

Fiscal Reform and Rural Public Finance in China

Richard Bird, Loren Brandt, Scott Rozelle, and Linxiu Zhang*

Abstract

We present a summary analysis of the important changes in township and village finance in China between 2000 and 2004, based on a survey of 100 villages in 50 townships in 25 counties in five provinces. The reforms included the elimination of regular fee assessments imposed on rural households and the removal of the long-standing agricultural tax as well as increased investment efforts by upper-level governments in the rural sector. This “Tax-and-Fee reduction” was popular in rural China but it is too soon to say what the long-term effects of this policy might be. However, the analysis reported here shows clearly that by most measures and for most areas the initial effects on the fiscal health of townships and villages are mixed. One clearly beneficial effect of the increased centralization reflected in this package of reforms was that relatively more resources have been directed to poor rural areas. However, the evidence we present suggests that such investment would have had a bigger payoff had there been larger direct village input into infrastructure projects.

Key words: China; rural sector; villages; townships; local taxes; fees; intergovernmental fiscal relations.

JEL: R51, R28, H71, H77

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China's rural sector is important. Despite the rapid out-migration of recent decades, over 650 million people still live in its 750 thousand villages. China's highly successful economic reforms began in its rural sector. In the long run, both the path its future development takes and the social, economic and political consequences of that growth will continue to depend in key ways upon how the rural sector is treated. The continuing outflow of people from the rural sector in itself makes it important for national development to ensure that rural individuals, both those who leave and those who remain, are provided with at least minimal local public services. But if China's many remaining villages (and the townships in which they are situated) are to become more viable, accountable, and at least moderately effective in providing such services, they need a more sustainable fiscal basis than they now have. Growing disparities in income, wealth and public services between the urban and rural sectors, between different regions of the country, and within the rural sector will increase the stress on the political system over time.

For all these reasons, rural public finance issues have attracted considerable recent attention in China (Fock and Wong, 2005; Li, 2006; Tao et al., 2005; World Bank, 2005). These same concerns have also prompted significant reforms affecting the rural public sector at both the township and village level. Collectively referred to as *feigaishui*, or the Tax-for-Fee reforms, they include the elimination of regular fee assessments imposed on rural households, the removal of the long-standing agricultural tax, a change in the management of village fiscal accounts, and increased investment efforts by upper-level governments in the rural sector. Although villages are not an official level of government in China, in key respects they constitute (together with townships) the most important level of the public sector in terms of building rural infrastructure and providing a solid fiscal foundation for the provision of rural local public service.

Assessment of these important reform initiatives has been limited, however, largely because of a scarcity of comprehensive fiscal data at both the village and township level. Drawing on a unique survey designed and carried out by several of the authors, this paper provides a summary analysis of the changes in township and village finance between 2000 and 2004, a period that spans the implementation of key reforms.¹ This survey, which was carried out in March-April 2005, extends to 100 villages in 50 townships in 25 counties in five provinces (Jilin, Hebei, Shaanxi, Sichuan and Jiangsu). Even though the counties, townships and villages in each province were selected to provide a representative cross-section, China is so vast and varied a country that we have no pretension of telling the entire story here.² It is also important to keep in mind that by the end of 2004 the full effect of these reforms had not likely played out. Follow up survey work completed in the spring of 2008 will soon allow our analysis to be updated.

In the next section we summarize these unique data on village revenues and expenditures in 2000 and 2004, and discuss the nature of the changes observed over this period. However, we cannot understand changes at the village level without taking into fuller account reforms simultaneously occurring at the township level, many of which were directly related to village reforms. In the following section of the paper we therefore summarize briefly what was going on the township level during this period. Finally, in the concluding sections we relate the fiscal changes observed to a few of the broader issues touched on above.

Tax-for-Fee Reform and Village Finance

Table 1 provides a broad summary of the major changes in village finance that emerge from a detailed analysis of these data. We report data for 2000 and 2004 at both the

¹ More detailed description and analysis of these data at the village and township level can be found in two reports prepared for the World Bank (Brandt et al., 2005, Brandt et al., 2006)..

² The sample provinces cover each of China's five major agro-ecological zones. Within each province, we randomly selected counties, towns and villages. The village data are based mainly on interviews with village accountants. In most of the villages, village accountants used accounting records as a basis for their answers. Township data are based largely on official accounting books supplemented by interviews with officials concerned with accounting.

provincial level as well as for those villages in the richest and poorest quintiles in our sample. We focus our attention on several key aggregates: village per capita measures of fiscal revenue, expenditure (current as well as capital), fiscal balance (deficit or surplus), and total public goods investment.

At the risk of oversimplification, the overall effect of the Tax-for-Fee reform on village finances appears to be mixed. Revenues increased only modestly with the elimination of the regular fee for assessments on farmers (*tiliu*), but total expenditures grew by more than 20 percent, largely because of increasing village capital expenditures. As a result, by 2004 a growing number of villages were running deficits. Moreover, the increase in transfers from higher levels of government covered only about 40 percent of the revenue loss. Other sources of revenue—notably revenue from the contracting out of village land and enterprises, and from village land and asset sales—made up the balance, with the result that total revenues were almost the same in 2004 as in 2000. As we discuss in more detail below, the other revenue sources that helped villages temporarily narrow the spending gap are almost certainly not sustainable.

