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Fiscal Federalism and Economic Reform in China

Roy Bahl and Jorge Martinez-Vazquez¹

Introduction

Because of history, size and economic potential China is a force to reckon with: 9.6 million square kilometers populated by 1.26 billion people. It has a varied geography: moving from west to east (Figure 1) we start with the vast dry areas, move to the mountains, valleys and higher altitudes of the center, and end up in the more temperate coastal regions which have more rain, lower altitudes, easier communication and transportation. A main theme of this paper is that, in great part due to geography, but also due to overt government policies, wealth and economic well-being tend to increase monotonically from west to east. That reality significantly conditions the past, present, and future of fiscal federalism in China.

A standard grouping of China's provinces is used in Table 1 to describe the economic geography. The Northern Region includes the large and rich cities of Beijing and Tianjin. These two cities, together with Shanghai in the Eastern Region and Chongqing in the Southwest

¹ We would like to thank T.N. Srinivasan, Baoyun Qiao, and Jessica Wallack for helpful comments. We acknowledge the able assistance provided by Li Zhang and Wenbin Xiao

Region, are granted provincial status, much as is the case for Moscow and St. Petersburg in Russia. The Northern Region also contains the relatively poor province of Inner Mongolia. The Northeast Region, also known as Manchuria, contains several relatively rich provinces with a long tradition of manufacturing dating back to Japan's occupation of this area in the first part of the 20th century. The Eastern Region includes the richest enclave in the country, the City of Shanghai, and the coastal or close-in provinces stretching from Shandong to Fujian. Most of these provinces have been recipients of foreign direct investment flows since the "openness" policy began in 1978. They also enjoy relatively high levels of income per capita. The Central South Region includes the fertile interior agricultural provinces between China's two great rivers, the Yellow River and the Yangtze River, except for Shandong province which is part of the Eastern Region. The Central South Region also includes the coastal province of Guangdong (geographically next to Hong Kong), which accounted for more than 10 percent of China's GDP in the year 2000. The Southwest Region provinces have humid climate but mountainous terrain. The Northwest Region is geographically more isolated, with arid climate and is inhabited heavily by ethnic minorities. These last two regions, in the west, contain many of China's poorest provinces.

The objectives of this paper are to examine the role of fiscal federalism in the economic growth, modernization and globalization of China's economy since the pro-market reforms started in 1979, and how, in turn, other economic policies and the forces of globalization have shaped and conditioned fiscal federalism in China.

After some background discussion, this paper is divided into two main parts. In the first, we study the process of economic reform and the main trends that have framed and conditioned fiscal federalism in China. We pay special attention to the process of foreign direct investment and its impact on regional development and on economic and fiscal disparities across China. The second half of the paper examines the challenges that have been presented by the Chinese fiscal federalism. We will continue to return to two central points. First, fiscal federalism issues in China are inextricably linked to tax policy and tax administration issues.² Second, fiscal federalism in China is significantly conditioned by other government economic policies regarding demographic issues, the financial sector, and foreign investment and globalization trends. The way forward for an improved system of intergovernmental fiscal relations in China

² See Bahl (1999).

will no doubt require active tax policy reform and the upgraded tax administration, but must also reach for policy reform outside the fiscal domain. For example, the reforms of migration policy, the pension systems and even of the banking system will have considerable impacts on the shape of fiscal federalism in China.

China's Fiscal Federalism

On the surface, China's governance appears to be very decentralized. Local governments in China are organized in a hierarchical way with each level of government reporting to the next highest level (see Figure 2). About 70 percent of government budgetary expenditures are made at the subnational government level. This is a very high share by international standards. Moreover, the structure of its governance gives the feel of a decentralized system. There are approximately 47,000 local government units, which would seem to indicate a desire to get government relatively close to the people. And though China is a unitary state, it gives the feel of a fiscal federalism: it has a hierarchical central, provincial and local structure of government, and it gives provinces considerable latitude in forming the intergovernmental system that finances and regulates their local governments. In particular, they may share revenues among local governments within the province as they choose.

In reality, however, China's governance is much less decentralized than the large subnational government expenditure share would indicate. There is a significant command and control element in the intergovernmental fiscal system that includes several binding expenditure laws and numerous expenditure mandates. Subnational governments have very little by way of formal revenue raising powers. They are financed primarily by shares of central taxes and grants. The political structure of its governance and intergovernmental fiscal system may not enable China to capture the potential efficiency gains from fiscal decentralization.

The subnational governments have reacted against this centralization by creating a kind of "backdoor federalism" (Bahl, 1999). They have been entrepreneurial in negotiating contracts with their enterprises, levying informal charges and maintaining significant off-budget accounts, indirectly borrowing from state banks to cover deficits, and erecting trade barriers to maximize local revenues. In part, this led the government to adopt a major intergovernmental fiscal reform

in 1994, to recentralize the fiscal system. While some recentralization has occurred, some of the incentives for fiscal entrepreneurship by subnational governments are still in place.

The present system of fiscal decentralization in China is probably not sustainable in the long run, assuming that the goal is to give subnational governments an incentive to improve local public services and to promote economic growth. Moreover, as noted above, there are significant regional, fiscal disparities that sooner or later will have to be addressed. Part of the way forward for China will almost certainly include a significant revision of the intergovernmental fiscal system.

Part I: Economic Reform and Fiscal Federalism

Recent Reforms and Growth

With the economic liberalization reforms starting in 1978, which provided for special economic zones in a few of provinces on the coast, China's government left behind any pretension of an egalitarian distribution of income (Yao and Zhu, 1998). This was a major political decision inspired by Deng Xiaoping's belief that some of China's regions would need to grow faster in the early years of reform in order to benefit the rest of the country at some future time. The essence of the reform was to progressively disengage from an economy driven by the state plan in favor of an allocation of resources driven by market forces.³

There has been considerable discussion about whether or not the gradualist strategy for reform adopted by China's government provided the country an advantage over the "shock therapies" adopted by Russia and several Eastern European countries.⁴ Causation notwithstanding, there is general agreement that China's rate of economic growth during its period of liberalization has been extraordinary. The data in Table 2 show the rate of growth in output per capita for the provinces, the regions, and for China as a whole for selected years since 1975. Although there are variations, with better and worse performers, these data show that economic growth has been widespread. Between 1980 and 1999, real income per capita in China increased

³ According to Wong (1998), by the mid 1990s, the share of GDP produced in the state sector had fallen to less than 20 percent and SOEs accounted for less than 45 percent of gross industrial output.

⁴ See, for example Naughton (1996), Bouin (1998) and Martinez-Vazquez and Wong (2003).

by well over five times. Provinces that benefited early from the inflow of foreign direct investment (FDI) grew the fastest. For example, from 1980 to 1999, output per capita in Jiangsu province increased nearly 16-fold and in Guangdong province almost 13-fold.

Several fundamental institutional reforms were behind this rather spectacular rate of economic growth.⁵ In the agricultural sector, the reforms known as the “production responsibility system” and later the “household contract responsibility system” led to significant income growth in the rural areas. After rural income growth slowed down in the mid 1980s, China’s government turned to the development of township and village enterprises (TVEs) to increase incomes in rural areas and to absorb unemployed or excess farmers. In the urban areas, the major institutional changes that led to economic growth included the reform in the governance of state-owned enterprises (SOEs), allowing profit sharing and retention of profits, and also the introduction of different forms of ownership. Under this system, both private ownership and FDI were allowed in China, and the latter became a powerful engine of economic growth.

The general economic reforms were accompanied by several fiscal reforms. After some experimentation during the 1978-83, the Chinese government introduced the first comprehensive reform of the fiscal system in 1984, which became known as the “Fiscal Responsibility System” (FRS). This was a contracting system involving fixed periods of time, in which generally local governments were allowed to retain part of the tax revenues collected after the remittance of a fixed sum to the central government. The system appeared to be incentive compatible because local governments could keep more revenues if they collected more tax. However, the FRS led over time to several important problems for the central government. Local governments found ways to contribute fewer fiscal resources to the central government by, for example, giving local enterprises tax exemptions at the expense of central government revenues, or by hiding resources from the central government in extra-budgetary funds. These problems led to the decrease of the central government share in total budgetary revenues and also to a lower share of total budgetary revenue in GDP. Realizing the shortcomings of the contracting system, the central government adopted the “Tax Sharing System” (TSS) in 1994. Therefore, the 1994 reform was prompted by the central government’s loss of control over the fiscal system. It was unable to generate adequate revenues for its programs, it could not enforce uniformity in the application of its tax laws, and its fiscal initiatives were being thwarted by negotiation and off budget practices of the

⁵ See Yao and Zhu (1998).

subnational governments. There were five commonly cited concerns that were to be addressed by the reform:

1. The revenue share of GDP was declining, in the face of significant budgetary needs. The tax/GNP share fell from 23 percent in 1985 to 11 percent in 1994.
2. The central government claim on total national revenues was falling relative to that of subnational governments. Central government budgetary expenditures were 65 percent of those of subnational governments in 1985, but only 43 percent by 1994.
3. The central government was losing its ability to steer subnational government fiscal policy, and the subnational governments were becoming increasingly aggressive about making their own policies. These policies were usually informal, but were effective. For example, local governments influenced the local tax administration cadre in the way in which they collected and assessed taxes, they negotiated tax contracts with local enterprises, and they used extra-budgetary taxes and expenditures.
4. The tax system, supposedly based on national law, was becoming less uniform as subnational governments made use of these discretionary powers. The amount of taxes paid by an enterprise might be more a function of the deals it made with the local government than of the national tax law. The system was becoming less transparent and more of a “back door” approach to fiscal federalism.
5. The tax structure was in need of adoption of modern practices to move it toward less complexity, to provide proper incentives for enterprise management decisions, and to continue to move its focus away from a regulatory function.

The 1994 TSS was quite comprehensive in that it covered tax policy, tax administration and intergovernmental fiscal relations. However, it did not address any significant issue related to expenditure assignment. The reform program was more or less true to the goals of addressing the problem issues raised above.

The *tax policy* reforms were more addressed at modernization of the tax structure. The following were the major elements: (i) The number of taxes in the system was reduced from 32 to 18, thereby reducing the complexity of the system. (ii) The top marginal income tax rate for enterprises was reduced from 55 percent to 33 percent and surtaxes were eliminated; the tax rate

schedule was unified to subject all enterprises (regardless of ownership) to the same regime; the deduction of loan principal repayment was disallowed; and an accelerated depreciation schedule was adopted. (iii) The practice of allowing local governments to negotiate tax contracts with individual enterprises was disallowed. (iv) The indirect tax system (with three main taxes and 250 rates) was simplified. The VAT was expanded, a credit invoice system of determining VAT liability was adopted, and specific excises on certain consumption goods was adopted.

The tax administration before 1994 was characterized as having “divided loyalties”. While technically, tax officials were employees of the central government, there was relatively little central supervision. Ties to local governments and to local enterprises were much closer. It was alleged that local tax administrations influenced the pattern of tax collections so much that they were making tax policy. The 1994 reform created separate tax administrations at the central and local levels. It established a local tax bureau, under the direct supervision of the local governments, with responsibility for, among others, the administration of income taxes. The central government tax administration would be responsible for the VAT and for all taxes on centrally owned enterprises.

The 1994 reform of the intergovernmental fiscal system was meant to reduce the degree to which the subnational governments had discretion to negotiate outcomes, and it was meant to claw back a greater revenue share for the central government. If successful, it would increase the transparency of the system. The main elements of the reform were as follows: (i) Income tax revenues were fully assigned to the subnational governments. This would reduce the incentive to avoid tax sharing through negotiated deals with the enterprises. (ii) The VAT remained a central government tax but with an agreement that 25 percent of revenues would be shared on a formula basis. This would make revenue sharing more “top down” than “bottom up.” (iii) Local governments lost much of their back door autonomy (extra-budgetary revenues, tax administration influence, and enterprise contracting) in favor of a more transparent and defined program.

