ADB

Consultant's Report

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Knowledge Work on Local Government Bond Market in the People's Republic of China

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For Asian Development Bank

Asian Development Bank

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ABBREVIATIONS

ADB	-	Asian Development Bank
CNY		Chinese Yuan
GDP	-	gross domestic product
LGFV	-	local government financing vehicle
MOF	-	Ministry of Finance
NAFMII	-	National Association of Financial Market Institutional Investors
PRC	-	People’s Republic of China
SBLC	-	standby letter of credit
Shibor		Shanghai interbank offer rate

CURRENCY EQUIVALENTS
(as of 27 March 2015)

Currency unit – yuan (CNY)

CNY1.00	=	$0.161033
$1.00	=	CNY6.20990

EXECUTIVE SUMMARY

- The PRC's domestic bond markets have grown continuously over recent years to reach CNY35,933 billion (56.5% of GDP) at end-2014. Total bond issuance was RMB12,145 billion (19.1% of GDP) in 2014, an increase of 34.3% over 2013. Asset securitization also increased strongly from a low base to 0.5% of GDP.
- Since 2009, the central government has issued smaller amounts of bonds for provincial governments though the Ministry of Finance to keep financing cost low. Since 2011, selected local governments can also self-issue bonds under a pilot controlled by the central government. The pilot was expanded in 2013 and 2014, and will likely to be further expanded and modified in 2015. Issuance increased over time under both schemes to CNY400 billion (0.6% of GDP) in 2014. Outstanding local government bonds reached CNY1,162 billion (1.8% of GDP or 3.2% of total domestic bonds outstanding) at end-2014. Bonds issued under the pilot have maturities of 3, 5, 7 or 10 years, the highest possible rating, and interest rates within a narrow range and mostly below those for central government bonds.
- In 2015, local governments have a bond issuance quota of CNY600 billion (0.9% of GDP), which also includes for the first time project related bonds. They received an additional initial quota of CNY1 trillion (1.5% of GDP) to re-finance principle payments on maturing liabilities but details have yet to be announced.
- Bond issuance by local government financing vehicles (LGFV) was boosted by the economic stimulus program that was initiated by the central government in 2008 and had to be largely financed by local governments. LGFV bond issuance increased over time to CNY1,833.4 billion (2.9% of GDP) in 2014, which brought the outstanding amount to CNY4,142 billion (6.5% of GDP). LGFV bonds have a broad range of maturities, with 6-7 years the most common, and higher financing cost than local government bonds. Some are rated, others are not. The government has yet to decide which LGFV bonds to assume full responsibility for.
- As a result of a major government reform initiative since 2014 a new system of local government finance and debt management is now evolving. Discussions are still underway on how to best use various elements of this system, including central government transfers, public private partnerships, and local government bonds, among others, and how to deal with the existing debt stock.
- To support local government bond market development the government could consider
  - (i) facilitating rating differentiation by assigning rating agencies to issuing local governments rather than letting those governments select the agencies themselves and/or requiring at least two agencies to rate bonds;
  - (ii) credit enhancement for bonds issued by local governments through standby letter of credit from banks, to provide credit comfort to investors who might otherwise not be able to invest in the low rated or unrated bonds and thereby increase the investor base; and
  - (iii) single local government bonds to be backed by several underlying loans by employing a collateralized debt obligation structure, to enable debt of weaker local governments to be sold as bonds and help investors to benefit from risk mitigation and possible diversification involved in backing bonds by a larger number of underlying loans.

I. INTRODUCTION

1. Total public debt of the People's Republic of China (PRC) stood at 53.3% of gross domestic product (GDP) in June 2013 according to a report of the National Audit Office disclosed in December 2013. As such, it was lower than that of some other large economies and below the crisis threshold of 90% of GDP suggested by academic research but above the IMF's warning-signal threshold of 50%.[1] More of an issue was that public debt had increased fast over the preceding years, suggesting large augmented budget deficits.[2] Further, the debt maturity was relatively short, raising sustainability concerns. This has drawn attention to local government finances.

2. In contrast to other major economies, where the central government typically accounts for a much larger share of public debt than local governments,[3] local governments in the PRC not only account for a larger share of the debt than the central government but have also been responsible for its rapid increase over recent years. In June 2013, local government debt, including guarantees and contingent liabilities, amounted to CNY17.9 trillion (30.6% of GDP) while central government debt amounted to CNY12.4 trillion (21.8% of GDP). A comprehensive stock-taking exercise for local government debt is currently ongoing, but findings have yet to be disclosed.

3. Bank loans had initially been the most common form of local government debt. However, since 2009 local government financial vehicles (LGFV) increasingly issued debt, including corporate bonds, to fund projects under the government's CNY4 trillion fiscal stimulus package, aimed at mitigating the impact of the global financial crisis on the PRC. In addition, the central government issued smaller amounts of general obligation bonds on behalf of provincial level governments. Further, in 2011, the central government started a pilot permitting four local governments to issue general obligation bonds in their own names within quotas set by the State Council. The number of local governments under the pilot was expanded to six in 2013 and ten in 2014. The pilot aims to gradually reduce the reliance of local governments on opaque borrowing through third parties, including LGFVs, by borrowing directly from capital markets. Bonds issued by local governments directly or through the central government accounted for only a fraction of total borrowing of local governments though, even of those participating in the pilot. However, together with bonds issued by LGFVs, local government bonds accounted for 18.4% of total bond issuance in 2014 and 14.8% of bonds outstanding at end-2014.

4. Reforms to strengthen local government finance and solve their debt problems were accelerated since mid-2014. Apart from broadening the bond market pilot, important milestones were the amendment of the budget law in August 2014, the adoption of debt management regulation and the launch of a comprehensive stock taking of local government liabilities in October 2014[4], and the announcement in December 2014 that the local government bond pilot will be expanded and made more market-driven. More recently, in March 2015, the quota for local government bond issuance for 2015 was increased by 50% compared to 2014 (to CNY600 billion) and an additional quota (CNY1 trillion) was announced for issuing local government bonds to finance principal payments

[1] Public debt in Japan is close to 250% of GDP, in the USA over 100%, and in the UK close to 100%.
[2] IMF. 2014. IMF Country Report No. 14/235. Article IV Consultations. Washington D.C.
[3] The size of the US municipal bond market is less than one third of that of that for treasury bonds.
[4] The disclosure of findings of this exercise would provide essential information about the local government debt stock and structure.

