# From the Helping Hand to the Grabbing Hand:

# **Fiscal Federalism and Corruption in China**

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#### Abstract

Helping and grabbing hand behavior can be used to describe behavior of government in transition economies. In both cases there is corruption, but of different types and with different consequences for economic development. With the helping hand, corruption is organized, and government assists development. With the grabbing hand, corruption is more individualistic and disorganized, and government impedes development. The grabbing hand has been described as present in Russia and other former socialist European countries, whereas behavior of local government officials in China has previously been described as helping hand. In this paper we study a fiscal recentralization that occurred in China in the mid-1990s. We set out to examine the interaction between central and local government in which the center chooses the division of budgetary tax revenues, and local government chooses between a helping and grabbing hand. Our empirical estimates indicate that the center did benefit from the fiscal centralization, but at the expense of local government. Moreover, budgetary revenue and economic growth declined because of the change from helping to grabbing hand behavior by local government.

(JEL D72, D78, H11, H73, H77, P26, P30)

## 1. Introduction

The distinction between grabbing and helping hands of government officials has arisen in explaining outcomes in transition economies. In Russia, the Ukraine, and elsewhere, government officials have been described as having grabbing hands in their dealing with the private sector (see Frye and Shleifer 1997, Shleifer 1997, Gelb et al. 1998, Levin and Satarov 2000, Blejer and Škreb, 2001). In China government officials have been described as providing with a helping hand to private investment and initiative (see Oi 1992, 1994; McKinnon 1992; Montinola et. al. 1995; Qian and Weingast 1996, 1997; Jin et. al. In Russia, local governments did not benefit from an 1999). expansion in the local tax base, because increases in tax revenues of local government were offset by obligations to remit taxes to the center. Local government officials therefore had no incentive to adopt helping hand behavior that could help expand the local tax base and increase tax revenue (Zhuravskaya 2000). The grabbing hand grabbed where possible through extortion and unofficial payments, before the central government could stake its claim. The helping hand in China also reflected self-interest of local government officials, who personally benefited from taxes on the profits of local businesses, because regional or local government was the residual claimant under the revenue-sharing rule with the central government. Blanchard and Shleifer (2000) propose that the helping hand in China was also attributable to the authority of the center to appoint provincial governors and fire those with grabbing hands.

This praise for the helping-hand in fiscal federalism in China contrasts, however, with other studies that have observed problematical aspects of inter-government relations. The problems include regional protectionism, self-interested

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intervention by local government officials in local business, and erosion of central government authority (see Chen 1991, 1995; Wong 1987, 1991). The existence of these problems led the central government of China to change the structure of centrallocal fiscal relations in 1994. The changes meant that local government was no longer the residual claimant to tax revenue and that restrictions were placed on the benefits that local government could provide to local business.

In this paper we investigate how the change in fiscal relations been central and local government affected the choice of local government between helping and grabbing hand behavior. Section 2 sets out the background for the change in central-local fiscal relations. In Section 3, helping or grabbing hand behavior is measured by the relation between local government off-budget revenue that local governments keep for themselves and budgetary revenue that is subject to the revenue-sharing rule with the center. The measure of helping and grabbing hand behavior applied to the individual Chinese provinces confirms the presence of a significant change from helping hand to substantive grabbing hand behavior in local government after the fiscal re-centralization in the 1990s. The benevolent helping hand that had distinguished the experience of local government in China from the grabbing hand of local government in Russia and other former socialist European countries was no longer present.

The empirical estimates moreover indicate that the change in revenue sharing by the central government of China from high to low shares of budgetary tax revenue for local government led to Pareto-inefficient changes. The center did benefit from the fiscal centralization, but at the expense of local government. Moreover, budgetary revenue and economic growth declined because of the change from helping to grabbing hand behavior by local government.

## 2. Taxation and Fiscal Federalism in China

Before the introduction of market-oriented economic reforms in China in the late 1970s, local governments were not responsible for their expenditures, which were financed through the national budget. There was no incentive for local government to seek to increase revenue, because all revenues were sent to the center for redistribution. Confronted with declining revenues, the Ministry of Finance (MOF) introduced a center-local government revenue-sharing system in 1977. Local government entered into long-term revenue-sharing contracts with the central government. The contract specified the total revenues to be remitted to the central government, and left local government as the residual claimant to revenues collected in the local jurisdiction. The MOF moved cautiously at first. There were experiments with revenue sharing in Jiangsu and a few other provinces. The system was declared as a success by MOF, because it brought more certainty to the central government budgetary revenue, and was subsequently extended to all provincial-level governments in 1980 (Chen 1998a).

