

Should Local Governments in China be Allowed to Issue Debt?

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Structure of the presentation

- Introduction: Pros and cons of local government debt issuing
- п. Current local government debt problem
- Using fiscal rules to overcome excessive local government debts
- Some preconditions for local government debt issuing
- v. Sequencing local government debt market development

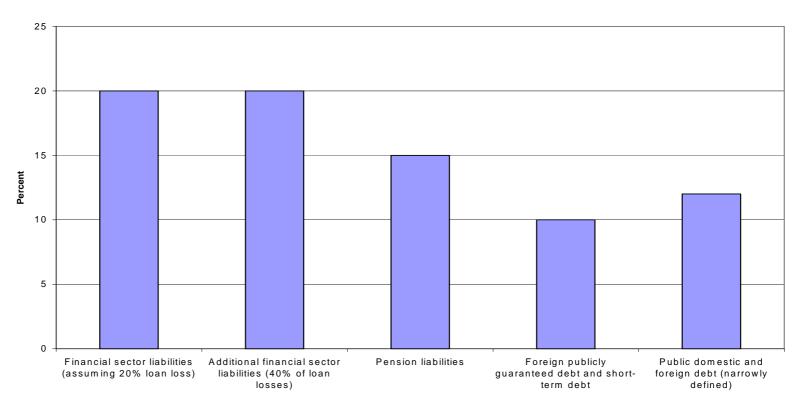


I. Introduction: Pros and cons of allowing local government to issue debt

- Fiscal sustainability is a risk factor
 - Central government's overall debt level high (over 100% percent GDP) if including contingent fiscal liability
 - Small revenue to GDP ratio (18.5%)
 - Interest payment in total expenditure is high
 - Limited redistributive power led to severe regional (10 times), urban-rural (3 times), and individual income inequality (Gini coefficient close to .5)

Stock of contingent liabilities is large

Stock of Contingent and Explicit Debt





Debt dependency ratio is right

Debt Dependency of the Central Government Budget

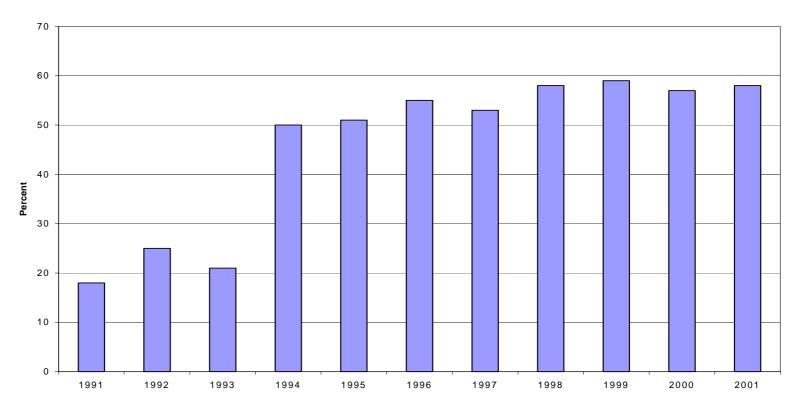


Table 1: Sum mary Information of Chinese Provinces (2003)

