From Federalism, Chinese Style to Privatization, Chinese Style

by Yuanzheng Cao, Yingyi Qian, and Barry R. Weingast

Working Paper Number 126
December 1997

Comments Welcome

From Federalism, Chinese Style, to Privatization, Chinese Style[1]

Yuanzheng Cao
Institute of Economic System Reform
State Commission for Restructuring the Economic Systems
Beijing, China

Yingyi Qian
Department of Economics
Stanford University
yqian@leland.stanford.edu

and

Barry R. Weingast
Hoover Institution and
Department of Political Science
Stanford University
weingast@leland.stanford.edu

Revised: December, 1997

Abstract

In 1994 China began a profound reform of its state-owned enterprises. We first describe and characterize this progress in two areas: privatization of small state-owned enterprises at the county level and mass layoffs of excess state workers at the city level. Local governments have initiated these reforms, which are proceeding in economically and politically sensible ways. We then argue that privatization, Chinese style, rests on an adequate economic and political foundation -- federalism, Chinese style. We suggest a range of incentives that propel local governments toward SOE reform, including their harder budget constraints and increased competition from the non-state sector. In this sense, federalism, Chinese style, has induced privatization, Chinese style.

Key Words: Privatization, Restructuring, Federalism, Local Governments, China

---

[1] The authors gratefully acknowledge David D. Li, Ramon Myers, Jean Oi, Michael Oksenberg, and the seminar participants at Stanford for helpful comments, Li-An Zhou for his research assistance, and Lisa McIntosh-Sundstrom for her editorial assistance.

From Federalism, Chinese Style, to Privatization, Chinese Style

Yuanzheng Cao, Yingyi Qian, and Barry R. Weingast

1. Introduction

Having experienced double-digit growth for nearly two decades, China's success in the economic reform is widely known. Beginning with agrarian reform in the late 1970s and proceeding to market reform and openness in the 1980s and especially the 1990s, China has made great strides in transforming its economy from the Maoist era. By 1993, growth of the non-state sector had transformed China's economy, without closing any state-owned enterprises (SOEs).[1] Between 1978 and 1993, the share of SOE employment was down from 75% to less than 60% in the urban areas and from 60% to about 30% with the inclusion of non-farm employment in the rural areas. During the same period, the state share of industrial output declined from 78% to 43% (*China Statistical Yearbook, 1994*).

Yet, many scholars qualify their evaluation of China's economic reform by pointing to the huge problem remaining for SOEs (Qian, 1996; Li, 1997; World Bank, 1997). By the early 1990s it had become evident that the lack of fundamental SOE reform had seriously undermined China's development. In 1994, China had about 300,000 SOEs (including 100,000 in industry) with about 75 million state employees (including 43 million in industry). These SOEs continue to consume a great portion of bank credit and other resources; most have excess employment; and close to half are loss makers. SOE reform has proved a thorny problem in Eastern Europe and the former Soviet Union in the 1990s, and these former socialist states are only moving slowly out of the woods. There are strong reasons to be concerned with whether China can solve its SOE problem.

---

[1] In 1993, except for few joint ventures and joint-stock companies, firms in China had one of the three types of ownership: state-owned enterprises (SOEs); collective enterprises (including urban collectives and rural collectives; the latter are also known as Township-Village Enterprises, or TVEs); and private enterprises (including foreign firms). The latter two together are referred to as "non-state-ownership of firms" while the first two together are referred to as "public-ownership of firms." SOEs are all owned by the central government, but they are supervised by the central, provincial (including three provincial-level cities), city, and county governments. (Although some counties recently have been renamed as cities, their administrative status remains as counties, therefore, in this paper we continue to call them counties). Most SOEs are supervised by the central, city, and county governments, and a few by provincial governments (excluding the three provincial-level cities). Township is one level below county and village is one level below township; neither of them supervise SOEs. In this paper, provincial, city, and county governments are referred to as local governments.

In 1994, China began a quiet reform in privatizing and restructuring its SOEs under the slogan "grasping the large and letting go the small" (*zhuada fangxiao*). This reform has proceeded in three areas: (i) privatization[2] of small SOEs at the county level; (ii) mass layoffs of SOE workers at the city level; and (iii) mergers (*jianbing*), groupings/conglomerations (*jituanhua*), corporatizations (*gongsihua*), and initial public offerings (IPO) (*shangshi*) of some large SOEs which often involve the central government. SOE reform has made significant progress in the first two areas: By the end of 1996, up to 70% of small SOEs had been privatized in pioneering provinces and about half were privatized in many other provinces. In addition, about ten million workers from SOEs and urban collectives were laid off by the end of 1996 and up to twenty million, or more than 10% of urban labor force, could be out of their SOE jobs by the end of 1997. In these two areas, local governments have been the driving force underlying reform. Moreover, these reforms have thus far proceeded relatively smoothly and with fewer social problems than expected. The third area of reform has not yet made any significant progress, which we will leave out in this paper.[3]

This paper has two main purposes and is thus divided into two parts. Because privatization and restructuring of SOEs in China are new phenomena and are not a common knowledge, we first document the progress in Part I of the paper. Our principal concern in Part I is to characterize and interpret some of the important economic and political features underlying this local government-driven reform.

After describing the significance of small and medium SOEs for China, we provide evidence on privatization of small SOEs at the county level in section 2. Because small and medium SOEs account for

[2] We need to clarify our use of the terms "privatization" and "private ownership." The Chinese do not use the term "privatization" (*siyouhua*), relying instead on several other terms: (i) *zhuanzhi*, or "change of ownership;" (ii) *suoyouzhi gaizao*, or "ownership transformation;" and (iii) *gufenzhi gaizao*, or "transformation of ownership to a joint-stock/shareholding system." (Similarly, the Chinese often use "non-public ownership" (*feigongyou*) as a substitute for "private ownership" (*siyou*).) Each of these terms means a change of ownership from state or collective ownership to various forms of non-state and non-collective ownership. The latter can entail ownership by an individual, by many individuals, or by groups of individuals together with some institutions; it can also entail other hybrid or mixed ownership forms. Because the essential feature of this ownership reform is to move away from state and collective ownership, our use of "privatization" is consistent with that in the literature on the transition economies in Eastern Europe and the former Soviet Union. Although privatization of urban collectives and TVEs is also on-going in China, this paper focuses on SOEs.

[3] The third area reform contains more difficult economic and political problems facing the central government. Some of the reform practice (such as merger and conglomeration) may not even be in the right direction (World Bank, 1997).

close to 60% of SOE employment (which differs from Eastern Europe and the former Soviet Union), privatization of these SOEs is highly significant. We identify three features of this privatization. First, the liquidity and wealth constraints on the potential buyers of firms seem to be less a concern in China than in Eastern Europe or Russia. The reasons are China's high private savings rate; and the net worth (and hence sale price) of most small and medium SOEs is typically small due to its large debt-assets ratio. When the liquidity constraint is a concern, non-cash mortgage sales are used in some cases. Second, a large portion of privatized firms has taken the corporate form known as "stock cooperatives" (*gufen hezuozhi*), which are essentially employee/manager ownership with some features of cooperatives. Third, new investments typically accompany privatization, which helps to produce profits and growth. We argue that two important political consequences of these three features of reform are that they reduce the *ex ante* resistance to privatization, and that they allow the great majority of the parties involved in privatization to realize benefits quickly, which increases the durability of reform *ex post*.

Privatization is mainly about assets; layoffs and reemployment are about people. We present evidence in section 3 on mass layoffs and reemployment from SOEs to non-state firms at the city level. This process is again driven by the local government and has two inter-related components, known as *xiagang* ("stepping down from one's post") and *zaijiuye gongcheng* ("reemployment program"). We observe two interesting features. First, these components address both *ex ante* and *ex post* political issues concerning SOE reform. Under the former, laid-off workers are compensated *ex ante* in a credible way in the absence of social welfare institutions. Under the latter, the local government helps laid-off workers to find new jobs, which creates an *ex post* political environment in which workers, having new jobs, are less likely to oppose the reform and demand subsidies. Second, when the local governments are responsible for layoffs and reemployment, they can make best use of local information and pursue the reform at the speed and in the form according to local conditions.

In part II, we take up a series of deeper questions raised by the process of privatization and restructuring in China: What are the economic and political foundations of SOE reform? What are the incentives of local governments to privatize and restructure the firms under their supervision/control?

Economists often assume that privatization programs result from an exogenous political event, ignoring the issue of government incentives to initiate reform.

Our previous work argues that, federalism, Chinese style (Montinola, Qian, and Weingast, 1995; Qian and Weingast, 1996), has created an adequate economic and political foundation for the earlier reforms in China. In this paper, we argue that federalism, Chinese style, has also induced what we call privatization, Chinese style.

