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Central-Local Relations From the Perspective of State and Non-State Industries

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When China adopted the Soviet model of central planning for its industrialization program in the early 1950s, the central government was the most important actor in the economy. Large industrial plants were built and controlled directly through the ministries in charge of various sectors. The central government also set up national committees to coordinate national plans and the flow of resources across sectors and regions. However, because of the sheer size of the Chinese economy, the central government also relied on the provincial governments to carry out its industrial plans and policies.

During the late 1950s and the Cultural Revolution period (1966-76), several waves of decentralization shifted administrative control of enterprises away from the national ministries to provincial governments. However, this administrative decentralization did not encourage any significant move toward a market economy. There was little managerial autonomy for the industrial enterprises. The managers and workers played very limited and passive roles in a fragmented but planned economy. The central and local governments, as the dominant players, directed industrial investment and production.¹

Economic reform since 1978 has also been characterized by decentralization of economic control from the central government to local governments as well as enterprises. But, the recent reform clearly encouraged

shifts of the economy from a planned to a market system. Two facts have emerged during this period of reform to arouse enormous debates on the economic role of the central and local governments: First, the central government's budgetary revenue has declined rapidly; second, large gaps in regional industrial productivity have emerged.

It has been suggested that the higher productivity in the coastal region of China is a result of higher local government autonomy, granted by the central government during the recent reform period. According to this theory, more local autonomy in other regions may improve their productivity as well. Changing central-local relations have often been seen as a result of political games among central and provincial leaders of various factions.² The central government and its ministries have sometimes been identified with the conservative forces favoring central planning while the local governments of the coastal regions have been regarded as leaders of market-oriented reforms. The rapid growth of the coastal regions has given rise to many bold suggestions on reforming central-local relations. Some suggest that local governments may initiate more appropriate reform measures than the central government because of the large gaps in regional industrial development.

In contrast, others argue that the recent decentralization has weakened the economic capacity of the central government and may hinder future economic development of the nation. Some scholars also warn that the increasing regional gaps and the expanding economic power of local governments may lead to local protectionism and other regional conflicts, which may also endanger economic and political stability in China.

This chapter addresses the above debates by examining the sources of China's regional productivity gaps and the root of the decline of central government budgetary revenue. It brings enterprise behavior into a study of the economic role of the central and local governments in post-Mao China. Most recent research has not examined closely the behavior of Chinese enterprises and its effects on the role of central and local governments. During the period of economic reform since 1978, Chinese enterprises acquired significant managerial autonomy and controlled more economic resources. The behavior of the managers and workers in the state and non-state enterprises has created important constraints and opportunities for both the central and local governments. As central planning becomes less important, the role of central and local governments needs to be changed from primary initiators and managers of industrial projects to regulators of markets and enterprises. When exploring the role of governments, it is crucial to study the impact of specific government regulations and policies on the performance of enterprises. If the sources of rapid industrial growth in the coastal regions come from the non-state sector (private, semi-private and foreign joint-

venture enterprises), then the policy of encouraging private enterprises should be supported. Increasing the power of local governments may or may not facilitate economic growth and development. This chapter emphasizes economic incentives and their effects on the behavior of enterprises and of the central and local governments. In particular, it uses results from an on-going study of the institutions of profit-sharing, managerial autonomy, and fringe benefits provisions in post-Mao Chinese industrial enterprises. The effects of this new incentive structure on performance and behavior of state and collective enterprises are examined briefly. The pattern of enterprise behavior described in this chapter provides an important base for discussion of the new economic role of the central and local governments.

I will first briefly analyze the property rights issue with regard to the Contract Responsibility System (CRS) in Chinese industrial enterprises. Some empirical findings about the performance of state and collective enterprises during the reform period will then be presented, followed by an examination of the sources of provincial productivity gaps. After discussing the challenge of state enterprise reform to the financial strength of central and local governments, opportunities provided by the rapid development of the non-state sector will then be pointed out. The final section summarizes the whole chapter.

A Property Rights Analysis of Chinese Enterprises

Since 1978 the Chinese government has transferred some important dimensions of property rights from the State to managers and workers. It has allowed both the state and collective enterprises to retain a portion of their profits for bonuses, welfare benefits such as housing, and industrial investment. The new structure of property rights can be summarized as follows:³

First, the profit-sharing arrangements set up between the government and the enterprises explicitly define the formal and contractual ownership structure of enterprises. The right to profits is the most important property right of Chinese enterprises. This right is widely recognized by the central and local governments, enterprises, and scholars.