Considering all sources of finance over this period, villages experienced a nearly four-fold increase in total public goods investment from 48.4 *yuan* per capita to 191.3 *yuan*. Much of this increase was in roads, with about 75 percent of the increase being financed by increased transfers. Despite the fact that capital expenditures from higher-level transfers to poor areas were larger than those to richer areas, the net result was a slight increase in inequality of fiscal expenditure at the village level. Richer villages were able to derive sufficiently more revenue from their own sources, which more than offset the redistributive effect of transfers.

This aggregate picture conceals significant heterogeneity across provinces and even within provinces. Furthermore, even if the fiscal health of China's villages did not deteriorate too much as a result of the reform, other evidence that we discuss suggests that this outcome may well have come at the expense of the fiscal health of China's townships, the next level up in China's administrative hierarchy.

Village Revenues

Table 2 provides a more detailed summary of village per capita revenues in 2000 and 2004, respectively. In 2000, village revenue per capita was 78.7 yuan. Assessments on farmers were the most important (38.1 percent) source of village revenue, with nearly three-quarters of villages reporting revenue from *tiliu*. Next in importance were revenues from land and asset sales (20 percent), followed by payments for contracting out of village land and enterprises (17.7 percent). Transfers from higher levels of government accounted for only 5.9 percent of all village revenue, with slightly less than half of all villages reporting revenue from these sources.

In 2000, we observe significant differences across provinces in revenue per capita on the order of 5:1.³ Fiscal resources were most abundant in Jilin and Jiangsu, with per capita revenues of 154.8 and 103.5 yuan, respectively. In contrast, Sichuan and Shaanxi had much less revenue. These disparities mainly reflect differences in land-based revenues. For example, in Jilin revenue earned from the contracting of village land and assets was especially important. Interestingly, the difference between the richest and poorest village quintiles was much less, on the order of magnitude of only 2:1.

Between 2000 and 2004, per capita village fiscal revenues increased only by about 5 percent from 78.7 to 82.1 yuan. This percentage increase was much lower than the rise in per capita rural incomes (China Statistical Yearbook, 2006). The elimination of *tiliu* of 30 yuan per capita was offset by increased revenue from transfers from above (13.2 yuan), land and asset sales (7.7), contract payments for land and from enterprises (6.0), and a surtax rebate from the agricultural tax introduced in 2002 (4.5).⁴ Despite their

³ The details by province and also in terms of the richest and poorest quintiles may be found in Brandt et. al. (2005).

⁴ This rebate was supposed to be the main source of income to replace *tiliu*. In place of most fees that farmers were paying, a single agricultural tax assessment (in theory to be set at 8.5 percent of the local agricultural GDP) was collected from farmers. Although the entire amount was remitted to the township government, part of this amount (1.5 percentage points) was supposed to go back into the village's account

significant increase, in 2004 transfers from above still provided only about a fifth of total village revenue. On average, other village sources of revenue covered half of the loss of revenue from the abolition of *tiliu* and grew in importance. Revenue from village land and asset sales, for example, increased from 18.8 percent in 2000 to 28.6 percent in 2004, with a third of all villages reporting income from this source.

The effects again differed from province to province (not shown). In three provinces (Jiangsu, Jilin, and Hebei) the changes in average per capita revenue were nominal. In Shaanxi, however, there was actually an increase of more than half. In contrast, in Sichuan there was a reduction of nearly a third. Some of this heterogeneity reflects differences in how villages made up the shortfall in revenue caused by the elimination of *tiliu*. In Jilin, for example, most of the shortfall was made up by an increase in transfers from above. In Jiangsu, a third came from transfers from above, half from an increase in contract payments for land and from enterprises, and the rest was largely from the surtax rebate from the agricultural tax. In Hebei, the surtax rebate from the agricultural tax was the most important source of the offset, followed by transfers from above and land and asset sales. In Shaanxi, the reduction in the *tiliu* was offset partly by a small increase from transfers but mostly by an increase in revenue from land and asset sales. In contrast, in Sichuan the increase from transfers from above only made up 10 percent of the decline due to the elimination of *tiliu*. The absence of other sources of incomes to offset the elimination of *tiliu* explains the decline in per capita revenue in Sichuan. As the Sichuan experience illustrates, in many villages the Tax-for-Fee reform was not revenue neutral. In fact, 40 percent of the 101 villages in our study experienced a drop in fiscal revenue of 25 percent or more.