We argue in section 4 that China's particular federal framework provides two major sources of political incentives for local governments to undertake the reform. First, recent reforms in tax, fiscal, monetary, and banking have hardened the budget constraints of local governments. The hard budget constraint means that local governments — and the SOEs under their supervision — must float on their own financial bottom. In China, it is the hard budget constraint that prompts local governments to privatize. This reform path stands in contrast to SOE privatization in Eastern Europe and the former Soviet Union where reformers attempted to use privatization to harden budget constraints of enterprises. Second, increased competition from the non-state sector raises competitive pressures on SOEs. Because of the fifteen years of successful reform, the non-state sector in China has already become a major force in the economy, for example, foreign firms and rural enterprises alone have accounted for more than one half of the national industrial output.

Then in section 5, we argue that harder budget constraints, together with increased competition, have changed the costs and benefits to local governments for keeping SOEs. In recent years many SOE performance deteriorated quickly amid increasing competition from non-state firms. Under a hard budget constraint, increasingly poor SOE performance implies that these enterprises became increasingly heavy fiscal burdens for the local government budget. Financing these losses crowds out other expenditures, thus providing local governments with an incentive to privatize and restructure SOEs.

The recent Fifteenth Congress of the Chinese Communist Party in September 1997 adopted a national policy to replace state ownership as the dominate ownership form of firms in the economy and to support privatization. This policy should be viewed as an endorsement, rationalization, and promotion of what is already going on in many local areas. The evidence we provide in this paper predates this Party Congress. With respect to privatization and restructuring of SOEs, local governments have pushed the central government.

This pattern of reform in privatization parallels many earlier reforms such as the introduction of the agricultural household responsibility system in the late 1970s. Both the recent privatization and the 1970s agrarian reform featured a quiet revolution from below. Both started with experiments in particular areas while many other areas initially ignored. Both were later promoted by the central government. This was not an accident. The initiatives of local governments and the tolerance of, and later promotion by, the central government are precisely the predictable consequences of federalism. In the concluding section 6, we make comments on the general pattern of what might be called "economic reform, Chinese style."

Part I. Features of Privatization, Chinese Style

Because the extent of privatization and layoffs in China are not a common knowledge, we must first prove that they are on-going. The main purpose of Part I is to characterize the important economic and political features of this reform process. Data limitations imply that we must rely on anecdotes, case studies, and survey results rather than systematic data. Therefore, although our evidence is informative, it should not be interpreted as systematic. In section 2, we discuss privatization of small SOEs at the county level (with three cases contained in Appendix A), and in section 3, we discuss layoffs and reemployment at the city level (with two cases contained in Appendix B).

2. Privatization of Small SOEs

2.1. The Status and Significance of Small SOEs in China

In China, there are two separate worlds in the state sector: one of small and medium SOEs under the supervision of local governments, and another of large SOEs under the central government. In contrast to Eastern Europe and the former Soviet Union, the distribution of SOEs by size in China is skewed toward the small enterprises; further they are spread throughout the country rather than geography concentration (Qian and Xu, 1993; Qian, 1996). Therefore, privatization of small SOEs is equally, if not more, significant in China than the reform of large ones.[4]

In a 1995 survey, the State Assets Management Administration reported that the state sector had about 300,000 SOEs. The top 1,000 SOEs accounted for 40% of total assets, 51% of net assets, and 66% of profits in the state sector (*People's Daily*, August 14, 1995). For industry, more detailed information is available from the *China Statistical Yearbook*. In 1993, although large industrial SOEs accounted for about 2/3 both in profits and taxes and in net value of fixed assets, small and medium industrial SOEs together accounted for 95% in number, 57% in employment, and 43% in output of the state industrial sector (Table 1).[5]

Table 1. State-Owned Industrial Enterprises by Size (1993)

	number	output	employment	net value of fixed assets	profits and taxes
large	4.7%	56.7%	43.2%	62.0%	66.7%
medium	12.9%	23.6%	25.6%	18.6%	19.4%
small	82.3%	19.7%	31.1%	19.5%	13.9%

Source: *China Statistical Yearbook, 1994*, pp.388-391, except employment figures, which are from the State Statistical Bureau.

---

[4] Even in Eastern Europe, after several years of privatization, the most successful case seems to be also the privatization of small SOEs.

[5] Officially, enterprises in China are divided into three categories according to their size: large, medium, and small. (The precise definition varies by industry, for details see Appendix III of *China Industrial Economic Statistical Yearbook, 1988*.) Large enterprises are subdivided into "large I" (very large) and "large II," and medium enterprises are subdivided into "medium I" and "medium II." However, economists and policy makers in China often use the term "small" enterprises in different ways. A narrow definition takes "small" from the above three-way division, and a broader definition is based on modified two-way divisions, which have many different interpretations. One interpretation is to group all large and medium I together and call them large, and group medium II and small together and call them small (Liu, 1997). A second interpretation refers to "small" as all enterprises except large ones. A third interpretation is to designate about 1,000 of the largest SOEs as "large" and refer to the rest as "small." Increasingly, economists and policy makers use the third interpretation.

Small and medium SOEs are mostly under the supervision of county and city governments (some are under that of provincial governments), and are often located in competitive industries, such as machinery, electronics, textiles, and food processing. The central government supervises most very large enterprises; some of them are in natural monopoly industries such as telecommunications and railroad transportation; and some are in government monopoly industries such as airlines, banks, electricity, oils, and petrochemicals.

In terms of capital structure, small SOEs generally carry more debt than large and medium SOEs, themselves highly leveraged by international standard. In a 1994 survey, the debt-assets ratio was 0.83 for small SOEs, as compared with an average of 0.75 for SOEs overall; and the debt-equity ratio was 1.92, as compared with 1.33 for large SOEs (Zhou and Shen, 1997). In industry, in 1995 the debt-assets ratio was 71.5% for small SOEs, compared with 65.6% for average SOEs; and the debt-equity ratio was 2.49, as compared with the SOE average of 1.92 and the international average of around 1.

In recent years, small SOEs also have generally had worse financial performance than large and medium SOEs. Most loss-making SOEs were small ones (Zhou and Shen, 1997): In 1994, 90% of the loss-making SOEs were small ones, while 82% of all SOEs were small ones. About 60% of small SOEs are making losses.[6]

2.2. Progress of Privatization

The process of SOE privatization at the county level (one level above township and one level below city) began with pioneering counties such as Yibin of Sichuan, Shunde of Guangdong and Zhucheng of Shandong as early as 1992 (see Appendix A for these three cases). It became widespread between 1994

---

[6] The average current loss is 2.2% as the share of total assets in small SOEs, as compared with 0.9% in large and medium SOEs; 6.7% as the share of net capital in small SOEs, as compared with 2.2% in large and medium SOEs. The profit-sales ratio is -0.78% for small SOEs, as compared with an average of 2.65% for SOEs overall; the profit-net asset ratio is -1.6%, with the average being 3.91%. Capital loss as a share of equity is 19.63% for small SOEs, and 8.88% for SOEs overall (Zhou and Shen, 1997).

and 1996. There are no nationwide statistics for the extent of privatization.[7] Surveys suggest that by the end of 1996, up to 70% of small SOEs had been privatized in pioneering provinces; most counties had moved from an experimentation stage to a promotional stage; and many provinces have completed *zhuanzhi*, or change of ownership, in more than 50% of their small and medium SOEs at the county level.[8] Some economists in China predict that by the end of 1998, most small SOEs at county level will be gone, although some of them may remain SOEs in name.

2.3. Features of Privatization

We identify three features of privatization.

(1) Financing privatization

The liquidity and wealth constraints of potential buyers of firms were a major concern in the design of privatization programs in Eastern Europe and Russia and are partially responsible for the free distribution of shares. In China, these constraints are less of a problem. After more than fifteen years' reform, households have accumulated a huge amount of private savings in the form of bank deposits.[9] On the other side, most SOEs' debt-assets ratios are very high, even more so for small SOEs, and thus, typically, the net worth of these firms is small relative to total assets, sometimes even close to zero. Therefore, when such a firm is sold to employees or outside investors, the transfer price of equity is very low. In many cases, the employees can afford to purchase the enterprise with their own savings. In some cases, "zero price transfer" is used as buyers take over control of the firm and all its debt for nothing (*Realistic Choice*, 1997). This is equivalent to buying firms with borrowed capital. Appendix A1 reports

[7] It is useful to note that figures in various issues of *China Statistical Yearbook* do not reflect the true picture, because after privatization enterprises may take many different corporate forms and they may still be recorded as SOEs in many cases.

[8] According to one account, by mid-1996, Heilongjiang had completed 91.4%, Shandong 65%, Hunan 60%, Jilin 56%, and Anhui 39% (You and Wang, 1997). According to another source, Jiangsu had completed about 50% by the end of 1996, and Henan started in 1996 with plans to finish by the end of 1997 (Institute of Economic System Reform, 1997).

