of China in May 2005, $27 billion worth of bills were traded in the first three-quarters of 2006. Other types of short-term debt instruments are also coming into widespread use. These include drafts (which must be settled within 90 days) and entrustment loans (loans between firms mediated by banks) ("Out of the Shadows" 2006).

China's equity markets made a brave start; the number of equities listed on the two mainland exchanges, Shanghai and Shenzhen, is impressive. Primary and rights issues of equities have raised an annual average of about 1 percent of GDP in recent years and close to 2 percent of GDP in 2007—a sizable sum, albeit dwarfed by the annual average net increase of about 17 percent of GDP in nongovernment lending by the banking system ("China: Stock Market Surge" 2007). Indeed, compared with other aspects of China's growth record, the contribution of the equity market to China's growth is modest.

One reason for this is the nature of ownership rights in listed enterprises and the related barriers to change of control of underperforming enterprises. The way in which nontraded shares are traded—an issue the authorities have only recently tackled—illustrates the ambiguous and gradual manner in which the state has been disengaging its control over enterprises.

In mid-2006, before the dramatic surge in stock prices, total equity market capitalization was about 25 percent of GDP. The boom in the stock market raised total equity market capitalization to about 100 percent of GDP by August 2007. Whatever the level of capitalization at a particular date, it overstates actual capitalization, for two reasons.[11] The first is the standard adjustment that needs to be made in any stock exchange to identify the free float of shares—that is, those not tied up in strategic stakes held by controlling shareholders and others considered unlikely to offer their holdings for sale on the market. Despite an increase during 2005–06, the proportion of freely tradable shares in China was still less than 40 percent of the total, equivalent to a relatively modest 10 percent of GDP.

The second reason why China's equity market is smaller than appears is the nonstandard nature of nontradable shares. The so-called legal person (LP) and state-share categories refer to separate classes of shares, which are conceptually distinct from those listed on the Shanghai or Shenzhen markets. (LP shares are generally held by SOEs.) While these shares convey equal voting rights and claims on dividends (when paid), until mid-2005 they could not be transferred between different classes of owners,[12] and transfers of LP shares between enterprises took place at prices that seemed very far from market exchange prices.[13]

11 Throughout, the discussion relates to A shares.

12 Until 2005 neither state shares nor LP shares could be sold to the general public.

13 For the historical evolution of these distinct classes of shares, see Walter and Howie (2003).

The unusual characteristics of the LP and state shares created considerable uncertainty about the value of the company as a whole. In particular, the fear that the LP and state shares might at some point be unloaded onto the market is believed to have depressed the price of A shares.

The high elasticity with which share prices have moved in response to the issue of new tradable shares suggests that the market viewed the value of the enterprise as being divided between tradable and other shares on a fixed basis, independent of the number of shares issued.[14] That is to say, when new tradable shares were issued, the market assumed that the issuance would dilute the ownership share of existing holders but not affect the value of the state and LP shares.[15] Thus, tradable shares have not appeared to convey the same kind of entitlement that equity shares have in most advanced securities markets—even in cases where there are multiple categories of shareholding, as is the case in several European exchanges.

In April 2005, the authorities finally grasped the nettle created by the multiple share categories and began a process of converting state and LP shares into tradable shares. Each listed enterprise made the conversion independently; most compensated existing holders with an additional tranche of tradable shares, ostensibly to make provision for the fact that there would now be no legal obstacle to disposing of the remaining shares on the market.

Not long after the announcement of this conversion policy (and the accompanying one-year moratorium on new share issues), the four-year decline in A-share values went into reverse, and the index rose rapidly for the following few years, almost quadrupling by mid-2007. The process of conversion was rapid, with 93 percent of market capitalization and more than 85 percent of the number of listed enterprises having converted by September 2006.

The conversion program can be seen as a significant step toward reducing the ambiguity of the government's claim on listed enterprises. But the apparent arbitrariness of the conversion process and the compensation paid to holders of already tradable shares (in the form of

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14 Walter and Howie (2003) interpret the relation as implying paradoxically that the market attached almost no value to the LP and state shares; however, the relation is equally consistent with the more-plausible interpretation given here.

15 There have been transactions in LP shares, at heavy discounts relative to A shares (Green 2003). The discount could be interpreted as implying that these transfers are at administered prices rather than fair-market value.

shares) also shows the pervasiveness of unwritten reserve powers in this area. Who is to say that the compensation is appropriate, especially if, as argued earlier, the market previously assumed that the claims of state and LP shareholders on the company were de facto independent of the relative number of tradable and other shares outstanding? Who is to say whether shareholders really have the final say over the management and wider governance of listed enterprises (especially for listings that represent only the attractive assets of wider state enterprise groupings)? Does ultimate control of the corporate finances of listed companies still lie in the political realm? It may take more than this rationalization of share categories to clarify and build market confidence that the various levels of government really are transferring genuine ownership and control of these enterprises into private hands, as they say they are.

