Local Public Finance in China: The performance of China's decentralization system

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Our objective in this section is to examine some aspects of the performance of the fiscal decentralization system in terms of efficiency and equity outcomes. In particular, we want to examine the impact of the decentralization system on economic growth and regional horizontal disparities. However, before we attempt to quantify these impacts of decentralization we offer an assessment of what we consider the main institutional weaknesses of the decentralization system, which impact negatively on its ability to achieve efficiency and equity objectives.

The main weaknesses of China's fiscal decentralization system can be summarized as follows:

(i)   Highly decentralized basic public services with wide concurrent expenditure assignments lacking transparency;
(ii)   Insignificant formal revenue autonomy but fairly extensive administrative and informal revenue authority;
(iii)   Significant vertical imbalances and gap-filling oriented intergovernmental transfers with low levels of equalization;
(iv)   No formal sub-national government borrowing but extensive informal use of debt;
(v)   Weak horizontal accountability mechanisms to local residents, which allow local officials to pursue their own priorities (potentially different from those of local residents.)

Highly decentralized services and lack of transparency

The decentralization of public services, a key component of fiscal federalism, is widely accepted as the means of improving the efficiency of the public sector by using the potential information advantage of local government to better match the needs and preferences of local residents (Hayek, 1945; Oates, 1972). In addition, the decentralization of public services is a necessary component of "market preserving federalism," whereby the role of sub-national governments is aligned with the goals of local economic development and local welfare (Qian and Weingast, 1997). But for these efficiency gains to be realized, sub-national governments need to be responsive to their constituencies. The existence of accountability mechanisms, such as the election of local officials, is widely acknowledged as a necessary condition for effective fiscal decentralization.[1]

It is also worth remembering that not everything in decentralization policy, as the international experience well shows, is positive and desirable. Poorly designed decentralized systems, for example lacking a hard budget constraint for sub-national governments, can lead to waste and macroeconomic instability.[2] Basic institutional

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[1] See, for example, Seabright (1996).
[2] For similar warnings on the potential failures of decentralization policies see Prud'homme (1995) and Tanzi (2000).

failure in issues such as accountability or the presence of bureaucratic corruption can lead to the capture of government by local elites with overall perverse outcomes.[3] Sub-national governments in addition may lack an adequate level of technical and administrative capacity to realize the potential gains from decentralization.[4]

China's current system of fiscal decentralization fits, in general terms, some of the conventional wisdom regarding the desirable features of fiscal decentralization; in particular, it provides sub-national officials with considerable autonomy to provide the "most desirable" mix of public goods and services at the local level. However, there are some other aspects of China's current system that do not fit the mold: at the present time, sub-national government officials are appointed by the higher governments, and, in essence, consequently these government officials are responsible to the higher government instead of to local residents. As we have discussed throughout this paper, this feature of the system can have important undesirable consequences.[5]

In recent years there has been an increased interest in the potential role of **f**iscal decentralization in economic growth**.** However, the precise nature of the link to growth is complex and the avenues through which decentralization affects growth are myriad. As noted above, the basic economic argument for fiscal decentralization is greater economic efficiency in the allocation of resources in the public sector. This suggests that policies aimed at the provision of public services such as infrastructure and education, which are sensitive to regional and local conditions, are likely to be more effective in encouraging growth than centrally determined policies that ignore these geographical differences.[6] For China, although quantitative studies of the impact of fiscal decentralization on economic growth reach conflicting results because of the differences in the measurements of fiscal decentralization,[7] most researchers agree that decentralization can lead to the improvement of overall economic growth. Fiscal decentralization can contribute to growth by improving the efficiency of resource allocation (Lin and Liu 2000). In addition, fiscal decentralization may affect economic growth by fostering increased competition among sub-national governments for adopting policies conducive to business and investment (Jin, Qian and Weingast 1999).

Inadequate local revenue autonomy

Revenue autonomy is related to: (i) the degree to which sub-national governments control their own tax base or tax rates; and, (ii) the extent to which sub-national governments rely on their own taxes, as measured by how important local taxes are in the budgets of sub-national governments. A reliance on revenue sharing and other central grants leads to a

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[3] On local elite capture issues see, for example, the discussion in Bardhan and Mookherjee (2000) and Bardhan (2002). On local versus central government corruption see Tanzi (1995) Prudhomme (1995), Bardhan and Mookherjee (1998, 1999), Besley and Coate (1999), Brueckner (1999), and Treisman (1999a, 1999b, 1999c).