[9] In 1993, household bank deposits and total financial assets were about 1 trillion yuan and 2 trillion yuan respectively, as compared to the total state assets of 3 trillion yuan (*China Statistical Yearbook*, 1994).

on the example of "Sida Insulation Material Company" in Zhucheng county, a 15.6 million yuan firm with a net worth of 1.3 million that was sold to 340 employees. The average cost per employee was only about 3,800 yuan, or US$460.

In some cases, non-cash mortgage sales are used in privatization to relax the liquidity and wealth constraints of potential buyers when such constraints are a concern. The example of Yibin county of Sichuan province (Appendix A3) illustrates this possibility. When the Yibin Printing Factory was transformed into a limited liability company in 1992, the net worth of the firm, excluding housing, was 370,000 yuan. That amount was sold to its employees, of whom 124 out of 135 bought shares. They paid 30% down and the rest in a three-year installment. During this period, they also paid 7.2% to the state annually as a use fee for state assets (which can be viewed as interests payments).

(2) Corporate governance and "stock cooperatives"

Although many varieties of corporate governance have emerged after privatization, three forms stand out: sales (*chushou*) to a private domestic or foreign investor or firm; corporatization (*gongsizhi*) into a limited liability or joint stock company; and "stock cooperatives" (*gufen hezuozhi*), where shares are sold mostly to employees. In a survey from several provinces, these three forms account for more than half of all privatization. Stock cooperatives accounted for 35%; sales to private investors for 11%, and corporatization for 8%. The rest included bankruptcy, takeovers by other enterprises, and others (Liu, 1997). Apparently, stock cooperatives are the major corporate form after ownership reform. In Shandong, 50% of small SOEs are stock cooperatives after privatization; in Jiangsu, more than 80%; in Henan, about one-third (Institute of Economic System Reform, 1997); in Jiangsu, 60%; and in Jilin, 40% (You and Wang, 1997).

Stock cooperatives are not one form, but incorporate many varieties.[10] Typically, a stock cooperative can be viewed as a limited liability or joint-stock company in which (i) enterprise employees (including managers) own a majority of the total shares of the firm; and (ii) transfers of these employee shares are restricted in some ways. There are cases in which firms issue shares to be "collectively" owned by employees, which means that these shares feature "one-person-one-vote." But in most cases firms do not have "collective shares" having instead shares according to the standard principle of "one-share-one-vote." Share distribution among employees may not be equal either, with managers typically having more shares (Institute of Economic System Reform, 1997).

Clearly, stock cooperatives are not conventional corporations as in the developed West. Nor are they traditional producer cooperatives: the number of shares differs for employees depending on subscription, and there may be important outside investors. Generally speaking, they are partial employee/manager ownership with some features of cooperatives. Because employees often buy shares at discount, we suspect that stock cooperatives are used to reduce the *ex ante* political resistance to privatization from workers.[11] It is not clear whether stock cooperatives are a transitory or permanent corporate form. Initial reports suggest they are transitory. Already some stock cooperatives have been transformed into standard limited liability or joint-stock companies, often after managers bought controlling shares (Institute of Economic System Reform, 1997).

[10] Until mid-1997, there was still no nationwide regulation on stock cooperatives. As a result, these firms are not categorized together and shown in a statistical yearbook. Some of them are treated as limited liability companies, some as joint stock companies, and some are still listed as SOEs (Institute of Economic System Reform, 1997). In August 1997, the State Commission for Restructuring the Economic System issued the first nationwide *zhidao yijian*, or "guiding suggestions," for the urban stock cooperatives. This document suggests that in stock cooperatives the number of employee/manager shares should be the majority of the total shares of the firm, and for the rest, the document's guidelines are quite flexible (*Economic Daily*, August 7, 1997).

[11] China is not alone among transition economies in this aspect. Employee and manager ownership was also seen as a major ownership form in post privatization firms in Eastern Europe, which is often referred to as "insider privatization" (see Earle and Estrin, 1995). In Russia, shares were given to enterprise insiders in order to secure political support for privatization from them (see Boycko, Shleifer, and Vishny, 1995). One difference in the case of China is that there is no free distribution of the state assets.

(3) Privatization together with new investment

Two phrases capture an important feature of privatization: *panhuo cunliang*, which means transferring existing stocks from the state to private hands; and *kuochong zengliang*, which means expanding stocks with new private investment. The combination of privatization of the existing stocks together with adding new investment is highly significant, because in this way, privatization not only transfers asset ownership, it simultaneously adds new resources. As a result, some former SOEs quickly turn to making profits after privatization. China's high savings rate and the large amount of foreign direct investment have clearly contributed to this feature.

The change in enterprise ownership combines with the injection of new investment to suggest that privatization may soon bring benefits to most, if not all, major parties whose interests are at stake. Privatization is thus not only economically efficient; it also has significant political implications. Making most parties better off in a short period of time reduces the chance of reversal of the reform *ex post*. The case of Zhucheng county of Shandong province (Appendix A1) shows that within three years the major stakeholders are made better off than when they started reform. Employees become the new owners. Not only did they buy shares at a discount but their shares have appreciated in growing enterprises. The local government has rid itself of loss-making enterprises, thus improving its budget. The central government, often as a minority shareholder, gets something back for its invested equity and, if the company grows, the value of its remaining equity appreciates.[12] This growth-induced *ex post* political situation reduces the pressure to turn backwards after privatization.[13]

---

[12] Although not reported, the state banks may also be better off for two reasons: With new equity injected, the debt-equity ratio declines and the probability of repaying debt increases, and furthermore, better governance means better performance and thus better repayment prospects. Note that losses written off by the banks do not imply that losses are created. They are already there and are just made transparent.

[13] According to other sources, most provinces see some growth of former SOEs soon after privatization; at the very least privatized firms stop making losses. A survey comparing 66 enterprises before and after privatization found that, on average, assets increased by 113%, profits and taxes by 100.6%, tax revenue paid to the government by 96.3%, state equity value by 105%, and employee wages by 75% (You and Wang, 1997).

3. Layoffs and Reemployment

3.1. The Problem of Excess Employment in SOEs

Privatization mainly concerns assets; layoffs and reemployment concern people. As with most socialist SOEs, SOEs in China are overwhelmed with excess employment. This is particularly an acute problem for some old industrial centers developed on the Soviet model (such as Northeast region of China) and for some industries which lost competitiveness after the entry of non-state firms (such as textile and machinery). For these firms, privatization of assets is often not the main concern; rather, the main concern is reallocation of the labor force.

In recent years, many cities have started restructuring medium and large SOEs by laying off excess workers and helping them to find jobs in non-state firms. Two new terms emerged and became the most frequent phrases appearing in the press to describe this process: *xiagang* (or "stepping down from one's post") and *zaijiuye gongcheng* (or "reemployment program"). They not only signal the extent of layoff and reemployment, but also indicate their important features.

3.2. Progress of *Xiagang* and *Zaijiuye Gongcheng*

According to the State Statistical Bureau, employees in the *xiagang* category are those "who went home from enterprises due to poor performance of enterprise but still maintained some nominal relationship with their enterprises" (Song, 1997). The nominal relationship exists because the former employees continue to receive a subsistence salary and/or other kinds of benefits (such as housing or health) from their old enterprises. Therefore, these *xiagang* workers are workers laid off from SOEs with some compensation and protection.[14]

Statistics on the number of *xiagang* workers are incomplete and vary by source (reported from the labor bureau, statistical bureau, or the enterprises themselves). An approximate picture can be formed.

---

[14] The number of *xiagang* workers is usually smaller than the true number of layoffs because it does not include those laid off under bankruptcy or those who had already completely severed their relationship with the enterprises. The *xiagang* figures also do not include those workers in privatized SOEs.

In one account, the director of the State Statistical Bureau reported in April 1997 that more than 10 million factory workers lost their jobs in 1996 (*China Daily*, April 5, 1997). According to a more detailed report made by the Department of Population and Employment of the State Statistical Bureau in May 1997, the total number of *xiagang* workers at the end of 1996 was about 8.9 million, of which 63% were from SOEs with the rest from urban collectives (Song, 1997). An additional 5.6 million workers were laid off in the first half of 1997 and a total of 13.7 million could be out of job by the end of 1997 (*China Daily Business Weekly*, November 2, 1997). This would imply that about 20 million *xiagang* workers, or roughly ten percent of the total urban labor force, was laid off by the end of 1997.

