
4. State Control, Entrepreneurship and Resource Allocation

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Introduction

State-led resource allocation has been an important part of China's economic reform strategy, having exerted substantial effects on the survival of state-owned enterprises (SOEs) and the evolution of private enterprises. Focusing on capital, land, energy and utilities as key resources, we examine how the state has changed and reformed the institutional systems governing the supply and distribution of these resources during the market reform process. At the same time, we investigate how enterprises of different ownership types have responded to access these resources. Differences in firm behaviours and responses across the sectoral and ownership patterns of investment activities, asset and output shares, and profit and productivity performance are examined. This sheds light on the puzzle of China's high economic growth with rapid expansion of the private sector in the total economy, but accompanied by the continuing predominant role of SOEs in some of the key sectors in the economy such as oil, petrochemicals, aviation, steel, coal, finance, telecommunications and railways.

In general, state control of the development of capital, land and resource markets has created substantial rents that have been directed to important infrastructure projects and provision of public goods, thereby facilitating economic transition and contributing to rapid economic growth. At the same time, such rents have also produced side effects of state control of resources including rent-seeking activities by both governments and enterprises, and distorting resource allocation. The misallocation of resources has been found to be linked with structural imbalances such as overcapacity in certain sectors, and significant negative impacts on the development of private entrepreneurship, which holds the key to increasing the productivity and growth potential of China.

Economic transition, state-controlled resources and entrepreneurship

It has been recognised that in a market economy, entrepreneurship drives economic growth through a 'creative destruction' process, a term coined by Schumpeter in the early twentieth century (Carree and Thurik 2003). Development economics views entrepreneurship as a driving force of economic growth and structural transformation (Naudé 2010; Gries and Naudé 2008). This view seems to be particularly relevant for a country in the process of economic transition from a centrally planned to a market-based economy. The connection between the market and entrepreneurship suggests that market transition is always associated with the emergence and evolution of the private sector in the economy. The progress of market reforms can be seen in the expansion and diversity of the activities of private entrepreneurs (Tanas and Audretsch 2011). While there are commonly agreed traits of entrepreneurs, such as being alert to profit opportunities, creativity and risk-taking (Lu 1994), the nature of entrepreneurship could be quite different, depending crucially on the institutional settings of an economy.

The nature and types of entrepreneurship

The Organisation for Economic Cooperation and Development (OECD) defines entrepreneurship as business activity determined mainly by entrepreneurs. Entrepreneurs are those who own and manage businesses with the purpose of value generation through creation or expansion of economic activity, by identifying and exploiting new products, processes or markets (Ahmad and Hoffman 2008).

The OECD definition of entrepreneurship is consistent with an observation made by Schumpeter in the early twentieth century. Schumpeter (1934) considered entrepreneurship to be an innovative process in which entrepreneurs, as innovators with willingness to take risks, seek profits by creating new products or new production processes with better values to replace old ones, implying higher productivity. Therefore, entrepreneurship is associated with a value-creation process, which he called 'creative destruction', which leads to true economic progress. In addition, introducing new products or processes is seen as creating disequilibrium in the existing market (Lu 1994).

The Schumpeterian view of entrepreneurship, however, which is called high-level entrepreneurship (Karlsson et al. 2004), is narrow, as it focuses only on new value created by new products or processes. Other processes that are not purely innovative can contribute to value generation too. Kirzner (1998) suggested that, being alert to market opportunities, entrepreneurs can make

profits through filling the gap between supply and demand in the market, either with production or with trade. By this equilibrating role of the entrepreneur (Lu 1994), more value in terms of profit can be generated through contributing to flows of goods and services. This kind of entrepreneurship is called low-level entrepreneurship, and an example is firms in the wholesale and retail trades (Karlsson et al. 2004).

The two early views of entrepreneurship miss an important fact: not all entrepreneurial efforts bring benefits to society as a whole, despite profits brought to entrepreneurs. Baumol identified this feature of entrepreneurship in his seminal paper (1990). Baumol suggests there are different types of entrepreneurship, including productive, unproductive and destructive entrepreneurship, due to the reward structure created by a certain institutional setting with the existence of the market. Given a country's institutional structure, entrepreneurs can take market opportunities to make profit with their talent. The entrepreneur's market-based activities will create more wealth or value for society, making productive entrepreneurship. There are also profit opportunities in political and legal processes that could attract entrepreneurial efforts. The entrepreneurial efforts in political and legal arenas can accumulate personal wealth through changing government policy in taxation and subsidy; however, these efforts do not generate additional social wealth, but rather redistribute wealth, leading to so-called unproductive entrepreneurship. Moreover, in some cases, entrepreneurial efforts involve illegal activities, which may cause loss of social wealth, making entrepreneurship destructive. Whether entrepreneurial efforts become productive, unproductive or destructive depends on how profitable opportunities are in market and non-market situations. The reward outcomes depend totally on the country's institutional structure. As Sobel (2008) elaborates, productive entrepreneurship is more likely to expand in a market-supportive institutional framework that is characterised by secure property rights, a fair and balanced judicial system, effective contract enforcement, appropriate business regulation and effective control of government power.

An important implication of Baumol's theory is that entrepreneurship growth is not always translated into economic growth and the healthy expansion of entrepreneurship is determined by a sound incentive structure of institutions. Baumol's view of entrepreneurship has particularly relevant implications for the analysis of entrepreneurship development in a transitional economy like China's, in which institutional change to a market economy is central to the transition process. A transitional institutional framework may have created many non-market profit opportunities that attract those business-minded people who are able to exploit institutional loopholes and have become entrepreneurs under

market transition. Moreover, transition from a centrally planned economy to a market-based one has created many rent-seeking opportunities that are conducive to unproductive entrepreneurship.

Market transition and evolution of entrepreneurship

Market transition is a long process with different stages of establishing the system with market rules and emerging private firms with different forms to those of state firms (Kolodko 2000). While it is complex to delineate the transition process and corresponding entrepreneurship, a typology of different stages of transition with different types of entrepreneurship would be useful. Estrin et al. (2008) provided such a typology by suggesting three stages of transition in which different kinds of entrepreneurship exist. The initial stage or early transition is characterised by initialising market channels of goods distribution and abandoning planned channels of resource allocation. There are frequent adjustments of relative prices and gaps between demand and supply, creating opportunities for mainly Kirznian types of entrepreneurs. There is a lot of uncertainty due to the unavailability of previous market information and macro-economic instability. In the second stage, uncertainty is reduced due to more market information, less extreme price fluctuations and a more stable macro-economic environment. The fundamentals of a market system such as property rights are established, providing incentives for Schumpeterian entrepreneurship. The third stage would follow with further development of market institutions, which becomes the main force of resource coordination and information provision for market participants. Contract enforcement becomes more dependent on courts. Entrepreneurs can have better access to resources through financial institutions and market exchange. This stage of market transition provides an institutional environment conducive for Schumpeterian entrepreneurship. As Estrin et al. (2008) noted, however, the early forms of entrepreneurship may exist in the later stage of market reform due to the inertia of institutional changes.

Determinants of entrepreneurship

In an analytical framework of entrepreneurship development, Ahmad and Hoffman (2008) suggested six factors determining the path of a country's entrepreneurship development: regulatory framework, market conditions, culture, access to finance or capital, technological capability and entrepreneurial capabilities. The first three factors could create an overall environment for the emergence and evolution of entrepreneurship. A regulatory framework comprises laws and regulations that govern the entry and operation of business activities. A regulatory framework deals with issues such as business entry

and exit, product standards, taxation, social health and security, safety, health and environmental protection. Market conditions are actually market opportunities created by the establishment and evolution of a market economy. Market opportunities are driven by factors such as competition, access to domestic and foreign markets and government participation in the market (provision of public goods and procurement). A culture for entrepreneurship growth includes society's attitudes towards entrepreneurs, and desires for business ownership.

The emergence and expansion of entrepreneurship cannot happen without resource availability, which is determined by access to finance, technology and entrepreneurial capabilities. Entrepreneurial supply depends first on entrepreneurial capabilities, which can be established and accumulated by the training and experience of entrepreneurs, business and entrepreneurship education, and migration of entrepreneurs. Research and development (R&D) and technological advances create opportunities for entrepreneurs and their businesses to flourish. Technological capability contributes factors such as R&D investment, technological cooperation between firms, technology diffusion, development of information technology and a patent system; however, to take advantage of business opportunities and make a successful business, the availability of capital is the crucial factor. This factor depends on the entrepreneur's access to financial resources such as a banking system, stock markets and other financial institutions.

The above analytical framework would be useful for examining the nature, characteristics and performance of entrepreneurship in an economy with an established system of market institutions; however, there are some missing elements in the framework for a transitional economy. The analysis of the performance of entrepreneurship would need to take into account two important processes: 1) the process of setting up and building market institutions, including laws and regulations to recognise and ensure private property rights and to govern market transactions; and 2) the parallel process of ownership transformation. The next subsection will explain why it is important to incorporate these processes into analysis of entrepreneurship performance.