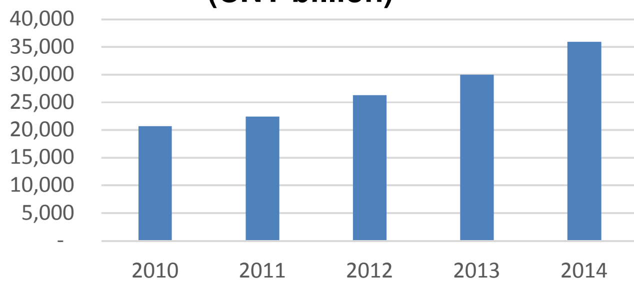
on maturing liabilities in 2015. Senior officials have suggested that this second quota might be increased as soon as local government debt payment obligations for 2015 become clearer.[5] The government has also raised the ceiling of social security fund holdings of local government debt from 10% to 20% to bolster demand for such bonds.

5. The ongoing fiscal reform initiative is much broader than developing local government bond markets and includes, among others, efforts to increase the efficiency of central government transfers, improve the budget system, advance tax reforms, and make better use of public private partnerships.[6] However, this report focuses on bond markets only with focus on issuers and instruments. It first outlines the PRC's (government and corporate) bond market overall, of which local government bonds are still a relatively small segment; then describes the development of the markets for bonds issued by local governments and LGFVs, and related policy and regulatory changes in greater detail; and concludes with policy recommendations on how to further enhance the efficiency of the ongoing local government bond market pilot.

II. BOND MARKET OVERVIEW

6. The PRC's domestic bond markets, comprising both government and corporate bonds, have grown continuously over recent years. The market size measured by outstanding amounts increased to CNY35,933 billion at end-2014,[7] 20% higher than at end-2013 (Figure 1). As a percentage of GDP, bonds outstanding increased from 50.9% to 56.5%. Total bond issuance amounted to CNY12,145 billion (19.1% of GDP) in 2014, the highest amount over the past five years with an increase of 34.29% over the CNY9,044 billion (15.4% of GDP) issued in 2013. Bond markets are thus an important element of the PRC's overall financial system and contribute significantly to financing its economy.

Figure 1: PRC bonds outstanding (CNY billion)



Source: Wind

7. The bond market has segments that can be classified based on issuers and bond features. For instance, "enterprise bonds" are bonds issued by government related

[5] The government has clarified that bonds will be issued based on market principles through the interbank or exchange markets and sold to institutional and retail investors. Private placements also seem to be an option. The quota of RMB1 trillion announced in March 2015 covers about half of the principal payments due in 2015 on direct local government liabilities as of June 2013 but does not take into account liabilities incurred since then and liabilities of local government financial vehicles.

[6] For a broader analysis of the local government finance reform agenda see: ADB. 2014. Money Matters–Local Government Finance in the People's Republic of China. Manila. http://www.adb.org/sites/default/files/publication/151515/money-matters-local-government-finance-prc.pdf

[7] Outstanding amounts were equivalent to USD5.9 trillion, which makes the PRC's bond market the fifth largest in the world after the USA, the Eurozone, Japan, and the United Kingdom.

entities while "corporate bonds" can be issued by any corporate.[8] "Financial bonds" are issued by policy banks, commercial banks and financial institutions. "Commercial papers" are short-term financing bills issued by non-bank corporates. Among these categories, financial bonds and government bonds together comprise around 60% of the total amount outstanding. When measured by the number of bonds issued, medium-term notes, private placement notes and enterprise bonds represent the majority (Table 1).

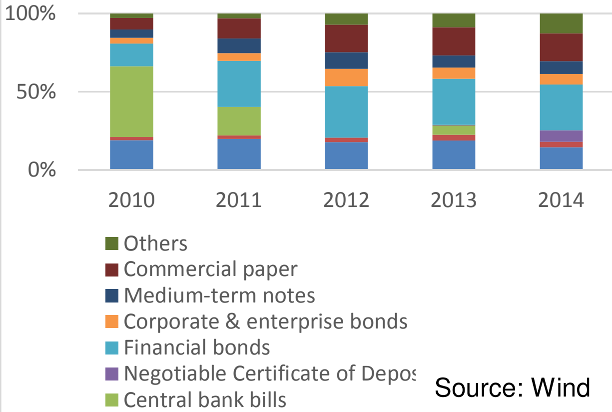
Table 1: Outstanding bonds (end-2014)

Type	Number	%	Amount, CNY billion	%
Central government Bonds	248	2.2	9,591	26.7
Local Government Bonds	97	0.9	1,162	3.2
Central Bank Bills	9	0.1	422	1.2
Negotiable Certificate of Deposits	667	6.0	600	1.7
Financial Bonds	1,022	9.1	12,095	33.7
Enterprise Bonds	2,148	19.2	2,924	8.1
Corporate Bonds	1,142	10.2	765	2.1
Medium-Term Notes	2,250	20.1	3,390	9.4
Commercial Paper	1,367	12.2	1,764	4.9
Private Placement Notes	1,660	14.9	1,757	4.9
Supranational Bonds	3	0.0	3	0.0
Agency Bonds	84	0.8	1,018	2.8
Asset-Backed Securities	438	3.9	312	0.9
Convertible Bonds	30	0.3	116	0.3
Detachable Convertible Bonds	2	0.0	10	0.0
Exchangeable Bonds	5	0.0	6	0.0
Total	11,172	100.0	35,933	100.0

Source: WIND

8. In 2014, financial bonds, commercial paper and government bonds were the three most used bond types, accounting for 29.2%, 18% and 14.6% of total issuance, respectively (Figure 2). These three types were also most actively issued since 2010.

Figure 2: Bond issuance by type



Source: Wind

9. Local government bonds enjoyed a steady increase in annual issuances. Bonds outstanding amounted to CNY1,162 billion (1.8% of GDP) at end-2014, and bonds issued in 2014 to CNY400 billion (0.6% of GDP or 5.3% of local government revenues without central government

[8] The terminology used in this report follows that of key data providers, which reflects the regulatory environment for the bond markets and established market practice in the PRC.

transfers). Volumes of bonds issued by LGFVs have grown more rapidly though, with CNY4,142 billion (6.5% of GDP) outstanding at end-2014. LGFV bond issuance amounted to CNY1,833 billion (2.9% of GDP or 24.2% of local government revenues without transfers) in 2014, almost six times the amount issued in 2010 (Table 2).

Table 2: Bonds issued by local governments and LGFV (2010-2014)

CNY billion	2010	2011	2012	2013	2014	2014 Outstanding
Local government bonds (LGB)	200	200	250	350	400	1,162
LGFV bonds	308	394	953	1,029	1,883	4,142
	508	594	1,203	1,379	2,233	5,304
Total bonds	9,348	7,824	8,096	9,044	12,145	35,933
Local government & LGFV bonds as % of total bonds	5.4%	7.6%	14.9%	15.2%	18.4%	14.8%

Source: WIND

10. Asset backed securities are also part of the overall bond market. Despite the PRC's huge asset base and the need for diversified funding, securitization developed very slowly over the past decade. The 2008 global financial crisis associated with subprime residential mortgage backed securities and collateralized debt obligations has raised concerns of the PRC's regulators, who put a pilot securitization program on hold in 2009. The pilot was re-booted in 2012 when regulators saw a need to further diversify the financial sector and create alternatives to financing provided by banks and nonbank financial institutions such as trust funds. However, the breakthrough for securitization in the PRC came only in 2014, with new issuance in the amount of CNY331 billion (0.5% of GDP), 10.8 times larger than the CNY28 billion issued in 2013. This reflects regulatory changes (e.g. the broadening of the securitization pilot) and changing investor preferences: Increasing concerns about possible bond defaults (para. 13) have increased investors' interest in securities backed by assets.