An important feature of the reform (although not set out in the tables) is that there was clearly significant redistribution in favor of the poorest villages. Villages in the poorest

as current revenue. This funding source is what we label the “surtax rebate from the agricultural tax.” In 2004, however, the government began a three year program to eliminate the agricultural tax, with local governments being required to reduce the agricultural tax by 3.5 percent in 2005 and an additional 2.5 percent in each of 2006 and 2007. In some provinces, provincial and local officials accelerated the government’s program and eliminated the tax completely in 2005. As a result, only 58.3 percent of villages collected the surtax rebate in 2004. This amount is supposed to be replaced by direct transfers from above.

quintile experienced an increase of 85 percent in revenues (from 75.2 yuan to 133.9 yuan) compared to an increase of only 1 percent in the richest quintile. As a result, the gap between rich and poor villages fell sharply from 1.90 in 2000 to only 1.08 in 2004. The reason for this progressive effect lies in the behavior of the transfers. Although all villages increased their revenue from land sales, for the poorest villages the decline in fee revenue was much more than offset by the increase in transfers.⁵

However, the redistribution in favor of the poorest 20 percent of villages may have been mainly at the expense of the middle 60 percent of villages. Nearly 40 percent of all villages reported a decline in revenue between 2000 and 2004 of 25 percent or more, consistent with an increase in the Gini coefficient for per capita fiscal revenue from 0.54 to 0.59 between 2000 and 2004 (See Table 3). In addition, although the redistribution of resources to poor villages (through transfers and by increasing investment financed from above) made them less dependent on their own current and future revenues, it had the opposite effect on richer villages. The latter have relied more on debt to increase capital expenditure, thus again raising important questions of sustainability.

Village Expenditure

Table 4 summarizes village expenditures. We report here only a few of our findings. In 2000, almost two-thirds of per capita expenditure was for current expenditures, of which more than half was for salaries and administrative expenses. Slightly less than a quarter went to maintenance expenditures, and expenditure on social welfare accounted for most of the balance. About one-third of the villages reported capital expenditures financed from current revenues or savings in 2000 and a third also reported debt repayment. Prior to Tax-for-Fee reform, villages were investing significant amounts of their own resources into public goods.

⁵ Even these numbers need to be interpreted carefully. Rich villages typically have populations that are 3 to 4 times larger than poor villages. Thus, on a per capita basis more went to individuals living in poor villages, but in absolute terms more went to rich villages.

Differences across provinces in 2000 in terms of expenditure were smaller than for revenues, with consistently one-third or so of current expenditure going to salaries in each province. Although current expenditures differed significantly between the richest and poorest villages, both groups had nearly the same levels of capital expenditures. The main difference was that poorer villages financed nearly 85 percent of their capital expenditures by borrowing, while richer villages were able to finance their capital expenditures from current revenue and savings.

Our village data reveal two significant changes in village expenditures between 2000 and 2004 (Table 4). First, total village expenditures shifted from current to capital expenditures. Second, much of the increase in capital expenditures was financed by debt, which increased between 2000 and 2004 from 8.4 yuan to 25.2 yuan per capita. There is significant heterogeneity across provinces in these trends however (not shown in tables). Expenditures declined most in Shaanxi, owing to a sharp decline in debt-financed capital expenditures, and in Hebei, where both current and capital expenditures declined. On the other hand, in Jiangsu and Sichuan capital expenditures nearly quadrupled. In terms of the distinction between rich and poor villages, the most notable change was a reduction in debt-financed expenditures by poor villages however such expenditures actually increased in rich villages. However, by 2004 debt repayment became more important in poor villages with 20 percent of their fiscal expenditure being earmarked for the repayment of debt.

Table 5 depicts per capita total public investment and the sources of financing. In 2000, average total public investment financed from all sources was 48.8 *yuan*. Roads, irrigation, drinking water and schools were (in order of importance) the most important investment projects. Nearly 30 percent of all villages had investment projects in roads and irrigation. About 15 percent of villages reported investment in drinking water. On the other hand, 11.9 percent reported investment in schools. Reflecting the highly decentralized nature of investment into public investment in rural China, the most important source of finance in 2000 was the village itself: 46.9 percent from the village committee (through the use of current revenue and savings or financing by debt) and an

additional 17.9 percent directly from village households (through special assessments on farmers, or *jizi*). Since only about a fifth of the investment was financed by transfers—slightly skewed towards roads and irrigation projects—much of the heterogeneity observed in levels of total public goods investment presumably reflects structures, including governance structures, at the village level that influence local ability and willingness to undertake investment projects.

Differences across provinces in total public investment in 2000 (not shown in the tables) were relatively small with the exception of Jilin, in which total public investment was only a sixth of that reported in the other four provinces. There were also important provincial differences in the composition of public goods investment. For example, roads and irrigation were especially important in Jiangsu; in Sichuan, roads and drinking water consumed more than 80 percent of total public goods investment, while in Shaanxi, more than two-thirds went to investment in schools. Comparing the poorest and richest of villages, in per capita terms the differences in 2000 were marginal. However, poorer villages weighted their own investment heavily towards schools, while in richer villages resources were primarily directed towards roads and other investments. These differences may reflect differences in the existing endowments of public goods between rich and poor villages.

Between 2000 and 2004, when village level public investment increased substantially, there was clearly a marked bias towards roads and bridges, followed by irrigation and drinking water. In 2000, one-third of villages had a road project; in 2004, two-thirds did. Similar increases occurred in the level of investment in irrigation and drinking water projects. On the other hand, although the number of villages reporting investment in schools also increased, such investment actually declined in per capita terms.⁶ As usual, we observe significant heterogeneity across provinces: for example, in Jiangsu, 95 percent of the increase in public investment went to roads. In Sichuan, about half went to

⁶ The relatively low rise in school investment is likely correlated with the fact that educational reform was just beginning to shift responsibility for school buildings and other infrastructure from the village to the county government. No significant investment in clinics was observed, which largely reflects the fact that these have been subcontracted to individuals to run and manage.

roads. In the other provinces, the rise in investment that went to roads was closer to a third. Even in Hebei, where there was no overall increase in public investment, there was a change in composition, with an increase in roads and drinking water offsetting the decline in “others.” These differences between provinces most likely reflect both differences in initial conditions and the source of the funding.