The new revenue-sharing contract changed the incentives of local government officials. Rather than seeking rents from the center, the local officials now had an incentive to enhance the local tax base.

The new revenue-sharing procedure also had an unintended political-economy consequence. Revenue sharing was identified as a reform measure that had been introduced by reformist leaders at the center. Since local government officials were beneficiaries of the perceived economic reform, reformist leaders at the center had pro-reform support from regional politicians. The balance of pro-reform and anti-reform forces was changed, and the reformists were able to proceed with broad

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reform measures (Chen 1995). Regional governments also became more sensitive to spontaneous local calls for policy changes, and played a pivotal role in state-society interactions that were very important in China's reform process (Chen 1998b). Regional governments had incentives to promote market reform and economic growth, and China became an example of successful "market-preserving federalism" (Jin et. al. 1999).

In the early 1980s, the new revenue-sharing system satisfied the needs of the central government. The assured revenue for the center satisfied the conservatives at the MOF. The reformist leaders at the center were also satisfied, because the tilt in the balance of political dominance allowed a strategy of "playing to the provinces" as a counterbalance to vested interests of line ministries in the central government (see Shirk 1993).

The revenue-sharing system was, however, not sustainable under conditions of substantial economic change. As in many early-transition economies (see Bogetić and Hillman 1995), the Chinese government relied principally on the state sector for tax revenue, but revenues of state-owned enterprises were in decline because of overall decline in the state sector and because of competition from new non-state competitors. The familiar circumstance of decreasing tax revenues soon emerged. Tax revenue collected by local governments to be shared with the center declined.<sup>1</sup> Tax revenue collected directly by the central government and not shared with the provinces declined by even more.

At the same time, the richer provinces, which were net remitters of tax revenue to the center, increased their share of tax revenue.<sup>2</sup> This increase reflected the revenue sharing rule, which

<sup>&</sup>lt;sup>1</sup> Total budgetary revenue declined from 23.7% of GDP in 1985 to 13.5% in 1993 (See Table 1). Budgetary revenue shared between the center and provinces declined from 14.4% of GDP to 10.8% during the same period. <sup>2</sup> From 61.8% in 1985 to 85.8% in 1993.

obliged regional governments to provide stipulated tax remittances, but allowed them to keep tax surpluses.

Year	Share of remitting provinces	Share of provinces receiving subsidies from the center	Share of all provinces	Shared budgetary revenue as % of GDP	Total budgetary revenue as % of GDP
1985	61.8	131.7	96.4	14.4	23.7
1986	67.1	141.7	104.3	15.7	22.2
1987	70.1	140.8	107.1	15.1	19.7
1988	75.9	126.1	102.8	13.5	17.8
1989	79.8	122.2	103.0	14.1	18.0
1990	79.4	122.0	104.4	13.1	17.9
1991	81.0	118.8	102.6	12.3	16.0
1992	81.3	118.2	101.4	10.6	14.2
1993	85.8	112.7	98.5	10.8	13.5
1994	78.7	96.0	88.5	9.7	11.8
1995	76.5	95.3	87.0	8.9	11.2
1996	77.9	94.5	87.3	8.9	11.3
1997	66.1	89.2	79.6	8.7	12.0
1998	61.8	86.3	74.4	9.6	12.8

## TABLE 1: SHARES OF PROVINCIAL BUDGETARY REVENUE (in percentage)

Sources: Calculated by the authors based on data from various issues of *China Statistical Yearbook* and *China Fiscal Yearbook*.

Notes: (a) All budgetary revenue figures have been adjusted so that subsidies to loss-making state-owned enterprises are no longer counted as revenue-negating items as practiced by the Chinese statistical authorities. (b) Provincial revenues are revenues collected by the province adjusted for remittance to and subsidies from the center. The post-1994 figures also include tax repayment (*shuishou fanhuan*) from the center.

The central government consequently had less income to redistribute to poorer provinces, and the revenue share of the provinces receiving subsidies from the center declined.<sup>3</sup> The central government was, in this period, on the verge of bankruptcy, and frequently sought to renegotiate the revenuesharing agreements with local governments. Richer provinces were asked to make additional "contributions" to the central government.

