Do Financing Biases Matter for the Chinese Economy?

Yasheng Huang

It is widely acknowledged that China's financial system is deeply troubled. Its banks have very high nonperforming loan ratios and its stock market has lost 50 percent of its value since 2001 amidst a GDP growth rate averaging some 9 percent a year. Those facts about the accounting aspects of China's financial system are becoming better known in the West. However, what has not been sufficiently highlighted is the precise effect of China's dysfunctional financial system and its broader pattern of allocating resources—in favor of the state sector at the expense of the private sector—on the Chinese economy and society.

Probably the only reason economists and business analysts have found it hard to reconcile the accounting aspects of China's financial system with the performance aspects of the Chinese economy is that China's GDP growth has been so impressive. Some experts (e.g., Rawski 2001, Young 2003) have argued that China's economic performance has not been as impressive as the official statistics indicate. Their work in this area delves into rather specialized and arcane areas of Chinese methods of compiling and reporting data. While this work is analytically important and does resolve some of the puzzles of China's rapid growth, it is very technical and difficult for nonspecialists to understand. Thus, it is unlikely to grab readers' attention away from newspaper headlines touting the rise of China and the huge trade surpluses that country has accumulated.

The more typical approaches of examining China's financial sector range from acknowledging this apparent paradox between a

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dysfunctional financial system and China's good performance to trying to identify (1) an alternative and positive rationale for having China's system of finance, and (2) alternative sources of capital and finance that seem to have been more supportive of genuine growth engines (such as private firms). Many business journalists have reminded their readers that China's growth has been good but its financial system is bad. Yet there is little analysis of how one can observe both of these phenomena simultaneously.

Some economists deny that such a paradox exists. Their work amounts to backward reasoning—reasoning from outcomes to processes that produced those outcomes. They argue that since we observe good economic performance it must be the case, despite all the accounting manifestations to the contrary, that China in fact has an underlying good financial system. Why is it good? Well, because it supports social stability in a country that needs a lot of it in order to keep growing. The financial system performs a social protection function by providing resources to state-owned enterprises (SOEs) and their workers who would naturally lose from market reforms. The end result is that private firms can grow without hurting the SOE workers. We are told that this arrangement is "Pareto optimal" because it produces all winners and no losers (Lau, Qian, and Roland 2000).

Another line of inquiry acknowledges this paradox and in fact tries to explain the question posed by many business journalists—how a country can grow so fast with so many bad loans. The answer is that China's formal financial system is hugely wasteful but there are alternative financing mechanisms that have sprung up to meet the challenge of financing growth. One mechanism is informal finance. Three finance professors (Allen, Qian, and Qian 2005) have recently put forward the view that informal financial mechanisms have adequately met the financing needs of private entrepreneurs. Going forward, they argue, China should avoid adopting a financial system based on the Western model; it will do better by keeping its informal mechanisms because they have worked so well in supporting the private sector.

The other alternative financing mechanism is foreign direct investment (FDI). In the past few years, this has been my area of research (Huang 2003). The idea here is that private entrepreneurs who are shunned by China's formal financial system have been sourcing capital—in the form of equity capital or FDI—from small and medium foreign firms—most of which are based in Hong Kong, Taiwan, and Macau (or what I call ethnically Chinese economies). This is one reason why FDI permeates in China's labor-intensive industries so substantially and in ways we do not observe in other economies,

including the most successful labor-intensive exporting economies of South Korea, Taiwan, and Hong Kong in the 1960s and 1970s (where most of the exporting was via inter-firm trade, not intra-firm trade). This is also one reason why we observe labor-intensive FDI in provinces with biased financial policies and lack of labor-intensive FDI in provinces with relatively neutral financial policies. Both types of provinces may be equally successful in exporting but they do it very differently. In this story, the primary function of FDI is a kind of venture capital role in a distorted financial environment, not technology or know-how transfer that FDI specialists are obsessed with.