11. The issuer base for securitization comprises banks and auto finance companies, among others. Subsidiaries of overseas companies, which may have difficulties of getting funding from their parents, have also mobilized funds through securitization in the PRC. Underlying assets used for securitization are increasingly diversified, comprising corporate and consumer loans originated by banks, as well as car loans, equipment leases and real estate loans originated by non-bank financial institutions. Domestic banks are still the main investors in bonds created through securitization.

12. The PRC bond market comprises three segments: the inter-bank bond market, regulated by the People's Bank of China and dominated by commercial banks where most of the secondary trading takes place; and the exchange-listed market, regulated by the China Securities Regulatory Commission, which uses facilities of the Shanghai and Shenzhen exchanges; and the over-the counter market, which is in effect a subsector of the interbank market that serves retail investors. The inter-bank market is much larger than the exchange market, accounting for more than 90% of total trading volume and dominated by repo transactions. The domestic bond investor base mainly comprises commercial banks, insurance companies, and other institutional investors. This includes foreign investors, which are increasingly active in the interbank market but still mainly investing in central government bonds and central bank bills. Domestic retail investors can participate through commercial banking counters.

13. Weakening economic growth has increased the likelihood of default in the local bond market. In March 2014, Shanghai Chaori Solar Energy Science & Technology announced its inability to pay CNY89.8 million interest due, and became the first Chinese company to default on an onshore corporate bond. Investors will have to increasingly assess the return of and risks associated with bonds and their issuer on their own, rather than assuming government support will always be behind. Nevertheless, the onshore bond markets remain attractive, particularly since offshore markets have also seen defaults.[9]

III. LOCAL GOVERNMENT BONDS

14. The central government has issued bonds on behalf of local governments since 2009, when the Ministry of Finance (MOF) issued general obligation bonds totaling CNY200 billion on behalf of some provincial level governments. Using the higher credit rating of the central government helped to reduce financing cost of these first local government bonds. Issuance sizes have been small, ranging between CNY177.1 billion (0.4% of GDP) in 2011 and CNY290.8 (0.5% of GDP) in 2014. The amounts of bonds self-issued by local governments since 2011 were even smaller (Table 3).

Table 3: Local Government Bond Issuance (2010 to 2014)

CNY billion	2010	2011	2012	2013	2014	Total
MOF on behalf of local governments	200.0	177.1	221.1	284.8	290.8	1,173.8
Local governments directly	-	22.9	28.9	65.2	109.2	226.2
	200.0	200.0	250.0	350.0	400.0	1,400.0
% of GDP	0.5	0.4	0.5	0.6	0.6	

Source: WIND

15. The maturity of bonds issued by MOF on behalf of local governments has been lengthened over time. 69% of the bonds issued in 2010 had a maturity of 3 years. Between 2011 and 2013, about half of the bonds issued had a maturity between 3 and 5 years. In 2014 MOF issued 7-year bonds in addition to the traditional 3-year and 5-year maturities (Table 4) for local governments.

Table 4: Maturity of local government bonds issued by MOF (2010 to 2014)

CNY billion	2010	2011	2012	2013	2014	Total
3 Years	138.4	87.8	109.8	141.7	115.7	593.4
5 Years	61.6	89.3	111.3	143.1	116.3	521.6
7 Years	-	-	-	-	58.8	58.8
	200.0	177.1	221.1	284.8	290.8	1,173.8

Source: WIND

16. The interest rate of the bonds (payable in form of coupons) was below 3% for both 3-year and 5-year bonds issued in 2010. Since then coupon rates increased to around 4.1% in 2014. The interest rate differential between shorter and longer maturity bonds

[9] Kaisa, one of the property developers in Shenzhen, defaulted on its HKD400 million loan from HSBC in December 2014 and later defaulted on its interest payment on a USD500 million high yield bond in January 2015. This has triggered not only a sell-off on Kaisa’s offshore bonds but also apparently adversely affected investor confidence in PRC’s high yield bonds issued off-shore.

tightened over time: In 2010, 3-year bond interest rates were 42 basis points (or 0.42%) lower than that for 5-year bonds. By 2014, the difference narrowed to 6 basis points. This encouraged MOF to lengthen the maturity profile of the bond issuances (Table 5).

Table 5: Coupon rates of local government bonds issued by MOF (2010 to 2014)

CNY billion	2010	2011	2012	2013	2014	Average
3 Years	2.57%	3.92%	2.94%	4.02%	4.08%	3.51%
5 Years	2.99%	3.99%	3.24%	4.09%	4.14%	3.69%
7 Years	-	-	-	-	4.24%	4.24%

Source: WIND

17. In 2011, the central government started a pilot program called "Pilot Measures for Local Self-issued Bonds", under which four local governments started issuing general obligation bonds in their own names: Shanghai, Zhejiang, Guangdong and Shenzhen. However, issuance quotas were set annually by the State Council and the debt was serviced by MOF, which charged the local governments by deducting the amounts from central government financial transfers to the respective government.[10] This is why these bonds were seen as being fully backed by the central government support and investors did not focus on assessing the fiscal position of the respective local governments.

18. Shanghai was the first local government to self-issue bonds in November 2011. Its 3-year and 5-year bonds carried annual coupon rates of 3.10% and 3.30%, respectively, which were below the average coupon rate of 5.15% of central government 5-year bonds issued in 2011, the benchmark deposit rate of 3.5%, the average 1-week Shanghai interbank offer-rate (Shibor) of 3.75% in November 2011, and the consumer price inflation of 4.2% year on year in November 2011. Demand was strong, nevertheless, with expressed demand three times larger than supply.[11] In the same month, Guandgong, Zhejiang and Shenzhen also issued 3-year and 5-year bonds with comparable coupons.

19. In 2012 these four local governments lengthened their bond maturities to 5 and 7 years, with average coupon rates of 3.25% and 3.42%, respectively. This compared to an average coupon rate of 4.77% of 5-year bonds issued by the central government, an average deposit benchmark rate of 3.25% in 2012, an average 1-week Shibor of 3.5% and average annual inflation of 2.6%. The coupon rates were very similar among the bonds issued by the four local governments and also comparable to those of local government bonds issued through MOF, e.g. 3.25% for self-issued 5-year bonds versus 3.24% for those issued through MOF (Tables 6 and 7).

