Decentralization in China

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Introduction

The World Development Report notes that decentralization is the main force "shaping the world in which development will be defined and implemented" in the first decade of this century (WDR, 1999/2000). It is widely argued that the devolution of power can encourage governments to improve their public service delivery. A more decentralized system may result in competition among local governments, increasing government effectiveness and efficiency to meet voters' demands, lest taxpayers vote with their feet or send investments to other jurisdictions (Tiebout, 1956; Brenna and Buchanan, 1980; Oates, 1972 and 1985). In China, fiscal decentralization has been a fundamental component of the transition to a market economy. The country has made substantial efforts to break down its highly centralized fiscal management system through various forms of fiscal contracting systems (1978-1993) and more recently through a tax sharing system (1994-present). However, the revenue collection system in China is much less decentralized than it appears to be on the surface. Additionally, expenditures are relatively more decentralized than revenue collection and distribution, which leaves room for funding shortage. Taking both together, revenue collection and expenditures shape the full picture of fiscal decentralization in China.

The objectives of this paper are to review China's fiscal decentralization experiences, including both revenue and expenditure sides, and to explore the impact of fiscal decentralization on intergovernmental transfers, local borrowing, education policy and social security policy. In China, provincial governments are responsible for public services such as education, public safety, health care, social security, and housing. However, as Wong (1992) points out, China's provincial governments are revenue-starved because of decreased profits and revenue from state-owned enterprises, a result of the increasingly competitive markets brought by the economic reform process. The mismatch between revenue shortages and expenditure responsibilities of local governments is causing serious problems, which is to be expected with the recentralization of revenue policy paired with the highly decentralized expenditure responsibilities.

This paper proceeds as follows. Section one reviews the history of decentralization. Section Two examines revenue assignment and highlights taxation, local borrowing and intergovernmental transfer issues induced by the fiscal decentralization reforms; Section Three discusses expenditure assignment, under which education and social security issues are assessed in the context of decentralization. In Section Four, the paper concludes with potential policy options.

I. History of decentralization

It is well-known that China has undergone several decentralization-related fiscal reforms. Decentralization was initially introduced in an attempt to solve problems associated with the centralized system, in which provincial governments lacked incentive to collect revenue and provide public services. China has witnessed several important waves of fiscal reform in which decentralization and recentralization have impacted many important policy issues.

(1) 1980-1993: Fiscal Contract System (Tax-Sharing System)

More than a decade ago, Bahl and Wallich (1992) argued that "Matters such as central government tax reform are usually a concern of the national treasury." The decentralization process of 1986 was designed to enhance the self-reliance of provincial governments to collect revenue. After 1986, especially in 1988, a contract system—the "fiscal responsibility system"—was established, under which the central government signed contracts on a case-by-case basis with the provincial governments, specifying their remittance based on the profit of their enterprises. Consequently, all revenues were divided into two parts: the central fixed revenues and the local retained revenues. The provincial governments relied on their local retained revenues for their public expenditure requirements. In this case, to some extent, the provincial governments were self-financed. In other words, the responsibility for meeting the expenditure needs of provincial governments was decentralized (Bahl and Wallich, 1992).

In 1980, the centralized fiscal regime was replaced with the fiscal contract system where each level of government contracted with the next level up to meet certain revenue and expenditure targets. Central and subnational governments shared the revenue proportionately or in the form of a fixed quota plus a percentage share. At the same time, subnational governments were required to finance their own expenditures through self-generated and shared revenues—a step in the direction of hardening the budget constraint on local governments.

Unlike the centralized system where taxes are collected by the central government and then allocated to subnational governments, in China local authorities collected all tax revenues and remitted a portion to the higher levels. The amount submitted to central coffer depended on provincial receipts, and the sharing formula between the center and provinces. Given such a highly decentralized revenue collection system, the center had to resort to various instruments to ensure revenue remittance from local authorities. These instruments, in turn, led to perverse reactions from the provinces, which always found ways to retain more revenues through their relaxed revenue collection for and the negotiations with the center regarding shared revenue.

From 1980 through the early 1990s, four revenue-sharing systems were employed, with many variations. Until the tax system reform in 1994, six different contract types were in use between the central government and provinces, with many more at the subprovincial level (see Table 1 in the appendix) (World Bank, 1993, and Bahl and Wallich, 1992).

Type A: Incremental contract – Based on 1987 revenues, the provincial retention rate of all tax revenues ranged from 28 percent to 80 percent while local remittance to the center needed was to increase from 3.5 percent to 6.5 percent (contracted growth rate) on an annual basis. Tax revenues in excess of the stipulated growth rates was retained entirely by provinces.

Type B: Basic Proportional Sharing – A fixed proportion of all revenues was remitted to the center.

Type C: Proportional Sharing and Incremental Sharing – A certain proportion of the actual revenue collection of the previous year was retained, and then a different (usually higher) proportion of revenues was retained for the incremental amount in excess of the total revenues for the previous year.

Type D: Remittance Incremental Contract – A specific nominal amount was transferred to the center in the initial year; in subsequent years, the remitted amount increased at a contracted rate (9 percent for Guangdong province and 7 percent for Hunan province).

Type E: Fixed Remittance – A specific nominal amount was transferred to the center with no annual adjustments.

Type F: Fixed Subsidy – Deficit provinces received fixed subsidies.[1]

Two crucial features survived every change in revenue-sharing systems. First, central fixed revenues were not subject to the revenue sharing, so that whatever was designated as central revenues left the pool of revenues to which revenue-sharing formulas were applied.[2] Second, enterprise income, both remitted profits and direct tax revenues (after 1984), were still divided among governments according to their administrative subordination, i.e., state-owned enterprises subordinated to the central, provincial, and local governments, respectively.

(2) 1994-Present: (tax sharing system).

Under this reform, the proportion of central revenue declined dramatically, causing a huge deficit at the central government level. In particular, certain categories of local revenues went to the "extra-budgetary fund" of provincial government, which was not subject to sharing with the central government. Provincial governments tended to maximize their "extra-budgetary fund." Consequently, two ratios (revenue/GDP and central/total revenue) eroded, and the central government faced a huge deficit (Zhang and Zou, 1998). Therefore, in order to raise the ratio of central revenue over the total revenue, the central government introduced a new reform, the "Tax Sharing System," in 1994.

[1] Bahl and Wallich (1992).

[2] E.g. income taxes from railways, coal mining, petroleum and airline industries as well as income taxes of banks and insurance companies, etc.

The 1994 fiscal reform was designed to base the fiscal relations between governments on the tax code: the central, the local, and the shared taxes. Value-added tax, business tax, and several excise taxes were introduced at both the central governmental and the provincial level. The biggest tax is the value-added tax, which is a shared tax. From the value-added tax, the central government takes 75%, which contributes a major portion of its fiscal revenue, and provincial governments retain only 25%.

The central government introduced the tax assignment system in 1994 to strengthen the central government's ability to achieve macroeconomic stabilization, regional equalization, and efficient public goods provisions. At the same time, the reform introduced more rigorous budget constraints on local governments.

The objectives of the reform package were fourfold: (1) to simplify and rationalize the tax structure by reducing tax types, tax rates, unifying the tax burden on taxpayers and reduce exemptions; (2) raise the revenue-to-GDP ratio; (3) raise the central-to-total revenues ratio; and (4) put central-local revenue-sharing on a more transparent, objective basis by shifting the negotiated sharing of general revenues to a tax assignment system.

Under the new system, taxes were reassigned between the central and local governments as follows:

- Taxes exclusive to the central government include tariff duties, income taxes of state-owned enterprises (SOEs) under the jurisdiction of the central government, consumption taxes, import-related consumption taxes, and taxes imposed on banks, non-bank financial institutions and insurance companies, and taxes on railroads;

- Taxes exclusive to provincial governments include sales taxes (provided that sales taxes applicable to banks and railroads would be payable to the central government), income taxes from state-owned enterprises under the jurisdiction of provincial governments and collectively owned enterprises, and personal income taxes.
- Shared taxes include the value added tax (VAT) (at the fixed rate of 75 percent for the central government, and 25 percent for local governments), stamp duties on securities transactions, taxes on natural resources, and other taxes.

In order to implement this tax assignment system and ensure the effective collection of the central government's portion of revenues, the central and provincial tax collection bureaus were to be separated. Once fully implemented, the central and provincial governments were to collect their own exclusive taxes. The shared taxes were to be levied and collected by the central tax bureau, and then shared between the central and provincial governments.