We also have some information about the subsequent employment of *xiagang* workers. Of the 8.9 million *xiagang* workers in 1996, about 3.6 million had found jobs. Another 2.3 million were not looking for jobs and were thus out of the labor market. The remaining 3 million were looking for jobs and are considered to be unemployed (Song, 1997). The groups of unemployed and out of the labor market tended to be women, junior high school graduates, and people aged 25 to 44.[15] Reportedly, many layoffs were concentrated in a few industries, such as textile, measurement instruments, coal, metallurgy, chemical, forestry, machinery, and electronics (Wang, 1997).

Together with *xiagang* is *zaijiuye gongcheng*, that is, local government assisted reemployment program for laid-off SOE workers. On May 27, 1997, the Ministry of Labor issued a document requiring reemployment rates to reach 50% of all laid-off employees (*China Economic Times*, June 4, 1997). The "reemployment program" became a major job for local governments. According to one report, by the third quarter of 1996, about 5 million laid-off workers had participated in "reemployment programs." In these programs, about 3 million workers participated in new career instruction and 1.1 million received

[15] The composition of this pool is as follows: Women account for 59.2%, although women's employment accounts for only 39% overall. The group between the ages of 25 and 44 account for 70.4%. Junior high school graduates account for 56.8% although they account for 32% of total employment. Unemployment lasting within a half year accounts for 40.2%, between a half and one year for 28.9%, one to two years for 16.9%, and beyond two years for 14% (Song, 1997).

retraining. Of the 5 million, 4.5 million received unemployment benefits and 2 million received temporary relief. Finally, about 2.4 million were actually reemployed (Wang, 1997).

3.3. Features of Layoffs and Reemployment

We observe two features of layoffs and reemployment.

(1) The *ex ante* and *ex post* political economy of *xiagang* and *zaijiuye gongcheng*

The combination of *xiagang* and *zaijiuye gongcheng* can be viewed as an attempt by local governments to address both the *ex ante* and *ex post* political issues surrounding reform. When the local government uses *xiagang* to lay off workers, workers receive credible compensation for a given period of time because they still maintain some relationship with the enterprises used to employ them. This is especially important given the absence of well-functioning social welfare institutions. Although such compensation addresses part of the *ex ante* political constraints of reform, it alone may not be enough to address the *ex post* political problems: laid-off workers may continue to demand subsidies when they do not have new jobs. When a local government helps laid-off workers find new jobs, it creates an *ex post* political environment in which workers, having new jobs, are less likely to oppose the reform and demand for subsidies. In this sense, the reform of combining *xiagang* together with *zaijiuye gongcheng* not only buys workers, but it buys them out.

(2) The use of local information and adaptation of reform to local conditions

Because local governments have better knowledge about local conditions than the central government, when they are responsible for layoffs and reemployment, they can make best use of local information (*à la* Hayek). For example, local governments can pursue the reform at the speed suitable to the local conditions. It is thus critical that the central government is not forcing local governments to reform all at once or all at one speed. Thus, if the local government finds that workers are not being absorbed as fast as predicted, it can slow down the pace of reform. This in part accounts for unevenness of reform progress across localities. Unevenness may thus become a political virtue when it implies an absence of large labor dislocations and the serious political disorder that accompanies privatization that occurs all at once.

Because local governments adapt the reform to local needs, we also observe a great variety of approaches to reform. The cases of Shanghai city and Heilongjiang province illustrate different methods used by local governments for compensating *xiagang* workers and for the reemployment. Shanghai, with a large foreign investment inflow, can afford to close down some industries entirely in a short time period, but it still has to do it carefully because of the sensitive social problems arising in such a large city. To support reemployment programs, the city government has found ways to raise funds in equal share from the holding company (which replaces the closed down enterprises), social sponsors, and the city government itself (see Appendix B1).

Heilongjiang province, in contrast, does not have the luxury of outside investment as Shanghai. Further, it is burdened by many sunset industries such as coal mining and defense. Nonetheless, it too has developed its own approach to reemployment programs (see Appendix B2). The province uses as a template a successful experiment in a coal mine called "3-3 scheme." Under this template, 1/3 of the employees continue their jobs, 1/3 engage in new tertiary industries, and 1/3 develop agriculture. Although Heilongjiang is short of capital, it has abundant uncultivated land. To support the laid-off workers for new jobs in agriculture, the provincial government has given away 1 million *mu*, or about 160,000 acres, for development, a large quantity of land by Chinese standards.

Part II. The Economic and Political Foundation: Federalism, Chinese Style

The local government-driven process of privatization and restructuring discussed above raises important questions: What are the economic and political foundation on which this reform rests? What are the incentives of local governments to privatize and restructure the firms under their supervision? We argue that federalism, Chinese style — a result from the decentralization of government in China's earlier reform (Montinola, Qian, and Weingast, 1995; Qian and Weingast, 1996) — has provided an adequate foundation and created appropriate political incentives for local governments to undertake this reform. Federalism, Chinese style, is therefore a key to the understanding of economic and political dynamics underlying privatization in China.

4. The Role of Hard Budget Constraints and Competition from the Non-State Sector

We begin by defining a specific form of federalism called market-preserving federalism. This type of federalism requires that, first, local governments have the primary authority and responsibility for their local economies; second, they are subject to hard budget constraints; and third, they are unable to insulate their economies from outside competition (Weingast, 1995; Qian and Weingast, 1996). As compared with the central government, local governments can be more likely subject to hard budget constraints (McKinnon, 1995). They may also possess less regulatory power under the mobility of goods and factors. We discuss below how these two conditions have been evolving in the past few years in China.

4.1. Hard Budget Constraints for Local Governments

The soft budget constraint is widely seen as one of the biggest problems for both governments and enterprises in all transition economies. Put simply, enterprises or governments which are endlessly bailed out have no incentive to make financially prudent decisions, let alone efficient ones. Hardening the budget constraint has been a major objective of the reform. In Eastern Europe and the former Soviet Union, reformers attempted to use privatization as a way to harden budget constraints of enterprises. In China, we observe a different path: the hard budget constraint of local governments induces privatization of enterprises under their supervision.

We emphasize that both fiscal and financial reforms between 1994 and 1996 in China have played important roles in hardening the budget constraints of local governments. These reforms effectively corrected some problems arising from the decentralization of the 1980s (Qian and Weingast, 1996). Yet, the fundamental feature of decentralization remains: local governments continue to assume primary responsibility for managing the local economies and have their own revenue sources.

(1) Tax and fiscal reform

In 1994, China introduced a major tax reform which (i) introduced a clear distinction between national and local taxes; (ii) established a national tax bureau and local tax bureaus each responsible for its own tax collection; and (iii) determined that value added tax (VAT) would become the major indirect tax to be shared by the national and local governments at a fixed ratio of 60:40. Before this reform, China did not have a national tax bureau; all taxes were collected by local governments. Local governments often reduced or exempted taxes which were supposed to be paid to the central government. The tax reform has made it very difficult for local governments to reduce national taxes as in the past (Dong, 1997). The tax reform has established some fixed tax rules between the national and local governments. It also has led to some reduction of local government revenue shares in the official "budgetary" and "extra-budgetary" accounts (Table 2).

Table 2. Share of Local Government Revenue in Total Government Revenue

	1988	1989	1990	1991	1992	1993	1994	1995	1996
"budgetary"	0.67	0.69	0.66	0.70	0.72	0.78	0.44	0.48	0.50
"budgetary" and "extra-budgetary"	0.64	0.64	0.63	0.64	0.63	0.79	0.55	0.59	

Source: *China Statistical Yearbook, 1996.*

Although the tax reform hardens the fiscal budget constraints of local governments, it does not remove the major revenue sources of local governments. This is because the aforementioned tax reform concerns only the official "budgetary" and "extra-budgetary" accounts. Local governments still have important revenue sources in the unofficial "off-budgetary" accounts, which are not touched by the central government. These accounts are about equal in size to the official "budgetary" accounts, which are about 11% of GDP, according to a recent study (Yang, 1996).

In 1995, the new "Budget Law" took effect. It prohibited the central government from overdrawing the central bank and from deficit financing its current account. The central government was allowed to have deficit financing in the capital account but it had to be financed by government bonds. The requirements for local governments were more stringent. Local governments at all levels were required to have their budgets balanced, and furthermore, the law strictly controlled bond issuance and restricted borrowing in the financial market by local governments. In 1995, Songjiang county of Jiangsu province proposed a budget with a 30 million yuan deficit, which the county People's Congress (the local parliament) later vetoed (Dong, 1997). To ensure enforcement of the Budget Law, an independent auditing system was also introduced. For example, in 1996, the State Auditing Agency audited the Ministry of Finance's implementation of the state budget for the first time since the founding of the People's Republic in 1949.

(2) Monetary and banking reform

After Vice Premier Zhu Rongji took over the governorship of the central bank, he centralized its operation. The central bank's local branches were no longer under dual supervision -- reporting to both the headquarters of the central government and the local government of the region in which they resided. They were now only supervised by the headquarters of the central bank, which set national monetary policy. Before 1994, 70% of the central bank's loans to state banks were made by the central bank's local branches. This authority of the local branches was revoked after 1994. These reforms substantially reduced the local government's influence on monetary policy and credit allocation decisions (Xie, 1996).