State control of resources and the development of entrepreneurship in transition

Market-oriented reform basically involves changing the relative role of the state and the market in the coordination of production, exchange and distribution activities with the main objective of improving efficiency and promoting economic growth. In China, like other centrally planned economies, market-oriented reform started from a point of 'only state, no market' (Zhang 2002:10).

At this starting point, the centrally planned economy is characterised by state control of all productive resources, from fixed assets such as plants, buildings, machinery and equipment to land and other natural resources. The state's control of productive resources takes the form of sole ownership and is carried out through SOEs and agricultural collectives. While financial resources in terms of savings are limited due to non-market, state-coordinated transactions of goods distribution under central planning, production surplus is captured by the state through setting inter-sectoral terms of trade, mainly between agriculture and industry or rural and urban areas. Therefore, one crucial dimension of market-oriented reform has been the transformation of the state's control of resources through ownership transformation of public assets, reducing the role of SOEs and changing the ways government intervenes in production and exchange activities based on market rules and orders. Consequently, on the one hand, market-oriented reform provides an environment for the emergence of entrepreneurship through market opportunities and the incentives of private property rights. On the other hand, market transition gives rise to entrepreneurship through reducing the extent and changing the forms of the state's control of resources—in particular, physical and financial capital, land and other natural resources.

Changing state control of resources under market conditions gives rise to the fundamental question of the interaction of the state and the market. While it is generally expected that the scope of state intervention will be reduced, an important observation is that in economic transition the state plays an indispensable and guiding role in the establishment of the market system, which provides open competition for all firms. This is particularly true of China's experience with its well-known gradual approach to market reform. The leading role of the state is needed because market reform is basically a process of institutional change. Institutional change is a long process and it takes time to build new market institutions and entrench them in an economic system (Murrell and Wang 1993; World Bank 2001). More specifically, Arrow (2001:91) explained the state's market-guiding role: 'Although the role of government in directing economic activity in a healthy economy is limited, transition does require guidance. The only source of general guidance for the economy is the state, and there is no denying that appropriate policy and leadership could considerably smooth transition.'

Given the leading role of the state in economic transition, the interaction between market liberalisation and state control of resources could affect strongly entrepreneurial activities. As discussed above, due to state-dominated ownership of all economic activities, enterprises had to rely on the state for their access not only to production factors (capital, land and other natural resources), but also to basic inputs (energy and utilities). In China as well as other transitional

economies, market reform led to the development of markets for these resources, and the emergence of entrepreneurship would not be possible if the state did not reduce its control of and restriction on the access to these resources. Therefore, the dynamics and performance of the private sector would depend significantly on the extent and ways of releasing the state's control of these key resources. Moreover, state dominance through sole ownership or SOE presence means state monopoly in the markets, implying distortions and the existence of substantial rents. The literature on rent and rent-seeking suggests that the existence of rents due to state interventions during market transformation is inevitable and there are certain rents that are growth-enhancing as well as growth-destroying (Khan 2004). A crucial question here is whether the state is able to manage and utilise these rents to enhance economic development. For example, the state can promote private investment by transferring the rents to entrepreneurs through market entry and participation or the state can use the rents for financing public goods provision. In addition, the existence of rents leads to another important question of how these rents can be distributed and used in an equitable manner. We will examine these issues in the context of China's market transition and the evolution of private entrepreneurship.

State control of resources and private entrepreneurship in the initial stage of reform: 1978–1992

One key feature of the early stage of reform in China was the dual-track price system with partial market liberalisation. Following the rapid and successful transformation of agricultural cooperatives under the commune system to a household-based production system, market exchanges were gradually allowed to take a greater share along with planning channels in line with the application of a contract responsibility system in industrial enterprises later on. Liberalisation took place progressively in the product markets, from consumer goods to materials and inputs for agricultural and industrial production. Gradual marketisation created ample opportunities for the expansion of non-state private businesses through exploiting the huge gaps between demand and supply resulting from the acute shortage problems under the planning mechanism (Garnaut et al. 2001). Observing the ways private business activities emerged outside the state sector, Lu (1994) concluded that new private businesses in this period had many features of Kirznian entrepreneurship. Additional market opportunities, although limited, came from the Government's initial steps to open domestic markets to the outside world, with a focal policy to attract foreign direct investment (FDI), especially overseas Chinese FDI from Hong Kong and Taiwan to the coastal areas. Total FDI increased from US\$7.4 billion in the period

1979–85 to US\$18.6 billion in the period 1986–91 (Wu 2009:34). Initial opening to FDI promoted trading activities between local entrepreneurs and their counterparts in Hong Kong, which emerged in the late 1970s (Tsai 2007:55).

China's non-state sector¹ had its rapid expansion and contribution to output and employment in the 1980s. Song (2014:190) indicates that, in the period 1978–92, the share of SOEs in gross industrial output value decreased from 78 per cent to 48 per cent while that of the non-state sector grew from more than 22 per cent to 52 per cent correspondingly. It is notable that, of the change in the share of the non-state sector, collectively owned enterprises accounted for most of the change while private enterprises expanded to nearly 10 per cent. During the first stage of reform, the institutional setting had limited formal recognition of the position private entrepreneurs and their business activities take. Their subordinate or auxiliary position resulted from the Chinese Government's experimental approach while a dominant perception of private entrepreneurs as capitalists and exploiters prevailed (Garnaut et al. 2001). Most importantly, there were no clearly defined private property rights (Huang 2008). The rapid expansion of non-state enterprises with their institutionally disadvantageous position has, however, been a big puzzle to many economists. From an institutional perspective, Huang (2008:34) suggested that in the context of property rights security was not institutionalised; what made potential entrepreneurs willing to do business was *directional liberalism*—that is, policy promises and symbolic actions made by government leaders to show the Government's reform intentions. In addition, as a way of responding to ideological and regulatory obstacles, many privately owned enterprises were registered as collectively owned enterprises, leading to a phenomenon of 'red hat' firms in the 1980s and 1990s (Garnaut et al. 2001:14).

1 Conceptually, the non-state sector was considered to include collectively owned enterprises, private enterprises, joint-venture enterprises, overseas Chinese enterprises and foreign enterprises (Lin et al. 1996:215). Among them, collectively owned enterprises can be urban non-state and township and village enterprises (TVEs). TVE was used for the first time in 1984 by the State Council to describe commune and brigade enterprises (Song 2014:189). TVEs constitute a major part of the non-state sector in terms of output, employment shares and the number of enterprises (Lin et al. 1996). This feature will be shown in the text. Despite the differing types, entrepreneurship is the nature of all these enterprises as they are exposed to market rules in their operation. Lu (1994) and Huang (2008) described entrepreneurs as those operating private enterprises and TVEs.

Table 4.1 Annual Average Growth Rate of Output and Total Factor Productivity (per cent)

	1980–88	1980–84	1984–88
State sector			
Output	8.49	6.77	10.22
TFP	2.40	1.80	3.01
Collective sector			
Output	16.94	14.03	19.86
TFP	4.63	3.45	5.86

Source: World Bank (1992).

Productivity performance is both an indicator of and a contributing factor to overall performance. In this early period of transition, non-state enterprises, particularly township and village enterprises (TVEs), had better productivity performance than SOEs, as shown in Table 4.1. In the period 1980–88, and the sub-periods 1980–84 and 1984–88, the collective sector always had a growth rate of total factor productivity (TFP) nearly doubling that of the state sector. It has been widely agreed among scholars that the collective sector is in the marketised section of the economy, facing more competition and hard budget constraints; however, there would be no less important factors contributing to the high growth of output and productivity of the non-state sector in terms of the Government's role in resource allocation during this early stage of transition. This could be seen in three dimensions.

First, there was no clear focus for industrial strategy associated with SOE reform. Instead, governments at various levels aimed their reform efforts at improving the efficiency performance of all existing SOEs through creating incentives for managers and workers. The gradual and experimental approach resulted in the dual-track price system, with the planned track and the market track. Importantly, as a result, the dual-track system created channels for transferring resources, especially raw materials from the state sector, and industrial enterprises to the non-state sector through flows between planned allocation and market channels (Jefferson and Rawski 1995:141). Moreover, the secular problem of shortage under planning (Kolodko 2000) contributed to excess demand in the market for goods, especially industrial products. The excess market demand combined with improved access to materials created highly profitable opportunities for non-state firms. As suggested by Jefferson and Rawski (1995), the high price gap due to shortages implicitly generated quasi-rents that were partly captured by non-state firms. The side effect of the dual-price system, however (and also evidence of rent-seeking), was the emerging rampant corruption of SOE managers and bureaucrats, as Lu (1994) indicated.