This new tax assignment system met with unprecedented resistance from provincial authorities, and significant concessions by the central government were obtained (for details, see Wang, 1997). As a compromise, the revised scheme would ensure provincial interests of *fait accompli* with the new assignments only applied to the incremental receipts (with 1993 as the base year).

The revenue-sharing contracts negotiated under the old system were allowed to remain effective at the same time. In practice, after the provinces shared taxes with the center under the new rule effective since 1994, they have had to "hand over remittances to or receive subsidies from the center according to the old revenue-sharing contracts. In the end, no one knew what constituted real central revenue or local revenue" (Wang, 1997).

The implementation of the new tax system increased central revenues from 95.8 billion in 1993 to 290.7 billion in 1994 and correspondingly raised the central share in total revenues from 22 percent in 1993 to 55.7 percent in 1994, and decreased aggregated provincial revenues from 339.1 billion in 1993 to 231.1 billion in 1994. According to the deal between the central and provincial authorities, the reduced amount was to be topped up by central "return transfers." Therefore, in the 1994, the central expenditure was 414.4 billion (including transfers), although the budgetary spending at the discretion of central government was only 175.4 billion. Transfers from the center to provinces soared from 54.5 billion in 1993 to 238.9 billion in 1994, among which roughly 180 billion was the "return transfers" from the center to top up to their 1993 revenue level.[3]

Even after all these adjustments; the redistribution of revenues did not improve. Central government's revenues continued to experienced a decline (52.2% in 1995, 49.4% in 1996 and 48.9% in 1997[4]) because local government tax revenues from the agricultural tax, individual income tax, and business tax increased at a faster pace than central government tax revenues from the VAT, certain customs tariffs, and consumption taxes. In addition, the central government increased export VAT rebates and reduced customs tariffs in order to encourage exports and technology imports and attract foreign direct investment.

[3] Finance Yearbook of China (1997). All revenue and expenditure figures exclude debt.
[4] Finance Yearbook of China (1997).

In terms of the outcome of these fiscal reforms, the 1980 fiscal reform led to a decreased overall tax share of GDP, while the 1994 fiscal reform resulted in a contrary outcome. As shown in Figure 1 below, the general trend over time is an increase in the tax share of GDP from 10% to 15% since 1996. Such a trend suggests that China has enjoyed increases in tax shares, and hence, better overall tax-collection efforts in the past decade.

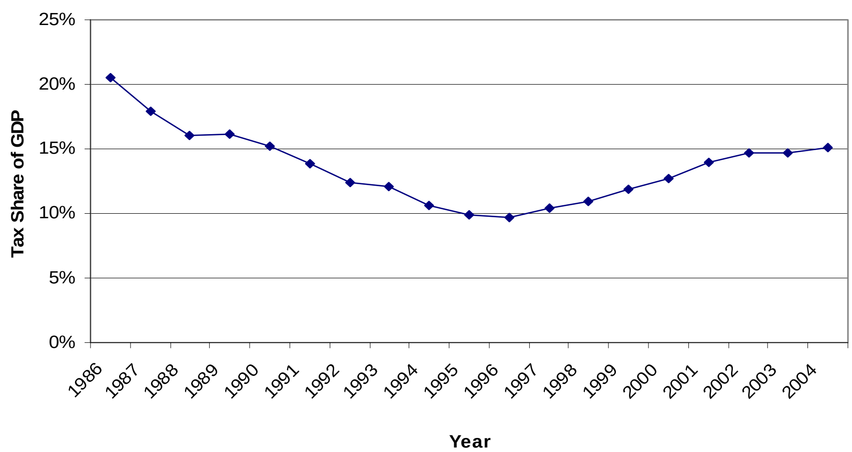

Figure 1: The Ratio of Total Tax Revenue Share of GDP (% GDP).

Source: China Statistical Yearbooks (1986–2004).

II. Tax revenue, local borrowing and intergovernmental transfers

The tax sharing reform in 1994 explicitly defined fiscal revenue as the central revenue, shared revenue and the local revenue. Taxes that can be used in the pursuit of maintaining national objectives were assigned as central taxes; the taxes that could be interpreted as more relevant to economic development were assigned as shared taxes; and the taxes more suitable to be collected and administered by the local governments were assigned as local taxes. Table 2 reflects the current tax assignment system. The central government changed the revenue sharing arrangement between the central and sub-national governments little by little after the 1994 reform. First, from May 1997, the sharing ratio of Stamp Taxes on Security Exchange between the central and local governments was adjusted from 50%-50% to 88%-12%; from 1st Oct 2000, it was changed to 97%- 3% in subsequent three years. Second, the business tax rate on the financial and insurance industry increased from 5% to 8%, and the central government gets all the extra revenues. Third, since January 1, 2002, the central and local governments share all the company income tax revenues, except a list of enterprises, and personal income tax revenues together at the ratio of 50%-50% in 2002. In 2003 and 2004, the central government's sharing rate went up to 60% (Su 2003;Zhang and Martinez-Vazquez 2003). In 2004, the fiscal revenue of the central government is RMB150.10 billions, counting for 57% of total fiscal revenue which is RMB 263.96 billions, while the fiscal revenue of the local governments is RMB110 billions in total, or 43% of the total fiscal revenue.

Financial pressures on local governments have intensified since the introduction of the Tax Sharing System in 1994, which re-centralized revenues without cutting expenditure assignments to localities. At the sub-national level, the centralizing trend occurs at each level at the expense of the subordinate governments. The taxes assigned at the present time exclusively to the local level in general do not provide an adequate revenue base for local governments.

Table 2 China Decentralization: Tax Assignment

Taxes	Central	Provincial	Sub-Provincial
Tariffs	100%	-	-
Excise Tax	100%	-	-
VAT	75%	10%	15%

Business Tax	3%	50%	47%
Stamp Tax on Security Transactions	97%	3%	
Individual Income Tax	60%	20%	20%
Enterprise Income Tax	60%	20%	20%
Urban Maintenance and Construction Tax	1%	50%	49%
Urban and Township Land Use Tax	-	40%	60%
Housing Property Tax	-	30%	70%
Vehicle and Vessel Utilization Tax	-	2%	98%
Land Appreciation Tax	-	40%	60%
Stamp Tax	-	1%	99%
Agriculture and Animal Husbandry Tax	-	-	100%
Tax on Special Products	-	1%	99%
Contract Tax	-	1%	99%
Farmland Occupation Tax	-	20%	80%
Gift and Bequest Tax	-	1%	99%
Slaughter and Banquet Tax	-	1%	99%
Fixed Asset Investment Tax	-	10%	90%
Resource Tax	-	50%	50%

Source: Qiu 2005.

Table 3 in the appendix provides an overview of central and local taxes during the period 1996-2003. Local governments rely most on Business Tax, VAT, and Enterprise Income Tax (276.76, 181.01, 117.89 billion yuan respectively in 2003), amounting to about 70 percent of the local total. As for the central government, VAT, Taxes on Imports, Enterprise Income Tax, and Consumption Tax are the key resources with the total of 1113.72 billion yuan in 2003, accounting almost 96 percent of the total central revenues.

According to most scholars (Bahl and Wallich, 1992; Lin, Tao and Liu, 2003; Wong, 1998), the overall system reforms in China focused on the decentralization of economic management, which allowed the development of greater autonomy for provinces and non-state sectors, but the 1994 fiscal reform actually recentralized the Chinese fiscal system. Revenue is centralized under the tax sharing system because the central government takes a considerable amount of revenue.

Local borrowing

Local borrowing is one of the most important financial resources for local governments and it has played an increasingly important role with the decentralization reform. Local borrowing, to a great extent, can accelerate local economic development and alleviate local fiscal pressure, particularly for those localities struggling to make ends meet. In addition, provincial and local governments' financial authority is enhanced through local borrowing. There are two kinds of local borrowing in China, but they are practiced informally or illegally. The first is borrowing from commercial banks or from collective finances. The other is indirect borrowing from SOE or foreign financial sources. The significant improvement of local infrastructure in almost all jurisdictions in the last decade is partially attributed to local borrowing. However, illegal local borrowing usually operated behind the screen, is difficult to control and susceptible to corruption, which seriously damages local governments' accountability. Almost all local governments of different levels in China incurred direct and indirect borrowing debt and the actual borrowing could be from any department of a local government. Local government borrowing authority can result in the serious problem of non performing loans, because local governments intervene in bank loan decisions, which force banks to lend money to enterprises with solvency problems. The prevalence of non performing loans is a serious problem.

