

# **THE ROLE OF GOVERNMENT IN CHINA'S TRANSITION TO A MARKET ECONOMY**

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## **I. Introduction**

China's transition from a planned economy to a market economy started at the end of 1978. When China started the process, the government adopted a piecemeal, partial, incremental approach. Some economists regard this approach to be self-defeating (Murphy, Schleifer, and Vishny 1992). However, the transition has turned China from a poor, inward looking economy to one of the most dynamic economies and largest trading powers in the world. The average annual growth rate of GDP reached 9.4 percent in 1978-2002, while the average annual growth rate of import and export trade reached 15.2 percent. During this period, the per capita income of rural and urban population, measured at constant prices, increased 5.3 times and 4.7 times respectively.<sup>1</sup> About 400 million people have been lifted out of poverty at the \$1 a day expenditure level (World Bank 2003). Such a rapid economic growth for such a sustained period of time in a country as large as China has never occurred in human history. The achievement is truly an economic miracle.

Nevertheless, in spite of the overall achievement in the past 25 years, the Chinese economy is encountering a series of problems, including a large non-competitive state-owned sector, a weak banking sector, widespread corruption, and a widening regional income disparity. Any of these problems, if worsened, may lead to a sudden breakdown in the economy. In this paper, I would argue that the traditional planning system in China and many other socialist and non-socialist systems arose from the government's adoption of comparative advantage-defying (CAD) development strategy to set up capital-intensive heavy industries in a capital-scarce developing country. Many firms in the government's priority sectors were nonviable in open, competitive markets because of the violation of the economy's comparative advantages. For implementing the CAD strategy, the government adopted a series of distortions in input and output markets to subsidize/protect the nonviable

firms. These distortions repressed incentives, distorted resource allocations, resulted in soft-budget constraints, and led to economic stagnation. Economic reform and transition became inevitable. However, many firms in the pre-transition system are nonviable in open, competitive markets. A shock therapy might result in widespread bankruptcies, unemployment, and social/political instability. It is advisable that the Chinese government adopted a dual track approach, on one hand, liberalizing the entries to the labor-intensive sectors, which were repressed previously, and on the other hand creating conditions to gradually address the viability issue of those firms in the CAD strategy's priority sectors. However, the final competition of transition to a market economy depends on the government's giving up of CAD strategy and the success of eliminating the firm's viability problem.

## **II. Development Strategy, Viability and Traditional Planning System<sup>2</sup>**

China adopted a traditional Stalinist planning system before the reform started in 1978. The system was endogenous to Chinese government's adoption of a CAD strategy in the 1950s when China was a capital-scarce agrarian economy. Heavy industry has a capital-intensive sector. The construction of a heavy-industry project has three characteristics: 1) it requires long gestation; 2) most equipment for a project, at least in the initial stage, needs to be imported from more advanced economies; and 3) each project requires a large lump-sum investment. When the Chinese government initiated this strategy in the early 1950s, the Chinese economy had three characteristics: 1) the available capital was limited, and, consequently, the market interest rate was high; 2) foreign exchange was scarce and expensive because exportable goods were limited and primarily consisted of low-priced agricultural products; and 3) the economic surplus was small and scattered due to the nature of a poor agrarian economy. Because these characteristics of the Chinese economy were mismatched with the three

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<sup>1</sup> Unless indicated otherwise, the statistical figures in this paper are taken from various issues of *China Statistical Yearbooks*.

characteristics of heavy industry projects, the firms in the prioritized heavy industries were not viable in open, competitive markets (Lin 2003), spontaneous development of capital-intensive industry in the economy was impossible. Therefore, the Chinese government instituted a policy of low interest rates and over-valued exchange rates to reduce the costs of both interest payments and of importing equipment and low agricultural prices and wage rates in order to mobilize agricultural surplus and personal savings for the heavy industrial projects. Meanwhile, to make the low nominal-wage policy feasible, the government provided urban residents with inexpensive food and other necessities, including housing, medical care, and clothing. The low interest rates, over-valued exchange rates, low nominal wage rates, and low prices for raw materials and living necessities constituted the basic macro policy environment in the traditional Stalinist system.<sup>3</sup>