Second, local governments played an active and significant role in promoting the TVEs, with access to land, production sites, local utility services and flexible taxation. An important impetus for local governments, especially at township and village levels, to become more involved in non-state business activities was fiscal reform. In the 1980s, fiscal reform was carried out by dividing the responsibility for and allocation of budget revenues and expenditures between the central and local governments (province, county and municipality). Local governments were given more autonomy for collecting revenues and making spending decisions. This was called the fiscal contracting system or the third contract responsibility system (World Bank 1992), or 'fiscal federalism with political centralisation' (Zhang 2002:11). Local governments were encouraged to generate revenues depending on local conditions. Therefore, the fiscal contracting system created incentives for local governments and bureaucrats to promote the development of local businesses (Bouckaert 2007). With the unfavourable institutional setting for private enterprises, the result was that local governments increased their nominal stake in local collectively owned enterprises. The involvement of local governments created favourable access for TVEs to land, production sites and local utility services and created a more equal footing for TVEs compared with SOEs. As an example, compared with TVEs, private entrepreneurs had to pay higher electricity prices and 2.5 times higher taxes in 1985 (Chang and Wang 1994:445). This fact further explains why private entrepreneurs often adopted the red-hat strategy.

Third, TVEs had favourable access to credit due to the active role of local governments in the context of limited credit and a partly commercialised banking system. In the 1980s, initial reform of the banking sector took place to establish the central bank, the People's Bank of China (PBC), and four state commercial banks, which were assigned to focus on lending to major corresponding sectors: agriculture, industry, construction and foreign trade (Riedel et al. 2007). There was also a considerable network of rural and urban credit cooperatives. With limited household savings, rural credit cooperatives had strong links with the Agricultural Bank of China for their source of funding (Huang 2008). The close connections with local governments gave TVEs a strong position from which to access capital provided by rural credit cooperatives (Huang 2008). Urban collective enterprises experienced a similar situation. Facing a hostile business environment with low status, private entrepreneurs understandably used the red-hat strategy to overcome constraints on the most important resources. Arguably, TVEs could be an important platform for private enterprises to emerge and grow in the later period of reform.

It is obvious that TVEs outperformed SOEs, due both to being exposed to market conditions with the significant involvement of private entrepreneurship and to some favourable access to resources created by local governments.

The dual-track reform had produced a latently vibrant emergence of private entrepreneurs through releasing some productive resources wholly controlled by the state sector. Importantly, non-state enterprises contributed to the adjustment of industrial structure due to their labour-intensive activities (Lin et al. 1996). The unexpected outcome in the sense of ‘growing out of the plan’ (Naughton 1995) created strong competition pressures on SOEs (Jefferson and Rawski 1995). That became an important factor contributing to the deteriorating performance of the state sector, with many loss-making SOEs in the late 1980s, prompting a course of comprehensive reform for SOEs after 1992.

State control of resources and private entrepreneurship in the stage of comprehensive market reform: 1993 – present

Since 1993, China has undertaken a series of market-oriented reforms and established market mechanisms in all economic activities; however, the extent of market rules and competition varies significantly across sectors of the economy. The important aspect is the extent of the role market forces play in resource allocation, which can be seen in the structure of the enterprise system with a growing share of the private sector. Under the overarching framework of institutional reforms, changes in the ways the state controls key resources have been a key determinant shaping the evolution of private entrepreneurship, in the form of private sector development.

Conducive changes in the institutional environment and market opportunities for private enterprises

Major changes in political ideology and the legal framework to recognise the private sector happened after Deng Xiaoping’s tour of southern China in 1992, during which he made several important speeches signalling the supportive view of the Chinese leadership of the role of private entrepreneurs in generating the nation’s prosperity (Naughton 2007). Following this event, fundamental changes in the political mind-set on private entrepreneurs took place. For example, in September 1992, the Fourteenth Chinese Communist Party (CCP) Congress officially adopted a ‘socialist market economy’. The Fifteenth CCP Congress recognised private ownership as an important component of the economy. This marked a significant change in the official ideology towards being supportive of private entrepreneurs. In a related move, there were marked changes in the legal framework. The amended 1999 Constitution acknowledged the important role of private businesses in China’s economy (Qian and Wu:2000). Related laws followed, enacted to govern the operation of private businesses.

The leadership's continued commitment to the market economy promoted the completion of the marketisation process of the economy in three dimensions. In the first dimension, there was further completion of liberalisation of domestic goods and product markets. Price liberalisation was implemented in 1993 and 1994 after the market-oriented reform gained momentum in 1992. In 1997, 85 per cent of agricultural output, 95 per cent of retail sales and 96 per cent of production materials were sold at market prices (Zhang 2002:12).

The second dimension is China's foreign trade liberalisation. Before accession to the World Trade Organisation (WTO) in 2001, China took major steps to reform its foreign trade regime to remove distortions and to become consistent with the international trade system. Important reform measures were unification and devaluation of the foreign exchange rate and increased access to foreign exchanges for domestic producers, removal of entry barriers to export and import activities by granting trading rights to manufacturing enterprises, expanding tariffs and gradual reduction of trade barriers as well as the application of other trade policy instruments such as import substitution and export promotion (Naughton 2007). China's WTO accession in 2001 marked another boom of market opportunities for domestic enterprises in terms of foreign market access, technology transfer and the entrance of foreign investors. While China's substantial welfare gains from WTO accession were generally acknowledged, deepening trade integration has posed a lot of competition pressure on domestic enterprises, especially SOEs. Joining the WTO has induced the Chinese Government to carry out more domestic reforms to make the country's business rules and regulations consistent with international standards. This resulted in significant reforms of the SOEs in the 2000s. Moreover, national treatment required by the WTO promoted further the status of domestic private enterprises in the Chinese economy (Song 2014).

The third dimension is the surge of FDI inflows into the Chinese economy, which was in line with the Government's clear commitment to market-oriented reform and extensive and progressive trade liberalisation. According to Chen (2009), China experienced a dramatic increase of annual FDI inflows in 1992 and 1993, while there were a slowdown and decline between 1997 and 2000 when the Asian financial crisis hit. China's accession to the WTO led to a sharp increase of annual FDI inflows, from US\$33 billion in 2001 to US\$80 billion in 2008. It is notable that FDI was mainly concentrated in the manufacturing sector, with 63 per cent of the total FDI inflows (Chen 2009:336). Large FDI inflows intensified domestic competition and demand for China's production factor endowments.

It appears there have been many favourable changes in the institutional setting for the development of private entrepreneurship. Marketisation and trade liberalisation have generated ample market opportunities, but significantly increased competition.

Market-based control of resources and the evolution of private entrepreneurship

It has been argued above that transformation from a centrally planned economy to a market-based one can be seen as a process of releasing productive resources from the state to be determined and directed by market rules. Restructuring SOEs is part of such a process. In addition, the progress of market reform has come about with market liberalisation in all economic sectors. China's gradual approach has, however, shown the proactive and dominant role of the state in the direction and speed of market liberalisation. It has been identified that complete liberalisation has only happened in product markets, and not factor markets (Huang and Wang 2010). The factor markets are the areas where the state exerts significant control to influence the resource flows and the pattern of economic growth.

SOE restructuring and the expansion of the private sector

In the 1990s and 2000s, SOE restructuring was implemented in tandem with promotion of private enterprises. In 1995, radical reforms of SOEs started amid their deteriorating performance (particularly profitability and output growth) since the late 1980s (Qian and Wu 2000). Reform directions were gradually developed over the years. For example, in November 1993, the CCP's *Decision on Issues Concerning the Establishment of a Socialist Market Economic Structure* set forth the direction for the SOE reform that emphasised property rights, separation of ownership and enterprise management and allowed for privatisation and diversification of ownership. In October 2003, the Third Plenum of the Sixteenth CCP Congress issued the *Decision on Issues of Perfecting the Socialist Market Economy*, which was aimed at deepening SOE reform by focusing on shareholding ownership and corporatisation of SOEs. Importantly, the SOE reform in this period was different from the previous period in terms of the ownership transformation, called *gaizhi*, and the wide scale of SOE transformation. Various measures have been adopted, ranging from bankruptcy, liquidation, listing and sales to private firms and auctioning (Song 2014). In the latter half of the 1990s, the process of transforming TVEs to private ownership took place progressively as many TVEs were facing losses due to their weak competitiveness, rigid management structure and decision-making due to collective ownership (Qian and Wu 2000). Moreover, the Government's official

recognition of private property rights and support for private entrepreneurship had encouraged many privately run collective enterprises to take off their 'red hats' to become private firms (Song 2014).

Table 4.2 Number of Registered Enterprises of Different Ownership Type, 1993–2005 (all sectors)

Year	<i>Getihu</i>	Private	TVEs
1993	17 670 000	237 919	1 690 000
1995	25 280 000	654 531	1 620 000
1997	28 510 000	960 726	1 290 000
1999	31 600 000	1 508 857	940 000
2000	26 710 000	1 761 769	800 000
2001	24 330 000	2 028 548	670 000
2003	23 531 857	3 005 524	
2005	24 638 934	4 300 916	

Sources: Tsai (2007); Huang (2008).

Note: *Getihu* refers to individual businesses with less than eight employees, and private firms are private businesses with more than eight employees.