Due to their convergence of interests and the special relationship between commercial banks and the local governments, local governments in China owed more debts than permitted by the 1994 Budget Law. According to the 1994 Budget Law, local governments are forbidden from borrowing on the capital market unless otherwise permitted by law. However, local governments do borrow from banks and on the capital market to finance subnational spending indirectly through their local enterprises, which depend on government subsidies of various kinds and are de facto government agencies. The indirect borrowing is less easily controlled than explicit government borrowing. This in turn creates contingent liabilities for local governments, and given the lack of transparency, is less easily controlled than explicit government borrowing.

It is estimated that the total local borrowing was over US$120 billions by the end of 2004 (Wei 2004). The total debt of the grassroots governments was around US$ 40 billions by the end of 2001, over half of which was borrowed by townships. According to the Audit report to the national congress in June 2002, the total debt for 49 counties (cities) audited was about US$ 8 billions, about 2.1 times of the yearly disposable fiscal resources. Local borrowing can be roughly categorized as follows:

Direct Borrowing from Commercial Banks and Loan Guarantee

One of the most important sources of local borrowing is direct borrowing from commercial banks, which is one capital markets China is now making great efforts to establish. The reestablishment of banking system in the early reform period (1978-94) led to the independent operation of the People's Construction Bank of China (renamed China Construction Bank, CCB) and the Bank of China (BOC), which were subordinates under MOF and PBC, respectively, before the reform. At the same time, the Agricultural Bank of China (ABC) was established to take over the PBC's rural banking business. By 1994, there were three policy banks,[5] four state commercial banks,[6] four universal banks,[7] and

[5] State Development Bank of China (renamed as China Development Bank, CDB), Agricultural Development Bank of China, Export and Import Bank of China.

a number of other local commercial banks and nonbank financial institutions. Local banks and local governments share an interest in investing in highly profitable industries. In addition, as banks have been transformed into financial institutions, local governments posed prevailing impact on the administration of bank lending through the appointment of regional bank heads, and also through intangible influences such as the supply of water and electricity, housing, recruitment of bank employees, and schooling of children (Huang 1996). As a result, local government gained substantial control over the credit supply and emboldened overlending and underpricing of loans, which led to the excessive expansion of banks' credit and a mounting number of bad and non-performing loans. Ultimately the borrowers of nonperforming loans may default, requiring the lender to absorb the loss. In 1998, the central government had to bail out local government by issuing 270 billion yuan of government bonds to recapitalize the state-owned banks (Jin and Zou 2003, 308)

Although the central government reserved credit resources such as bank loans and capital market access for use only by state-approved projects, and it strengthened the traditional investment plan and approval mechanism, local authorities still maintained considerable latitude in securing and deploying financial resources. For example, subnational government maintained the power to approve investment projects below 50 million (projects above 50 million require approval by SDPC) and technical transformation or technology promotion projects below 30 million (projects above 30 million require approval by the State Economic and Trade Commission (SETC, former

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[6] Industrial and Commercial Bank of China, Agricultural Bank of China, Bank of China, and People's Construction Bank of China.

[7] Bank of Communications, China International Trust and Investment Corportation (CITIC)'s Industrial Bank, China Everbright Bank, and Hua Xia Bank.

State Economic Commission). These projects could be funded by commercial and indirect borrowing. These rules have resulted in redundant investment of medium- and small-sized investment projects directly under the jurisdiction of subnational governments. With the help of banks, local governments are much more able to access financial resources.

Another form of direct borrowing is debt to the government employees, mainly teachers of elementary and secondary school, and venders providing products or services to governments. Local governments (particularly the county and township governments) in dire fiscal straits are unable to pay the full salaries of elementary and secondary school teachers and the unpaid part becomes the local debt. On some occasions, grassroots governments issue informal debt papers (*baitiao*) to farmers when they are financially incapable to pay farmers for their agriculture products. Meanwhile, almost all local governments provide loan guarantees for SOEs directly or indirectly, although it is neither allowed by the budget law. Local governments also provide loan guarantees to the central bank for local financial institutions to avoid financial risk.

Indirect Borrowing

Local governments take on indirect borrowing through various channels such as local-owned enterprises, or through “collective financing”, or Trust and Investment Companies (TICs). Local authorities also maintain considerable latitude in securing and deploying financial resources for investment projects. For instance, sub-national governments are allowed to approve investment projects below 50 million yuan and technology promotion projects below 30 million. These projects can be funded by commercial and indirect borrowing, which resulted in redundant of sub-national medium- and small-sized investment projects (Jin and Zou 2003).

Local enterprises, in charge of providing public services, can and do borrow from banks and on the capital market, sometimes on behalf of local governments. Such indirect borrowing essentially finances local government spending and in turn represents liabilities for local governments. Meanwhile, almost all local governments provide loan guarantees for SOEs directly or indirectly, although this practice is not allowed by the Budget Law either. Local governments also provide loan guarantees to the central bank to allow local financial institutions to avoid financial risk.

Local governments may also borrow through "collective financing" in which various groups of people, such as government employees and employees of local SOEs, are selected to lend money to local governments. The borrowing could be voluntary, but most of time it was forced by local governments. Most of these borrowings were used to start local enterprises. However, a significant part of these projects were not successful and the bankruptcy of these enterprises due to lack of management skills and experiences imposed serious debts to local governments.

Another channel for local indirect borrowing is establishing dummy financial companies, which has fueled the proliferation of Trust and Investment Companies (TICs) and securities houses at subnational levels. TICs receive government and enterprise trust deposits or trusted deposits. Most TICs were created by the four state-owned specialized banks, and some by other banks, the MOF, or municipalities. In the late 1980s, as many as 365 TICs were in business across the country (Mehran, et al. 1996). Thus, soft budget constraints are reflected in the proliferation of trust and investment companies (TICs) and securities houses under the jurisdictions of provincial and local governments. According to Mehran, Quintyn, Nordman, and Laurens (1996), TICs receive government and enterprise trust deposits or entrusted deposits. and, particularly tThe larger companies, also underwrite and broker securities. Banks initially established these TICs to circumvent the credit quotas, but most TICs have been increasingly engaged in banking business, taking household deposits and greating granting working capital loans. A portion of these TICs are engaged in international business and entitles as the International Trust and Investment Companies (ITICs). Some of them are involved in external borrowings.

Foreign Borrowing

Foreign borrowing by the central and local government-owned financial institutions has been managed by a credit management system, under which the issuance of debt requires a quota from the SDPC and an approval from the State Administration of Foreign Exchange (SAFE). Most of these local financial institutions are TICs controlled by local governments and those TICs engaged in international business are referred to as International Trust and Investment Companies (ITICs). Since the borrowing by these entities are not guaranteed by any direct or indirect credit support from the central government and hence the central government refused to bail out ITICs, Guangdong ITIC went bankrupt in 1999 as well as Fujian ITIC, Tianjin ITIC, Shanghai ITIC, Daian ITIC, Shandong ITIC, and Shenzhen ITIC. By the end of 1998, the external debt of domestic financial institutions (including central agencies) was $41.99 billion, 28.8 percent of China's total external debt. It is a question whether the central government has to step in once financial failure emerge on a large scale among these ITICs (Jin and Zou 2003, 313).

Distortion in the local borrowing system

Local borrowing accelerates the trend of decentralization. However, a problem with the decentralization of local borrowing is that with increased autonomy of local governments and local banks, it is hard for the central government to control the credit and loans of special projects, and further, the credit plan cannot work the way it is designed to. This produces an increasing number of non-performing loans as the direct outcome.

The local borrowing system, aligning the credit plan in accordance with the ownership of SOEs, induced a number of problems. First, the system paralleled the interests of the government in line with those of enterprises, which not only encouraged various levels of government to interfere in the operation of the banks, slowing the separation of government from the capital market, but also harmed the market economy by guaranteeing the special treatment of SOEs and preventing fair competition. Second, the system provided local governments with incentives to pursue their own fiscal interests, which also distorts the capital market and generates additional non-performing loans.

Intergovernmental transfer

In the recentralized system after 1994, since central government controls 75% of the tax revenue, provincial governments have to rely on other revenue sources beyond their own tax revenue, including extra-budgetary funds, non-tax fees, tax rebates, earmarked grants, capital grants, and international aid. (Bahl and Wallich, 1992; Zhang and Zou, 1998) These alternative sources have significant impacts on the revenue of local governments. Provincial governments expect that the central government will transfer grants to offset their deficit.