Table 6: Maturity of self-issued local government bonds (2010 to 2014)

CNY billion	2010	2011	2012	2013	2014	Total
3 Years	-	11.5	-	-	-	11.5
5 Years	-	11.5	14.5	32.6	43.7	102.2
7 Years	-	-	14.5	32.6	32.8	79.8
10 Years	-	-	-	-	32.8	32.8
	-	22.90	28.90	65.20	109.20	226.20

Source: WIND

[10] The issuance quota of CNY40 billion for 2011 was not fully used by the participating local governments, which had then easy access to alternative sources of funding, including through LG~~V~~FVs.

[11] See para. 28 for a possible explanation.

Table 7: Coupon rates of self-issued local government bonds (2010 to 2014)

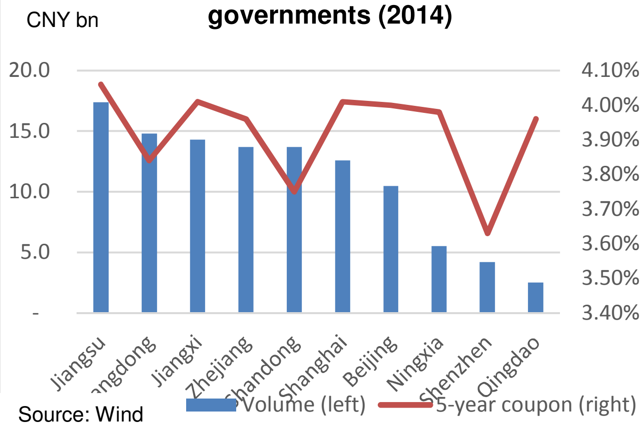
CNY billion	2010	2011	2012	2013	2014	Average
3 Years	-	3.06%	-	-	-	3.06%
5 Years	-	3.27%	3.25%	3.97%	3.92%	3.60%
7 Years	-	-	3.42%	4.08%	4.10%	3.87%
10 Years	-	-	-	-	4.17%	4.17%

Source: WIND

20. In July 2013, the pilot was expanded to include Shandong and Jiangsu, bringing the total number of participating local governments to six. 5-year and 7-year bonds were issued with average coupon rates of 3.97% and 4.08% respectively, compared to the average annual inflation rate of 2.6%, the benchmark deposit rate of 3.0%, the average 1-week Shibor of 4.1% in 2013, and the average coupon rate of 4.63% of the central government 5-year bonds issued in 2013. These coupon rates were 72 basis points and 66 basis points, respectively, higher than the same in 2012. The coupon rates were similar among the bonds issued by the six local governments and slightly lower than the local government bonds issued through MOF, e.g. 3.97% by the local governments vs. 4.09% by MOF for 5-year maturity.

21. In May 2014, the pilot was expanded to 10 governments by adding Beijing, Jiangxi, Ningxia, and Qingdao. The move was seen as an effort to help local governments reduce their reliance on LGFV by borrowing directly and on-budget from the market. The quota for self-issued bonds was set at CNY109.2 billion (0.2% of GDP), carved out of the overall quota of CNY400 billion (0.6% of GDP) for local government bond issuance in 2014. The difference to self-issuance under the pilot in 2011-2013 was that, since May 2014, local governments directly (not through MOF) serve their bonds, which is also why they were required to disclose enhanced information about their fiscal position, and request credit ratings. This raised the expectation that coupon rates would diversify in line with the credit quality of the respective issuers.

Figure 3: Direct bond issuances by local governments (2014)



Source: Wind

22. Guangdong was the first local government to issue bonds under the modified pilot, raising a total of CNY14.8 billion in June 2014 (Figure 3). The annual coupon rates were 3.84% (5-years), 3.97% (7-years) and 4.05% (10-years). The average coupon rates of the bonds issued by the other nine local governments were 3.92% (5-year), 4.10% (7-year) and 4.17% (10-year). With this, the coupons were very similar among the bonds issued by the ten local governments and slightly lower than the local government bonds issued through MOF, e.g. 3.92% for self-issued 5-year bonds versus 4.14% for those issued through MOF. The coupon rates were lower than the average coupon rate of 4.85% of the central government 5-year bonds issued in 2014 but higher than the 1-week

average Shibor of 3.6% in 2014, the benchmark deposit rate of 3% and also inflation, which averaged 1.7% year on year in the second half of 2014.

23. Five major credit rating agencies dominate PRC's credit rating market (Table 8). Three were involved in rating the local government bonds: China Rating, Dagong Global and Shanghai Brilliance. Noticeably, the two others, joint ventures with Moody's and Fitch, the international rating agencies,[12] were absent: China Chengxin and LianHe.[13]

Table 8: Major rating agencies in the PRC

	Description
China Chengxin	Credit rating joint venture with Moody's; one of the largest three rating agencies in the domestic market
China LianHe	Credit rating joint venture with Fitch; one of the largest three rating agencies in the domestic market
Dagong Global	One of the largest three rating agencies in the domestic market; one of the three founding shareholders of Universal Credit Rating Group (UCRG); overseas expansion including onshore presence in Europe and Hong Kong, China.
China Credit Rating	Domestic credit rating agency set up by the National Association of Financial Market Institutional Investors (NAFMII)
Shanghai Brilliance	One of the domestic credit rating agencies founded by China Foundation for Development of Financial Education and Shanghai University of Finance and Economics

24. Each of the ten bonds was rated by one rating agency only rather than two or even three as frequently the case in other countries. Having only one credit rating agency rating each local government bond will not allow any room for diverse credit opinions on the same issuer, and this does not help investors in assessing potential bond investment. Actually, the bonds issued by the ten provinces under the pilot program all received the highest possible rating, namely AAA (Table 9).

Table 9: Credit rating of local government bonds issued in 2014

Issuer	Issuer Region	Rating Agency	Bond Rating
Guangdong	South coastal	Shanghai Brilliance	AAA
Shandong	East coastal	Shanghai Brilliance	AAA
Jiangsu	East coastal	China Credit Rating	AAA
Jiangxi	Central China	Shanghai Brilliance	AAA
Ningxia	Western China	Dagong Global	AAA
Qingdao	East coastal	Dagong Global	AAA
Zhejiang	East coastal	China Credit Rating	AAA
Beijing	North China, political centre	China Credit Rating	AAA
Shanghai	East, financial centre	Dagong Global	AAA
Shenzhen	South coastal, special zone	Shanghai Brilliance	AAA

Source: Finance Asia

[12] Moody's, Standard and Poor's, and Fitch, the three major international rating agencies, rate the majority of bond issuers and the bond issuance worldwide. Despite justified criticism of these agencies for their roles in rating securitization products before the global financial crisis, in particular the conflict of interest in relation to the issuer-pay model, bond investors still value their publication and credit insights.

[13] Some media speculated that, given fierce competition for the rating mandates, the three rating agencies were mainly selected by the issuers because they offered the lowest fees and were willing to provide favorable ratings.