Second, fringe benefits are informally controlled and "owned" by managers and workers. The amount and even the kind of fringe benefits are usually unspecified and may vary among enterprises. That is, they are not determined by explicit agreements but, instead, are a "consensual" sharing of enterprise resources. These fringe benefits can not be written into a contract and can not be unbundled and traded with other benefits because of the government ownership of non-industrial fixed capital,

which is used to provide fringe benefits services. Moreover, some of the fringe benefits, such as residential housing, involve large amounts of fixed capital investment, and become an important channel for employees to accumulate quasi-private property, since it is practically impossible for enterprises to take back apartments that have been distributed to their employees, even though the apartments are officially state property. The implicitly-recognized claim to fringe benefits is largely ignored by scholars in China and abroad.⁴

Third, price-controls, wage-ceilings, production-quotas, and other administrative regulations specifically define restrictions on the managerial autonomy of enterprises. Although these administrative regulations may create some distortions and inefficiency, their role in Chinese industrial activities is declining. At the margin, more and more inputs and outputs are allocated according to market prices. Some of the regulations exist for reasons relating to revenue distribution across industries. Also, these regulations often involve very specific products, such as steel, coal, and electricity, and are implemented more effectively than the regulations on fringe benefits.

Finally, while the central and local governments still influence enterprises through arrangement of loans, subsidies, and appointments, significant control over resources in the enterprises has been implicitly and non-contractually delegated to the managers. As the Chinese economy becomes more decentralized, and as economic resources are controlled to a greater extent by enterprise managers, it becomes important to study the behavior of managers under the new institutional context.

This author formalizes a new structure of property rights described above in a dynamic model of the Contract Responsibility System.⁵ Several important theoretical results are derived:

The Contract Responsibility System, which consists mainly of profit-sharing between the government and enterprises, managerial autonomy, and the provision of in-kind fringe benefits, is more efficient than the pre-reform planning institution, but less efficient than the private property institution. Under the Contract Responsibility System, managers and workers receive full marginal return from fringe benefits production but only a fraction of marginal return from industrial production. Since it is costly for the government to monitor effort, regulate fringe benefits, and distinguish industrial and non-industrial investment, the new system creates incentives for Chinese enterprises to divert effort and capital away from industrial to fringe benefits production. The enterprises, behaving rationally, equate private returns on the margin, but this leaves social marginal returns from production of industrial profits unequal.

Greater government claims lead to reduced use of resources in industrial production and to inefficiency. Hence, state enterprises are less productive industrially than collective enterprises.

Performance of State and Collective Enterprises

Using firm and city-level data for the 1980-1987 period and econometric techniques, the behavior and performance of Chinese state and collective enterprises has been examined empirically.⁶ The evidence shows forcefully that the post-Mao Chinese industrial reform has successfully stimulated individual incentives and started a promising process of evolution toward a private market economy. This section summarizes some major findings in the study and their implications.⁷

Economic reform in the 1980s increased productivity of both the state and collective enterprises. But the growth rate of productivity in collective enterprises is much higher than that in state enterprises. During 1980-1985, the estimated annual total factor productivity growth from the firm sample of this study is 3.9 percent for state enterprises and 8.8 percent for collective enterprises. According to the city-level data from 1985-1987, the state sector has stagnant productivity growth in the later period of the decade-long reforms. The collective sector maintained high productivity growth of 4.4 percent per year in the 1985-1987 period. These findings confirm the analysis in the last section.

Although the productivity gap between state and collective enterprises decreases when non-industrial activities are taken into account properly, the decreased gap is still significant. State enterprises are less efficient than collective enterprises in using labor and capital. The estimated gaps in total factor productivity between the two sectors after controlling for economies of scale are 23.7 percent in 1985 and 34.8 percent in 1987 according to city-level data. From the firm sample, the measured gap of total factor productivity between the state and collective enterprises is about 60 percent during 1980-85, if fringe benefits are ignored. However, the gap decreases to about 30 percent if the fringe benefits services are counted as output. The evidence shows clearly the effects of the ownership structure on productivity. State enterprises have much higher fringe benefits than collective enterprises. The level of fringe benefits is positively correlated with the level of government investment in Chinese enterprises.

According to the firm sample, during the 1980-1985 period, controlling for industrial capital and other variables, fringe benefits capital has grown about 30 percent for state enterprises and about 80 percent for collective enterprises. The more rapid growth of fringe benefits capital in

collective enterprises does not change the basic pattern of fringe benefits capital stock. In the firm sample, controlling for industrial capital and other variables, state enterprises have about 100 percent more fringe benefits capital than collective enterprises in 1980. This gap narrows to about 50 percent in 1985. It is found that fringe benefits capital is positively correlated with industrial capital. So capital-intensive firms have significantly higher levels of fringe benefits capital for their workers, in addition to higher wages, than the labor-intensive firms. One explanation for this pattern is that Chinese managers and workers are able to divert more industrial capital to non-industrial uses when they control more government property. Hence, the managers and workers in large state enterprises have captured some of the monopoly rents which would have gone to the government in the pre-reform system.

Sources of Regional Productivity Gaps

According to the theoretical and empirical analyses in last two sections, Chinese industrial reform in the post-Mao era has increased the productivity of both state and collective enterprises through changes in incentive structure and property rights. It is also shown that collective enterprises are more efficient than state enterprises. This section examines the impact of the non-state sector on the productivity of a region and the sources of regional productivity gaps.