[4] See Bahl and Linn (1992).

[5] This is not a well-researched area in China's fiscal federalism. For a recent case study of several local governments that highlights the importance of the lack of accountability at the local level see Wang (2002).

[6] See Oates (1993), Martinez-Vazquez and McNab (1997).

[7] See, for example, Zhang and Zou (1998), Lin and Liu (2000). Jin, Qian and Weingast (1999).

dependency mentality for sub-national governments and to the potential development of a soft-budget constraint regime and the continuous lobbying for more central government grants. In comparison to the locally generated revenue, a central grant has little to do with the effort of local government for local economic development.

Whether local revenue autonomy improves the efficiency and general accountability of sub-national governments is a critical question in fiscal federalism theory and practice, and in particular for improved local governance practices. It is generally accepted that sub-national revenue autonomy is a fundamental ingredient in decentralization because it increases efficiency, and accountability or transparency in government's actions (Mello 2000). Revenue autonomy also tends to offer the best solution to vertical imbalances and promotes credit worthiness among sub-national governments.[8]

However, some potential problems could come with sub-national revenue autonomy. One of the problems is related to tax externalities, for example, as in the case of tax exporting (McLure 1967). In particular, in a world without factor mobility, public services could be over-provided if taxation decisions by sub-national governments impinge on non-residents since local residents and government will not internalize the costs of public services. On the other hand, there could be under-provision as non-residents benefit from service provision. The potential migration of factors of production also causes problems, and the mobility of capital and labor imposes natural limits on fiscal autonomy because of the tax competition. In this context it is argued that managing a national tax system is feasible at lower cost and from this point of view, government financing systems based on grants or tax-sharing arrangements may be preferable. A subtler version of this argument relates to the problem of transparency and complexity in decentralized tax systems. A complex tax system, where various jurisdictions share the same tax base, and where sub-central governments have important fiscal powers, can lead to less transparency in the fiscal system. Taxpayers may find it difficult to understand fully the operations of the different levels of government (Tanzi, 2001) and this leads to less accountability.

A decentralized system with revenue autonomy may also pose more problems than a centralized system in the presence of government corruption. In their discussion of government as the "grabbing hand" Shleifer and Vishny (1993) argue that decentralized corruption may be a kind of free-for-all; while central government has a stake in not killing the goose that lays the golden eggs, in a decentralized system local officials do not take into account the externalities of their own actions on the other governments.[9]

Another issue related to sub-national revenue autonomy is that there may be a trade-off between equity and accountability, especially if the system does not count with a sizable equalization transfer system. Jurisdictions with different levels of income and wealth will

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[8] See, for example, the discussion in Bahl and Martinez-Vazquez (2005)

[9] While there is a widespread perception that decentralization and corruption are closely linked, the empirical evidence on this issue is still too limited to reach a firm conclusion. Gurglur and Shah (2000), Arinkam (2000), and Fisman and Gatti (2002a). However, Treisman (2000) finds corruption to be higher in federal (as opposed to unitary and supposedly more centralized) countries.

have very different tax resources at their disposal. The need to ensure that citizens have access to a roughly equal level of public services will necessarily imply some degree of redistribution between sub-central governments either through the use of transfers funded from general taxation, or through some kind of 'pooling' arrangement between the sub-central governments. [10]

