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Chapter 1

The Role of Local Government and the Integration of Market: The Case of China and India

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Abstract

Some researchers, who study local fiscal system or fiscal federalism, emphasize the domination of Chinese fiscal system to that of India. According to them, the former is "*de jure*" federation, and later is "*de facto*" federation. And from the perspective of economic performance, "*de facto*" federation dominated "*de jure*" one. But is it really fair judgment?

Actually, China's economic performance dominated India in the incentive of local economies, but it is accompanied the problems such as the segmentation of financial market and the rent seeking action of local governments in the factor market. During Chinese reform era, the integration of market, especially factor market had not developed enough. Under such regionally segmented financial market, local government had been increasing their revenue, through the bargaining to the central government about revenue, or some rent-seeking action by intervening into the market. *Keywords:* fiscal federalism, financial restrain, rent-seeking, extra-budget revenue, market integration

1 Trade off between Equity and Incentive?: From the Perspective of Fiscal Federalism

To discuss the difference about the economic performance of China and India, the discussion about "Second generation of fiscal federalism" or SDFF, may be useful. According to Weingast (2006), the exponent scholar of SGFF, while first generation of fiscal federalism (FGFF) is largely normative idea which assumes that public decision-makers are so benevolent to maximize the social welfare, SGFF assumes that public officials have goals induced by political institutions that often systematically diverge from maximizing citizen welfare.

Weingast also insists that the attempt to correct vertical and horizontal imbalances in developing countries often means that these transfer systems exhibit poor responsiveness to localities that foster local economic growth (Weingast 2006).

And some researchers, who study local fiscal system or fiscal federalism, emphasize the domination of Chinese fiscal system to that of India. They described the public finance system of India, as the example that the fiscal transfer systems without incentive system spoiled the fiscal discipline of local governments.

In India, local governments have its own fiscal revenue, such as inheritance tax of farmland, but most of important revenue, such as income tax, company tax, or customs, is shared with central government, according to the fixed ratio that Finance Commission decided. The assignment of taxation powers and expenditure responsibilities among states, and mandates the appointment of Finance Commission every five years to make recommendations on tax sharing between center and states. Local governments also receive many subsidies from central government, and there are issues of coordinating transfers recommended by the Finance Commission and the Planning Commission. The Finance Commission's goals include equity, efficiency, predictability and stability (Singh 2007, p. 5).

The Finance Commission's transfers of revenue to states reflect a series of weights for different criteria: for example, 62.5% is negatively related to a state's income, so that poorer states receive greater funds; 10% on the basis of population; and the remainder somewhat evenly divided among state area, an index of infrastructure, tax effort, and fiscal discipline (Singh and Srinivasan 2006, Table 7).

So generally, states have less incentive to increase revenue effort, especially on shared taxes, because they do not derive the full benefit of the extra resources raised under this fiscal system, in which soft budget constrain is quite serious. According to Singh (2007), for example, in 2004-2005, the states on average raised about 39% of combined government revenues, but incurred about 66% of expenditures. States financed about 58% of total revenue from their own sources, but in terms of total expenditure, the states covered only about 42% by their own revenue receipts in that year.

How about was the fiscal system of China?

The fiscal system of China in the reform era had been managed on the basis which gives priority to stimulate the incentive of local governments over equality across areas. Especially, the independent economic base of the reform provinces allowed them to resist the central government's initiative to undermine their own fiscal independence by altering the fiscal basis of economic reform. Consequently, the function of fiscal redistribution across regions by the central government had been weakened through the 1980s.

However, these fiscal incentives played a major role in Chinese economic reform and its success, Chinese provinces had considerable fiscal independence during the initial high growth phase in the 1980s, because such a competition among local governments, made the budget constrain of these governments quite hard, and made the market competitive.

Some empirical studies also show the advantage of Chinese fiscal system to other developing country's in the sense of improving the economic performance.

For example, Purfield (2004), using panel data of India's 15 largest states over the period 1985-2000, estimated the effect of the each state's transfer dependence to the ratio of the budget deficit/total expenditure in each state. And he found that states with greater access to central government transfers tend to have larger deficits, and this negative relationship is amplified the higher a state's reliance on central government loans. It is the evidence that the fiscal transfer dependence bring the problem of moral hazard or soft budget constrain of state government.