By 2004, the share of total capital expenditures financed by transfers had almost tripled. The effects of the financing shift are also visible when one compares richer and poorer villages. In 2000, per capita investments were very similar between poor and rich villages (65.8 *yuan* versus 63.4 *yuan*). In contrast, by 2004 investment in rich villages was 317.2 *yuan* per capita compared to only 170.5 *yuan* in poor villages. Although investment in both rich and poor increased substantially, in poor villages increased transfers substituted for financing by the village (from current revenues/saving and by debt) to financing from above and other sources. On the other hand, in the richest villages, increased transfers were complemented by increases in the absolute contribution of the village (from both current revenues/savings and from debt). Associated with this different financial mix is a difference in the composition of investment. In the richer villages, nearly 95 percent of the increase in investment went to roads. In poorer villages, investments in drinking water and the “other” category were especially important in 2004. On the other hand, investments in schools, a major priority in 2000, declined.

Fiscal Reform at the Township Level

The reforms occurring at the village level were directly related to a simultaneous set of reforms at the township level.⁷ The Tax-for-Fee reform not only eliminated *tiliu*; it also eliminated *tongzhou*, fees from farmers collected at the village level and remitted to the township. In addition, the fiscal reform package included policies that reassigned expenditures, realigned responsibilities, reduced the importance of extra-budgetary and

⁷ For a detailed analysis of recent township level fiscal reforms, see Brandt et al. (2006).

self-raised funds, and, as already discussed, increased investment in infrastructure in rural areas.

On the whole, our data from the fifty towns from the five sample provinces suggest that, the broad impact of the fiscal reforms on township fiscal health has not been beneficial. On average, expenditures were almost double local fiscal revenues throughout the 2000 to 2004 period, a period during which township revenues fell by 6 percent and expenditures by 11 percent. Although county to town transfers rose, the increase did not come close to covering the reduction of fiscal resources to townships. Moreover, many transfers were earmarked, leaving little latitude for decision-making by township leaders. Finally, it was clear during our field work that county financial offices have been given increased control over township expenditure even from own fiscal resources.

One motivation for downgrading the fiscal independence of townships was concern that township governments were not paying enough attention to the provision of rural public services. For this reason, although townships continue to be required to support rural education, they now do so by transferring resources up to the county which then directly pays teacher salaries. Similarly, a motivation for increased county control over local public investment was to ensure that more was directed to rural areas and particularly to poor rural areas. A positive outcome of the fiscal reform was indeed a substantial increase in rural infrastructure, not least in poorer areas. However, almost all the new investment came from above and there was little direct involvement at the village level in project selection, design or implementation. As we elaborate below, this increased top-down control appears to be associated with reduced village level satisfaction.

We also noted earlier that one result of the fiscal reform was a reduction in the amount of own fiscal resources available to villages. A consequence of this trend has been that revenue-short village leaders often seek funds from townships for a variety of reasons—for example, to repair village irrigation works or bridges. These pressures from below have had the effect of further exacerbating the fiscal pressures on townships resulting from reform. Increasingly pressed from below and directed from above, township fiscal

managers have been finding life very difficult in recent years. The undermining of the operating budget at both the village and township levels that appears to have been a major outcome of the fiscal reforms stands in sharp contrast to the obvious intention and effort of the national government to increase investment in rural China as part of its overall strategy of strengthening the rural economy.

Table 6 shows the two stories of the effect of the fiscal reforms on township fiscal health. On the one hand, the fiscal reforms have undermined—or at least not improved—the current budgetary condition of townships.⁸ Total fiscal revenues are down. Although county to township transfers have increased, so have township to county upward remittances. Even with the additional subsidies associated directly with the fiscal reforms, disposable financial resources at the township level in 2004 were no larger than in 2000. This stagnation in disposable fiscal resources has occurred despite additional fiscal pressures for townships arising from the need to aid villages that have lost fiscal resources.⁹

On the other hand, total investment in rural infrastructure by the township has increased sharply (see also Luo et al. 2007). Assuming road construction is helpful to villagers, the major effort made to increase investment into rural areas during the period of fiscal reform succeeded. However, the rise in investment had other, perhaps unexpected, consequences. Given the tight fiscal conditions, when increases in investment by upper level were accompanied by demands for matching funds (as was often the case), the result in many townships has been increased borrowing. On average, per capita debt rose 23 percent in townships between 2000 and 2004.

Village Fiscal Health and Farmer Satisfaction

⁸ It is important to emphasize, however, that in many ways the fiscal reforms were relatively more beneficial for poorer townships. For further discussion of this point as well as differences between provinces, see Brandt et. al. (2006).

