

## **The effects of fiscal decentralisation on compulsory education in China: For better or worse?**

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### **Abstract**

The article address key questions about the circumstances under which decentralisation are sought in China, and points out that decentralisation experiences of China is far from other countries in East Asia, with its unique intergovernmental structures, uneven paces and different implementation strategies. It will provide specific data about how fiscal decentralisation affects the education policy across the range of government services, and generate insights into how innovations developed in other country may be adapted to work successfully in China.

**Key words:** fiscal decentralisation; compulsory education; China

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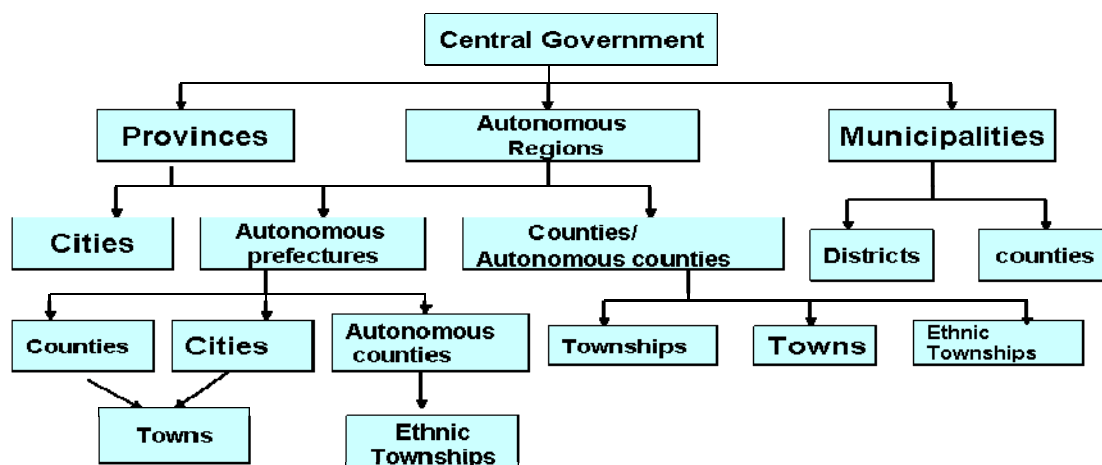
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## Introduction

The trend of fiscal decentralisation, which focuses on the devolution of fiscal power and authority from the central to local governments, has been seen in countries with federal constitutions and with unitary systems. It has spanned across countries with different ideological spectrums and varying levels of development. With the transition of planned economy to market-oriented economy, fiscal decentralisation has become a fundamental aspect of China's transition. While most scholars who are interested in this specific topic agree that it is beneficial to China's economic growth as a transition economy, there has been growing concern about the possible detrimental effects of decentralisation on other aspects of the China's society (i.e. regional economic disparities, unequal public goods such as education and health care).

The purpose of this paper is to take a critical look at the nature and implications of the fiscal decentralisation in China. We use field research to look at two issues: (1) the extent to which fiscal decentralisation is occurring and the revenue of township government, which is one of the major provider of compulsory education and (2) the township government's expenditure. Not surprisingly, we find that the figures have markedly indicated that the township government spends a huge ratio of their revenue in compulsory education. Maybe it is not a big deal in the eastern region, but in the middle and western parts of China, things will be quite different, especially with the abolishment of agriculture tax policy, which starts nationwide around 2005 to 2006. Many township governments in the middle and western China stand to lose the major resources of revenue. They depend heavily on the transfer and grants from upper government to support the normal work but can do little to improve the quality of compulsory education in their region.

**Figure 1: Administrative structure of China**



An overview of Chinese fiscal decentralisation

The Chinese administrative system is quite unique and complicated, which consists of a central government and four sub-national levels of government, which are referred to as “local governments.” The local governments consist of: 1) 31 provincial-level localities, including 22 provinces, four municipalities under the central government, and five autonomous regions. 2) Prefecture level: 333 prefectures and municipalities. 3) County level: 2862 counties and cities, and 4) Township level: 37354 townships, towns, and city districts (Year 2004, see Figure 1).