The *gaizhi* process was actually one of releasing the state's control of assets and reducing the scope of the state's direct involvement in doing business, allowing for a wider operation of the market mechanism. Notably, this process contributed significantly to the rapid expansion of the private sector in the late 1990s and 2000s. Table 4.2 shows that, in the whole economy, private enterprises had a continuous and rapid increase in number. At the same time, the number of TVEs declined at a quite rapid pace. As a result, the share of SOEs in total gross output continued to decline, giving way to the rapidly emerging private enterprises. Figure 4.1 indicates the trend of a more dramatic increase of private enterprises in the industrial sector from 1999 to 2010. The number of SOEs and TVEs had a continuous decline. At the same time, the number of foreign-funded enterprises increased quite significantly. The industrial gross output share of the private sector surpassed that of the state sector in 2010, at around 30 per cent (Song 2014).

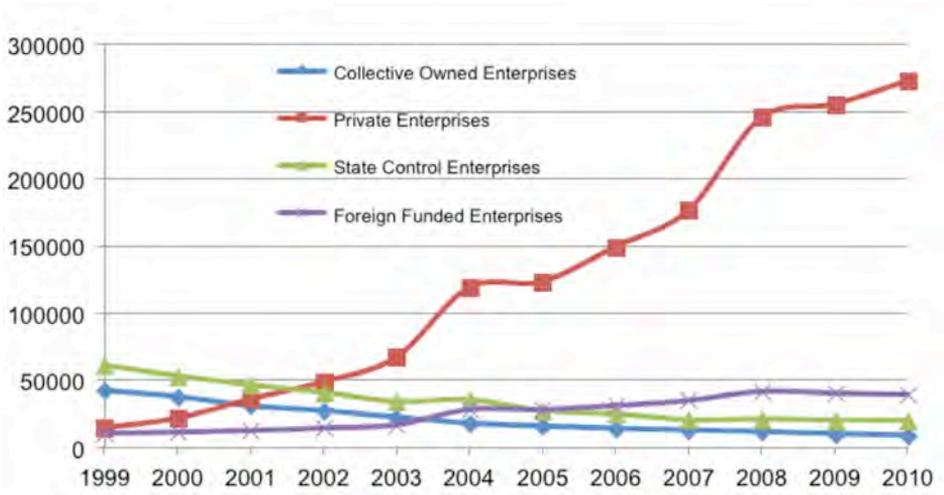


Figure 4.1 Number of Industrial Enterprises, 1999–2010

Sources: CEIC database; authors' compilation.

From the perspective of resource reallocation, SOE restructuring could be considered successful as the process led to a significant transfer of state assets to private entrepreneurs using the market mechanism, reducing the state's fiscal burden created by loss-making SOEs. The process was also successful in terms of both making room for expansion of the private sector (Xiao et al. 2009) and exploiting the dynamics and strength of private entrepreneurship in using resources (assets) more efficiently. There was also a concern about the loss of the state's assets and corruption through *gaizhi*. The problem of rent-seeking associated with unproductive entrepreneurship is unavoidable to some extent; however, there is some evidence suggesting the losses could be small in some cases due to local governments' exchange for employment protection after privatisation (Garnaut et al. 2006). Moreover, it has been found that the growing private sector contributed to reducing unemployment problems created by SOE restructuring (Song 2014).

Industrial strategy and asymmetric sectoral distribution of SOEs and non-state enterprises

An important feature of the SOE reform in the 1990s was the Government's introduction of an industrial strategy. In 1994, the State Council approved 'An Outline of the State Industrial Policies in the 1990s'. The renewed industrial policy identified machinery-electronics, petrochemicals, automobile manufacture and construction as 'pillar industries'. Later, specific policies for pillar industries were developed, such as the industrial policy for the auto industry' (Lu 2000). This policy would be one of the key factors underlying the

approach of SOE reform under the slogan of ‘grasping the large, letting the small go’, put forward by the Fifteenth CCP Congress. Consequently, some 1000 SOEs were identified as large ones to be retained with whole state ownership when the SOE restructuring began (Song 2014). Subsequently, a group of key sectors has been identified, which includes energy, electricity, utilities, telecommunication, aviation and shipping. Since the 1990s, there have been some changes in the list of the pillar industry group, which now includes equipment, autos, electronics, information technology, construction, steel, metals, and chemicals (Baston 2014; World Bank and DRC 2013).

Table 4.3 Distribution of Private Enterprises in China, 1994–2005 (per cent)

Industry	1994	1999	2001	2005
Agriculture	4.1	4.7	5.6	6.3
Mining	1.2	1.2	1.3	2.0
Manufacturing	40.4	39.8	38.3	43.5
Power	0.9	1.1	0.7	1.1
Construction	5.5	6.4	5.9	5.4
Geology and watering	0.0	0.0	0.1	0.0
Transportation	2.4	2.3	2.5	2.5
Service and catering	27.4	20.6	21.4	26.0
Finance and insurance	0.3	0.2	0.3	0.1
Real estate	0.9	3.2	3.8	2.5
Social services	8.0	8.3	8.0	4.9
Science and technology	2.5	2.6	2.1	1.5
Others	6.5	9.6	9.9	4.2
Total	100	100	100	100

Source: Yang (2012).

Note: The data in the table were collected from repeated cross-sectional surveys of private enterprises in China, conducted by the Institute of Sociology, Chinese Academy of Social Sciences (Yang 2012:109).

Industrial policy has become one of the main tools guiding the Chinese Government's new approach to the control and allocation of key resources, especially production factors. Different policy measures have been deployed to implement the Government's industrial policy perspective. First, in line with SOE restructuring, various barriers were erected to prevent or limit the entry and competition of non-state enterprises, especially private enterprises. Apart from some industries with natural monopoly characteristics, there are several oligopolistic or monopolistic industries created by administrative measures, generating an ‘administrative monopoly’. Administrative barriers include permits and business regulations such as administrative inspection, monitoring of firms' registered business activities and local governments' purchase of goods and services from targeted firms (World Bank and DRC 2013:108–9). Second, the Government controlled the financial system, especially banking, to direct

credit to targeted industries, especially SOEs. Consequently, the introduction of pillar and strategic industries has a significant effect on the participation of private firms and enterprises of other kinds in different sectors of the economy. The outcome is the skewed distribution of firms by industry. Based on the data from representative sample surveys of private enterprises, Table 4.3 shows that private firms are concentrated in manufacturing and service and catering. Nevertheless, it is possible that there are not many private firms in some manufacturing industries that were designated as ‘pillar’ industries. In contrast, very few private enterprises operated in sectors such as power, construction, finance and insurance, and geology and watering, which are key utility sectors whose output is used by all other sectors. This situation remained unchanged from the start of SOE restructuring to the time when the deepening SOE reform was going on. The pattern of asymmetrical distribution of SOEs and private firms will be further discussed below.

Controlled financial system and private entrepreneurs’ access to capital

Market liberalisation led to the retreat of the state in directing goods flows between economic sectors and regions. Price liberalisation also made it increasingly impossible for the state to distort relative prices between sectors and regions for industrialisation (Zhang 2002). With growing household and firm incomes as a result of marketisation, the allocation of financial resources has become the main form of the state’s resource control. On the one hand, in line with market reform, the Chinese Government gradually promoted the financial system, including banking, stock markets and the emergence of non-bank financial firms, to mobilise and channel savings for investment demand in the growing economy. On the other hand, the Government took the monopoly position in the financial system by using state-owned commercial banks and financial corporations with strict entry barriers and regulations. In fact, in line with developing the financial system of a market economy, the Government has continued to consolidate its dominant position in the financial system since the central-planning period. Key state-controlled financial institutions are state-owned commercial banks and rural and urban cooperatives. In the 1990s, the Government started to allow the market participation of the non-state sector, including shareholding commercial banks and foreign banks (Bonin and Huang 2002; Song 2005). The participation of non-state commercial banks increased in the 2000s; however, state-owned financial institutions have been major players in the financial markets. It is clear that the controlled financial system enabled the Government to channel most savings to SOEs, particularly SOEs in pillar and strategic industries, and to undertake big infrastructure investment projects. As a result, the private sector had limited access to capital. For example, in 1999,

private enterprises received only less than 0.5 per cent of loans from state-owned banks, which is in contrast with their contribution of nearly 35 per cent of industrial output in 1998 (Song 2005:117). Consequently, private enterprises had to rely much on informal financing.

The monopoly position in the financial markets allowed the Government to impose financial repression. Using its monopoly of state-owned commercial banks, the Government has been able to set a low level of interest rates for bank deposits and lending (Riedel et al. 2007). Moreover, 'the maintenance of interest rates at artificially low levels has made it difficult for domestic savers and investors to see the true price of capital' (Song 2005:115). Cheap credit has been used to keep many loss-making SOEs viable, leading to the well-known problem of non-performing loans in the banking system (Riedel et al. 2007).

By imposing low ceilings on borrowing and lending interest rates, the Government has created significant rents, which can be defined by the differences between the actual and the would-be market clearing interest rates. The rents would be much higher when taking into account the potential value of profitable projects for private entrepreneurs. There has been recognition that the extent of capital market distortions would be significant (Young 2000; Zhang and Tan 2007; Huang and Wang 2010; Brandt and Zhu 2010; Brandt et al. 2013). Huang and Wang (2010) claimed that distortions caused by government interventions are not confined to the capital markets, but are also in the labour and natural resource markets. Notably, these distortions were substantial. For example, their estimates show that the value of factor market distortions was about RMB2.1 trillion in 2008—equivalent to 7 per cent of GDP. Moreover, capital-market distortions accounted for the biggest share in the total since 2000 (Huang and Wang 2010:307). An important issue here is how to view these distortions in terms of their contribution to economic growth.