The arguments above in favor and against more revenue autonomy are quite relevant to decentralization reform in China, and while they are revealing, the arguments are far from offering an immediate readymade solution to some of the problems we have been examining in this paper. An interpretation of the fiscal crisis facing local governments at the county and township level in China, which is fundamentally espoused in this paper, is the current unbalanced approach to fiscal decentralization with more centralized revenue assignment and more decentralized expenditure assignments. This approach is rooted in the presupposed political advantage of upper government allocating fiscal resources among governments at different levels in China. Consequently, a more balanced revenue and expenditure assignments or an improved intergovernmental transfer system with a much stronger presence of unconditional equalization grants is generally viewed as the solution to the fiscal crisis facing many county and township governments. However, this solution assumes an unchanged accountability of local governments, and it does not address the issue of local incentives related to the fiscal crisis. In particular, there is no guarantee that an increased level of autonomy would lead to more government expenditure in the areas where there is a perception of large unmet needs (health, education and welfare). In fact, low efficiency and over-sized personnel rosters in local governments continue to be a serious problem in China, and may be a powerful explanation in itself for the current fiscal crisis of local governments. Thus, it may be that the problem lies more in over-expanded inefficient and even misguided local expenditures, and not so much on the lack of revenue autonomy and the need for more equalization unconditional funds. If this conjecture is correct, the redesign of revenue and expenditure assignments and the intergovernmental transfers, as desirable as they may be, may not be able to solve, or at least will not be a sufficient condition to solve, the current fiscal crisis at the county and township levels.

Gap-filling oriented intergovernmental transfers and interregional equity

One of the major reasons to have a well-designed intergovernmental transfer is that there are significant vertical imbalances for governments at all levels. Although there is no best way to measure the vertical gap, the percent of total expenditures of sub-national governments that are *not* financed with own revenues (taxes and others sources of revenue over which sub-national governments have discretion) is generally regarded as an acceptable approximation. An important caveat with this approach is that the revenue statistics reflect actual receipts, and not the potential yield of the assigned revenue

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[10] The equity argument should be distinguished from that of insurance for the business cycle. Maintaining a centralized system of welfare benefits allows for a system of insurance even in the presence of substantial fiscal autonomy. On the other hand, if resources are shared equally between sub-national governments, the incentive effects from fiscal autonomy disappear. This has become one of the central issues in deciding on the appropriate level of fiscal autonomy for sub-national tiers of government in the international experience.

autonomy to local governments. At any rate, this measure indicates that countries like Canada and the U.S. have relatively small vertical gaps; countries like Australia, India, and Russia have larger ones. The size of a country's vertical imbalance is largely a function of expenditure and revenue assignments. It is a reality that central governments retain control over the most productive tax bases; this is typically justified in terms of the inherent advantage in administering broad-based taxes on income and consumption. Consequently, it is common for there to be an imbalance between the expenditure responsibilities of sub-national governments and their revenue assignments. A dependence on transfers is quite typical and may help reduce vertical fiscal gaps. However, a high transfer dependency may contribute to problems with fiscal profligacy.[11]

Although there is no consensus on the optimal vertical gap, economic intuition suggests that allocative decisions are likely to be more efficient if sub-national governments internalize the full costs of providing services: that is, make them responsible for raising the necessary revenue to fund services, especially at the margin. In practical terms, the surest way to reduce vertical gaps is to assign sub-national governments with adequate revenue autonomy. Countries like Brazil, Canada, and the U.S. provide sub-national governments with considerable revenue autonomy and experience fewer problems with vertical imbalances.[12]

The heavy reliance on gap-filling transfers in the China transfer system points in the wrong direction for addressing the existing problems with vertical imbalances. The reliance on transfers (as opposed to providing more revenue autonomy) very likely has contributed to a dependency mentality among sub-national governments and to lax fiscal discipline in budget execution. Increasing revenue autonomy at all levels of sub-national government should help address existing vertical imbalances, but this may be only part of the solution; providing incentives to sub-national governments to use that revenue autonomy will also be needed.

As discussed above, of course, more revenue autonomy is likely to lead to increased fiscal disparities given the uneven geographical distribution of tax bases. One serious concern in China today is the impact of the lack of regional equity on the quantity and quality of public services. The serious consequence of the existing high regional disparities is that basic public services are not guaranteed in poor jurisdictions. As we

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[11] The smaller vertical gap in Canada, for example, can be attributed to the fact that the Provinces of Canada have access to all the major broad-based taxes: there are no constitutional rules on exclusive use of certain bases by different levels of government. The provinces are also able to set their own rates. Currently, provinces raise most of their funds from own-source revenues, and overall federal transfers account for only 13 per cent of total revenues of the provinces. However, transfer dependency varies greatly among the provinces, from 10-12 percent in the high-income provinces to nearly 40 per cent in the low-income provinces

[12] But revenue autonomy per se is not a sufficient condition to address vertical imbalances; sub-national governments must be provided with the incentives to use that revenue autonomy. This does not always happen. For example, countries like India and Spain provide sub-national governments with considerable revenue autonomy but these jurisdictions refuse to use it because they have had increased access to revenue sharing and other transfer schemes from the central government.

have seen, many basic key public services (primary, secondary, and vocational education, health, social security) have been assigned local governments at the county and township levels. Thus it is important to ask what the impact of fiscal decentralization reform, including increased revenue autonomy, on regional equity will be. Coming up with the right policy response should be facilitated by the better understanding of how the current decentralization mechanism impacts regional equity.

