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Micro Incentives and Macro Stability

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Task Force on Decentralization

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There have been intense debates on the virtues and limits of decentralization. The issue is too complicated to draw simplistic policy conclusions. This essay focuses on one aspect of the problem to highlight the potential complexity, based on the recent experience of transition economies, mainly China and to some extent Russia. It concerns the role of government in development and transition: a need to provide incentives for local governments to pursue development on the one hand, and a need to maintain macro stability of an entire economy on the other. This essay draws upon the findings from Qian and Weinast (1997), Qian and Roland (1998) and Jin, Qian, and Weingast (2001).

1. The Changing Fiscal Incentives for Local Governments

Measured by the share of local government expenditure in total government expenditure, China has always been more decentralized than most other countries. Before the reforms, the average share of local government expenditure in total government expenditure was 49 percent for 1970-79. After the reform, it was 53 percent for 1982-91 (after adjustment for consistency). On average, the share for industrialized countries is 34 percent and, for developing countries, 22 percent (World Bank, 1996).

The most important changes that China's reform brought about are not so much the expansion of local government expenditure shares, but the increase of local autonomy and, especially, the increase of marginal local retention rates. This was achieved through the "fiscal contracting" between the central government and local governments. This arrangement was implemented between 1980 and 1993. The marginal provincial revenue retention rates on average were 67 percent in 1980 and increased to 89 percent in 1992. Out of 29 provinces, 19 provinces kept 100 percent of revenue at the margin between 1989 and 1993.

Is the contractual arrangement of high marginal local retention rates realized *ex post* in practice? We examined a fixed effect model to regress provincial budgetary expenditure on its revenue collection. During the reform period between 1982 and 1991, the correlation coefficient between the provincial budgetary revenue and budgetary expenditure is, on average, 0.75. To see how this reflects the change of reform, we also did the similar exercise for the pre-reform period. In contrast, during the pre-reform 1970-79 period, the corresponding coefficient between the budgetary revenue and expenditure is, on average, 0.17. There is indeed a dramatic change after the reform.

Zhuravskaya (2000) examined the fiscal incentives of city governments in the region-city fiscal relationship in post-reform Russia. Using the data of 35 cities for the period 1992-1997 and by regressing the change in the "shared revenue" between the regional and city governments on the change of the city's "own revenue," she finds that the coefficient is -0.90. She interprets this result as evidence that increases in a city's revenue are almost entirely offset by decreases in shared revenues from the region to the city. From the perspective of local government fiscal incentives, it is about the same as in the pre-reform period of China.

2. How Local Governments Respond to Fiscal Incentives

Do local governments respond to fiscal incentives? In the fixed effect model estimation, we found that an increase in the marginal fiscal revenue retention rate in a province by 10 percentage points is associated with an increase of 1 percentage point in the growth rate of employment of non-state enterprises in that province. Because the mean of the growth rate of employment of non-state enterprises is 9 percent, the effect of fiscal incentives on local economic development is significant. The similar result is also obtained when the growth rate of employment of rural enterprises is used instead, a narrower measurement than all non-state enterprises which include both urban and rural.

We note that this result is obtained after controlling for the conventional measurement of fiscal decentralization – the share of local government expenditure in total government expenditure. Therefore, the estimated incentive effect is independent of the average level of fiscal decentralization. Furthermore, the positive incentive effect is robust to the exclusion of this variable. This result confirms our intuition that local fiscal incentives are important inducement for local economic development. Therefore, the local governments' enthusiastic support for local business in China is rooted in the incentive structure of local government.

One may worry that the central government sets higher marginal retention rates for high growth provinces. If this is the case, we cannot interpret the higher growth of the non-state sector as a result of higher marginal retention rates. However, when we examine our data set more carefully we found negative rather than positive coefficients in the regression of marginal retention rates on the lagged growth rates of the non-state sector. That is, on average, high growth areas are likely to receive lower, rather than higher, marginal retention rates. Therefore, if our estimates are biased due to the endogeneity problem, it is more likely biased against our hypothesis, that is, we might have underestimated the claimed effect.

3. Continued Central Control on the Appointment of Provincial Leaders

Despite decentralization in the economic spheres, China's central government has maintained its power over the appointment and dismissal of local government officials. In particular, the central government, through the Party, selects top provincial officials. The combination of the increased fiscal incentives for local governments and the continued central control on the appointment of local leaders is a salient feature underlying China's central-local relationship during the reform period.