State-led development of land markets and the private sector's access

In China, land is owned and managed by local governments in urban areas and by collectives in the countryside. Due to its sole ownership of land on behalf of all the people, the Government has control of land supply and land-use rights transfer (Huang and Wang 2010).

The land market is a contrasting case with the capital market in terms of accessibility for private enterprises given a similar feature of government monopoly in the market. As a common practice, local governments have the authority to determine and collect land-use fees (Huang and Wang 2010). Many local governments have used access to land as one of the main instruments to

promote industrial and economic growth. Local governments actively promoted land developments for industrial sites. To attract manufacturing enterprises, many local authorities set low land-use fees. In many cases, land-use fees were only equal to, or even lower than, the cost of land development (including compensation for existing land users, land-clearing costs and infrastructure building costs). In the past two decades, due to local competition in pursuit of rapid economic growth, many local governments have tried to reduce the cost of land development to create low land-use fees. The main method used is paying low land compensation fees to local farm households as most land transfers involve agricultural and rural land. Low land-use fees have been considered an important factor promoting rapid industrial development in many localities; however, the consequences of industrial land development are soaring land disputes and demonstrations. Land grabs are becoming a big concern for the Chinese Government. On this aspect of land market development, it appears that governments at various levels have used their monopoly position of sole ownership to release land resources with low prices for industrial enterprises, including private enterprises. Conceptually, distorted industrial land prices have implicit government subsidies, which are equivalent to implicit rents. Otherwise, industrial development would have been constrained by rising land prices due to rising demand from industrial investment.

Another aspect of land market development is urbanisation and residential land expansion. Rapid industrialisation has promoted urbanisation through attracting millions of rural migrants. Urbanisation, in combination with increasing income levels, has created huge demand for new housing and residential land. Excess demand for urban and industrial land use has caused land prices to soar due to the government-controlled supply of land. Recognising the rapid growth of demand for land, local governments have actively managed the supply of land for urban and industrial uses. Being able to control land supply has enabled local governments to determine land-use prices and collect substantial revenue for their budgets. Importantly, soaring land prices in many locations with rapid industrial and urban expansion have generated substantial rents, which can be defined here as the difference between the market price and the cost of land supply by the Government. Moreover, there could be additional rents when the actual market value of land was higher than the sale price determined by the Government. Revenues for local government budgets from residential land sales or auctions have been used mainly for building infrastructure. On this aspect of land market expansion, the Government's monopoly in land supply has generated rents that were captured by the Government for public investment.

In relation to land, the Government also has monopoly power over other natural resources such as energy and public utilities and other natural endowments. It has been argued that government control of key sectors (coal,

electricity, oil and water) has distorted the markets in favour of industrial development. Huang and Wang's (2010) estimates suggest these distortions were significant during the period 2000–08, ranging from 3.6 to 6.4 per cent of GDP. Again, government control of resources has created significant economic rents, which were used to support industrialisation.

Beneficial aspects of the state control of resources during market reform

Since the SOE restructuring process started in the 1990s, the Government has made effective interventions in factor markets, which have created substantial rents. Its dominant position in these markets has helped the Government to mobilise resources, especially financial resources to build infrastructure. Large SOEs have large undertakings in public infrastructure. Government-led infrastructure investments have had both short-term and long-term effects on economic growth through long-term productivity growth. In this sense, government control of resources to generate key infrastructure has been supportive of the development of private entrepreneurship. Xiao et al. (2009:166) showed the impressive achievements of China in infrastructure building. For example, the total length of highways increased from 1.16 million km in 1995 to 3.46 million km in 2006. At the same time, the railway network expanded from 59 700 km to 77 100 km, and there was a huge increase of mobile phone subscribers, from eight million to 610 million. In terms of value, Zhang et al. (2012:9) reported that the annual amount of public expenditure increased from RMB73.2 billion in 1997 to RMB1.270 billion in 2010 at the 2005 constant price. This observation is consistent with one made by Naughton (2010:446) about China's approach: 'Public ownership can be used to exploit market power and generate revenues for investment and public goods' creation.' The active and effective role of the Chinese Government in undertaking market transition has given rise to a notion of China's development model. To some extent, Khan's (2004) observation that a state with strong capacity can generate and manage rents that are growth-enhancing seems to be relevant to China's experience.

In another dimension, the rents created by government control of resource markets, despite being a market distortion, have been used as strong incentives to attract and support investment from the non-state sector. Many studies have suggested that this has been an important factor contributing to China's investment-driven pattern of growth.

What are the inefficiency effects of resource control and when did they worsen?

Distorted investment patterns

Despite generating investment effects for growth, state-maintained low resource prices appear to have led to some overinvestment in manufacturing (Blanchard and Giavazzi 2006), resulting in lower investment returns. From the 1990s to the 2000s, the investment cost of \$1 additional growth increased from \$3 to \$4 (Zheng et al. 2009:878). Excessive investment has gradually accumulated to generate China's structural imbalances of economic growth (Huang and Wang 2010). While there is a certain rationale for the intervention of the Government in some industries with natural monopoly characteristics, the growth of the private sector with its better performance has caused concerns about the Government's dominance in these industries. Figure 4.2 presents the share of the state sector in total assets and output in a number of industrial subsectors in 2011. It suggests there is a clear difference between the total asset share and the output share of SOEs. There are only four subsectors in which the asset share is equal to or greater than the output share: petroleum and gas, processing of nuclear and petroleum materials, tobacco, and water supply (these industries appear to be pure state monopolies). In several other subsectors, the output share is significantly smaller than the asset share held by the SOEs. This means that where there is some participation of the non-state sector, the state control of resources (capital or assets) becomes less efficient due to competition and the inherent weaknesses of some SOEs. This situation suggests that further reduction of state control in these industries would enhance their output growth.

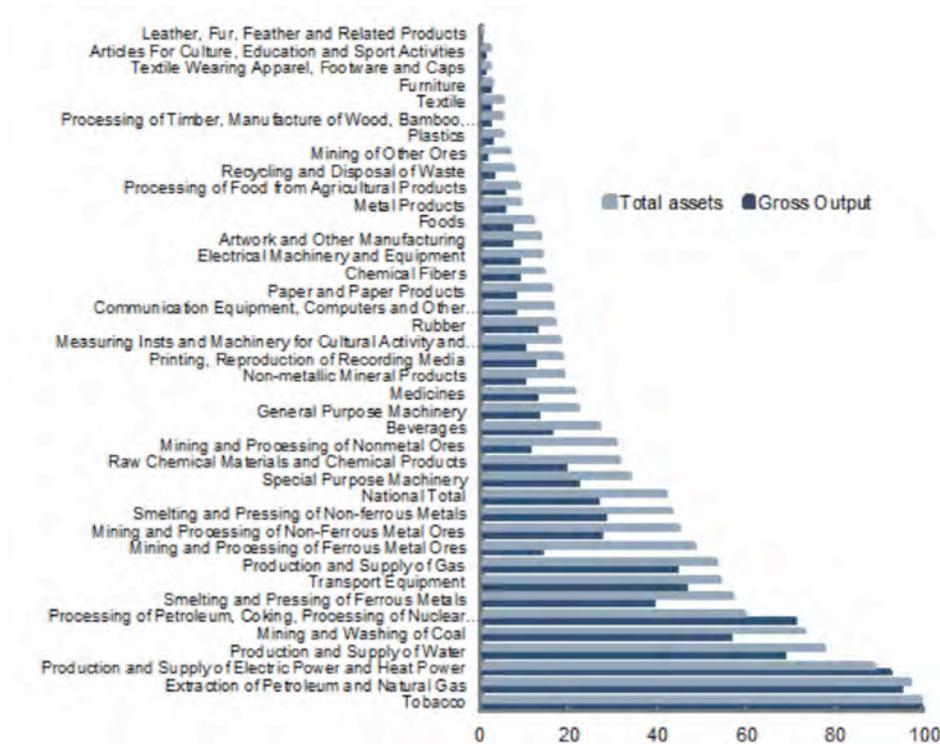


Figure 4.2 Sectoral Distribution of SOEs, 2011 (per cent of total assets and output)
 Source: Zhang and Freestone (2013).

The above situation is consistent with information in Figure 4.3. From 2000 to 2013, the state's share of assets and output in the industrial sector declined steadily. Moreover, there is always a gap between the asset share and the output share, with the asset share always higher than the output share. It would therefore be growth-enhancing if there were some further reduction in the state's holding of assets in some industrial subsectors.