Some researcher emphasized that the marginal revenue retention of the local governments is one of the important proxy of financial decentralization. Parikh and Weingast (2003) calculated the marginal revenue retention rate for India, and the figure was between 20 and 30% for Indian states. In contrast, states in the 19th century United States retained upwards of 100% of increases in revenue (Weingast 2006).¹

Provinces in post-reform China retain a high proportion of revenue. Jin, Qian,

¹ Zhuravskaya (2000) calculated the marginal revenue retention rate, as 10% for Russian cities.

and Weingast (2005) calculate that during the high growth period following the initial reforms (1981-92), Chinese provinces on average marginal retained 89% of additional tax revenue generate within the province. Further, they show that 68% of all provinces faced a marginal retention rate of 100%. And they argue that the effective marginal retention rates in the new (post-1994) system are similar to those in the early reform period.

From the result of these former empirical studies, it seems that, the differences of financial system of India and China is as follows, the former is "*de jure*" federation, and later is "*de facto*" federation. And from the perspective of economic performance, "*de facto*" federation dominated "*de jure*" one. But is it really fair judgment?

Actually, during Chinese reform era, while the market economy rapidly penetrated in the society, the integration of market, especially factor market had not developed enough. Under such regionally segmented financial market, local government had been increasing their revenue, through the bargaining to the central government about revenue, or some rent-seeking action by intervening into the market. We will inspect the problem of market integration in section 2, and the rent-seeking action of local government in Chinese reform era in the section 3.

2 Integration of Financial Market: Chinese Case

2.1 Home-Bias and Integration of Financial Market

With perfect capital mobility, savings from any particular region can go anywhere in search of the best region to maximize its return. In other words, local savings respond to global opportunities for investment; local investment is financed by a national or international pool of capital. This is the fundamental idea of Feldstein and Horioka (1980) who proposed to use the saving-investment correlation as a measure of capital market integration.

The Feldstein-Horioka (FH) test was initially proposed as a test of world capital market integration, or a measure of the degree of capital mobility across countries. Boyreau-Debray and Wei (2005) applied FH test to the financial flow across Chinese provinces. In their study, the coefficient of local saving is positive and statistically significant even when national and regional factors are controlled for. There is an increase in the slope coefficient over the 1990s. Therefore, there is no evidence of an improvement in the degree of capital market integration.

Their studies suggest that there are still significant barriers to intra-national capital mobility in China. Hence, the pattern for China is closer to that of international capital movements as opposed to international capital mobility observed for a country such as Japan with no internal barriers.

2.2 Risk Sharing across Regions and the Changing Pattern of It

Generally, the financial or fiscal transfer across the regions for the equalization among regions give the negative effect against the incentive of the area which receive the transfer, such as the public subsidy. But the finance transfer that is companied with the risk sharing across the regions, could reduce the temporary income shock of particular area, and improve the economic performance of this area in long term.

In a world with a complete asset market and perfect capital mobility, one region can, by pooling their risks, insure against uncertainty in their incomes. Household consumption should move with aggregate consumption absent of idiosyncratic fluctuations. Furthermore, changes in consumption across regions should not be perfectly correlated with changes in regional resources (Boyreau-Debray and Wei 2005).

According to some empirical studies,² consumption is more correlated within OECD countries, where we know ex ante that the level of financial integration is high, than between them. One generally finds that intra-national risk sharing is much stronger than international risk sharing.

In the previous researches in the U.S., EU and Japan, it is shown clearly that the gap of consumption per person among provinces is smaller than the gap of GDP per person, because the temporary shock in GDP could be smoothed by various ways, such as the move of treasury funds between areas, and the fluctuation of saving in each area.

Boyreau-Debray and Wei (2005) investigate the existence of risk sharing across provinces by the means of OLS analysis. In their study, the changing rate of each province's per capita consumption is depending valuable, and "Local Resource Limit" in per capita terms, or LRL, which is defined as G_{it} (= $GDP_{it} - I_{it}$), where I_{it} and G_{it} are investment rate and government consumption (per capita) is the depending valuable.

They conclude that while evidence of increasing financial integration is clear across the OECD countries, it is much less so across the regions within China. If

² For example, Iwamoto and Wincoop (2000) using data of OECD countries and Japan, investigated inter-national and intra-national effect of risk-sharing. And Doi (2000) investigated risk-sharing across Japanese counties.

anything, the degree of intra-China consumption risk sharing might have declined during the last two decades.