But local government officials are not homogeneous, and they vary considerably in a range of characteristics, both cross-region and over time. Some local officials have deeper roots in their localities because they are promoted from within the provinces. Others are more loyal to the central government because they serve concurrently in the

central government or because they are transferred from the central government ministries or Party apparatus. Not only does the effective influence of the central government over provincial government policy vary with the characteristics of local government officials, but provincial government officials' local knowledge and networks also differ.

To examine this variation quantitatively we use an index constructed by Huang (1996) and called *bureaucratic integration*. The index is based on the career background of the provincial Party Secretaries in the following way. It was scored 1 if he/she was promoted from within the same province; 2 if he/she was moved to the current post from another province; 3 if he/she served in the central government before his/her current appointment; and 4 if he/she concurrently holds a post in the central government (such as a Politburo seat). On the scale from 1 to 4, the average of this index was about 2.1 in 1980, which dropped to about 1.7 in the early 1990s.

In some sense, this index measures a degree of “closeness” of top provincial officials with the central government: the higher the score, the closer is the top provincial officials to the central government. We may interpret this index in the following way: Provincial officials with a lower score are more likely to have better local information and local connections, and moreover, they are more likely to be committed to fostering local prosperity. In contrast, provincial officials with a higher score are more likely to have better central government connections and more loyal to central government's objectives.

4. How Central Government Control Helps Macro Stability

While fiscal incentives are good for the development of the local non-state sector, they may not be good for maintaining macroeconomic stability. One way to examine this issue is to study local government investment spending and local credit expansion, which are known as possible sources for macroeconomic instability. Indeed we found that higher marginal revenue retention rates generally associated with higher local government investment spending as well as local credit expansion. Note that during this period local governments had the autonomy on local government investment and also to a large extent captured the local branches of state banks.

Interestingly, examination of the variable of bureaucratic integration shows a somewhat different picture. We found that the higher level of bureaucratic integration in a province is associated with slower, rather than faster, growth of local non-state enterprises in that province. Therefore, a closer connection between local leaders and the central government is not good news for local development. However, we also found that higher bureaucratic integration in a province is associated with lower local government fixed investment, where local government investment is measured by both the level of local government fixed investment and by the ratio of local to central government fixed investment. This suggests that central government control on appointment does play a role in maintaining macroeconomic stability by curbing local government's excessive

fixed investment. This is not surprising, because those provincial leaders who have closer ties to the central government also share the latter's objective. Though primitive, the continuation of the central control on the appointment of provincial leaders provides one mechanism to maintain macro stability.

However, the role of this mechanism is limited. We found that, unlike its effect on local government investment, bureaucratic integration has no significant effect on local credit expansion, from either state banks or credit cooperatives. This suggests that during this period the central control on the appointment was not effective in controlling local governments' access to credit. To the extent that credit expansion is a major source of inflation, the central control has not achieved that objective. This is perhaps an important reason for the monetary reform in 1994.

5. Conclusions

China's recent experience of decentralization is often used in the policy debate on the benefits and costs of decentralization, and for good reasons. China is a very large country and some kind of decentralization is a necessity. During the past fifty years the central-local relationship in China often occupied a central stage of policy changes. One may find great variations both across regions inside China and changes over time. Finally, the great success of China's reform also adds curiosity to China's experience on decentralization.

There is little controversy that China's reform has been closely associated with regional decentralization. But the assessment of this experience varies enormously among economists. To many, decentralization is the key to the understanding of China's economic success. To some others, decentralization is the evil root of many problems arising during China's reform such as regional protectionism, allocation distortions, macro instability, regional inequality, etc. To still others, political centralization, rather than economic decentralization, is believed to play a key role in China's extra-ordinary growth.

This paper intends to show that appropriate assessment of the role of decentralization requires careful analysis, which reveals that the relationship between decentralization and economic performance is not simple. It is not just that the higher share of local government expenditure in total government expenditure matters, more crucially, higher local fiscal incentives in terms of higher marginal retention rates are important for inducing local governments' support for economic development. However, such high incentives may not be conducive to macroeconomic stability, in particular when local governments have considerable influence over the banking system. On the other hand, the central government's appointment mechanism induces a tradeoff between macro stability and development: while it is not good for local development, it plays a role in maintaining macro stability. Therefore, there is a complicated relationship between micro incentives and macro stability. It also demonstrates the complexity of the relationship between economic reform and political reform.

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