This article argues that the negative effects of China's poor allocation of financial and other broad economic resources are substantial. The article begins with a demonstration of just how distorted China's financial practices and policies have been. This distortion is defined as a systematic, pervasive, persistent bias in financial policies in favor of the least efficient firms in the Chinese economy—SOEs—at the expense of the most efficient firms in the Chinese economy—China's small, entrepreneurial, and private enterprises. The second section presents evidence of the negative effects of this policy bias. The evidence mainly concerns the micro aspects of the Chinese economy, such as the poor state of China's private-sector development and the poor treatment of the majority of China's population—its rural residents. I will leave aside the question whether these micro issues have affected or will affect China's GDP growth. Suffice it to say that the micro evidence here is consistent with a number of characteristics of Chinese economic growth: its heavy and growing reliance on fixed asset investments, a contraction of rural consumption in the 1990s, low domestic value-added, and so forth. The final section concludes with some broad conjectures.

Financing Biases in the Chinese Economy

China has a huge banking sector, as measured by the ratio of banking assets to GDP. But this huge banking sector has provided very few resources to China's domestic private sector. A number of indicators illustrate this point. One is that cross-country survey evidence suggests that domestic private firms in China are among the most financially constrained in the world. In fact, at least one form of a socialist solidarity seems to be alive and well: The level of financing constraints in China is comparable to the level of financing constraints among transitional European economies (such as Ukraine and Russia) and is far higher than the level of financing constraints existing in the established capitalist economies such as Malaysia, Thailand, and India.

Many observers have compared China's growth with that of East Asia. In this particular aspect (and in many other aspects as well), China is not an East Asian economy; it is a socialist economy. A further finding is that India, which is often thought of as a laggard compared with China, appears to have a financial system far more supportive of the entrepreneurial private sector.

The second aspect of our finding is that the level of financing constraints *got worse* in the 1990s over the level prevailing in the 1980s. Many Western economists believe that the decade of the 1990s represented a golden era of the Chinese economy. They hold such a view only because they know nothing about the Chinese economy other than in the 1990s. The true golden era of the Chinese economy was in the 1980s when the economy grew very fast, the ratio of consumption to GDP was rising, poverty declined sharply, social performance improved along with economic performance, the urban bias inherent in a socialist economy got attenuated, and China made gradual political reforms toward "socialism with a humane face." Most remarkably, all of this happened when some of China's most conservative leaders were alive.

Many of these productive policies were reversed in the 1990s. Urban bias came back with a vengeance; the absolute number of people living under poverty in fact increased since 1999; the ratio of consumption to GDP fell, giving an investment/GDP ratio of 0.50 in 2004 (the highest ever in the history of the People's Republic of China and maybe highest ever in the world during peace time); and, according to the current governor of China's central bank, 90 percent of China's nonperforming loans occurred in the 1990s. I write about these broad topics elsewhere. In this article, I focus on one dimension: financing constraints on domestic private-sector firms increased in the 1990s over the level prevailing in the 1980s.

Cross-Country Survey Evidence: WBES

The World Bank designed and implemented the World Business Environment Survey (WBES) in 1999–2000. The survey was carried out in 81 countries and for more than 10,000 firms operating in these countries. The survey was designed to capture the firms' views on many aspects of the business environment pertaining to their operations. An

¹There have been two studies that have used this data set. One study was conducted by a group of World Bank economists who focus on assessing the business environment around the world (Batra, Kaufmann, and Stone 2003). The other study focuses on differences in policy treatments between foreign and domestic firms (Huang 2004).

important feature of the WBES is its emphasis on entrepreneurial firms. The vast majority of the firms are owned privately. Of the entire WBES sample, only 12 percent of the firms reported some government ownership, and these firms are not controlled by the government.

The WBES went to a great length to ensure sample balances along a number of dimensions. The sectoral composition of firms is roughly allocated in accordance with their contributions to GDP. At least 15 percent of the sample is set aside for small firms—defined as firms with fewer than 50 employees—and at least 15 percent is set aside for large firms (with more than 500 employees). At least 15 percent of the sample comprises firms with foreign ownership and at least 15 percent of the firms export 20 percent of their output. WBES is the only cross-country survey that I know of that includes China along with many other countries. Thus WBES enables one to assess China comparatively against other countries.

Question 38 of the WBES asks, "Please judge on a four-point scale how problematic are the following factors for the operation and growth of your business." The response choices are: 1 (no obstacle), 2 (minor obstacle), 3 (moderate obstacle), and 4 (major obstacle). The WBES provides a choice of 11 factors for the respondent firms, one of which is the "general financing constraint" (GFC)—a measure of the perception of the severity of credit constraints, with 1 being the least severe and 4 being the most severe.