It is not only minority shareholders' behavior that is affected by the ambiguous dividing line between government and enterprise management in so many Chinese enterprises. Indeed, arguably much more important is the barrier this ambiguity erects to takeovers of enterprises by more effective management teams, often through merger or acquisition by a better-placed or more-skilled incumbent.[16]

Lack of a market for enterprise control is problematic not only for the listed enterprises—which after all, include the elite of Chinese industry—but also particularly for small underperforming enterprises whose control lies partly in the hands of city governments. It is not surprising that, in order to ensure no disruption to the employment or flow of tax revenues from locally controlled enterprises, governments act to block takeovers or mergers, especially if the purchasing enterprise is not from the same city (Yi 2003). The opportunity for raising productivity through rationalization and more efficient management is lost by the failure to pursue the logic of market-driven control of the deployment of enterprises' productive resources.

Even where city and provincial governments are not interfering directly, they may be influencing the efficiency and productivity of enterprises by failing to create the conditions for productivity-enhancing

16 Many advanced economies have witnessed episodes of excessive merger and acquisition activity; a number of studies claim to show that value destruction has been at least as frequent a consequence as value creation. Like other transition economies, however, China is still at the point where allocation of enterprise ownership and control is far from what can deliver the most-efficient outcome.

investment. In particular, although private property rights are protected (since the 1999 constitutional amendment, albeit not to the same extent as state property), the perception is that these rights differ across cities and enterprises. Cull and Xu (2004) examine survey responses by 2,400 enterprises in 18 cities during 2003. They find a systematic relation between the enterprises' self-assessment of the degree to which their property rights were likely to be protected and their willingness to reinvest profits. Assuring enterprises throughout China that their property rights will be protected will likely require that the central authorities play a stronger role in ensuring local compliance with national policy on property rights protection.[17]

The conversion of shareholdings by state and legal persons into standard tradable shares has been successfully accomplished. The conversion represents an essential step toward achieving transparency in the role of government agencies in corporate governance. But this process will not be fully accomplished without a coherent privatization program for moving most enterprises from state to private hands. Privatization itself will not be very effective if the security of property rights in every Chinese city is not strengthened. Strengthening these rights will require action at political, legislative, and judicial levels (Yusuf, Nabeshima, and Perkins 2006).

It is somewhat ironic that one of the ways reformers are advocating to reduce overinvestment by cash-rich enterprises is to force the payment of dividends to the state or to a state holding company (Naughton 2006). Higher wholesale deposit interest rates, and an active market for corporate control, would represent an alternative and potentially more dynamic solution to this problem.

The wider message is clear. Governments, at the municipal and higher levels, have the important tasks of building and maintaining the soft infrastructures (including legal and information infrastructures) that support productivity-enhancing enterprises. If these tasks are to lead to an expansion of financial and producer services and the associated growth of urban economies, authorities at various levels must refrain from creating ambiguity over who controls and who can control the destiny of enterprises.

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17 Qian (2003) suggests that the early success of township and village enterprises (TVEs), despite the lack of formal property rights, may reflect the political protection implicitly given to them by their links to local governments. The subsequent performance of TVEs shows the limitations of such an approach.

Financing Physical Infrastructure

Two key dimensions of urban physical infrastructure are housing and large public works. Each calls for a different financing solution.

Housing Finance

Although China's population growth and household formation rates are not high, the combination of rapid economic growth and urbanization has generated a huge demand for urban residential units and their financing. China is currently in the most-rapid phase of its urbanization. The proportion of the population in urban areas rose from 21 percent to 36 percent in the last 18 years of the 20th century. The following five years saw this percentage jump to 43 percent, still a relatively low rate, which can be expected to continue growing to beyond 60 percent before 2020. If it does, some 200 million more people will become city dwellers by 2020.

Rising living standards generally translate into higher expected quality of accommodation. Many of the apartment blocks built in the big cities in the boom years of the 1970s and 1980s are being razed to make way for larger and better units. The scope for quality improvements is considerable. By 2005, 82 percent of urban households owned their own homes, but by one estimate, 38 percent lived in housing of poor quality.

Financing the construction and purchase of these dwellings is already transforming the business model of China's banks. Negligible a decade ago, by 2006 mortgage lending accounted for about a tenth of the banks' local currency loan portfolio, and other real estate finance accounted for almost half as much again.[18] All types of banks have been active, although the Big Four have shifted into mortgages more than others, and they accounted for more than two-thirds of new bank mortgage lending in 2005.