			G overnment				
Provinces	GDP Size (Billion of Yuan)	Total Population (year- end) (million)	Per Capita Provincial Incom e (Yuan)	Revenue (Billion of Yuan)	Revenu-G D P Ratio		
Anhui	3 9 7 .2	6 4 . 1	6 1 9 7	2 2 . 1	5.6		
B eijin g	3 6 6 . 3	1 4 . 6	2 5 0 8 9	59.3	16.2		
C h o n g q i n g	2 2 5 . 1	3 1 . 3	7 1 9 2	16.2	7.2		
Fujian	5 2 3 . 2	3 4 . 9	1 4 9 9 1	3 0 . 5	5.8		
G an su	1 3 0 .5	2 6	5 0 1 9	8.8	6.7		
Guangdong	1 3 6 2 . 6	7 9 . 5	17140	1 3 1 .6	9.7		
Guangxi	273.5	48.6	5 6 2 8	20.4	7.5		
G u i z h o u	1 3 5 .6	38.7	3 5 0 4	1 2 . 5	9.2		
H ain an	67.1	8 . 1	8 2 8 4	5 . 1	7.6		
H e b e i	709.9	67.7	1 0 4 8 6	3 3 . 6	4.7		
H elongjiang	4 4 3	38.2	1 1 5 9 7	2 4 . 9	5.6		
H e n a n	7 0 4 .9	96.7	7 2 9 0	3 3 . 8	4.8		
H u b e i	5 4 0 . 1	6 0	9 0 0 2	2 6	4.8		
H u n a n	463.9	66.6	6 9 6 5	26.9	5.8		
Inner M ongolia	2 1 5	23.8	9034	13.9	6.5		
Jiangsu	1 2 4 6 . 1	7 4 . 1	16816	79.8	6.4		
Jiangxi	283	4 2 . 5	6 6 5 9	16.8	5.9		
Jilin	252.3	2 7	9 3 4 4	15.4	6 . 1		
Liaoning	600.2	4 2 . 1	1 4 2 5 7	4 4 . 7	7.4		
Ningxia	3 8 . 5	5.8	6638	3	7.8		
Qinghai	3 9	5 . 3 4	7 3 0 3	2.4	6.2		
Shandong	1 2 4 3 . 6	91.3	1 3 6 2 1	7 1 . 4	5.7		
Shanghai	6 2 5 . 1	17.1	36556	88.6	1 4 . 2		
Shannxi	239.9	36.9	6 5 0 1	17.7	7.4		
Shanxi	2 4 5 . 7	3 3 . 1	7 4 2 3	18.6	7.6		
Sichuan	5 4 5 . 6	8 7	6 2 7 1	3 3 . 7	6.2		
T ianjing	2 4 4 .8	1 0 . 1	2 4 2 3 8	20.5	8.4		
Tibet	18.5	2.7	6 8 5 2	0.8	4.3		
X injiang	187.8	19.3	9731	1 2 . 8	6.8		
Yunnan	2 4 6 . 6	43.8	5630	22.9	9.3		
Z h e j i a n g	9 3 9 . 5	46.8	20075	70.7	7.5		
<u>M e m o ra n d u m</u>							
Maximum	1 3 6 2 . 6	96.7	36555.6	1 3 1 . 6	16.2		
Minimum Average	1 8 . 5 4 3 7 . 2	2.7 41.4	3503.9 11139.7	0.8 31.8	4 . 3 7 . 3		

Source: Chinese Statistical Yearbook (2004)



- But not necessarily will China run into fiscal unsustainability problem!
 - Large private savings rate and stock
 - Better human capital
 - Better institutional foundations to deal with the transition debt
 - Key to resolve the problem: Allow long-term financing means at the local level as well to reduce excessive accumulation of responsibility at the center



- Advantages of allowing local government to issue debt
 - Many development projects are too large for private sector to handle. Local government involvement is inevitable at this stage of development.
 - Local government also runs into maturity mismatch problem: long-term financing need (infrastructure, education, and health) is often financed by short-term means (bank loans)
 - Provinces' access of the bond market will leave room for the central government to target regional inequality by using transfers more effectively
 - Municipal bond market development helps overall capital market development
 - Help improve transparent budget process and expenditure assignment at the local level and increase accountability
 - Better institutions associated with this segment of the market: better budget process and institutions, intergovernmental relations, credit rating agencies, derivatives markets, etc...



- Disadvantages of allowing local government to issue debt
 - Excessive debt issues and local governments defaults (Argentina and to some extent, Brazil)
 - Endangering national fiscal position and therefore monetary stability



But the adverse effects can be minimized!