Industrial productivity during the reform period has been uneven across the regions. From city-level industrial data, the total factor productivity (TFP) index for Chinese provinces has been estimated.

The eastern (or coastal) provinces have achieved the highest level of productivity and the western provinces the lowest. The average TFP indexes for the eastern, inland, and western regions are 114.5, 94.2, and 87.4 respectively. These indexes mean that given a certain amount of input such as capital and labor, if the western region produces \$87.4 in output, the inland and eastern regions would produce \$94.2 and \$114.5 respectively.

There are many reasons for these productivity gaps. Historically, industrialization started in coastal cities such as Shanghai and Tianjin. Recent reforms and the opening policy also largely benefit the coastal provinces such as Guangdong and Fujian, which have close business contacts with Hong Kong and Taiwan.

The exceptionally rapid development of the eastern region has also been accompanied by a rise in local government autonomy during the reform period. Guangdong, Fujian, and Jiangsu, where productivity

TABLE 6.1 China's Regional and Provincial Productivity Index

Province	Region Classification	Non-state Sector Share of Gross Value of Industrial Output	Total Factor Productivity Index	Provincial Share of National Gross Value of Industrial Output
ALL PROVINCES		40.3%	100	100.0%
Provinces with 15%-23% Non-State Sector Share of GVIO			86	9.9%
CANSU	West	15.3%	85	1.2%
QINGHAI	West	16.6%	85	0.2%
XINJIANG	West	17.1%	92	0.8%
HEILONGJIANG	Inland	19.4%	84	4.1%
NEI MENGGU	Inland	20.8%	75	1.1%
GUIZHOU	West	21.1%	83	0.9%
XIZANG	West	21.8%	85	0.01%
NINGXIA	West	22.2%	85	0.2%
YUNNAN	West	22.8%	97	1.3%
Provinces with 25%-41% Non-State Sector Share of GVIO			100	51.9%
GUANGXI	East	25.5%	99	1.5%
SHANGHAI (city)	East	25.9%	123	7.7%
JILIN	Inland	28.2%	100	2.6%
SHAANXI	West	28.3%	84	1.9%
JIANGXI	Inland	28.9%	104	1.9%
BEIJING (city)	East	30.0%	108	3.2%
TIANJIN (city)	East	30.6%	108	2.9%
SICHUAN	West	32.5%	91	5.2%
HUBEI	Inland	34.0%	91	4.8%
HUNAN	Inland	34.6%	103	3.3%
SHANXI	Inland	35.1%	79	2.2%
LIAONING	East	36.0%	99	7.6%
ANHUI	Inland	38.7%	110	2.9%
HENAN	Inland	40.9%	102	4.3%
Provinces with 45%-67% Non-State Sector Share of GVIO			120	38.2%
HEBEI	East	46.8%	108	4.6%
FUJIAN	East	47.5%	119	1.9%
SHANDONG	East	49.5%	107	7.5%
GUANGDONG	East	50.6%	126	6.5%
JIANGSU	East	63.4%	123	11.5%
ZHEJIANG	East	66.7%	139	6.2%

Sources: Total Factor Productivity Index from Xiao Geng (1991); others from *Statistical Yearbook of China*.

exceeds the national average by 26 percent, 19 percent, and 23 percent respectively, also enjoy very favorable profit-sharing arrangements between the central and local governments. The Special Economic Zones developed during the post-1978 reforms are all located in coastal regions. Hence, it is suggested that higher productivity in the coastal region may reflect the higher local government autonomy in those regions. And it follows that the central government should give more autonomy to local governments since they are better able to initiate reform measures for their own regions.

Recent decentralization of economic control from the central to provincial and lower levels of governments may have contributed positively to productivity growth. However, local governments do not always produce good economic policies. In addition to local protectionism, provincial governments potentially have all the weakness the central government has. Hence, it is important to identify specific local policies that contributed to better local economic development.

The last two sections suggest that collective enterprises are more efficient than state enterprises. Hence, if a region has more collective or non-state enterprises, it should have higher regional productivity. In addition to its own high productivity, the non-state sector competes directly with the state sector. As a result of competitive pressure, the state enterprises in that region should also have higher productivity than those in the other regions.

The above analyses are all consistent with the general pattern of regional productivity discrepancies, which rank the coastal regions at the top and the western provinces at the bottom. In this section, a regression analysis is used to determine which factor is most important in explaining the productivity gaps.

The regression analysis is based on the data in TABLE 6.1. In the table, the provinces are grouped into three regions with different concentrations of the non-state sector. The region where 15 percent to 23 percent of the Gross Value of Industrial Output (GVIO) comes from the non-state sector has a TFP index 14 percent lower than the national average, while the region where 45 percent to 67 percent of GVIO comes from the non-state sector has a TFP 20 percent higher than the average. Clearly, productivity is positively correlated with the concentration of non-state enterprises in a region.