The vigor of the banking response could conceal some problems in the future. Credit underwriting standards vary widely, and there is little relation between loan pricing and perceived credit risk. Many banks seem to be more eager to build market share than to ensure that the business is profitable. In the competition for market share, banks have been offering mortgages at the lowest long-term rate permitted by the People's Bank of China, without distinguishing borrowers by risk category. Indeed, as fixed-term mortgages have become established, they, too, have been

18 The mortgage market in China started in 1988. During 2005 the value of total outstanding mortgages exceeded 10 per cent of GDP for the first time. It still has some way to go to reach the levels attained in the Republic of Korea (27 percent), Hong Kong (China) (44 percent), or Singapore (61 percent) ("Mortgage Industry" 2006).

offered at the lowest permitted rate, without regard to the additional risks involved (Chiquier 2006). To be sure, loan delinquency rates have so far proved manageable, but this may change if mortgage portfolio growth rates and the increase in housing prices slows.

Banking systems that are more market-oriented have not been free of the problems associated with the underwriting and pricing of mortgages and mortgage-related products. But banks controlled by government-owned entities and still not fully committed to the goal of profitability are particularly prone to errors of this type.

Another segment of the Chinese mortgage market is even more ambiguously positioned in regard to viability. The Housing Provident Funds (HPFs) were established for public sector employees in the early 1990s in an attempt to move away from employer-provided housing toward an individual responsibility scheme. The funds are financed partly by mandatory employee contributions and partly by employer contributions. Ostensibly designed mainly to help low-paid workers obtain affordable housing (while also accumulating resources for eventual use in pension outlays), the funds' 10 million or so subsidized mortgages appear to have gone to the more prosperous of their 63 million savers. The local governments that control the funds have also diverted some of the resources to other uses. This kind of scheme is another half-way step between plan and market that fails to deliver the intended social goal, is susceptible to corrupt practices and subversion, and interferes with the development of a robust and sustainable mortgage system. Although HPFs account for just 12 percent the value of the mortgage market ("Mortgage Industry" 2006), the rapid emergence of banks as mortgage providers has removed most of the initial rationale for the provision of housing finance through special channels. As the HPFs are still increasing their share of mortgage finance nationwide, it is worth reforming their structure in order to remove or redirect the misaligned subsidy and to centralize underwriting and other investment decisions.[19]

The mortgage insurance industry that has emerged in China displays features of fragmentation and the lack of a coherent business model. Indeed, although they have now diversified into insuring bank mortgages, many of the one hundred or so Housing Guarantee Funds (HGFs) started as a way of insuring the loans of HPFs. As such, they too inhabit an

19 In 2005, the People's Bank of China revised the rules to allow securitization of mortgage loans and trading of such securities on the interbank market ("Mortgage Industry" 2006).

uncomfortable halfway house between government-controlled business and the market. Mortgage insurance works best when a strongly capitalized and specialized insurer pools the risks of numerous lenders, offering scale and diversification economies and pricing risks on the basis of loss experience accumulated on a nationwide basis. Charging arbitrary but seemingly low premia, the HGFs (many of them controlled by local governments or government-owned companies) inhibit the emergence of stronger and more viable mortgage insurers.

Infrastructure Finance

Considerable uncertainty exists regarding the financing costs of the vast program of infrastructure investment now under way. Much of the infrastructure investment is being financed through conventional bank loans, some of them made to contractors with an explicit or, more likely, implicit guarantee from the city and other local authorities that wish to see the projects completed.[20] It is not clear just how much of current infrastructural spending has been financed in such inefficient ways.

Although it may very well have to pay for the infrastructure in the end, the local government is unlikely to have had the opportunity to control the design, prioritization, or contract cost of the project or to monitor the progress of spending. Where a contractor has borrowed the funds and begins to foresee that the project will be financially unsuccessful, he will have an incentive to loot the project, diverting all possible resources to his personal benefit, thus deepening and accelerating insolvency and increasing the cost of the project to the local government.

Here again the problem is one of ambiguity over the dividing line between public and private. A poorly conceived and executed semi-privatization of the financing of public infrastructure is the least attractive form of financing.[21]

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20 This is not the only issue in infrastructure financing. Indeed, international experience with respect to approaches to infrastructure financing varies widely even in countries, such as Germany, Japan, and the Republic of Korea, that have relied on bank finance (see Robaschik and Yoshino 2000, who note that German policy banks have generally lent through private banks, whereas Japanese policy banks take the credit risk directly themselves).