No formal sub-national government borrowing but extensive informal use of debt

According to China's 1994 Budget Law and other related regulations, sub-national governments are forbidden from borrowing. Local borrowing and debt were brought to the attention of the central government for two major reasons.

First, informal local borrowing became an important channel to finance local deficits for a significant number of local governments in poor jurisdictions, especially in the central and western poor areas, and the accumulated debt presented serious financial risk. Although the Budget Law does not allow local government deficits, lack of resources to finance local expenditures led to significant deficits for many poor county and township governments. Currently, it appears that high debt levels represent a heavy burden for many local governments. It has been estimated that by the end of 2004 total local borrowing was over US$ 120 billion (Wei 2004). According to the Audit report to the National Congress issued in June 2002, the total debt for 49 counties (cities) audited was about US$ 8 billion, or about 2.1 times the yearly disposable fiscal resources. For county and township governments, it was estimated that the total debt was US$ 40 billion in 2001, an amount equally divided between counties and townships. This estimate did not include any arrears in unpaid civil servant salaries or unpaid suppliers.

Although there are various sources of local borrowing, the only legal channel for sub-national governments is for the central government to issue bonds or to borrow from domestic or foreign banks. As described in Box 5.1,legal borrowing and debt represent a small portion of total local borrowing for the sample township governments (only the borrowing from World Bank and higher governments can be regarded as legal borrowing). It is a common phenomenon that the major part of local debt, especially debt of township governments was from rural enterprises in poor jurisdictions. The main reason was that poor jurisdictions in central and western areas (heavily dependent on agricultural production) had strong incentives to start new enterprises; they hoped for increased future fiscal revenues and were able to finance the new investments through a variety of sources. However, the lack of management skills and business experience led to the failure of many of these new enterprises. Unfunded expenditure responsibilities were another main reason. For example, to meet the national standards for school facilities, local governments had to resort to borrowing.

Box 5.1 Structure of Township and Village Debt in GX County (source side), Jiangxi Province

	Township Amount (in million Yuan)	As % of Total	Village Amount (in million Yuan)	As % of Total
Financial Institutions	16.803	41	9.913	60
World Bank	6.344	15	0.249	2
Higher Governments	3.543	9	0.759	5
Other Organization	5.377	13	3.283	20
Private Sectors	9.073	22	2.306	14
Total	41.14	100	16.51	100

Expenditure Structure of Township and Village Debt in GX county (usage side), Jiangxi Province

	Township Amount (in million Yuan)	As % of Total	Village Amount (in million Yuan)	As % of Total
Agriculture Development	6.285	15	1.86	11
Rural Enterprises	19.26	47	6.33	38
Social Services	10.92	27	5.88	36
Government Facilities	1.18	3	1.41	9
Others	3.495	8	1.03	6
Total	41.14	100	16.51	100

Affordability of Debt of Township and Village Governments in GX county, Jiangxi Province

	Debt (in million Yuan)	Annual Disposable Income (in million Yuan)	Ratio of Debt to Disposable Income	Population	Per Capita Debt (Yuan)
Township A	1.12	0.702	1.60	5638	199
Township B	6.483	1.24	5.23	15864	409
Village A	0.143	0.0643	2.22	2991	48
Village B	0.0429	0.0316	1.36	1469	29
Village C	0.1451	0.0148	9.80	689	211
Village D	0	0.0192	0.00	891	0
Village E	0.198	0.0253	7.83	1012	196
Village F	0.0077	0.018	0.43	799	10
Village G	0.0154	0.0189	0.81	838	18
Village H	0.0715	0.0111	6.44	495	144
Village I	0.0467	0.0219	2.13	975	48

Source: Ziping Xie, *Force and Debt: Rural Public Debt of GX county in Jiangxi Province*, 2003, Dissertation of Beijing University.