25. The lack of rating differentiation is an issue. Ratings of issuers and bonds by rating agencies potentially play an important role in bond markets. Institutional and retail investors without the in-house credit risk expertise that typical exists in larger banks rely on independent third party opinions, based on transparent methodologies and criteria, to assess the creditworthiness of bond issuers and their bonds, and the adequacy of bond yields and duration, and make their investment decisions accordingly. Further, the lack of rating differentiation does not facilitate yield differentiation, which is important for developing bond markets as different investors seek different risk-return combinations.

26. The lack of differentiation of ratings (and coupons) for self-issued local government bonds surprised many market participants, given the obvious difference between the issuers in terms of fiscal position and underlying economic and social development. Guangdong, for instance, arguably the wealthiest province in terms of GDP per capita and one that saw 10.6% growth in land sales in 2014, which are an important source of revenue for local governments, received the same rating as Ningxia, which ranked 15th out of 31 provincial level administrative regions in terms of GDP per capita at end-2013 and reported a 0.8% drop in land sales in 2014.

27. One possible explanation for the lack of differentiation is the perception that local governments still enjoy more or less explicit central government support. Indeed, Moody's has stated that the credit strength of the 31 provinces and five provincial level cities (categorized as the upper tier regional and local governments) is supported by their close ties with the central government and their ratings "would likely be in a tight range", if rated by Moody's. However, Moody's added that the ratings could be two notches below that of the sovereign government.[14] Standard & Poor's mentioned in late 2014 that 15 of the 31 provincial governments would most likely rated BB+ or below, which is speculative or junk grade. Such a discrepancy in views between the domestic and international rating agencies has undermined the credibility of the current ratings assigned to local government bonds. Some market participants have speculated that the assignment of AAA ratings to all issuers is mainly due to competition between rating agencies for rating mandates, resulting in "rating level inflation". This has raised doubts if the current ratings of the local government bonds were assigned based on a consistent methodology applied in the international markets.

28. As to the lack of differentiation in coupon rates, a possible explanation by market participants is that local bank branches, which were the most active investors, saw their investment as a way to enhance their relationship with the respective local government. Hence the coupons were set independent of the ratings and actual credit quality of the issuing local governments. Here again, an alternative view is that the self-issued bonds are still seen as backed by the central government, whose potential strength of support does not give much room for credit differentiation among the local governments.

29. The local government bonds, including both those issued through MOF and those directly issued by local governments under the pilot, amounted to CNY1,162.4 billion (1.8% of GDP) at end-December 2014 (Table 9). More than half (56%) of the bonds will mature over the next three years (2015-2017) and 86% over the next 5 years (2015-2019).

[14] Moody's Investor Service. 12 March 2015. China's Regional and Local Governments – Upper Tiers Show High Level of Creditworthiness. Beijing.

Table 9: Maturity of outstanding local government bonds, (end-2014)

Maturity	Amount (CNY billion)	%
< 1 Year	171.4	15%
1 to 2 Years	242.5	21%
2 to 3 Years	241.5	21%
3 to 4 Years	175.7	15%
4 to 5 Years	174.4	15%
5 to 6 Years	32.6	3%
5 to 6 Years	91.6	8%
9 to 10 Years	32.8	3%
	1,162.4	100%

Source: WIND

30. In December 2014, the government announced its intention to further expand the pilot beyond the ten participating local governments, allow local governments to issue special purpose bonds tied to specific projects in addition to general obligation bonds, and make pricing of bonds more market-driven.[15] This statement seems to acknowledge that market considerations, including credit risk, did not play decisive role under the pilot in the past, as evidenced by lack of rating and coupon differentiation, and coupon rates that were below that of central government bonds.

31. The National People's Congress in March 2015 set a limit of CNY600 billion (0.9% of GDP) for local bond issuance in 2015, including CNY500 billion for general-obligation (or revenue) bonds and CNY100 billion for special-purpose bonds tied to specific projects. The total quota for bond issuance increased by 0.3 percentage points of GDP compared to 2014. As such, government is still pursuing a gradual approach in allowing local governments to issue bonds to finance their expenditure needs. The share of self-issued bonds has yet to be announced. In addition, the government announced that the 31 provinces and five provincial level cities will be given a quota of CNY1 trillion (1.5% of GDP) to issue bonds in 2015 to refinance principal payments on liabilities in 2015; this has been labeled as "debt-swap" in the media. With this, it became clear that local government bond issuance will also play an important role in solving problems associated with the local government debt-stock, including liabilities incurred by LGVF.[16]

IV. LOCAL GOVERNMENT FINANCING VEHICLES

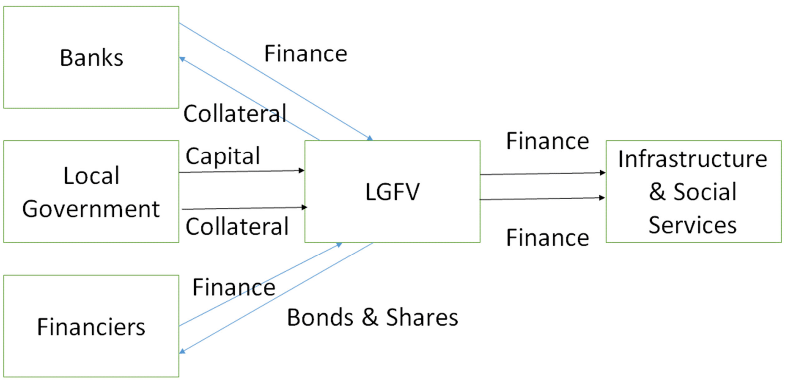
32. While there is no official definition for LGFVs, they are often referred to as independent investment corporations, construction investment corporations, or utility investment corporations set up by local governments to finance investment in infrastructure and social services. LGFV bonds referred to in this report are those classified as LGFV by WIND, a commercial data service provider that is widely used by financial market participants as source of information about LGFVs. According to this classification, LGFV bonds mainly comprise enterprise bonds, commercial paper, private placement notes, and medium term notes.

[15] Details have yet to be announced.

[16] The government also announced that projects under construction can also be financed or re-financed by bank loans at least in 2015, before local government bond markets are further developed. Details of this arrangement and the "debt-swap" have yet to be announced.

33. LGFVs are usually established by local governments, which contribute capital and collateral to the vehicles.[17] They may be specific project vehicles established for developing an industrial zone or building a road, for instance, or may be general purpose vehicles that undertake a number of infrastructure-related activities. LGFVs tap both banks and capital markets to finance their operations (Figure 4). As separate legal entities, LGFVs are not subject to the restrictions on local government borrowings outlined in the 1994 budget law.