Since the center did not have its own tax collection administration, there was no alternative but to rely on tax revenue remittances from regional governments. The regional governments, however, had ready means of avoiding tax remittance obligations. They could withhold tax remittances by diverting tax revenues from budget to off-budget items, which were not subject to sharing with the center. Revenue could also be withheld from the center by giving regional enterprises tax holidays and exemptions (Wong 1991). These activities by regional government were consistent with their residual claimant status for tax revenues. The tax exemptions increased resources for local investment and expanded the local tax base.

Local government officials had, in these circumstances, incentives to offer a helping hand to local enterprises. However, the helping hand could create inefficiencies. Local government officials protected their participation in local investment through local protectionist policies that prevented free movement of goods across regional boundaries. With regional banks under their close supervision, local government officials could also selectively direct credit to local enterprises. The regions became, in effect, independent economic fiefdoms (Chen 1991). With the local protectionism and directed bank credits, a proliferation of smallscale high-cost activities was inefficiently duplicated across localities.

Regional government was now an impediment to change and resisted attempts at re-centralization (see Chen, 1991). By the early 1990s, the central government sought to re-centralize the fiscal system, but only succeeded in 1994 with the introduction of a new tax-sharing system (TSS) that distinguished between exclusive central and local government tax bases. Shared taxes

 $<sup>^3</sup>$  From 142% in 1986 to 113% in 1993. Shares were more than 100% because of subsidies received from the center.

were instituted, including the value-added tax. A central tax bureau was set up to collect the center's taxes.

Local tax bureaus at the same time continued to collected local taxes. As an incentive for local government, the center agreed to a special transfer payment (*shuishou fanhuan* or tax repayment) to provinces to ensure that local revenues did not decline. The reference point was provincial government revenue in 1993. However, the objective of the central government was to increase its share of total tax revenues from 40% to 60%.

The new system ended the downward trend of the budgetary revenue to GDP ratio and increased the share of the center in total budgetary revenue.<sup>4</sup> At the same time, the revenue shares of the regional governments significantly declined.<sup>5</sup> Local government is no longer the residual claim to local tax revenues.

Regional government also lost discretion to grant tax reductions and exemptions to their local enterprises. Banks were re-organized and re-centralized.<sup>6</sup> The center also tightened control over extra-budgetary funds, which were re-channeled into budget items.<sup>7</sup> Extra-budgetary charges and *ad hoc* levies were also placed under central government scrutiny.

The re-centralization took place at a time when the central leadership felt that political support from the provincial

 $<sup>^4~</sup>$  In 1998 total budgetary revenue was 12.8% of GDP, only slightly below the 13.5% in 1993.

<sup>&</sup>lt;sup>5</sup> Budgetary revenue shares for remitting provinces fell from 85.8% in 1993 to 61.8% in 1998. The provinces that were recipients of subsidies from the center also experienced revenue losses. Their share of revenue declined from 112.7% to 86.3% in the same period (Table 1). Since their share dropped below 100% after 1994, these provinces also became net contributors to the center's budget revenue.

<sup>&</sup>lt;sup>6</sup> The branches of the People's Bank of China were re-organized with regional headquarters following the Federal Reserve System of the United States. Managers of state owned bank are no longer under the supervision of local governments, and major bank loans have to go through the Credit Approval Committee in which local governments have no representation.

<sup>&</sup>lt;sup>7</sup> See Zhang (1999).

governments was not important, <sup>8</sup> and the re-centralization measures were implemented despite unpopularity at the regional level. Discontented provincial leaders were rotated or replaced.<sup>9</sup> Local governments were also given additional expenditure responsibilities while being compelled to give up revenue sources. The central government set annual growth targets for central tax revenue and threatened to remove tax bureau chiefs if targets were not met.<sup>10</sup> Compliance by local government officials was in general based on such coercion and administrative orders, and not on compatible incentives and budgetary laws. Tax revenue targets were based on pre-achieved levels and were subject to ratchet effects, so that high tax collection in one year implied a higher target for the following year. Officials at the tax offices therefore had no incentive to collect revenue beyond the tax target. Local government revenue targets could also be achieved by simultaneously inflating tax revenue and expenditure.11 The central tax bureau resorted to various means of meeting the taxrevenue targets, even if the achievements were only notional, and did not provide actual revenue for the central budget.<sup>12</sup>

The central government reacted by directing to itself yet more tax revenue from the regions or from outside the budget. Uncertainty and mistrust spread in the tax sharing system, as the

<sup>&</sup>lt;sup>8</sup> After the Communist Party formally adopted the "socialist market economy" as the objective of economic reform at its 14<sup>th</sup> congress in 1992 and with the old generation of revolutionary leaders passed the scene, there were no major political obstacles for market reform in China. Nor were there major challenges to the new leadership at the center.

