

PROSPECTS FOR THE STATE-OWNED ENTERPRISE IN CHINA'S SOCIALIST MARKET ECONOMY*

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State-Owned Enterprises (SOEs), which are a fundamental part of China's socialist economy, are in fundamental trouble. Economic reforms have been unable to halt their relative decline, and have in fact helped to accelerate the process by introducing market competition from non-state firms. The decline has serious implications for China's future, since it is becoming more difficult for the Chinese Communist Party to maintain social and political stability, by keeping growth high and inflation and unemployment low, while simultaneously holding on to political power and socialist legitimacy.

The Socialist Market Economy: An Introduction

At the 14th National Congress of the Chinese Communist Party (CCP) in October, 1992, a new vision for the Chinese economy was announced. With Deng Xiaoping's support, the "Socialist Market Economy" (SME) signalled a return to serious economic reform after the retrenchment begun in late 1988, and helped to encourage a rapid response in the economy that has made China once again a focus of the business world's attention.

Since Deng's reforms began in 1978, China has gradually introduced the market mechanism into its socialist economy. By 1992, directive planning in agriculture had been dismantled, and in industry the proportion of output subject to the plan fell from 95 percent to under 12 percent.¹ Four-fifths of Chinese output was being sold at market prices. State enterprises were allowed to retain some of their profits, and given increased autonomy. New ownership forms were allowed in addition to collectives, and the opening

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to the outside world allowed increasing amounts of foreign investment, technology transfer, and the establishment of foreign firms.

As change has accelerated, official ideology has struggled to keep up. Initially, the introduction of market incentives was seen in the same way Lenin originally described his New Economic Policy, as "one step backward in order to take two steps forward." Markets were a characteristic of capitalism necessary to speed China's future attainment of full socialism. Zhao Ziyang's 1987 theory of the primary stage of socialism finally admitted a legitimate place for the market in the "socialist commodity economy," thereby "professionalizing" the debate over China's reform by allowing sanctioned discussion² and giving Zhao's reformers the "ideological ammunition" to fight their critics.³ Yet it wasn't until 1992 that the Chinese leadership made a permanent place for the market in China's future.

Western economists have had a difficult time describing China's new SME. Traditional definitions of market socialism rely heavily on the variety put forth by Lange.⁴ In an attempt to overcome the criticisms of von Mises that a rational allocation of resources was impossible in a socialist economy,⁵ Lange proposed that the state use free markets, not commands, to allocate labor and all goods coming out of the doors of the state enterprise. The state would maintain ownership of capital and natural resources, selling them to the enterprise at market-clearing prices determined by trial and error. State enterprises would act according to efficient rules of production, and profits would be turned over to the state as a social dividend. While Lange's model has been criticized by proponents of market socialism who have suggested alterations in order to reduce monopolistic behavior or inefficient management,⁶ the survival of the proposed economic systems relies on the state's continued monopoly in the ownership of the means of production. By ending the prohibition on individual and private enterprise, China has created a system beyond the standard theoretical framework of market socialism.

The problems of combining socialism and markets are philosophical as well as definitional. Socialism's *raison d'être* relies on Marx's description of the process by which the capitalist exploits labor's surplus value; if all value comes from labor, profit is only possible if this exploitation occurs.

However, Western economists justify markets through the idea of gains from trade, in which both parties to an exchange are better off because of decreasing marginal values. An entrepreneur who is able to bring capital and labor together with a good idea creates value by directing the exchange. Since value is not constant, the arbitrageur and speculator make society better off by moving goods from low-value uses to high-value ones. The idea that markets perform a useful social function is fundamentally at odds with Marx's views on value, and as such market socialism and its variants inherently suffer from this ideological contradiction.

China's SME is intended to remain "socialist" in a number of ways. First, state ownership is its cornerstone, and socialist forms of ownership -- including both SOEs and Collectively-Owned Enterprises (COEs) -- should predominate. Second, earned income (from labor) should be the predominant form of income, and the state should help to provide for social justice and a more equitable distribution. Third, by means of indicative (not directive) planning and investment in key projects, the state should help set the direction of the economy.⁷ Finally, it has been made clear that the CCP intends to carry out economic reforms under the SME, but has no intention to carry out political reform or otherwise relinquish its monopoly on political power. The CCP promises sustained rapid economic growth combined with political stability. Recent concerns about an "overheated" economy and plans for a "soft landing" reflect a debate about unsustainable growth rates and rising inflation rates, but do not reflect a willingness to allow economic contraction.

Chinese economic reform is a dynamic and endogenous process, by which the state reacts to problems originally created by previous state actions.⁸ Successful economic reforms solve one set of problems, only to create others; reform therefore proceeds at an unpredictable pace, according to an internal logic, and is difficult to control or plan. As a result of this unintended process, the SOE is in a serious situation. As of the first quarter of 1994, at least half of these firms are losing money, and many were only able to pay wages by a continued state subsidization that has led once again to rising price inflation rates.⁹

Current trends in the Chinese economy point towards an inherent contradiction: the CCP's political monopoly depends on state ownership, the maintenance of stability, and sustained economic growth, but the latter is undermining the former. China's government has yet to find a way to allow the SOE to wither without undermining its own ideological basis. Nor can the government easily halt this process without seriously jeopardizing the economic growth that reforms have wrought. The middle path of transforming state enterprises in order to make them competitive, however, may require costs that China's government is unwilling to pay.

Is the Chinese State-Owned Enterprise Declining?

As Chinese industrial output has grown at dramatically rapid rates, Chinese state-owned industry has stagnated. In the first quarter of 1994, industrial output from China's SOEs grew by only 0.4 percent compared to the same period a year before, a figure that lagged far behind the 17 percent overall growth of Chinese industry.¹⁰ In March, 1994, state industrial output actually declined by 1.3 percent. The difference between state and total growth rates is somewhat staggering, since the state-owned sector has long dominated China's industrial landscape.

The state firm is usually the first to feel the impact of state policies to restrict credit, reduce investment, and slow inflation, while the non-state firms depend more on their own profits and relatively informal, and difficult to control, credit sources, so the stagnation in state output could be seen as part of a business cycle. Since reforms began, however, the state-owned sector in China has in fact grown significantly. Not only were there approximately eleven thousand new state industrial enterprises between 1985 and 1993 alone, but the state workforce has increased by 35 million people since 1978, a 47 percent increase that almost kept pace with the growth of the Chinese labor force.¹¹

Numerous studies have found that SOEs have also improved overall efficiency since reform began. Using revised estimates for capital stock that removed the effects of inflation and nonproductive (e.g.

residential housing) investment,¹² Chen et al. estimated dramatic increases in multifactor productivity growth (the difference between output and weighted input growth rates) for SOEs.¹³ Estimated productivity growth rates ranged from 1.9 percent to 2.8 percent per year from 1953 to 1985, and from 4.8 percent to 5.9 percent from 1978 to 1985; a later estimate revised these productivity estimates downwards to 2.4 percent per year by accounting for increasing material inputs.¹⁴ Similar results were found in an analysis of China's iron and steel industry.¹⁵ Parker found that large and medium state-owned construction enterprises improved their technical efficiency by one to one-and-one-half percent per year between 1985 and 1987,¹⁶ and a second study estimated a similar rate of improvement between 1985 and 1988 in overall cost efficiency for all state-owned construction enterprises.¹⁷

In spite of apparent improvements in productivity, the state sector is suffering from a long-run secular decline in relative terms. Almost half of the increase in state employment since economic reforms began has been in the educational and governmental sectors, as shown in Table 1, while the state's share of industrial employment has fallen. The state-owned sector created less than a third of the net jobs in industry since 1978, even as industrial employment increased its employment share and agricultural production absorbed a relatively small share of the increased workforce.