The two main goals of the 1994 reform, increasing the share of government revenues in GDP and the share of central government revenue in the total budgetary revenues, were reached after several years but only in a modest way.

The potential for future economic growth in China is constrained by the inefficient allocation of resources in the economy due to low labor and capital mobility. The low mobility

of economic inputs is to a large extent determined by government economic policies introduced under planned socialism: in the case of labor, strict migration control under the household registration system (or *Hukou*), and in the case of capital the key role is still played by the state banking system and the allocation of funds on non-market criteria. A quite different form of constraint on economic growth, it has been argued, may be the lack of democratic institutions in the country. Further economic growth and macroeconomic stability in the future will require first, addressing the migration problem, and second, addressing the modernization of the financial system and most critically the reform of the banking system. There are other issues in the current population dynamics that should be of concern to government authorities: rising unemployment and the long-term viability of pension funds. Although we discuss migration issues, the issues of unemployment and pension funds will not be discussed here.⁶

Economic globalization has been one of the strongest engines of economic growth in China with the country absorbing a big proportion of worldwide FDI funds. However, the impact of FDI on employment, income and growth has been uneven across the country in part because of explicit central government policies (e.g., restricting FDI to only some areas) and in part because of basic economic geography and comparative advantages of the coastal regions. Thus one possible disadvantage of the FDI boom in China has been the exacerbation of economic disparities among different regions of the country and possibly between the urban and rural dwellers within each region. The recent entry of China into the World Trade Organization (WTO) may reinforce these past patterns via lower protection of domestic agricultural products and other sources of income in the interior provinces.

Thus, fiscal decentralization design and fiscal policy in general, besides mobilizing revenues and providing much-needed public goods and services, aims to address the growing economic and fiscal disparities across China's regions. These points are examined in the second half of the paper.

⁶ Unemployment problems do not directly relate to fiscal federalism. However, in China the long-term viability of pension funds is at the heart of fiscal decentralization reform. The reason is that, as discussed below, the pension system in China is mostly a local government expenditure responsibility. This atypical assignment of responsibilities dates back to the self-reliance policies favored by Chairman Mao. Throughout the country different pension systems have been reporting liabilities growing much faster than contributions. Because these are "pay as you go" systems, the existing population dynamics augur more serious problems in the future. According to *The Economist* (2002), the ratio of workers to pensioners was expected to fall from 10 to 1 in 1995 to 2 to 1 in 2050. In fact the central government budget has been making contributions to many local pension systems over the last decade to keep them afloat. This issue is further discussed below with possible reforms to expenditure assignments.

We turn now to current problems in the labor and capital markets. In particular, we review options to address the migration problem, especially in the context of the twin threats of rising unemployment and the viability of pension funds. Next, we review some of the implications of the weakness of the banking system and the alternative reforms that have been proposed. We then examine what evidence there is that the lack of democratic institutions has hindered or may be hindering economic growth in the country. Last, we study the phenomenal growth of FDI, its determinants and sources, and its impact on economic disparities.

Population and Migration Trends: The Floating Labor Phenomenon

The fiscal profile of subnational governments can be significantly affected by population and migration patterns. Population growth increases the demand for basic services and strains the current infrastructure. Similar effects can result from sudden bursts of immigration. Rapid increases in population can overwhelm any system of local public services. Even those local jurisdictions losing population may be subject to fiscal distress if the migration implies a loss in revenue bases without much change in expenditure needs, as is the case when the active population migrates leaving behind retirees and school-aged children. Of course, migration from poorer to richer areas is an important instrument for reducing economic disparities among regions through employment and wage rate convergence and by the remittances of migrants back home.

Traditionally, Chinese people have been restricted in their freedom to move inside their country. The *Hukou* system of household registration in effect largely confined people to the place of their births.⁷ Currently, the household registration system still makes it illegal for rural households to migrate to urban areas and for residents in poor provinces to migrate to richer

⁷ Under the household registration system, or *Hukou*, re-adopted by the PRC from long standing Chinese traditions, households were designated as rural or urban. The designation, which went beyond mobility issues, was openly unfair toward rural households. In effect, *Hukou* meant that only designated urban households were allowed to reside in cities and towns employed by state enterprises and with access to subsidized foods and other benefits. See Dayal-Gulati and Husain (2002). In 1958 the “Regulation on the Registration of Households” required that all households register in their place of residence and that they should gain official permission for any changes in residence.

provinces without special permits.⁸ The household registration system is defended these days as a way to prevent urban chaos.

It is likely that the rural reforms of the late 1970s and early 1980s weakened the ability of government to control migration and labor mobility. However, during the 1980s and 1990s the official rate of migration remained quite low. For example the officially recorded number of people that moved from one county to another between 1985 and 1990 amounted to 0.24 percent of the rural population in 1990 aged 5 or older. This is not surprising since after the successful rural reforms in the early 1980s, the government encouraged only local migration. The *Hukou* system was never removed. But despite its illegality, there appears to be migration in China. The numbers are not official but China's so-called floating population has been estimated to be as large as 100 million workers.⁹ As in the case of "illegal" fees in China, there is some recognition and even support for migration at the provincial level.¹⁰

The low level of rural to urban migration over the last two decades has meant that the mean value of the provincial urbanization ratio increased only from 23 percent in 1979 to 29 percent in 1999. However, provinces with considerable amounts of FDI and rapid economic growth, such as Jiangsu and Guangdong, experienced faster increases in their urban population ratio. Therefore, at least in some provinces there must have been sizable rural to urban migration. However, rural to urban migration was relatively small for the country as a whole. The level of inter-provincial migration is even more difficult to gauge indirectly from population figures.¹¹ From what is known and despite the fast economic growth in China during these two decades, the level of migration, appears to have been low.¹² Government policy of controlling population movements has been effective, at least until recently. The low migration has had important economic consequences. An important consequence of the low migration rate in

⁸ Being illegal within China means being excluded from regular public benefits including children's education and health services, pension benefits or ability to own a house.

⁹ Officially reported figures are smaller. China's State Statistical Bureau (1998) conducted a 1 percent survey of the population in 1995 and estimated that there were 53.5 million floating migrants that year, of which 17.8 million were inter-provincial migrants.

¹⁰ Some provinces are managing and coordinating labor flows among themselves. Montinola, *et al.* (1995) describe the Guangdong efforts to coordinate its immigration with the provinces where the migrant workers originate mostly in the nearby provinces of Hunan, Guangxi, and Sichuan.

¹¹ For example, migration movements do not seem to get captured in official statistics since the provinces' relative shares in the total population for China have not changed much over the years.

¹² The combination of low migration and fast economic growth is not unique to China. For example, in India, GDP grew at an average rate of 6 percent during 1980-2000, but rural-urban migration (except for large metropolitan areas) has been modest.

China from the viewpoint of fiscal federalism is that the reduction in economic differences or the convergence of incomes across and within provinces has been slower than it otherwise would have been (Kanbur and Zhang, 1999; and Demurger, *et al.*, 2002). This is a theme to which we return.

Lack of Capital Mobility

The significant lack of capital mobility has had a direct impact on the differential economic development of the provinces and thus on fiscal federalism. Testing for capital mobility is no straightforward matter. But generally, the greater the capital mobility, the lower the correlation we should expect between savings and investments in particular jurisdictions.¹³ Despite the fact that savings and investment data are notoriously noisy, Zhao (1998) tested this proposition for China and found a high correlation between saving and investment rates at the province level. His results strongly suggest a low level of capital mobility across provinces.

Dayal-Gulati and Husain (2002) argue that, to some extent, the lack of mobility has been engineered by central government tax policies. The profit retention system that was in place in the early 1980s discouraged capital mobility because retained profits were part of local government revenues, and thus, local governments discouraged enterprise transfers to other locations. The changes in tax policy in the late 1980s and 1990s that featured the contract responsibility system (fixed profit remittances by enterprises), and the revenue sharing arrangements of that period, led to increased inter-regional capital mobility. The trend was for subnational governments to offer fiscal incentives (often tax incentive and holidays) to attract investment. Capital mobility was driven by tax differentials rather than by differences in resource endowments and cost advantages. Current features of the tax system and revenue assignments among different levels of government also encourage protectionism by provincial and local governments, another factor that decreases capital mobility.¹⁴

The state control over bank loans, achieved through the monopoly state bank system, has played an even more decisive role in discouraging capital mobility. The state banks have continued to favor large state-owned enterprises (SOEs) in their lending programs. Historically,

¹³ See Feldstein and Horioka's (1980) analysis of international capital mobility.

¹⁴ The issues of local protectionism and tax policy are discussed further below.

fewer SOEs have located in the western and central provinces than in the eastern and coastal provinces of China (Demurger *et al.*, 2002; and Dayal-Gulati and Husain, 2002).

Capital formation (gross investment in fixed assets) has varied significantly from across provinces. For example, capital formation reached in 2002 more than RMB 323 billion yuan in Guangdong province and only RMB 6.6 billion yuan in Tibet. Because of the importance of FDI, as discussed below the coastal provinces became very quickly the largest absorbers of capital. In 2000, four coastal provinces alone (Jiangsu, Zhejiang, Shandong and Guangdong) accounted for one-third of capital formation in China (Table 3). Several of these provinces were the ones experiencing the fastest increase in capital formation over the past 20 years. The relative importance of Jiangsu and Guangdong provinces in annual capital formation almost doubled from 1979 to 2000. In contrast, the relative contribution to capital formation of the Manchurian rust-belt provinces of Liaoning, Jilin, and Heilongjiang was cut in half from 1979 and 2000.

The Fragility of the Financial System¹⁵

The financial system in China has been traditionally dominated by the banking sector and, in turn, the banking system has been dominated by the state owned banks (SOBs). There is wide consensus of opinion that China's banking system faces difficult challenges. Estimates of non-performing loans reach as high as 50 percent of all assets, with thin capitalization and close to negligible levels of loan loss provisions. Some estimates put the cost to the government of re-capitalizing the banking system at around half of current GDP.¹⁶

Causes: The main cause for the problems in the banking sector in China is the quasi-fiscal role that banks were forced to play (by the central authorities) for so many years (Hofman, 1998).¹⁷

¹⁵ For a review of the issues and a historical perspective see Baizhu, *et al.* (2000).

¹⁶ See OECD (2002) and *The Economist* (2002). On the other hand, China has been able to navigate the 1977-79 global financial crisis much better than its Asian neighbors. The main reason is that the Chinese yuan is not convertible on the capital account and that FDI represents most of the capital inflow in China. Consequently, China has had little exposure to private debt denominated in foreign currency (Naughton, 2000).

¹⁷ As is shown below, government revenues fell continuously as percent of GNP from the beginning of the market oriented reforms in 1978. Despite this rapid drop in revenues, budget deficits did not rise to unsustainable levels. Part of the explanation is that budget expenditures also declined significantly and that a considerable share of the slack in funding needs was taken up by extra-budgetary expenditures and off-budget accounts (also discussed below). However, as Hofman (1998) argues convincingly, another part of the answer is that budget and extra-budget funds were supplemented during much of the period by quasi-fiscal activities of the central bank and the banking system.

The People's Bank of China and the state banking system were asked to perform "policy lending," for capital investments and social expenditures of SOEs.¹⁸ Another cause for the poor performance of SOBs is that, due to the fact that they have operated with a soft budget constraint, they have shown a marked tendency to undertake risky and even speculative investments, possibly contributing to stock market and real estate speculation (Woo, 1998).