<sup>&</sup>lt;sup>9</sup> See Blanchard and Shleifer (2000).

 $<sup>^{10}\,</sup>$  When the center wanted to increase its tax revenue by an additional 100 billion yuan in 1998, it just held a telephone/video conference to mobilize tax collection.

<sup>&</sup>lt;sup>11</sup> The center actually made it easy for local governments to do so. In an effort to promote certain sectors of the economy, the central government started the practice of *xianzheng houfan, lieshou liezhi* – taxes collected from enterprises in privileged sectors were returned to these enterprises while the amount was recorded under both revenue and expenditure. The practice proliferated because local governments found it very useful. They could effectively grant tax exemptions and inflate budgetary revenue and expenditure at the same time.

 $<sup>^{12}\,</sup>$  For example, 13 types of extra-budgetary revenues were brought into the budget to boost the budgetary revenues in 1997, but the spending plans is still determined by the administrative agencies that collect the funds. This means

center repeatedly and arbitrarily used administrative orders to redefine tax-sharing rules. Regional governments in turn responded by finding additional means of hiding revenues from the center. Since the central government and its departments were collecting additional extra-budgetary revenues, it was difficult to prevent local governments from doing the same. Financial resources overall thus increasingly came outside budgetary control (Zhang 1999).

Extra-budgetary revenue had been prevalent in the prereform era, and was expanded under the fiscal system of the postreform period. Local governments were permitted to collect fees and charges outside the budget when government revenue was inadequate to cover expenses. This eroded the tax base, led to more budget deficits, and to the imposition of yet more off-budget fees and charges. The vicious cycle was reinforced by the post-1994 re-centralization.<sup>13</sup> In 1998, the central government outlawed more than 20,000 different types of *ad hoc* fees and charges that were being collected by government departments (Wang 1999). Other fees and charges were however invented and collected.

Shleifer and Vishny (1993) have proposed that disorganized corruption is more averse to economic development than organized corruption. When corruption is disorganized, different ministries, agencies and levels of local governments independently seek personal revenue through bribes without accounting for the adverse effects of their independent appropriation activities. The cumulative burden of corruption therefore increases. The change that took place at China's local government level in response to the center's re-centralization policy was from organized to

that this part of budgetary revenue is not available for normal government expenditure and the increase in the budgetary revenue is artificial. <sup>13</sup> For example, fees and charges were twice taxes in 1996 in Guangdong, Sichuan and Xian City of Shaanxi Province (An and Yue 1999). Gao (1999) estimated taxes to be no more than around one-third of total government revenue.

disorganized corruption. The organized corruption that provided a helping hand was replaced by the disorganized corruption of a grabbing hand.

The change from helping to grabbing hand was also a change from the behavior of stationary bandits to roving bandits (see Olson 1993, 2000). The stationary bandit that provided a helping hand had a broad interest in the long-run development of the local tax base. The roving bandit had a narrow personal interest in extracting revenue through the grabbing hand. The roving bandit takes and moves on, and does not care for what can be taken tomorrow.

# 3. The empirical evidence on the significance of the helping and grabbing hand

The change by the center from low to high tax shares in the 1990s is established from the published data in tables 1 and 2. We require a measure of the magnitudes of the helping and grabbling hand to show that local government responded to the fiscal re-centralization by switching from helping to grabbing hand and thus the increases in disorganized corruption and rovingbandit behavior. The relation between the components of government revenue provides such a measure.

China's government revenue is composed of (1) budgetary revenue, (2) extra-budgetary revenue (*yushuanwai shouru*) and (3) extra-establishment revenue (*zhiduwai shouru*). Extra-budgetary revenue is in principle under control of the central government, with collection of revenue taking place through official documents issued by the State Council, the State Planning Commission or Ministry of Finance. Extra-budgetary revenue is however under decentralized management and allocation of funds is by different agencies and organizations at various levels of the government. As a consequence extra-budgetary revenue is not well controlled by the central government, and many extra-budgetary revenue items are not recorded in official statistics. A study by the central