And they also insisted that the degree of risk sharing across the Chinese regions high and has not improved from the 1980s to the 1990s. However, these measures are not conclusive per se, their studies examines the degree to which capital markets are segmented within the country due to the interference of the local governments, and this segmentation did not only had improved after 1990's, but might had gotten worse.

Kajitani (2005) also carried out the econometric analysis which uses the economic indices such as GDP per person within provinces, to show whether the function of consumption equalization has even been seen in China, and what kind of role the fiscal and financial system played in it, and whether there was a change according to the reform of the reform, such as introduction of tax assignment system.

Concretely, we estimate following panel regressions.³

$$\Delta \ln GDP_{i,t} - \Delta \ln BPI_{i,t} = v_{D,t} + \alpha_{D,t} + \beta_D \Delta \ln GDP_{i,t} + \varepsilon_{D,t}$$

$$\Delta \ln BPI_{i,t} - \Delta \ln API_{i,t} = v_{T,t} + \alpha_{T,t} + \beta_T \Delta \ln GDP_{i,t} + \varepsilon_{T,t}$$

$$\Delta \ln API_{i,t} - \Delta \ln C_{i,t} = v_{S,t} + \alpha_{S,t} + \beta_S \Delta \ln GDP_{i,t} + \varepsilon_{S,t}$$

$$\Delta \ln C_{i,t} = v_{U,t} + \alpha_{U,t} + \beta_U \Delta \ln GDP_{i,t} + \varepsilon_{U,t}$$

Note: BPI is per capita provincial GDP before fiscal transfer across provinces, API is per capita provincial GDP after fiscal transfer. C stands for the consumption. $v_{x,t}$ is time dummy, (x = D, T, S, U), $\alpha_{x,t}$ is provincial dummy, $\varepsilon_{x,t}$ is error term.

In this equation, the coefficients βD , βT , and βs mean that the incremental percentage amount of smoothing achieved at each level, capital depreciation, fiscal transfer, and saving. And βU means amount not smoothed. If $\beta U = 0$, the real growth rate of consumption in each area, do not have correlation with the real growth rate of income, means that there is full risk sharing across regions. Because βD , βT , βs and βU always sum to 1, βD , βT , βs also stand for the contribution of each factor's to the total consumption smoothing.

The result of estimation is shown in Table 1.

 $^{^{3}}$ This empirical model was basically same as that used in Asdrubali *et al.* (1996) and Doi (2000).

	Period					
	1980-2002	1980-1993	1994-2002			
Capital Depreciation (βD)	0.028	-0.036*	0.14			
	(0.49)	(-2.04)	(1.46)			
Fiscal Transfer (βT)	0.124*	0.112*	0.181			
	(1.88)	(1.98)	(1.58)			
Saving (βs)	0.332**	0.478**	-0.177			
	(3.13)	(6.08)	(-0.86)			
Not smoothed (βU)	0.517**	0.441**	0.858^{**}			
	(8.89)	(7.64)	(6.99)			
Number of sample	643	391	252			

Table 1: Interregional risk-sharing in China

Source: Authors' calculations.

Notes: The figures in parentheses are *t* values. *(**) denotes significant at the 5 (and 1) % level

First, we notice the result of estimation during the period 1980-1993, before the fiscal and financial reform had started. The value of βU shows that 48% of shocks to gross provincial product is absorbed through saving, most dominant, and 44% of the shocks were not smoothed in total.

However, in the period after the 1994, the result had changed dramatically. During this period, the estimate value of βT , βs is not significant, means that the smoothing through the saving and fiscal transfer that was significant in former period was not effective. Besides, 86% of the shocks were not smoothed in total during this period, most of income shock was not absorbed, the risk sharing did not function.

It might be the 'puzzle' that in the 1990's, when the economic must be market oriented than in 1980's, the finance flow across regions had shirked. And about this Puzzle about the integration of market, there are many former studies, which concern and discussed this problem from different perspective.

For example, Young (2000) provided evidence for distortions of market by the intervention of local governments had be getting more serious in 1990's then 1980's reformed economy by examining barriers to inter-provincial trade in China.

This is followed by four types of quantitative evidence, on cross-provincial (i) output structure convergence, (ii) price, especially grain price divergence, (iii) the time trend of the variances of relative output, labor productivity, and labor allocations, and (iv) the relationship of grain yield or agricultural labor and a measure of comparative advantage.