[Insert Table 1 here or after]

The non-state sector includes a mixture of firm types. First are the urban COEs, which were originally a means of organizing small peddlers and handicrafts following the revolution, and which coexisted with SOEs through the Cultural Revolution. Rural collectives, or Township and Village Enterprises (TVEs), emerged in the late 1970s from the commune's sideline industries. Individually-owned enterprises, both rural and urban, are private enterprises with less than seven (usually family) workers. Privately-owned enterprises, which have more than seven employees, are usually combined in the catch-all "other" category along with foreign-owned enterprises and joint ventures, but have recently been reported together with individual enterprises. With almost five million new non-state industrial enterprises since 1978, these non-state firms together have increased their share of nonagricultural

employment from 44 percent to 59 percent, and have increased their share of industrial employment from 48 percent to 57 percent. They have also increased their share of nominal gross industrial output, from 22 percent in 1978 to 57 percent in 1993 and rising. Reported industrial output growth rates imply that the nominal non-state share rose to 59 percent in the first quarter of 1994.¹⁸ This rising nominal share has occurred even though the derived inflation rate for state industrial output is more than double that of the non-state sector; at current 1978 prices, the non-state sector's share of gross industrial output increased to 59 percent by 1992 alone. Prior to 1985, most of this growth was in urban COEs, but these firms have since lost ground to other non-state enterprises.

The non-state sector is catching up to the state sector in productivity, or gross output per worker, as well. The ratio of non-state to state industrial nominal productivity has increased from 31 percent to 86 percent by 1992. In fact, if 1980 constant prices are used to adjust for faster inflation in the state sector, labor productivity in the non-state industrial sector has surpassed that of the state sector. Even if the state sector still had higher productivity per worker in 1992, doubt remains that state firms were more efficient, since the standard productivity measure does not account for non-labor inputs and the state sector uses significantly more capital per worker. Certainly the state sector continues to receive two-thirds of total investment, while industrial investment accounts for anywhere between 50 percent and 60 percent of total state investment and approximately 70 percent of investment in the state sector is said to be for productive use.

This aggregate statistical evidence for the relative performance of SOEs is corroborated by several studies of Chinese enterprises that have attempted to account for multifactor productivity. Jefferson found that urban COEs in 1984 had less than 40 percent of the multifactor productivity of state enterprises, a higher marginal product of capital, and a lower marginal product of labor.¹⁹ When these estimates were improved and extended from 1980 to 1988, however, it was found that urban COEs were not only increasing output at an overall faster rate, they were increasing total factor productivity at twice the annual rate of state enterprises.²⁰ In a study of 75 large and medium-sized industrial enterprises, Lee

concluded that while reforms have pushed enterprises towards some improvement in efficiency, the effects have been relatively limited in the urban state-owned sector compared to other sectors.²¹

These comparative results extend to other ownership types and other sectors of the economy. A study by McGuckin and Nguyen examined Chinese state-owned, collective, and private enterprises in manufacturing and nonmanufacturing sectors.²² Estimated multifactor productivity was found to be rising most rapidly in the newly emerging private enterprises, while output from urban COEs was growing faster than that of state enterprises primarily due to increased material inputs. Parker found that state-owned construction enterprises were slightly more efficient in 1985-1988 than urban collective enterprises in the use of variable inputs; however, once these results are adjusted for the state sector's higher level of capital inputs, the state enterprise is found to be significantly less efficient than the collective sector, and this difference is even greater if non-productive fixed assets are included.²³

Reasons for Inefficiency in State Ownership

At current (1985-1992) real growth rates in both total and state-owned industrial production, the state's share of industrial production will fall to 30 percent by the end of the century, and by the year 2010 it will fall below 18 percent. If in the unlikely event the non-state sector maintains its current rate of growth along with the state sector, the state's share will fall to below 10 percent by the year 2010. The state sector is declining because it is not performing as well, but the reasons for the relatively poor performance of the state-owned industry are numerous and complex.

To explain the problems of state ownership, economic theory tends to stress the increased divergence of interests between principals (citizens) and their agents (managers) when information is imperfect and asymmetric, goals are multiple and contradictory, monitoring is difficult, and compensation schemes do not reflect the incentives of private property rights. Managerial income is difficult to link to performance, especially if there is a "public good" aspect to public enterprises. In the words of Colliard,

The controls are multiple, confused, crossed, superimposed. They slow down decisions in the [state-owned] enterprises, spread and dilute responsibility, limit management's authority without, however, arriving at exemplary sanctions if, eventually, blame or errors are uncovered.²⁴

The evidence for the inferiority of state ownership in developed market economies is inconclusive, however, in large part due to the preponderance of state firms in recognized areas of market failure.²⁵ Private ownership tends to excel in relatively competitive and unregulated sectors, but in the U.S. these sectors tend to have few public firms, if any. In a decreasing-cost industry subject to natural monopoly and a corresponding heavy regulatory burden, private firms may be equally inefficient. One recent study of U.S. water utilities found that the overall difference in efficiency between publicly-owned and privately-owned firms was insignificant, though public enterprises did show a greater dispersion of inefficiency.²⁶

There appears to be general agreement, however, that the state enterprise in a socialist economy has severe deficiencies, partly due to the lack of competition and misincentive in the classical socialist centrally planned and managed economy. Chinese SOEs exist in an institutional environment that severely distorts profit maximization and its accompanying efficiency conditions;²⁷ enterprise managers are given too many goals and too many restrictions. Kornai argues that the SOE is characterized by a soft budget constraint, in which firms and their managers do not bear the costs of expenditures nor the full responsibility for their results, while a paternalistic socialist state continues to provide investment funds and guarantee employment.²⁸

Factory managers find their own advancement dependent upon the opinions of a largely tenured workforce, opinions heavily influenced by the bonuses and benefits provided. Managers also fear that disgruntled workers will cause high absenteeism, tardiness, wastage of material inputs, and equipment breakdown.²⁹ A successful manager, then, is seen as a provider, one who is willing and able to get around restrictions and regulations for the benefit of workers. While improved efficiency may increase profitability and therefore the enterprise's ability to pay for bonuses and benefits-in-kind, managers also

have incentives to engage in rent-seeking behavior through negotiation with local economic bureaucracies.³⁰

Observers of Chinese state industrial enterprises find them to be bloated with excess workers, wasteful in their use of materials and machinery, resistant to change in work methods, excessively reliant on government subsidies and patronage, and lagging behind even collective enterprises in their ability to meet the needs of their customers.³¹ A significant share of state firms are chronic money losers, requiring continuous subsidies through soft credit, soft taxes, negotiable prices, or other forms of subsidy. An ongoing study at Nanjing University looked at ten local SOEs, all of which were unprofitable. Research found that the primary reasons for their poor performance included continued reliance by managers on the state to sell their goods rather than participation in the market, continued intervention by the government, and an irrational industrial and product structure that neither reflected efficient scale nor produced desired goods. Many state firms have been unable to adjust to the market economy.

In China, one of the disadvantages of the state firm is the relatively privileged and protected workforce, as well as the relatively high burden of nonproductive costs. According to official statistics, the average wage in state industry has risen faster than inflation since 1980 and faster than nominal productivity (even though prices for state industrial output have risen faster than for non-state output). The ratio of the wage in the non-state sectors to nominal productivity has fallen by up to a third, even though the average non-state wage was more than 3.6 times as large in 1992 than in 1980. In the "other" (largely private and joint venture) ownership forms of industrial enterprises, wages have increased since 1985 at a faster rate than in any other ownership form, but these wage gains have been more than offset by gains in productivity. In 1992, state industrial wages were 43 percent higher than those available in urban collectives, and only 22 percent below those of the other ownership forms; these workers in other ownership forms, however, were 130 percent (in 1990 prices) to 200 percent (in 1980 prices) more productive than those under state-ownership.