The above macro policies induced a total imbalance in the supply and demand for credit, foreign exchange, raw materials, and other living necessities. Because non-priority sectors were competing with the priority sectors for the low-priced resources, plans and administrative controls replaced markets as the mechanism for allocating scarce credit, foreign reserves, raw materials, and living necessities, ensuring that limited resources would be used for the targeted projects. Moreover, the state monopolized banks, foreign trade, and material distribution systems.<sup>4</sup>

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<sup>2</sup> For a detailed discussion of the logic behind the formation of Stalinist Planning system, see Lin, Cai, and Li (20003)

<sup>3</sup>Theoretically, the government could use subsidies instead of distorting the price signals as a means to facilitate the development of capital-intensive heavy industry in a capital-scarce economy. It can be shown that the subsidy policy is more efficient economically than the policy of price distortion. However, with the subsidy policy, the heavy industry would incur a huge explicit loss and the government would have to tax other sectors heavily to subsidize the loss. Under such a situation, the government would find it difficult to defend its position of accelerating the development of heavy industry. Moreover, the government in an underdeveloped economy may not have the ability to collect huge taxes. This may explain why governments, not only in socialist economies but in capitalist economies, use price distortions instead of subsidies to facilitate the development of priority sectors.

<sup>4</sup>In the literature in China and other socialist countries, many authors presumed that the distorted policy environment and the administrative controls were shaped by socialist doctrines. The socialist ideology might play a role in the formation of these policies, however, the existence of these policies and controls also have an economic rationale. They facilitate the implementation of a CAD strategy in a capital-scarce economy. This explains why non-socialist developing economies, such as India, also had a similar policy environment and administrative

In this way competition was suppressed, and profits ceased to be the measure of an enterprise's efficiency. Because of the lack of market discipline, managerial discretion was potentially a serious problem. Managers of state enterprises were deprived of autonomy to mitigate this problem.<sup>5</sup> The production of state enterprises was dictated by mandatory plans and furnished with most of their material inputs through an administrative allocation system. The prices of their products were determined by pricing authorities. Government agencies controlled the circulation of their products. The wages and salaries of workers and managers were determined not by their performance but by their education, age, position and other criteria according to a national wage scale. Investment and working capital were mostly financed by appropriations from the state budget or loans from the banking system according to state plans. The state enterprises remitted all their profits, if any, to the state and the state budget would also cover all losses incurred by the enterprises. In short, the state enterprises were like puppets. They had no autonomy in the employment of workers, the use of profits, the plan of production, the supplies of inputs, and the marketing of their products.

The development strategy and the resulting policy environment and allocation system also shaped the evolution of farming institutions in China. In order to secure cheap supplies of grain and other agricultural products for urban low-price rationing, a compulsory procurement policy was imposed in the rural areas in 1953. This policy obliged peasants to sell set quantities of their produce, including grain, cotton, and edible oils to the state at government-set prices.

In addition to providing cheap food for industrialization, agriculture was also the main foreign-exchange earner. In the 1950s, agricultural products alone made up over 40

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controls when they adopted the same development strategy under a similar economic condition.

<sup>5</sup>The state enterprises were granted some autonomy after the reforms in the late 1970s. As expected, one of the results of this reform was a rapid increase in wages, bonuses and fringe benefits at the expense of the enterprise's profits.

percent of all exports. If processed agricultural products are also counted, agriculture contributed to more than 60 percent of China's foreign exchange earnings up to the 1970s. Because foreign exchange was as important as capital for the heavy-industry-oriented strategy, the country's capacity to import capital goods for industrialization in the early stage of development clearly depended on agriculture's performance.

Agricultural development required resources and investment as much as industrial development. The government, however, was reluctant to divert scarce resources and funds from industry to agriculture. Therefore, alongside the CAD strategy the government adopted a new agricultural development strategy that did not compete for resources with industrial expansion. The core of this strategy involved the mass mobilization of rural labor to work on labor-intensive investment projects, such as irrigation, flood control, and land reclamation, and to raise unit yields in agriculture through traditional methods and inputs, such as closer planting, more careful weeding, and the use of more organic fertilizers. The government believed that collectivization of agriculture would ensure these functions. Income distribution in the collectives was based on each collective member's contribution to agricultural production. However, monitoring a member's effort is extremely difficult in agricultural production due to dimensions of time and space. The remuneration system in the collectives was basically egalitarian (Lin 1992).