- Advocate a Carrot and Stick Approach to debt issuing
 - Carrot: allow the possibility of local government to issue debt
 - Stick: the local governments would have to disclose their revenues and expenditures, assets and liabilities to rating agencies, the general public (tax payers) and the central government at a transparent manner.
 - This will allow local legislature (Chinese provincial National People's Congress) to monitor local government finance
 - In addition, the local government will have to abide by some fiscal rules that designed to prevent them from running into excessive debt problem



II. Local government debt problem is quite serious

- Five types of local government debts
 - Guarantees via the "decisions" issued by local NPCs on loans from banks to local governmentowned enterprises (explicit contingent debt)
 - Using social security fund for current expenditure needs (implicit but direct debt)
 - Losses due to state-owned grain related enterprises or grain debt (implicit but direct debt)
 - Salary non-payment to school teachers or other government employees (explicit debt)
 - Construction debt owned to construction firms (about one percent of GDP)

Local governments are already running deficits, which is in violation of the 1995 budget law

Table 2: Provincial Level Revenues and Expenditure, 1993-2003 (Billions of Yuan)

Tuote 2. TTO vincau											
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Revenue	339.1	231.2	298.6	374.7	442.4	498.4	559.5	640.6	780.3	851.5	985
Share of total government Revenu	78%	44.3%	47.8%	50.6%	51.1%	50.5%	48.9%	47.8%	47.6%	45%	45.40%
Expenditure Share of total government	333	403.8	482.8	578.6	670.1	767.3	903.5	1036.7	1313.5	1528.1	1723
Expenditure	71.7%	69.7%	70.8%	72.9%	72.6%	71.1%	68.5%	65.3%	69.5%	69.3%	69.9%
Fiscal Gap	6.1	-172.6	-184.2	-203.9	-227.7	-268.9	-344	-396.1	-533.2	-676.6	-738
Share of GDP	0.2%	-3.7%	-3.1%	-3.0%	-3.1%	-3.4%	-4.2%	-4.4%	-5.5%	-6.4%	-6.3%
Memorandum: GDP	3463.4	4676.9	5847.8	6788.5	7446.3	7834.5	8206.8	8946.8	9731.5	10517.2	11725.2

Source: China Statistical Yearbook (2004)



- Various survey data have shown local debt problem has been serious
 - National Bureau of Audit (2003): 37 countries out of 49 counties in 10 provinces in Mid-Western region had averaged deficits of 1 billion yuan, or 147 percent of their allowed budget
 - Accumulative debt of the 49 counties exceeds 16.2 billion yuan or 2.1 times of their total tax revenue
 - It is estimated that the average debt is around 4 million yuan per township nationwide (or 1.89% of local GDP or 25.7% of the annual local government revenue (Wei, 2004 and Li, 2003)
 - Survey data also show that the lower the level of government, the worse the problem



- Two problems contributed to the local government debt problem
 - Fiscal responsibility of central and local government remains unclear after 1994 tax reform: local revenues increase only 4 percent, compared 22 percent revenue increase at the center. At the same time, local govt. responsibilities remain the same or even increased.
 - Lack of check and balances led to overexpansion of the local bureaucracy and short-term behaviors



Figure 2: Central and Provincial Revenue Share in Total Revenus





III. Using fiscal rules to overcome excessive local government debts

- Simply banning local government from running up debt does not work.
- Using a carrot and stick approach: Allow debt issuing, but subject to a set of stringent fiscal rules
- For example: The Maastricht Treaty (3% of budget deficit and debt at 60% of GDP) and the US states fiscal rules
- The US states experiences have been illustrative so far



- Four types of balanced budget rules
 - The least restrictive: the governor of the state submits a balanced budget at the beginning of the fiscal year. Events during the fiscal year that may cause fiscal imbalances do not require corrective action, which means that the state can run deficits.
 - The next-level restrictiveness: State legislature to enact a balanced budget. If unforeseen economic events lead to deficits, the state can borrow to carry the deficit forward to future years. This means these states can run deficits legally (8 states)



- The third-level allows deficits at the end of a year; but the deficit has to be explicitly budgeted for the next fiscal year.
- The most restrictive type of balanced budget rules stipulates that the legislature enact a balanced budget with a prohibition on deficit carry-forward. Deficits occurred during the budget year has to be reduced to zero by the end of the year. Borrowing is only allowed within the budget cycle (36 states).