Prior to 1980, China’s fiscal system was heavily centralised. Profits and taxes from local governments were sent to the central government and then transferred back to provinces according to their own expenditure needs. Since 1980, China has undergone a series of reforms that have given local governments more fiscal authority and incentives to develop local economies. Local governments have more power in revenue collection, government expenditure, credit allocation, investment project proposal, price and wage control, foreign trade management, and industrial policy formation. From 1980-1984, approximately 80 percent of shared revenues were sent to the central government and local governments retained 20 percent. The local governments collected the majority of revenues. The central government determined the bases and rates of all taxes.

In 1994, the central government introduced a tax-assignment system. The object of the reform were: 1) to simplify and rationalise the tax structure by reducing tax rates and tax categories; 2) raise the central-to-total ratio; and 3) put the central and local revenue sharing on a more transparent and reasonable basis by shifting the negotiated revenue to a tax assignment system. Instead of allowing local governments to collect almost all the taxes, the central government set up its own tax collection agency, the National Tax Service, to collect both the central-fixed and shared taxes. Local tax services would collect local-fixed taxes. The reform addressed fiscal decline and macroeconomic instability worries by giving the central government control over a larger proportion of the total revenue (Yee, 2001)

The expenditure assignment between the central and sub-national governments is decided by the principle that those things such as national defence, diplomacy, and macroeconomic adjustment, are taken by the central government. Sub-national governments are charged with local services and local economic development. The principle of revenue assignment between the central and sub-national governments is that the taxes concerning national interest or macroeconomic adjustment belong to the central government, such as Tariffs, Consumption Taxes, Income Taxes of state owned enterprises, Import-related consumption taxes and value added taxes and etc. are under the jurisdiction of the central government. Those with regard to local economic development under the jurisdiction of sub-national governments, such as Business Tax (not include banks, nonblank financial institutions and insurance companies, and railroads), Company Income Tax (not include local banks, foreign banks, and nonblank financial companies), Local company profits, Personal Income Tax, and etc. After 1994, according to the requirements of the tax assignment system and the needs of macroeconomic-control, the central government changed the revenue sharing between the

central and sub-national governments little by little.

After 1994, because of the new introduced tax assignment system, sub-nation governmental revenue to total fiscal revenue ratio was gradually declining from 77.98% in 1993 to 45% in 2002. This trend demonstrates that the central revenue share increased much more than that of sub-national governments. The main reason is that the central government benefited from the tax assignment system. The other reasons are: first, a large scale of extra-budget revenue was put into budget in recent years; secondly, the “fees” revenue mainly controlled by sub-national governments were gradually cut down by the central government. (Su & Zhao, 2005)

Then the expenditure and revenue assignment between the provincial and sub-provincial governments carries on the similar character. This means the sub-provincial governments must take certain responsibility without enough fiscal support. In China, sub-provincial governments include city, county, and township governments. Till now, sub-provincial governmental fiscal situation is very difficult. This is largely due to the provincial level possessed much more sub-national fiscal revenue resource.

### **Empirical analysis**

As the central government began to reduce subsidies for local schools, educational officials at the county, township and village level pursued alternative sources to fund basic education. This resulted in a much more diversified funding structure for education using local taxes, tuition, overseas and domestic donations, income from enterprises, and modest subsidies to fill in the gaps left by the central government. As mentioned above, China has 37354 townships, towns, and city districts at the township level. The speed of economic development and the financial situation are quite different among different regions. For the empirical work, data was gathered from Ningbo City, Zhejiang Province, which is one of the richest regions in China. Eighteen townships within three counties were divided these towns into three levels according to their revenue. The revenue (budget revenue) of the first level (Town A and Town B) is about 40 - 60 million, the second level is about 20 -40 million (Town E and Town F), and the third level is lower than 20 million (Town C and Town D). (RMB, 2004)