The distorted macro-policy environment, planned allocation system, and micro-management institutions outlined above all made the maximum mobilization of resources for the development of heavy industry possible in a capital-scarce economy. Therefore, China was able to test the nuclear weapons in the 1960s and launched the satellite in the 1970s. However, like other countries that adopted the CAD strategy in the socialist and non-socialist alike, China paid a high price for such an achievement. The economy is very inefficient due to two factors: 1) low allocative efficiency because of the deviation of the industrial structure

from the pattern dictated by the comparative advantages of the economy, and 2) low technical efficiency due to managers' and workers' low incentives to work.

### **III. The Gradual Approach to Transition**

As Perkins (1988) pointed out, it is unlikely that the Chinese government had worked out a blueprint when they set out to reform the economic system. However, retrospectively, China's transition followed a logical process that is predictable from the logic of the traditional planning system. The trinity of the traditional economic system is endogenous to the adoption of a CAD strategy in a capital-scarce economy. The main fault in this economic system was low economic efficiency arising from structural imbalance and incentive problems. To improve economic efficiency, the Chinese government initiated a series of incremental, gradual reforms in 1979 that eventually resulted in a transition to a market economy. In the process, the reforms in the micro-management systems led the reforms in the resource allocation systems, which in turn led the reforms in the macro-policy environment. Specifically, the Chinese government first allowed the SOEs to share part of the performance improvement by a profit-retention program, which initially gave 12 percent of the increased profits or reduced losses to the enterprises. The SOEs could use the retained income for paying bonuses to workers, supporting welfare programs, and investing in capacity expansions. The managerial autonomy was gradually deepened through the replacement of the profit retention system by a contract responsibility system in which the SOEs agreed to deliver pre-determined amounts of revenue to the state and retained the residuals, and later the replacement of the contract responsibility system by the modern corporate system in which the state was entitled to the dividend on its shares in the SOEs' assets. Parallel to the SOEs' managerial reform was the decollectivization of agriculture, which replaced the production team system with the household responsibility system. Meanwhile, a dual-track system was introduced to reform the resource allocation system. After fulfilling the

compulsory delivery obligations, the SOEs were allowed to sell their above-quota outputs to the markets at the market-determined prices. The enterprises were also permitted to purchase inputs from the markets to increase their productions or to expand their production capacities.

An unexpected effect of the above reforms was the entry and rapid growth of non-state enterprises, especially the township-and-village enterprises (TVEs). The rural industry already existed before the reform as a result of the government's 1971 policy to develop rural processing industries in order to finance the agricultural mechanization program. However, being outside the state plans, the growth of TVEs was severely constrained by their lack of access to capital, raw materials, equipment and markets. The reforms created two favorable conditions for the rapid expansion of TVEs: (1) a new stream of surpluses, which were brought about by the household responsibility system reform and were retained in rural areas, providing a resource base for new investment initiatives (Lin, 1992); (2) the dual-track system provided non-state enterprises access to key raw materials, equipment and markets. In 1978, the output of TVEs consisted 7.2 percent of the total value of industrial output in China. The output share of TVEs increased to 31.1 percent in 1996.

Being outsiders to the traditional system, non-state enterprises had to obtain credits and inputs from competitive markets and, in turn, their products were sold to markets. They faced hard budget constraints and they would not survive if their performances were poor. The dynamism of non-state enterprises exerted a heavy pressure on the SOEs and triggered the state's policy of deepening the SOEs' managerial reforms. Firm-level studies show that the increase in managerial autonomy and the intensification of competition have significantly improved SOEs' managerial incentives and total factor productivity (Wei Li, 1997).

When the reform started in 1979, most SOEs were profitable. Taxes and revenues from SOEs were the government's main sources of fiscal income. However, in spite of the significant increase in productivity, the profitability of the SOEs has declined substantially

since the reforms started. Currently, evidence shows that more than 40 percent of SOEs are operating at a loss in spite of large amounts of implicit subsidies from low-interest loans and other policy protections. The decline of the SOEs' profitability is partly attributable to the dissipation of the SOEs' monopoly rent. However, the walloping increases in wages and other fringe benefits are other important reasons. The average annual growth rate of SOEs' wage fund in the state sector was 16 percent in 1978-96, while the average annual growth rate of output in the same period was 7.6 percent.