Then Young concluded that the local governments that started requiring

economic profit for themselves after the fiscal decentralization tend to lead the credit to local investment of second industry, contrary to the principle of comparative advantage. According to Young, this rent-seeking of local governments and disturbing of market integration is a "razor's edge" of market-oriented reform.⁴

And Poncet (2003) also tried to investigate whether the market of China had be gradually integrated across regions after reform, using the data of Input-Output table across regions in 1987, 1992, 1997. She found that the barrier between domestic and foreign market had been gradually decreasing, however, the barrier across the provinces, had been increasing after reform. This result seems to mean that the domestic market in China might have segmented.

Although it is difficult to find the correct answer to this "puzzle," the financial reform in 1990, promoted by the Prime Minister Zhu Rong-ji, whose purpose is to restrain inflation, and strengthen the management power of central government over macroeconomics may be one of the important background that the consumption smoothing through saving did not work. According to this reforms, the political credit assignment by the central bank was restrained, and the finance inflow to the area of which the economic performance far behind. This process might have lowered the risk sharing effect of across regions through the transfer of finance.

Thinking that consecution, the problem of imperfect of financial market across the regions is quite important to discuss the transfer of finance across the regions and redistribution policy by the central government. The back ground which causes such an imperfect integration of financial market will be as follows.

(i) The institutional condition for the integration of financial market such as the negotiation of draft in the transaction is not enough. (ii) The banking sector was quite "localized" in the means that the local branches of state owned banks give priority to the enterprises in the same region on their loans. (iii) Most of middle or small sized private companies that had grown rapidly in reform era, could not be supplied enough loan by the banking sector, and mainly relied on reserving profit for investment. (iv) Because in China the interest rate is restraint by the government, the loan rate does not correctly reflect the risk and return of lending. So banking sector could not help lending money for the "localized" criterion.

This problem of "imperfect integration" could make the theoretical framework

⁴ Holz (2006) insisted, that while the phenomena Young pointed are observed in China, it could not necessarily be the evidence that the "protectionism" of local governments caused the regional segment of market, as Young insisted.

disputable, in which redistribution of resource across the region as "the trade-off between fairness and incentive."

It is thought that the main purpose of financial reform in the middle of the 1990s is, to expanded control of the central bank, through the means such as establishment of the banks which concentrate on a public finance abolition of the provincial branches of People's Bank of China, and establishment of various financial laws. But in actual, the financial transfer across the regions do not expand, rather shrink, and the effect of risk sharing across regions did not work, This phenomenon might make the regional economy more unequal.

How the local governments act under this "imperfect integration" of financial market? And is it effective enough? We will discuss this problem in next part of this paper.

3 Rent-Seeking of Local Governments in the Chinese Reform Era

3.1 Case of TVEs

From the relationship between the market and the government, the pattern of economic development in China in the reform era can be characterized as follows. First, because the market mechanism is not perfect, there is always the chance of rent-seeking by the mean of government's intervene. Second, under chronic fiscal deficit, local governments attempt to maximize their non-tax revenues. Third, under the lack of an efficient financial system, the interventions by local governments into local financial markets sometime have strong effect on local economies.

But after 1994, when a series of fiscal and financial reforms were enacted, the type of intervention by local governments changed from that in the 1980s. Roughly speaking, the main means of rent-seeking in local economies in the 1980s was intervention into local financial markets. A representative example of this pattern of intervention is development of township and village enterprises (TVEs) in Sunan area.

The characters of the development of TVEs are as follows.

a. The enterprises can receive rent through the regulation of deposit and rental interest.

b. The local governments receive the share of rent as the "governance fee (extra budget fund)" from the TVEs.

c. The sharing of rent is linked with the growth of productivity; there is efficient competition among local governments and enterprises.

d. The rent shared by local governments would be invested to the local economy especially to the construction of infrastructure. Through this process, the cost of local financing would decease, so supply curve would shift downward (Figure 1).



Figure 1: Financial restrain

QE

QD

QD'

0

р

Q

According to them (Hellman *et al.* 1998), the purpose of financial restraint, then, is to promote the creation of a large number of decentralized agents that can make credible promises of future repayment.

This development process of Chinese TVEs might be match to the theory of "financial restrain" by Hellman, Murdock and Stiglitz. The essence of "financial restrain" is as follows.

Figure 1 shows the situation that the chance of receiving rent through the governments' intervenes into financial market, like regulation of interest rate. If the deposit rate are fixed to the lower level than market clear level (at rD), the supply of credit must decrease (QE \rightarrow QD), and the loan rate will increase. In this situation, the spread between deposit rate and loan rate will be the rent which banking sector can receive,⁵ and there is the welfare loss in whole economy.