Second, there are immediate demands for local borrowing to finance infrastructure investment in rich jurisdictions. Although it has and it continues to be practiced either informally or illegally, sub-national government borrowing may have played an important role in local economic development. The significant improvement of local infrastructures in many jurisdictions across the country such as Shanghai and Beijing over the last decade could be partially attributed to local borrowing. Naturally, this impact may have been more significant in richer jurisdictions.

Clearly, there is a serious negative side to informal local borrowing. The practices lack transparency, they may seriously damage the accountability of sub-national governments, and foment an atmosphere of fiscal irresponsibility. Regulated and explicitly sub-national government borrowing is a much-preferred alternative.

Assessing the performance of the decentralization system

There is no standard approach in the literature on fiscal federalism to the evaluation of a decentralized system of finance. Some recent literature has begun to formulate empirical analysis of the impact of decentralization on economic growth and the efficient allocation of resources, on macroeconomic stabilization, on the equitable distribution of resources, on the composition of public expenditures, on the quality and effectiveness of service delivery, and so on.[13] In this sub-section we follow this approach to examine the performance of China's decentralization system along five particular dimensions: its impact on economic growth, its impact on regional inequality, its impact on revenue mobilization, its impact on fiscal disparities ,and its impact on the composition of sub-national expenditures (measured by the share of expenditures dedicated to social services-- health, education, and welfare in sub-national budgets.).

To carry the analysis we use consolidated provincial data, which incorporates revenues and expenditures of all other government levels below the province. The analysis covers a period of five years between1998 and 2002.

The first step is to quantify the dependent variables used to measure the performance of decentralization. To measure economic growth, we use the real growth rate (GRWTH), and to measure inequality we use the coefficient of variation of per capita GDP at the county level within the province (INEQ). To measure revenue revenue mobilization we use the growth rate in nominal fiscal revenues (RGRW), while in order to measure fiscal disparities we use the coefficient of variation at the county level within the province for fiscal expenditures (RINEQ). Finally, we use the share of expenditure on education, health care, and culture development in total expenditure (SSHARE) to measure sub-national government commitment to spending on social services.

In terms of explanatory variables, our main interest is to model variations in the level of decentralization. This can be a challenge since all sub-national units live under the same decentralization system at any time. However, the level of decentralization within provinces varies across jurisdictions when measured as the the share of sub-provincial

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[13] See, for example, the survey in Martinez-Vazquez and McNab (2003).

government expenditures in total budgetary expenditure at the provincial level. Therefore, we approximate the magnitude of decentralization of public services (DECE) as:

DECE = (total county fiscal expenditure + total prefecture fiscal expenditure)/provincial fiscal expenditure

In addition to the decentralization of public services we several other control variables. First, we approximate the level of local autonomy by the share represented in sub-provincial budgets by own revenues in total expenditure (OWNREV), or

OWNREV = (total county own fiscal revenue + total prefecture own fiscal revenue)/(total county fiscal expenditure + total prefecture fiscal expenditure)

Second, the impact of the composition of other funding sources is modeled by three variables: the relative importance of shared taxes in total fiscal revenues of sub-provincial governments (SHARE); the share of the tax rebate (REBATE) in total transfers, and the general transfer (GENERAL) in total transfers received by sub-provincial governments. In particular,

SHARE =(total county VAT, Business, Income Tax + total prefecture VAT, Business, Income Tax)/(total county fiscal revenue + total prefecture fiscal revenue)

REBATE = (total county tax rebates + total prefecture tax rebate)/(total county transfer + total prefecture transfer)

GENERAL = (total county general transfer + total prefecture general transfer)/(total county transfer + total prefecture transfer)

Third, we use several additional variables at the province level to control for budget and price (incentives) effects. These include:

the percentage of total transfer in provincial GDP,or
TRANS = total provincial transfer / provincial GDP;

the share of own revenues in total expenditure for provincial governments; or
PAUTO = total provincial own fiscal revenue /total provincial fiscal expenditure;

the share of tax rebates from the central government in total transfers received by the province, or
PREBATE = total provincial tax rebates / total provincial transfers; and

the share of general transfer from the central government in total transfers received by the province, or
PGENERAL = total provincial general transfer / total provincial transfer.