Table 1 presents the percentage shares of firms across a number of countries that ranked the GFC as a major constraint (i.e., a score of 4 in response to Question 38) or as a moderate/major obstacle (i.e., a score of either 3 or 4). Of the Chinese firms, 66.3 percent ranked the GFC as a major constraint. This percentage is the second highest, the highest being Moldova at 69.1 percent. Combining the scores of 3 and 4 as a single measure of the GFC improves China's ranking somewhat. Pakistan, Kyrgyzstan, Moldova, and Ukraine have higher scores than China whereas Romania, Belarus, and Croatia have similar scores to those of China. The percentages of Chinese firms ranking the GFC as a major constraint or as a moderate/major constraint are substantially higher than the WBES averages. The WBES averages for these two measures of the GFC are 36.3 percent and 63.5 percent, respectively.

Table 1 shows that the high Chinese GFC is not explained by income. In terms of per capita income (on the basis of purchasing power parity), several countries in Table 1 are poorer than, or at least comparable to, China—and yet they have lower GFC levels. These countries include India, Bangladesh, Indonesia, the Philippines, and Georgia. The second pattern is how China is dramatically different

	TABLE 1	JE 1	
Perception of Genera	L FINANCING CONSTRAINTS	OF GENERAL FINANCING CONSTRAINTS (GFCs): CHINA, INDIA, AND SELECTED COUNTRIES	SELECTED COUNTRIES
	General financing constrain	General financing constraints based on Question 38a in the WBES: "Please	the WBES: "Please
	judge on a four-point scale how prol	judge on a four-point scale how problematic are the following factors for the operation	ctors for the operation
	and growth	D	1
	of your business:" 1=No ok 4=Major obstacle	of your business:" 1=No obstacle, 2=Minor obstacle, 3=Moderate obstacle, 4=Major obstacle	Moderate obstacle,
	% of Firms Giving	% of Firms Giving	Per Capita Income
Countries	a Score of 4	a Score of 3 or 4	(PPP), 2001
China	66.3	80.2	4,260
South Asia			
India	25.5	52.1	2,450
Bangladesh	37.0	54.5	1,680
Pakistan	47.5	83.1	1,920
Southeast Asia			
Indonesia	41.0	50.0	2,940
Malaysia	22.1	41.0	8,340
Philippines	35.0	57.0	4,390
Singapore	9.1	30.3	24,910
Thailand	41.3	75.3	6,550

	8,660	5,980	8,083	5,950	8,440	2,860	6,370	2,710	7,610
	79.5	80.5	82.3	73.3	81.0	78.3	79.5	87.2	8.69
	51.8	59.4	54.9	56.7	58.7	58.1	48.8	64.0	35.9
Transitional Economies	Russia	Romania	Belarus	Bulgaria	Croatia	Georgia	Kazakhstan	Kyrgyzstan	Lithuania

SOURCES: WBES; per capita income data are from the World Bank (2003a).

from those countries that many scholars put in the same category as China—the fast-growing Southeast Asian countries. No country in Southeast Asia comes remotely close to China in terms of its GFC ranking. The two countries with the highest GFC levels in the Southeast Asian region are Indonesia and Thailand, but only 41 percent of the firms in those two countries ranked the GFC as a major constraint.

A China-India comparison is quite illustrative. Many specialists compare India unfavorably with China—influenced, I suspect, by the differential GDP growth rates between the two countries, rather than by a detailed examination of institutions and policies. But on the question of GFC, 80.2 percent of Chinese firms gave a score of either 3 or 4 to this question whereas 52.1 percent of Indian firms gave a score of either 3 or 4 to this question. The differential in their responses is even greater if we only look at those firms that gave a score of 4 in their responses: 66.3 percent of the Chinese firms gave a score of 4, while only 25.5 percent of the Indian firms gave a score of 4. (In the same study China fares much better when it comes to labor and licensing regulations as compared with India.) India is far closer to the countries in Southeast Asia than China in terms of GFC profiles. India's ranking is very close to that of Malaysia (25.5 percent vs. 22.1 percent) and to that of the Philippines (25.5 percent vs. 35 percent).