From Tables 1-6, we can find that: 1) the ratio of Town A’s revenue in education (wages and salaries of teachers plus other education input) vary from 55% in 2002, 16% in 2003 and then to 24% in 2004. 2) The ratio of Town B’s revenue in education (wages and salaries of teachers plus other education input) changes from 34.1% in 2002, 50.3% in 2003 and then to 21% in 2004. 3) The ratio of Town C’s revenue in education (wages and salaries of teachers plus other education input) varies from 65% in 2002, 71% in 2003 and then 48% in 2004. 4) The ratio of Town D’s revenue in education (wages and salaries of teachers plus other education input) varies from 74% in 2002, 52% in 2003 and then 59% in 2004. 5) The ratio of Town E’s revenue in education (wages and salaries of teachers plus other education input) varies from

39% in 2002, 31.1% in 2003 and then 35.7% in 2004. 6) The ratio of Town F's revenue in education (wages and salaries of teachers plus other education input) varies from 43.6% in 2002, 40.2% in 2003 and then 43.1% in 2004. See Figure 2.

**Table 1: The revenue and expense of town A (ten thousands yuan, 2002-04)**

		2002		2003		2004	
Revenue	Budget revenue	2043		3305		5346	
	Extra-budget revenue	2786		29410		16175	
Expense		5178		23555		23447	
		Amount	Ratio	Amount	Ratio	Amount	Ratio
	Wages and salaries (excluding teachers)	2132	41%	2510	11%	3566	15%
	Wages and salaries of teachers	1282	25%	1170	5%	1881	8%
	Infrastructure	1832	35%	17832	76%	12685	54%
	Agriculture development	135	3%	174	1%	334	1.5%
	Education	1571	30%	2687	11%	3651	16%
	Technology	152	3%	190	1%	1069	5%
	Subsidy to Village	0	0%	76	0.3%	1855	8%
	Social Security	152	3%	220	1%	200	1%
	Public health	217	4%	332	1.4%	559	2%
	Recreation and Culture	66	1%	100	0.4%	245	1%
	Public Safety	123	2%	351	1.5%	604	3%
	Administrative fee	676	13%	1020	4%	1255	5%
	Subsidy to enterprise		%		%	382	2%
Others	254	5%	573	3%	608	3%	

Note: There are all together 393 full-time teachers and 88 retired teachers in this town.

**Table 2: The revenue and expense of town B (ten thousands yuan, 2002-04)**

		2002		2003		2004	
Revenue	Budget revenue	3604		7116		5630	
	Extra-budget revenue	3418		5520		19711	
Expense		7216		7219		21302	
		Amount	Ratio	Amount	Ratio	Amount	Ratio
	Wages and salaries (excluding teachers)	1351	18.7%	2290	31.7%	3085	14.5%
	Wages and salaries of teachers	987	13.7%	1224	17%	1485	7%
	Infrastructure	1153	16%	2047	28.4%	4225	19.8%
	Agriculture development	312	4.3%	327	4.5%	218	1%
	Education	1472	20.4%	2410	33.3%	2992	14%
	Technology	100	1.4%		%	500	2.3%
	Subsidy to Village	50	0.7%	60	0.8%	200	0.9%
	Social Security		%		%	80	0.4%
	Public health	153	2.1%	320	4.4%	326	1.5%
	Recreation and Culture	136	1.9%	103	1.4%	139	0.6%
	Public Safety	180	2.5%	216	3%	216	1%
	Administrative fee	578	8%	838	11.6%	533	2.5%
	Subsidy to enterprise	2511	34.8%	378	5.2%	4459	20.9%
Others	571	8%	520	7.2%	7414	34.8%	

Note: There are 383 full-time teachers, 89 retired teachers and 87 part-time teachers.