However, if the banking sector using the rent which they received to construct their local branches, and try to decrease the cost of finance from the household, the supply curve of finance will shift to downwards $(S \rightarrow S')$, and banking sector can loan to the enterprises in lower interest rate. Hellman *et al.* insisted, that in the case of

Souse: Hellman et al. (1997)

⁵ They insist, the banking sector require to get the chance of rent, as the "franchise value", which can be received the bank continue to run the branch.

developing countries, in which the initial invest of banking sector is quite poor, and tend to suffer the shortage of fund and the higher interest rate, it is quite useful for the economic growth, to generate the chance of receiving rent by the mean of modest restrain of interest rate. This is the framework of the "financial restrain" theory.⁶

The case of reform China might shared the assumption with the theory of financial restrain theory, in the point that the governments fixed the interest rate in lower level to support industrial sector that suffer the shortage of capital. But Chinese case is different from the theory, because the level of loan rate also is very low, and banking sector has few chances to receive the rent. Actually, Chinese industrial sector receiving the rent through the dominant loan with lower rate, must share the part of their profit with local governments as "admission fee," and the local governments reserve that as "extra budget fund" for themselves. For example, in the case of Chinese TVEs, the local governments in lower layer (Township) may share the rent with the enterprises.

There are two important points. First, this process of receiving rent is quite competitive; because TVEs and local governments, which is assigned credit, could not receive any rent until succeed in the competition against the enterprises in other areas. Second, the credit assignment by the local governments is effective, in the situation that financial market is segmented among areas, and most of TVEs must rely on the loan from the local branch of the Bank of Agriculture or credit corporation.

In such a circumstance, if the money assigned to the TVEs by the intervention of government was used to effective project which can make profit, and this profit will be reinvested for the development of local area, the supply curve will sift downward in the local financial market, as the "financial restrain" theory have thought.

3.2 Case of SOEs

The TVEs is not the only case in China that the local governments intervene into its management. Most of state owned enterprises (SOEs) were also governed by local government through the reform era, and local governments deeply concern the performance of such a localized enterprises, on which local economy rely about the employment or the level of income. Such a close relationship with the local government, including the sharing of rent, is the common character of the case of SOEs and TVEs.

But in the case of SOE, different from the TVEs, enterprises and local

⁶ "Financial restrain" is distinguished from "financial repression" discussed by McKinnon and Show, in the point that the real interest should be kept positive informer case, but often be under zero in later.

governments did not necessarily require the improving of productivity to maximize the rent which they receive, from some reasons as follows. First, in the case of SOEs, there is the room of bargaining with central government to increase their share of profit. Of course, the manager of TVEs also made efforts to decrease the remittance of profit to the upper governments, but changing the rule or bargaining to the central government had more impact to the case of SOEs.

Second, the credit to SOE was finally financed by the loan of Central Bank (People's Bank of China, or PBC), and the budget constrain was softer than the case of TVEs. In 1980's most of local governments forced the branches of state owned banks (including PBC) finance the localized SOEs, and banks could not deny it. Under this soft budget constrain the central government could not effectively control the state banks' diversion of credit; it was forced to use money creation to finance the increasing transfers to the state sector. And as Figure 2 show, if the credit to SOE is finally financed by the loan of Central Bank (BOP), inflation will offset the decline of real interest. It is serious different from the case of TVEs.





Source: The author made.

Note: If the credit to SOE is finally financed by the loan of Central Bank (BOP), inflation will offset the decline of real interest.

These local government's intervene into SOEs was typical rent-seeking action, in the mean of that the local government try to increase the rent which they can receive by mainly using political power. In the economic depression period, during 1989-1991, this rent-seeking and ineffective investment bears down on the SOEs, the enterprises burden and state's financial deficit rapidly increased.

As a result, while non state enterprises like TVE s recorded quite good performance, and the growth rate of GDP was high, the inflation rose and real interest rate was very low, which bring heavy burden to the people living in the city. In this case, the burden of the rent is transferred to the peoples by the inflation which was invited by the central bank's ineffective finance to SOEs.

3.3 Rent-Seeking through the Land Market

After the mid 1990s, local governments tended to intervene in local land markets, the monopolistic suppliers of property rights for land. In this case, the developer and local governments could get the monopolistic rent through the supply of the right of using land, and the peasant and urban residence will bear the rent in the land market.