There are a number of reasons to believe that domestic private firms in China should be less constrained as compared with their counterparts in India. First, China has a far larger banking sector. In 2001, for example, domestic credit provided by the banking sector as a percentage of GDP was 132.7 percent in China but only 53.8 percent in India (World Bank 2003b). This implies that Chinese banks, for a given unit of GDP, lend twice as much as Indian banks. Second, China began its economic reforms a full decade earlier than India and one would expect to see financial reforms in China further ahead as compared with those in India. Finally, much of the literature on China-India comparisons portrays China as being more supportive of private entrepreneurial activities. The WBES evidence, however, does not bear out these postulations.

That India is quite close to Southeast Asia in its GFC profile is evidence that the design of financial institutions—as opposed to culture or other geography-specific factors—matters the most for access to capital on the part of private firms. This point is reinforced by the fact that China's GFC profile is broadly similar to that of the other transitional economies. Every single transitional economy included in Table 1, except for Lithuania, has a higher reported GFC level compared with the established capitalist economies. The only countries

that have a higher GFC level than China are all transitional economies. This finding suggests that the source of the financing constraints for the private sector is rooted in the legacy central planning.

Financing Biases over Time

Many analysts believe that the Chinese economy was more liberalized in the 1990s than in the 1980s. This characterization is only true in a number of areas of the Chinese economy—principally foreign trade, FDI regulations, and price liberalization of product markets. The factor markets—mainly land and finance—are a different story.

To provide more detail on this issue, we focus on the findings from a major private-sector survey conducted in 2002. This survey is a part of the regular survey efforts organized by the All-China Federation of Industry and Commerce to solicit information and views from China's private sector. Altogether, there have been six such surveys—in 1993, 1995, 1997, 2000, 2002, and 2004—the results from the 1993 and 2002 surveys provide the perspective of a decade and are also nationwide in scope.² These surveys provide information on (1) firm size, status of development, organization, and operation; (2) management system and decisionmaking style; (3) socioeconomic background of enterprise owners; (4) social mobility and network of owners; (5) source and composition of employees and employee-employer relations; and (6) income, expenditures, and assets of entrepreneurs. Of most interest to us, however, they also provide information on entrepreneurs' views on a range of issues related to government-business relations, the overall business environment, and the availability of financing.

The 2002 survey is nationwide; that is, it covered all the provinces in China. The 2002 survey covers 3,258 firms and it is apparently more heavily focused on larger firms. Almost all the firms in the 2002 survey appear to be privately operated firms (*sying qiye*) rather than individual businesses. Privately operated firms are usually larger than individual businesses, which employ only up to eight workers.

The 2002 survey shows that the importance of formal finance declined and the importance of informal finance increased. Question 8

²There was another private-sector survey in 1991, but that one was limited to what is termed "individual businesses"—that is, small single proprietorships with a few employees. The 1993 and the private-sector surveys thereafter began to focus on larger private firms that have multiple shareholders and a large number of employees. The data from the 2004 survey have not been released, although the Chinese press has made references to its summary findings.

in the 2002 survey asks the respondents to check off their sources of startup capital from the following choices: (1) savings from running small businesses, (2) savings from running small-scale production, (3) donations from friends and relatives, (4) wages, (5) informal loans, (6) bank loans, and (7) inheritance. We adopt a conservative classification scheme and classify bank loans as formal finance and informal loans as informal finance.

Table 2 reports the percentage of firms that have checked off either formal loans or informal loans as a source of initial capital. Period averages are highlighted in bold. Very few firms in the 2002 survey were founded before 1984 and thus we omitted data on those firms. We report only on those private firms that were founded as such and exclude privatized firms.³

The number of firms reporting a reliance on formal finance, at least for the subset of firms founded as private firms, declined over time. During the 1984–89 period, an average of 24.5 percent of private firms reported receiving formal finance; this ratio declined to 19.6 percent during the 1990–2001 period. For firms founded in 2001, the year touted as a breakthrough for the private sector because of Jiang Zemin's invitation for capitalists to join the Communist Party, only 15 percent of private firms reported receiving formal finance (see Column 1a). In 1984, 25 percent of firms did so, and in 1987 as many as 29 percent of firms did so.