As Bahl and Wallich state, every year the central government redistributes subsidies to provincial governments with deficits, and also distributes earmarked grants to provinces whose proposals for development plans are approved. Under this system, provinces in the special economic zone along the east coast, such as Guangdong, Shanghai, and Fujian, can take advantage of their development policies and political leverage when negotiating with the central government for greater subsidies (Zhang and Zou, 1998).

1949-1978: The Intergovernmental Transfer System: Fiscal Gap Transfers

Since local finance came from the central budget, intergovernmental transfers were set to finance the gap between locally collected revenues and permitted local expenditures. In other words, local income in excess of expenses, was to be transferred to the central government and shortfalls were to be covered automatically. This revenue sharing system was highly redistributive: for example, while Shanghai gave up 80-90 percent of its collected revenues, Guizhou was able to finance more than two-thirds of its expenditures from central subsidies (Wong 2000). Such a system was highly devoted to the equalization concerns.

1988-1994: The Intergovernmental Transfer System: Mixed Gap-Filling Transfer System

During this period, the transfer system was still dominantly gap-filling transfer: when the base amount for expenditures was larger than the fixed local revenues, the province was allowed to keep all the fixed revenue and in addition, entitled to shared-revenues which filled the fiscal gap; when the base amount of expenditure in a province was less than its base amount of local fixed revenue, the province had to remit the surplus to the central government, and when the base amount for expenditure in the province was greater than both the base amounts for its fixed revenue and shared revenues, then the province can keep both and in addition, the fiscal gap was filled with the "fixed amount" grants from the central government every year (Zhang and Martinez-Vazquez 2003). The system of intergovernmental transfers in China consisted of four kinds of central-local grants. Under the fiscal contract system, some provinces had to remit to the central government part of their revenues, according to a predetermined lump-sum amount or a progressively increasing ratio of revenues. The central government depended a great deal on this local transfer from the better-off provinces during that period.

a. Fixed Subsidy: This transfer was aimed at redistributing revenues and expenditures to maintain local fiscal balance. Subsidies were given to provinces with base-year expenditures large than base-year revenues.

b. Special-Purpose Grant: The transfer was initially used for disaster relief, poverty reduction, and other specific purposes, it was expanding in terms of both the range of the programs and the size of the financial resources.

c. Annual Accounting Closing Transfers: The amount of this transfer was determined at the end of each fiscal year. It acted as an adjustment to the net revenues and expenditures, taking into account transfers between central and local governments.

d. Capital Grants: The central government also disbursed conditional grants mainly for local capital construction and other investment activities.

1994 reform: Simplifying the Intergovernmental Finance System:

The 1994 Tax Assignment System replaced the previous six types of fiscal contract system, which makes the system much easier to manage. The clearer and proper assignment of taxes not only put a stop to the enduring misappropriation of revenues between central and local governments, but also provided right incentives to sub-national governments. For instance, since excise taxes are assigned to the central government and business taxes to local governments, the incentives for localities to over-develop enterprises with higher tax returns, such as distilleries and tobacco companies, are corrected (Zhang and Martinez-Vazquez 2003).

Improving the intergovernmental fiscal transfer system was another stated objective of the 1994 fiscal reform, but progress in this area has been limited. In 1995, first formula-based equalization transfer was launched in China. However, after a decade of implementation, the equalization transfer has remained small (about 4.7 percent of the total central transfers in 2003) and majority of central transfers, in the format of tax rebate, have been negotiated with provinces, thus virtually preserving the pre-1994 pattern of interregional fiscal distribution. As a result, The current system of intergovernmental transfers in China is poorly designed to address the regional fiscal disparities and to support the financing of vital social services such as education and public health although the volume of central transfers is large, accounting for 46 and 48 percent of local expenditures in 2001 and 2002 (World Bank. 2003, 70). The current Chinese transfer system consists of eight types of transfers:

Prio-1994 Subsidies

Prio-1994 subsidies are the contracted fixed grants under the “Fiscal Contracting System” during the period 1988-1993. Since 1994, local governments have continued to remit revenues to or receive transfers from the centre according to their fiscal contracts in effect in 1993. The amount of transfers is approximately equal to the gap between revenue and expenditure measured in the base year. Sixteen provinces, including Inner Mongolia, Jilin, Fujian, Jiangxi, Shandong, Guangxi, Hainan, Sichuan, Guizhou, Yunnan, Tibet, Shannxi, Gansu, Qinghai, Ningxia, and Xinjiang, still receive this type of grant.

Tax Rebate

The second type of transfer is the 'tax rebate' from the center according to a calculation that ensures each locality retains no less than what it had in 1993. In addition, the provinces can also get 30 percent of the increases in VAT and consumption tax (CT) collection over their tax rebate in the previous year. The scale of tax rebate is decided directly by the upward transfer amount from sub-national governments to the central in 1993, the overall increasing rate of VATs and Consumption Taxes, and local revenues compared with its 1993 level. The formula of the tax rebate for a certain province in the t year states that:

$$TR_t = TR_{t-1}\left[1 + 0.3\left(\frac{VAT_t - VAT_{t-1} + CT_t - CT_{t-1}}{VAT_{t-1} + CT_{t-1}}\right)\right]$$

Where:

TR_t - tax rebate to a province at year t
VAT – value-added tax
CT – Consumption tax

Bahl (1999) argues that the tax rebate is fundamentally an incentive mechanism by which the center can prompt local governments to increase potential tax bases for centrally collected taxes. However, it is observed by many researchers that the tax rebate is in nature expanding fiscal disparities among regions as the arrangement enables the richer provinces to get more tax rebate (Ahmad 2004;Li 2002;Tsui 2005).

Earmarked Grants

Earmarked grants account for a huge segment of the total central grants. The earmarked grant has often been proved to tilt toward more economically developed areas because some grants under this category require recipients to provide matching funds (Yao 2005a, 9). It increased from 15.4 percent of the total central-local transfers in 1994 to more than 30 percent in 2003.

Grant for Minority Regions

Cooperated with the western economic development, the grant for minority regions was established in 2000 in order to support economic development in minority regions. The fund resource comes from the central government budget and the rebate of the increased VATs revenue in minority areas. The earmarked grants for minority were 2.47, 3.54, 3.91, and 5.54 billion yuan from 2000 to 2003 respectively.

Various Transfers and Subsidies

(a) Grants for Increasing Wages of Civil Servants established in 1999

(b) Grants for Rural Tax Reform since 2000

(c) Various Subsidies

Transitory Period Grants*, or Fiscal Equalization Grants*

In 1995, transitory period grants (TPG), the first equalization grants in China, were established. The reason why it is not directly called “fiscal equalization transfer” rests on the central government’s insufficient financial capacity to serve the objective of equalization. Truly it is more about a gesture than substance. Therefore, it is called "transitory period grants" to avoid high expectation from local governments.

The TPG is aimed to reducing regional disparities in the level of public services delivery. It is the first formula-based grants in China, at least in theory. However, the central government is slow in expanding the pool for the equalization scheme, but pumping more funds into earmarked transfers and final accounts transfers in an effort to retaining control, which reinforced local suspicions about the firmness of central government commitment toward building healthy local finance. As pointed out by some scholars, China's regional disparity in income level and fiscal capacity was one of the largest in the world, but its fiscal transfer system, with most transfers determined by vested interests and political influences, has played little role in equalization efforts (Ma 1997b). The methodology of the TPG is summarized and presented in Table 4 in the appendix.

Recent increases in equalization transfers have helped, but by themselves cannot address public service delivery needs. Chart 5 depicts the trend of the grant from 1995 to 2003. In 1996, the size of the new program was only about 1.3 percent of total central transfers, and the program was applied to 18 provinces and autonomous regions. In 1997, this program was slightly modified in its calculation of local fiscal capacities and needs, and its size was expanded to about 1.8 percent of the total central government transfers. In 2003, the transitory period grant is 38.03 billion yuan, 13 times more than 2.07 billion yuan in 1995 and accounting for 4.72 percent of the total central-local transfers. At the lower end of the distribution, county and township governments in poor regions are unable to fulfill their expenditure responsibilities, and consequently provide insufficient levels of vital public services.