State firms tend to be older, so they have a higher proportion of retirees, and a significant portion of their expenses goes toward the provision of housing, nursery schools, primary and middle schools, and other benefits. A visit to one large Nanjing firm found that approximately half of the 5,800 employees were neither workers, engineers and technicians, or administrators, but rather teachers, groundskeepers, and cafeteria workers whose work was not directly linked to the firm's output. State firms may also be at a tax disadvantage when new firms receive tax holidays, or even lower tax rates for producing in the special economic zones or the coastal open cities. Non-state firms may in fact be "free riding on the social safety net," as argued by Aghion and Blanchard.³²

In an analysis of data from 434 Chinese cities, Wei and Lian argue that non-state and state firms have a "love-hate" relationship.³³ Existing state firms provide opportunities for non-state firms because of forward and backward supply linkages.³⁴ In a socialist economy, reducing barriers to entry for non-state firms can provide them with opportunities to engage in "cream skimming," making high profits due to irrational prices and chronic shortages in the planned economy. Non-state enterprises may be at a competitive advantage in head-to-head competition due to their lower overhead costs, and may be able to bid away better managers, workers, and inputs. On the other hand, as the non-state sector grows larger, the tendency for state firms to receive scarce inputs at controlled prices may put the non-state firms at a competitive disadvantage, though the price differential will lead to a chronic problem of resource diversion. State firms and their patrons in the bureaucracy may lobby for restrictions on non-state firms in order to eliminate this problem, and interviews with non-state managers show this to be a real concern.

Naughton argues that policies allowing entry by non-state firms effectively dismantled the state's industrial monopoly and its accompanying monopoly profits.³⁵ Sectors with the highest profit rates had the greatest degree of competition in the 1980s, and profits fell dramatically. From 1985 to 1992, total profits for state-owned independent accounting enterprises fell from 22.4 percent of the original value of fixed assets to 12.4 percent. Profits for non-state independent accounting enterprises fell during this time as

well due to this increased competition, but still remained about 60 percent higher, as a percentage of the original value of fixed assets, than profits in the state sector.

Implications of the Decline

Is the decline of the SOE important? One argument is that most non-state firms are still "socialist" and collectively-owned; since over eighty percent of China's total industrial output came from nominally socialist enterprises (including COEs as well as SOEs) in 1993, as can be seen in Table 2, this argument concludes that China's Socialist Market Economy is not really threatened. While the state share of industrial output has declined since 1978, first urban COEs then rural TVEs have gained.

[Insert Table 2 here or after]

Why has the SOE been outperformed by the COE? In the non-state sector, Chinese urban collectives are also often without significant independence from state ownership, as they are usually managed de facto by state agencies, if at a lower level of government. COEs, however, usually lack the SOE's access to the state's deep pockets, and so may in fact differ significantly in behavior. As Stepanek said, "the only people who support it are the customers."³⁶ Tang and Ma noted the number of urban collectives that were formed without governmental assistance. "Known as 'people-run collectives' (*minban jitū*), they are responsible for their own financial performance."³⁷ SOEs have not shared the same responsibility.

In southern Jiangsu province, rural enterprises are largely owned and tightly controlled by township and village governments. This "local state corporatism" is a new institutional development between state and private ownership in which "local governments have taken on many characteristics of a business corporation, with officials acting as the equivalent of a board of directors."³⁸ Certainly rural enterprises initially faced more competition than state enterprises. Lardy argues that urban collective enterprises, together with foreign joint-ventures and TVEs, have been much more "entrepreneurial" regardless of ownership form, since:

These firms generally paid something close to the real value for their capital, both fixed and working; they purchased the bulk of their inputs on relatively free markets rather than receiving materials allocated by the government at fixed prices; they paid their workers wages based on their profitability rather than following the pattern of fixed wage scales used by the state firms; and they sold most of their output at market prices rather than delivering it to the state-run commercial network at a fixed price.³⁹

So part of the relatively poor performance of state enterprises in the era of reform may be explained by their soft budget constraints and insulation from market discipline. The environment in which state enterprises operate is a significant part of the problem.

Ownership, however, may be a significant factor in enforcing market discipline and encouraging technological progress. Rural governments do have the ability to intervene in a firm's decisions and prevent its bankruptcy, an action that will become more likely as rural firms grow larger. Parker has argued that an immature socialist industry (such as the TVEs) could outperform both a immature capitalist industry and a mature socialist industry (such as China's SOEs) because bankruptcy is not allowed to idle productive capacity; in the long run, however, the technological stagnation due to the lack of a selection mechanism will dominate.⁴⁰ Managers of even model rural enterprises express deep concern not only over the political power of state firms but also the increased market competition from the small but growing private sector. Furthermore, many rural collectives may in fact be privately-owned. A study by the Asian Development Bank contended that rural private enterprises are often disguised as collective enterprises for purposes of receiving favorable treatment.⁴¹ Lin reached a similar conclusion, noting that rural private firms may turn in part of their profit, pay administrative fees, or offer shares to the township and village governments in order to receive the protection of cooperative or collective production.⁴²

Beyond the somewhat theoretical implications a declining state sector has for economic efficiency and the debate over state ownership, the political implications of this secular decline for China's economic, social, and political tableau are enormous. State ownership is clearly important to China's top leaders. Jiang Zemin recently stated that the preservation of state-owned assets was the "fundamental marker" of success in enterprise reforms.⁴³ Chen Yun has said that SOEs must remain the mainstay of the Chinese

economy if socialism is to be preserved.⁴⁴ Even Deng Xiaoping has recently stated that "the predominance of the public sector" was basic to his vision of China's economy.⁴⁵

Kornai argues that the socialist state's very legitimacy depends on state ownership for practical as well as ideological reasons.⁴⁶ Walder argues that the patronage of workers by cadres and managers in the state enterprise buys political stability and tacit acceptance of the system, since the distribution of goods and services to a potentially powerful group is based on personal relationships, or *guanxi*, as a matter of political largesse, not according to individual performance in an impersonal marketplace.⁴⁷

In order to command sufficient support, the government must either earn the loyalty of those who believe in its goals, or control enough resources to receive acquiescence from those who don't. The promise of socialism was to overturn the old society, in the belief that production relations in capitalism were the chief culprit in society's ills; once these relations were eliminated under socialism, the economy of a poor country could be quickly developed through state ownership of the means of production, mass mobilization of labor, and wise state management. Furthermore, in an existing socialist country, state ownership is important because it is the state's chief source of revenue.

One particularly dangerous problem, of course, is employment. China currently lacks the necessary infrastructure to ease the transition of state employees into other sectors. Nor is there an adequate "social safety net" to sufficiently reduce the hardship of unemployment. While the potential job losses of this relatively privileged group are small compared to the rest of the economy, state employees are generally urban, better educated, better organized, and better represented in the Chinese power structure, so unemployment among this group is more likely to create social and political instability.

A second practical problem is the differential social return on investment in the state sector. In 1992, China spent over 25 percent of national income used, or 21 percent of GNP, on investment in fixed assets of SOEs. Investment in state enterprises since 1986 accounts for a larger share of income than any period since 1949 except the Great Leap Forward. Continued investment in state enterprises, based more on demands by managers and local government officials than on any economic rationale, is a major drain

on private and government savings. To the extent that this investment is not used wisely, national potential output decreases. If other sectors have a higher real social return on capital, then it is better that investment be spent in these other sectors.