**Table 3: The revenue and expense of town C (ten thousands yuan, 2002-04)**

		2002		2003		2004	
Revenue	Budget revenue	965		1457		1316	
	Extra-budget revenue	1028		1521		2135	
Expense		1988		3096		5000	
		Amount	Ratio	Amount	Ratio	Amount	Ratio
	Wages and salaries (excluding teachers)	460	23%	500	16%	550	11%
	Wages and salaries of teachers	503	25%	958	31%	1082	22%
	Infrastructure	260	13%	502	16%	333	7%
	Agriculture development	68	3%	155	5%	771	15%
	Education	787	40%	1247	40%	1313	26%
	Technology	50	3%	160	5%	249	5%
	Subsidy to Village	90	5%	80	3%	253	5%
	Social Security	65	3%	78	3%	160	3%
	Public health	80	4%	66	2%	116	2%
	Recreation and Culture	49	2%	62	2%	75	2%
	Public Safety		0%		0%	20	0.4%
	Administrative fee	426	21%	565	18%	827	17%
	Subsidy to enterprise		%		%	251	5%
Others	113	6%	181	6%	632	12.6%	

Note: There are 163 full-time teachers, 66 retired teachers and 30 part-time teachers.

**Table 4: The revenue and expense of town D (ten thousands yuan, 2002-04)**

		2002		2003		2004	
Revenue	Budget revenue	907		1071		1098	
	Extra-budget revenue	578		1013		1160	
Expense		1488		2230		2414	
		Amount	Ratio	Amount	Ratio	Amount	Ratio
	Wages and salaries (excluding teachers)	1135	76%	1155	52%	1205	50%
	Wages and salaries of teachers	520	35%	542	24%	582	24%
	Infrastructure	43	3%	143	6%	131	5%
	Agriculture development	106	7%	144	6%	331	14%
	Education	584	39%	633	28%	837	35%
	Technology	6	0.4%	7	0.3%	8	0.4%
	Subsidy to Village	18	1%	20	1%	20	1%
	Social Security	53	4%	56	3%	88	4%
	Public health	70	5%	70	3%	115	5%
	Recreation and Culture	44	3%	49	2%	62	3%
	Public Safety	15	1%	15	1%	17	1%
	Administrative fee	281	19%	387	17%	545	23%
	Subsidy to enterprise	15	1%	20	1%	56	2%
Others	252	17%	458	21%	449	19%	

Note: There are 138 full-time teachers, 50 retired teachers and 15 part-time teachers in this town.



**Table 5: The revenue and expense of town E (ten thousands yuan, 2002-04)**

		2002		2003		2004	
Revenue	Budget revenue	1925.2		2675.2		2251.6	
	Extra-budget revenue	3115.6		5365.9		6210.5	
Expense		5021.2		7458.5		7495.2	
		Amount	Ratio	Amount	Ratio	Amount	Ratio
	Wages and salaries (excluding teachers)	1047.3	20.9%	1484.6	19.9%	1896.4	25.3%
	Wages and salaries of teachers	573.8	11.4%	815.9	10.9%	1001.2	13.4%
	Infrastructure	1137.2	22.7%	2154	28.9%	2245.4	29.9%
	Agriculture development	138.1	2.8%	355.4	4.8%	183.9	2.5%
	Education	1387.8	27.6%	1507.7	20.2%	1668.6	22.3%
	Technology	276.8	5.51%	344.7	4.6%	483.6	6.5%
	Subsidy to Village	120	2.4%	220.2	2.9%	230.4	3.1%
	Social Security	158.8	3.2%	159.4	2.1%	211.4	2.8%
	Public health	34.5	0.7%	265.3	3.6%	282.2	3.8%
	Recreation and Culture	116.4	2.3%	193.4	2.6%	172.3	2.3%
	Public Safety	510.3	10.2%	786.2	10.5%	861.5	11.5%
	Administrative fee	835.1	16.6	992	13.3%	943.8	12.6%
	Subsidy to enterprise	306.3	6.1%	480.1	6.4%	212.3	2.8%
	Others	1047.3	20.9%	1484.6	19.9%	1896.4	25.3%