⁹ Additional pressure resulted from a mandated national increase in wages: between 2000 and 2004, the (nationally dictated) average wage for civil servant rose by over 35 percent.

It is still too soon to assess the impact on rural China of the major fiscal reforms of recent years. For example, the linkages (and time lags) between fiscal changes and changes in rural incomes and productivity are complex and may take a long time to work out. All we have attempted here is the much more modest task of reporting in summary form the impacts on village and township finances of the package of fiscal reform introduced in the early years of this century end. It is clear from our analysis that these reforms had substantial, but often mixed, impact on the fiscal health of both villages and townships.

To examine further the effect of the fiscal reforms on village fiscal health we consider the impact of six measures of fiscal reform (or its effect on township fiscal health) on three indicators of village fiscal health. The reform measures include two measures of changing township fiscal health, two measures of county fiscal support, and two measures of the support upper-level policy makers give to townships in the form of investment transfers for infrastructure investment. The three measures of village fiscal health are changes in village fiscal revenue per capita, changes in village fiscal expenditure per capita, and changes in village infrastructure investment per capita.

We rank townships on the basis of each fiscal reform measure and then divide the sample into quartiles so that we can separate townships in which expenditure fell the most from those in which expenditure rose the most. We then compare village outcomes in the two extreme quartiles. Table 7 summarizes the results.

Panels A and B of the table provide evidence that when township fiscal health is improving (expenditure per capita is rising or the fiscal resource to expenditure balance is improving), village revenue per capita tends to rise and village expenditure per capita does not deteriorate as much. In these and other ways, there appears to be some correlation between township fiscal health (in terms of the operating budget) and village fiscal health (in the same terms). However, there is no correlation between the township measures of fiscal health in terms of the operating budget and public investment at the village level.

Similarly, as panels C and D of the table show, there is almost no discernible relationship between the fiscal relationship between the county and township, and the village.

Whether the county provides (demands) more or less transfers to (from) townships, there is no clear pattern in the change in any of the village measures. If this is correct, it would seem that increased county control over townships appears to have had little if any effect on the fiscal condition of villages. The same is true with respect to the relation between county-controlled investment transfers and the health of village operating budgets (panels E and F of Table 7). Capital accounts in China, it seems, are managed quite independently of operating budgets. This explanation is also supported by the fact that there is a clear relationship between investment from above and village investment. In villages in which upper-level governments invest more, there is more investment. If higher levels invest less, there is less investment.

In other words, if upper-level governments want to get more investment in villages, under the present system they can best do it by making the investments themselves.

Unfortunately, as Table 8 suggests, they may be making less than optimal investments since the evidence confirms the hypothesis (Liu et al. 2007) that, holding the level of investment fixed, the more that investment is financed by transfers from above—so that the villages' stake-holding in the project is less—the lower farmer satisfaction with rural investment seems to be. This result is robust regardless of the type of project (road, school, etc.), the gender of respondents, and the location (county). Farmers, it seems, enjoy getting more in the form of rural investment; but they might perhaps enjoy it even more if they had some say in selecting and designing the projects. .

Conclusion

Unsurprisingly, the set of fiscal reforms generally referred to under the label of the Tax-and-Fee reduction was popular in rural China: everyone likes lower taxes! However, although it is too soon to say what the long-term effects of this policy might be, the analysis reported here shows clearly that by most measures and for most areas the effects on the fiscal health of townships and villages are mixed. The increased investment by

higher level governments in rural areas that accompanied the reform clearly has the potential to make many rural people better off. Indeed, one beneficial result of the increased centralization reflected in this package of reforms has been that relatively more resources have been directed to poor rural areas. However, even in these cases the evidence presented here suggests that such investment would, in welfare terms, have had a bigger payoff if there were larger direct village input into the selection design and implementation of infrastructure projects. Moreover, in the province of Jiangsu and richer townships, the need for additional matching funds has resulted in increased local debt.

As Wong and Bird (2008) and others have argued, the intergovernmental dimensions of China's public finances remain a work in progress in the sense that there is much that needs to be done before the inter-governmental system is placed on a sound basis. In at least two ways, the recent package of reforms affecting rural public finance appears to have moved in the wrong direction in this respect. First, by eroding the fiscal resources and control of both China's lowest official level of government—the township—and that of its lowest effective "governing" body—the village—these reforms have moved the system even further away from one that is likely to be able both to accommodate the heterogeneity of China's rural reality and at the same time sustain an adequate level of rural public services. Second, by strengthening upper-level control of local public finance, the reforms have made it even more difficult for China to develop an effective and responsible local public finance system.

The marked fiscal re-centralization emerging from the recent package of fiscal reforms makes it clear that upper-level leaders are afraid lower-level leaders will not manage fiscal resources responsibly. It is equally clear, however, that when fiscal management is too far removed from local reality the outcome is not likely to be ideal. Many of the problems manifest at the local level in China result from the inadequacy of local governance institutions and the lack of effective checks on the behavior of local leaders. Changes that "solve" some of the resulting local problems essentially by kicking them upstairs are in the end almost certainly doomed to failure. Ultimately, the development of more responsive and sustainable local fiscal management in China will inevitably

require both the devolution of more decision-making power over public finance to local governments and the development of local governments that are more openly and directly responsible to the local people whom they are supposed to serve.