Starting in July 1993, the central bank imposed a tight monetary policy to fight inflation. The total annual credit increase was reduced to around 24% in three consecutive years between 1994 and 1996, substantially down from 43% in 1993. As a consequence, inflation was reduced from 21% in 1994 to 6% in 1996 (*International Financial Statistics*, July 1997). Moreover, the tight monetary policy apparently also affected the proportion of (non-agricultural) loans going to SOEs. During the previous credit crunch in 1989, the share of new loans to SOEs increased from 84% in 1988 to 89% in 1989; while during this credit crunch, the share of new loans to SOEs decreased from 78% in 1993 to 72% in 1994 (Table 3).

Local governments were hurt even more because their influence over credit allocation was substantially reduced as observed above.

Table 3. Share of Non-Agricultural Loans to the State Sector

	1988	1989	1990	1991	1992	1993	1994
Total Loans	0.83	0.84	0.84	0.84	0.83	0.82	0.80
New Loans	0.84	0.89	0.86	0.83	0.78	0.78	0.72

Source: *Almanac of China's Finance and Banking*, 1993 (p.356); 1995 (p.483).

In 1994, four major state specialized banks became commercialized when they adopted the international standard for bank assets and risk management (i.e., the Basal Accord). They also started to compete with each other since their businesses overlapped. These banks became more conscious of profitability and the quality of loans. Furthermore, internal management of these banks became more centralized, and this also reduced the political influence of local governments on their local branches in loan decisions, which had often happened in the 1980s.

4.2. Increased Competition from the Non-State Sector

China is known for its rapid expansion of the non-state sector in the early stages of reform (Qian and Xu, 1993). By 1993, the state's share of industrial output in the national economy had declined to 43%. After Deng Xiaoping's southern tour in 1992, expansion of non-state-owned enterprises obtained a new momentum.

Both foreign firms and domestic non-state firms have become the major sources of the competition. The former are the result of the rapid increase of foreign direct investment (FDI) to China, and the latter are mostly from rural enterprises which include both Township-Village Enterprises (TVEs) and private enterprises. By the mid-1990s, foreign firms together with rural enterprises already accounted for more than half of China's industrial output. As a result, competition pressure on SOEs from non-state firms reached a new level. Furthermore, this competition affects more SOEs supervised by local governments than those by the central government because most of the former are in competitive industries where the non-state firms entered.

(1) Foreign direct investment

Since 1992, FDI to China has increased dramatically and played a more and more important role in the non-state sector of the economy. In 1992, FDI for the first time accounted for more than half of the total foreign capital inflow. In 1991, annual new FDI was only US$4.4 billion. It jumped to US$11 billion in 1992, and further to US$41.7 billion in 1996 (*A Statistical Survey of China*, 1997). On accumulated terms, China had a total of US$200 billion FDI by the mid-1997 (*People's Daily*, November 28, 1997). Since 1993, China has become the second largest country in the world to attract FDI, next to the United States. The share of foreign investment in total social fixed investment also increased from 6% in 1991 to 12% in 1995 (*China Statistical Yearbook, 1996*).

Table 4. Foreign Direct Investment (Annual New Investment)

	1991	1992	1993	1994	1995	1996
FDI (billion US$)	4.4	11.0	27.5	33.8	37.5	41.7
Share of foreign investment in social fixed investment	0.06	0.06	0.07	0.10	0.12	.

Source: *China Statistical Yearbook, 1996*, and *A Statistical Survey of China*, 1997.

The share of industrial output from foreign firms invested in China accounted for 5.6% of the national total in 1992, which increased to 12% in 1994. In some regions, foreign firms became substantial regional powers. For example, in 1994, industrial output from foreign invested firms accounted for 20% in Jiangsu, 24% in Beijing, 51% in Shenzhen, and 70% in Xiamen (*China Industrial Development Report, 1996*). Foreign brands have become so popular in the market that many domestic brands are in trouble.

In recent years there emerged increasing complaints about the take-over of foreign products in major domestic consumer markets. In the areas of foreign trade, foreign firms accounted for 32% of total exports and 48% of total imports in 1995 (*China Foreign Economic Trade Yearbook, 1996-97*, p.59). The numbers increased to 41% and 54% respectively in 1996 (*Foreign Trade Research*, Issue 12-13, 1997).

(2) Rural enterprises

Beginning in 1992, rural enterprises (including both TVEs and private enterprises) also expanded, becoming a major domestic competitive force. In 1993, rural enterprises accounted for 45% of coal production, 37% of cement, 59% of paper, 61% of electric fans, 70% of canned food, and 42% of silk products (*China Industrial Development Report, 1996*). The following Table 5 shows the increasing importance of rural enterprises in the national economy.

Table 5. Rural Enterprises (TVEs and Private Enterprises)

	1986	1990	1991	1992	1993	1994
Total non-farm employment (million)	79.4	92.6	96.1	105.8	123.5	120.2
Industrial employment (million)	47.6	55.7	58.1	63.4	72.6	69.6
Share of industrial output as national total	0.22	0.25	0.31	0.37	0.45	0.46

Source: *China Statistical Yearbook, 1995*, pp.364-365, 377.

4.3. Other Considerations

In addition to the harder budget constraints for local governments and increased competition from the non-state sector, other factors may also affect the incentives of local governments for privatization.

We discuss below the roles of the central government and SOE managers respectively.[16] We argue, however, that they may not be independent factors.

(1) Relaxation of the ideological constraints: the role of the central government

The process of privatization and restructuring in China has been mainly driven by local government. This does not mean that the hand of the central government is absent. After all, the central government retains ultimate ownership rights to all SOE assets (Qian, 1996); changes in SOE property rights therefore require the central government's (sometimes tacit) endorsement. The willingness of the central government to do so is driven by the local governments. To a large extent, the central government's ideological constraint has become relaxed because of the local initiatives. This is evident from the recent endorsement for privatization by the Fifteenth Party Congress, which is a result of the widespread practice which has taken place at the local level for several years. Relaxation of the ideological constraint in turn encourages local governments to push privatization even further because it reduces the costs of privatization due to political risks.

The first sign of relaxation of the ideological constraint came at the end of 1993. In November of that year, the Third Plenary Session of the Fourteenth Party Congress adopted a document on economic system reforms. Although it did not advocate privatization, it left the door open slightly: "As for the small State-owned enterprises, the management of some can be contracted out or leased; others can be shifted to the partnership system in the form of stock sharing, or sold to collectives or individuals" (*China Daily*, Supplement, November 17, 1993, p.1). The next step came in mid-1995 when the central government endorsed the slogan for SOE reform of "grasping the large and letting go the small." This happened after several counties had already successfully privatized their small SOEs. Although the meaning of "letting go the small" remains vague, its interpretation is up to the local government.[17]

[16] Another factor affecting SOE privatization and restructuring concerns the emergence of complementary social welfare institutions which were completely absent a few years ago. This may reduce the costs of privatization and lay-offs. However, such social institutions remain very primitive in China. This makes *xiagang* an important form of compensation for laid-off workers.

[17] However, relaxation of the ideology constraint does not necessarily mean that the state completely gives up its commitment to the welfare of SOE workers and the value of state assets. In July and September of 1996, the

(2) Insider control of SOEs: the role of SOE managers

The SOE reform of the 1980s, attempting to expanding enterprise autonomy under the "contract responsibility system," produced an important legacy for the 1990s. It created a tendency toward what is known as "insider control." That is, enterprise managers (often colluding with workers) used their effective control over the assets of SOEs to benefit themselves at the expense of the state (Qian, 1996). In the extreme form, managers steal money and assets from enterprises. Indeed, the so-called "state asset stripping" problem has increased at an alarming rate in the past few years (Qian, 1996).[18] We observe that increased insider control of SOEs reduces profitability of SOEs even without increasing their inefficiency. This source of losses consequently reduces the benefits for local governments to maintain these SOEs.

Nonetheless, the increased agency problem of managers alone is not sufficient to provide the government with incentives for privatization for three reasons. First, the government still has the option of taking back some of the managerial autonomy. The government may not want to do so exactly because it will fail to provide managerial incentives in the new market environment. Second, although the agency problem reduces the profitability of SOEs, without competition, the government still can enjoy considerable monopoly rents, as in many monopoly SOEs under the supervision of the central government. Third, without a hard budget constraint, governments may still have no incentives to privatize loss-making firms.