Figure 4: LGFV Structure



Source: Asian Development Bank

34. LGFV bond issuance increased from CNY307.8 billion (0.8% of GDP) in 2010 to CNY1,833.4 billion (2.9%) in 2014, representing an annual growth rate of approximately 56% in CNY volume terms. Enterprise bonds, commercial paper, private placement notes, and medium term notes were the most actively used types of LGFV bonds, accounting for more than 98% of the issuance in 2014. Enterprise bonds alone accounted for 34.6% of the issuance in 2014 and 40.8% of the issuance over the past 5 years (Table 10).

Table 10: LGFV bonds issuance by instrument (2010 to 2014)

CNY billion	2010	2011	2012	2013	2014	Total	2014 (%)	Total (%)
Enterprise bonds	160.7	184.2	481.3	383.0	633.9	1,843.2	34.6	40.8
Corporate bonds	-	4.4	9.2	12.5	23.8	49.8	1.3	1.1
Medium-term notes	67.7	117.5	215.4	217.3	337.4	955.3	18.4	21.1
Commercial paper	79.4	70.7	109.7	189.9	418.8	868.4	22.8	19.2
Private placement notes	-	16.9	132.3	222.9	413.4	785.4	22.5	17.4
Asset-backed securities	-	-	5.7	3.0	5.8	14.5	0.3	0.3
Convertible bonds	-	-	-	-	0.4	0.4	0.0	0.0
Total	307.8	393.6	953.5	1,028.6	1,833.4	4,517.0	100.0	100.0

Source: WIND

35. LGFV bonds predominately carried fixed rate coupons, accounting for two-thirds

[17] Most LGFV are municipal state-owned enterprises under the PRC's company law. For a more detailed analysis of LGFVs see: IMF. 2013. Local Government Financing Platforms in China: A Fortune or Misfortune? IMF Working Paper 13/243. Washington D.C.

of the issuance over the past five years and in 2014. However, zero coupon bonds have increasingly become more common, accounting for 25% of the issuance in 2014. Floating rate bonds, which were issued in 2010, have become a very minor portion of the LGFV bonds issued in the recent years (Table 11).

Table 11: LGFV bonds issuance by coupon (2010 to 2014)

CNY billion	2010	2011	2012	2013	2014	Total
Fixed Rate Bonds	93.0	206.3	743.0	756.3	1,233.8	3,032.4
Floating Rate Bonds	28.4	8.2	1.9	1.0	1.3	40.8
Step-up Coupon Bonds	108.3	108.5	72.5	48.7	127.9	465.9
Zero Coupon Bonds	78.1	70.7	136.1	222.7	470.5	978.0
	307.8	393.6	953.5	1,028.6	1,833.5	4,517.0

Source: WIND

36. LGFV bonds had a big range of maturities, with 6-7 years the most common, followed by less than one year, 4 to 5 years and 2 to 4 years. The weighted average maturities of bonds issued in 2010-2014 ranged between 4 and 5 years (Table 12).

Table 12: LGFV bonds issuance by tenor (2010 to 2014)

CNY billion	2010	2011	2012	2013	2014	Total	2014 (%)	Total (%)
Less than 1 year	79.4	70.7	133.1	222.7	470.5	976.3	25.7	21.6
1-2 years	-	0.5	13.2	25.2	34.8	73.7	1.9	1.6
2-3 years	19.9	34.2	96.2	141.9	257.2	549.4	14.0	12.2
3-4 years	-	-	0.4	1.8	7.6	9.8	0.4	0.2
4-5 years	50.3	103.3	204.8	216.6	325.9	900.9	17.8	19.9
5-6 years	16.0	21.3	77.3	30.3	32.6	177.4	1.8	3.9
6-7 years	89.4	127.0	359.7	326.7	595.5	1,498.3	32.5	33.2
7-8 years	7.0	11.4	12.3	5.7	6.7	43.1	0.4	1.0
9-10 years	39.8	24.3	54.9	39.3	72.5	230.8	4.0	5.1
More than 10 years	6.0	1.0	1.5	18.5	30.3	57.2	1.6	1.3
	307.8	393.6	953.5	1,028.6	1,833.5	4,517.0	100.0	100.0

Source: WIND

37. Jiangsu was the province with the most active LGFV bond issuance in 2014, followed by Beijing, Tianjin and Shandong (Table 13). Construction activity generated the most active LGFV bond issuance in 2014, amounting to CNY641.9 billion and accounting for 35% of the total LGFV bond issuance in 2014, followed by conglomerate/diversified business (26.9%); and transportation and warehousing services (14.3%).

Tables 13: LGFV bonds issuance by region and industry (2014)

CNY billion	2014	%	CNY billion	2014	%
Jiangsu	292.4	16.0%	Construction	641.9	35.0%
Beijing	113.9	6.2%	Conglomerate/diversified businesses	493.1	26.9%
Tianjin	113.3	6.2%	transportation, warehousing and postal services	262.3	14.3%
Shandong	110.3	6.0%	Real estate	178.2	9.7%
Zhejiang	101.3	5.5%	Production and supply of Electricity, heat, gas and water	87.6	4.8%
Guangdong	90.3	4.9%	Water, environment and public facilities management	76.2	4.2%
Chongqing	79.4	4.3%	Financial	30.9	1.7%
Hubei	75.1	4.1%	Manufacturing	24.3	1.3%
Hunan	73.0	4.0%	Wholesale and retail	21.5	1.2%
Sichuan	72.0	3.9%	Mining	13.1	0.7%
Others	712.6	38.9%	Others	4.4	0.2%
	1,833.5	100.0%		1,833.5	100.0%

Source: WIND

38. LGFV bonds outstanding amounted to CNY4,142 billion or 6.5% of GDP at end-2014, which compares to local government bond issue through MOF or directly by local government of 1.8% of GDP. Enterprise bonds were the major outstanding bond type of LGFVs accounting for 50.1% of the total (Table 14), followed by medium-term notes (22.2%) and private placement notes (17%). Fixed rate coupon bonds accounted for 75.6% of total LGFV bonds outstanding, followed by step-up coupon bonds (13.3%) and zero coupon bonds (10.2%).

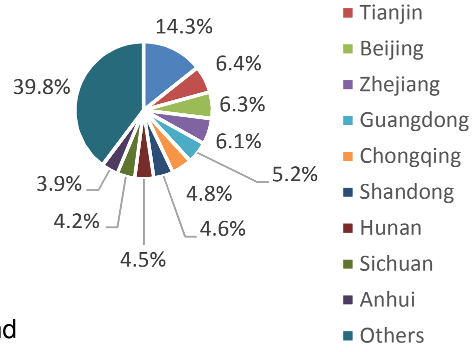
Tables 14: Outstanding LGFV bonds issuance by instrument and coupon (end-2014)

CNY billion	Amount (CNY billion)	%	CNY billion	Amount (CNY billion)	%
Enterprise Bonds	2,075.3	50.1	Fixed Rate Bonds	3,130.9	75.6
Corporate Bonds	51.3	1.2	Floating Rate Bonds	37.8	0.9
Medium-term Notes	920.7	22.2	Step-up Coupon Bonds	551.5	13.3
Commercial Paper	379.1	9.2	Zero Coupon Bonds	421.9	10.2
Private Placement Notes	703.1	17.0			
Asset-backed Securities	12.3	0.3			
Convertible Bonds	0.4	0.0			
	4,142.1	100.0		4,142.1	100.0

Source: WIND

39. Jiangsu in the east coastal area of China was the local government with most LGFV bonds outstanding, accounting for 14.3% of the total outstanding LGFV bonds at end-2014. Jiangsu was followed by Tianjin, Beijing, and Zhejiang which respectively accounted for 6.4%, 6.3% and 6.1% of total outstanding LGFV bonds (Figure 5).