Consequences: The continued practice of administrative lending (as opposed to market lending) by the monopoly state banking system has meant that most of the funds are claimed by the larger state enterprises (SOEs). Since fewer of those are located in the western provinces, these lending practices have exacerbated regional economic disparities (Demurger, *et al.* 2002). What might make things even more unfair for the interior and western provinces is that if the banking system were rescued by the central government all of China, including the poorer western provinces that never benefited much from SOBs' loans, would somehow bear the costs. Globalization, in particular competition from imports, has likely contributed to the losses of SOEs and hence, to the bad shape of SOBs.

Foreign Direct Investment, and Regional Economic Growth

Fast growth of FDI. The single most important factor behind the different rates of economic development in China's provinces has been the phenomenal flow of foreign direct investment (FDI) over the last two decades and its concentration in a few provinces. The \$ 0.88 billion of FDI that China was receiving in 1985 grew to \$ 41.1 billion in 2000.¹⁹ Besides the obvious

¹⁸ After gaining independence from the Ministry of Finance in 1978, the central bank or People's Bank of China saw a transfer of its commercial lending activities to the Industrial and Commercial Bank of China (ICBC). This new state owned bank (SOB) was designated as the bank for residents and firms in urban areas. Other SOBs include the Bank of China, designated the international exchange and remittance bank, the People's Construction Bank, designated to handle large infrastructure projects, and the Agricultural Bank of China (ABC), designated to provide financial services to the rural sector. In 1981 two new SOBs were created: China's Investment Bank and the Bank of Communications. Interest rates have remained centrally controlled and at the same time SOBs have been asked under government orders to lend to "strategic" industries and unprofitable SOEs in what have become known as "policy loans" (Woo, 1998). In 1995, the government transferred all "policy loan" obligations to three SOBs: the State Development Bank of China, the Agricultural Development Bank of China (ABC), and the Export-Import Bank of China.

¹⁹ Total FDI in China exceeds the amounts reported in Table 8. There we only report the FDI that is allocable to one of China's provinces. FDI in China takes four different forms: equity joint ventures, contractual joint ventures, wholly owned foreign firms and joint exploration (for offshore oil). See, for example, Kaiser, *et al.* (1996) for a dissection of FDI flows.

reason of a huge economic potential, there are several reasons for the fast growth of FDI in China. One reason is that China has had and continues to have significant restrictions on its equity market. This has left little room for foreign investors other than direct investment in assets (Feng and Zhang, 2000).²⁰ A second reason has been the very unique process of “round-tripping” of Chinese capital, whereby Chinese firms divert their profits offshore only to have the same profits brought back to China as “foreign direct investment” that qualifies for whatever tax preferences are offered by central and local authorities.²¹ According to Wong (1998), round tripping accounted for as much as 25 percent of FDI in China in the mid 1990s.²²

High geographic concentration of FDI. From the start, with the opening economic policies of 1978, FDI has clustered in the coastal provinces of the country. In 2000, about 87 percent of the FDI flow in China was going to the twelve coastal provinces and less than 13 percent to the other eighteen inland provinces (Table 4).²³ This distribution pattern has become only slightly more favorable to the inland provinces over the last decade. What are the causes of this concentration? Initially, it was government policy. At the start of the Open Door Policy, the government in reality only opened some coastal areas in the provinces of Guangdong and Fujian, designated as “Special Economic Zones.” In the mid 1980s the special treatment for Guangdong and Fujian was extended to many other coastal areas. By the early 1990s the same privileges were extended throughout China, including most central and western provinces. The literally thousands of Special Economic Zones, each offering customized preferential tax treatment, became a drain to tax collections. With the fiscal reforms of 1994, many special economic zones were closed down and subnational governments’ ability to provide tax privileges was withdrawn.

In reality, the high concentration of FDI continues to survive. Notice that six provinces (Guandong, Fujian, Jiangsu and the cities of Shanghai, Tianjin and Beijing) received over two-thirds of FDI in 1998, the most recent year with complete data. One province alone, Guangdong,

²⁰ The financial crises that affected a number of Southeast Asia countries in the late 1990s appears to have strengthened the resolution of the Chinese government to continue to closely regulate capital markets and control short-term capital flows.

²¹ This contrasts sharply with the experience of other countries in transition from socialism. For example, in Russia, it has been estimated that more than \$50 billion are diverted abroad every year, but hardly ever has this capital come back.

²² See also Broadman (1995).

²³ In 2000, the twelve coastal provinces represented 61 percent of GDP.

received over one-fourth of all FDI in 1998, though this is down from a 58 percent share in 1985 (Table 4).

Sources and causes of FDI. One peculiarity of the FDI process in China is that it has come disproportionately from overseas Chinese, particularly those residing in Hong Kong. The second source of FDI has been Taiwan, followed at a distance by Japan and other industrialized nations.²⁴ Part of the advantage for Hong Kong is related to the “round-tripping” phenomenon discussed above. But also proximity and ethnic and cultural factors explain the concentration of FDI from Hong Kong in Guangdong, and FDI from Taiwan in Fujian. Japanese investment has tended to concentrate in Manchurian provinces. Investment from other countries has been spread over large cities in search of domestic markets. The coastal provinces also have geographical advantages. For example, Guangdong province benefited from its proximity to Hong Kong. Zhang (1994) argues that the success of Guangdong province in attracting FDI from Hong Kong is to a large extent due to administrative decentralization and local initiative.²⁵

Determinants of the geographic distribution of FDI. A number of studies have researched the determinants of the geographical distribution of FDI. What they have found is that several factors tend to attract FDI: the availability of infrastructure including transport and communications, openness of the provincial economy, size of market, coastal location unemployment rate. Other factors seem to discourage FDI, notably higher wage levels and higher illiteracy rates.²⁶ However, the nature of FDI in China likely changed from the 1980s to the 1990s (Naughton, 1996). During the 1980s (and early 1990s) Hong Kong investments in Guangdong province and Taiwan investments in Fujian province represented almost half of all FDI and all output was expected to be exported. Starting in 1992, China began to offer foreign investors access to domestic markets. Therefore, the determinants of FDI in the two periods may differ substantially. In fact, Sun, Tong, and Yu (2002), find that the importance of the determinants of FDI do change in the two periods. An interesting finding by Sun, Tong, and Yu (2002) is that the cumulative FDI relative to the cumulative domestic investment has a negative

²⁴ While FDI from Hong Kong and Taiwan has been largely concentrated in labor-intensive manufacturing, U.S. and European FDI has concentrated on capital and technology-intensive industries (Sun and Tipton, 1998).

²⁵ For example, local governments in Guangdong province were allowed to authorize limited amounts of FDI.

²⁶ See for example Wei, *et al.* (1999); Feng and Zhang (2000); Dayal-Gulati and Husain (2002).

impact on FDI flows. They basically do not explain this result, but one may wonder whether some form of protectionism is at work.

Impact of FDI on fiscal federalism. From the perspective of this paper on fiscal federalism, the most important aspect of the FDI phenomenon in China is the impact it has had on the differential rates of economic growth and therefore regional disparities in fiscal capacity.²⁷ The impact of FDI on regional growth in China has been quite thoroughly studied, but always the problem is separating the independent effect of FDI from all other factors that effect growth.²⁸ It is fair to state that there is a lack of consensus in the literature. Some studies (Lee, 1995; Jin, *et al.*, 1999; and Wei and Wu, 2001) conclude that, as a result of the market oriented reforms started in 1978, the regional distribution of income was not very much affected, or actually was improved. On the other hand Dayal-Gulati and Husain (2002) find that the convergence of per capita income across all provinces to the same steady state level does not hold over the past two decades. However, they find conditional convergence, that is, convergence of provincial per capita incomes to their steady states, and that provincial disparities appear to be primarily influenced by the relative importance of FDI in the provinces. Similar conditional convergence is found by Chen and Fleischer (1996); Jian, *et al.* (1996); Kanbur and Zhang (1999); Shi (2001); and Demurger, *et al.* (2002). Sun and Chai (1998) also find similar results at the national level and, in addition, they find that FDI also played a critical role in exacerbating intra-provincial economic inequality (they study the case of the Guandong Province).²⁹

But the differences in provincial growth in China should be seen in the broader context of inter-regional redistribution going back to the planned economy. Provinces have had access to different levels of resources through industrial investment policies and official pricing policies that have favored urban, as opposed to rural areas, and eastern or coastal provinces, as opposed

²⁷ Of course, the impact of FDI on economic growth goes beyond investment itself since it is accompanied by the transfer of technology, managerial skills and other forms of human capital that help the recipient provinces grow faster. The focus on provincial GDP growth and FDI may not be entirely justified given that provinces in China are quite large and that FDI tends to be concentrated even within provinces. The lack of more disaggregated regional data prevents more targeted analysis.

²⁸ For other studies that examine the impact of FDI see OECD (2002). There is disagreement in the literature on whether fiscal federalism itself has contributed to economic growth in China. See, for example, Zhang and Zou (1998) and Qiao, *et al.* (2002).

²⁹ A much larger literature is reviewed in Naughton (2000) who notes the some times contradictory and even paradoxical results, but the weight of the evidence is that since 1990 there has been a trend toward increased divergence. Some of the differences in results seem to be explainable by whether the price deflators used are province specific. In the latter case, much of the convergence results disappear.

to inland provinces (Yao and Zhu, 1998; and Naughton, 2000). Coastal provinces also have had the natural advantage of location. Demurger, *et al.* (2002) decomposed provincial growth into geography effects and policy effects for 1996-99. They find both geography and policy effects to be powerful, with policy effects more so. They recommend reducing disparities to extend the “preferential” deregulation policies to the interior provinces.³⁰

In summary, the phenomenal flow of FDI over the last two decades into China, in combination with its concentration in a few particular areas of the country has led to considerable growth in the country but its geographical distribution has been and remains uneven. This has important implications for the design of a workable fiscal federalism.

Further Globalization of China’s Economy

World Trade Organization (WTO) membership in 2002 created high expectations for deeper economic reforms in China. The most significant impact on the economy will be in those sectors that China’s government had protected from foreign investment, including agriculture, financial services and telecommunications. In the case of agriculture, for example, the losses in employment, it is feared, will add to the overall threat of rising unemployment in the country. The conversion process may also affect income distribution within China, but it is not clear what the final outcome will be. For example, Zhai and Li (2000) simulate the impact of WTO accession on income disparities in China. They conclude that, given the dominant role played by agricultural trade liberalization, and despite the gains in efficiency, rural households will be the main losers and that rural–urban economic disparities could increase. On the other hand, Wei and Wu (2002) find that the impact of globalization will be to reduce rural-urban income inequalities, and that, while inequality in the distribution of income within urban areas will rise, in rural areas it will decline. Whatever the final impact of WTO membership may be on the sectoral and regional distribution of employment and income, there is little doubt but that it will make the local economies more exposed to international trends. As the provinces trade more with the rest of the world, it will weaken the links between the center and local governments.

³⁰ Other factors may be at work. For example, rising returns to education in the last decade may be an additional contributor to the rise in income inequality in China given the higher levels of education in the eastern or coastal provinces (Zhang and Zhao, 2002).

This again will have important implications for the design and management of the system of intergovernmental fiscal relations in China.

The Political Role of Fiscal Federalism

In 1978, China's government made the momentous decision to abandon rigid communist ideology in favor of a more pragmatic market-oriented socialism, and at the same time to open the country's economy to the world. If economic growth is the test, the decision was a good one. However, a puzzle for many has remained how China has been able to grow so fast over the last two decades in the absence of democracy, and in many ways also in the absence of the rule of law and private property rights.³¹ Different explanations have been offered, but an element in all of them is the role played by fiscal federalism. In the view of Montinola, *et al.* (1995) "federalism, Chinese style" has provided incentives for production and competition and at the same time created a protection for the reform, including credible limits on the central government's ability for economic extraction, fiscal claw back, or any other form of appropriation of resources. Fiscal federalism and its associated jurisdictional competition also placed limits on patronage and political spoils by the central authorities and altered center-local relations in a way that will be difficult to reverse. Similar views are held by Qian and Weingast (1996) who see China's fiscal decentralization reforms in the 1980s as "market-preserving federalism." The reforms empowered local governments with responsibility over their own economies and hardened local budget constraints.³² The reforms also contributed to create, but still did not produce, a common market with free mobility of goods and factors across subnational jurisdictions.