III. Expenditure Assignment

The 1994 reform did not change the responsibility assignments that existed by law and practice before 1994. The extent system, as set out in the constitution, is broadly consistent with international practices: the central government is responsible for nation-wide services including national defense, foreign affairs, the operation of the central government body, the macro-economic control and coordination of economic development, and providing funds for universities, hospitals, research institutions, newspapers, publishing houses, etc that directly under the control of the central government; the sub-national governments are responsible for delivering most public goods and services, the development of the local economy, and operation of various institutions. Table 4 illustrates the current responsibility assignments in China. Ma and Norregaard (1998) suggest that the expenditure assignment is largely a result of the division of budgetary agencies' affiliations. The central budget is responsible for state-owned enterprises, universities, hospitals, and research institutions; expenditures of budgetary agencies "owned" by local governments, including primary and secondary schools, most hospitals, local infrastructure facilities, pension funds, and various extra-budgetary funds, are the responsibilities of local budgets (Ma and Norregaard 1998, 2).

Table 5 Fiscal Decentralization: Responsibility Assignment by Administrative Levels

Public Services	Central	Provincial	Local
National Defense	*		
Foreign Affairs	*		
Administration of the Central Gov't	*		
Administration of the Sub-national Governments		*	*
Geological Prospecting Expenses	*		
Macro-economic control and regional coordination of economic development	*		
Public Debt	*		
R&D	*	*	*
Capital Investment	*	*	*
Running Costs of the Military Police	*	*	*
Agricultural Support	*	*	*
Law and Order	*	*	*
Culture	*	*	*
Education	*	*	*
Health	*	*	*
Social Security	*	*	*
Price Subsidies	*	*	*
Urban Maintenance and Construction		*	*
Militia		*	*

Sources: Su 2003 and Zhang 2003.

There is substantial overlapping between the center's and the local governments' responsibilities in heavy industrial sectors (e.g. electricity and raw materials), large infrastructure projects, higher education, R&D, and social safety nets, which complicates both the revenue assignments and the needed design of the transfer system. Further, unfunded central mandates have overloaded localities. For instance, since 1980 the central government has increased the standards of rural basic education on paper, but no new resources have been assigned to townships and counties to provide these services.

China's local governments (provincial, prefecture, county, and township) have a much larger portion of expenditure responsibilities that are out of line with international practice. Local governments play the key role in providing social services such as education, health care, social security, housing and urban/local services. According to Table 6, sub-provincial governments covered 75 percent of education expenditure, 70 percent of health, and 70 percent of various social services. Some assignments seem to be wrong – for example, assigning local governments major redistributive activities as social security, unemployment insurance, and basic social welfare which should be reassigned to the national or provincial levels in order to reap the benefits of risk pooling and equalization; and assigning local governments the core services of primary education and public health which are usually the sharing responsibilities between national and provincial governments.

With no specific central government guidelines, the actual division of expenditure responsibilities among sub-provincial governments is left to the discretion of each level of government. The higher-level government has discretion to determine the expenditure assignment of the level immediately below it. In other words, provinces determine the assignments of cities/prefectures, and the cities determine the assignments of counties and the latter determine the revenues and expenditures of townships. The outcome is quite regressive, leaving the lowest level of government financially starved. County and township levels of government spend 70 percent of budgetary expenditures for education, and 55-60 percent of those for health. Cities at the prefecture and county levels account for all expenditures on unemployment insurance, social security, and welfare (World Bank. 2002).

Table 6 Public Expenditure by Function and Levels of Government, 2004

Function	Central	Provincial	Sub-Provincial
Defense	99%		
Law and Order	5%	30%	65%
Debt Servicing	99%	1%	
Economic Services	40%	20%	40%
General Administration	20%	40%	40%
Subsidies	15%	25%	60%
Social Services	10%	20%	70%
Education	10%	15%	75%
Health	5%	25%	70%
Total	30%	15%	55%

Source: Qiu 2005

Table 7 compares budgetary expenditure between central and local governments in 2003. The central government poured most of its financial resources to national defense, capital construction, and debt services, which are respectively 188.53, 152.28, and 95.52 billion yuan. Sub-national governments spent about a quarter of the budget on operating expenses for culture, education, science and health, that is, 399.76 billion yuan, followed by the investment of 190.65 billion yuan in capital construction.

Table 7 Budgetary Expenditure of Central and Local Government by Item, 2003
Unit: billion yuan

Items	Central	Local
National Defense	188.53	
Armed Police Troops	24.00	
Social Security Subsidiary Expense	14.44	
Expenditure by Using the Vehicle Purchase Tax	46.52	
Interest Payment for the Foreign and Domestic Debts	95.52	
Capital Construction	152.28	190.65
Enterprises Innovation Funds	4.21	63.43
Science and Technology Funds	22.63	19.04
Additional Appropriation for Enterprises' Circulating	1.06	0.14
Geological Prospecting Expenses	2.56	8.14
Operating Expenses of Dept of Industry, Transportation, and Commerce	8.45	20.07
Supporting Agricultural Production and Agricultural Operating Expenses	13.56	99.93
Operating Expenses for Culture, Education, Science and Health	50.79	399.76
Pensions and Relief Funds for Social Welfare	0.51	49.37
Government Administration	53.95	289.82
Price Subsidies	23.75	37.98
Urban Maintenances and Construction Expenditure		85.08
Supporting Underdeveloped Areas		15.60
Other Expenses	39.26	443.99
Total	742.02	1723.00

Source: Finance Yearbook of China 2004

Education

The educational system in China has experienced three stages, punctuated by reform, over the last five decades. The first stage dates from 1950 to 1993. During this period, education was a local public good and local governments provided primary and secondary education services, while the central government financed the education expenditure through budgetary funds, education charges, social donations to education, and fees collected from students mostly upon request.

The second stage is from 1994 to 2002, during which the education sector has been further decentralized. On the revenue side, under the Tax Sharing System, 75 percent of fiscal resources went to the central government, and only a small share went to local governments, especially the township governments, under which non-budgetary resources, such as school fees, played a bigger role in financing education. However, on the expenditure side, the responsibility of local governments did not change. This fiscal imbalance led to a significantly difficult situation for local governments trying to provide education services. Because of the financial stress on local governments, they resorted to reducing education costs by hiring lower quality and quantity of teachers and even by closing a certain number of schools, which cause a lack of accessibility to education services. In response to reform, the accessibility of school was getting harder and the quality and quantity of the education services decreased. In turn, the dropout rate has increased. In addition, the imbalance between recentralization of revenue and decentralization of education expenditure resulted in several additional problems, such as teachers not getting their payments on time; students were charged high fees in order to support the school facilities; and local residents were taxed heavily to maintain the regular operation of schools. Another problem with decentralization in education is that local governments sometimes mishandle the education funds and apply them to other areas because education does not contribute to the economic development in a quick enough way to show the local officers’ achievement when they are in office.

By comparison to the system before 1994, there were other policy shocks that added to the troubles facing local governments. In particular, in 1996-1997 the State Counsel transferred many Minban teachers (non-government employees) into government employees, which caused a salary increase, and correspondingly increased the financial burden of local governments, in particular township governments, who were already facing financial struggles. What's more, under the implementation of the program "9-year Universal Compulsory Education", all schools should meet additional regulations concerning school facilities and local governments incurred large increases in education construction costs.

The third stage is the implementation of "Tax for Fee Reform" started in 2002, which is regarded as "education recentralization", because it deprived the township governments and village governments of any power to make important decisions concerning the schools in their jurisdictions. "Tax for Fee" aimed to reduce the households' burden in rural areas. Under this new policy, five agriculture-related taxes and budgetary funds were removed from the tax base of local governments and in turn from the list of sources of education revenue. As a result, township governments and self governing villages are unable to finance education. Instead, county governments played the most important role in transferring financial resources to compensate for the loss of revenues to local governments, while provincial and central governments retain the power to make education policy.

Facing significant financial stress, the township governments and self-governing villages look for other ways to compensate for their financial loss, such as increasing tuition and fees collected from the students. Additionally, the lower-level governments have to request transfers from upper-level governments. The disadvantage of these transfers is that local governments lack incentives to perform better m which makes the accountability of local governments a more serious problem. Opposite to the initial purpose of the “Tax for Fee” reform that is intended to reduce the fiscal burden of rural households, township and village governments charged students higher fees that bring a much greater burden to households with children in school. Therefore, the removal of those agriculture related taxes makes households without children in school better off. However, the increased price for education is a big burden for all households with children in school. As a result, demand for educational services has been diminished by the significant price effect.

An empirical study in testing the impact of the Tax-for-Fee Reform on education finance in rural China shows that the changes in fiscal capabilities of county governments suggested that the 2001 Tax-for-Fee reform negatively affected the ability of local governments to finance education expenditures from their own resources, since on the one hand it reduce the number of tax sources available to local governments, yet on the other hand, it mandated some new regulations which merited additional expenditures.