Table 3	· Ralanced	Budget Ru	les in U.S.	States

	G overnor M ust		Legislature		G overnor M ust			
	Submit	Nature of	M ust Pass	Nature of	Sign Balanced	Nature of	May Carry	Credit Raing
State	Balanced	Requirement	Balanced	Requirements	Budget	Requirement	Over Deficit	(S&P)
A la b a m a	X	c,s	X	S	n.a.	n.a.		AA
Alaska	X	S	X	S	X	S		A A -
Arizona	X	C,S	X	C,S	X	C,S		A A -
Arkansas	X	S	X	S	X	S		AA
California	X	С	n.a.	n.a	X	S	YES*	A
Colorado	X	С	Х	С	X	С		A A -
Connecticut	X	S	X	C,S	X	С		A A
Delaware	X	C,S	X	C,S	X	C,S		AAA
lorida	X	C,S	X	C,S	X	C,S		A A +
3 e o rgia	X	С	X	С	X	С		AAA
lawaii	X	C,S	n.a.	n.a	X	C,S	*	A A -
daho	*	n.a.	X *	С	n.a.	n.a.		NR
llinois	X	C,S	X	С	X	S		AA
ndiana	n.a.	n.a.	n.a.	n.a	n.a.	n.a.		A A +
o w a	X	C,S	X	S	n.a.	n.a.		A A +
(ansas	X	S	X	C,S	n.a.	n.a.		A A +
Centuky	X	C,S	X	C,S	X	C,S		A A -
ouisiana	X	C,S	X	C,S	X	C,S		A +
// ain e	X	C,S	X	Ċ	X	C,S		A A +
// arvland	X	C	Х	C	*	C *		AAA
Massachusetts	X	C,S	X	C,S	X	C,S		A A -
1 ichigan	X	C,S	X	Ć	X	C,S	*	AAA
1 in n e s o ta	X *	C,S	X *	C.S	X *	C,S		AAA
// ississippi	X	S	X	S	n.a.	n.a.		AA
Missouri	X	Č	n.a.	n.a	X	C		AAA
Montana	X	Š	X	Č	n.a.	n.a.		AA-
N e b r a s k a	X	Č	X	Š	n.a.	n.a.	N O	N R
N e v a d a	X	S	X	Č	X X	C	11 0	AA
New Hampshire	X	S	n.a.	n.a	n.a.	n.a.		A A +
New Jersey	X	C	и.а. Х	C C	ν.α.	C.		AA
New Mexico	X	Č	X	Č	X	C		A A +
New Mexico	X	Č	n.a.	n.a	÷	n.a.		aa
North Carolina	X	c,s	и.а. Х	N.a S	n.a.	n.a.		AAA
North Dakota	X	C	X	C	π.а.	п.а. С		A A -
) hio	X	C	X	C	X	C	N O	A A +
O klahom a	X	S	^	C	^ X*	C	N O	A A A
) regon	X	C	x	C	X	C		
						C,S	V *	AA
Pensylvnania	X	c,s	n.a.	n.a	X		X *	AA
Rhode Island	X	С	X	С	X	S		AA
South Carolina	X	C	X	C	X	C		AAA
outh Dokota	X	С	X	С	X	C		N R
ennessee	Х	С	X	С	X	C	N O	AA
Texas	n .a .	n.a.	X	C,S	X	С		AA
Jtah	X	С	X	C,S	X *	n.a.		AAA
/ erm on t	n.a.	n.a.	n.a.	n.a	n.a.	n.a.		A A +
/irginia	*	n.a.	*	n.a	*	С	N O	AAA
V ashington	X	S	n.a.	n.a	n.a.	n.a.	S *	A A +
V est Virginia	n.a.	n.a.	X	С	X	С	n.a.	A A -
V isconsin	X	С	X	С	X	C,S		A A -
W yom ing	X	С	X	С	n.a.	n.a.		A A +
Total	45 STATES	·	41 STATES		35 STATES	•		

Total 45 STATES 41 STATES

Source: Budget Process in the States, January 2002 and S&P's (2004)

Codes: X: Yes; C: Constitutional; S, Statutory;

" n.a." means not apply. The highest rating is AAA and investment grade is BBB-.