Table 1: Summary Table**UNIT: Yuan per capita**

	2004								2000							
	Total	Jiangsu	Sichuan	Shanxi	Jilin	Hebei	Rich	Poor	Total	Jiangsu	Sichuan	Shanxi	Jilin	Hebei	Rich	Poor
1 Revenues	82.1	1098	229	48	156	412	145	1339	78.7	1035	329	312	1548	406	143.1	75.2
2 Total Expenditure (1)	70.3	1078	28.6	38.5	104.3	399	125.5	77.9	70.4	89.6	26.2	42.2	98.8	79.5	138.7	56.1
3 Total Expenditure (2)	95.3	1675	55.8	51.9	104.3	49.7	187.9	84.7	78.5	98.2	30.8	7.3	99.5	84.2	141.5	94.1
4 Of which:																
5 Current Expenditure	40.1	62.1	19.6	26.5	53.8	21.9	70.9	37.6	44.8	65.8	20.3	23.3	68.3	28.5	75.8	42.8
6 Capital Expenditures (1)	17.3	36.9	1.1	4.4	16.8	14.2	37.8	11.8	14.6	17.1	2.3	4.3	2.4	45.8	45.1	6.2
7 Capital Expenditures (2)	42.3	96.6	28.3	17.8	16.8	2.4	100.2	18.6	22.7	25.7	6.9	35.1	3.1	50.5	47.9	44.2
8 Repayment of Principle	12.9	8.8	7.9	7.6	33.7	3.8	16.8	28.5	11	6.7	3.6	14.6	28.1	5.2	17.8	7.1
9 Fiscal Balance																
10 Deficit/Surplus (1)	11.8	2	-5.7	9.5	51.7	1.3	19.5	5.6	8.3	13.9	6.7	-1.1	5.6	-38.9	4.4	19.1
11 Deficit/Surplus (2)	-13.2	-57.7	-32.9	-3.9	51.7	-8.5	-42.9	49.2	0.2	5.3	2.1	-41.8	55.3	-43.6	1.6	-18.9
12 Total Public Goods Investment	191.3	352.7	214.5	156.4	78.2	63.4	317.2	170.5	48.4	58.6	52.4	69.4	6.6	60.1	63.4	65.8

Notes:

Total expenditure (1) is the sum of rows 5, 6 and 8; Total expenditure (2) is the sum of rows 5, 7 and 8.

Deficit/Surplus (1) is row 1 minus row 2; Deficit/surplus (2) is row 1 minus row 3.

Capital expenditures (1) include only those financed by current revenues/savings; capital expenditures (2) in addition includes expenditures financed by debt

Table 2: Per Capita Fiscal Revenue: Sources of Funding**UNIT: YUAN/ PERCENTAGE**

Revenue Categories	2004				2000			
	Mean	Std. Dev.	Percent>0	Percent of total revenue	Mean	Std. Dev.	Percent>0	Percent of total revenue
1 Transfers from above	17.8	37.4	82.2	21.7	4.6	7.5	48.5	5.9
2 Regular fee assessments from farmers (tiliu)	0.2	1.5	1.0	0.2	30	39.0	73.3	38.1
3 Surtax rebate from agriculture tax	4.7	5.5	58.4	5.7	0.2	1.3	1.0	0.2
4 Contract payment for land	12	31.2	51.5	14.6	8.1	16.3	50.5	10.3
5 Contract payment for enterprises	7.9	44.2	12.9	9.6	5.8	31.8	17.8	7.4
6 Land and asset sales	23.5	85.2	32.7	28.6	15.8	55.1	18.8	20.0
7 Other revenues ^a	16	24.9	59.4	19.5	14.3	24.9	54.5	18.2
8 Total revenues ^b	82.1	123.4	100.0	100.0	78.7	93.4	99.0	100.0

^a. Other includes such items as administration fees from enterprises, profits from village-owned enterprises, income from fines, etc.

^b. Total revenue is the sum of rows 1 to 7.

Table 3: Inequality Measures for Fiscal Revenues and Expenditures

Gini coefficient	2004	2000
Revenues	0.59	0.54
Total expenditures (2)	0.57	0.5
Current expenditures	0.44	0.43
Capital expenditures(2)	0.73	0.68
Total public goods investment	0.64	0.6

Table 4: Per Capita Total Fiscal Expenditure: Composition of Expenditures**UNIT: YUAN**