5. The Incentives of Local Governments: The Costs and Benefits of Privatization and Restructuring

The local government's decision about whether to privatize SOEs depends on its costs and benefits. We argue that the two factors discussed in the previous section have changed many local governments'

State Commission for Restructuring the Economic Systems and the State Economic and Trade Commission, respectively, issued documents to push forward the "letting go" policy of small SOEs (Fan, 1997). The central government set out some general guidelines in the areas of its greatest concern: how to maintain the value of state assets to avoid losing state resources; how to compensate laid-off workers through reemployment or other means to avoid social disorder; and how to write off bad debts owed to state banks to avoid theft. Within these guidelines, the local governments had the authority to solve the SOE problem in their own localities.

[18] Li (1997) finds in his econometric works that even in the 1980s SOE managers used the acquired autonomy to increase worker bonuses when the enterprise performance was bad.

calculation in favor of privatization. In other words, it has become in the local governments' own interests to privatize or restructure SOEs. Harder budget constraints of local governments and increased competition from the non-state sector made it increasingly costly to maintain these inefficient enterprises. In fact, some county governments have been unable to pay school teachers for several months. Keeping inefficient SOEs deters creation of more employment, another important governmental objective. It also diverts the attention of local governments from being good regulators of their local economies, which are increasingly represented by non-state firms. Finally, with many inefficient enterprises, the same amount of money goes farther in privatization than in maintaining the old SOEs.

The deterioration of SOE financial performance in recent years, in particular at the local level, is astonishing. This makes privatization of these SOEs a more pressing issue. Between 1988 and 1996, the share of loss-making industrial SOEs nationwide increased from 12% to 38%, and in 1996, the amount of losses exceeded after-tax profits for the first time in history (Table 6). The financial burden of SOEs on the government thus increased drastically.

Table 6. Loss-Making State-Owned Industrial Enterprises

	1988	1989	1990	1991	1992	1993	1994	1995	1996
Share in number	0.12	0.16	0.32	0.30	0.25	0.30	0.33	0.34	0.38
Loss/After-Tax Profits	0.09	0.24	0.90	0.91	0.69	0.55	0.58	0.81	1.74

Source: Shares in number between 1988 and 1992 are from *A Statistical Survey of China, 1993*, p.82, those between 1993 and 1996 are from *A Statistical Survey of China, 1994-1997*; loss/after-tax profits are from p.429, *China Statistical Yearbook*, 1996, except 1996, which is from *A Statistical Survey of China, 1997*.

Loss-making SOEs are concentrated in small SOEs, which are mostly supervised by county governments: 90% of loss making SOEs are small SOEs, and 60% of all small SOEs are not profitable (Zhou and Shen, 1997). This is not surprising because SOEs under county government cannot compete with rural enterprises and foreign firms due to a lack of incentives. They cannot compete with large SOEs either because they lack the technology, human capital, scale economy, or monopoly power. These small SOEs are squeezed between non-state firms and large SOEs.

Consider the case of Zhucheng county of Shandong province in Appendix A1. Poor financial performance of SOEs was one of its main motivations for deciding to privatize them. An audit in April 1992 showed that 103 out of 150 SOEs and urban collectives were loss-making firms. Among the SOEs, debt-assets ratios were as high as 0.94. A related reason was the shrinking local government revenue. In 1992, local government revenue was 109 million yuan, compared with 1980 when an average annual increase was less than 6 million yuan, a small number in an economy growing at 10% a year (Wu and Ding, 1997). In the case of Yibin county in Sichuan province in Appendix A3, in 1991, among 35 SOEs, 70% made losses and the debt-assets ratio was over 0.85 (Kang, 1997). In the case of Heilongjiang province (Appendix B2), by the end of 1993, losses and credit arrears in the forestry industry amounted to 1.5 billion yuan, in addition to 0.9 billion yuan which was owed to workers in wage payments. In the coal industry, total losses amounted to 9.3 billion yuan, with an additional 1 billion yuan owed in unpaid workers' wages (Institute of Economic System Reform, 1996).

There are also opportunity costs for the local government in keeping inefficient SOEs. Traditionally, SOEs are the major source of government revenue and non-state enterprises only contributed a tiny fraction to the government budget. This is changing. In 1995, revenue contributed by non-state enterprises already accounted for more than 40% of the revenue from all industrial enterprises (*The Third Industrial Censors*, 1997).

For those locations which have better investment opportunities, it is the opportunity cost that matters. For example, Shunde county of Guangdong province, unlike many other counties, started privatization when the performance of its SOEs, and especially TVEs, was not in a state of crisis, but was in good condition (Appendix A2). Being close to Hong Kong, the government of Shunde would like to invest its money in infrastructure in order better to compete with neighboring counties; that is, the opportunity cost of keeping inefficient SOEs is high. Similarly, the ambition of Shanghai is to attract foreign investment and become China's commercial and financial center. Again, the opportunity cost to the Shanghai government of keeping old SOEs is too high.

In summary, local governments' incentives for privatization and restructuring depend on the costs and benefits of the alternatives. Local governments can be an inducement for efficiency-enhancing privatization and restructuring when they are under hard budget constraints and facing market competition. Therefore, privatization, Chinese style, can be better understood in the framework of federalism, Chinese style.

6. Conclusions: A General Patten of Economic Reform, Chinese Style?

In this paper, we characterize the progress of China's reform of its SOEs in two areas: privatization of small SOEs at the county level and mass layoffs at the city level.[19] Our main thesis is that privatization, Chinese style, rests on an economic and political foundation of federalism, Chinese style. Local government privatization works reasonably well because these governments are in a better position to address economic and political issues through localized privatization programs. More importantly, we also argued that the federal structure provides the local governments with the incentives to privatize. Harder budget constraints combined with increased competition from the non-state sector to yield strong financial pressures for many local governments to address SOE problems.

Our argument about privatization combines with the evidence from previous reform initiatives to suggest a general and consistent pattern of what might be called "economic reform, Chinese style." The Chinese style of reform relies on the "laboratory of the local governments" to pursue reform.[20] In many of China's major reform efforts, reform began on an experimental basis in a few local areas. The successes were then learned and imitated on a moderate scale by a few provinces. If these "beta" experiments succeeded, they were recommended and promoted by the central government as a national

[19] Given the current momentum, it is not impossible that SOE employment could be reduced to the level of about 25% of urban employment, or 15% of total non-farm employment, in a few years.

[20] This phrase echoes the American Supreme Court Justice, Louis Brandeis's, famous characterization of American federalism as the "laboratory of the states."

policy. This sequential set of experiments creates a series of *templates* for reform, adopted first at the local level, then at the national level. In doing so, local governments adapt one of the templates to their local conditions, sometimes creating new ones. This explains in part why we observe a great number of varieties of reform across different regions in China.

This pattern has occurred in several previous big waves of reform. First, the introduction of the agricultural household responsibility system in the late 1970s started with experiments in particular areas (such as Anhui and Sichuan provinces). It was later promoted by the central government. Second, the rapid development of TVEs in the early and mid-1980s also started with great success in a few coastal areas (such as Jiangsu province) — without the central government's plan. The central government first tolerated TVEs, only later coming to support them. Many inland provinces later caught up. Third, in the development of markets in the late 1980s, some areas (such as Guangdong province) first liberalized prices and opened their markets while others (such as Hunan and Heilongjiang provinces) chose to regulate prices and stay closed (Montinola, Qian, and Weingast, 1995). Only later did other provinces begin to liberalize their markets.

In this paper, we suggest that the same pattern of reform is beginning to emerge for SOE reform in the 1990s. Privatization of small SOEs started in some areas (such as Shandong province) and mass layoffs of SOEs initiated in other areas (such as Shanghai and Heilongjiang provinces) without any central government program. The central government has just announced the national policy in favor of privatization in September 1997, but as with previous reform issues, the central government's announcement is really an acceptance and spreading of what has been going on in certain local areas for several years.

At any given point in time, this pattern of reform is characterized by a "horizontal non-uniformity" of reform with some areas doing experiments and other areas waiting — or resisting — as described above. Over time, most areas eventually adapt successful instances of reform. Furthermore, over time the reforms expanded in scope to include new issues, often being initiated at different levels of government: Agriculture reform began at the household level; TVEs at the village and township level; privatization of

SOEs at the county level; layoffs of state workers at the city level; and marketization at the provincial level. This "vertical non-uniformity" has progressed steadily and has continuously generated substantial payoffs over the past two decades. Together, these reforms have led China's transition into a new stage.

This pattern of reform also demonstrates a fundamental change of the role of the central government before and after reform in China. Under Mao, the central government forced all regions in the country to copy the same model, such as *Qiliying* People's Commune of Henan province during collectivization in the 1950s and *Dazhai* Production Brigade of Shanxi province for agricultural development in the 1960s and 1970s. This "one size fits all" approach allowed no independent experimentation, no adaptation, and no local government autonomy or choice. This approach to institutional change failed miserably. After 1978, reform took place within the framework of federalism, Chinese style. This system has altered the roles of the central and local governments in fundamental ways. First, in the various reform episodes after 1978, the central government did not attempt to establish "the model" of reform, let alone force local governments to copy it. Second, local governments have had the authority to decide on the form and speed of the reform and to adapt reform to local needs. Given hard budget constraints and an open economy, local governments cannot afford to make big mistakes for an extended period of time.