With respect to equity in education, the same empirical study also shows that the education expenditure as a whole increased dramatically. Basically, school expenditures consist of three categories: salaries for teaching staff, operating costs, and construction costs. The data shows that the salaries of teachers are increased significantly although operation and construction costs have not increased correspondingly. The salary gap between rural teachers and urban teachers is getting smaller. However, the difference in operation and construction costs between rural and urban areas has increased. Furthermore, increased transfer funds go to poorer areas to reduce disparities in education expenditure. Lastly, education relies more heavily on budgetary funds it had than before.

Looking at the problem of imbalance between revenue and expenditure systems in education, Zhang (2005) and Wang (2002) argue that it is necessary to reconsider whether the responsibility for education services is correctly assigned at each level of government. Is the burden appropriate for central government, county governments, township and village governments, given the decentralization of expenditure, limitations in fiscal ability of each, administrative capacity?

The Social security system

The Chinese social security system has two components: the urban system and the rural system. People access public services according to where they live—in rural or urban areas. Rural residents have very limited social security coverage, even after a series of reforms aimed at improving health and education services in rural areas. Residents in rural areas are less dependent on the social security system and are most often self-financed. 70 percent of the population in rural areas receive only 10 percent of the total social security benefits of the country. On the contrary, urban residents, which only account for 30 percent of the whole population, enjoy 90 percent of the total social security coverage. The imbalance between social security coverage in rural and urban areas is a serious problem for China as it attempts to build a “harmonious society”. Correspondingly, in this following sections, I discuss the Chinese social security system as it is differentially applied in urban and rural regions.

Urban System

In the urban system, China is facing several challenges as a result of the increased aged population. In particular, after the twenty-year implementation of the “One Couple, One Child" policy, China is now an older country with a majority of retired citizens. This has resulted in a high dependency ratio—the retired population exceeds the working population—and makes the social security policy reform a crucial task. A series of social security policy reforms have been carried out to transfer the employer-based labor insurance model to a labor insurance model based on employees, employers and governments. The main goal of ongoing social security reform is to relieve the burden of enterprises that were primarily responsible for the social security of urban residents before reform. A brief history of twentieth-century reforms follows.

In 1951, China introduced a Soviet model of labor insurance regulation based on which lifetime employees were provided benefits by State Owned Enterprise (SOE). Male workers at 60 years old after 25 years of continuous employment and female workers at 50 or 55 years old after 20 years of continuous employment were eligible for pensions of typically 50 to 70 percent of the standard wage. After the Cultural Revolution, 1978 amendments formalized that the State Owned Enterprises (SOE) took the whole responsibility for all pension benefits to their employees (Whiteford, 2003). More importantly, the 1978 amendments introduced a higher pension rate for employees—60-75 percent of standard wages, depending on the duration of work. The amendments also lowered the number of working years from 20continuous years of employment to 10, a change which caused a dramatic increase in pension expenditure. Facing the rising expenditure, 1986 reforms required SOE employers to make contributions of 15 percent of employees' pre-tax wages, while all new SOE employees could contribute up to 3 percent of their wages. Under this system, Social Insurance Agencies (SIA) were responsible for collecting and managing the contributions from both employer and employee. These reforms represent the first time individual contributions were introduced into policy, although most contributions come from the SOE. These reforms also represent the first time China relied on an independent agency to administrate the contributions.

Administration

An important step in reform was the creation of the National Social Security Fund Executive Council, whose responsibility is to administrate funds received from different sources, including those contributed by the central government. The urban social security system includes the Social Security Pension System, the Social Mutual Help System, the Natural Disaster Relief System, the Special Care and Placement System, the Social Welfare System, the Minimum Living Standard Security System, the Childbirth Insurance System, the Industrial Injury Insurance System, the Unemployment Insurance System, and the Medical Insurance System.

Administration of social security is divided across a number of Ministries. Social insurance has been the responsibility of the Ministry of Labor and Social Security (MOLSS), which was the former Ministry of Labor. Social assistance is largely the responsibility of the Ministry of civil Affairs (MOCA). The Ministry of Agriculture supervises rural issues, rather than the Department of Rural Social Insurance under MOLSS.

The impact of decentralization

In China, the administration and expenditure assignment of the social security system are highly decentralized. With the objective of avoiding regional variations within social security administration, a uniform pension scheme had been proposed by World

Bank in 1997. The scheme has has three pillars: (1) collective funds jointly financed by enterprises and individual employees and managed by local governments; (2) a mandatory account funded by all SOE employers, administrated by local governments; and (3) a supplementary account funded by profitable enterprise from its surplus (World Bank, 1997). All of the local governments should adapt the uniform pension scheme guided by the central government. However, actual rules differ across regions. For example, in the special economic zone, Guanghzou and Shenzhen carried out special programs. With respect to expenditure assignment, provincial government played the most important role, followed by the prefecture and county governments, and, finally, the central government takes the least proportion.

Table 8. Social Security Expenditure by Different Levels of Government, 2003

(in billion Yuan)

	Total Government Expenditure in all goods and services	Social Security Expenditure (excluding health care expenditure)	Share of Social Security in government expenditure	Share in total social security expenditure for governments at different order
Total	2465.0	126.2	5.1	100.0
Central	742.0	14.4	1.9	11.4
Provincial	455.4	49.6	10.9	39.3
Prefecture	531.4	39.9	7.5	31.6
County and under	736.2	22.2	3.0	17.6

Source: World Bank Report (?? ..)

With respect to the decentralization of social security system administration, Béland and Yu (2004) argue that the movement towards decentralization in China has a strong negative impact on pension and social security reform and creates obstacles at the implementation level to uniform national social security and pension programs. In other words, local governments are allowed to carry out programs based on their regional economic and demographic variations, which has slowed the implementation of a centralized public pension system.

Rural Area

China's social security pension for rural areas underwent an experiment in selective richer rural areas started in 1986, and after 1992, the pension plan was expanded to the whole country. In June 1991, the Ministry of Civil Affairs worked out the "Basic Plan for Rural Social Pension Insurance System" in Shandong province and expanded the experiment of this system nationwide in 1992, represented by the National Rural Social Pension Insurance Work Conference in Jiangsu Province, the richest province of China. The rural social security system is collected, invested and distributed at the county level of government. It is financed mostly by the creation of personal accounts for employees who participate in the program, supplemented by collective contributions by village and township enterprises.

Since there are significant differences in levels of economic development, demographic variables, and financing structures across provinces, the decentralization of expenditure assignment and administration constrains the implementation of social security system nationwide. There is a need to reevaluate the effect of decentralization on the efficiency of implementation of social security policy with attention to differences in both rural and urban regions.

IV. Policy Options

In the present system of fiscal decentralization, on the one hand, the revenue collection system in China is much less decentralized than it appears to be on the surface; on the other hand, expenditures are relatively more decentralized than revenue collection and distribution. Correspondingly, the mismatch between revenue shortages and expenditure responsibilities of local governments creates obstacles at the implementation of the fiscal reforms. The way forward will almost certainly embrace a significant modification and reforms of the existing revenue and expenditure system. We explore a few general policy options for China in this concluding section, and a much expanded version can be found in Martinez, Qiao, Wang and Zou (2006).

(1) Set up formal and stable expenditure assignment to clarify the responsibilities of governments

China has made dramatic progress in separating government from SOEs and re-defining the function and responsibility of government in the economy in last two decades with the economic reform and fiscal decentralization, but there are still many problems from the expenditure assignment perspective. In particular, a stable and transparent expenditure assignment with less concurrent responsibilities is in need. It has significant meaning in China's political framework because (a) it will significantly improve the accountabilities of both the central and local governments; (b) it can effectively prohibit government from encroaching private sectors; and (c) sound expenditure assignment is also a key component to solve the horizontal fiscal disparities as the expenditure follows with proper fiscal revenue.

It is necessary to stress that local government should focus on the public services and social affairs while the central government has the expenditure responsibilities on such national issues as national defense, foreign affairs, economic development, and improving regional equality besides the public services and social affairs. This is the prerequisite for building the sound system of expenditure assignment. The central government should implement macroeconomic policies such as monetary policy, fiscal policy, exchange rate etc, and create a harmony macroeconomic atmosphere and environment for the stable and healthy development of society and economy. The local governments are mainly in charge of managing social affairs, organizing and delivering public services. Apparently, local governments need to switch the focus from economic construction to public services gradually.