This pattern is shown in FIGURE 6.1. The significantly positive correlation between the provincial TFP index and the share of non-state industrial output is illustrated by the closeness of sample points to a regression line.

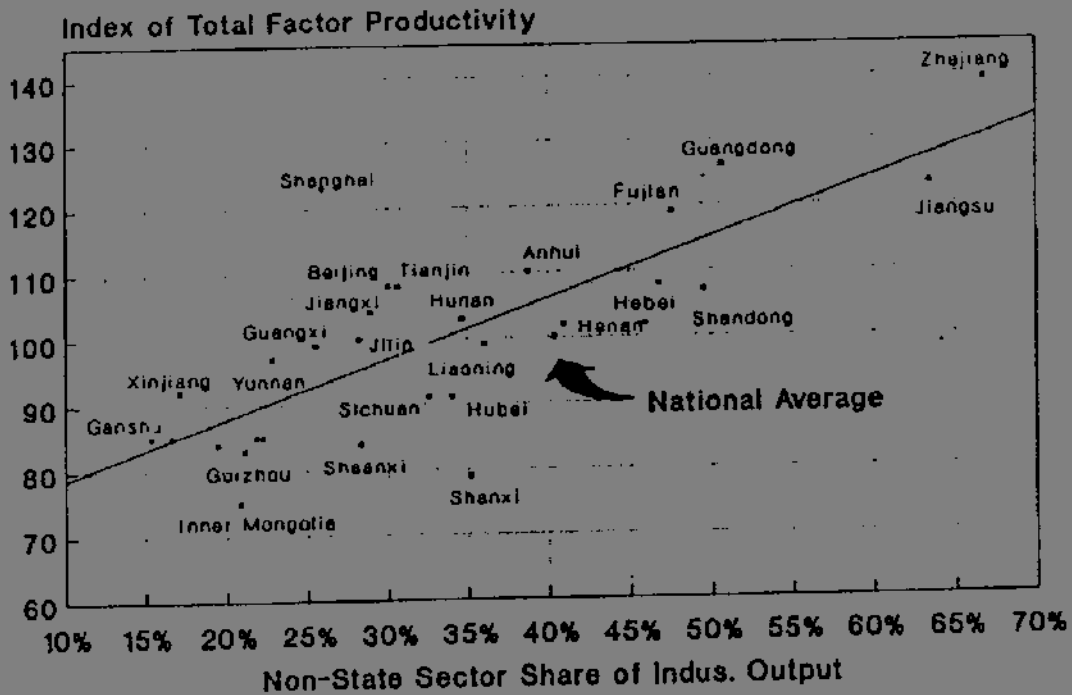


FIGURE 6.1 Impact of the Non-State Sector on China's Regional Productivity Gaps, 1985-1987

Source: See TABLE 6.1.

In TABLE 6.2, weighted OLS regressions are used to explain total factor productivity gaps across the provinces. The explanatory variables are the Non-State Share of GVIO in the provinces and dummy variables for the Western Provinces, Eastern Provinces, and Cities under the direct control of the central government.

Shown also in FIGURE 6.1, Shanghai has exceptionally higher productivity with its low share of non-state industrial output. Beijing and Tianjin also have low shares of non-state industrial output. Since these three cities are controlled directly and tightly by the central government, it is natural to use a City dummy to separate out their special circumstances.

Regression (2) in TABLE 6.2 shows that the TFP correlates positively with the Non-State Sector Share of GVIO. Regression (3) confirms that the TFP also correlates with the dummy variable for the coastal (eastern) provinces. Regression (1), however, is used to find out whether the TFP

TABLE 6.2 Regressions Explaining Regional Productivity Gaps in China

Regression	Sample and Number of Observations	R-Square (Adjusted R-Square)	Coefficients for each variable (t-statistics)				
			Constant	Non-State Sector Share of GVIO	Western Province Dummy	Eastern Province Dummy	City Dummy
(1)	29 provinces	0.774	66.97	88.28	-1.29	3.85	20.98
(2)	29 provinces	0.516 (0.498)	75.82 (12.03)	78.96 (5.36)			
(3)	29 provinces	0.525	95.32		-6.16	21.42	-0.37
(4)	11 eastern provinces	0.621 (0.526)	67.66 (4.87)	94.35 (3.62)			22.44 (2.53)
(5)	9 inland provinces	0.360 (0.268)	67.54 (4.71)	67.54 (4.71)			
(6)	9 western provinces	0.06 (-0.08)	84.83 (12.62)	16.30 (0.66)			

Note: Dependent variables for all regressions are TFP. All regressions are Weighted OLS with Provincial Share of National Gross Value of Industrial Output as weights.

Source: See TABLE 6.1

is still significantly correlated with regional variables after controlling for the concentration of non-state enterprises. According to Regression (1) in TABLE 6.2, the regional dummy variables are not statistically significant except for the City dummy. Hence, if the impact of the non-state sector were separated out and removed, the eastern provinces would not have performed significantly better, while the western provinces would not have had significantly lower productivity than the inland provinces during the 1985-87 period.