From the perspective of cross-country comparisons, economic reform, Chinese style, also differs considerably from economic reform in Eastern Europe and the former Soviet Union. Reform in those economies is far more centrally driven. A more detailed comparison awaits further research. But we note here that the pattern underlying economic reform, Chinese style, is not an accident. There is a political logic for it. Again, the initiatives of local governments and the tolerance of, and later promotion by, the central government are predictable consequences of federalism. The federal perspective provides important insights to the economic and political dynamics underlying privatization, as well as other reforms, in China. Indeed, reform in China depends on the incentives of local governments, large numbers of which seek to promote economic gain and remove sources of economic inefficiency.

Finally, we note that privatization in China has only taken its first — though gigantic — step; it has a long way to go. Privatization of small SOEs is not yet finished. After privatization, many problems remain. For example, the state still holds some (although often not controlling) shares; and there are many restrictions on share transfers. There also remains a question whether privatization will encompass the largest SOEs, mostly under the jurisdiction of the central government. Part of the reason we project that the central government will eventually privatize some of the largest SOEs is that it too faces the same financial incentives as local governments: Once the central government gives up its monopoly in the key industries, maintaining inefficient enterprises is too expensive. And once local governments have shown the way — especially shown that workers do not become destitute — there will be far less political resistance. Of course, the central government's task is made easier in China than Eastern Europe and the former Soviet Union because there are so many fewer large SOEs. Nonetheless, if this projected pattern holds, SOE reform will provide a strong case in favor of our thesis that federalism, Chinese style, underlies the process of economic reform in China.

Appendix A. Cases of Privatization of Small SOEs

A1. The case of Zhucheng county, Shandong province[21]

Zhucheng county is located 50 miles west of Qingdao (the home of Tsingtao beer), and has a population of 1.04 million. Zhucheng is the only case that has received early national and international attention because Vice Premier Zhu Rongji visited the county in March 1996 during its controversial privatization experiment, and gave it his endorsement (*Economic Daily*, March 29-April 3, 1996; *Wall Street Journal*, June 10, 1996). Zhucheng started the reform process in September 1992. The country transformed 37 of 50 its SOEs, the remaining ones being state-owned public utility and transportation companies. At the same time, the county also privatized 235 of its 238 urban collectives.

Among the 37 former SOEs, 32 became stock cooperatives, 3 larger SOEs were incorporated into limited liability companies, 1 SOE was merged with a motorcycle company from Beijing, and 1 SOE went bankrupt. Consider the case of "Sida Insulation Material Company," which is now a stock cooperative. Before privatization, the assets of this firm totaled 15.6 million yuan; total liability, 10.9 million yuan; and the (accounting) net worth, 4.7 million yuan. Excluding land use rights worth 1.9 million yuan, housing worth 1.2 million yuan, and reserves for employee reallocation fees of 0.3 million yuan, the state sold all the rest — with a real net worth of about 1.3 million yuan — to its employees. All 340 employees subscribed, and the average cost per employee was about 3,800 yuan (US$460). Since then, the average equity per employee has risen to about 10,000 yuan (US$1,200), more than double.

The reported results of privatization in Zhucheng are impressive. Before the reform, the majority of SOEs were losing money; after the reform, all firms were making a profit. The total profits from these former SOEs increased from 25 million yuan in 1992 to 136 million yuan in 1995. The average return to capital increased from 7.5% in 1992 to 49.4% in 1995. Between 1993 and 1995, the average growth rate of local government revenue in Zhucheng was 33.8%. At the same time, the employees' average

[21] This is based on Wu and Ding (1997).

income in 1995 in those privatized firms (including dividends distribution) was 2.4 times their income in 1992.

A2. The case of Shunde county, Guangdong province[22]

Shunde county is located in the Pearl River Delta between Guangzhou (the capital city of Guangdong province) and Hong Kong, and has a population of nearly 1 million. Shunde is a fast-growing area and is famous for its Township-Village Enterprises (TVEs). In the late 1980s, Shunde had more than one-half of the top 10 TVEs in the country, and its consumer electronics and gas ranges comprise 1/10 and 1/3 of the national market share for those products respectively.

Beginning in 1993, the Shunde government decided to make major changes in its ownership structures. It was the pioneering county that performed one of the most radical changes in the country. Its government deliberately adopted a "four no principle" (no report, no promotion, no summary, and no propaganda). Therefore, its experience remained unknown to the public until recently.

Three distinct features characterize Shunde's experience. First, the Shunde government pooled together SOEs and collectives (including TVEs) for ownership reform. Out of a total of 1,083 state and collectively-owned enterprises (called "publicly-owned firms" in Shunde), 743 (or 69%) changed their ownership forms. These include four major types:

(i) Firms where the county or township government was the sole owner or has controlling interest in some public utility, highway, real estate, and foreign trade firms. This category includes 142 such firms, accounting for 13% of all former public firms.

(ii) The county or township government has maintained minority shares in some 21 profitable firms, accounting for 1.9%.

(iii) 331 firms were changed into stock cooperatives owned by employees, accounting for 31%. For example, "Qianjin Silk Company," a former SOE, was transformed into a stock cooperative, with 15

[22] This is based on Lu (1997).

board members owning 12% of the equity, middle level managers owning 20%, and other employees owning 68%.

(iv) 249 firms were sold to the public, accounting for 23%.

Second, the county government established a separate commission for public assets management, specializing in monitoring such assets. Below that commission are four public assets management companies for day-to-day investment operations. The purpose of the commission and the assets management companies is to separate the government's function as an asset owner from its function as a regional social and economic regulator.

Third, simultaneously, the county embarked on a profound political reform program. It eliminated all line bureaus and replaced a dozen of them with three comprehensive bureaus: the industry development bureau, agriculture development bureau, and trade development bureau. These bureaus no longer supervise firms, but rather, they regulate the regional economy. As a result, the county government was able to reduce the number of its bureaus from 56 to 29 and reduce its staff by 1/3. Now the county government concentrates on local public goods provision and other social services. For example, it recently invested heavily in the infrastructure to build a 110-kilometer superhighway and expand its electric power supply.

A3. The case of Yibin county, Sichuan province[23]

Yibin county is located in southern Sichuan with a population of about one million. Yibin county started ownership reform early in 1992. The government of Yibin made an explicit parallel between privatization of SOEs and the earlier agricultural household responsibility system introduced in the late 1970s. At that time Sichuan was one of two pioneering provinces (the other is Anhui province) in the country. Similarly, in this case, Yibin became a pioneering county for privatization of SOEs.

[23] This is based on Kang (1997).

By 1995, the ownership structure of 86 out of 110 SOEs and collectives had been transformed. Among the 16 former industrial SOEs, comparing 1995 with 1991, net assets increased from 25.5 million yuan to 75.6 million yuan, and profits and taxes increased from -2.2 million to 17.2 million yuan.

An interesting feature of the privatization in Yibin was the adoption of a method of non-cash mortgage sales. In general, buyers paid 30% of the value down, and then paid back the remaining value over the next 3 years. For example, the "Yibin Printing Factory" was changed to a limited liability company in 1992. Excluding housing, the net worth of the firm was 370 thousand yuan. The firm was sold to its employees. 124 out of 135 employees purchased shares, paying 30% down and the rest in a three-year installment. During this period, they also paid 7.2% to the state annually as a use fee for state assets. Between 1993 and 1995, company profits and taxes increase from 100 thousand yuan to 700 thousand yuan, and workers incomes (excluding dividends) increased by 30% per year.

Appendix B. Cases of Layoffs and Reemployment

B1. The case of Shanghai city

Shanghai is an old industrial center of China, with a heavy concentration of old SOEs. In recent years, Shanghai took the lead in SOE reform. According to one source, 860 thousand workers were laid off between 1991 and 1995 (*Forbes*, January 27, 1997). By the end of 1996, Shanghai had about 1 million *xiagang* workers in a city with a total population of about 13 million. By the end of 1996, about 200,000 were still unemployed, while all the rest had been reemployed (*Business World*, June 1997, p.10).

Shanghai's textile and measurement instruments industries have become uncompetitive compared with TVEs and have had the most layoffs. In 1996, Shanghai established two "reemployment service centers" as "trust institutions" for those laid off in these two industries. These two centers are responsible for subsistence-level support for the laid off workers and for paying former worker hospital clinic fees and social security contributions. They are also responsible for training these workers. It is reported that about 115 thousand unemployed workers have joined the two centers, and about 58 thousand have found jobs. These two centers are financed by three parties in equal shares: the city government, the newly-established textile and measurement instruments holding companies, and other social sponsors (Shi, 1997).