Province	1985-1993	1988-1993	1994-1998
Anhui	122.4	117.5	92.0
Beijing	86.6	91.3	75.7
Fujian	119.4	113.0	95.1
Guangdong	99.1	96.7	80.4
Gansu	135.2	126.7	114.1
Guangxi	136.4	126.0	109.5
Guizhou	142.4	130.8	107.1
Hainan	204.8	185.6	117.5
Hebei	98.0	98.8	86.9
Henan	112.9	108.5	89.2
Heilongjiang	126.5	120.2	87.5
Hubei	105.1	101.2	89.4
Hunan	109.5	106.2	90.4
Jilin	139.1	135.0	100.5
Jiangsu	72.1	73.4	70.6
Jiangxi	149.9	138.0	113.2
Liaoning	83.1	86.5	79.5
Inner Mongolia	203.6	178.1	130.2
Ningxia	244.9	213.9	137.1
Qinghai	246.8	208.9	168.8
Sichuan	118.0	112.8	88.3
Shandong	99.4	102.6	76.7
Shanghai	43.9	52.9	53.4
Shaanxi	132.9	123.7	103.4
Shanxi	116.9	107.4	85.8
Tianjin	74.8	79.7	65.6
Xinjiang	237.3	205.9	118.7
Yunnan	109.8	111.3	71.7
Zhejiang	76.5	79.4	76.2
Average of remitting	75.8	80.5	72.2
provinces			
Average of provinces receiving subsidies	126.0	120.0	92.2
National Average	101.7	101.8	82.5

#### TABLE 2: SHARES OF PROVINCIAL BUDGETARY REVENUE (in percentages)

Sources: Calculated by the authors based on data from various issues of *China Statistical Yearbook* and *China Fiscal Yearbook*.

Note: In this study, Guangdong, Zhejiang, Jiangsu, Shanghai, Tianjin, Beijing, Liaoning and Hebei are classified as the remitting provinces based on the net remittance data, and the rest of classified as subsidy receiving provinces.

government in 1996 suggested that the actual extra-budgetary revenue for 1995 was 1.6 times that recorded in the official statistics (Zhang 1999).

Extra-establishment revenue is the revenue collected by government departments and organizations at the discretion of the officials themselves. No rules govern collection of extraestablishment revenue and there are no official statistics. The collection of extra-establishment revenue has been described as "san luan" (three times arbitrarily): collecting fees arbitrarily, imposing fines arbitrarily, and raising funds arbitrarily.

Extra-budgetary revenue and extra-establishment revenue are associated with the grabbing hand through the use of the authority of government to impose a variety of predatory regulations on business. Various government departments and agencies collect different off-budget revenues under different names and justifications, and the revenues are principally used for privileged consumption by local government officials, or sent to foreign bank accounts.

Budgetary revenue on the other hand provides finance for helping hand activities such as provision of public goods, infrastructure, and law and order. We can accordingly use the proportion of budgetary revenue to total government revenue to measure the helping against grabbing hand. The higher is the proportion of government revenue that is outside the budget, the weaker is the helping hand and correspondingly the greater is the grabbing hand.

While official statistics on budgetary and extra-budgetary revenue are readily available, there are no official statistics for extra-establishment revenue. There are, however, a number of estimates of extra-establishment revenue at the national level. Three of these estimates are listed in Table 3, together with our own estimate. Column A is from Zhang (1999), who assumes that extra-establishment revenue is entirely absorbed by fixed asset investment within the state-owned enterprises. This assumption would result in underestimation, especially in the post-1994 period. Column B is taken from the State Planning Commission Study Team (1999). This study makes conservative assumptions about ratios of tax to non-tax revenue, but does not explain the rational behind these assumptions. Column C is derived by Yang (1999), who uses the residual method by deducting the budgetary revenues and extra-budgetary revenue from the estimated total government expenditure. Many assumptions are made when estimating total government expenditure, including values of investment expenditure and transfer payments.

Year	А	В	С	D
1985	27.4			0.0
1986	36.9			6.9
1987	34.6		66.6	13.1
1988	52.1		83.2	28.4
1989	51.2		86.1	33.7
1990	65.0		105.1	62.2
1991	179.1	27.1	149.1	82.5
1992	273.5	15.6	218.7	145.4
1993	291.6	17.6	314.1	196.8
1994	370.7	61.0	497.1	326.8
1995	415.3	101.2	536.6	471.6
1996		182.7	598.0	575.8
1997		266.8		680.8
1998		288.1		653.4

TABLE 3: ESTIMATED EXTRA ESTABLISHMENT REVENUE (in billion yuan)

Sources: Column A is from Zhang (1999); Column B from State Planning Commission Study Team (1999); Column C by Yang (1999); and Column D is the estimate of the authors.