Note: California: May carry over deficit from current year to budget year. The budget for any year must be balanced when enacted.

Hawaii: A fiscal year may have deficits if prior years' surpluses can be used to balance it.

Idaho: Not required, but in practice governor always submits balanced budget.

Maryland: When the budget bill is passed by both houses, it shall become a law immediately without further action of the governor.

Minnesota: The state constitution limits the use of public debt, which requires balanced budget.

New York: Governor is not technically required to sign a balanced budget, but the governor must certify the budget in balance in order to meet borrowing requirement.

North Carolina: The governor is not required to sign a bill for the bill to become a law. If a bill is not returned by 10 days after it is presented to the governor, it becomes a law. Oklahoma: Legislature could pass and the governor could sign a budget where appropriation exceed cash and estimated revenues, but constitutional and

statutory provisions reduce the appropriations so that the budget is balanced.

Pensylvania: The deficit must be paid from the next fiscal year's revenue.

 $\textbf{U}\,\textbf{tah}\colon \textbf{G}\,\textbf{overnor}\,\textbf{m}\,\textbf{ay}\,\,\textbf{allow}\,\,\textbf{balanced}\,\,\textbf{budget}\,\textbf{to}\,\,\textbf{go}\,\,\textbf{into}\,\,\textbf{law}\,\,\textbf{without}\,\textbf{signature}\,.$

Virgina: Requirement applies only to budget execution. The governor is required to insure that actual expenditures do not exceed actual revenues by the end of appropriation period.

Washington: Ability to carry over a deficit in any account must be approved by the Office of Financial Management for a specific time period.



- These budget rules apply to operating budget or general fund. But US state budget also includes capital fund and insurance fund (rainy-day fund). There are some linkages between general fund with these two type of funds
- Some US states also have rules on revenue side, the so-called tax limitation rules (specific limitation on property tax).
- Also some US states impose debt limits in nominal dollar terms (percent of state revenue, taxable property, state property, or budget funds)