On the other hand, Li and Lian (1999) explain China's success as due to "market-preserving authoritarianism." The formula for growth in China, in their view, has been the combination and balance between economic decentralization and budget autonomy with political control and coordination from the center. Three conditions have made the system work, according to Li and Lian (1999). First, political leaders perceive it is in their interest to promote

³¹ On the other hand, as Li and Lian (1999) point out, there has been rapid growth under authoritarian regimes before, including Meiji Japan, the German Second Reich, the Asian Tigers and Franco's Spain.

³² Empowering local governments with responsibility over their own economies has meant that local officials have become entrepreneurs and local governments, owners of industry. This is completely at odds with the role of government in a market economy.

market activities for China to catch up economically. Second, their policies were made more credible by imposing self-constraints and by distributing some authority and resources to a large number of decision makers, including those in lower level governments. Third, the center is able to use incentive schemes, coordination and enforcement devices to balance autonomy and controls.

There are two additional political effects of fiscal federalism that have been less emphasized in the literature. First, the rapid economic development of the coastal provinces vis-à-vis the rest of the country created a political asymmetry with first class and underclass provinces. The wealthier coastal provinces have been much more effective in the past two decades in protecting their interests, as witnessed for example by the introduction of a hold harmless provision in the 1994 revenue sharing reforms. Second, the asymmetry with first class and underclass provinces has led to the political weakening of the center vis-à-vis the provinces, in particular those in the coastal regions. Globalization, through foreign direct investment and exports, has probably also contributed to the weakening of the center vis-à-vis the wealthier provinces in the east. For example, in the revenue sharing reforms of 1994, the wealthier provinces managed to extract from Beijing a tax rebate transfer, which in effect protected them from losing significant revenues, and left the equalization grant system without significantly more funds to compensate the poorer inland provinces.³³

Recapitulation: The Policy Environment for Fiscal Federalism

Multiple factors have been at work in the widening of economic disparities across China's provinces. The natural cost advantage provided by geographical location to the coastal provinces has been reinforced by three sets of central government policies. First, the central government opened up the economy by providing special fiscal status and additional economic resources to very few provinces. What followed were high levels of FDI and quite different rates of economic growth and levels of economic development within China. It is not clear how further globalization of the Chinese economy will effect these disparities. Second, this situation has been exacerbated by population policies that have severely limited migration out of the poorer provinces in the central and western parts of the country. Third, access to capital funds

³³ Wang (1997) discusses how the center in order to get acceptance of the 1994 reform had to bribe Guangdong and other rich coastal provinces, since these provinces were capable of blocking institutional change.

by these poorer provinces in the center and west has continued to be limited by the bureaucratic decisions of the monopoly state banking system that still favors state enterprises and projects in the coastal provinces. At the same time, the costs of rescuing an insolvent banking system will be spread to all part of the country. The general outcome has been an unbalanced distribution of political power and wealth in favor of the coastal provinces. A second outcome has been the political weakening of the center vis-à-vis the wealthier coastal regions, and therefore further limitations for Beijing to implement fiscal federalism policies.

It is against this backdrop that we now turn to review how China's institutions for fiscal federalism themselves have affected and been affected by the development and relative well-being of the regions.

Part II: Fiscal Federalism and the Economy

Political Representation and Accountability

Local governments in China are organized in a hierarchical way with each level of government reporting to the next highest level (see Figure 2). The 31 provincial-level governments vary greatly in size and level of economic development. For example, Shandong and Sichuan provinces have populations that are approaching 100 million while Tibet has a population of less than 3 million (Table 1). GDP per capita is over 30 thousand yuan in Shanghai province but less than 3 thousand yuan in Guizhou province. The subnational governments have very different jobs to do in meeting expenditure needs, and very different financial capabilities.

The structure of government described in Figure 2 is quite decentralized, but relatively little power is directly invested in local voters. Arguably the biggest difference between China and the decentralized systems in the west is the absence of popular political representation. Theory and practice tell us that provincial and local councils must be popularly elected, and the chief local officers must be locally appointed, for the efficiency gains from decentralization to occur (Bahl and Linn, 1992). Local officials must be accountable to those who elect them and the local population must have the right to vote out those who do not satisfy their wishes.

Without popular elections, the general population has no direct way of revealing its preferences for more or less or different public services. China's federalism, termed "market preserving" by some analysts (Weingast, 1997) has practically never included political decentralization.³⁴ The communist party has not been separated from the State and there is no secure system of property rights. The provincial governors and chief local officers are still appointed, thus their accountability is upward to the level of government and the political body that appointed them.

Some would argue that this is not negative, at least in terms of economic growth. With the opening of the Chinese economy, and with the new flexibility given by fiscal decentralization, local officials had more of the wherewithal to pursue economic development for their regions. The central government encouraged this economic growth emphasis and rewarded those who were successful with it. Some have attributed China's better economic performance than Russia's to China's resolve toward economic growth and to its continued political centralization (Blanchard and Shleifer, 2000). The Chinese version of federalism that empowered centrally-appointed local officials, rewarded their successes and encouraged them to compete with one another, appears to have been a successful alternative to political decentralization. The reward system favored those who could show greater economic progress, and while in some cases protectionism and fiscal abuses resulted, in other cases the provincial leadership played their comparative advantages. All of this, and the backing away from "entitlement" subsidies to SOEs, led to what one might call a market preserving approach. Coupled with other economic policies, however, this entrepreneurial freedom appears to have led to growing disparities in the fiscal health of subnational governments. Political decentralization also has the advantage of making local officials more accountable and responsive to the needs and preferences of their constituencies. China's decentralization experience has been criticized precisely for the lack of concern of local officials for local needs and services and their concentration on fulfilling the wishes of the central authorities focusing exclusively on rapid economic growth.

³⁴ In recent years, a democratic experiment has been running in a number of provinces at the township or lower levels. Zhang, *et al.* (2002) have investigated through village surveys conducted over several years the relative performance of these local governments with elected officials compared to that of appointed cadres. Interestingly, they find that elected officials are perceived as taxing constituents less and providing them with higher levels of public services.

Expenditure Assignment

For most functions of government, the assignment of expenditures in China more or less follows along the lines of that made in other countries. The center provides services with national benefits, provinces provide those services with regional benefits, and local governments provide services with limited spillover effects. In 1999 the central government accounted for about 36 percent of spending and is dominant in the areas of defense, debt service and geological prospecting. Technological upgrading, R&D, and industry expenditures appeared to be concurrent functions. The local governments were dominant in the social service sectors (health, education and welfare) and in agricultural development. Local governments accounted for about half of all capital construction expenditures. This is more or less the pattern of responsibility one would expect to find in any country.

Where the statistics for China look a little different is in the distribution of expenditures among the three levels of subnational government. The data in Table 5 show that a heavy expenditure delivery burden is placed on the lowest levels of local government (counties and townships).

There are three important problems with this pattern of expenditure assignment. First, the exact assignment of expenditures is murky. There is no law that spells out exactly which level of subnational government is responsible for which functions. In effect, it is left to the provincial government to decide which of the local governments will be responsible for which functions. As a result, there can be overlap in the delivery of services, and expenditure decisions may be driven as much by politics as by efficiency considerations (Hu, 1995; Lou, 1997). The high incidence of concurrent expenditure assignments creates problems because even if it is clear which level of government can regulate expenditures and which level is responsible for implementation, there is considerable murkiness as to which level is actually responsible for financing these expenditures or how these financing responsibilities are divided. This has allowed upper-level government to push down funding responsibilities, which in many cases has meant an (inefficient) under-provision of public services.

Second, and probably most important, there are problems with mis-assignment, i.e., certain expenditure functions are matched with the “wrong” level of local government. Responsibility for much of the social safety net lies with the subnational governments. China

stands practically alone in the world in assigning responsibility for unemployment compensation, health insurance and pensions to prefecture (city) and county governments. These welfare expenditures are financed on a pay-as-you-go basis from enterprise payroll taxes, from general revenues, and from special central subsidies. The level of expenditures required to meet expenditure needs in these areas has been beyond the reach of some local governments. The result has been a growing problem with pension arrears that has required central government financial intervention.

An assignment issue also arises with respect to health and education services, which are the responsibility of the lowest level county and township governments. These local governments in many cases have neither the financial nor the administrative capacity to handle the social service functions.

Third, there is not a balance between the assignment of expenditure responsibilities and the revenues available to finance these expenditures. In the pre-reform period of the 1980s, central transfers supported a “basic” level of expenditures for each province. As the financing scheme shifted toward contracts and then tax sharing on a derivation basis, the link between expenditure needs and revenues became weaker. In fact, under the present tax sharing system, the money flows to the provinces where the economy is strongest.

The distribution of central resources among provinces almost certainly is not equalizing. Within provinces there also may be an exacerbation of the mismatch between expenditure needs and revenues made available. The provincial governments allocate revenues among their constituent units, and, as in the case of the central government, some recentralization occurred after the 1994 reform. As may be seen in Table 5, the share of provincial governments in revenues and expenditures grew by 1.8 percent since the 1994 reform. The share of the lowest level governments, where the social service responsibilities are greatest, have actually declined. This pattern follows the spirit of the 1994 reform that revised the revenue side of the intergovernmental fiscal system, but did not address expenditure assignment. In fact, China has done relatively little, since its economic and fiscal reforms began, to change expenditure responsibilities among levels of government.

Expenditure Management and Budget Autonomy

In theory, subnational governments in China have budget autonomy in that they may approve their own budgets. In practice, their autonomy is more limited. Several national budget laws prescribe minimum expenditure growth rates for some functions, and numerous unfunded expenditure mandates are imposed on lower level governments. The most important of these is the mandated labor cost for civil servants. It is important to note that subnational governments cannot determine the aggregate level of their budgets because they have no autonomy in revenue-raising.

While there may be a hard budget constraint on local governments in that they cannot formally run budget deficits, it is also the case that the local budgets are far from being hard expenditure plans. Budgets in China are organized on a top-down basis (the center informs the province of the budget constraint, the province informs the prefecture, etc.) and the process typically begins late in the fiscal year. Moreover, there is uncertainty about the revenues available to the local governments, since conditional grants are distributed on an ad hoc basis and provinces have not held to stable revenue sharing systems. The result of all of this is that the budgets of local governments are not firm expenditure plans. Under such a scheme, one should expect budget deficits.

In fact, the subnational governments do run deficits (Bahl, 1999; Wong, Heady and Woo, 1995). If a deficit does occur, the higher-level government must decide if it will be partly or fully covered by a deficit or “year end” grant. The four rounds of pay increases for civil servants since 1999, along with associated increases in pension and unemployment benefits, clearly contributed to problems of fiscal imbalance and brought many local governments to the brink of insolvency, especially at the county and township levels. The growing bailouts to local governments are a clear indication that current expenditure assignments are both unsustainable and increasingly blurred. Other methods of financing the deficit include using extra-budgetary funds, and borrowing from government or from the industrial bank. The soft budget constraint is also encouraged by policy loans from the banking system to the SOEs which may partly finance social service expenditures, and which may become a contingent liability to the local governments.