#### **IV: The Performance of the China's Transition**

When China started its transition in the late 1970s, the government did not question the feasibility or desirability of the traditional economic system. Its attempt was simply to improve incentives in the state enterprises and collective farms by giving agents in state enterprises and collective farms some autonomy so that a closer link between personal rewards and individual efforts could be established. Empirical studies found that the attempt was successful and a new stream of resources was created by the micro-management system reform. The granting of partial micro autonomy was only a small crack in the traditional economic system. However, the partial autonomy also implies that entrepreneurs gain partial control over the allocation of the newly created stream of resources. The suppressed sectors in the traditional economy are the sectors that are consistent with the comparative advantages of the economy. The unexpected results of the micro-management reform are that, driven by profit motivation, the autonomous entrepreneurs allocated the new stream of resources under their control to the more profitable suppressed sectors. Since the planned allocation mechanism and distorted macro-policy environment were preserved, the government still had control over the old stream of resources and guaranteed that these resources would be allocated to the nonviable SOEs in the priority sectors, preventing the collapse of the state sectors. As the economy grew, the proportion of resources that was allocated according to the

planned prices became increasingly small. Therefore, by the time the price for a commodity was liberalized, the shock was much smaller than the gap between the market price and plan price would have suggested.<sup>6</sup>

China's gradual, dual-track approach to transition has been successful in bringing in dynamic growth by encouraging the entry of non-state firms to the traditionally suppressed sectors and in preventing the collapse of the system by continuously providing necessary supports to the nonviable SOEs. However, due to the inability to solve the SOEs' viability issue, China also paid a high price for this approach, including the sharp increase of non-performing loans in the four big state-owned commercial banks, the widespread corruption, and the widening regional income disparities.

After 1983, the measure adopted by the Chinese government to support SOEs changed from the direct fiscal appropriation to the offering of low interest-rate loans from the four state banks. Currently, over 70% of loans from the four state banks go to SOEs, but due to their poor performance, many SOEs have been unable to repay the loans. Therefore, the banks accumulate large amounts of non-performing loans. To support SOEs, the government also limits the market entry of private interests into certain sectors so as to give SOEs in those sectors monopoly position. Therefore, rent seeking to obtain preferential loans or market entry licenses is prevalent among SOEs and non-SOEs, adding fuel to the widespread corruption. In addition, to subsidize SOEs, the government artificially depressed the prices of agricultural products and minerals in the traditional planning system. Such price distortion is maintained as a way to continue the subsidies to the nonviable SOEs after the transition. The comparative advantages of eastern China lie in manufacturing industries, those of central

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<sup>6</sup>The official exchange rate was 5.7 Yuan for one US dollar and the swap market rate was 8.7 Yuan for one US dollar when the exchange rate in China was unified to the swap market rate at the beginning of 1994. However, the shock was very small because before the unification about 80 percent of the foreign exchanges had already been traded in the swap markets.

China lie in agriculture, and those of western China lie in minerals and natural resources. After the transition, the eastern region has made huge progress in the development of manufacturing industries by taking advantage of the superior geographical and market conditions and increased substantially imports of low-priced agricultural and mineral products from the central and western regions. In essence, the relatively poor central and western regions have been subsidizing the development of relatively rich eastern, industrial region. The regional disparities are widening as a result.

### **V: SOEs Reform and the Completion of China's Transition**

Many distortions and government interventions in the traditional planning system are endogenous to the needs of protecting and subsidizing the nonviable SOEs. Unless the Chinese government finds ways to reform SOEs successfully, China's transition to market economy will not complete. Currently, besides the inherent viability problem, the SOEs in China have an additional problem of social burdens arising in the transition process. Before the economic transition, the investment in heavy industry provided limited employment opportunities. The government was responsible for urban employment and usually assigned several workers to a job, resulting labor redundancy in SOEs. Before the transition workers also received low wages, which were only enough for covering their current consumption. Before the transition, SOEs remitted all their revenues to the government, and the government used fiscal appropriation to cover SOEs' wages, pensions of retired workers and other expenditures. Therefore, the labor redundancy and the pension expenditure were not a burden to SOEs. After the transition, SOEs started to be responsible for their workers' wages and retirement pensions. The newly established TVEs, joint ventures, and other non-state firms are in sectors that are consistent with China's comparative advantages and they do not have the problem of labor redundancy and unfunded pension for retired workers. The issue arising from the viability problem can be called as the SOEs' "strategic burden" and the