A related problem is that direct subsidization of money-losing state enterprises in their current expenditures puts excessive strains on the government's budget deficit. In 1991, the government spent 51 billion yuan on these direct subsidies and had a budget deficit of 42 billion yuan, almost half of which was financed by credits from the People's Bank of China. According to Liu Zhongli, China's Finance Minister, the 1994 deficit is projected to reach 70 billion yuan.⁴⁸ If this deficit is financed entirely through borrowing from foreign or private domestic sources, it would merely be a drain on savings. To the extent that the deficit is financed through the central bank, however, it increases the money supply. Combined with indirect subsidization of capital expenditures through the continuance of bank loans that are not repayed, in part because the Chinese banking system is under partial control of local and provincial officials, the money supply has been growing at an annual rate of almost 22 percent since 1984, while real output has been growing at an estimated 9 percent per year. Though public willingness to hold (not spend) larger stocks of money has increased somewhat, most economists believe that excessive growth of money is the primary source of inflation.

The state enterprise is the state's primary source of revenue, though it is not clear to what extent its decline will actually lead to less government revenue. In 1991, the government received over 230 billion yuan in revenue from the state-owned sector, or about 2,170 yuan per employee. On the other hand, this was offset by direct subsidies of 51 billion, direct investment expenditures of 93 billion, as well as an unknown amount of indirect subsidies. Furthermore, other sectors of the economy contribute significantly on a per-capita basis without comparable levels of corresponding government expenditures. Government revenue from the "other" forms of ownership was over 18 billion yuan in 1991, about 8,590 yuan per employee. Industry on average contributed 1,500 yuan per employee, while commerce contributed 2,740 yuan per employee to government coffers. The expansion of profitable sectors and the

contraction of unprofitable ones should help government revenues if taxes are based on profit, not ownership.

China's Options

Barring either a return to the classical socialist centrally planned and managed economy, which would likely lead to a sharp economic contraction and require revolutionary upheaval rivalling that of the Cultural Revolution, or the transition to a full market economy and private property along the path broken by Poland and the Czech Federal Republic, China has three options in response to the ongoing decline of the state sector.

Follow Taiwan's Example

If the state sector is in decline, China's first option is to allow the process to continue. Failing state firms will continue to be a drain on the government budget unless they shut their doors, or unless the state decides to privatize and is lucky enough to find a buyer. Successful state firms will continue to produce, but are generally not likely to grow as fast as the non-state sector given the experience of the past decade. A model for this experience may be found just off mainland China's coast, in Taiwan.

According to the *Economist*, average consumption patterns in mainland China today resemble those of Taiwan two to three decades ago, when the Taiwan "miracle" was well under way, in spite of the mainland's significantly lower official per-capita income.⁴⁹ An interesting comparison might also be made in terms of the state-owned industrial enterprise. In 1950, the state dominated not only politically but economically as well. Following the nationalization of Japanese holdings and the retreat of the KMT nationalists from the Chinese mainland, the state "owned all large industrial concerns and banks,"⁵⁰ effectively dominating the industrial heights. In 1952, SOEs produced 56.6 percent of Taiwan's total industrial production,⁵¹ and state firms received the largest share of investment.⁵²

But state firms in Taiwan were characterized by many of the same problems found in the mainland, at least initially, including "inefficiency, overstaffing, rigid pay structures, and bureaucratic interference."⁵³ The KMT initially favored a policy of import substitution and hand-picked supporters were helped to become industrialists dependent on the state. While KMT policy in the 1950s did not facilitate small business, neither did it prevent or obstruct small business, in part due to U.S. influence.⁵⁴ Some of Taiwan's large state firms were privatized in the 1950s, but with great difficulty due to a lack of sufficient private wealth and the unattractiveness of the poorly performing enterprises.⁵⁵ Gradually, the KMT recognized that to "survive economically, it would be necessary to liberalize the economy, permit large, globally competitive, Taiwanese-owned conglomerates to emerge, and reduce state intervention."⁵⁶

By 1964, as Taiwan's small private firms expanded into exports, the state's share of manufacturing slipped from 56.2 percent in 1952 to 38.9 percent, though government continued to control utilities, the iron and steel industry, shipbuilding, and railroads. Overall, the state share of industrial production fell to 43.7 percent in 1964. By 1975, this share fell to 15.4 percent, in spite of an average growth rate of almost 8 percent per year in real industrial output since 1952 from SOEs.⁵⁷ Real industrial output for the economy overall had increased almost twenty times since 1952, implying an astounding average annual growth rate of over 17 percent for private industry. In a sense, "the KMT party-state fell victim to its own success,"⁵⁸ and as the state sector lost economic power the pressures on the KMT's political monopoly increased.

Taiwan, however, is not a socialist country. If the CCP were to follow Taiwan's example by allowing the formal state sector to decline in importance, it would need to redefine itself, its role in the economy, and its mission. If the development of a market economy leads to less state ownership, how is the Chinese "Socialist Market Economy" to provide for a more equitable, or socialist, distribution of income? One alternative under discussion is to continue to allow competitive markets while also keeping the government involved in regulation, income distribution, and a social safety net so as to prevent the excesses of the *laissez faire* capitalist economy.

One possibility is that China's "Socialist Market Economy" may become like the German *Soziale Marktwirtschaft*, or Social Market Economy. The German SME represents a philosophical integration of the *Sozialer Rechtstät*, a society of individuals equal before the law, with the *Sozialstät*, a society of justice and shared power among groups.⁵⁹ This interventionist approach "combined concern for social justice and stability with giving scope to individual industry and initiative," and was characterized by "free enterprise tempered by a social conscience."⁶⁰ Markets were encouraged through partial or complete privatization of many state industries, little reliance on state planning, laws against limitations of competition, and noninterventionist monetary and fiscal policies. Yet the distributive outcome of markets in terms of income and power was altered through policies encouraging labor codetermination, the indexing of pensions to productivity, wages, and prices rather than individual contributions, and policies designed to encourage ownership of stock by the lower classes.

If China moves in this direction rather than towards Marx's communist utopia, there are many problems to solve. Chinese writers have expressed concern over the "welfarism" of Germany and other European countries, which some believe to a major cause of current high unemployment rates. While a social safety net has been discussed for the displaced state worker, the costs of insuring adequate social welfare systems in the Chinese countryside are beyond the means of the Chinese government in the near future.

Slow Down the Non-State Sectors

A second option is to establish policies to hinder the growth of the non-state sector, especially the enterprises under individual, private, and foreign ownership. According to Wei and Lian, "managers in state firms may exert strong pressure on various levels of government to make life difficult for non-state firms."⁶¹ Some of these policies may in fact eliminate unfair advantages these other firms may have, such as special tax holidays. Other policies may actually give additional unfair advantages to state enterprises, by further subsidizing their input prices. Competition against state enterprises may be reduced or even

eliminated by regulation. Expansion of the non-state sector may even be stifled through increased enforcement of the household registration system, preventing labor migration that acts as the labor pool for the relatively informal sectors.

One type of regulatory hindrance is the limit on employment and property income. In his description of "feasible socialism," Nove argued that individual and private enterprise should be tolerated to fill the gaps in the socialist economy, subject to firm limits: the owner must be a worker, his income must primarily come from labor and not the ownership of capital, and the number of employees under him must not be too large.⁶² This view is consistent with the belief that profit comes from exploitation of the working class rather than from a willingness to incur risk, a good idea, or an entrepreneurial spirit; it also recognizes the threat uncontrolled private firms pose for the continuation of socialism.

These strategies have been tried in China, with troubling results. Beginning in 1988, the Chinese government attempted to slow down the overheated Chinese economy. By 1989, much of this effort was being made against the non-state sector. Credit was limited, start-up tax breaks were eliminated, firms were shut down, and material flows were diverted back into the state sector. As a result, the official annual retail price inflation rate fell from approximately 18 percent in 1988 and 1989 to 2 percent in 1990, but annual real GNP growth fell from 11 percent in 1987 and 1988 to 4 percent in 1989 and 1990.