Figure 5: Outstanding LGFV bonds by region (CNY billion)



Source: Wind

40. Because of the large issuance volumes and outstanding amounts, LGFV bonds have attracted increasing attention by market participants, rating agencies, and other stakeholders, especially regarding the question which LGFV bonds can be seen as government debt and how LGFVs can refinance their outstanding liabilities. Regulatory developments have also affected the LGFV bond market.

41. LGFV bond issuance was boosted by the economic stimulus program that was initiated by the central government in 2008 and had to be largely financed by local governments. Most LGFV bond proceeds were used to finance public infrastructure and social service projects, some of which may not generate the required cash flow to repay the bonds in full amount and on time. This was especially the case when the LGFV bond financing was used for social services such as education, social welfare, and low-income housing, for instance.

42. To bring local government borrowing through LGVF under better control, the central government has introduced several policies. One of the most important ones was the "Notice to Stop Local Government Behavior of Illegal Financing" adopted by the People's Bank of China, MOF, the Development and Reform Commission, and China Banking Regulatory Commission in December 2012. In March 2013, China Banking Regulatory Commission adopted "Guidelines for Strengthening Risk Monitoring of LGFV Loans in 2013", restricting the use by LGFVs of special financial products such as derivatives and off-balance-sheet transactions.

43. In August 2014, the Standing Committee of the National People's Congress revised the budget law, effective January 2015, to allow local governments to directly issue debts under the strict control by the legislature and the central government, among others. The revised budget law also calls for multi-year rolling budget plans, placing local revenues and expenditures under the supervision of local peoples' congresses, creating an early warning system for local government debt, and requiring proceeds from bond issuance to be used for investments of local governments and not current expenditures. The revised law also requires local governments to publish their balance sheets and their bonds to be rated. All these measures are expected to help channeling LGFV debt to the formal local government bond market over time. However, in 2015, LGFV are still allowed to issue debt to finance ongoing investment projects while new ones already need to be financed through official local government budgets.

44. Perhaps the most significant LGFV regulatory development was Circular 43 "Opinions of the State Council on Strengthening the Administration of Local Government Debt", adopted in October 2014. Circular 43 has provided a comprehensive new framework for local government financing and also addressing debt stock problems by asking local governments to report their on- and off-budget liabilities to MOF by 5 January 2015. While local governments can still finance their ongoing projects through LGFVs until the end of 2015, they can only use local government bonds to financing new projects. Further, starting January 2015, LGFV bonds used for certain purposes like social housing, water projects, or roads, for instance, can be classified as government debts. Other LGFV bonds not falling in such categories will not enjoy any implicit government guarantee any more. Local governments should also finance commercially viable public projects through special-purpose bonds or public-private-partnerships.

45. The announcement of Circular 43 has already impacted the LGFV bond issuance. For instance, Changzhou Tianning Construction Development Co and Urumqi State-Owned Assets Investment Holdings Co. initially planned bond issuances in December 2014, which were claimed to be local government debt, but the local authorities revoked the decision and the bond issuances were suspended as a result.

46. In December 2014 the China Securities Depository and Clearing Co. Ltd. (CSDCC) set higher standards for the use of enterprise bond, including LGFV bonds, as collateral for short-term interbank loans, e.g. bond repurchase transactions. It will only accept new enterprise bonds with AAA bond ratings and above AA issuer ratings as collateral. This has adversely affected the pricing of LGFV bonds that are not eligible for such repurchase transactions.

47. Market participants expect that, with the loss of the implicit government guarantee for many LGFVs and the potentially large increase of bonds directly issued by local governments, LGFVs, especially those with weak or even non cash generating capabilities, will have to pay much higher coupon rates. In the worst case, they might not be able to issue new bonds, not even to refinance maturing liabilities. However, the greater liquidity and transparency in the bond markets that should derive from the ongoing reforms of local government finances will help to address a major structural weakness of the PRC's economy and increase the efficiency of capital allocation overall.

V. CONCLUSIONS AND RECOMMENDATIONS

48. As a result of a major government reform initiative, which was accelerated in 2014 and is still ongoing, a new system of local government finance and debt management is now evolving. Discussions are still underway on how to best use various elements of this system, including central government transfers, public private partnerships, or bonds issued directly by local governments, among others, and how to deal with the existing debt stock. The government wants to make issuance under the ongoing local government bond pilot more market driven. This implies that there will be more rating and pricing differentiation in future. Further, the quotas given for issuance under the pilot and for refinancing principal payments on existing debt will have to be increased over time to meet local governments legitimate financing needs. The number of participating governments will also have to be increased. This section outlines some recommendations that should be considered when further enhancing the ongoing local government bond market pilot and deciding how to use bond issuance to refinance principal payments on local government debt.

1. Facilitate rating differentiation to avoid rating inflation

49. Rather than letting local governments choose rating agencies by themselves, as has been the case since May 2014, the central government should consider taking the lead in allocating the rating agencies to the local government issues at this stage of the pilot to avoid unreasonable competition for rating mandates and potentially resulting rating level inflation. Further, the central government should consider requiring at least two ratings on local government bonds to allow diverse opinions on the same issuer. The central government could even consider a combination of one domestic agency and one with foreign affiliation for each local government bond to be issued as an interim solution, in order to have a more balanced and hopefully more accurate credit view of each local government bond. All this might be necessary, particularly if the government is interested in broadening the investor base for local government bonds beyond large banks, which depend less on external credit ratings. In contrast, if the target investors remain large banks with in-house credit rating capacity and/or if the approach to rating bonds remains unchanged, ratings could be made voluntary to reduce issuance cost.

50. Some market participants suggest that the central government should establish an independent and non-profit credit rating agency. While there may be some merits in minimizing the potential conflict of interest faced by a private and commercially run rating agency, it would be hard for a government sponsored rating agency to convince investors of the objectivity and independence of its rating for bonds issued by the government, including local governments. This is why we do not support this suggestion.