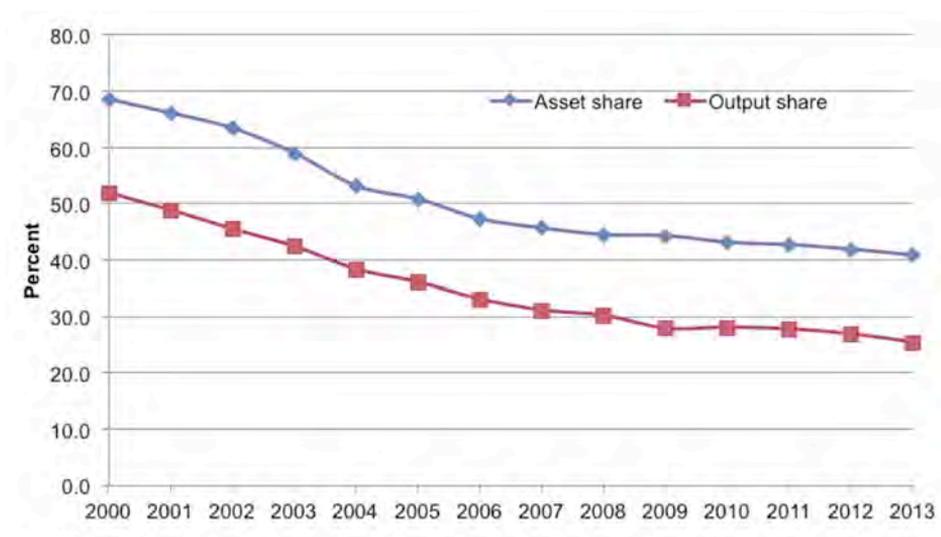


Figure 4.3 Asset and Gross Output Share of State-Controlled Enterprises (per cent)

Sources: CEIC database; authors' estimates.

Unequal access to resources, rent-seeking and unproductive entrepreneurship

Access to credit or capital is one of the most important issues for a private enterprise to succeed in the market. While there have been more and more profitable opportunities in the product markets, private firms have been constrained by the lack of capital and access to bank credit, which prevents them from taking up profitable opportunities for business start-ups or expansion. Deepening SOE reform has forced state-owned commercial banks to operate on a commercial basis and look for profitable private enterprises to which to lend (Firth et al. 2009). The tradition of favouring the SOEs has remained, however, meaning access to bank credit is a significant challenge for private enterprises, especially small and medium enterprises (SMEs), which are the main form of private entrepreneurship (Shen et al. 2009). There has long been a contradiction in the financial markets: there is always substantial excess demand on the one hand, and a limited supply of credit for entrepreneurs on the other. Therefore, there exist rents that could be significant due to the gap between the market clearing level and the regulated interest rate. The rents could be very large if we take into account the opportunity costs of forgone market opportunities identified by entrepreneurs.

To overcome credit constraints, many private enterprises have used informal channels, especially the *guanxi* network,² to obtain loans (Liao and Sohmen 2001). Because the state controls bank credit and other resources, government officials and people in charge of managing resources have an advantageous position from which to access capital and resources. Consequently, there has been anecdotal evidence of private firms trying to get bank loans or to gain access to government subsidies through political connections (Zhou 2009; Bai et al. 2006; Wu and Cheng 2011). Moreover, some evidence has been found showing that private enterprises with political connections perform better than those without (Choi and Zhou 2001; Faccio 2006). In a sense, there could be a concern, as suggested by Baumol (1990), that there will be some entrepreneurs who concentrate their investment in political connections for profitable opportunities. This is a kind of unproductive entrepreneurship. For other resources, especially land and property development, state control is likely to create unproductive entrepreneurship due to the speculative nature of the market in the context of the Government's controlled supply of land in localities with high demand for housing and residential land.

Financial performance of the state-controlled and non-state sectors

SOE restructuring has played an important role in promoting SOE performance, and the growth of SOEs still makes an important contribution to economic growth and government revenues. Given their large share of fixed assets in many industries, especially key and pillar industrial subsectors, an important question is how the SOEs performed compared with other non-state firms.

Figure 4.4 shows industrial enterprise performance in terms of profit rate during 2000–13. Before the Global Financial Crisis (GFC) in 2008, the SOEs had a substantially higher and faster growing profit rate than non-state enterprises. One explanation could be the SOE reform in the early 2000s—as well as their favourable access to cheap bank credit. But there are arguments that SOEs had other policy objectives to justify their better performance. Their performance quickly worsened, however, after 2008 and became closer to the level of the non-state sector.

2 'Guanxi' is a popular Chinese term referring to interpersonal or social relationships and connections (Calisle and Flynn 2005).

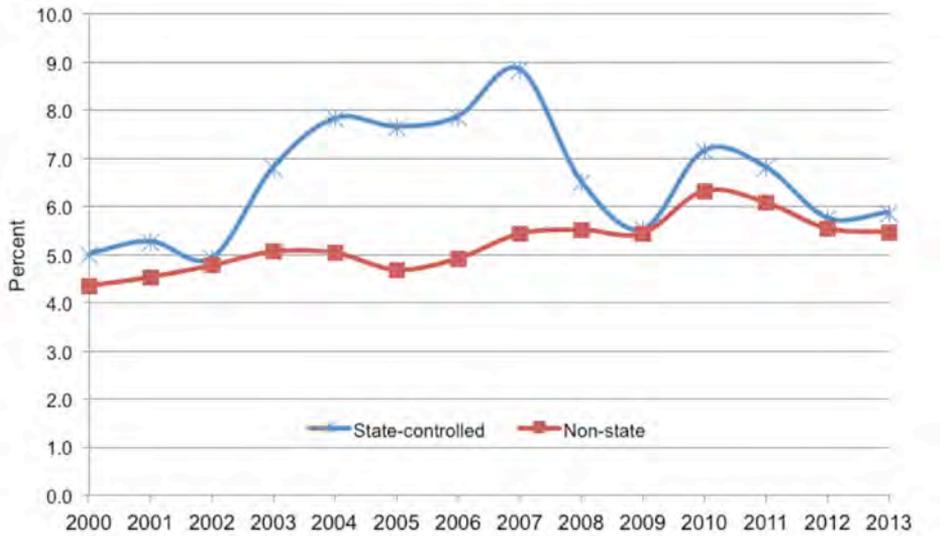


Figure 4.4 Profit Rate (Profits/Sales) of Industrial Enterprises, 2000–13

Sources: CEIC database; authors' estimates.

Figure 4.5 shows the performance of industrial enterprises in terms of returns on assets (ROA) during 2000–13. Before 2008, SOEs showed significant improvement in their ROA, which could be due to the reasons given above; however, the SOEs appeared to have consistently lower ROA than the non-state sector. There was a similar trend to that with the profit rate in that the SOEs' performance in terms of ROA worsened after 2008. The ROA gap between the SOEs and the non-state sector became larger. Baston (2014) suggested that the trend of worsening performance of the SOEs after 2008 indicates the structural problems of the SOE sector, with loss-making SOEs, despite the fact that deepening SOE reform had helped boost the performance of many SOEs through corporatisation and improved corporate governance. This suggests state control of assets would be reduced by restructuring inefficient SOEs and allowing more participation by private enterprises.

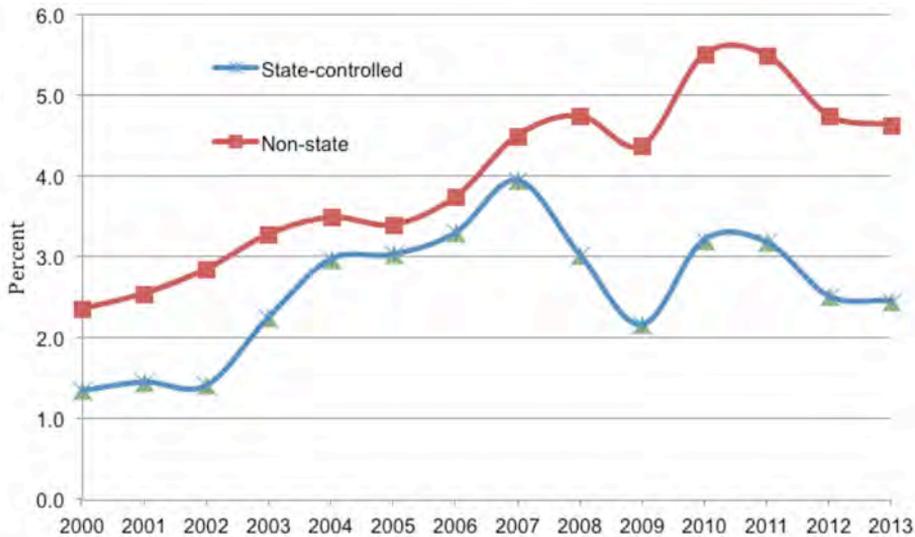


Figure 4.5 Returns on Assets of Industrial Enterprises, 2000–13 (per cent)

Sources: CEIC database; authors' estimates.

Changes in resource control and productivity performance

Further assessment of the efficiency of the state control of resources could be seen in the TFP performance in relation to financial performance. Figure 4.6 shows there is a positive association between TFP and profitability indicators, as commonly expected in the literature on firm performance (Zhang et al. 2002). In addition, SOE reform has had positive impacts on the SOEs' performance in terms of both productivity and profitability. As shown in Figure 4.6, in contrast with the period 1988–98, accelerated SOE restructuring appears to promote the annual profit rate of the state sector in the period 1998–2007. At the same time, SOEs' average TFP growth rate had a sharp increase from nearly zero per cent to more than 4 per cent.