Inflation was brought down by these measures and state industry's decline was temporarily slowed. Unemployment, however, was a bigger problem. Official urban unemployment statistics showed a modest increase of 800,000 unemployed in 1989, compared to an increase of only 200,000 per year in the preceding years. However, comparing actual to trend employment figures, the Chinese social labor force declined by over 4 million people in 1989. Rural industrial employment decreased by 4.6 percent in 1989, and urban collective construction enterprise employment fell by 7.3 percent. Compared to the trend, there were 2.5 million fewer workers in rural industry in 1989 (over a third of whom could not be reabsorbed into agriculture) and 1.2 million fewer workers in urban collectives. There is anecdotal

evidence that migration of millions of displaced workers created great concern in Beijing, leading to increased pressure for a resumption of reform and expansion of the non-state sector.

A policy favoring state enterprises at the expense of the non-state sector may have too great a social cost, and the political cost may also be too high since Deng Xiaoping's view that "slow growth is not Socialism" was made public. Nor is it entirely certain that such a policy will reduce the growth of the relatively private sectors since they operate somewhat outside of the state's control. While urban and rural collective enterprises were seriously hurt by the 1989 contraction, employment in urban individually-owned enterprises only fell by 1.7 percent, while in the "other-owned" enterprises employment picked up speed, rising by 36 percent in 1988 and employing 350,000 new workers. But if more severe action to control the non-state sector cannot be taken without leading to a decline in China's growth prospects, how can the SOE maintain its dominant position in the Chinese economy?

Make the State Enterprise Competitive

If allowing the state sector to decline leads to one set of unpleasant outcomes for the Chinese government, and preventing growth in the non-state sector leads to another, the middle option is to attempt to make the state sector competitive with the non-state sector in all potentially contestable markets absent of severe external social costs. This requires that enterprise management be made equally responsive to market pressures, that state enterprises be made to compete on a "level playing field," and that the soft budget constraint of state enterprises be eliminated. These three elements are interrelated, and cannot be achieved independently of each other. In effect, state ownership can be saved if state firms come to behave like private firms.

First, management should be made truly accountable for a single criterion of performance, that of long-run profitability, and rewarded accordingly. It should be relatively simple to change managers, not just possible. The difficulty of choosing the best manager, rather than just an adequate one, means that ministry and provincial officials also must be similarly motivated. Other motivations for the state

enterprise, such as the maximization of employment, output, average retained earnings per worker, investment, and the level of technology,⁶³ will have to be foregone to the extent that they do not maximize long-run profitability. If they are accountable, managers will also have to be independent of government interference.

Second, if state enterprises are to be judged fairly in the marketplace, they will need to have the same potential cost structure as non-state firms. On one hand, either state firms must stop bearing the cost of providing housing, pensions, health care, education, and other benefits unrelated to improving productivity, and these expenses given to various levels of government, or non-state firms must be made to bear their fair share of these costs. On the other hand, input prices should be rationalized and remaining implicit subsidies under the two-tier pricing system must be eliminated. State firms pay only a small fraction of the true cost for electricity, coal, water, and many material inputs. Similarly, implicit subsidies in the purchase of capital equipment through government grants and soft loans should be stopped.

If managers are to be able to make profit-maximizing decisions, reforms that will have a major effect on urban society are necessary. The "iron rice bowl" still exists in fact, if not in statute. It should be possible to fire workers given just cause, or lay off excess workers. A recent story told among foreign businessmen is that of the joint venture manager who fired an employee who performed poorly. Hounded day after day by the disgruntled ex-employee, the manager eventually rehired the employee, commenting that he would never again terminate a Chinese worker.

This requires not only a working labor market, which China is slowly developing, but also an adequate social safety net, with unemployment benefits that make it possible for workers to look for other employment without too great a hardship. Furthermore, labor mobility implies that it must be possible to move to a new location if necessary, and to be able to find housing. Housing market reform, as described above, is linked also to changes in the role of the state-owned firm.

It is likely that under these reforms, many state firms will succeed and grow, while still others will fail. If the failing enterprise is propped up by continued government subsidies, all reforms will be for

naught, as the incentive to strive for success may disappear. Even if the manager is terminated upon failure, he may find that his staff is not overly concerned with his fate. Subsidies must be phased out in the absence of sound economic reasons, and enterprises must face the consequences. This includes indirect subsidies through bank loans given for political rather than economic reasons. For this to be a fair policy depends on continued price reforms, so that prices reflect social opportunity costs.

According to some reports, SOEs are beginning to fail in many Chinese cities. In Wuhan, for example, five SOEs went bankrupt in 1993, and the large Wuhan Iron and Steel Company has tried to reduce its workforce by creating subsidiaries that will be subject to bankruptcy in the future.⁶⁴ China's bankruptcy laws will need to be used more often, and even large firms must be allowed to fail.

The potential costs of this approach are high. Unemployment of former state employees may create urban social unrest, while labor migration may lead to rural workers putting a strain on urban infrastructure. Housing privatization may lead to the loss of homes for those without adequate savings or incomes, as well as increasing demands for increased direct wages to pay for it. The removal of enterprise costs to the state budget may make it harder for the state to ration these services, while the increased expenditure without accompanying changes in revenue may lead the state to underfund these services.

Newspaper articles during 1994 suggested that China's policymakers are very concerned about the potential for social unrest (including strikes and worker protests) resulting from continued economic reforms, and are slowing the pace of reform.⁶⁵ Even relatively successful state enterprises are facing difficulties, due to poor investments or cash flow problems resulting from unpaid debts by other state enterprises; Capital Iron and Steel Works, considered a model in its use of the contract responsibility system,⁶⁶ had to borrow to pay its wages by early 1994. Losses are leading to rising subsidies, rising credit, and continued delays on implementing any reforms that threaten money-losing enterprises.

But the costs of a temporizing policy, in order to forestall social instability, may also be high. If unprofitable state firms are heavily subsidized until some future date when they become able to compete,

then this dependence is not likely to end. If unprofitable state-owned firms continue to avoid hard decisions by lobbying for continued subsidization and implementation of reforms are delayed, inflation may get out of hand and growth may come to a halt. Though China would be helped by its past reforms and its large non-state sector, Russia's experience shows that delaying reform is a dangerous gamble.

Saving State Ownership

Economic reform policies during the 1980s intended to encourage state enterprises to rely on their own profits and bank credit rather than the state budget for capital expansion, thereby reducing the inefficiencies of investment hunger, and to allow state enterprises the ability to motivate their workers. The net effect of these reforms is uncertain, but Tidrick and Chen suggest that the "increases in financial autonomy have outpaced the increases in the cost of capital."⁶⁷ Employee bonuses were intended to act as an incentive, but a preference for an egalitarian distribution of income prevails. By not connecting individual performance to individual pay, this loss of potential worker incentive represents one of the great lost opportunities of industrial economic reform.⁶⁸ Bonuses as a percentage of profit have swelled, however; in the early 1980s, while industrial labor productivity increased by 9 percent over five years, cash and non-cash remuneration for the average worker almost doubled.⁶⁹

The consensus among many scholars of China's economy is that these reforms were not enough, nor were the reforms proposed adequately implemented. Industrial economic reform allowed enterprises to retain profit for capital accumulation and bonuses, and pushed for improvements in the production and provision of consumer goods for collective consumption. Because state pricing and planning continued to play a strong role, however, industrial reform stalled and this failure stalled agricultural reform as well.⁷⁰ Rather than breaking the iron rice bowl, neither job security nor egalitarian tendencies toward paycheck levelling were significantly affected.