2. Allow credit enhancement for bonds through guarantees

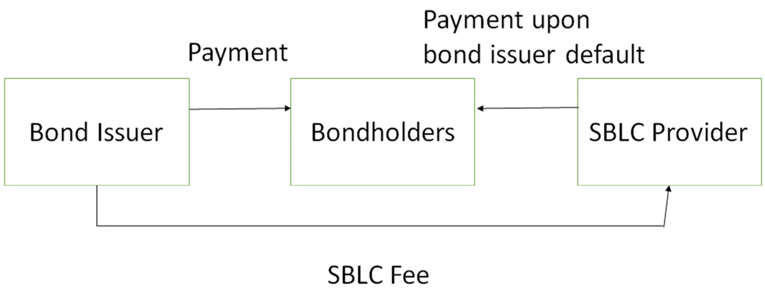
51. Currently the local governments selected to self-issue bonds are regarded as the fiscally stronger ones, i.e. provinces and provincial level cities. These governments have also received a quota to issue additional bonds to (re-) finance payments on their debt. However, many other local governments are also in need for transparent ways to finance their deficits and debt service. Local government debt is actually concentrated at the sub-provincial level. While it may be costly and even non-feasible for fiscally weaker local governments to issue bonds based on their stand-alone credit profiles, it might also not be possible to increase fiscal transfers from higher level governments fast enough for local governments to fully meet their legitimate expenditure needs. A possible way out could be an enhancement of their credit structure through a third party guarantee, which could be tested on a pilot basis. This would also be a more market oriented solution than letting stronger provincial government alone take responsibility for the debt management and issuance of lower level governments under their jurisdiction and thereby effectively assume full responsibility for the liabilities of lower level governments.[18]

52. Domestic and regional good practice is available for this approach: In the past several years, Asian issuers that are either rated speculative grade or unrated, including some of the PRC's LGFVs, nevertheless successfully issued offshore bonds utilizing stand-by letters of credit (SBLC) as guarantee from banks like Bank of China and Agricultural Bank of China. If a bond issuer defaults on its interest and/or principal payments to the bondholders, the bond trustee will inform the guarantor of the bond

[18] Issuance of debt by provincial governments on behalf of lower level governments in the required volumes could quickly undermine the fiscal position of those provincial governments that are now seen as being fiscally stronger.

issuer's default, and the guarantor would have the legally binding obligations to pay the interest and/or principal not paid by the issuer to the bondholders (Figure 6). Such structure will allow the bond issuer's access to the bond market and provide credit comfort to the investors who might otherwise not be able to invest in the low rated or unrated bonds.

Figure 6: SBLC Structure



Source: Asian Development Bank

53. This structure is also popular among the other issuers of offshore bonds from the PRC as it allows onshore companies to authorize SBLC support for their overseas subsidiaries without transferring funds from China. For instance, Zhuhai Huafa, one of the Chinese state-owned conglomerates with businesses in property, infrastructure and financial services in Zhuhai city of Guangdong Province, issued a CNY850 million 3-year bonds with SBLC provided by the Guangdong Branch of Agricultural Bank of China in June 2014. Zhuhai Huafa is unrated but the bonds carry a coupon of only 4.25%. Other LGFVs like Zhuhai Dahengqing have also issued SBLC-backed bonds.

54. Hence using credit enhancement through SBLCs would allow investors to look at the guarantor credit to determine their yield requirements on bonds issued by weaker local governments and/or LGFVs. But the market would still have the opportunity to observe, over the bond tenor, if any of these local governments and/or LGFV issuers can repay the bonds on their own, or have to draw the SBLC for repayment. This could help weaker local governments and LGFVs to refinance their existing maturing debt, and allow investors to monitor the credit performance of the governments and LGFVs without taking direct credit risk exposure to them.

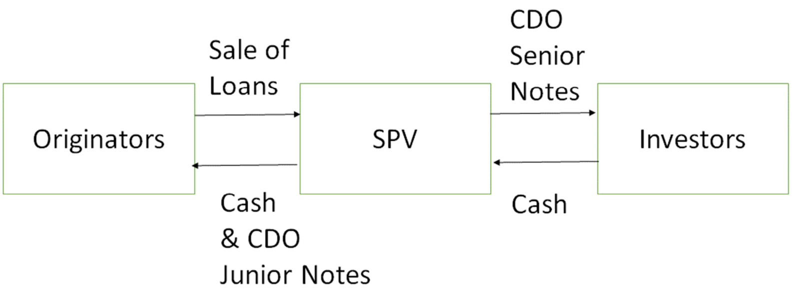
55. Besides, the SBLC structure could also help to open the offshore bond market to local governments and LGFVs or their successor organizations. Offshore bond issuance may not necessarily be a more competitive option with regard to pricing compared with onshore bonds, but could help bring more transparency, as off-shore markets have steeper disclosure requirements and more sophisticated investors, and arguably a wider investor base, which is both important for the long term development of bond markets.[19]

[19] The alternative would be to quickly strengthen disclosure requirements at the onshore market, increase secondary market liquidity, and open the capital account, which might not be feasible or even desirable in the short- to medium-term. .

3. Allow bonds to be backed by several underlying loans

56. Apart from an external guarantee, a collateralized debt obligation (CDO) structure can be employed to either assist local governments to access the bond market or help provincial governments to mitigate the impact that issuing bonds on behalf of local governments can have on their own credit position.[20] CDOs are bonds issued and backed by the predicted cash flows from specific loans. A CDO can involve setting up a special purpose vehicle which buys loans from different originators and sells the notes, backed by the portfolio of the bought loans, to the investors. This is called a cash-CDO, and investors can enjoy the diversification benefit of a larger number of loans in the transaction, rather than single credit exposure to any underlying loan (Figure 7).

Figure 7: CDO Structure



Source: Asian Development Bank

57. In the context of the PRC's local government and LGFV debt, the CDO structure could be packaged in different ways, particularly to help solve debt stock problems. For instance, banks can pool various existing LGFV debts and/or local government bonds, and package them into a CDO to be sold to investors, or the local government can pool various LGFV debts to be issued and package them into a CDO to be sold to investors. The bottom-line is that the correlation among each underlying debt should be limited in order to have diversification benefit, which should lead to lower bond coupons.

58. For the initial CDOs to be issued it is advisable to pool more debts by stronger local government and LGFVs in order to give a higher credit comfort to investors and require an external rating for the CDO. As investors are getting more familiar with the local government and LGFV credit, the proportion of stronger local government and LGFV debt in the pool can be gradually reduced. Alternatively, full or partial government credit can be employed for the CDO or an external guarantee like the SBLC can be sought.

[20] In December 2014, the government indicated that it considers excluding local governments from securitizing their debt through asset backed securities. While there is no further detail about the rationale and the timetable, securitization like CDO could be an effective mean to commingle stronger and weaker local government and LGFV debt, so that diversification benefit can be given to lower the required yields by investors, and provide a funding source for weaker issuers which could otherwise suffer from higher funding cost by issuing bonds on their own.