BBVA | RESEARCH

Banking Watch

China

Hong Kong, July 21, 2011
Economic Analysis

Asia

Chief Economist of Emerging Markets
Alicia Garcia Herrero
alicia.garcia-herrero@bbva.com.hk

Asia Chief Economist
Stephen Schwartz
stephen.schwartz@bbva.com.hk

Senior Economist
Le Xia
xia.le@bbva.com.hk

Who will pay the bill for local governments' fiscal stimulus?

- **One of the legacies of China's massive, infrastructure-led stimulus program of 2008-09 has been a build-up of local government debt.** The issue is not new, but has become the focus of discussion in recent weeks in light of newly released government figures that raise questions about the true size of such debt, and how it will be paid for in the coming years.
- **Official figures appear to put the size of local government debt at between RMB 10.7–14.2 trillion (USD 1.6–2.2 trillion), equivalent to 27-36% of China's GDP.** Figures from the National Accounting Office (NAO) place the level at the lower end, while market estimates such as Moody's place the level at the higher end, based on their interpretation of figures from the PBoC.
- **We believe that the most accurate estimates lie at the upper end of the range.** The reason for supporting the upper end is that we believe a proper definition of the debt should include borrowing through local government financing vehicles (LGFVs) (RMB 8.5 trillion, or USD 1.3 trillion), as well as the direct borrowing of local government agencies (RMB 5.7 trillion, or USD 880 billion). We estimate that RMB 12.1 trillion of local government debt is held by banks, and of this amount RMB 3.0 trillion (USD 460 billion) may be "at risk" to banks, according to our interpretation of NAO and CBRC reports..
- **A clean-up of the local government debt is likely to require some combination of a bailout by the central government and bank write-offs over the next several years.**
- **To assess the impact of the large increase in government debt on bank balance sheets, this note estimates two extreme scenarios.** In the first, it is assumed that the central government bears the full cost of the bailout, which would raise central government debt from 37% of GDP at present to around 59% of GDP. We consider this to be a significant increase, but still manageable. In the second extreme scenario, we assume that banks bear the full cost of the RMB 3.0 trillion "at risk" (equivalent to 60% of end-2010 capital). Under this scenario, we assume that banks provision for these losses over 5 years, which would require further capital raising of RMB 700 billion over the period in order to maintain a minimum regulatory capital adequacy ratio of 11.5%. Alternatively, if banks were to keep such problem loans on their books, their NPL ratio would rise to 4.3% by 2015 from 1.1% at present. We would expect the most likely outcome to involve a combination of the government- and bank-loss scenarios.
- **The good news is that China's gross government debt appears manageable.** Even under the scenario in which the government were to bear full responsibility for local government debt (with public debt reaching 59% of GDP), the level of debt would not be too far from that of other large emerging market economies such as India and Brazil. Such a level should be manageable given projected growth and revenues, although it would reduce the room for further fiscal stimulus if another external crisis were to put downward pressure on China's exports and GDP growth.

.

How big is China's government debt?

China's central government debt is officially reported at RMB 6.8 trillion (USD 1 trillion), or about 17% of GDP. This is low by any standard, especially for an economy as large and fast-growing as China's. Even when other obligations are included (Chart 1), such as debt instruments of the central bank, bank restructuring costs (associated with the 1999 AMC approach to cleaning up NPLs of state-owned banks) , and liabilities of the Railway Ministry, total debt rises to a still-modest 37% of GDP (Chart 2).

More controversial, however, is the size of local government debt, and particularly the portion for which the central government may ultimately be liable. The issue has become important ever since the 2008-09 infrastructure-led stimulus package implemented to offset the effects of the global financial crisis. Much of the package was financed through borrowing by local government financing vehicles (LGFVs), on top of borrowing by various local government agencies.