The reforms unveiled at the Third Plenum of the 14th CCP Central Committee in November, 1993, represent the most dramatic set of policies to date to transform not only enterprise management but the system in which it operates. These recent reforms, described in *Jingji Ribao*,⁷¹ should be seen as a means to save the state enterprise by introducing market orientation and quasi-private incentives.

One set of new SME reforms is designed to separate the banking system's lending and subsidization roles; existing state banks are being divided into commercial banks and policy banks. In the next few years, commercial banks will increasingly become responsible for asset management and no longer subject to planning. Policy banks will be responsible for China's long-term development goals, especially in agriculture and key infrastructure projects; initially, at least, they will likely be run as a window in the local branches of the commercial banks. If successful, these changes will harden the state enterprise's budget constraint by making it more difficult for unprofitable enterprises to receive loans.

A second set of reforms in government finance is intended to strengthen the central government collection of revenue, but with the added effect of putting various types of enterprises under relatively equal rates of taxation. In effect, all enterprises types will pay flat rates on business profits, value-added, imports, and sales of certain consumption goods, while leveling taxes and administrative fees will be curtailed. Related reforms in the area of investment are intended to alter government subsidization and investment allocation for state firms.

Most dramatic of the proposed changes is the radical alteration of state enterprise management through either joint-stock systems or leasing. This "modernization" of enterprise management has three tiers. Small state enterprises, those with approximately a thousand employees or less, are to be either privatized or leased for management through the *guoyou minying* (state owned, non-state run), *gongyousiying* (publicly owned, privately run), or *minyou minying* (non-state owned and managed) systems. Medium-sized state firms are to be transformed into joint-stock corporations, with stock held by the state, employees, and other legal entities. Large state firms, those with over 3,000 employees, are to be made into limited liability shareholding corporations.⁷² These large corporations are to be held in part or even

majority by the public; the employee share is to be limited to 20 percent, and the state's share is expected to remain above 50 percent but may be allowed to eventually fall as low as 1/3. One proposal calls for 10,000 of the 13,000 large and medium state-owned firms to be "rejuvenated" with reform, 1,000 enterprises to experiment with German-style codetermination through a supervisory board, 100 firms to become full shareholding firms, and comprehensive state sector reform to take place in ten cities.⁷³

The leasing of small enterprises has, by all reports, been moving rapidly in the past year or two. In Nanjing, more than 30 percent of small commercial enterprises were reported to be operating under the *gongyou siying* system, and this was increasing work hours, improving service, guaranteeing profit and tax delivery to the government, and improving profits, with the residual going to the manager.⁷⁴ Similar reports are made elsewhere. In spite of these glowing reports, leased SOEs have also been criticized as "lame enterprises," since property rights are neither private nor public, the incentive to build and maintain capital is low, and managers are still constrained in their actions.⁷⁵

The difficulties in corporatizing the large SOEs are many. First, since the value of a stock is the perceived net present value of all future dividends, money-losing enterprises are not likely to find willing buyers unless management is expected to turn the firm around, and state enterprises have obligations that may mean unavoidable losses for any new owners. Even voluntary mergers would only be likely to occur if the new owners were able to provide superior management, dispose of the bankrupt firm's assets, or trim their workforce. Second, stock ownership must imply management rights, or at least representation by an agent interested in maximizing long-run profits. If stock sales are intended primarily to finance investment and the state has no intention of giving up control, improvements in management will be limited and the stock system will not succeed. The envisioned combination of state control with private capital is similar to the *guandu shangban* (official-supervision merchant-management) enterprises of a century ago. These enterprises and their successors, the *guanshang hoban* (official-merchant joint management), were unsuccessful at attracting private capital since officials made the decisions and merchant-

shareholders had to bear the costs. Raising concerns to a manager was, in the words of one shareholder, "like striking rocks with eggs."⁷⁶

A final problem is that if stock ownership is transferable, then it will be difficult to maintain state control. Public and private exchange of stocks will inevitably undermine the dominance of state ownership as stock flows to private individuals.⁷⁷ There are, in fact, reports that this is already occurring. Government agencies are selling stock shares on the "grey market" in order to meet their budgetary needs, or are not able to purchase their share of new stock issues. As a result, control of these state firms is slipping away from the state faster than expected.⁷⁸ A new electronic marketplace selling whole companies in Shanghai is intended eventually to sell state enterprises once the property rights arrangements can be solved.⁷⁹

The effect of these reforms on improving efficiency in the SOE will require significant ongoing study, but it does seem clear that political opposition is delaying full implementation of management and ownership changes. The process, furthermore, may not be easy to undo once begun, leading to an escalating conflict between the desire to maintain state ownership and the increasing costs of doing so as the market transforms China's economy according to its own logic.

Conclusion

In framing its stated economic goal as the Socialist Market Economy, the Chinese government promises to maintain rapid rates of growth (at least by international standards), maintain social stability, remain committed to socialist goals, and remain in power. Judging by the relative performance of state enterprises in China, some of these goals may be contradictory. Growth in the Chinese economy today is largely being fueled by the non-state sectors, and continuation of the state sector's relative decline may threaten the ability of the government to control economic activity and promote socialist outcomes. The government's only way out of this dilemma is somehow to make state enterprises more efficient, to put

them on a level playing field with non-state enterprises and make them competitive. Whether this is possible in a nonsocialist country is still a matter of research and debate, but clearly the economic reforms prior to current proposals were insufficient to make state firms efficient in socialist China.

State ownership is important to China's leaders. As a result of past reforms, however, state-owned enterprises are falling behind and becoming an increasing drain on the Chinese economy. Maintaining the state sector through continuous subsidies will lead to increasing inflationary pressures in the Chinese economy, yet allowing failing large key enterprises to go out of business may create, at least in the short-run, politically intolerable levels of urban unemployment. Reforms that are intended to improve state enterprise management may in fact undermine state control beyond acceptable levels. Whether or not the system of state ownership is doomed to decline remains to be seen, but clearly China's leaders are facing difficult choices.

Footnotes

1. Jin Dexiang, "China's Economic Policies: Impact on Southeast Asia," working paper, China Institute of Contemporary International Relations (Beijing: 1993).
2. Prybyla, Jan S., *Reform in China and Other Socialist Economies* (Washington, D.C.: AEI Press, 1990), p. 173.
3. Woo, Henry H. K., *Effective Reform in China: An Agenda* (New York: Praeger, 1991), p. 43.
4. Lange, Oskar, "On the Economic Theory of Socialism," *Review of Economic Studies* 4, no. 1/2 (1936), p. 53-71, 123-144.
5. von Mises, Ludwig, "Economic Calculation in the Socialist Commonwealth," 1920, in Friedrich A. Hayek, ed., *Collectivist Economic Planning* (1935).
6. Yunker, James, "The Microeconomic Efficiency Argument for Socialism Revisited," *Journal of Economic Issues*, 13, no. 1, (1979).
7. Jin, *op. cit.*
8. Jefferson, Gary H., and Thomas G. Rawski, "A Model of Endogenous Innovation, Competition and Property Rights Reform in Chinese Industry," working paper #289, University of Pittsburgh, Department of Economics (Pittsburgh: 1994).
9. "Ailing State Companies Stoke China Inflation," Reuters, *International Herald Tribune* (Apr. 18, 1994), p. 14.
10. "State Sector Output slows Burgeoning Economy," Kent Chen, *South China Morning Post* (Apr. 4, 1994), p. B1.
11. China State Statistical Bureau, *Zhongguo Tongji Nianjian (China Statistical Yearbook)* (Beijing: Zhongguo Tongji Chubanshe, 1993).
12. Chen Kuan, Gary H. Jefferson, Thomas G. Rawski, Wang Hongchang, and Zheng Yuxin, "New Estimates of Fixed Investment and Capital Stock for Chinese State Industry," *China Quarterly*, 114 (June 1988).
13. Chen Kuan, Wang Hongchang, Zheng Yuxin, Gary H. Jefferson, and Thomas G. Rawski, "Productivity Change in Chinese Industry: 1953-1985," *Journal of Comparative Economics*, 12, no. 4 (Dec. 1988), p. 243-66.
14. Jefferson, Gary H., Thomas G. Rawski, and Zheng Yuxin, "Growth, Efficiency, and Convergence in Chinese Industry," *Economic Development and Cultural Change*, 40, no. 2 (Jan. 1992), p. 239-66.
15. Jefferson, Gary H., "China's Iron and Steel Industry: Sources of Enterprise Efficiency and the Impact of Reform," *Journal of Development Economics*, 33, no. 2 (Oct. 1990), p. 329-55.