The problem is further complicated because about half of all expenditures made by subnational governments are off-budget. Subnational governments have levied a variety of off-budget fees, charges and informal taxes since the early 1990s, and have spent these funds to augment their expenditure programs. In some cases the impact of extra-budgetary funds is considerable. The World Bank (2002) reports that personnel expenditures for education in Hunan province were equivalent to 125 percent of total budgetary expenditures for education, and the comparable number for health expenditure was 220 percent. The appeal to local governments of extra-budgetary accounts is easily seen: extra-budgetary taxes are not shared with higher level governments and extra-budgetary expenditures are not subject to the same regulation and controls as are budgetary expenditures. Although many of the fees and quasi taxes used as extra-budgetary financing have been criticized as chaotic and excessive, many have been levied with the blessing of the central government and in some cases under the supervision of upper level governments (Wong, 1998). One interpretation of this is that the center recognized the need for more local autonomy and more local resources, but was not yet ready to take the step of providing formal local revenue-raising autonomy. A back-door federalism was seen as a good substitute in the 1990s. However, off-budget revenues and expenditures can have the additional cost of being more distortionary than their budget counterparts.

Revenue Assignment

Revenue assignment in China has taken the form followed by most transition countries. Some central government taxes are assigned fully or in part to the provincial governments. The province may in turn assign revenues to their lower level governments, subject to very few restrictions. In fact, there is a wide variation in the practice among the Chinese provinces. The remaining amount of revenues for subnational governments is provided by grants and subsidies. Subnational governments have no independent taxing powers, and no powers to set tax rates.³⁵ The revenue system is very centralized.

Revenue assignment to the subnational governments is no simple matter. Excise duties and taxes on international trade are held exclusively for the central government. All other taxes in the system are shared with provincial governments at rates ranging from zero to one hundred

³⁵ The lone exceptions are that local governments may set the rate of the land use tax within a prescribed range, and may chose whether or not to levy the entertainment tax.

percent. Sharing is always on a basis of origin of collections. The result of this system, as practiced in China, is that the overall share of total collections going to the subnational governments is about 44 percent.

There are some miss-assignments on this list. The most notable relate to origin-based revenue sharing of VAT and the enterprise income tax, which may not be proper taxes to share with subnational governments. The individual income tax holds more promise as a proper revenue source for subnational governments in a system of fiscal federalism.

VAT: The VAT is particularly inappropriate as a shared tax on a derivation basis. Tracking and policing the origin of collections is no easy administrative matter. VAT payments can be credited to provinces other than those where the value added takes place, causing the “wrong” province to receive the revenue. Given the challenges of VAT administration and the importance of this revenue source to the central government, one might question the wisdom of allocating tax administration effort to verify that the inter-provincial allocations are being correctly made. Moreover, to assign VAT on a basis of origin of collections is to invite provinces to institute protectionist measures. Examples of protection policies abound. Henan and Anhui provinces ban imports of tobacco from Guizhou. Many local businesses are prohibited from opening branches outside their home region.³⁶ There is nothing in China that approximates an interstate commerce clause that would enable free trade among provinces.

Enterprise Income Tax: The enterprise income tax is a poor choice for provincial governments. It is fraught with problems that have plagued its use as a subnational tax in many countries. As the Chinese economy develops and enterprises begin to operate in many provinces, as comparative advantage tells us they will, the problem of allocating profits among the provinces will appear. The United States has learned well the great problems that come with trying to incorporate the net income of companies across state boundaries (Fisher 1996; McLure 1998). Other problems with a subnational government enterprise income tax are worrisome: The tax base (profits) is cyclically unstable, and provincial and local government revenues can be significantly affected by changes in central government tax or industrial policy. The enterprise income tax is a mainstay of the Chinese finance system, and this is not likely to change, even with the next round of reform. But, in the long run, it cannot be the primary source

³⁶ This contrasts markedly with the concept of China’s “market preserving federalism, as discussed, for example, in Qian and Weingast (1996).

of income for local governments. Local industrial policy and enterprise income taxation are too closely intertwined, the profitability outlook for SOEs is guarded, and the tax administration is not yet up to the task of extensive coverage of the non state sector.

Individual Income Tax: The individual income tax is a much better choice for subnational government finances. It meets the “correspondence test” in that the burden is mostly borne in the local area. There also are administrative efficiencies. The provincial and local governments and their tax administrations are most familiar with the economic situation of the local enterprises that withhold the tax, and collection rates are likely to be enhanced by local administration. The Chinese system does assign administrative responsibility to the provincial governments, but does not give them any power to determine the tax rate or tax base. At the time of the 1994 reform, all revenues from this tax were retained by the provincial governments. In theory, this would give a maximum incentive for local collection effort.

The central government appears to take a different view of the efficacy of the individual income tax as a local revenue source and has begun to recapture this tax. The sharing of individual income tax was amended to provide the central government with a higher tax share, with implementation beginning in January 2002. The main justification for this reform is to provide the central government with additional revenues so as to increase the pool or funds for the equalization transfer system. The plans are for the central government to allocate all incremental revenues resulting from this reform to local governments, mainly those in the central and western provinces middle-western regions, via the equalization grant system (Zhang and Martinez-Vazquez, 2002). The central government share will be 50 percent in 2002 and 60 percent in 2003.

Tax Administration: Prior to the 1994 reform, there was a unified central tax administration system. This is not unusual for the former socialist economies. Taxes were assessed and collected locally and passed up to the center under the rules of an origin-based tax sharing system. Most taxes were collected directly from enterprises and the system had the significant advantage that locally-based officials had a good familiarity with the tax base. There also was an incentive for efficient collections in that the province was able to keep a share of all taxes collected. In theory, all local tax administrations would follow the same set of assessment and collection rules, and a uniform tax system would result.

However, the approximately 600,000 local tax administration officials were not closely supervised by the central government, and so a divided loyalty grew. They were close to the leadership of their local governments, and to local enterprises, but technically reported to the central government. To the extent they acted more in concert with the local government, they were able to honor negotiated tax arrangements (tax contracts) between local governments and local enterprises, and to enforce the central tax system with varying degrees of enthusiasm.

The result was that the tax system was not administered in the same way in all provinces, and tax administration became a significant part of tax policy. The 1994 reform addressed this problem, in part, by assigning income taxes to subnational governments, along with the responsibility for income tax administration (but not the authority to set the tax rate or tax base). The VAT and its administration became a strictly central government affair and locally-based, central government staff would be closely supervised more closely to remove the divided loyalty problem.

Intergovernmental Transfers

The Chinese system of intergovernmental transfers to provinces has been evolving over the past two decades, but it has retained its basic approach of origin-based shared taxes. There is little distinction in China between revenue assignment and intergovernmental transfers. One would not be too far off the mark by characterizing the system as one that attempts to define a vertical share in central taxes for the provinces, supplemented by grants and subsidies for a myriad of purposes and with considerable redundancy. The result appears to have been a limited degree of equalization among provinces and a complex system of transfers by any standards.³⁷

Shared taxes are allocated on a derivation basis, i.e., by point of collection. The company income tax and the individual income tax until recently have been fully retained by the collecting provincial governments, and they were assessed and collected locally. However, the subnational governments had no power to set the tax rate or define the tax base. It is common in China to refer this as a “local tax” but in fact this is incorrect. In effect, the provincial government is a collection agent for a central tax, and it may retain all, or a designated percent of the collections. Starting January 2001, all income tax revenues above a base figure were shared 50-50 between

³⁷ See Zhang and Martinez-Vazquez (2002).

the central and local governments. In 2003, the sharing ratio became 60 percent for the central governments and 40 percent for local governments.³⁸

The value added tax is also shared with the provincial governments, though the formula is more complicated. At the time of the major intergovernmental reform in 1994, a base amount of revenue sharing was identified as the difference between the amount received from all transfers in 1993, less the sum of proposed “local taxes” and 25 percent of VAT collections. This held all provinces at the same level as the previous year, and protected the subsidized position of the “deficit” provinces. An additional 30 percent of the increment in national VAT and consumption tax collections was added to this amount to provide revenue growth. The VAT is collected by the national tax administration service.

The other form of intergovernmental transfers is a series of equalization and conditional grants. The structure of these grants has changed over time but now accounts for approximately 50 percent of all transfers. The conditional grants include capital grants, and cost reimbursement grants to assist subnational governments to cover some pension and unemployment compensation costs. The most notable features of equalization grants are the general complexity of the distribution formula, and until quite recently, their low level of funding. This latter is noticeable because of the large fiscal disparities in revenue capacity and expenditure needs across China’s provinces. The re-centralization of a share of personal income tax revenues (up to 60 percent) in recent times has been motivated by the central government as a way to increase the funds available for equalization purposes.

Vertical Shares. Throughout the 1980s and the early 1990s, the rate of revenue mobilization in GNP fell in China. By the time of the landmark 1994 reform, it had dropped to less than 12 percent of GNP. Moreover, successive reforms in the intergovernmental transfer system had favored the provincial governments, so that their share had been increasing. Prior to the 1994 reform, the central share of total revenues had fallen to 22 percent. This left the central government with too little revenue to aggressively pursue national infrastructure needs, social service improvements or inter-province equalization.

In fact, the vertical share of local governments may have been greater. It has been estimated that the extra-budgetary revenues raised by local governments were half as large as the

³⁸ These additional central government revenues have been earmarked for equalization transfers to the central and western regions of the country.

level of budgetary revenues. While the 1994 reform closed off some of the avenues and incentives for raising extra-budgetary revenues, the amounts remain quite significant.

The 1994 reform was meant to increase overall tax effort and to re-balance the system in favor of the center. The enterprise income tax base was broadened, and the VAT was both modernized by introducing a credit-invoice system, and by extending the coverage to all production sectors and to some services. The enterprise contracting system was eliminated. The new intergovernmental transfer system eliminated the provincial contracting system and passed the income taxes fully to the subnational governments, and made the VAT a (shared) central tax.

Another important part of the 1994 reform was to create a separate local tax administration service with responsibility for administering the “local taxes.” This provided an incentive for local governments to increase the rate of revenue mobilization, and together with full retention of income tax collections, removed a reason for pursuing revenue options that were off-budget.

Revenue mobilization in China has increased significantly and had reached a level equivalent to 15 percent of GNP by the end of the decade. While this is not a high level of taxation by international standards, it is well above the 1994 level. There was also a shifting of the balance back to the central government in terms of revenues available. The central share increased from 22 percent in the pre-reform period to about 56 percent by 2000. However, as noted below, part of the negotiations that led to this fiscal recentralization was a rebate on indirect taxes that would benefit the higher income provinces, a hold harmless for the formerly subsidized provinces, and a commitment to funding an equalization grant.

Fiscal Disparities and Equalization. There are significant disparities in per capita incomes and per capita expenditures across the 31 provinces. As may be seen in Table 1, the per capita income in the highest income province is on the order of ten times that in the lowest. Per capita subnational government revenues were on the order of 18 times higher in 2000 and per capita subnational government expenditures were on the order of ten times higher also in 2000 (Table 6). As Table 6 shows, on average, per capita revenues and expenditures have been substantially higher in the coastal provinces than in the inland provinces for the last two decades.

The intergovernmental transfer system does have some equalizing elements, but it is not designed explicitly as a system that will reduce disparities in unmet expenditure needs or fiscal capacity. Some of its components are equalizing and some are counter equalizing. It is difficult

to use a priori reasoning to reach a conclusion about the degree of horizontal inequity inherent in this system. The 100 percent sharing of income taxes is likely to be quite counter equalizing, as is the portion of revenue sharing that is based on increments in the value added and consumption taxes. This is because these are all shared taxes based on origin of collection and will favor provinces with a stronger economic base. The “base amount” of revenue sharing built into the distribution formula reflects the subsidy that was paid to deficit provinces in the pre-1994 reform period. Therefore, some equalizing component was built in, but this effect has become less important in the formula as the weight of the incremental VAT sharing and income taxation has become greater since 1994.