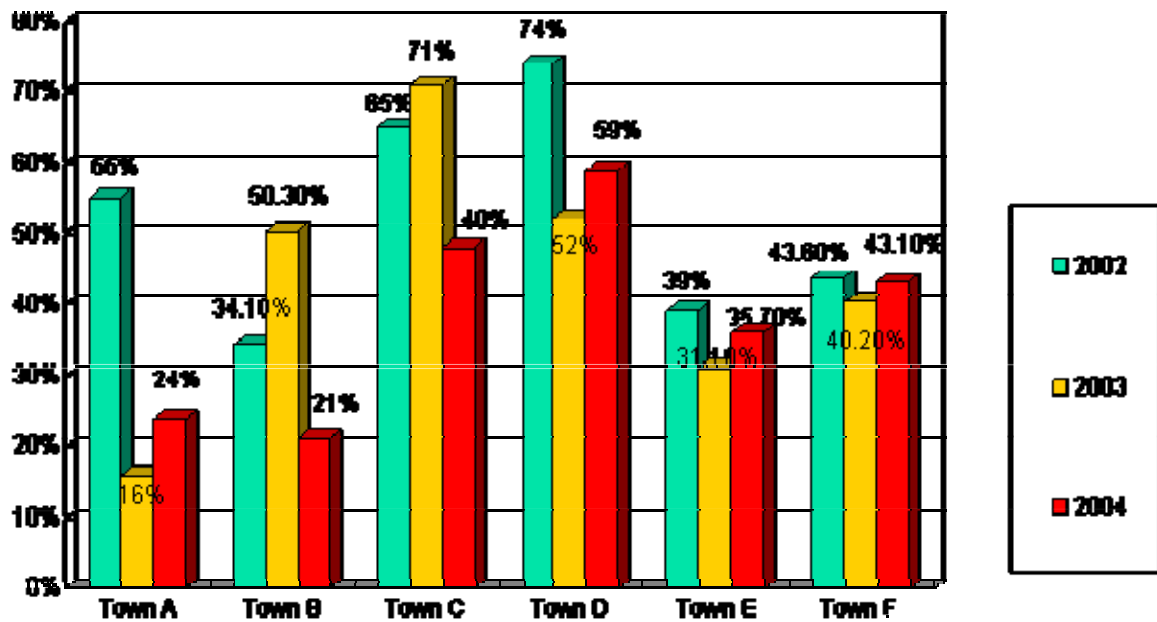
Note: There are 200 full-time teachers and 66 retired teachers in this town.

**Table 6: The revenue and expense of town F (ten thousands yuan, 2002-04)**

		2002		2003		2004	
Revenue	Budget revenue	1876.9		3562		2896	
	Extra-budget revenue	5170		7186		8880	
Expense		6465		8261		9446	
		Amount	Ratio	Amount	Ratio	Amount	Ratio
	Wages and salaries(excluding teachers)	1299.5	20.1%	1660.5	20.1%	2030.9	21.5%
	Wages and salaries of teachers	943.9	14.6%	1156.5	14%	1398	14.8%
	Infrastructure	2062.3	31.9%	3701	44.8%	2984.9	31.6%
	Agriculture development	420.2	6.5%	297.4	3.6%	406.2	4.3%
	Education	1874.9	29%	2164.4	26.2%	2673.2	28.3%
	Technology	103.4	1.6%	148.7	1.8%	188.9	2%
	Subsidy to Village	782.3	12.1%	487.4	5.9%	727.3	7.7%
	Social Security	174.6	2.7%	231.3	2.8%	330.6	3.5%
	Public health	252.1	3.9%	355.2	4.3%	746.2	7.9%
	Public Safety	109.9	1.7%	214.8	2.6%	188.9	2%
	Administrative fee	536.6	8.3%	536.9	6.5%	840.7	8.9%
	Subsidy to enterprise	775.8	12%	487.4	5.9%	784	8.3%
	Others	148.7	2.3%	123.9	1.5%	358.9	3.8%