It is important to build broad and formal coordinating institutions to deal with concurrent assignment. The responsibilities should be defined for a multi-dimensional array of attributes, including: (i) actually producing a good or delivering a service, (ii) providing or administering the service, (iii) financing a service, and (iv) setting standards, regulations, and policies guiding the provision of government services. While there is no problem, with assigning competencies over these attributes in the case of exclusive assignments, there is a need to be explicit about their assignment in the case of concurrent expenditure assignments.

(2) Align the decentralized fiscal system properly to guarantee all citizens have access to basic public service.

First, it is necessary to start to build national minimal standard of basic public services. The wide and increasing regional disparity in China could be harmful for the cohesive of the country. A national minimal standard of public services can play significant role in improve national cohesive. Basic public services should cover nine years compulsory education, basic hygiene medical treatment, basic unemployment compensation and endowment insurance, and essential communal facilities services in rural public services.

Second, it should be the central government's responsibility to guarantee all citizens have access to basic public service. Although equalization transfer can be regarded as an important approach to address the issue of regional disparity, it should be more important in China to through setting national minimal standard and centralizing basic public services. Most of governments at and under county level cannot provide adequately basic public services, such as education, health care and social security net. Meanwhile, the provision of basic public services by the governments at and under county level also causes the equity problem. With wide economic disparity across provinces, it is also not a good choice to assign the responsibility to provincial governments.

(3) Provide sound local autonomy to improve local fiscal capacity

International experience suggests that local governments are more efficient and effective in implementing their responsibilities when they are also responsible for raising the revenues that they spend. In most federal and unitary but decentralized countries, decentralization reaches local governments quite fully, with these entities having different degrees of revenue autonomy and exclusive responsibility for an array of functions and services. This status for local governments is the result of explicit legislation in unitary decentralized countries. The most important issue in China is how to balance the legislative revenue autonomy and the administrative revenue autonomy. Apparently there is no such a political mechanism to prevent the local government from practicing wide administrative revenue autonomy or abuse legislations. Improve current system to provide local government reasonable tax autonomy and formalize the administrative autonomy is one of the most important tasks.

First, the revenue autonomy should be built based on the right balance between devolution of responsibilities according to economies of scale, the internalization of costs, and available administrative capacity. There is no consensus on the degree of autonomy that should be devolved to local governments. However, most federal systems provide local governments with their own sources of revenue, with autonomy to change at the margin, tax rates or other elements of the structure of the tax. A tentative list of the most widely used local taxes across countries would include property taxes, user charges, business license fees, permits and excise taxes, motor vehicle taxation, income taxes, and sales taxes.

Second, an asymmetric approach can be explored as a means to allow major cities and other local governments with more developed capacity to introduce piggyback income taxes and other forms of local tax autonomy. Greater revenue autonomy must be considered an important reform in putting decentralization to work at the local level in any decentralized country. Most sub-national governments need to augment their revenues due to the large share of committed expenditures and increasing needs. This can be accomplished in a number of ways, including increasing own source revenues, improved tax administration, and increasing intergovernmental transfers. Enhancing the revenue autonomy of sub-national governments would have the added advantage of tightening the Wicksellian link between costs and benefits which would help foster greater fiscal discipline.

Third, it is necessary to increase the share rates of local part in major taxes such as VAT and income taxes to improve the fiscal capacity of local government. The framework of current tax sharing system is consistent with international good practice in revenue assignment since multiple uses of the same base, if properly coordinated, is found to simplify administration and reduce compliance costs. However, China's tax sharing system has showed significant differences. The major difference is that the tax rates are determined by the central government, and local governments do not have autonomy to alter rate. The advantage is that it may eliminate the horizontal tax competitions, but the disadvantage is that uniform arrangement of tax sharing cannot fit all jurisdictions.

Fourth, it is necessary to continue to reform tax system. The main objective is that governments at each level should have a stable tax base and main taxes, either exclusively or shared with other governments. Good property tax for governments at and under county level should be a reasonable approach. It not only provides a main fiscal resource for richer jurisdictions, but also simplified currently over-complicated local tax system. Technically, current VAT and enterprise income tax have serious problem. Production type VAT generates distortion to market, and the enterprise income tax based on ownership further enlarge the distortion. In addition, the problem of tax mobility across province has not been seriously recognized in China. Current revenue assignment is not able to deal with the increasing tax competition.

(4) Formalize local borrowing system to support sustainable development

Decentralize the authority of local borrowing to jurisdictions with reasonable fiscal capacity. International experience suggests that local borrowing has the potential to generate significant benefits for local governments by allowing them to finance public capital projects. Current budget law prohibited local governments from borrowing. However, it did not effectively prevent local government from informal borrowing, and caused various issues. In future reforms, first, it is necessary to consider to permit local borrowing. Second, set strict central control on local borrowing. Currently, China's bond market is not well developed, therefore, the municipal bond market should not be regarded as the main approach of local borrowing although it is necessary to start to build the system.

(5) Standardize intergovernmental transfer to meet the goals of governments

Generally speaking, intergovernmental fiscal transfers are used to correct for vertical and horizontal imbalances, inter-jurisdictional spillovers, and promote national objectives. All countries use special purpose grants of one type or another to promote national priorities and address inter-jurisdictional spillovers. Equalization grants and special purpose transfers also help reduce vertical imbalances or the mismatch between expenditure responsibilities and own sources of revenues for sub-national governments. Often different forms of revenue sharing, in themselves a type of transfer, are used to address vertical imbalances. However, the only fail proof way to address vertical imbalances is to provide sub-national governments with an adequate level of revenue autonomy. In summary, a system of transfers is needed for many good reasons, but it can easily be misused, and transfers are not a substitute for a healthy degree of tax autonomy.

First, central transfer should focus on national minimal standard of public services and provincial transfer should focus on equity of local service provision. Current revenue assignment cannot guarantee all citizens have access to basic public services. On other hand, requiring sub-national governments to rely too heavily on own revenues to close vertical imbalances may give rise to economically and/or politically unacceptable differences in the quality and quantity of critical social and economic services among jurisdictions. Although in practice countries differ in how, and if, they use measures of expenditure needs and/or fiscal capacity in their equalization formulae, a well-designed equalization grant is often used in many countries to reduce horizontal fiscal disparities among sub-national governments arising from differences in expenditure needs and fiscal capacity. The intergovernmental transfer should be designed to focus on national minimal standard of public services.

The design of transfers is of critical importance for efficiency and equity of local service provision, revenues autonomy, and fiscal health of local governments. In China, one of the priorities in public finance is to allow all citizens to have access to basic public services. Consequently, intergovernmental transfer for both decreasing the regional disparity and solving the vertical fiscal imbalance should be based on national minimal standard of public services.

In summary, transfers to local governments should be clear, transparent, and formula based. The methodologies should be simple and use available measures, such as population and property taxation. With time, as data on reliable developmental indicators are compiled, transfers could also be related to other proxies of revenue capacity and expenditure need. Given the types of services that are provided at the local level (i.e., water supply, sanitation, and streetlights) a simple formula with population could be initially used.

Appendix: Table 1

Revenue-Sharing System between the Central and Provincial Governments, 1988-1992

	Type A		Type B	Type C		Type D		Type E	Type F
	Incremental Contract		Basic Proportional Sharing	Proportional Sharing and Incremental Sharing		Remittance Incremental Contract		Fixed-Remittance	Fixed-Subsidy
	Contracted growth rate(%)		Retention rate (%)	Proportion	Incremental sharing	Remittance (100 million)	Incremental Contract (%)	(100 million Yuan)	
Beijing	4.00	50.00							
Hebei	4.50	70.00							
Liaoning	3.50	58.30							
Shenyang	4.00	30.30							
Haerbin	5.00	45.00							
Jiangsu	5.00	41.00							
Zhejiang (exl. Ningpo)	6.50	61.50							
Ningpo	5.30	27.90							
Henan	5.00	80.00							
Chongqing a/	4.00	33.50							
Tianjin			46.50						
Shanxi			87.60						
An Hui			77.50						
Da Lian				27.70	27.30				
Qingdao				16.00	34.00				
Wuhan a/				17.00	25.00				
Guangdong						14.10	9.00		
Hunan						8.00	7.00		
Shanghai								105.00	
Heilongjiang								2.90	
Shangdong (exl. Qingdao)								4.90	
Hubei (exl.Wuhan)									1.22
Ji Lin									1.07
Sichuan (exl. Chongqing)									1.79
Jiangxi									0.50
Sha'anxi									1.20
Gansu									1.30
Fujian									0.50
Inner Mongolia									18.40
Guangxi									6.10
Tibet									9.00
Ningxia									5.30
Xinjiang									15.30
Guizhou									7.40
Yunan									6.70
Qinghai									6.60
Hainan									1.40

Source: Ministry of Finance, P.R. China

Also see Bahl and Wallich, 1992, and World Bank, 1993.

a/: After the cities of Wuhan and Chongqing were treated differently from Hubei and Sichuan provinces, the provinces changed from net providers to the state to net recipients of subsidies from the state.