State	Amount of Government Overall Debt	Constitution or	Override Provisions	Amount of Short-term Debt Limit	Constitution	O verride
Alabama	Limit U	Statutory C		\$300,000	or Statutory	Provisions
Alabama Alaska	U	n.a.	n.a.	\$300,000 U	C C	n.a.
			n.a.			n.a.
Arizona	\$350,000	C	n.a.	\$350,00	n.a.	n.a.
Arkansas	\$1,350,000,000	С	n.a.	N	n.a.	n.a.
California	U	n.a.	n.a.	n.a	n.a.	n.a.
Colorado	U	С	n.a.	N	S	X
Connecticut	1.6*Revenue	S	n.a.	n.a.	S	n.a.
Delaware	Yearly issue<5% of general fund;	S	n.a.	n.a	n.a.	n.a.
	Aggregate max. annual debt service < 15% of annual revenue					
Florida	n.a.	С	n.a.	N	n.a.	n.a.
Georgia	10% Revenue	С	n.a.	n.a	n.a.	n.a.
Hawaii	debt payment can not exceed 18.5% of	С	Emergency condition require 2/3 vote of	n.a	n.a.	n.a.
	three year general fund revenue average.		legislature			
daho	\$2,000,000	C	X	\$2,000,000	С	X
Illinois	Dollar amount set by 3/5 vote of legislature	C,S	n.a.	15% total appropriation	C,S	n.a.
Indiana	N	С	n.a.	N	С	n.a.
ow a	\$250,000	C	n.a.	U	S	n.a.
(ansas	\$1,000,000	C	X	Ü	n.a.	n.a.
i entuky	\$500,000	Ċ	n.a.	Ü	n.a.	n.a.
ouisiana	<10% average reveune of Bond Security and Redemption fund for the last 3 fiscal years.	C,S	X	n.a	n.a.	n.a.
Maine	U	n.a.	n.a.	10% of general fund and	С	n.a.
M a rylan d	3.2% of state personal income and less than 8 percent of revenue source	n.a.	n.a.	highway fund revenue \$100,000,000	s	n.a.
Massachusetts	Debt service appropriation less than 10%	S	n.a.	n.a	n.a.	n.a.
Michigan	of total appropriations. Approved by a majority vote fo elctors	C,S	n.a.	15% of prior year underdedicated general	С	n.a.
				_		
	voting at every general election			fund		
/linnesota	3% non-dedicated Revenue	n.a.	n.a.	n.a	S	n.a.
A ississippi	1.5*Revenue	C	n.a.	5% of Govt. Fund	S	n.a.
<i>l</i> issouri	\$1,000,000	С	С	N	С	X
Montana	U	n.a.	n.a.	U	n.a.	n.a.
Nebraska	N	С	n.a.	N	С	n.a.
Nevada	2% of Assessed value	С	n.a.	n.a	n.a.	n.a.
New Hampshire	10% Revenue	S	n.a.	\$125,000,000	n.a.	n.a.
New Jersey	1% of General Fund	C	Referendum	N	n.a.	n.a.
New Mexico	One percent of total property valuation subject to taxation	C	n.a.	\$200,000	С	n.a.
New York	U	C/S	n.a.	\$1,000,000,000	S	X
North Carolina	Ü	C	Popular vote	50% year total	Č	x
North Dakota	\$10,000,000	Č	X	N	n.a.	n.a.
) hio	Less than 5% of general revenue fund	Ċ	Limitation can be waived with 3/5 vote of each house of the general	Subject to the authorization of the particular bonds being	C,S	Same as long
	rovenue plus lettery proceeds		assembly	issued		term debt
) l. l. b. a	revenue plus lottery procceeds			Issued		
Oklahom a Oregon	U* General obligation debt must be authorized in the constitution	n.a. C	n.a. Constitution Amendament	· ·	n.a. n.a.	n.a. n.a.
Pensylvnania	General obligation debt for capital budget not approved by the voters is limited to 1.75 times five-year average annual tax	С	Referendum	20% of revenue	S	n.a.
Rhode Island	revenue \$50,000	С	Referendum	\$150,000,000	C,S	n.a.
South Carolina	5% of the actual General Fund	С	n.a.	N	n.a.	X
South Dokota ennessee	N Pledged revenues must be 150% of debt	C S	n.a. X	\$100,000 N	C n.a.	n.a. n.a.
Гехаѕ	service requirements 5% of Govt. Revenue	C.S	X	n.a	n.a.	X
J tah	20% of State Appropriation limit	C,S	ĉ	n.a	n.a.	n.a.
erm ont/	Ü	S	n.a.	**	S	n.a.
/irginia	\$9,425,434,000	С	n.a.	\$3,310,975,000	С	n.a.
N ashington	7-9% general revenue	c,s	n.a.	n.a	n.a.	n.a.
W est Virginia	per am endment	Ċ	n.a.	per statute	S	n.a.
	F	~		F	-	



Do these fiscal rules work?

- No-carry-over rule has a significant effect in reducing state general fund deficits (Bohn-Inman, 1996)
- US municipal bond yields are significantly lower in states with strong balance of budget rules than those with weaker ones (Bayoumi, Goldstein, and Woglom, 1995)
- Credit ratings and default data also verify this: All states' ratings are very high above the investment grade and there is almost no default of municipal government debt in the US.
- Municipal bond default rate is extremely low: In the 1840s, there are 9 states defaulted (no fiscal rules by then!). One recent case is Orange County in California whose default was due to ventures into derivatives.



IV: Some preconditions for local government debt issuing in China

- Comprehensive survey of existing local government debt problem
- Amend the Article 28 of the budget law at the provincial, region, and county level
- In return, local governments need to adopt some version of the fiscal rules and create mechanisms that these rules that can be *enforced*.
- A law to honor all government debt (akin to "An Act to Strengthen the Public Credit" by the US congress in 1869).
- Local government bankruptcy law for an orderly default process



- Institution buildings: budget process and institutions, fiscal rule enforcement mechanisms (to give real power to the current rubber stamp local national people's congress), independent budget forecast agencies, inter-governmental relations agencies, independent accounting and audit process, associations of national governors and provincial budget officers, etc...
- Credible rating agencies: allow foreign entry in domestic municipal bond markets



Using some rating criteria by Moody's

- Central and local government fiscal relations and oversights,
- Fiscal institutional quality at the provincial level,
- 3) Economic fundamentals of provinces,
- Financial conditions, and
- 5) Their indebtedness and debt risks

We find that all will be able to do so!