addition cost arising from labor redundancy and pension expenditure as SOEs' "social burden." Together they constitute the SOEs' "policy burdens". As long as the policy burdens exist, the government is responsible for the firms' loss and the soft-budget constraint cannot be eliminated (Lin and Tan 1999).

There is a consensus in China about the necessity and the way to eliminate the social burdens. Currently the government is adopting measures to lay off SOEs redundant workers and creating a fully funded social security system to take care of the retired workers from SOEs.

The viability problem of SOEs can be solved according to four different categories, depending on the nature of SOEs' outputs (Lin, Cai and Li 1998 and 2001). The first is mainly the defense-related SOEs whose production, intensive in both capital and technology, run against China's comparative advantage, but their outputs are essential for national security. For this group of SOEs, direct fiscal appropriation is necessary for their survival and the government should directly monitor their production and operations. It is reasonable to expect that there are only a few SOEs in this category. The second group of SOEs also requires intensive capital and technological inputs for their production, but their outputs are not sensitive in national security and their outputs have large domestic markets. Examples of this category are telecommunication and automobile industry. For this category of SOEs, the government can adopt a "market for capital" approach to get access to capital from international markets and remove the adverse impact of domestic endowment structure on these firms' viability. There are two ways to achieve this goal: one is to encourage SOEs to go public on international equity markets; the second is to set up joint ventures with foreign companies and get direct access to foreign technologies and capital. China Mobile, China Telecom, and China Petroleum follow the first approach and many automobile makers in China follow the joint-venture approach. The third category of SOEs has limited domestic

markets for their outputs and thus this group of SOEs cannot adopt the “market for capital” approach. The way for them to solve the viability issue is to make use of their engineering and managerial capacities and to shift their production to labor-intensive products, which have large domestic markets and at the same time are consistent with China’s comparative advantages. The most famous example of this approach is the color TV maker, Changhong. This firm used to produce old style military radar. After switching to the production of color TV, the firm has dominated Chinese market and is very competitive in international market. Most SOEs have advantages in engineering and managerial personnel. If they are provided the conditions to shift their production lines to labor-intensive products, many of them can become viable. The fourth group consists of non-viable firms that lack engineering capacity and are thus unable to shift their production to new markets. These SOEs should be allowed to go bankrupt.

After the policy burdens of the existing SOEs are eliminated, whether or not an SOE can earn acceptable profits in an open, competitive market becomes the responsibility of the SOE’s managers. The government will no longer be responsible for a firm’s performance. There will be no reasons for the government to continue the subsidization and protectionism of SOEs through low-interest loans, monopolistic practices, and the depression of prices for agriculture and raw materials. The remaining distortions and government interventions can be eliminated (Lin, Cai and Li 2001). Only then can the reform of institutions that are inherited from the traditional planning system with the functions of subsidizing and protecting SOEs be carried out thoroughly and the transition from a planned economy to a market economy be completed.

## **VI: Concluding Remarks**

In this paper, I argue that the traditional planning system in China was endogenous to the needs of protecting and subsidizing the nonviable firms in the priority sectors of CAD

strategy that was adopted by the Chinese government to accelerate the growth of capital-intensive industries when China was still a capital scarce, poor agrarian economy. Because most SOEs were nonviable in open, competitive markets at the beginning of China's transition to market economy, to prevent the economy's collapse and consequent chaos, it was wise to adopt a gradual, dual-track approach that encouraged the entry of non-state firms to the suppressed sectors and gave partial autonomy to the SOEs, and meanwhile maintained the government's protections and subsidies to the SOEs. The completion of the transition depends on the government's ability to find ways to eliminate SOEs' policy burdens, including the social and the strategic burdens. The government will be able to do so only if it gives up the CAD strategy, protects private property rights and respects the function of market competition in resource allocation.

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