It should be emphasized that this surprising result does not contradict the theory that increased local government power in the coastal regions may contribute to productivity growth through policies encouraging the development of private, semi-private, and foreign businesses in those regions. In that case, the degree of local autonomy correlates with the concentration of non-state enterprises. Hence, the explanatory variable of Non-State Sector Share of GVIO may pick up the effects of both local autonomy and the non-state sector on productivity.

The above evidence shows forcefully that other than the concentration of the non-state sector, geographic location does not seem to have an important impact on regional productivity gaps (Shanghai, Beijing and Tianjin are the exceptions). Regressions (4) to (6) explore further the impact of the non-state sector on provincial productivity gaps by dividing the national sample into three regional samples. It shows that the correlation between productivity and the non-state sector share of GVIO is significant within the coastal or inland region, but is not significant within the western region. This can be illustrated by examples from FIGURE 6.1. Both Zhejiang and Guangdong are coastal provinces. The productivity of Zhejiang is higher than that of Guangdong since Zhejiang has a higher concentration of non-state enterprises.

It should be noted that the regression analysis only reveals a pattern of relations between productivity and ownership structure of the provincial economies. In particular, it does not prove that ownership structure is the only important factor in determining productivity. Other factors, such as local government autonomy, may also contribute to the productivity gaps. However, the pattern presented here does suggest that ownership factors cannot be excluded from a serious analysis of regional productivity gaps in China.

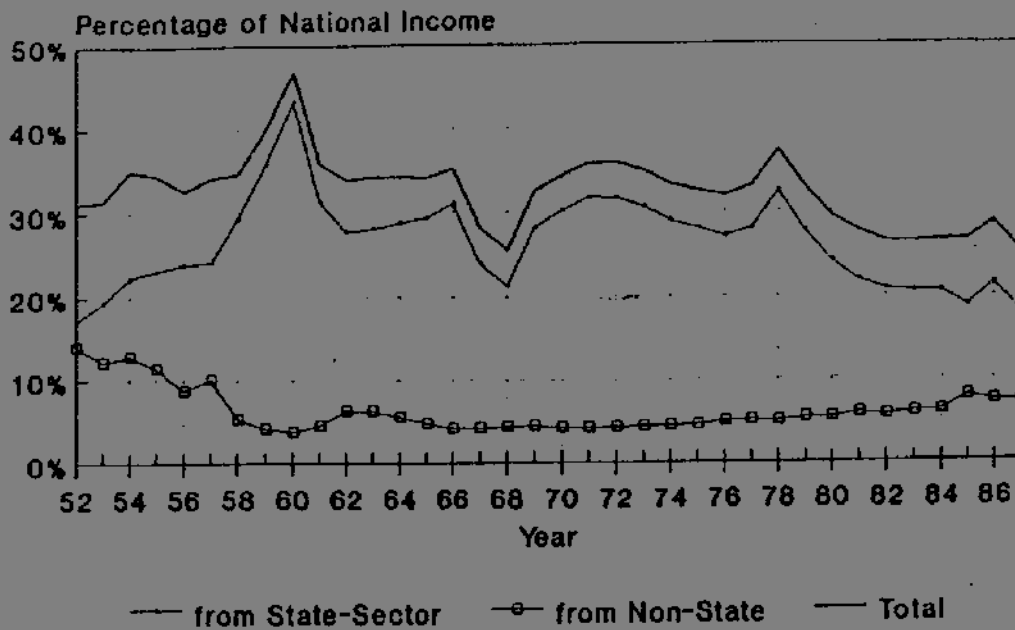


FIGURE 6.2 Contributions to Budgetary Revenue by State and Non-State Sectors, 1952-1986

Sources: *Statistical Yearbook of China*, 1992, pp. 32, 217, and 228.