From the land market, the local governments can get a plenty of revenue, except for the tax for the transaction or holding of the land, a plenty of extra budget fee from the developer or real estate sector. Especially, the local government's revenue through selling the usage rights of land in the markets is rapidly growing in recent years. This revenue is a kind of monopolistic rent that the governments get by the disturbing of the market.

From Figure 3, we can see that these revenue was growing rapidly since 2002 when the boom of investment to the land market restarted, and that the there is serious distinction between coastal area and inter land (center and west area) in the level of revenue. Most of this revenue could be reserved in the local government, as the extra budget revenue (The Second fiscal revenue).



Figure 3: Disposal revenue of local governments by selling usage right of land

Source: Zhonghua Renmin Gongheoguo Guodu Ziyuanbu, Zhongguo Guodu Ziyuan Nianjiang [The Almanac of Chinese Land Resource], Beijing: Zhongguo Dizhi Chubanshe, various years.

How should we think this revenue and the character of Chinese land market?

An important point is that such a rent-seeking through the land market could be sustained by the special structure of the Chinese land market.

Chinese land market could be divided into three layers. First layer is the market, in which the local governments dispose usage right of land, and second layer is the market in which the developers sell the real estate with the usage right of land, and third layer is the market of the transaction among end users.

In the first layer, the local governments have the monopoly power about the supply of the usage right of land, so the amount of the supply would be fewer and the price would be more expensive than the market clear level. And after determination of the supply and price of usage right in the first layer, rental and asset price of real estate are determined in second and third layer market. This process of the determinacy of the flow and asset price of land market that the textbook say,⁷ but it may be plausible in Chinese case.

⁷ Suppose that the real rent of land is determined as R, the equivalent level in the market, and q is the real asset price of land, and r is the nominal interest rate, p is the deflator. And suppose at the period t, there is the investor who has one unit of land. If the investor sell this land at current period and invest the fund in the financial market, he or she will get the return of $(1+r)p_tq_t$ at the next period. On the other hand, if he or she lend this land at current period, and will sell at next period, the return will be $(1+r)p_tq_t$. In the equivalence, these value of return will be same, so we get value of q, that satisfies $(1+r)p_tq_t = p_{t+1}q_{t+1} + p_tR$.

And in the first layer of the land market, the serious distinction exists in the price of land, according to the ways of the using. For example, about the site for industrial factories, there is serious competition between other regions because of the bigger elastics of demand; the governments dispose the usage rights with very low price by the way of conference.⁸ Contrarily, about the commercial or residential area, elastics of demand are smaller than industrial zone, the supply with low price by the way auction. Because of the monopoly supply of land by the local government, there is no arbitrage between different uses of land (Figure 4).

Figure 4: Price distinction in the land market



Source: The author made.

Compared with the pattern of intervention in the 1980s, rent-seeking through the land market has tended to distort the market and adversely affect economic welfare. First, because the land market is quite different from the credit market, the amount of the factor endowment is fixed, and the supply of land is basically determined by the local governments. This means, the "development competition" among the local governments through the intervening into the land market, is a kind of rent-seeking that require the monopoly rent. Second, the sharing of rent through the land market do not link to the increasing of productivity in the finance and enterprise or banking sector, so the intervention of local governments into land market tend to be quite inefficient.

In this case, local governments do not take any risk by themselves, but require

⁸ According to the announcement of the ministry of National Land and Resource, the average price of land is 2775 yuan per square meter for commercial area and 1983 yuan for residential area, though 568 yuan for industrial zone.

opportunities for rent-seeking through political means and thrust the risk on ordinary people, especially peasants.

Now we can ask a big question. Though there is such inefficient rent seeking action by the local governments, why the Chinese economy after 1990's could record the very high growth performance, such as over 10%'s growth rate of GDP? To answer this question may be out of scope of this paper. But we can suggest following things. After late 1990's, because of global excess liquidity that invited the real estate bubble and this catastrophe in the United States, and lower RMB level than market clear level, a plenty of hot money flown into Chinese finance market. It is plausible that this flow of hot money might sustain the high growth rate and also cause the local government's rent seeking action that we discussed in this section.