Over the same period, the number of firms reporting a reliance on informal finance increased dramatically. For firms founded during the 1984–89 period, on average, 26.5 percent of firms reported receiving informal finance; for those founded in the 1990–2001 period, 30.9 percent did so. The gap between those reporting a reliance on formal and informal finance increased substantially in the 1990s as well. For firms founded in the 1984–89 period, the number of firms relying on formal and informal finance during the start-up period was roughly similar. For the firms founded in the 1990–2001 period, 30.9 percent of firms reported receiving informal finance as we have seen, but only 19.6 percent reporting receiving formal finance. The 1990s therefore witnessed a decline in the share of private firms able to tap resources through the formal financial sector and a corresponding growth in firms' reliance on the informal sector.

³We do not have information about when these firms were privatized, and therefore cannot know their ownership status when they received formal or informal finance. Moreover, the question contains an important ambiguity in asking for information about the firm during its "startup stage"—we do not know whether respondents interpreted the question to mean the startup of the original firms or their startup as privatized firms.

The finding that fewer private firms had access to formal finance in the 1990s than in the 1980s is striking. How should we interpret the increasing reliance on informal finance and the seeming reduction in the role of formal finance? One interpretation is that the emergence of informal finance itself indicates the government's tolerance of a greater play for market forces and private decisionmaking outside of its direct control (Tsai 2002). This allegedly explains the prominence of informal finance in some regions of China. Another way to say this is that formal and informal finances are complements.

But this is not what we observe in the data. In the 1990s, the role of formal finance declined and that of informal finance increased. The changing composition of sources of finance suggests an alternative interpretation: that these two sources of finance are substitutes. Although more research would be needed to establish this point empirically, it is likely that private entrepreneurs turned to informal finance as they faced diminishing access to formal finance. The reason is not hard to understand. Informal finance is much more expensive than formal finance. According to one study, the curb market rate in Beijing for small private firms in the late 1990s was as high as 18 percent, compared with 6 percent on formal loans (Fang 2005).

Do These Financing Biases Matter?

The financing biases against the private sector are significant. Yet, in the absence of a slowdown in the GDP growth rates, it is difficult to locate their effects. Here I suggest a number of ways to think about the effects of the severe financing biases in the Chinese economy.

The most commonly cited evidence that China's institutional environment has been supportive of its private sector is that the share of the private sector's output has grown and is at a high level. A recent OECD report (2005) estimates that China's private sector accounts for more than half of China's GDP. This output share measure captures the economic importance of the private sector in the Chinese economy, but it has a huge disability when it comes to measuring the policy environment for private firms. This measure does not distinguish between the effects of policy on the growth of this sector and a variety of other firm-level characteristics that might also be at work. Let us explain by an example. In 1985, the industrial output value of the private sector was about 2.9 percent of that of the state sector; by 1997 this ratio had risen to 70.2 percent. While the policy environment improved for the private sector during this period, it would be highly misleading to conclude that the policy environment facing the private and SOE sectors had nearly converged.

		TABLE 2		
	Perceptions of Cr	Perceptions of Credit Bias: 2002 Private-Sector Survey	TE-SECTOR SURVEY	
		(1)		(2)
	Percentage of Firms Bank Loans in	Percentage of Firms Reporting Receiving Bank Loans in the Startup Year	Percentage of Firms Informal Loans in	Percentage of Firms Reporting Receiving Informal Loans in the Startup Year
	(1a)	(1b)	(2a)	(2b)
	Privately founded	Privately founded	Privately founded	Privately founded
	firms	firms in rural areas	firms	firms in rural areas
1984	25.0	36.4	29.2	18.2
1985	26.5	50.0	20.6	33.3
1986	23.3	15.8	27.9	15.8
1987	29.0	38.5	34.2	46.2
1988	27.0	27.8	23.8	16.7
1989	16.2	27.3	23.5	27.3
1984–89 average	24.5	32.6	26.5	26.3
1990	21.3	25.0	27.7	28.1
1991	16.2	16.7	27.0	30.0
1992	23.8	25.0	27.8	22.5
1993	18.8	26.4	34.2	18.9
1994	18.2	27.6	33.2	36.2
1995	19.6	25.7	32.9	29.7
1996	19.1	25.6	31.3	30.8
1997	20.9	29.2	35.6	29.2
1998	22.3	34.3	30.9	31.4

1999	21.8	34.6	34.6	34.6
2000	18.4	28.0	28.6	24.0
2001	15.0	13.8	27.0	41.4
1990–2001 average	19.6	26.0	30.9	29.7
SOURCE: Based on Question 8 in the	e 2002 All-China Feder	ration of Industry and Cc	ommerce's private-sector survey.	