Finally, we introduce other control variables to follow the conventional specifications in the more recent literature on the overall impact of fiscal decentralization.[14] In the case of the economic growth equation, we follow the convention of introducing as explanatory variables the growth of capital input (CGRW), measured by the growth rate of overall capital investment, and the growth of labor input (LGRW), measured by the growth rate of labor. In the case of the inequality equation, we introduce inequality in previous year as an explanatory variable. In order to allow for incentive aspects we introduce GDP, fiscal revenues (PREV) and fiscal expenditures (PEXP) in per capita terms in the equations of revenue growth, fiscal disparities, and commitment to social spending in social services respectively.

The five equations to be estimated in implicit form are as following:

$GRWTH_{it} = f1(DECE_{it}, OWNREV_{it}, SHARE_{it}, REBATE_{it}, GENERAL_{it}, TRANS_{it}, PREBATE_{it}, PGENERAL_{it}, PAUTO_{it}, CGRW_{it}, LGRW_{it}) + e1$

$INEQ_{it} = f2(DECE_{it}, OWNREV_{it}, SHARE_{it}, REBATE_{it}, GENERAL_{it}, TRANS_{it}, PREBATE_{it}, PGENERAL_{it}, PAUTO_{it}, INEQ_{i(t-1)}) + e2$

$RGRW = f3(DECE_{it}, OWNREV_{it}, SHARE_{it}, REBATE_{it}, GENERAL_{it}, TRANS_{it}, PREBATE_{it}, PGENERAL_{it}, PAUTO_{it}, PGDP_{it}) + e3$

$RINEQ_{it} = f4(DECE_{it}, OWNREV_{it}, SHARE_{it}, REBATE_{it}, GENERAL_{it}, TRANS_{it}, PREBATE_{it}, PGENERAL_{it}, PAUTO_{it}, PREV_{it}) + e4$

$SSHARE = f5(DECE_{it}, OWNREV_{it}, SHARE_{it}, REBATE_{it}, GENERAL_{it}, TRANS_{it}, PREBATE_{it}, PGENERAL_{it}, PAUTO_{it}, PEXP_{it}) + e5$

Data and regression results

As indicated above, the analysis is based on the provincial data from 1998-2002. The data sources and the descriptive statistics for all the variables used in the regressions are shown in Table 6.1

Table 6.1 Descriptive statistics of the regression variables

	Max	Min	Average	C.V.
GRWTH	16.80	0.40	8.71	0.32
DECE	50373.01	3228.99	7190.45	0.54
OWNREV	0.89	0.09	0.61	0.24
SHARE	0.86	0.34	0.57	0.20
REBATE	0.82	0.00	0.40	0.48
GENERAL	0.20	0.00	0.02	1.79
TRANS	0.31	0.02	0.07	0.71
PREBATE	0.93	0.08	0.46	0.50

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[14] See, for example, Qiao et al. (2005).

ETAX	0.35	0.01	0.07	0.45
PGENERAL	0.13	0.00	0.03	0.96
SSHARE	0.29	0.14	0.21	0.14
CGRW	40.71	-6.43	13.44	0.61
LGRW	26.90	-13.14	0.08	45.48
INEQ	2.31	0.17	0.55	0.42
INEQPRE	2.31	0.17	0.54	0.42
RINEQ	1.49	0.09	0.51	0.50
RGRW	5.22	0.26	1.16	0.31
PAUTO	1.75	0.17	0.56	0.35
PREV	3776.16	165.48	661.99	1.09
PEXP	5306.98	347.42	1115.16	0.76
PGDP	33285.00	2301.00	8671.22	0.64

Data source: China Statistic Yearbooks, China Fiscal Statistic Yearbook, and Prefecture, City and County Statistic Yearbooks, several years.

To estimate the equations we use 2SLS for GRWTH, INEQ, RGRW and RINEQ equation and a two-way fixed effect estimation to allow for unmeasured provincial characteristics and time effects. SSHARE is estimated by GLS. The regression results are shown in Table 6.2. To test for the robustness of the estimations, we also estimated the equations using the average values for all variables across the sample years to test the robustness.