In addition to restructuring SOEs, the government of Shanghai also delegated some small SOEs from the city to its counties. In light industry, about 231 city-supervised SOEs were delegated to counties in 1996 (*Reform in Shanghai*, June 1997, p.23). The main purpose of this decentralization was to open the way for privatization, which can be done more easily by county governments.

B2. The case of Heilongjiang province

The case of Heilongjiang is particularly interesting for several reasons. First, Heilongjiang has a common border with Russia and a concentration of Soviet-styled heavy industries. It was a center of Soviet-type planning during the first two five-year plan periods (1953-63). Second, for the first 15 years of reform (1979-93), Heilongjiang lagged far behind other provinces (See Montinola, Qian, and Weingast

1995). And third, unlike Shanghai, it did not have the luxury of foreign and domestic investments pouring into it. Combining a huge proportion of excess workers with a lack of new capital, Heilongjiang restructuring of its old SOEs was particularly difficult. Nevertheless, it found its own way to do so.

Heilongjiang has four state industries that experienced heavy losses: coal mining, forestry, defense, and state farms. In 1993, the province had a total of 2.3 million excess state workers. 50% of forestry workers were redundant as a result of an 81% decline of forest resources by 1993. 70% of coal mine workers were redundant, and 60% in defense industry. In fact, 7 out of 9 defense enterprises already had a negative net worth. The state farms, with 25% of the arable land and 50% of the agricultural loans, in addition to large government grants, accounted for only 20% of grain production in the province. These difficulties also created social disorder with an increasing number of worker protests (Institute of Economic System Reform, 1996).

In 1994, the provincial government took note of an earlier successful experiment by the Jixi Coal Mine. With a total of 150,000 workers, the coal mine arranged for 50,000 to continue coal production, 50,000 to engage in agricultural development, and 50,000 to develop new businesses in the non-state sector. The coal mine became profitable. The provincial government recommend this scheme, nicknamed the "3-3 scheme," as a *template* for reform in all four of its troubled industries. Under this scheme, 1/3 of the employees would continue their jobs, 1/3 would engage in new tertiary industries, and 1/3 would develop agriculture.

Although Heilongjiang is short of capital, it has abundant uncultivated land. The provincial government gave away 1 million *mu*, or about 160 thousand acres, for development to those workers who were laid off from coal mines and exempted their land use fees and agricultural taxes. The three industries of forestry, coal mining, and defense have a total of about 2 million employees, with at least 550,000 redundant. With the above scheme, in the two years of 1994 and 1995, 192,000 (or 35% of the total) found jobs for themselves in the tertiary and agricultural sectors. As a result of this reform, the ratio of coal output over non-coal output decreased from 80:20 in 1990 to 60:40 in 1995, and forestry output over non-forestry decreased from 54:46 to 35:65 in the same time period (Institute of Economic System Reform, 1996).

This reform had a significant economic impact on Heilongjiang. In three years, excess workers were reduced from 2.3 to 1.6 million in 1996, and 600,000 laid-off workers found jobs by 1996 (*China Economic Times*, June 4, 1997). Four of the largest coal mines reduced their operating losses by 230 million yuan in 1995 (from losses of 560 million yuan in 1994) and by another 220 million yuan in the first 10 months of 1996. In 1995 the total output of the defense industry increased by 55% and profits and taxes increased by 59%, while non-defense output already accounted for 82% of total output. Total output from state farms increased over 19% per year in 1995 and 1996. Overall economic performance of Heilongjiang therefore improved significantly. In 1996, industrial output increased by 16% and government revenue by 16.6% (Institute of Economic System Reform, 1996).

References

Boycko, Maxim, Andrei Shleifer, and Robert Vishny, *Privatizing Russia*, MIT Press, 1995.

China Industrial Development Report (1996), Institute of Industrial Economics, Chinese Academy of Social Sciences, Beijing, 1996.

Dong, Furen, "The 'Budget Law' and Hardening Governments' Budget Constraints," in Tianqing Xu and Jinyan Li (eds.), *China's Tax Reform*, Beijing: China Economics Publishing House, 1997.

Earle, John, and Saul Estrin, "Employee Ownership in Transition," Center for International Security and Arms Control, Stanford University, 1995.

Fan, Hengshan, "Small SOE Reform: Progress and Problems," *Jingji Yanjiu Cankao* (*Economic Research References*), February, 1997.

Institute of Economic System Reform, "Investigation on Small Enterprise Reform in Hebei, Shandong, Zhejiang, and Jiangsu Provinces," mimeo, Beijing, May, 1997.

Institute of Economic System Reform, "Heilongjiang: Deepening Reform Is the Fundamental Way Out of Crisis for Industries," mimeo, Beijing, December, 1996.

Kang, Jinhua, "Yibin: The State Sells Property, the Government Changes Functions, and Enterprises Reform Mechanisms," in *Realistic Choice: Preliminary Summary of the Practice of Reforming Small State-Owned Enterprises*, China Reform and Development Report, Shanghai: Far East Publishing House, 1997.

Li, David D., "Government Control of State Enterprises in Transition Economies: Evidence from China," mimeo, Hoover Institution and University of Michigan, 1997.

Liu, Guoguang, "Some Issues Concerning Medium and Small Enterprise Reform," *Zhongguo Gongye Jingji* (*China Industrial Economy*), March, 1997.

Lu, Liling, "Shunde: Transformation of Government Function Based on Property Rights Reform," in *Realistic Choice: Preliminary Summary of the Practice of Reforming Small State-Owned Enterprises*, China Reform and Development Report, Shanghai: Far East Publishing House, 1997.

McKinnon, Ronald, "Market-Preserving Federalism in the American Monetary Union," in M. Blejer and T. Ter-Minassian (eds.), *Macroeconomic Dimensions of Public Finance: Essays in Honour of Vito Tanzi*, London: Boutledge, 73-93, 1997.

Montinola, Gabriella, Yingyi Qian, and Barry R. Weingast, "Federalism, Chinese Style: The Political Basis for Economic Success in China," *World Politics*, 48(1):50-81, October, 1995.

Qian, Yingyi, "Enterprise Reform in China: Agency Problems and Political Control," *Economics of Transition*, 4(2): 427-447, October, 1996.

Qian, Yingyi, and Barry R. Weingast, "China's Transition to Markets: Market-Preserving Federalism, Chinese Style," *Journal of Policy Reform*, 1:149-185, 1996.

Qian, Yingyi, and Chenggang Xu, "Why China's Economic Reforms Differ: The M-Form Hierarchy and Entry/Expansion of the Non-State Sector," *Economics of Transition*, 1(2):135-170, June, 1993.

"Realistic Choice," in *Realistic Choice: Preliminary Summary of the Practice of Reforming Small State-Owned Enterprises*, China Reform and Development Report, Shanghai: Far East Publishing House, 1997.

Shi, Ming, "Don't Believe in Waiting: Shanghai's Reemployment Programs," *Qiye Guanli (Enterprise Management)*, May 1997.

Song, Changqing, "Reemployment: A Difficult Issue," *Qiye Guanli (Enterprise Management)*, May, 1997.

Wang, Dongsheng, "Making a Good Job Out of Reemployment Programs," *Jingji Yanjiu Cankao (Economic Research References)*, April, 1997.

Weingast, Barry, "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Growth," *Journal of Law, Economics and Organization*, 11: 1-31, 1995.

World Bank, *China's Management of Enterprise Assets: The State As Shareholder*, Washington, DC: World Bank, 1997.

Wu, Tianlin, and Fengjun Ding, "Zhucheng: Small SOE Reform Based on Stock Cooperatives," in *Realistic Choice: Preliminary Summary of the Practice of Reforming Small State-Owned Enterprises*, China Reform and Development Report, Shanghai: Far East Publishing House, 1997.

Xie, Ping, *The Choice of China's Financial Systems*, Shanghai: Far East Publishing House, 1996.

Yang, Zhigang, "China's Off-Budget Revenue Accounts," mimeo, Institute of Public Finance and Trade, Chinese Academy of Social Sciences, 1996.

You, Lixin, and Shuhua Wang, "Investigation on 'Letting Go Small SOEs,'" *Jingji Yanjiu Cankao (Economic Research References)*, 1997.

Zhou, Fangsheng, and Ying Shen, "'Letting Go Small SOEs' Is Good for Enhancing the Quality of the State Assets," in *Realistic Choice: Preliminary Summary of the Practice of Reforming Small State-Owned Enterprises*, China Reform and Development Report, Shanghai: Far East Publishing House, 1997.