The source of ambiguity has to do with the fact that the output-share measure of reform incorporates the consequences of two very different effects. One is the "policy effect": the increase in the private-sector share that resulted from a more favorable policy environment toward private activity. But this measure also incorporates what might be called the "efficiency effect." If private firms are more efficient than SOEs—and there is massive evidence that they are—then they generate more value-added per unit of input. An increase in the output share of private firms can therefore occur without any improvement in the policy environment as long as there is competition between private firms and SOEs.

A better measure of private-sector growth is the size of individual firms (and this is a measure more commonly used in the economics literature). If we use employment as a measure of the size of private firms, Chinese private firms are extremely small. In 2003, the average employment of a domestic private firm was 14 persons. Of about 3.4 million domestic private firms, only about 1,130 of them employed more than 1,000 workers each. More tellingly, there is some evidence that in the 1990s there was no increase in the average or median size of private firms in terms of employment. There is even some evidence, although quite scattered, that the individual size of private firms in the late 1980s was larger than that in the late 1990s. Thus for some reasons, China's private entrepreneurs were unable to capitalize on the propitious macroeconomic environment to grow their enterprises. The growing aggregate size of China's private sector was a result of massive entry of new firms rather than the deepening and maturity of the existing private firms.

This observation calls into question two ideas in the conventional wisdom about Chinese reforms. One is the idea that informal and formal finances are functionally equivalent. No, they are not. Informal finance might be sufficient to finance entry of businesses or small-scale, mom-and-pop operations but it is not sufficient to finance large-scale, technologically sophisticated, modern operations. The other idea is that there are no losers in the Chinese reforms. I will show how China's rural residents lost in the 1990s, but for now it is important to note that domestic private entrepreneurs—many extremely capable, risk-taking, visionary—have lost. The least they have lost is the forgone revenue that would have accrued to them if they could have raised sufficient capital to grow their businesses. We may still evaluate the Chinese reforms positively but this evaluation would depend on assigning a greater weight to the actual losses on the part of the SOE workers than to the prospective losses of the Chinese entrepreneurs. But this is quite different from saying that there are no losers in Chinese reforms. There are losers but we may care about some losers more than others.⁴

Some may ask, "What about Lenovo?" Isn't the arrival of firms such as Lenovo a sign that China has a supportive entrepreneurial environment? Many Western analysts herald its acquisition of IBM's PC business as a harbinger of the rising world-class domestic Chinese companies. Using the success of firms like Lenovo as evidence, a *McKinsey Quarterly* article (Woetzel 2004) has gone so far as to claim that China has the "best of all possible models."

These business analysts are unusually perceptive except in one detail: Lenovo is a foreign company. All of the manufacturing, service, and R&D operations of Lenovo in China are legally organized as subsidiaries of its Hong Kong firm and as such they are subject to laws and regulations pertaining to FDI, rather than those far more restrictive laws pertaining to domestic private businesses. In 2003, seven of Lenovo's Hong Kong subsidiaries were among China's 500 largest foreign operations.

There is a good reason for this arrangement. As I showed in my book, *Selling China*, one of the substantial distortions in China is that laws and regulations have treated foreign firms better than domestic *private* firms (although worse than inefficient state firms). This has several effects, one of which is that Chinese entrepreneurs are motivated to set up branches in Hong Kong and use them to make investments in China. This is one of the few ways for them to ease the massive regulatory restrictions on their activities.

At the time of its founding, Lenovo was denied a license in PC manufacturing because it was not a traditional state firm. It ventured into PC manufacturing only under the legal cover of a Hong Kong firm, QDI, which Lenovo acquired. While many herald Lenovo as a rags-to-richs story, with a start-up capital of only \$24,000, the reality is more complicated. Its subsequent rounds of financing, including an IPO in Hong Kong, were all quite substantial and they all came from Hong Kong. China's massive financial system had little to do with Lenovo's success. Nor could the informal finance have propelled Lenovo to its current prominence.

⁴Even if we adopt this methodology, it is not clear why we should care more about the losses of the SOE workers than the forgone benefits of the private entrepreneurs. During central planning, SOE workers were the most privileged members of the Chinese society whereas many would-be entrepreneurs were at the bottom of China's social and political pyramid. ⁵Under Chinese law, as in Britain before 1997, investments from Hong Kong are treated as FDI.