16. Parker, Elliott, "Shadow Factor Price Convergence and the Response of Chinese State-owned Construction Enterprises to Reform," *Journal of Comparative Economics*, forthcoming, 1995.
17. Parker, Elliott, "Relative Efficiency in Chinese Urban Construction: A Comparison of State-owned and Collective Enterprises after Reform," *China Economic Review*, 5, no. 2 (Fall 1994).
18. "1993 rewrites recordbooks for industry," *South China Morning Post* (Jan. 22, 1994), p. B1.
19. Jefferson, Gary H., "Potential Sources of Productivity Growth within Chinese Industry," *World Development*, 17, no. 1 (Jan. 1989), p. 45-68.
20. Jefferson, Rawski, and Zheng, *op. cit.*
21. Lee, Kuen, "The Chinese Model of the Socialist Enterprise: An Assessment of Its Organization and Performance," *Journal of Comparative Economics*, 14, no. 3 (Sep. 1990), p. 384-400.
22. McGuckin, Robert H., and Sang V. Nguyen, "Post-Reform Industrial Productivity Performance of China: New Evidence from the 1985 Industrial Census Data," *Economic Inquiry*, 31, no.3 (July 1993), p. 323-41.
23. Parker, "Relative Efficiency in Chinese Urban Construction," *op. cit.*
24. Colliard, Claude Albert, "Il controllo dell'impresa pubblica," 1960, cited in Sabino Cassese, "Public Control and Corporate Efficiency," in Raymond Vernon and Yair Aharoni, eds., *State-owned Enterprises in the Western Economies* (New York: St. Martin's Press, 1981).
25. For a review of the literature, see Boardman, Anthony E., and Aidan R. Vining, "Ownership and Performance in Competitive Environments: A Comparison of the Performance of Private, Mixed and State-owned Enterprises," *Journal of Law and Economics*, 32, no. 1 (Apr. 1989), p. 1-33.
26. Bhattacharyya, Arun, Elliott Parker, and Kambiz Raffiee, "An Examination of the Effect of Ownership on the Relative Efficiency of Public and Private Water Utilities," *Land Economics*, 70, no. 2 (May 1994).
27. Parker, "Shadow Factor Price Convergence and the Response of Chinese State-owned Construction Enterprises to Reform," *op. cit.*
28. Kornai, János, *The Economics of Shortage*, Volume A (Amsterdam: North-Holland, 1980).
29. Walder, Andrew G., "Factory and Manager in an Era of Reform," *China Quarterly*, 118, (June 1989), p. 242-64.
30. Huang, Yasheng, "Web of Interests and Patterns of Behaviour of Chinese Local Economic Bureaucracies and Enterprises during Reforms," *China Quarterly*, 123 (Sep. 1990), p. 431-58.
31. Stepanek, James B., "China's Enduring State Factories: Why Ten Years of Reform has left China's Big State Factories Unchanged," in U.S. Congress Joint Economic Committee Papers,

- China's Economic Dilemmas in the 1990s: The Problems of Reforms, Modernization, and Interdependence*, 2 (Washington, D.C.: U.S. Government Printing Office, 1991), p. 440-54.
32. Aghion, Philippe, and Olivier J. Blanchard, "On the Speed of Transition in Eastern Europe," working paper, Massachusetts Institute of Technology, Department of Economics (1993).
 33. Wei, Shang-Jin, and Peng Lian, "Love and Hate: State and Non-state Firms in Transition Economies," *Pacific Basin Working Paper Series*, #PB93-10 (Federal Reserve Bank of San Francisco, 1993).
 34. Hirschman, Albert O., *The Strategy of Economic Development* (New Haven: Yale University Press, 1958).
 35. Naughton, Barry, "Implications of the State Monopoly over Industry and its Relaxation," *Modern China*, 18, no. 1 (Jan. 1992), p. 14-41.
 36. Stepanek, *op. cit.*, p. 446.
 37. Tang Jianzhong and Laurence J. C. Ma, "Evolution of Urban Collective Enterprises in China," *China Quarterly*, 104 (1985), p. 639.
 38. Oi, Jean C., "Fiscal Reform and the Economic Foundations of Local State Corporatism in China," *World Politics*, 45, no. 1 (Oct. 1992), p. 100.
 39. Lardy, Nicholas R., *Foreign Trade and Economic Reform in China* (New York: Cambridge University Press, 1992).
 40. Parker, Elliott, "Schumpeterian 'Creative Destruction' and the Growth of Chinese Enterprises," paper presented at the annual meeting of the Chinese Economists Society, University of Chicago (Aug. 1994).
 41. Asian Development Bank, *Asian Development Outlook* (Manila: 1993), p. 221.
 42. Lin, Qingsong, "Private Enterprises: Their Emergence, Rapid Growth, and Problems," in William A. Byrd and Lin Qingsong, eds., *China's Rural Industry: Structure, Development, and Reform* (Oxford University Press, 1990), p. 185.
 43. "Jiang moves to shore up ailing state enterprises," Willy Wo-Lap Lam, *South China Morning Post* (Feb. 4, 1994), p. 1.
 44. "State-run firms win concessions," Willy Wo-Lap Lam, *South China Morning Post* (Mar. 15, 1994), p. 1.
 45. "Deng pushes public sector predominance," Willy Wo-Lap Lam, *South China Morning Post* (May 4, 1994), p. 10.
 46. Kornai, János, *The Socialist System: The Political Economy of Communism* (Princeton University Press, 1992).