It is not clear if the grant system is equalizing, but it does contain factors that suggest that it might be. The component of the grant system that reflects cost reimbursement for social insurance expenditures could be allocated to redress expenditure needs, and therefore might be an equalizing component. The World Bank (2002) reports that about 60 percent of transfers net of tax rebates went for social security expenditures, safety net expenditures, and transfers to offset the costs of increased civil service wage increases. Most of these funds were distributed to provincial governments in the inland regions. Though we have no up-to-date empirical estimates of the equalization impacts of these grants, a study of the distribution of earmarked grants in the early 1990s found a positive correlation between earmarked grants received and the level of income of the province (Bahl, 1999, chapter 4). On the other hand, the conditional grants are allocated in an ad hoc way, and there is no way to make an a priori judgment about whether they are allocated more heavily to places with deficient infrastructure and basic services. However, from the data reported in Table 6 we can infer that the overall fiscal system is equalizing. The range between the maximum and minimum values in per capita revenues is considerably larger than that for per capita expenditures, for all selected years since 1979. Also, the coefficient of variation for the distribution of per capita expenditures is significantly lower than the coefficient of variation for the distribution of per capita revenues. Somehow, therefore - presumably through the transfer system - the fiscal system manages to reduce the disparities implied by revenues.

However, the data reported in Table 6 also show that the degree of equalization achieved is not high since substantial disparities in expenditure per capita remain.³⁹

There is also a significant disparity within regions, in the level of income and expenditure needs, and there is evidence that the fiscal systems within some regions are not equalizing. Bahl's (1999) empirical work on Jiangsu and Sichuan for the first year after the 1994 reform showed that both provinces were characterized by significant disparities among local governments in income and expenditure levels. Both provinces reduced expenditure disparities somewhat using intergovernmental transfers and shared taxes. However, even after this degree of equalization, large fiscal disparities remained.

Interdependence of the Tax System and Fiscal Federalism

A distinguishing feature of the Chinese fiscal system is that tax policy, tax administration, and intergovernmental fiscal relations are not separable. The major form of intergovernmental transfer is shared central government taxes, hence tax policy changes affect the flow of resources to subnational governments; the performance of the tax system depends crucially on the efficiency of the tax administration system; and tax administration is carried out by both the central and the subnational governments. The main point here is that central government tax policy choices, and changes in tax administration procedures, are key policy decisions affecting the intergovernmental fiscal system. If one is to understand the strengths and weaknesses of the Chinese system of fiscal federalism, she must understand the strengths and weaknesses of all three of its legs.

China's tax system has been evolving over the past two decades. Government policy makers have paid more attention to reform of the tax and transfer system than they have to expenditure assignment. At present, the primary revenue producers in the system are consumption taxes (notably the value added tax), the enterprise income tax, and to a lesser extent the individual income tax.

Taxes account for about 15 percent of GDP. This is not a high share by international standards. An international comparison suggests that a country at China's level of per capita

³⁹ A more complete measure of equalization goes beyond disparities in expenditures per capita and should incorporate differences in expenditure needs and also differences in fiscal capacity to finance those needs. China's current equalization grants still measure needs and capacity deficiently.

income, and with China's degree of foreign trade openness and population characteristics should raise about 17 percent of GDP more in taxes (Appendix A). While there is room for increased taxation, one could not say that China's level of taxation is either inordinately low or high. The revenue performance of the tax system has been erratic in the past decade. Revenues fell from 19 to 11 percent of GDP in the early 1990s, but have now risen back to 15 percent.

Whether or not the level of taxation is a major concern, there are structural problems with the tax system that may compromise China's competitive position. However, any of these changes is likely to affect the fiscal disparities among provinces and their comparative advantage in attracting investment.

Value Added Tax: China moved a step closer to a modern tax system with the reforms of the VAT it enacted in 1994. The base of the tax was broadened and a credit-invoice system was implemented. A more productive VAT means a faster growing base for subnational governments. The stronger is the provincial economy, the greater will be the revenue benefits.

There remain two important structural changes to consider for the value added tax. One is to bring the services sector more fully into the tax net thereby increasing revenues in provinces with large taxable service sectors. The other needed change is to fully allow credit for taxes paid on capital inputs. The Chinese government frequently invokes its concern with over-investment as a justification for tax structure choices. There are better ways to deal with over-investment than disallowing the VAT credit on capital inputs; e.g., make the general tax regime neutral with respect to the investment decision, and adopt a more realistic approach to rationing credit for capital investments. Allowing credit for capital inputs would produce a revenue loss for the central government and especially for the producing provinces. Whether this would be offset by increased economic activity in investment-friendly provinces, and in those that produce intermediate goods is an open question. Almost certainly, however, there would be differential impacts across the provinces.

Enterprise Income Tax: The enterprise income tax is in need of reform (Bahl, 1999). The tax code still treats domestic enterprises differently from foreign-owned enterprises and joint ventures. The latter are taxed at significantly lower rates. Such distortions may channel funds away from domestic investment. Moreover, the differentially lower rate may not be necessary to attract foreign investment, because of the availability of tax credits in the home country and the

relatively high rates of return in China. A full unification of the tax structure on foreign and domestic enterprises is a reasonable reform measure.

A more difficult question relates to capital cost deductions. While depreciation rates were accelerated with the 1994 reform in China, they still do not match up well to capital consumption rates allowed in other countries. In addition, all interest expenses are not deductible. The net result of these provisions is that true profits are overstated and capital investment is discouraged. The enterprise income tax should be based on proper depreciation rates and full deductibility of interest costs.

If these two reforms were undertaken, it would have revenue implications for the “local” tax base of provinces. Adopting parity in rates for foreign and domestic firms would in the short run increase the revenues of provinces that have heavier foreign investment. A more realistic schedule for capital consumption allowances would lower enterprise income tax revenues in all provinces, but less so in provinces where industry is more profitable.

Again, the story is that structural reform of the central government taxes holds important implications for the budgets of subnational governments. A distinguishing feature of most advanced systems of fiscal federalism is autonomous taxing power in the hands of subnational governments. This enables the local governments to adjust the size of government to match the preferences of local residents. If government does not match local preferences, local voters either change the government at the polls or they migrate to find a more hospitable budget.

China does not give its local governments any taxing powers. Nor is there popular local election or complete population mobility. However, a program of informal subnational government taxation did emerge in the form of extra-budgetary revenue-raising. Local government used a backdoor approach to capture some of the efficiency gains that one might expect in a fiscal federalism. The 1994 reform limited the use of these extra-budgetary taxes. The absence of broad-based provincial and local government taxes probably results in smaller regional disparities in resources available. One autonomous local government tax that is used in China is the property tax.

Individual Income tax: The individual income tax meets the tests for a provincial revenue source in a fiscal federalism. However, in China, it is used as an intergovernmental transfer of the shared tax type and there is no rate setting autonomy at the provincial level. The central government could go in two directions with the individual income tax. They could

restructure it to move toward a local government-financing device, providing additional autonomy or they could increase the productivity of this tax and then claw back the revenues to use for equalization purposes. As of 2003, they are following the latter path.

In this latter scenario, the reforms that are being discussed in China at present, will lead to a more productive income tax and possibly a larger revenue pool for equalization purposes. These reforms include increasing the threshold for payment of the tax, simplification for reducing evasion, and improving the assessment and collection efficiency. There is some possibility that the reform of the individual income tax, unlike the reform of the VAT or enterprise income tax, could be disparity reducing.

Property tax: This is the standard for local governments in most countries around the world. A charge for the use of property, based on some notion of value would seem an appropriate way to finance public services, especially in urban areas. At present, China does not have a property tax based directly on land or building values. However, there are at least six different local government taxes that are related to the use of land, or the transfer of land use. These generate only small amounts of revenue, but they do have the feature of the local governments having some autonomy in setting tax rates. The more urbanized provinces would gain most from an expanded property tax.

Conclusion

The most important conclusion of this paper is that China's road to fiscal federalism reform has been and continues to be strongly conditioned not only by tax policy and tax administration reform but also by a wide range of economic policies, which typically are considered to be well outside of the relevant policy framework for fiscal federalism. These interdependencies between fiscal federalism and other aspects of economic reform set China's experience with fiscal federalism decidedly apart from the experience of most other countries. We have seen that there are in particular three sets of policies that have constrained the ability of the fiscal federalism system to operate efficiently and fairly. These policies in different ways have raised the demands on fiscal federalism, expecting, for example, a more equal distribution of public goods and services throughout the national territory.

First, demographic policies, in particular the restrictions to internal migration through the residence registration system or *Hukou*, have put additional fiscal pressures on poorer local governments in the center and west provinces where it appears that a good share of the population would have migrated to the richer local jurisdictions in the coastal provinces if they were given the chance. The additional burdens take the form of higher expenditure needs from the unemployed, higher incidence of poverty, and otherwise higher demand for basic services such as education and health and so on. The other side of the coin is that expenditure needs and the overall fiscal health of jurisdictions in the richer coastal provinces are significantly lightened up as a consequence of current migration policies. In fact, under current arrangements, the coastal provinces may benefit from illegal migrant labor without bearing the costs of social services, pensions, and so on.

Second, China's financial system, through the role of the monopoly state banking system, has traditionally channeled more funds to the richer coastal provinces where there has always been a higher concentration of SOEs. The poor quality of many of these loans has driven the SOBs to the verge of default. The inevitable rescue of the SOBs will not only draw resources from all parts of China, including those that never benefited much from the administered loan policies but, given its size with respect to GDP, it will also noticeably reduce the pool of central government funds available for equalization. The result will be that the poorer jurisdictions in the center and western provinces will suffer.

Third, globalization forces and industrial development policies adopted by China's central government also have disproportionately helped the coastal provinces vis-à-vis those in the center and western regions of the country. The momentous policy decision to open China to the world and allow FDI in 1979 benefited just a few "special economic zones" in the east coast at first and then a larger number of areas still in the coastal provinces. When FDI was allowed in the rest of the country, in the poorer provinces of the center and the west, by then the central government had disallowed, and rightly so, the wide use of tax incentives and holidays to attract investment. Thus with their geographic disadvantage (and nothing such as tax advantages to offset it) as well as other disadvantages such as poor infrastructure and public services, jurisdictions in the center and western areas of the country have not yet been able to benefit from globalization forces. The fear is that China's access to the WTO will impose significant losses to rural agricultural areas in the already poorer areas of the country. Meanwhile, the lack of

horizontal integration of the Chinese economy contributed to small positive spillovers from the richer to the poorer provinces, thus validating the first part of Deng Xiaoping's famous phrase pronounced in 1978 after his fact-finding trip to the southeastern provinces: "Let part of us be richer first."⁴⁰

Given the remarkably uneven development of the different regions in China, one would have expected a system of fiscal federalism that aggressively tried to compensate for the existing fiscal disparities. And yet, as we have seen, it has been only very recently that fiscal decentralization reform has started to pay some attention to this serious problem. It is as if China's central government over the last two decades has been operating under the belief that there is a policy tradeoff between economic growth and regional fiscal equalization, and that it chose unequivocally to stand on the side of economic growth.⁴¹

The policy choices actually may have to do more with political economy issues than with the preferences of a benevolent planner-dictator. The lopsided coastal-heavy regional development of China has contributed to an asymmetric distribution of political power in the country. With the fast development of the coastal provinces, their voices in Beijing have become much more notable and influential than those in the rest of the country. In addition, this asymmetric process of development eventually has transferred political power from Beijing to some of the provincial capitals. The negotiations that protected the revenue shares of the richer provinces from fiscal recentralization in 1994 are evidence of this power.

Besides the lack of adequate equalization effort, China's fiscal federalism is afflicted by several other problems, which in some ways tend to aggravate the situation of the poorer subnational governments. In particular, the assignment of expenditure responsibilities for most social welfare issues, including pension systems, to subnational governments would tend to hurt poorer regions disproportionately. The centralization of some of those expenditure responsibilities would increase efficiency in the delivery of services and would also be equalizing. Other necessary reforms in the fiscal federalism system, such as providing a noticeable degree of tax autonomy to subnational governments, are likely to further increase

⁴⁰ The post 1979 policies and the general acceptance of growing regional inequalities contrast with the heavily redistributive policies favored in earlier times by Chairman Mao, which pushed for the development of the interior poorer areas of China.