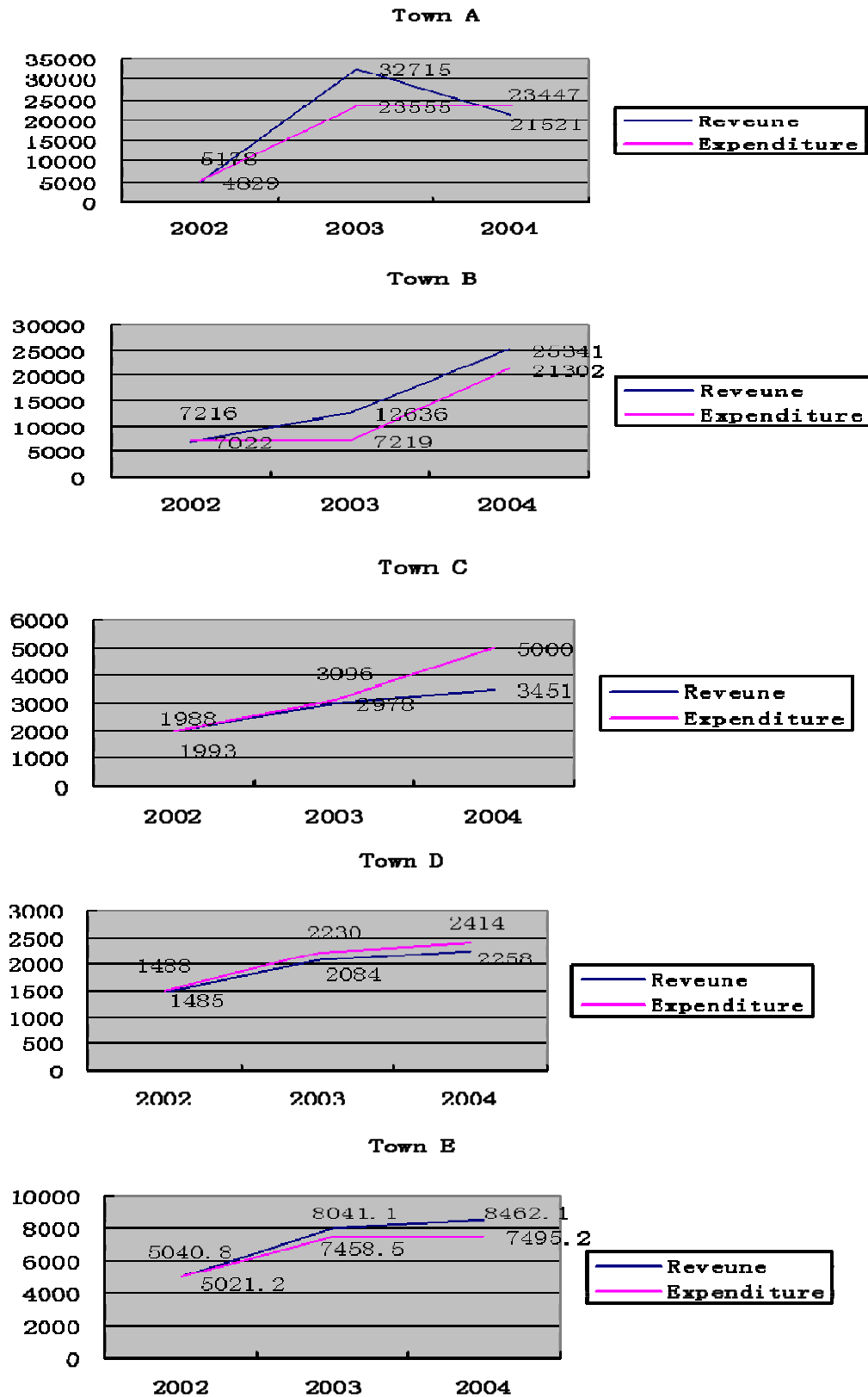
Note: There are 292 full-time teachers and 90 retired teachers.