	2004				2000			
	Mean	Std. Dev.	Percent>0	Percent of total expenditures (2)	Mean	Std. Dev.	Percent>0	Percent of total expenditures (2)
Total fiscal expenditures								
1 Current expenditure	40.1	41.9	100.0	42.0	44.8	37.9	100.0	56.8
2 Salaries	14.4	11.7	98.0	15.1	15.0	11.8	96.0	19.1
3 Administrative Expenditures	6.7	7.3	99.0	7.0	9.0	8.6	99.0	11.4
4 Maintenance expenditures	8.0	10.5	80.2	8.4	10.6	14.2	80.2	13.4
5 Social welfare expenditures	6.1	17.6	74.3	6.3	3.8	6.2	71.3	4.8
6 Other expenditures	5.0	8.5	80.2	5.2	6.4	12.2	76.2	8.1
7 Total capital expenditures financed by the village leadership	42.5	105.7	66.3	44.5	23.0	66.8	40.6	29.2
8 Financed by current revenues/ savings	17.3	47.4	51.5	18.1	14.6	44.8	35.6	18.5
9 Financed by debt	25.2	85.6	32.7	26.4	8.4	47.3	12.9	10.7
10 Repayment of principle	12.9	33.4	50.5	13.5	11.0	27.6	32.7	13.9
11 Total expenditures (2)	95.5	138.9	100.0	100.0	78.8	85.4	100.0	100.0

Note: Row 1 is the sum of rows 2 to 6; row 7 is the sum of rows 8 and 9, row 11 is the sum of rows 1, 7 and 10.

Table 5: Funding of Public Investment: By Project Type**UNIT: YUAN/ PECENTAGE**

	2004					2000				
	Mean	Percent from higher levels of government	Percent from Village Committee	Percent from households	Percent from other sources ^c	Mean	Percent from higher level of government	Percent from Village Committee	Percent from households	Percent from other sources ^c
Public goods investment										
1 Road & bridge	123.6	64.8	22.9	11	1.3	15.1	23.4	46.5	28.6	1.5
2 Schools	7.3	30.9	13.5	3.6	52.1	8.9	23.8	57.2	14.9	4.1
3 Irrigation	20.4	50.5	28.1	10.1	11.2	10.2	42.3	31.4	21.2	5.1
4 Drinking water	17.6	42.7	24.3	19.3	13.6	4.3	4.6	1.5	3.8	90.1
5 Clinic	0.9	0	3.8	0	96.2	0	0	100	0	0
6 Other ^a	21.6	61.3	13.5	8.2	17	9.8	1.2	74.1	6.9	17.8
7 Total public goods investment ^b	191.3	59.2	22.1	11	7.7	48.4	21.3	46.9	17.9	14

^a. Other includes electricity, village office building construction, green for grain projects, investment in communications, etc.

^b. Row 7 is the sum of rows 1 to 6.

^c. Other sources include funds from overseas, donations from local enterprises, investment by small groups (xiaoxu) in the village, private investment, and investment by public utilities.

Table 6: Summary of Township Fiscal Health, Including Summary of Operating Budget, Capital Budget and Debts in China, 2000 and 2004 (Unit: Yuan per capita)

Row	ITEM	2004	2000
1	Total Township Fiscal Revenues ^a	182	211
2	Local Taxation revenue	129	95
3	Town Taxation revenue	66	70
4	Township-to-county transfers	93	34
5	Mandated Township-to-County Transfers for Expenditure Sharing	21	2
6	County-to-township transfers	84	58
7	Township disposable fiscal resources ^b	119	119
8	Supplementary funds shifted from extrabudgetary funds	6	22
9	Total extra-budgetary revenue	53	55
10	Total Self-raised funds	10	37
11	Total Current Expenditure ^c	186	204
12	Total Budgetary Expenditure	126	142
13	Total Extra-budgetary Expenditure	59	62
14	Total Public investment expenditure	217	77
15	Total township debts	290	236

Notes:

a. Row 1 = 7+9+10, or Total Township Fiscal Revenues is equal to Disposable Financial Resources plus Extrabudgetary Revenues plus Revenues from Self-raised Funds

b. Row 7 = 1-4+6, or Disposable Financial Resources is equal to Total Township Fiscal Revenues minus Town-to-County Transfers plus County-to-Town Transfers.

c. Row 11 = 12+13, or Total Current Operating Expenditures is equal to Total Budgetary Expenditures plus Extrabudgetary Expenditures.

Table 7: Correlations between Measures of Township Fiscal Reform and Village Fiscal Health in China, 2000 and 2004 (Unit: Yuan per capita)