Table 6.2 Regression results

	GRWTH	INEQ	RGRW	RINEQ	SSHARE
DECE	0.0002 (1.58)[15]	0.00001 (0.87)	-0.00001 (-1.45)	-0.000002 (-0.60)	-0.0000004 (-1.13)
OWNREV	7.921 (1.28)	0.365 (0.97)	-0.529 (-2.20)	-0.027 (-0.14)	-0.022 (-1.06)
SHARE	-6.591 (-0.95)	-0.258 (-0.56)	0.102 (0.35)	0.042 (0.18)	0.017 (0.64)
REBATE	-3.485 (-0.85)	-0.141 (-0.49)	-0.022 (-0.12)	-0.243 (-1.79)	0.021 (1.27)
GENERAL	-2.470 (-0.26)	-0.976 (-1.94)	-0.288 (-0.91)	-0.284 (-0.87)	0.014 (0.47)
TRANS	28.249 (1.55)	1.469 (1.26)	2.688 (2.98)	-1.527 (-2.40)	-0.148 (-2.32)
PREBATE	-2.434 (-0.43)	0.205 (0.61)	-0.817 (-3.64)	0.157 (0.92)	0.014 (0.71)
PGENERAL	44.552 (1.27)	3.087 (1.50)	3.865 (2.56)	-1.485 (-1.26)	0.114 (0.97)
PAUTO	0.664 (0.11)	0.044 (0.43)	2.746 (41.77)	0.095 (1.16)	0.002 (0.26)
ETAX	-1.970 (-0.06)				
INEQ	-5.189 (-0.84)			0.008 (0.04)	
CGRW	0.120 (3.23)				
LGRW	-0.133 (-1.81)				
INEQT1		-0.029			

	(-0.21)				
GRWTH	-0.005 (-0.29)	0.001 (0.14)			
PGDP		0.00003 (1.55)			
PREV			-0.00003 (-0.50)		
PEXP					-0.00002 (-4.22)
_CONS	7.093 (1.24)	0.262 (0.68)	-0.353 (-0.99)	0.703 (3.64)	0.239 (10.45)
R^2	0.56	0.09	0.95	0.21	0.61
Observation			145		

In general the estimation results in Table 6.2 are disappointing in that we fail to find consistently significant results. A likely suspect is multicollinearity among the explanatory variables.

First, expenditure decentralization does not have a statistically significant impact on any of the dependent variables: economic growth, economic disparity, fiscal resource growth, fiscal disparity and relative spending on social services. This may suggest that our measure of decentralization is not the proper one but it may also indicate that the potential impact of decentralizing fiscal expenditure may have already been exhausted during the previous stages of fiscal reform.

Second, under the current revenue system, the measure of local autonomy had only a significant impact on the growth of fiscal revenue. It is interesting that the impact of provincial autonomy and sub-provincial autonomy had opposite effects on fiscal revenues. In particular, greater provincial autonomy improves the growth of fiscal revenues but greater sub-provincial autonomy slows it down.

The structure of local revenues does not have significant impacts on any of the dependent variables. This result is not surprising since local governments have very limited if no legislative autonomy on all local taxes and shared taxes under current system.

Third, intergovernmental transfers would seem to help fill the gap between local revenues and expenditures, although the coefficient is not statistically significant. Since the major part of local expenditures is the operation costs of local governments, this category tends to show less regional disparity than other government expenditures such as on education, health care and social security.

Fourth, different intergovernmental transfer programs had conflicting impacts. In particular, at the provincial level, general transfers from the central government helped to improve the growth of fiscal revenue, but the tax rebate decreased these incentives for fiscal resource growth. For the sub-provincial level, intergovernmental transfer programs are more efficient in improving equity, and the general transfer helped improve the regional equity in economic development.

Fifth, increasing local fiscal expenditures does not seem to help improve the share of expenditures going to social services. The result shows that per capita fiscal expenditure is negatively related to the share of local expenditure on social services. This may suggest that the current decentralization system may lack a mechanism to restrain local governments' behaviour regarding the composition of expenditures. Instead, as fiscal expenditure increases, local governments may face higher regional capital competition, and therefore more resources will be used in non-social programs in order to improve the economy and attract capital investment.

In summary, further empirical work will be needed to better evaluate the performance of China's decentralization system over the past two decades.

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