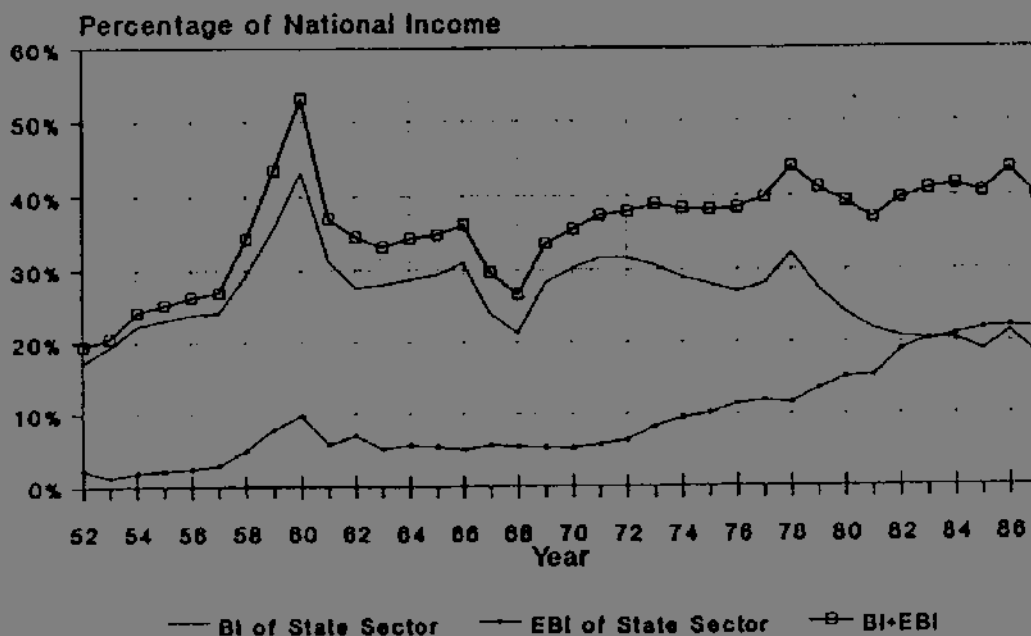


FIGURE 6.3 Budgetary and Extra-Budgetary Revenues of the State Sector, 1952-1986

Sources: *Statistical Yearbook of China*, 1992, pp. 32 and 228.

Decline of Budgetary Revenue: Roots, Consequences, and Solutions

In the last section, we examined the contribution of the non-state sector to industrial productivity and explored the sources of regional productivity gaps. However, most industrial reforms in the last decade were aimed at the state sector. The central and local governments have delegated much economic control to managers and workers in state enterprises. As discussed early in this chapter, increased enterprise autonomy has improved productivity in the state enterprises. However, the budgetary revenues of the central government have not increased as a result of this increased productivity.

FIGURE 6.2 shows the contributions of the state and non-state sector to the central government's budgetary revenue from 1952 to 1987. It is clear that the contribution of the non-state sector has been stable and increasing, although the non-state sector provided budgetary revenues at a level less than 10 percent of the national income throughout the recent reform period. The decline of central government budgetary revenue is primarily due to the fall in budgetary revenues originating from the state sector. In 1978, the state sector contribution to budgetary revenue was more than 30 percent of national revenue, but this contribution declined to less than 20 percent by 1987.

However, as shown in FIGURE 6.3, the fall of budgetary revenue has been accompanied by an increase in extra-budgetary revenue in the state sector. In 1978, budgetary revenue exceeded extra-budgetary revenue by about 20 percent of national income. In 1986, extra-budgetary revenue exceeded budgetary revenue by a few percentage points of the national income, while the sum of budgetary and extra-budgetary revenue held quite stable at about 40 percent of national revenue from 1978 to 1986.

Hence, the decline of government budgetary revenue during the reform era has been characterized by decentralization of control over revenues and profits away from the central government. Nevertheless, local governments did not increase their extra-budgetary revenue very much. This can be seen from FIGURE 6.4, which presents the division of extra-budgetary revenue among the local governments, administrative units, and enterprises in the state sector. The extra-budgetary revenue of local governments as a percentage of national income has actually been declining since 1978. Most of the increases in extra-budgetary revenue went to enterprises and administrative work units.

The above pattern of decentralization is closely related to enterprise reform or the Contract Responsibility System. As discussed in the first two sections, the profit-sharing, managerial autonomy, and fringe benefits

provision, key elements of the Contract Responsibility System, provided incentives for enterprises to use resources more efficiently. However, because of the limitation of state ownership and information costs, this increased efficiency has not contributed to budgetary revenue.

The sources of budgetary revenue (taxes and profit remittances) are from sales of industrial products. However, Chinese state enterprises produce not only industrial products but also non-industrial services or fringe benefits within the enterprises. The fringe benefits raise the real income of the managers and workers in the state enterprises but do not contribute to government budgetary revenue. As the enterprises control more resources, they tend to bias investment toward non-industrial projects since the government (not the employees of enterprises) would claim most of the industrial profits from the state enterprises.

A trend toward decentralization has characterized Chinese economic reform since 1978. However, the central government rarely initiated this decentralization. More often, the farmers, enterprises, or local governments first demanded "policies" which gave them some autonomy, and the central government then yielded to them. After more than ten years