Our estimation is in Column D. Since we know that extraestablishment revenue was not significant in the mid-1980s, we begin with no extra-establishment revenue in 1985. We take budgetary revenue and extra-budgetary revenue as adequate to cover government expenses, and use the revenue to GDP ratio of 1985 as a constant revenue-adequacy ratio throughout the sample period. Multiplying the ratio by GDP gives the adequate-revenue level. The extra-establishment revenue is derived by subtracting the budgetary revenue and the extra-budgetary revenue from the estimated adequate revenue. While the adequacy ratio might understate the actual value of adequate revenues, this method allows us to use extra-establishment revenue to estimate measures of the helping hand and the grabbing hand by provinces.

In Table 4 we see that, for most provinces, the helping hand index decreased between 1985 and 1993, as local governments shifted resources outside the budget in order to avoid sharing with the center. There was an acceleration in the grabbing hand after 1994.

Our estimates show significant changes. The national helping hand index decreased by more than 30% from 0.67 in 1988-1993 to 0.43 in 1994-1998. The same pattern is observed for most of the provinces. The significant decline in the helping hand and increase in the grabbing hand suggest why the central government should become pre-occupied with corruption at the regional and local government level.

#### Helping Hand and Investment

In order to understand how the helping hand helps, we can consider the relationship between the helping hand index and investment. We specify the investment equation:

$$\log(inv_{st}) = \alpha_s + \beta \, \log(gdp85_{st}) + \gamma_t \log(help_{st}) + \varepsilon_{st}$$

where s and t indicate province and year, inv is fixed asset investment in 1985 prices, gdp85 denotes GDP in 1985 prices,

Province	1985-1993	1988-1993	1994-1998
Anhui	0.72	0.64	0.44
Beijing	0.83	0.80	0.68
Fujian	0.68	0.59	0.32
Guangdong	0.80	0.72	0.60
Gansu	0.74	0.67	0.45
Guangxi	0.70	0.60	0.32
Guizhou	0.78	0.73	0.48
Hainan	0.72	0.68	0.53
Hebei	0.69	0.63	0.40
Henan	0.76	0.69	0.46
Heilongjiang	0.80	0.72	0.40
Hubei	0.72	0.62	0.33
Hunan	0.73	0.65	0.41
Jilin	0.89	0.83	0.45
Jiangsu	0.61	0.52	0.33
Jiangxi	0.76	0.66	0.42
Liaoning	0.61	0.54	0.38
Inner Mongolia	0.78	0.70	0.48
Ningxia	0.70	0.61	0.42
Qinghai	0.73	0.63	0.40
Sichuan	0.80	0.75	0.40
Shandong	0.73	0.70	0.43
Shanghai	0.92	0.92	0.61
Shaanxi	0.73	0.66	0.50
Shanxi	0.67	0.60	0.40
Tianjin	0.65	0.59	0.33
Xinjiang	0.63	0.51	0.30
Yunnan	0.76	0.78	0.58
Zhejiang	0.73	0.69	0.44
National Average	0.73	0.67	0.43

#### **TABLE 4: THE HELPING HAND INDEX BY PROVINCES**

Source: Estimated by the authors.

*help* is the helping hand index, and  $\varepsilon$  is the error term. This is a fixed effect model with the varying coefficient for the helping hand index. In order to estimate the varying coefficient, we make use of the time trend variable *t* and the dummy variable *dummy*, which equals to 1 in 1994-1998 and 0 elsewhere. The estimation results are presented in Table 5.

#### TABLE 5: HELPING HAND

Variable	Total	State Owned	Township &	Other Types of
		Enterprises &	Village	Ownership
		Urban	Enterprises	-
		Collectives	-	
Ln(GDP85)	0.8001	0.7217	0.8011	0.2268
	(13.7761)	(13.7238)	(9.1310)	(2.1324)
Ln(help)	0.5558	0.2729	0.8323	1.8675
	(5.3057)	(2.5318)	(6.3113)	(9.9793)
Ln(help)*t	-0.0359	-0.0203	-0.0522	-0.1508
	(-3.2073)	(-1.7877)	(-3.2967)	(-7.4021)
Ln(help)*dummy	-0.1392	-0.0479	-0.2537	-0.4970
	(-3.0705)	(-1.0211)	(-3.8754)	(-6.2671)
Number of Obs.	406	406	406	406
Adjust R-square	0.9931	0.9921	0.9613	0.9790
Residual SS	12.7388	12.9871	60.0536	67.4016
S.E. of	0.1848	0.1866	0.4013	0.4251
Regression				

Dependent Variable: logarithm of fixed investment in 1985 price	Dependent	Variable:	logarithm o	f fixed	investment	in 1985	prices
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Notes: (a) Provincial fixed effects are included in all models that are estimated by GLS from 1985 to 1998. (b) tstatistics are given in parentheses.