Table 3 Central and Local Taxes, 1996-2003
Unit: billion yuan

Taxes		1996	1997	1998	1999	2000	2001	2002	2003
Consumption Tax		62.02	67.87	81.49	82.07	85.83	93.00	104.63	118.23
Consumption Tax and VAT on Imports		44.77	50.75	55.55	101.56	149.17	165.16	188.57	278.86
Tariffs		30.18	31.95	31.30	56.22	75.05	84.05	70.43	92.31
Cargo Tax							0.62	0.85	0.94
Vehicle Purchase Tax							26.58	34.88	46.82
Tax Rebate for Foreign Trade Company		-82.77	-55.50	-43.62	-62.67	-105.00	-108.00	-115.00	-198.86
Other Central Taxes		2.29	2.82	4.24	4.30	0.00	0.00	0.00	0.00
VAT	Central	222.00	245.96	272.00	290.76	341.32	401.55	463.10	542.56
	Local	74.28	82.43	90.84	97.43	114.00	134.17	154.74	181.10
Business Tax	Central	4.63	16.33	23.46	21.49	24.31	21.50	15.53	7.69
	Local	100.63	116.10	134.05	145.37	162.57	184.91	229.50	276.76
Enterprise Income Tax	Central	56.56	42.47	39.69	59.17	61.02	94.53	188.22	174.07
	Local	40.28	53.84	52.86	62.44	105.18	168.56	120.06	117.88
Personal Income Tax	Central				0.08	14.95	27.92	60.60	85.08
	Local				41.28	51.02	71.60	60.58	56.73
Stamp Tax on Security Exchange	Central	6.08	20.22	18.03	21.53	42.29	26.59	10.86	12.39
	Local	6.08	3.51	2.46	6.71	5.47	1.70	0.34	0.38
Urban Maintenance and Construction Tax	Central	0.31	0.33	0.29	0.26	0.33	0.36	0.37	0.33
	Local	24.19	26.87	29.20	31.26	34.90	38.06	46.71	54.67
Tax on Resources		5.73	5.65	6.19	6.29	6.36	6.71	7.51	8.33
Urban Land Using Tax		3.93	4.41	5.41	5.91	6.48	6.62	7.68	9.16
Agricultural Tax		33.83	36.50	36.54	39.05	29.89	28.63	42.14	42.38
Fixed Assets Investment Adjustment Tax		6.22	7.84	10.76	13.01	4.63	1.56	0.80	
Tax on the Use of Cultivated Land		3.12	3.25	3.34	3.30	3.53	3.83	5.73	9.00
Other Local Taxes		46.60	59.81	72.20	41.45	44.87	49.94	64.82	84.95
Central Total		346.08	423.20	482.44	574.77	689.27	833.86	1023.03	1160.40
Local Total		344.90	400.20	443.85	493.49	568.89	696.28	740.62	841.33

Source: Finance Yearbook of China (2004).

Table 4 Transitory Period Grants: Methodology

The existent literature on TPG design, methodology, and calculation is fragmented and incomplete due to the government's traditional penchant for secrecy[8]. The methodology in paper looks similar to the Representative Tax System (RTS) and the Representative Expenditure System (RES) developed in the western federations. Many scholars argue that the RTS and RES are the best methodology for measuring fiscal capacity and fiscal needs. The disadvantages include high demand for both quality and quantity of data, and competent staff to monitor the system.

The size of the pool for the equalization transfer is determined by the central government on ad-hoc basis, subject to annual budget constraint.

$$TPG_i = TG\left(\frac{SE_i - SR_i}{SE - SR}\right)\beta_i$$

Where

TPB_i -- transitory period grant for province i

TG – total transitory period grant

SE_i – standard expenditure of province i

SR_i – standard revenue of province i

β_i -- adjustment ratio for province i

β_i is partly determined by SE_i/ $SR_{i.}$

1) Standard Revenue - SR_i

SR_i = standard local own and shared taxes + [tax rebate + general purpose grants – remittances to the central government. In the above formula, tax rebate, general purpose grants, and remittances to the central government are actual amount decided by the central government.

Standard local own and shared taxes are considered as the measure of fiscal capacity of the province:

Standard Local Own and Shared Taxes =

Standard VAT (25%) +

Standard Business Tax +

Standard Urban Maintenance and Construction Tax +

Standard Resource Tax +

Standard Tax on Urban and Township Land Use +

Standard Agriculture Tax (?) +

Standard Vehicle and Vessel Utilization Tax +

[8] The discussion on the transitory period grants is mainly based upon Zhang 2003.

Standard Slaughter Tax +

Standard Personal Income Tax +

Standard Enterprise Tax +

Standard Property Tax +

Standard Stamp Tax +

Other Items of Revenue

All the standard revenues are estimated. For an example, the standard personal income tax is predicted by the formula "standard tax base * standard tax rate". Here, the standard tax base includes salaries and income of private industrial and commercial enterprises. The actual income tax collection from other bases is regarded as the standard revenue. The income tax base of salaries is estimated upon per capita taxable salaries net of exemptions and number of employees. The tax rate of salaries is local average effective tax rate, adjusted with a regional coefficient.

a) Standard personal income tax from salaries in province i:

$$PI_{si} = TB_{si}\left(\frac{PI_s(real)}{TB_s}\right)\alpha_{si}$$

Where

PI_{si} -- standard personal income tax from salaries in the province i

TB_{si} -- standard income tax base of salaries in the province i

$PI_s(real)$ – real local income tax collected from salaries

TB_s – local income tax base of salaries

α_{si} -- a regional coefficient

α_{si} = per capita disposable income for urban residents in region i / local per capita disposable income for urban residents in the country

b) Standard personal income tax collected from income of private industrial and commercial units in province i:

$$PI_{pi} = TB_{pi}\left(\frac{PI_p(real)}{TB_p(real)}\right)$$

Where

PI_{pi} -- standard personal income tax from private industrial and commercial units in the province i

TB_{pi} -- standard income tax base of private industrial and commercial units in the province i

$PI_s(real)$ – real local income tax collected from local private industrial and commercial units

$TB_s(real)$ – real local turnover amount of private industrial and commercial units

The standard income base of private industrial and commercial units in the province i, TB_{pi}, is approximated by the turnover amount of private industrial and commercial units.

2) Stand Expenditure - SE_i

SE_i = Government administration + Agriculture + Forestry and irrigation + Culture and sports + Education + Health care + Others

The standard expenditure for the seven sectors is calculated by the formula:

Standard Expenditure for each sector = Personal Expenditure (salaries + bonus) +
Office expenditure (vehicles, heating, and other office expenses)

a) Standard Personal Expenditure

$$SPE_{i,j} = N_{i,j} S_{i,j}$$

Where

$SPE_{i,j}$ -- standard personal expenditure of province i in the sector j

$N_{i,j}$ -- standard number of civil servants of sector j in region i

$S_{i,j}$ -- standard per capita salaries of sector j in region i

The standard number of civil servants is a critical factor for calculating standard expenditure. The key variables used in the estimation include the provincial population, the number of counties and districts, and residential area. For instance, in 2001 the standard number of civil servants in the education sector was estimated by the number of students, residential area, and number of counties and districts; the number in the health sector was determined by the population and the number of counties and districts. The weight for each factor was calculated using regression analysis. The standard per capita salaries are the average local per capita salaries at the different levels of governments.

b) Standard Office Expenditure

Standard office expenditure comprises fuel and maintenance of vehicles, heating and other office expenses. For instance, standard fuel expenditure is calculated as follows:

Standard Fuel Spending = Standard number of vehicles * fuel consumption per vehicle per year * unit fuel price * plateau area adjustment coefficient

The standard number of vehicles is determined by the standard number of civil servants and people-ratio in various sectors covered by the budget. The unit fuel consumption is provided by the Ministry of Transportation. The unit fuel price is set by the central government.

Standard expenditure for other office expenses of a particular sector is estimated upon the standard number of civil servants and actual local per capita office expenditure.

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