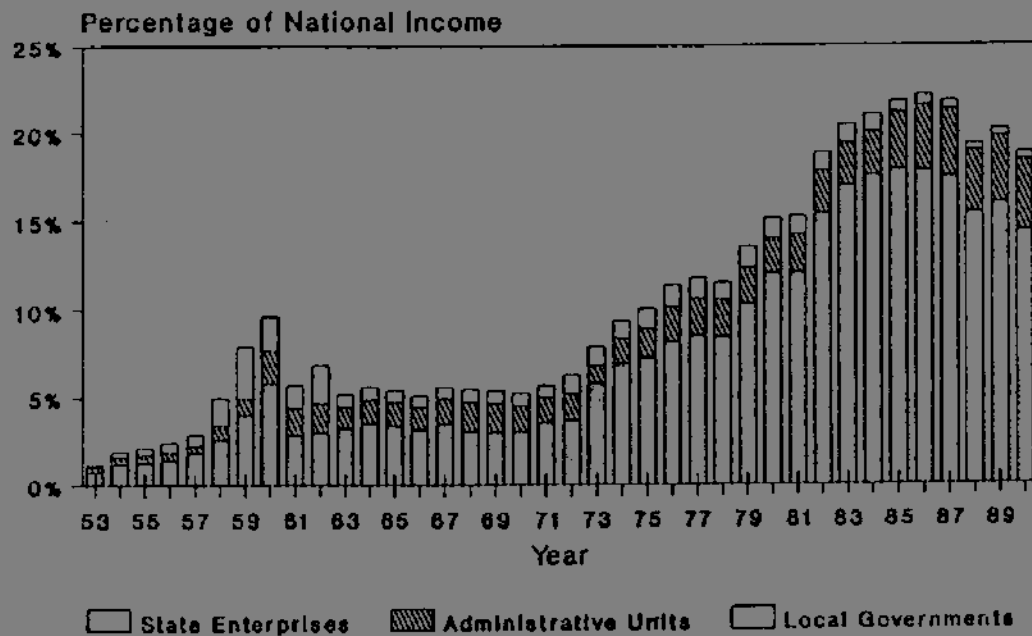


FIGURE 6.4 Size and Distribution of Extra-Budgetary Revenue, 1953-1989

Sources: *Statistical Yearbook of China*, 1992, pp. 32 and 228.

of reforms, the central government now controls less economic resources and has become weaker financially. On the other hand, private business, rural enterprises, and urban collective enterprises have grown rapidly, competing with the state enterprises. The state enterprises, though less efficient than the non-state enterprises, have also improved their productivity. However, the state enterprises have failed to provide enough revenue for the government, not simply because of lower industrial productivity but also because of an expansion of fringe benefits. Even the state enterprises operating at a loss have not given up efforts to continue the expansion of fringe benefits projects.

Reforms in the state sector have produced a dilemma for the central government. If it continues the current decentralization reform, state enterprises may maintain their productivity and fringe benefits expansion but contribute little to budgetary revenue. Recentralization, however, may lower productivity and yield no profits for the central government.

The solution lies in privatization and changes in the economic role of the government. The rapid development of the non-state sector provides the government with new opportunities. Private firms not only have high productivity but are also potential sources of tax revenue. There are significant economies of scale for Chinese enterprises.⁸ These economies of scale are currently unavailable to private firms because of their limited size. Large private firms should be able to reap benefits from both the economies of scale and the efficiency of private ownership. The Chinese government is used to the concept that the government invests in state enterprises and so shares some of the profits as budgetary revenue. As the central government invests less in state enterprises, it seems necessary for the government to tap new sources of tax revenue. It is true that it is difficult to collect taxes from small private business. But that situation is also true in other countries. If the property rights of large private firms or corporations are effectively protected by the Chinese government, they may be more than happy to pay taxes and still retain adequate profits for themselves.

At present, however, government regulations do not protect the growth of private enterprises and in many cases discriminate against them. The future uncertainty over government policy toward private business severely restricts the type and size of private firms. Since it is only efficient for government to monitor business accounts and tax files of large firms, the financial benefits of promoting private business for the government will come when large private and semi-private firms have earned significant profits.

In FIGURE 6.5, the state and non-state sectoral shares of budgetary revenue are related to the sectoral share of the gross value of industrial output. During the post-1978 reforms, the non-state sector's share of bud-

getary revenue has been increasing, with its share of the gross value of industrial output as the leader. Since the non-state sector share of GVIO may continue to increase in the future, the central and local governments should be able to benefit from the rise of non-state industrial enterprises.

To tap budgetary revenue from the private sector, the economic role of the central and local governments has to change. It is not necessary for the government to initiate investment projects, since private firms have incentives to do that if societies demand those projects. However, it is important for the central government to enforce free contracting and protect private property rights. The central government has a monopoly on making and enforcing laws and regulations about markets and economic organizations. If these laws and regulations are effective in facilitating efficient production and exchange, there are tremendous economies of scales for the central government to provide those public services.