⁴¹ See Qiao, *et al.* (2002).

fiscal disparities. This points, therefore, to the critical importance in the future of redesigning and strengthening the grants system, in particular equalization grants.

Reforming revenue assignments in China will still require simultaneous reform efforts in tax policy and tax administration. Besides increasing revenue mobilization and improving vertical balances, these reforms still need to reduce distortions in the allocation of resources and to improve equity in the distribution of tax burdens. This reform agenda should include the further development of the personal income tax and property taxes at the local level. The centralization of VAT revenues could help finance the centralization of expenditure responsibilities in social welfare. Thus the reform agenda may have both decentralizing and centralizing measures. However, the message of this paper is that the chances for success and failure of possible reform in the system of fiscal federalism need to be considered in the contexts of reform in the tax system and the wider environment of population, financial sector and other central government policies. Righting these other policies can be as effective as, or even more effective than fiscal policy in increasing the well-being of the poorer regions of China.

Appendix A: Tax Effort

Tax effort in China appeared to lag behind that in other countries during the 1990s. Using data for the 1990s (the latest years available) from *Government Finance Statistics (GFS)*, we calculated the ratio of tax to GDP (T/Y) for 110 industrialized, developing and transition countries. Following the standard tax effort literature, we estimated:

$$T/Y = 1.95 + 0.11(Y/P) - 0.07(A/Y) + 0.16(F) - 0.17(PG) \quad \bar{R}^2 = 0.61$$

(2.97) (2.24) (-0.99) (2.55) (-5.00)

where Y/P = per capita GDP, in US dollars,
 A/Y = agricultural sector share of GDP,
 F = imports plus exports as a share of GDP, and
 PG = population growth rate.

Variables are expressed in logarithms and t-values are shown in parentheses.

The income and openness variables are significant and have the expected signs. For this period, China has an “expected” tax ratio of 17 percent, but according to *GFS*, an actual tax ratio of 12.5 percent. By the end of the decade, China’s tax ratio had risen to about 15 percent.

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Tables and Figures:Table 1: Key Features of People's Republic of China in 2001⁴²

	Area		Population		Population Density (Persons per km ²)	GDP		GDP per capita (yuan/person)
	(1,000 km ²)	(%)	(10,000 persons)	(%)		(100 Million RMB)	(%)	
China	9600	100	127627	100	133	95933	100	7517
Northern Region	1573	16.4	14735	11.5	94	13589	14.2	9222
1. Beijing	17	0.2	1383	1.1	826	2846	3.0	20576
2. Tianjin	11	0.1	1004	0.8	893	1840	1.9	18328
3. Hebei	188	2.0	6699	5.2	356	5578	5.8	8326
4. Shanxi	156	1.6	3272	2.6	210	1780	1.9	5440
5. Inner Mongolia	1201	12.5	2377	1.9	20	1546	1.6	6503
North-Eastern Region	802	8.3	10696	8.4	133	10627	11.1	9935
6. Liaoning	146	1.5	4194	3.3	288	5033	5.2	12001
7. Jilin	187	1.9	2691	2.1	144	2032	2.1	7553
8. Heilongjiang	469	4.9	3811	3.0	81	3561	3.7	9344
Eastern Region	791	8.2	36577	28.7	463	40369	42.1	11037
9. Shanghai	6	0.1	1614	1.3	2603	4951	5.2	30674
10. Jiangsu	103	1.1	7355	5.8	717	9512	9.9	12933
11. Zhejiang	102	1.1	4613	3.6	453	6748	7.0	14629
12. Anhui	139	1.5	6328	5.0	454	3290	3.4	5199
13. Fujian	121	1.3	3440	2.7	284	4254	4.4	12365
14. Jiangxi	166	1.7	4186	3.3	252	2176	2.3	5198
15. Shandong	153	1.6	9041	7.1	589	9438	9.8	10439
Central South Region	1028	10.7	35493	27.8	345	27710	28.9	7807
16. Henan	168	1.7	9555	7.5	570	5640	5.9	5903

⁴² Source: Population and GDP are based on the data from China's Yearbook 2001. Areas are from each province's or municipality's official website.

Table 1: Key Features of People's Republic of China in 2001 (continued)

	Area		Population		Population Density (Persons per km ²)	GDP		GDP per capita (yuan/person)
	(1,000 km ²)	(%)	(10,000 persons)	(%)		(100 Million RMB)	(%)	
17. Hubei	188	2.0	5975	4.7	319	4662	4.9	7803
18. Hunan	210	2.2	6596	5.2	314	3983	4.2	6039
19. Guangdong	192	2.0	7783	6.1	405	10648	11.1	13681
20. Guangxi	236	2.5	4788	3.8	203	2231	2.3	4660
21. Hainan	34	0.4	796	0.6	235	546	0.6	6859
South-Western Region	1259	24.4	20086	15.7	160	9470	9.9	4715
22. Chongqing	82	0.9	3097	2.4	376	1750	1.8	5650
23. Sichuan	485	5.1	8640	6.8	178	4422	4.6	5118
24. Guizhou	176	1.8	3799	3.0	216	1085	1.1	2856
25. Yunnan	395	4.1	4287	3.4	108	2075	2.2	4840
26. Tibet	120	12.5	263	0.2	22	139	0.1	5275
North-Western Region	3024	31.5	9196	7.2	30	5002	5.2	5439
27. Shannxi	206	2.1	3659	2.9	178	1844	1.9	5040
28. Gansu	450	4.7	2575	2.0	57	1073	1.1	4165
29. Qinghai	702	7.3	523	0.4	7	301	0.3	5754
30. Ningxia	66	0.7	563	0.4	85	298	0.3	5300
31. Xinjiang	1600	16.7	1876	1.5	12	1485	1.5	7918
Max	1600	16.7	9555	7.5	2603	10648	11.1	30674
Min	6	0.1	263	0.2	7	139	0.1	2856

Table 2: Growth Rates of GRP Per Capita in Selected Years

Province	1975	1980	1985	1990	1995	1999
Beijing	11.85	10.90	6.09	3.71	11.81	7.28
Tianjing	2.69	8.48	9.35	3.67	14.06	3.85
Hebei	9.38	1.94	11.25	1.02	13.03	8.41
Shanxi	6.14	0.78	5.41	3.34	9.95	-3.42
Inner Mongolia	9.22	1.16	19.72	3.22	7.98	6.99
Northern Region	8.09	4.55	10.04	2.27	11.78	6.21
Liaoning	7.37	11.28	12.86	1.03	6.39	6.13
Jilin	11.17	5.40	7.38	1.17	4.61	5.91
Heilongjiang	5.23	8.22	8.42	4.27	8.74	5.63
North-Eastern Region	7.21	9.19	10.33	1.98	6.67	6.02
Shanghai	3.82	7.04	12.29	4.57	13.87	-2.32
Jiangsu	4.80	4.08	17.67	1.48	14.66	9.65
Zhejiang	-4.87	15.06	21.50	3.74	15.94	9.32
Anhui	1.57	1.10	14.85	0.09	13.11	6.63
Fujian	0.55	17.90	16.42	6.37	13.71	6.75
Jiangxi	6.89	2.84	13.44	2.28	16.92	6.79
Shandong	27.44	11.89	11.40	7.58	13.70	9.59
Eastern Region	6.51	7.87	15.01	3.53	14.33	8.29
Henan	4.54	13.88	11.91	3.94	13.88	7.22
Hubei	9.95	5.22	14.82	3.17	13.55	7.70
Hunan	8.33	4.08	10.83	8.39	9.35	4.62
Guangdong	9.09	14.64	19.05	8.00	13.33	7.14
Guangxi	4.46	8.10	9.06	4.68	10.18	6.84
Central South Region	7.53	9.61	14.03	6.15	12.77	7.17
Sichuan+Chongqing	12.72	7.98	14.44	4.09	7.67	4.91
Guizhou	7.68	2.71	6.45	3.28	5.97	6.83
Yunnan	2.78	7.22	11.51	5.35	9.78	5.99
South-Western Region	9.63	7.07	12.63	4.22	7.94	5.33
Shannxi	3.57	6.36	15.13	2.21	8.01	7.69
Gansu	14.76	7.74	11.69	6.20	7.21	7.34
Qinghai	5.27	25.20	2.99	7.48	6.43	6.67
Ningxia	2.08	6.39	14.89	1.23	7.19	7.41
Xinjiang	13.11	5.15	13.38	15.54	7.12	5.44
North-Western Region	8.49	7.67	12.97	6.22	7.47	7.03
China	7.40	7.83	13.07	4.03	11.79	7.28
Mean	7.28	7.92	12.30	4.32	10.56	6.15
Maximum	27.44	25.20	21.50	15.54	16.92	9.65
Minimum	-4.87	0.78	2.99	0.09	4.61	-3.42
C.V.	0.79	0.70	0.36	0.71	0.33	0.46

Source: www.ccer.org.cn

Table 3: Percentages of Capital Formations By Province (Shares in National Total)

Province	1980	1985	1990	1994	1995	1996	1997	1998	1999	2000
Coastal										
Beijing	4.64	3.86	4.34	4.10	4.37	3.92	3.90	3.95	3.90	3.92
Tianjin	3.34	2.70	2.13	2.00	2.04	1.95	2.02	2.04	1.89	1.84
Hebei	5.19	4.54	4.29	4.48	4.88	5.31	5.97	5.85	5.99	5.58
Liaoning	7.49	5.83	6.37	5.61	4.59	3.91	3.87	3.73	3.67	3.83
Shanghai	6.35	4.86	5.50	7.09	8.31	8.72	8.03	6.96	6.18	5.65
Jiangsu	4.85	7.87	8.63	8.41	8.72	8.71	8.94	8.99	9.13	9.05
Zhejiang	4.65	4.19	4.53	6.36	7.05	7.23	6.88	6.55	6.28	6.85
Fujian	2.56	2.28	2.80	3.40	3.54	3.53	3.65	3.72	3.61	3.36
Shandong	9.78	7.97	8.13	7.00	6.86	6.96	7.28	7.29	7.40	7.68
Guangdong	5.35	7.57	9.24	13.52	12.08	10.40	9.33	9.46	10.08	9.76
Guangxi	1.75	1.73	1.66	2.42	2.20	2.13	1.95	2.03	2.06	1.99
Hainan	0.48	0.63	0.86	1.39	1.03	0.83	0.68	0.65	0.63	0.58
Subtotal	56.43	54.05	58.50	65.77	65.66	63.59	62.51	61.21	60.82	60.08
Inland										
Shanxi	3.94	3.76	2.99	1.84	1.53	1.49	1.62	1.89	1.92	1.89
Inner Mongolia	n.a.	2.15	1.72	1.59	1.42	1.23	1.29	1.24	1.28	1.30
Jilin	2.92	2.55	2.27	1.91	1.77	1.76	1.48	1.49	1.66	1.77
Heilongjiang	5.38	4.59	3.95	2.56	2.53	2.54	2.72	2.84	2.62	2.59
Anhui	2.42	3.31	2.98	2.52	2.76	2.74	2.79	2.58	2.58	2.62
Jiangxi	2.63	1.81	1.71	1.50	1.47	1.59	1.56	1.61	1.64	1.66
Henan	n.a.	5.21	4.99	3.97	4.18	4.48	4.73	4.44	4.41	4.46

Table 3: Percentages of Capital Formations By Province (Shares in National Total) (continued)