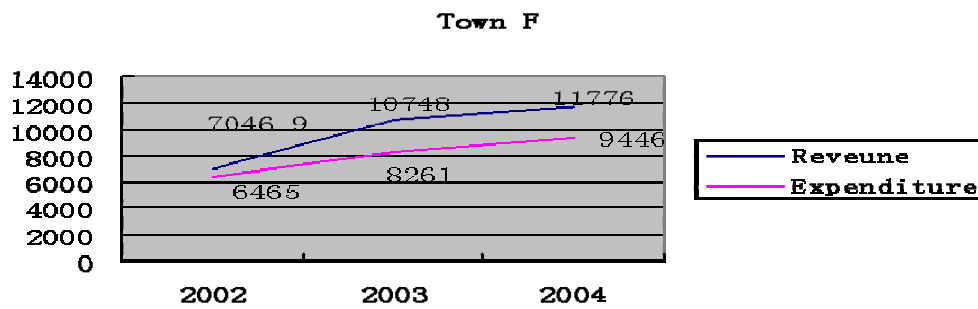
Figure 2: Six town government's expenditure on education (as percentage of revenue)



Hayek asserts that local governments are able to make better decisions than the national government about local conditions and preferences because they have better access to local information (Hayek, 1945). Musgrave and Oates propose that the appropriate assignment of expenditures and taxes to the various levels of government could increase welfare on both the local and national levels (Musgrave, 1959; Oates, 1972). This leads to the decentralisation theorem. Sub-national governments thus become agencies that provide services to identifiable recipients up to the point at which the value placed on the last (marginal) but the situation is not true in China. For a period, fiscal decentralisation allowed local government's great discretion to set taxes, target surcharges for education and generally manage their financial affairs. For a variety of reasons, including issues of equity, the central government, in 1994, began removing certain tax authority from the local governments. Local governments now may not set tax rates or borrow for capital projects. Central authorities continue to fund teacher salaries and certain capital projects but these are funds that are far more than to afford compulsory education. To implement this, sub-national (local) governments must be given the authority to exercise "own-source" taxation at the margin and be in a financial position to do so. This is the essence of decentralisation. For wealthy regions this worked OK and the quality of schools and teachers was not bad. Like Ningbo city, what I'm mentioned above, is one of the richest cities in China, the town government may afford the fund for education, although sometimes they are on debt too (See Figure 3).

Figure 3: Revenue and Expenditure of Town A-F (2002-04)





The citizens are supposed to receive equal and free compulsory education within one country, however, for poorer regions, the opposite was often true and disparities began to appear in the system. Although statistics and figure for the dropout ratio in the poorer regions were available, such cases are reported often. The side effect is more than this. After the fiscal decentralisation, the local governments got the relative responsibility without the corresponding fiscal ability and it must be very active in finding alternative sources for funding schools, which in fact may produce a space for misuse and abuse of public power. While the localities are not able to set tax rates, they have been encouraged to set surcharges on top of commercial and industrial taxes, which must be devoted exclusively to education. But in fact, things are not always turned out as wished; local government may use the money for other cause.

### Measures to be taken

Comparing to other countries, in many countries such as Japan, France, Britain and Spain, the central government's investment in compulsory education is around 80%, while in New Zealand, South Korea and Italy, the proportion is above 80%, and the lowest is about 10%. While in China, the township government affords about 78% of the fee of compulsory education, county government affords around 9%, provincial government affords 11% and the ratio of central government is about 2%. The majority of the education fee of central and provincial government is spent on high education, which results not only the imbalanced development of compulsory education, but also do no good to the coordinated development of three-level education. Considering the huge work and insufficient money, the provincial government should carry on main responsibility to afford compulsory education. To achieve the equal and high quality compulsory education, the central government should increase its input in this area, with the transfer to local government, especially those in undeveloped regions.

Reassign the expenditure assignment among government, with corresponding reasonable revenue assignment, is the premise to avoid the bad side effect of fiscal decentralisation. Central government should afford the wages and salaries of teachers; provincial government affords the local benefits of teachers, and then municipal and county government co-finance daily operation. Regarding the school building and maintenance, it should be co-financed by the transfer from central and provincial government.

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