Measures	Quartile	Village fiscal indicators	2004	2000
Panel A: Impact of Percentage Change in Expenditure per Capita between 2000 and 2004 (ranked from lowest to highest and grouped into quartiles)				
Measure 1	Lowest Quartile (range of variable: -76 to -42)	Village revenue per capita	112	120
		Village expenditure per capita	51	63
	Highest Quartile (range of variable: 32 to 190)	Village investment per capita	131	36
		Village revenue per capita	72	40
		Village expenditure per capita	34	34
		Village investment per capita	325	52
Panel B: Impact of percentage change in the gap between disposable financial resource per capita and per capita budgetary expenditures between 2000 and 2004 (ranked from lowest to highest and grouped into quartiles)				
Measure 2	Lowest Quartile (range of variable: -177 to -3)	Village revenue per capita	110	115
		Village expenditure per capita	45	56
	Highest Quartile (range of variable: 33 to 233)	Village investment per capita	334	33
		Village revenue per capita	126	87
		Village expenditure per capita	56	58
		Village investment per capita	268	25
Panel C: Impact of percentage change in the share of county to town transfers as a share of disposable fiscal resources between 2000 and 2004 (ranked from lowest to highest and grouped into quartiles)				
Measure 3	Lowest Quartile (range of variable: -70 to -8)	Village revenue per capita	121	97
		Village expenditure per capita	39	45
	Highest Quartile (range of variable: 77 to 165)	Village investment per capita	136	40
		Village revenue per capita	53	85
		Village expenditure per capita	35	45
		Village investment per capita	153	92
Panel D: Impact of percentage change in the share of town to county transfers of total tax revenue collections between 2000 and 2004 (ranked from lowest to highest and grouped into quartiles)				
Measure 4	Lowest Quartile (range of variable: -87 to -6)	Village revenue per capita	74	75
		Village expenditure per capita	26	39
	Highest Quartile (range of variable: 82 to 338)	Village investment per capita	176	42
		Village revenue per capita	63	87
		Village expenditure per capita	43	51
		Village investment per capita	216	71
Panel E: Impact of percentage change in the share of total investment from upper level government transfers between 2000 and 2004 (ranked from lowest to highest and grouped into quartiles)				
Measure 5	Lowest Quartile (range of variable: -57 to 0)	Village revenue per capita	75	43
		Village expenditure per capita	24	30
	Highest Quartile (range of variable: 74 to 100)	Village investment per capita	70	71
		Village revenue per capita	90	109
		Village expenditure per capita	28	37
		Village investment per capita	115	15
Panel F: Impact of percentage change in absolute amount of upper level government transfer for public investment between 2000 and 2004 (ranked from lowest to highest and grouped into quartiles)				
	Lowest Quartile	Village revenue per capita	29	34

Measure 6	(range of variable:	Village expenditure per capita	21	24
	-34 to 9)	Village investment per capita	103	61
	Highest Quartile	Village revenue per capita	75	75
	(range of variable:	Village expenditure per capita	46	53
	101 to 757)	Village investment per capita	336	53

Notes:

Measure 1: Change (in percentage terms) in township expenditure per capita between 2000 and 2004

Measure 2: Change in the gap between disposable financial resources per capita and per capita budgetary expenditures between 2004 and 2000

Measure 3: Change in the share of county to town transfers as a share of disposable fiscal resources between 2000 and 2004

Measure 4: Change in the share of town to county transfers of total tax revenue collections between 2000 and 2004

Measure 5: Change in the share of total investment from upper level government transfers between 2000 and 2004

Measure 6: Change in absolute amount of upper level government transfer for public investment between 2000 and 2004.

Table 8. Regression Results Explaining Villager Satisfaction as a Function of Total Investment and Share of Investment Financed from Upper Level Governments in China, 2004

Explanatory variables	Dependent variable: Measure of Satisfaction of Individuals in Village on Public Goods Service (Satisfied=1, No=0)			
	Model 1	Model 2	Model 3	Model 4
Total investment level	0 (3.25)***	0 (2.70)***	0 (3.58)***	0 (3.84)***
The share from above	-0.102 (2.07)**	-0.124 (2.46)**	-0.118 (1.94)*	-0.169 (2.18)**
District dummy	~	Province	County	Town
Gender Dummy (Male=1)	~	Yes	Yes	Yes
Project dummy	Yes	Yes	Yes	Yes

References

- Brandt, Loren, Scott Rozelle, Yuanyuan Yan and Linxiu Zhang, “China’s Rural Public Finance: The Village Perspective,” 2005. ANNEX 7: Report to the World Bank, Village Finance: Tax-for-Fee Reform, Village Operating Budgets and Public Goods Investment.
- Brandt, Loren, Scott Rozelle, Yuanyuan Yan and Linxiu Zhang, “China’s Rural Public Finance: The Township Perspective”, 2006. Annex 8: Report to the World Bank, Fiscal Reform and the Role of the Township
- Fock, Achim, Wong, Christine, 2005. Extending Public Finance to Rural China. Background for Presentation at the MOF-World Bank International Seminar on Public Finance for Rural Areas.
- Li, Linda Chelan, 2006. Embedded institutionalization: sustaining rural tax reform in China. The Pacific Review, 19, 1, 63-84.
- Liu, Chengfang , Linxiu Zhang and Scott Rozelle, 2007. “A Study on the Factors Impacting the Quality of Public Goods Investments in Rural China”. Journal of Agro-technological Economics (Chinese), 2, 11-18.
- Renfu Luo, Linxiu Zhang, Jikun Huang and Scott Rozelle, 2007. “Elections, Fiscal Reform and Public Goods Provision in Rural China”, Journal of Comparative Economics, 235, 583-611.

- Tao, Ran, Liu, Mingxing, 2005. Urban and rural household taxation in China-- measurement, comparison and policy implications. Journal of the Asia and Pacific Economy 10(4), 486-505.
- Wong, Christine and Richard Bird, 2008. "China's Fiscal System: A Work in Progress." In China's Great Economic Transformation. Ed. Loren Brandt and Thomas G. Rawski. Cambridge University Press, pp. 429-467.
- World Bank, 2005. Tax for Fee reform and Public Investment in China's Rural Communities. Report of the World Bank, Beijing Office, Beijing, China.
- Zhongguo tongji nianjian 2006 [China Statistical Yearbook]. Beijing: Zhongguo Tongji Chubanshe.