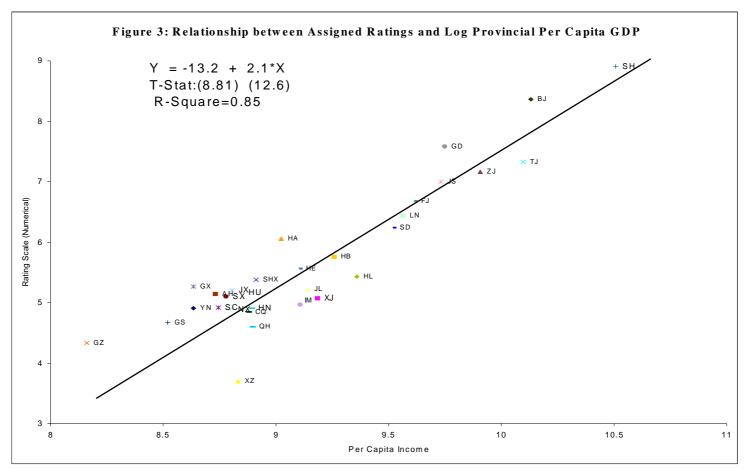
Table 5: Domestic Currency Ratings of Chinese Provinces using Moody's Raitng Scale

Province Name	Code Name	Numerical Rating	Letter Rating Scale
Shanghai	SH	8.9	Aaa
Beijing	BJ	8.4	Aaa
Guangdong	G D	7.6	Aa1
Tianjin	TJ	7.3	Aa2
Zhejiang	ZJ	7.2	Aa2
Jiangsu	JS	7.0	Aa2
Fujian	FJ	6.7	Aa3
Liaoning	LN	6.4	Aa3
Shandong	SD	6.2	A 1
Hainan	HA	6.1	A 1
Hebei	НВ	5.8	A 2
Hubei	HE	5.6	A 2
Helongjiang	HL	5.4	A 2
Shanxi	SHX	5.4	A 2
Guangxi	GX	5.3	A 2
Jilin	JL	5.2	A 3
Jiangxi	JX	5.2	A 3
Hunan	HU	5.2	A 3
Anhui	AH	5.1	A 3
Shaanxi	SX	5.1	A 3
Xinjiang	ХJ	5.1	A 3
Inner Mongolia	IM	5.0	A 3
Sichuan	SC	4.9	A 3
Henan	HN	4.9	A 3
Yunnan	YN	4.9	A 3
Ningxia	NX	4.9	A 3
Chongqing	CQ	4.8	A 3
Gansu	GS	4.7	Baa1
Qinghai	QH	4.6	Baa1
Guizhou	GZ	4.3	Baa2
Tibet	XZ	3.7	Baa3

Source: Calculated by the Authors

Note: Moody's Rating Scales are Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1, Baa2, Baa3, Ba1, Ba2, Ba3, B1, B2, B3, Caa1, Caa2, Caa3, Ca, C. Ratings below Baa3 are Speculative Ratings, i.e., below investment grade

Indeed, the assigned ratings are highly correlated to per-capita income





V. Sequencing local government debt market development

- The initial stage: The Japanese local government bond experiences are very suggestive
- Three-pronged approach to local government debt issuing: Local government debt issues subject to the approval and monitoring of the central government, the local NPC, and the market.
- Benchmark-based standards for accessing the market: Rich provinces could be allowed to tap into the market first. Their experiences will serve as a guide for poor provinces



Move to a market based approach

- The second stage: The US model
- Once institutions and markets are matured and are strong enough to discipline the local government borrowers, the market should be allowed to take over: No more central government approval, but local NPC approval for local debt issues should always be required.
- All issues should require a rating by a credible rating agency (joint venture with a global rating agency would be preferred).