47. Walder, Andrew G., *Communist Neo-Traditionalism: Work and Authority in Chinese Industry* (Berkeley: University of California Press, 1986).
48. "Deficit may hit 70b Yuan," *South China Morning Post* (Mar. 10, 1994), p. 1.
49. "China: The Titan Stirs," *Economist* (Nov. 28, 1992).
50. Gold, Thomas B., *State and Society in the Taiwan Miracle* (Armonk, NY: M. E. Sharpe, 1986), p. 73.
51. Fei, John H.C., Gustav Ranis, and Shirley W.Y. Kuo, *Growth with Equity: The Taiwan Case* (Oxford University Press, 1979).
52. Kuo, Shirley W. Y., *The Taiwan Economy in Transition* (Boulder, CO: Westview Press, 1983), p. 10.
53. Fei, Ranis, and Kuo, *op. cit.*, p. 51.
54. Gold, *op. cit.*
55. Fei, Ranis, and Kuo, *op. cit.*
56. Gold, *op. cit.*, p. 129.
57. Ranis, Gustav, "Industrial Development," in Walter Galenson, ed., *Economic Growth and Structural Change in Taiwan* (Ithaca, NY: Cornell University Press, 1979), p. 206-62.
58. Gold, *op. cit.*, p. 128.
59. Rimlinger, Gaston V., *Welfare Policy and Industrialization in Europe, America, and Russia*, (New York: Wiley, 1971).
60. Hiscocks, Richard, *The Adenauer Era* (Philadelphia: Lippincott, 1966), p. 51-52.
61. Wei and Lian, *op. cit.*, p. 5.
62. Nove, Alex, *The Economics of Feasible Socialism* (London: George Allen and Unwin, 1983), p. 207.
63. Byrd, William, and Gene Tidrick, "Factor Allocation and Enterprise Incentives," in Gene Tidrick and Chen Jiyuan, eds., *China's Industrial Reform* (Oxford University Press, 1987).
64. "China's Reforms Could Founder in Sea of Debt," Patrick E. Tyler, *International Herald Tribune* (May 6, 1994), p. 1.
65. See "Fear of Unrest Inhibits China's Reform Efforts," Lena H. Sun, *International Herald Tribune* (Apr. 21, 1994), p. 13. Also, see "Beijing in \$2.6b bid to head off pay unrest," Willy Wo-Lap Lam, *South China Morning Post* (Mar. 2, 1994), p. 1.
66. Feng Baoxing, "Cong Shou Gang Chengbaozhi de Shijian Tan Caizheng yu Shengchan de Guanxi (On the Relationship between Finance and Production according to the Practice of

- Contract System at the Capital Steel Company)," *Jingji Yanjiu (Economic Research)*, 10 (Oct. 1991), p. 65-71.
67. Tidrick, Gene, and Chen Jiyuan, *China's Industrial Reform* (Oxford University Press, 1987).
68. Gutowski, Armin, and Renate Merklein, "Restructuring Economic Incentives in the People's Republic of China," in Bela Balassa and Herbert Giersch, eds., *Economic Incentives* (New York: St. Martins, 1986).
69. Xia Xiaoxun and Li Jun, "Consumption Expansion: A Grave Challenge to Reform and Development," in Bruce Lloyd Reynolds, ed., *Reform in China: Challenges and Choices - A Summary and Analysis of the CESRRI Survey* (Armonk, NY: M. E. Sharpe, 1987).
70. Putterman, Louis, "Dualism and Reform in China," *Economic Development and Cultural Change*, 40, no. 3 (Apr. 1992), p. 471.
71. "Zhonggong Shisi Jie San Zhongquanhui Gongbao (Communique of the 14th CCP Third Plenum)," *Jingji Ribao (Economic Daily)* (Nov. 15, 1993), p. 1.
72. "Mingnian Guoyou Qiye Gaige Lunkuo Xianlu (Outline of Next Year's State-owned Enterprise Reform Made Visible)," *Jingji Cankao Bao (Economic Information Daily)* (Nov. 27, 1993), p. 6.
73. "Law gives state firms sufficient incentive for global push." Peng Foo Choy, *South China Morning Post* (Jan. 3, 1994), p. B1.
74. "Nanjing Sancheng Xiao Shangdian Gongyou Siying (In Nanjing More than 30% of Small Shops Are Using Public-ownership Private-Management)," *Jingji Cankao Bao (Economic Information Daily)* (July 4, 1993), p. 2.
75. "Gongyou Siying: Bozu de Qiye (Public-owned Private-Managed: The Lame Enterprise)," Ma Jianhua, *Jingji Cankao Bao (Economic Information Daily)* (Oct. 10, 1993).
76. Eastman, Lloyd, *Families, Fields, and Ancestors* (Oxford University Press, 1988), p. 174.
77. Xiao Haiquan, "Stock Market in China," faculty seminar paper, Johns Hopkins Nanjing University Center (April 28, 1994).
78. "Chinese Firms Slipping into Private Hands," Kevin Murphy, *International Herald Tribune* (Apr. 19, 1994), p. 1.
79. "First it was Stocks: Now, Companies Will Trade in Shanghai," *International Herald Tribune* (May 4, 1994).

Table 1. Employment By Ownership and Sector, Selected Years (millions)

	<u>1978</u>	<u>%</u>	<u>1985</u>	<u>%</u>	<u>1991</u>	<u>%</u>	<u>1993</u>	<u>%</u>
Social Labor Force:	401.52	100.0%	498.73	100.0%	583.60	100.0%	602.20	100.0%
Total Industry	60.91	15.2%	83.49	16.7%	99.47	17.0%	104.67	17.4%
State-owned:	74.51	18.6%	89.90	18.0%	106.64	18.3%	109.20	18.1%
Industry	31.39	7.8%	38.15	7.6%	44.72	7.7%	44.98	7.5%
Gov't, Educ.	14.72	3.7%	21.98	4.4%	28.39	4.9%	30.30	5.0%
Other Sectors	28.40	7.1%	29.77	6.0%	33.53	5.7%	33.92	5.6%
Urban Collective:	20.48	5.1%	33.24	6.7%	36.28	6.2%	33.93	5.6%
Industry	12.15	3.0%	17.05	3.4%	18.98	3.3%	16.92	2.8%
Other Sectors	8.33	2.1%	16.19	3.2%	17.30	3.0%	17.01	2.8%
Rural:	306.38	76.3%	370.65	74.3%	430.93	73.8%	442.56	73.5%
Agriculture	274.88	68.5%	303.52	60.9%	341.86	58.6%	332.58	55.2%
Industry	17.34	4.3%	27.41	5.5%	32.68	5.6%	36.59	6.1%
Con, Tran, Com	3.62	0.9%	20.27	4.1%	29.12	5.0%	36.36	6.0%
Other Sectors	10.54	2.6%	19.45	3.9%	27.27	4.7%	37.03	6.1%
Urban Individual & Private:	0.15	0.0%	4.50	0.9%	7.60	1.3%	11.16	1.9%
Industry	0.03	0.0%	0.51	0.1%	1.28	0.2%	1.82	0.3%
Con, Tran, Com	0.11	0.0%	3.52	0.7%	5.43	0.9%	7.88	1.3%
Other Sectors	0.01	0.0%	0.47	0.1%	0.89	0.2%	1.46	0.2%
Other Ownership:	0.00	0.0%	0.44	0.1%	2.16	0.4%	5.36	0.9%
Industry	0.00	0.0%	0.37	0.1%	1.82	0.3%	4.36	0.7%
Other Sectors	0.00	0.0%	0.07	0.0%	0.34	0.1%	1.00	0.2%

Table 2. Gross Industrial Output Value (Billions of Current Renminbi)

	<u>1980</u>	<u>%</u>	<u>1985</u>	<u>%</u>	<u>1991</u>	<u>%</u>	<u>1993</u>	<u>%</u>
Total GIOV:	515.43	100.0%	971.65	100.0%	2824.80	100.0%	5269.20	100.0%
State-owned:	391.56	76.0%	630.21	64.9%	1495.46	52.9%	2272.47	43.1%
Total Non-state:	123.87	24.0%	341.44	35.1%	1329.34	47.1%	2996.73	56.9%
Collectively-Owned:	121.34	23.5%	311.72	32.1%	1008.48	35.7%	2021.32	38.4%
Township & Village:			142.33	14.6%	593.54	21.0%	1394.99	26.5%
Urban COEs & Other:			169.39	17.4%	414.94	14.7%	626.33	11.9%
Individual:	0.08	0.0%	17.98	1.8%	160.91	5.7%	440.21	8.4%
Rural:			14.64	1.5%	147.98	5.2%	400.59	7.6%
Urban:			3.34	0.3%	12.93	0.5%	39.62	0.8%
Other Ownership:	2.45	0.5%	11.74	1.2%	159.96	5.7%	535.20	10.2%

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