The equation is estimated with four different dependent variables according to ownership types. The results confirm the role of the helping hand in promoting investment. We observe that the coefficient of the helping hand index, which is significantly positive in all four equations, is greatest for investment by firms with ownership that includes private firms and foreign investment. The coefficient on the helping hand is also significantly greater for Township and Village Enterprises (TVEs) than for State Owned Enterprises (SOEs) and urban collectives. The helping hand is thus more effective for private investment and less so for the stateowned enterprises and urban collectives. The declining coefficient of the helping hand index in TVEs and other ownership indicates that the helping hand becomes less important as market reforms Since the dummy variable is significantly negative, progress. regional government became less effective in helping investment in

the post-1994 period after the implementation of the recentralization measures.

#### High Taxes and the Grabbing Hand

We can examine the relationship between high center taxes and the grabbing hand of local government through the equation:

$$\log(grab_{st}) = \alpha_s + \beta \, \log(cpi_t) + \gamma \, \log(local_{st}) + \theta \log(staff_{st}) + \varepsilon_{st}.$$

Here s and t indicate province and year, and grab is the grabbing hand index (grab = 1- help), cpi is a corruption perception index, local is the local revenue shares summarized in Table 2, staff is the number of government officials and administrative staff, and  $\varepsilon$ is the error term. We estimate three models using different definitions for staff. Staff1 is the number of government officials and administrative staff, Staff2 equals to Staff1 divided by population, and Staff3 equals to Staff1divided by non-agricultural population.

Table 6 shows the estimation results. The coefficient of *local* is significantly negative in all three models, which confirms that the lower is the tax shared by the local government (the higher tax remittances to the center), the stronger is the grabbing hand. The coefficients of *local* in (2) and (3) are less than -1, which means that the grabbing hand index would increase by more than 1% if the local share decreases by 1%. Thus, a large proportion of reduction in the helping hand indices in the 1990 (see Table 4) was due to the decrease of the local shares of budgetary revenues (see Table 2). Thus, the fiscal recentralization has a significant adverse effect on investment (see Table 5) and on the budgetary tax base.

Higher values of the corruption perception index value indicate a less corrupt government.<sup>14</sup> The coefficient of *cpi* is significantly negative for all three equations, which confirms our expectation that more corrupt governments grab more. Since the coefficients for the *staff* variables are all significantly positive, an increase in the number of government officials leads local governments to grab more.<sup>15</sup>

#### **TABLE 6: THE GRABBING HAND**

Dependent Variable: logarithm of grabbing hand index

Variable	(1)	(2)	(3)
Ln(CPI)	-0.2901	-0.3576	-0.7103
	(-6.0841)	(-6.8765)	(-12.7860)
Ln(local)	-0.8682	-1.1524	-1.4515
	(-11.1028)	(-14.3106)	(-15.6348)
Ln(staff1)	1.7522		
	(18.1464)		
Ln(staff2)		1.9685	
		(13.9793)	
Ln(staff3)			1.0745
			(5.1807)
Number of Obs	106	106	106
Number of Obs.	406	406	406
Adjust R-square	0.9441	0.9354	0.8787
Residual SS	25.8903	31.1938	36.2403
S.E. of	0.2631	0.2888	0.3113
Regression			

Notes: (a) Provincial fixed effects are included in all models that are estimated by GLS from 1985 to 1998. (b) t-statistics are given in parentheses.

In order to assess the dynamic impact of fiscal recentralization, Gu (2002) includes the estimated relationships between local share, grabbling/helping hand and investment in an

<sup>&</sup>lt;sup>14</sup> The source of the Corruption Perception Index is *Transparency International*. We use interpolation to fill in the values for four years in which the index is not available.