⁶Hong Kong's IPO raised about US\$10 million.

Almost all other dynamic entrepreneurial firms in China have benefited from connections to Hong Kong. TCL, Galanz, and Kelon, the three most successful home appliance firms in China, all have substantial legal and financial ties to Hong Kong. In 2002, *Forbes* compiled a list of the most dynamic small firms in the world. There were 13 from India but only four from China, and each of these four firms—although run by Chinese entrepreneurs and deriving all of their revenues in China—is actually headquartered in Hong Kong.

The example of Kelon shows the importance of formal finance. Kelon, one of China's top refrigerator makers, had an IPO in Hong Kong in 1996 and then in 1997 issued additional shares, which raised about US\$90 million. Its Hong Kong affiliate also borrowed \$70 million from Bank of America in 1997. These financing schemes were critical to Kelon as the firm invested heavily in distribution networks and acquisition of compressor facilities (see Huang and Lane 2002). No informal financing scheme could have raised this kind of capital.

Although China lacks good financial institutions, it has *access* to good financial institutions in Hong Kong. Good institutions are vital for economic growth everywhere in the world and nothing from China's experience suggests otherwise. It is important to recognize how special China is: China has Hong Kong but many other poor countries do not. McKinsey's recommendation of China as "the best of all possible models" is equivalent to urging other countries to have their own Hong Kong. This advice is extremely limited in its utility.

The story of Lenovo and its Hong Kong connections tells us about both what the Chinese policymakers have done right and what the limitations of their approach are. Amidst massive institutional inefficiencies, Chinese policymakers have done two things vitally right and important. One is that they have allowed FDI to come in; the other, which is underappreciated, is that they have allowed Chinese citizens to travel abroad since the early 1980s. This mobility of people is probably the single most important reason that some of the entrepreneurs could at least escape from the clutches of a very bad system. Thus, China's success has less to do with creating efficient institutions but with allowing an escape valve from inefficient institutions.

But this escape valve is not sufficient. What about would-be entrepreneurs located in China's vast rural and interior regions that are distant from Hong Kong both geographically and culturally? Because they cannot access Hong Kong's efficient capital and institutions, FDI can never be a full substitute for good legal and financial institutions. One can even go further: China's need for an efficient financial system is even greater in the interior regions than in the coastal provinces because the interior is so short of other conditions for growth.

The concentration of FDI in urban areas demonstrates a further cost of restricting the potential of indigenous entrepreneurs. Many of the most dynamic, risk-taking, and talented entrepreneurs in China reside in the countryside. These rural entrepreneurs created China's true miracle growth in the 1980s, first by dramatically improving the agricultural yield and then by starting many small-scale businesses in food processing and construction materials. In fact, my research shows that many of the biggest private firms in the 1980s were located in the interior regions, but that those firms atrophied in the 1990s because of the failure of China's financial institutions to support them. FDI and Hong Kong can do very little—and they did very little—to help entrepreneurs in those regions.

The issue of rural China seldom features in the evaluations by many Western economists about the costs and benefits of China's reform approach, but it should—and it should do so centrally and prominently. We know a number of things about rural/urban issues in China. One is that the income disparity between rural and urban China is huge and it is likely to be among the highest in the world. The other less firmly established fact is that within-group income disparity is more severe than across-group income disparity.

We know that rural income gains have lagged behind urban income gains, but there are also suggestive data that the welfare of a substantial portion of the rural population may have declined in the 1990s compared with the 1980s. The most remarkable development is what has happened to the state of rural education in the 1990s. Despite its monumental importance, scholars who write about the pros and cons of China's reform strategy seem to have missed this issue altogether.

The data here are incomplete and preliminary. Researchers are only beginning to look into this issue and to compile an accurate empirical picture.⁷ But this much we know:

- According to official data, the number of primary schools in the rural areas declined by some 55 percent between 1987 and 2003.
- According to official data, in the late 1990s, some 40 percent of 5th graders in rural primary schools did not make it to the 6th grade.
- According to an investigation by Chinese researchers in 17 rural secondary schools, the average dropout rate was more than 43 percent and in some schools reached 70 percent.
- Some Chinese journalists reported seeing only two students

⁷I have collected data on educational expenditures at the city level to determine which factors are driving these expenditures.