Based on the estimation of labour productivity and growth accounting simulations, Brandt and Zhu (2010) provided some evidence of the impacts of state control of resources on the productivity performance of SOEs compared with non-SOEs, as shown in Table 4.4. In the period 1988–98, the labour productivity of non-SOEs was nearly double that of SOEs (6.17 per cent versus 3.46 per cent). The TFP growth of the non-SOEs had a greater impact on the growth of the TFP of two sectors. Notably, the data show that capital distortions played a more important role in promoting the productivity of SOEs, while they had a much smaller effect on promoting the productivity of non-SOEs.

In contrast, an increase in investment had little effect on the labour productivity of both sectors. Therefore, capital control was a significant factor after TFP for the labour productivity performance of SOEs.

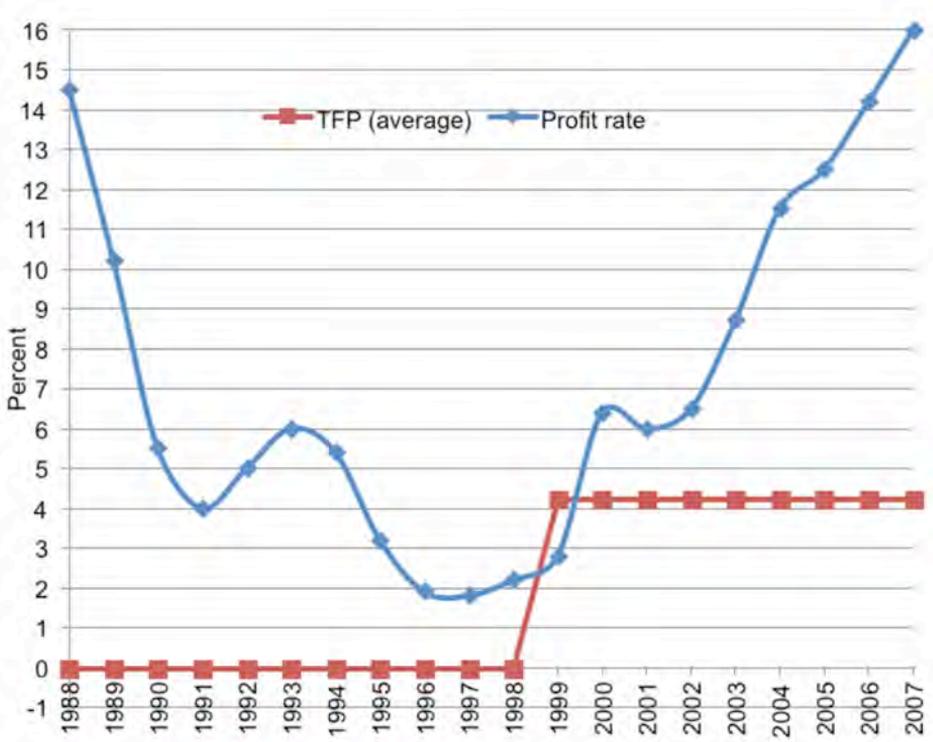


Figure 4.6 Profit Rate and TFP Growth Rate of the State Sector, 1988–98 and 1998–2007 (per cent)

Sources: Song (2014); Brandt and Zhu (2010).

Note: TFP growth rate is the average growth rate estimated by Brandt and Zhu (2010) for two periods: 1988–98 and 1998–2007. The profit rate of the whole state sector for each year is estimated by Song (2014).

During the period 1998–2007, SOEs had substantially higher labour productivity growth than non-SOEs. This could be due to the deepening of SOE reform that makes SOEs larger with more access to credit. In this period, the TFP growth of non-SOEs and SOEs had a quite similar effect on the labour productivity of other sectors. Again, investment had less impact on the labour productivity growth of non-SOEs than SOEs. It appears that, compared with the 1988–98 period, the SOEs' TFP performance improved significantly and was the main contributor to labour productivity growth, rather than investment. Most importantly, capital market distortions had a significant negative impact on the labour productivity growth of non-SOEs. In contrast, SOEs clearly benefited

from capital market distortions. Therefore, in line with the development of factor markets, the state control of resources had significantly negative effects on the performance of non-SOEs, and private enterprises in particular.

Table 4.4 Reforms Related to Resource Control and Labour Productivity Growth (counterfactual simulations) (per cent)

Item	1988–98		1998–2007	
	Non-SOEs	SOEs	Non-SOEs	SOEs
Benchmark model	6.17	3.46	8.48	11.15
No TFP growth in non-state sector ^a	2.00	-0.71	1.87	4.54
No TFP growth in state sector ^a	5.52	2.82	4.95	7.62
No capital market distortions ^a	6.10	-0.34	9.01	9.03
No increase in investment rates since 1988 or 1998 ^a	6.00	3.29	7.91	10.58

Source: Brandt and Zhu (2010).

Note: ^a refers to counterfactual situations, which are assumed to show what the labour productivity growth of each sector would be in comparison with the benchmark model.

Overall, the examination of the financial and productivity performance of the SOE and non-state sectors has shown that the state's control of resources, in terms of interventions in the factor markets, had negative impacts on the performance of private enterprises, despite their better performance compared with SOEs. This means that SOE restructuring and the change in focus of state resource control have promoted the performance of the state sector, but at the expense of efficiency losses of private enterprises in the non-state sector.

Concluding remarks

We have used the framework of entrepreneurship development to analyse the pattern and impact of change in the state's control of resources on the emergence and evolution as well as outcomes of private entrepreneurship in China during market transition over the past 30 years.

The examination of SOE reform and change in the state's control of resources has shown that private entrepreneurship has emerged and developed robustly in the context of China's market reform. Apart from improving the environment for private entrepreneurship, the change in the ways the Government controls key productive resources has had significant impacts on the performance of private enterprises. In the most recent period, when the product markets have been liberalised, state interventions in factor markets have had more negative impacts on the performance of the private sector. Given a larger share and better performance of private enterprises, reducing the state's control of key resources would promote productivity and economic growth in the future.

References

- Ahmad, N. and Hoffman, A. (2008), *A framework for addressing and measuring entrepreneurship*, OECD Statistics Working Papers 2008/02, Paris: OECD Publishing. Available from <<http://dx.doi.org/10.1787/243160627270>>.
- Arrow, K. (2001), 'The role of time', in L. R. Klein and M. Pomer (eds), *The New Russia: Transition Gone Awry*, pp. 85–91, Stanford, Calif.: Stanford University Press.
- Bai, C. E., Lu, J. and Tao, Z. (2006), 'Property rights protection and access to bank loans: evidence from private enterprises in China', *Economics of Transition* 14(4): 611–28.
- Baston, A. 2014, *Fixing China's state sector*, Paulson Policy Memorandum, The Paulson Institute, Chicago. Available from <http://www.paulsoninstitute.org/media/.../fixingchina_sstatesector_english.pdf>.
- Baumol, W. J. (1990), 'Entrepreneurship: productive, unproductive and destructive', *Journal of Political Economy* 98(5): 893–921.
- Blanchard, O. J. and Giavazzi, F. (2006), *Rebalancing growth in China: a three-handed approach*, January 2006, Discussion Paper DP5403, Center for Economic Policy Research, Washington, DC.
- Bonin, J. P. and Huang, Y. (2002), 'China's opening up of the banking system: implication for domestic banks', in L. Song (ed.), *Dilemmas of China's Growth in the Twenty-First Century*, pp. 55–72, Canberra: Asia Pacific Press.
- Bouckaert, B. R. (2007), 'Bureaupreneurs in China: we did it our way', *European Journal of Law and Economics* 23(2): 169–95.
- Brandt, L. and Zhu, X. (2010), *Accounting for China's growth*, Working Paper Series IZA DP No. 4764, Institute for the Study of Labor, Bonn. Available from <<ftp.iza.org/dp4764.pdf>>.
- Brandt, L., Tombe, T. and Zhu, X. (2013), 'Factor market distortions across time, space and sectors in China', *Review of Economic Dynamics* 16(1): 39–58.
- Carlisle, S. and Flynn, D., (2005), 'Small business survival in China: *Guanxi*, legitimacy, and social capital', *Journal of Developmental Entrepreneurship*, 10(1): 79-96.
- Carree, M. A. and Thurik, A. R. (2003), 'The impact of entrepreneurship on economic growth', in Z. J. Acs and D. B. Audretsch (eds), *Handbook of Entrepreneurship Research*, UK: Kluwer Academic Publishers.