<sup>&</sup>lt;sup>15</sup> On the general theory of bureaucracy, and consequences of the expansion of bureaucracy, see Niskanen (1971). Niskanen looks at self-interested behavior of

economy-wide multiregional model which endogenizes GDP, investment and other relevant variables. The model is run in a counter-factual simulation from 1994 to 1998 to study the impact of the fiscal recentralization, and the key results are provided in Table 7. It shows that the center benefited from high revenue share and fiscal recentralization, but at the expense of local governments. It also shows that fiscal centralization was inefficient, because it led to lower budgetary revenue and lower economic output.

# TABLE 7: CHANGES IN BUDGETARY REVENUE AND GDP DUE TO FISCAL CENTRALIZATION

	Cen	iter	Lo	cal	Center &	& Local	GDP
Year	Billion	As % of	Billion	As % of	Billion	As % of	(%)
	yuan	GDP	yuan	GDP	yuan	GDP	
1994	29.0	0.6	-39.0	-0.8	-10.0	-0.2	-0.6
1995	37.3	0.6	-51.4	-0.9	-14.1	-0.2	-1.0
1996	46.2	0.7	-66.8	-1.0	-20.6	-0.3	-1.3
1997	118.7	1.6	-173.1	-2.3	-54.4	-0.7	-3.1
1998	178.0	2.3	-283.9	-3.6	-105.9	-1.3	-6.3

Source: Gu (2002).

## 4. Conclusions

We have investigated the change from helping hand to grabbing hand behavior in China. The change is associated with fiscal recentralization. The evidence confirms that local government switched from helping to grabbing hand when the center altered budgetary tax shares to increase the center's share at the expense of local government. The change from helping to grabbing hand in China has eliminated the difference that was previously observed between the helping hand of local government

bureaucracy under democracy. Our empirical results point to the same principles of self-interested behavior under autocracy.

in China and the grabbing hand in Russia (and other postsocialist European countries).

We have shown that the helping hand help investment most effectively for private firms and least effective for state-owned enterprises. The helping hand becomes less effective with the fiscal re-centralization. We have also shown that the grabbing hand grabs more when (1) the center takes more from the revenue pool, (2) the government is more corrupt, or (3) the size of the government bureaucracy expands.

The general conclusion is that fiscal federal relations can affect growth and investment, and efficiency, through incentives that affect the form of corruption by local government officials. Our study shows that when local government can choose between helping and grabbing hands, revenue maximization by the center might not be an appropriate objective. As in the case of China, the corruption of the helping hand when taxes are decentralized can be socially preferable to the corruption of the grabbing hand when taxes are centralized.

Local governments lost from the fiscal re-centralization because they are worse off with a low local budgetary tax share and a grabbing hand. Many local government officials acknowledge that more than two thirds of China's counties have been in budget deficit in recent years.<sup>16</sup> As a result, many township governments are running on "the neutral gear" (*kongzhuan*) fiscally, which means that the county government provides little or no fiscal income to township governments. Since the township government is the lowest level of government in China and does have its own tax revenue sources, may township government officials, including school teachers, have to be paid by fees and charges collected from rural households. In many cases,

 $<sup>^{16}</sup>$  From authors' personal communication with local government officials from Heibei and Shangdong provinces.

government officials confiscated and sold farmers' assets because they failed to pay their dues. The grabbing hand grabs, literally!

Local government in China provided a helping hand when the center was politically weak and there was pre-commitment to a low remittance rate from local government to the center. When the center felt politically capable, it chose high tax remittances from local government, which led to an inefficient equilibrium with the grabbing hand of local government. The helping hand was corrupt, but nonetheless socially preferable to the corruption of the grabbing hand. Under the disorganized grabbing hand, growth slowed, since illegally diverted revenue was not used for investment but was used for consumption or was diverted abroad.<sup>17</sup>

In choosing high tax remittance from local governments, the central government in China may have hoped to eliminate local government discretion, or organized corruption, by fiscal control from the center. With the personal benefits from being a local government official reduced, the officials might leave local politics or the local bureaucracy and move to the socially more productive private sector. Our results show, however, that it may have been naïve for the central government to believe that redirection of taxes to the center would make being a local government official sufficiently unattractive to entice departure from political and bureaucratic positions. The bandits become roving rather than The grabbing hand of disorganized roving bandits stationary. takes more, and is more inhibiting for private sector development than the organized helping hand of stationary bandits, who consider the future tax base when deciding when and how to take - and to give.

<sup>&</sup>lt;sup>17</sup> Capital flight in 1997 is estimated to have been 40 billion US dollars, which is 90% of utilized foreign direct investment for China in the same year (Song 1999).

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