21 It is true that the rapid infrastructural development of Germany and Japan, in the 19th century and after World War II, was accomplished without the benefit of such sophisticated financial instruments. But it is not only that the sophistication of modern finance offers new opportunities for improved allocation of risk, it is also the case that the greater potential in current conditions for risk transfer to the state, especially in China, makes the use of such opportunities essential. These points are linked to much wider issues of defining the best role for public ownership and regulation in infrastructure (see Kessides 2003).

Some of the risks of infrastructure investment can by transferred to investors who have the capacity to bear such risks through structured bond financing (Dailami and Hauswald 2003). Bonds whose returns are sensitive to cost overruns or revenue shortfalls could be attractive to insurance companies and other collective investment vehicles (including foreign investors). Because a diversified portfolio of such bonds need not be especially risky, they could be attractive even at a modest premium yield over government bonds.

China's bond market is still immature. Until 1988, no trading in treasury bonds was allowed; hence no secondary market existed (Zhou 2005). Several reforms were introduced after 1988 to make the bond market more like bond markets elsewhere. Before 1991, treasury bonds were issued through administrative assignment. Since 1995, they have been issued through syndications and auctions. To establish a benchmark, long-term bonds were introduced starting in 2001.[22] Since 2003, the Ministry of Finance has announced the schedule of new issuances in advance (Zhou 2005).

Since 2004, several initiatives have been introduced to stimulate the growth of bond markets. These initiatives include issuing subordinated bonds by commercial banks;[23] promoting the securitization of credit assets;[24] authorizing the Agricultural Development Bank of China to issue policy-related financial bonds; allowing railway bonds and corporate bonds to be circulated in the interbank market; introducing forward transactions in the interbank bond market;[25] and authorizing the Asian Development Bank and the International Finance Corporation to issue bonds denominated in yuan in China (Mu 2005).[26] To facilitate the infrastructure construction, the People's Bank of China issued "The Administrative Rules for Fund Management Firms by Commercial Banks" on February 20, 2005 to allow commercial banks to set up fund management firms (Mu 2005).

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22 In 2001, 15- and 20-year bonds were introduced; 30-year bonds were introduced in 2002 (Zhou 2005).

23 The People's Bank of China issued "The Administrative Rules on Financial Bonds in the Interbank Bond Market" on May 12, 2005 (Mu 2005).

24 The government issued the "Administrative Rules for Credit Asset Securitization Pilot Operations" on April 20, 2005 (Mu 2005).

25 Forward transactions in the interbank bond market were introduced in "The Administrative Rules for the Forward Bond Transactions in the National Interbank Bond Market" on May 11, 2005 (Mu 2005).

26 "The Provisional Administrative Rules for International Development Institutions RMB Bonds" was issued February 18, 2005.

Currently, the full range of financial derivatives that can be used to structure bonds is not available in China, not least because of regulatory impediments, some of them introduced to stem abuses in the past. The credibility of such instruments depends on achieving an adequate level of accounting and auditing for the relevant bodies. Now is the time to move progressively and carefully toward removing the legal and regulatory barriers that hamper the introduction of such bonds, though the need to build the technical skills and regulatory infrastructure required to ensure that they work well should not be underestimated.

The recent introduction of mortgage-backed securities is a useful step along this road. Removal of unduly restrictive regulation on the investment portfolio of insurance firms will also help ensure that the natural purchasers of such instruments are permitted to do so.

City governments should move away from the use of special-purpose vehicles and other rough-and-ready attempts to shift infrastructure financing off their balance sheets when the likelihood is that they will pay for them in the end, toward a more sophisticated approach, such as that described above. Well-designed infrastructure bonds can help provide what is needed: a clear dividing line between the risks to be absorbed by government and those to be absorbed by the market.

Concluding Remarks

China's cities will continue to absorb vast financial resources as they grow and consolidate in the years and decades ahead. For this flow to be ensured, several deficiencies in China's financial sector need to be corrected. The flow of investable banking funds must chase productive and well-managed firms rather than be diverted into less productive uses in the less dynamic regions and firms. Takeovers and market discipline on listed enterprises need to be more effective to ensure that these enterprises become engines of urban dynamism. If China's cities are to be well built, arrangements for mortgage and infrastructure finance need to embrace modern financial techniques more effectively.

A common theme underlies several of these shortcomings. Along several dimensions, ambiguity in the role of some level of government or its agencies is resulting in suboptimal credit and investment decisions affecting cities. This phenomenon is not unique to China, but it is arguably much more acute in China than in most countries—a legacy of both the transition process and the shifting balance of power between

regional authorities and the central authority. Resolution of these issues will be part of ongoing administrative and policy reform on a wide front, at both the city and national levels.

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