Province	1980	1985	1990	1994	1995	1996	1997	1998	1999	2000
Hubei	4.96	4.22	3.50	3.75	4.29	4.40	4.40	4.36	4.34	4.29
Hunan	4.50	3.43	3.01	2.66	2.72	3.03	2.84	3.01	3.14	3.22
Chongqing	n.a.	n.a.	n.a.	n.a.	n.a.	1.43	1.51	1.77	1.87	1.98
Sichuan	4.47	4.50	3.94	3.62	3.52	3.59	3.85	4.20	4.06	4.24
Guizhou	1.95	1.36	1.25	0.89	0.90	0.93	1.00	1.08	1.11	1.22
Yunnan	2.92	1.90	1.84	2.03	1.98	2.00	2.19	2.38	2.39	2.11
Tibet	0.25	0.31	0.18	0.13	0.19	0.14	0.14	0.15	0.19	0.20
Shannxi	3.88	2.38	2.51	1.79	1.68	1.66	1.72	1.93	2.06	2.25
Gansu	1.77	1.39	1.44	1.00	1.01	0.96	1.07	1.17	1.28	1.33
Qinghai	1.03	0.70	0.54	0.29	0.29	0.35	0.40	0.41	0.43	0.47
Ningxia	0.56	0.56	0.53	0.39	0.36	0.35	0.36	0.39	0.43	0.49
Xinjiang	n.a.	1.82	2.15	1.80	1.73	1.73	1.81	1.84	1.78	1.84
Subtotal	43.57	45.95	41.50	34.23	34.34	36.41	37.49	38.79	39.18	39.92
China	100	100	100	100	100	100	100	100	100	100

Source: www.acmr.com.cn

Table 4: Shares of FDI For Coastal and Inland Provinces

Province	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Coastal Provinces												
Beijing	n.a.	8.57	5.65	2.97	2.52	4.23	3.76	3.64	3.44	4.51	5.53	5.98
Tianjin	4.99	2.57	2.17	1.97	2.05	2.98	4.08	4.71	5.43	5.50	6.27	6.23
Hebei	0.44	1.22	1.76	1.52	1.35	1.53	2.09	2.90	3.24	3.58	3.58	2.49
Liaoning	1.78	7.69	7.24	3.73	4.64	4.17	3.77	3.92	4.79	4.81	5.11	6.21
Shanghai	7.07	5.48	4.05	10.69	8.76	9.47	8.72	11.07	10.40	7.94	7.55	7.69
Jiangsu	1.35	4.37	5.38	11.92	11.35	12.24	12.82	11.90	12.53	14.52	15.86	15.63
Zhejiang	1.85	1.50	2.11	2.50	3.90	3.35	3.37	3.57	3.25	2.88	3.80	3.92
Fujian	13.34	8.98	14.88	12.03	10.84	10.88	10.83	9.57	9.08	8.76	0.00	0.00
Shandong	0.63	4.67	4.14	8.27	6.97	7.43	6.99	6.08	5.41	4.85	6.12	7.23
Guangdong	58.33	45.19	42.08	30.17	28.34	27.54	27.31	27.27	25.33	26.24	30.24	29.77
Guangxi	1.42	0.94	0.89	1.53	3.30	2.39	1.80	1.56	1.90	1.93	1.58	1.28
Hainan	2.37	3.11	4.06	3.84	3.96	2.56	2.83	1.85	1.54	1.57	1.20	1.05
Subtotal	93.57	94.28	94.42	91.14	87.96	88.79	88.38	88.05	86.33	87.09	86.83	87.48
Inland Provinces												
Shanxi	0.05	0.11	0.10	0.46	0.27	0.09	0.17	0.32	0.58	0.53	0.97	0.55
Inner Mongolia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.13	0.18	0.12	0.23	0.27
Jilin	0.29	0.52	0.42	0.56	0.90	0.93	1.07	1.06	0.87	0.89	0.75	0.82
Heilongjiang	0.26	0.78	0.44	0.87	0.86	1.00	1.20	1.29	1.59	1.15	2.03	2.02
Anhui	0.18	0.30	0.22	0.42	0.97	1.08	1.29	1.19	0.94	0.70	0.90	0.77
Jiangxi	0.59	0.19	0.45	0.82	0.79	0.77	0.77	0.71	1.03	1.02	0.79	0.55
Henan	0.64	0.32	0.88	0.91	1.29	1.25	1.29	1.23	1.40	1.35	1.23	1.31

Table 4: Shares of FDI For Coastal and Inland Provinces (continued)

Province	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Hubei	0.00	0.90	1.07	1.73	2.02	1.76	1.67	1.62	1.71	2.01	2.27	2.30
Hunan	1.99	0.35	0.53	1.09	1.64	0.95	1.31	1.65	1.98	1.79	1.62	1.66
Chongqing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.51	0.83	1.01	0.59	0.59
Sichuan	n.a.	0.32	0.38	0.71	1.41	1.51	0.76	0.53	0.54	1.10	1.12	1.06
Guizhou	0.17	0.14	0.17	0.17	0.16	0.19	0.15	0.07	0.11	0.10	0.10	0.06
Yunnan	0.18	0.08	0.07	0.20	0.37	0.60	0.60	0.42	0.36	0.32	0.38	0.31
Shannxi	1.56	1.30	0.73	0.39	0.89	0.70	0.87	0.77	1.36	0.66	n.a.	n.a.
Gansu	0.33	0.15	0.02	0.40	0.21	0.08	0.17	0.21	0.09	0.08	0.10	0.15
Qinghai	n.a.	n.a.	n.a.	0.01	0.03	0.01	0.02	0.01	0.03	0.02	n.a.	n.a.
Ningxia	0.03	0.03	0.02	0.03	0.04	0.14	0.09	0.07	0.02	0.01	0.02	0.03
Xinjiang	0.18	0.22	0.09	0.09	0.20	0.14	0.18	0.16	0.05	0.05	0.06	0.05
Subtotal	6.43	5.72	5.58	8.86	12.04	11.21	11.62	11.95	13.67	12.91	13.17	12.52
Total	100	100	100	100	100	100	100	100	100	100	100	100

Source: www.acmr.com.cn

Table 5: Distribution of Revenues and Expenditures of Subnational Governments

	<u>Percent Share</u>	<u>Percent change Since 1994-1995</u>
Province	28.2	1.8
Prefecture	30.2	-1.1
County ^a	41.5	-0.6

^a Includes townships

Source: World Bank (2002)

Table 6: Provincial Per Capita Fiscal Outcomes

(RMB yuan)

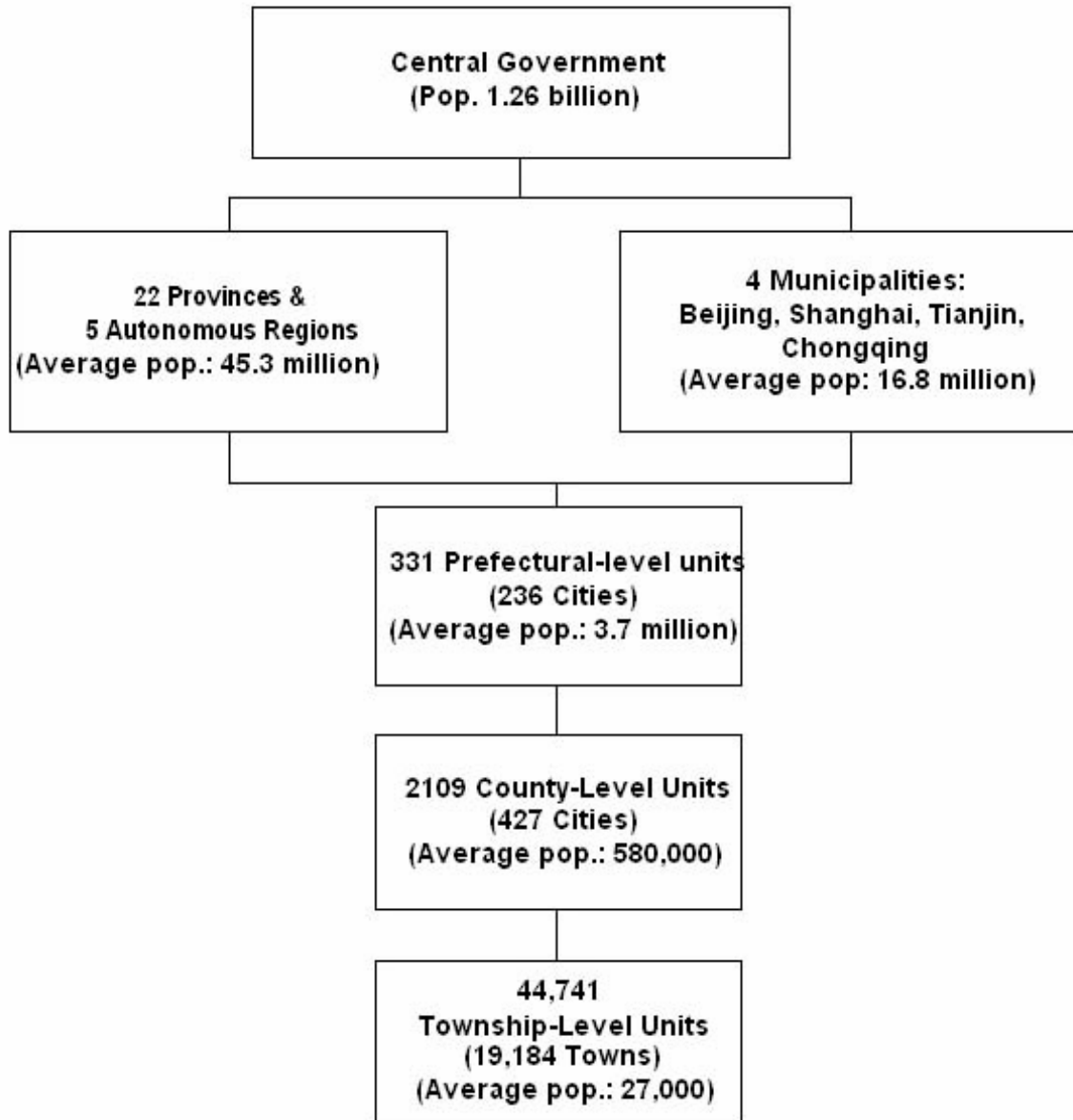
Province	Revenues		Expenditures	
	1979	2000	1979	2000
Coastal Provinces				
Beijing	532	3117	224	3837
Tianjin	509	1465	206	2052
Hebei	69	373	67	623
Liaoning	254	715	101	1253
Shanghai	1525	3768	239	4713
Jiangsu	101	684	54	n.a.
Zhejiang	68	762	47	958
Fujian	51	1065	64	934
Shandong	79	515	44	681
Guangdong	67	1214	55	1427
Guangxi	35	310	59	544
Hainan	25	590	34	927
Average	146	843	70	969
Inland				
Provinces				
Shanxi	83	352	85	693
Inner Mongolia	25	467	114	1100
Jilin	58	395	82	992
Heilongjiang	171	562	89	1074
Anhui	44	285	42	514
Jiangxi	36	414	55	539
Henan	47	260	42	470
Hubei	68	360	61	619
Hunan	55	270	48	530
Chongqing	n.a.	557	n.a.	866
Sichuan	n.a.	278	n.a.	538
Guizhou	24	227	49	537
Yunnan	36	426	68	976
Tibet	-12	207	274	2308
Shannxi	60	316	70	746
Gansu	97	240	75	736
Qinghai	62	321	183	1322
Ningxia	84	376	173	1098
Xinjiang	44	517	135	1113
Average	52	343	57	689
China	92	550	63	804
Mean	148	691	98	1157
Minimum	-12	207	34	470
Maximum	1525	3768	274	4713
C.V.	1.98	1.15	0.69	0.83

Source: www.acmr.com.cn

Figure 1: China Provinces



Source: ACASIAN, Lex Berman

Figure 2: Structure of Government in China

Source: World Bank (2002)