- Chang, C. and Wang, Y. (1994), 'The nature of the township-village enterprises', *Journal of Comparative Economics* 19: 434–52.
- Chen, C. (2009), 'Inflow of foreign direct investment', in R. Garnaut, L. Song, and W. T. Woo (eds), *China's New Place in a World in Crisis: Economic Geopolitical and Environmental Dimensions*, pp. 325–47, Canberra: ANU E Press.
- Choi, E. K. and Zhou, K. X. (2001), 'Entrepreneurs and politics in the Chinese transitional economy: political connections and rent-seeking', *The China Review* 1(1): 111–35.
- Estrin, S., Meyer, K. E. and Bytchkova, M. (2008), 'Entrepreneurship in transition economies', in A. Basu, M. C. Casson, N. Wadeson and B. Yeung (eds), *The Oxford Handbook of Entrepreneurship*, pp. 679–723, New York: Oxford University Press.
- Faccio, M. (2006), 'Politically connected firms', *American Economic Review* 96(1): 369–86.
- Firth, M., Lin, C., Liu, P. and Wong, S. M. L. (2009), 'Inside the black box: bank credit allocation in China's private sector', *Journal of Banking & Finance* 33: 1144–55.
- Garnaut, R., Song, L. and Yao, Y. (2006), 'Impact and significance of state-owned enterprise restructuring in China', *The China Journal* 55: 35–63.
- Garnaut, R., Song, L., Yang, Y. and Wang, X. (2001), *Private Enterprise in China*, Canberra: Asia Pacific Press.
- Gries, S. and Naudé, W. (2008), *Entrepreneurship and structural economic transformation*, UNU-WIDER Research Paper No. 2008/62, United Nations University/World Institute for Development Economics Research. Available from <http://www.wider.unu.edu/publications/working-papers/research-papers/2008/en_GB/rp2008-62/>.
- Huang, Y. (2008), *Capitalism with Chinese Characteristics: Entrepreneurship and the State*, New York: Cambridge University Press.
- Huang, Y. and Wang, B. (2010), 'Rebalancing China's economic structure', in R. Garnaut, J. Golley and L. Song (eds), *China: The Next Twenty Years of Reform and Development*, pp. 293–318, Canberra: ANU E Press.
- Jefferson, G. H. and Rawski, T. G. (1995), 'How industrial reform worked in China: the role of innovation, competition, and property rights', in *Proceedings of the World Bank Annual Conference on Development Economics 1994* Washington, DC: The World Bank.

- Karlsson, C., Friis, C. and Paulsson, T. (2004), *Relating entrepreneurship to economic growth*, CESIS Electronic Working Paper Series No. 13, Centre of Excellence for Science and Innovation Studies, Stockholm. Available from <<http://ideas.repec.org/p/hhs/cesisp/0013.html>>.
- Khan, M. H. (2004), State failure in developing countries and institutional reform strategies, Paper presented at the Annual World Bank Conference on Development Economics—Europe 2003, Oslo, 24–26 June 2002. <http://eprints.soas.ac.uk/3683/1/State_Failure.pdf>.
- Kirzner, I. M. (1998), *How Markets Work: Disequilibrium, Entrepreneurship and Discovery*, Sydney: Centre for Independent Studies.
- Kolodko, G. W. (2000), 'Transition to a market and entrepreneurship: the systemic factors and policy options', *Communist and Post-Communist Studies* 33(2): 271–93.
- Liao, D. and Sohmen, P. (2001), 'The development of modern entrepreneurship in China', *Stanford Journal of East Asian Affairs* 1: 27–33.
- Lin, J. Y., Cai, F. and Li, Z. (1996), 'The lessons of China's transition to a market economy', *Cato Journal* 16(2): 201–31.
- Lu, D. (1994), *Entrepreneurship in Suppressed Markets: Private-Sector Experience in China*, New York: Garland Publishing.
- Lu, D. (2000), 'Industrial policy and resource allocation: implications on China's participation in globalisation', *China Economic Review* (11): 342–60.
- Murrel, O. and Wang, Y. J. (1993), 'When privatization should be delayed: the effect of communist legacies on organizational and institutional reforms', *Journal of Comparative Economics* 17(2): 385–406.
- Naudé, W. (2010), 'Entrepreneurship, developing countries, and development economics: new approaches and insights', *Small Business Economics* 34: 1–12.
- Naughton, B. (1995), *Growing Out of the Plan: Chinese Economic Reform, 1978–1993*, Cambridge: Cambridge University Press.
- Naughton, B. (2007), *The Chinese Economy: Transition and Growth*, Cambridge, Mass.: MIT Press.
- Naughton, B. (2010), 'China's distinctive system: can it be a model for others?', *Journal of Contemporary China* 19(65): 437–60.

- Qian, Y. and Wu, J. (2000), *China's transition to a market economy: how far across the river?*, CEDPR Working Paper No. 69, Center for Research on Economic Development and Policy Reform, Stanford University. Available from <<http://siepr.stanford.edu/publicationsprofile/1503>>.
- Riedel, J., Jin, J. and Gao, J. (2007), *How China Grows: Investment, Finance, and Reform*, Princeton, NJ: Princeton University Press.
- Schumpeter, J. A. (1934), *The Theory of Economic Development*, Cambridge, Mass.: Harvard University Press.
- Shen, Y., Shen, M., Xu, Z. and Bai, Y. (2009), 'Bank size and small- and medium-sized enterprise (SME) lending: evidence from China', *World Development* 37(4): 800–11.
- Sobel, R. S. (2008), 'Testing Baumol: institutional quality and the productivity of entrepreneurship', *Journal of Business Venturing* 23: 641–55.
- Song, L. (2005), 'Interest rate liberalisation in China and the implications for non-state banking', in Y. Huang, A. Saich and E. Steinfeld (eds), *Financial Sector Reform in China*, pp. 111–30, Cambridge, Mass.: Harvard University Asia Centre.
- Song, L. (2014), 'State and non-state enterprises in China's economic transition', in G. C. Chow and D. H. Perkins (eds), *Routledge Handbook of the Chinese Economy*, pp. 182–207, London and New York: Routledge.
- Tanas, J. K. and Audretsch, D. B. (2011), 'Entrepreneurship in transitional economy', *International Entrepreneurship and Management Journal* 7: 431–42.
- Tsai, K. S. (2007), *Capitalism without Democracy: The Private Sector in Contemporary China*, Ithaca, NY: Cornell University Press.
- World Bank (1992), *China—Country Economic Memorandum: Reform and the Role of the Plan in the 1990s*, Washington, DC: The World Bank. Available from <<http://documents.worldbank.org/curated/en/1992/06/736717/china-country-economic-memorandum-reform-role-plan-1990s>>.
- World Bank (2001), *World Development Report 2002: Building Institution for Markets*, New York: Oxford University Press.
- World Bank and Development Research Center of the State Council, the People's Republic of China (DRC) (2013), *China 2030*, Washington, DC: The World Bank.
- Wu, J. (2009), 'Market socialism and Chinese economic reform', in J. Kornai and Y. Qian (eds), *Market and Socialism: In the Light of the Experiences of China and Vietnam*, New York: Palgrave Macmillan.

- Wu, J. and Cheng, M. L. (2011), 'The impact of managerial political connections and quality on government subsidies: evidence from Chinese listed firms', *Chinese Management Studies* 5(2): 207–26.
- Xiao, G., Yang, X. and Janus, A. (2009), 'State-owned enterprises in China: reform dynamics and impacts', in R. Garnaut, L. Song and W. T. Woo (eds), *China's New Place in a World in Crisis: Economic Geopolitical and Environmental Dimensions*, pp. 155–78, Canberra: ANU E Press.
- Yang, K. (2012), 'The dependency of private entrepreneurs on China's state', *Strategic Change* 21: 107–17.
- Young, A. (2000), 'The razor's edge: distortions and incremental reform in the People's Republic of China', *The Quarterly Journal of Economics* CXV(4): 1091–135.
- Zhang, A., Zhang, Y. and Zhao, R. (2002), 'Profitability and productivity of Chinese industrial firms: measurement and ownership implications', *China Economic Review* 13: 65–88.
- Zhang, C. (2002), The interaction of the state and the market in a developing transition country: the experience of China, Paper presented at International Seminar on Promoting Growth and Welfare: Structural Changes and the Role of Institutions in Asia, Brazil.
- Zhang, D. and Freestone, O. (2013), 'China's unfinished state-owned enterprise reforms', *Economic Roundup Issue 2*, The Treasury, Government of Australia, Canberra. Available from <<http://www.treasury.gov.au/PublicationsAndMedia/Publications/2013/Economic-Roundup-Issue-2/Economic-Roundup/Chinas-unfinished-SOE-reforms>>.
- Zhang, X. and Tan, K. Y. (2007), 'Incremental reform and distortions in China's product and factor markets', *The World Bank Economic Review* 21(2): 279–99.
- Zhang, Y., Wang, X. and Chen, K. (2012), *Growth and distributive effects of public infrastructure investments in China*, Working Paper 2012-07, Partner for Economic Policy Network. Available from <http://www.gdn.int/admin/uploads/editor/files/.../YuMeiZhang_Paper.pdf>.
- Zheng, J., Bigsten, A. and Hu, A. (2009), 'Can China's growth be sustained? A productivity perspective', *World Development* 37(4): 874–88.
- Zhou, W. (2009), 'Bank financing in China's private sector: the payoffs of political capital', *World Development* 37(4): 787–99.

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