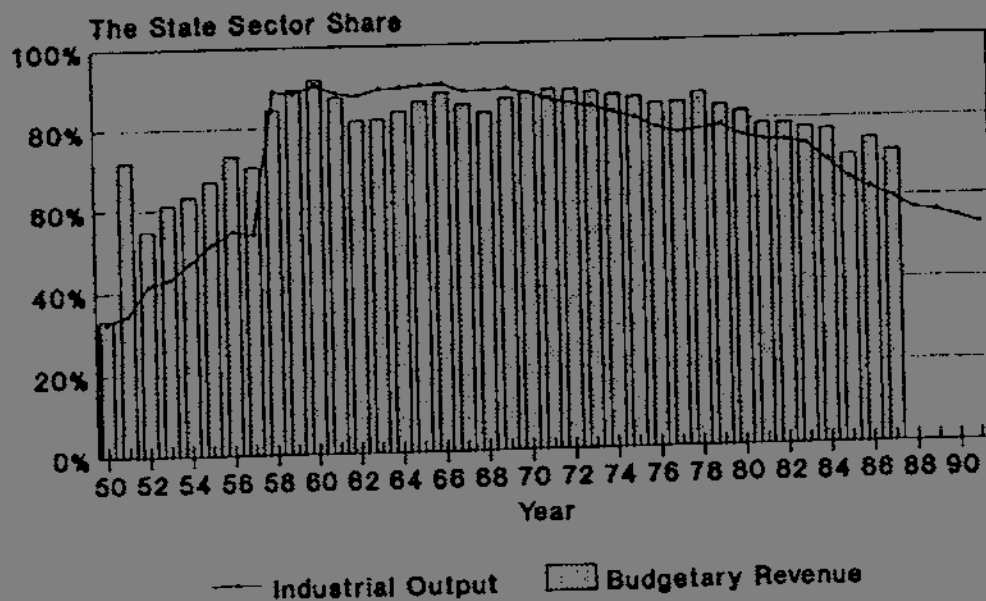


FIGURE 6.5 The State Sector's Share of Industrial Output and Budgetary Revenue, 1950-1991

Sources: *Statistical Yearbook of China*, 1992, pp. 408, 215, and 217.

Since private businesses do not provide extensive fringe benefits such as housing, medical care, public transportation, and education, it is important for local governments to organize these community services to attract profitable businesses into their regions. The central government does not have enough information or the capacity to provide these public goods. In some places such as Wenzhou, the private sector has very sophisticated transportation services. But in most of China, local governments have to take over some of the responsibilities which have fallen to enterprise management in the state sector. The new economic role of the central and local governments should be to serve the growth of the private sector. The growth of the private sector should be able, in turn, to provide the necessary budgetary revenue for better functioning of the central and local governments.

Conclusions

Since 1978, the Chinese government has devolved significant economic control to local governments and enterprises. Two facts have emerged during this time that aroused enormous debates on the economic role of the central and local governments: first, there was a rapid decline in the central government's budgetary revenue; second, there were large discrepancies in regional productivity.

It has been suggested that the higher productivity of China's coastal region may be a result of greater local government autonomy. Hence, more local autonomy in other regions may improve their productivity as well. On the other hand, it has also been argued that the recent decentralization has weakened the economic capacity of the central government and may hinder future economic development in China.

This chapter addresses these debates by examining the sources of China's regional productivity gaps and the root of the decline of the central government budgetary revenue. It finds that the ownership structure of China's regional economies correlates strongly with regional industrial productivity. The impact of the non-state sector on regional productivity was so important that there would have been no significant differences in productivity among the coastal, inland, and western provinces if the contribution of the non-state sector to provincial productivity gaps had been separated out.

Also, the decline of central government budgetary revenue largely resulted from rising extra-budgetary revenue, which was primarily controlled by state-owned enterprises. The state-owned enterprises were able to use extra-budgetary revenue to carry out both industrial and non-industrial projects. The latter would not yield future revenue for the

government but nevertheless represented rational investment from the perspective of the managers and workers of the enterprises.

The author therefore argues that the decline of the central government's budgetary revenue was not due to the problems of central-local relations. The root of the decline in budgetary revenue lay in the decline of state enterprise profits. A policy of encouraging development of the non-state sector may be more important than a policy of reforming central-local relations. Both the central and local governments will be better off shifting their attention to new challenges and opportunities arising from the rapid growth of the non-state sector. And an encouraging sign is that both the share and the size of the budgetary revenue originating in the non-state sector has been increasing throughout the period of China's economic reform.

Notes

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2. Susan L. Shirk: "Playing to the Provinces: Deng Xiaoping's Political Strategy of Economic Reform," mimeo, Department of Political Science, University of California at San Diego, 1991.

3. Xiao Geng, "Managerial Autonomy, Fringe Benefits and Ownership Structure," *China Economic Review*, 2(1), 47-73, Spring 1991; also Xiao Geng, "The Impact of Property Rights on Productivity and Equity in Post-Mao Chinese Industrial Enterprises," Ph.D. Dissertation, University of California at Los Angeles, June 1991.

4. *Ibid.*, this author reveals the importance of incorporating fringe benefits into the formal analysis of Chinese enterprise behavior.

5. Xiao Geng, Ph.D. Dissertation, *op. cit.*

6. Xiao Geng, *China Economic Review*, *op. cit.*

7. Xiao Geng, *China Economic Review*, *op. cit.*

8. Xiao Geng, Ph.D. Dissertation, *op. cit.*