4 Integration of Financial Market: The Case of India

In this section, we try to compare the problem about the Chinese local governments or the fiscal system, to that of India. Indian fiscal system is the good contrast of Chinese case, for example in the relationship between the autonomy of local fiscal system and the incentive of local governments, and it seems to be the typical case that "the trade off between incentive and fairness" is adopted.

Indian fiscal system has been suffering the serious deficit both in central and local level (Table 2). For example, the central fiscal deficit recorded the 8.4% of the GDP, and improving this is the main background of economic liberalization program that started in 1991(Sato 2002). After the economic liberalization, fiscal deficit had once improved, but after later 1990's, the fiscal deficit of the states had expanded. It is appointed that the background of expanding of states' fiscal deficit, the competition of depreciation about tax rate in order to pull the foreign direct investment or the increasing of public servant's wage.

	NSDP per	Poverty Rate	Index of fiscal	Loan/deposit	Growth rate of	Population
	capita (rupee)		autonomy	ratio	NSDP per capita	10thousand
	2001/02	1999/00	1996/97-1998/99	2001/02	1993/94-2001/02	1991/1992
Bihar	3554	42.6	0.354	0.24	2.4	863.74
Uttar Pradesh	5885	31.2	0.379	0.28	1.6	1391.12
Assam	6059	36.1	0.314		0.5	224.14
Orissa	6105	47.2	0.342	0.41	2.6	316.6
Madhya Pradesh	7699	37.4	0.555	0.47	2.2	661.81
Rajasthan	8819	15.3	0.512	0.48	3.8	4440.06
West Bengal	10375	27	0.424	0.44	5.4	680.78
Andhra Pradesh	10590	15.8	0.561	0.63	4.4	665.08
Kerala	11046	12.7	0.604	0.43	3.9	290.99
Karnataka	11516	20	0.742	0.59	5.6	449.77
Tamil Nadu	13108	21.1	0.647	0.91	4.6	558.59
Gujarat	13684	14.1	0.785	0.49	3.3	413.1
Haryana	14250	8.7	0.739	0.42	3.1	164.64
Maharashtra	14892	25	0.801	0.85	2.7	798.37
Punjab	15255	6.2	0.674	0.41	2.5	202.82

Table 2: Economic Data of Indian Main States.

Sources: NSDP per capita, its growth rate and Ratio of population under poverty line: Uchima (2006). Index of fiscal autonomy: Yamamoto (2007). Loan/deposit ratio: Nirvikar and Srinivasan (2006).

Notes: Index of fiscal autonomy means the ratio of state's own revenue to state's expenditure. Poverty Rate means the ratio of population under poverty line.

How about is the regional integration of financial or credit market?

Nirvikar and Srinivasan (2006) shown that the positive correlation between the ration of per capita SPD and credit-deposit ratio, and the correlation increased dramatically from 1995 to 2001. They also investigate that growth convergence regression using states data, focusing three different financial variables: FDI approvals per capita, per capita bank credit, and credit-deposit ratios. The result is following: any one of the financial variables taken individually is estimated to have a significant impact, however, when two or more financial variables are included, their variables have positive and effective relation to the growth of SDP. This result means that mobile domestic and foreign capital driving growth. This result is contrary to Chinese case, as Park and Sehrt (2001) showed, where the loan/deposit ration has the negative correlation with the economic growth rate.

The result of former studies is very simple, so the result may not be so robust, but it is plausible to conclude that the financial transfer across the regions is not seriously disturbed by the redistribution policy of governments. Besides, comparing the other developing countries, in India rather well-developed financial or asset market exists, especially after economic liberalization, the amount of the transaction or institution about that have improved dramatically.

Quite roughly speaking, one of the important differences between India and China in fiscal and financial system is following. While in India the adjustment of regional inequality had been made through the fiscal transfer, not financial market, in China financial transfer also played important role. The reliance to the fiscal transfer of some poor regions spoiled the incentive of these region economies, however, from the point of regional integration of financial market, India might be quite progressed than China.

In this meaning, like Weingast, to praise China as the typical case of the "market preserved federalism" and to rank the India as inferior case than China might be a little simplistic. Actually, China's economic performance dominated India in the incentive of local economies, but it is accompanied the problems such as the segmentation of financial market and the rent seeking action of local governments in the factor market, such as finance and usage right of the land. Several recent big political decision, such as the constitution of property rights law in 2007, or promoting of transfer about usage right of farmers land in 2008 suggest that it is one of most urgent issue for Chinese economy and politics, to improve the problem of local government's rent-seeking action in some factor markets.

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