- remaining in a rural 6th grade classroom. The total number of students in this school declined from 300 to 60.
- Between 1995 and 2004, college tuition rose from an average of 800 yuan to 5,000 yuan. This far outpaced the inflation in the goods sector.⁸ Some poor students committed suicide because they could not pay tuition. This phenomenon is so widespread that the term, "tuition suicide," entered into Chinese lexicon.
- Some have observed that rural students today constitute a smaller share of the college student population than in the late 1980s.

At this point, we do not know enough about these developments. But these developments are entirely consistent with the view that in the 1990s Chinese policymakers had a severe urban bias. This urban bias is manifested in the massive financial resources that have poured into Chinese urban areas in the 1990s—the skyscrapers, airports, and infrastructure projects. Many foreigners are impressed with the fancy buildings that have gone up in China's urban space. These buildings are astronomically costly. The national theater in Beijing and the headquarters of the Bank of China—possibly one of the world's worst banks—all cost in excess of \$200 million to build. Foreigners do not ask a basic question, "How are these buildings financed in a country with a per capita income of only \$1,000?" Neglect of China's rural infrastructure, of which the poor provision of education is a sign, is part of the answer.

The urban bias contains within it a subtle ownership bias. SOEs are located in the cities and a substantial part of China's private sector—outside the real estate industry—is located in the countryside. The increasing financing constraints on the private sector were not neutral in their effects: They had a larger effect on rural China because the majority of private entrepreneurs in China came from the rural areas. According to the 1991 private-sector survey of 13,259 entrepreneurs, 55 percent of them had a rural *hukou* (i.e., rural residency status). Between 1979 and the 1990s, the years with the lowest percentage shares of rural entrepreneurs are 1979 (48.6 percent), 1988 (53.9 percent), 1989 (53.7 percent), and 1990 (48.8 percent). For all the other years, the percentage shares are above 56 percent.

Many observers believe that private-sector development is an

⁸This raised an issue about the computation of Chinese deflators. It is not known at this point whether the cost-of-living index sufficiently incorporates inflation in the service sectors, such as rising costs of education and health services. A related question is that if the service-sector inflation is appropriately taken into account, what will happen to China's real GDP growth rate?

urban affair. Precisely the opposite is the case. The private sector developed fastest in those provinces that were largely rural in the late 1970s. Today some of the largest private firms in China had substantial rural origins back in the 1980s. The Hope Group, China's largest animal feed and agricultural processing firm, was founded in a rural area near Chengdu. Some of China's largest home appliance firms, such as Kelon and Galanz, were founded by rural entrepreneurs. Zhejiang, which has produced half of China's largest 500 private firms (as of 2002), was a heavily agricultural province in the late 1970s. The city that is billed as the "capital of capitalism" in China—Wenzhou in Zhejiang province—was largely a rural area. Many people forget that Guangdong province in the late 1970s was a largely rural province. If we define the private-sector development in terms of the size of individual firms, rather than in terms of the aggregate size of private firms as a whole, then in the 1980s, especially for the first five years of the 1980s, the most successful private-sector firms are found in Guangdong but also in the interior and rural regions such as Hubei, Guizhou, and the city of Xian of Shaanxi province.

Conclusion

Many Western observers believe that China today is a dynamic market economy. I agree that China has a large foreign sector that is completely market oriented, and in many downstream industries domestic entrepreneurship is vibrant and is growing very fast. But the fundamental orientation of the Chinese state has not been supportive of private ownership of assets and private provisions of goods and services.

The fact is that as of 2003, less than 2 percent of the short-term bank credits went to domestic private firms. In 2003, 40 percent of fixed asset investments occurred in the explicit state sector and another 33 percent occurred in a sector of other ownership of which state-controlled shareholding firms comprised the vast majority. Only 14 percent occurred in the explicitly private sector. Is 14 percent large or small? I do not know; all I know is that the private sector already accounted for some 20 percent of fixed asset investments as early as 1980.

In 1998, Nicholas Lardy published an excellent book on China's problematic banks. He entitled the book *China's Unfinished Economic Revolution* to convey the idea that the financial sector is the last frontier of Chinese reforms. But finance pervades every aspect of an economy, and, as impressive as the development of China's product market has been, it is undeniable that its factor markets—for

capital and land—are still tightly controlled by the state. Maybe it is time to write a book with the following title: *Has China's Economic Revolution Begun*?

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