Estimates of this debt vary, and the debate has heated up in recent weeks with the publication of official figures of the People's Bank of China (PBoC) and the National Audit Office (NAO). In its annual report (Regional Financial Situation Report) released in late June, the PBoC reported that LGFV debt (which excludes local government agency debt) to be, "less than 30% of total outstanding RMB loans [of the banking system] as of end-2010." Market observers initially interpreted this to mean that LGFV debt was as high as RMB 14.4 trillion (30% of total outstanding bank loans), but the PBoC has more recently clarified such estimates to be a gross exaggeration.[1] For its part, in early July the NAO reported local government debt (including LGFV and local government agencies) to be RMB 10.7 trillion (USD 1.6 trillion).

Market observers, including ourselves, believe the level of local government debt to be higher than that reported by the NAO. We do not believe the apparent under-reporting to be deliberate, but rather it probably reflects different definitions, in which the NAO concept excludes LGFV debts of local government agencies. Moody's rating agency (June 27) issued a report estimating the total level of government debt to be some RMB 3.5 trillion (USD 540 billion) higher than the figures reported by the NAO. We believe this estimate to be reasonable (see footnote 2 for details).[2]

How safe is the local government debt?

Ultimately, the impact on central government finances and bank balance sheets will depend on the asset quality of local government financing vehicles and agencies, rather than on the size of borrowing alone. The debts of local government agencies borrowed directly from banks (not through LGFVs) are typically used to finance social welfare projects with low prospects of investment returns or cash-flow generation. Accordingly, repayment is effectively the responsibility of local government fiscal budgets. Borrowing through LGFVs, on the other hand, are used by local governments to finance infrastructure projects, a good number of which could have cash flow generating capacity. If the asset quality of these LGFVs is high enough, they could service their debts through the future cash flow generated by the projects, without recourse to local government assistance.

---

[1] The PBoC has clarified that the reference in its report to "less than 30%" applies region-by-region, with some LGFVs have debt levels considerably below this amount.

[2] Local government debt can be divided into two types: local government agency debt and LGFV debt. Borrowers of the former consist of local governments and their agencies. The NAO reports total agency debt to be RMB 5.7 trillion as of end-2010, which is uncontroversial. However, Moody's estimates LGFV debt to be some RMB 3.5 trillion (8.8% of GDP) higher than reported by the NAO of RMB 8.5 trillion. In our view, the Moody's estimate is consistent with other published figures by the CBRC and PBoC. For example, according to the PBoC the total number of LGFVs exceeded 10,000 at end -2010, while the equivalent NAO figure is only 6,576 (apparently the NAO has excluded LGFVs which are not technically under local government guarantee, even though they may be implicitly liable).

The NAO reports that 26.4% LGFV-financed projected suffered financial losses in 2010, which could mean that around one-third of associated loans could be impaired. Moody's estimates a delinquency rate on the RMB 3.5 trillion (USD 540 billion) of excluded LGFV debt to be much higher, at around 50-75%.

Of the total RMB 8.5 trillion LGFV debt, we believe around RMB 3 trillion (USD 460 billion), or about 30-40% is at risk, based on the NAO report and also consistent with figures reported from the CBRC (Chart 3). We note that Moody's estimate of such loans at risk is higher, due to their assumption, as mentioned above, that up to 75% of RMB 3.5 trillion of NAO-excluded debt is of questionable quality.

Two scenarios for dealing with LGFV debt

Here we need to make a distinction between local government debt and LGFV debt. The former is comprehensive (RMB 14.2 trillion, or USD 2.2 trillion), while the latter is a subset (RMB 5.7 trillion, or USD 880 billion), consisting of the borrowing of local governments and agencies through specialized vehicles. In practice, given the complexities of central/local fiscal relations, and the arm's-length operations of state-owned enterprises, it is difficult to define clearly local government debt, and which obligations the central government may take over in the event of non-payment.[3]

Below we describe two extreme scenarios, one in which the central government bears the cost of servicing potential problem loans of local governments, and the other in which banks must bear the cost by writing off problem LGFV loans. The scenarios are extreme by design, with the most likely outcome consisting of a combination of the two, in which banks and the central government share the cost.

Scenario 1: A central government bailout

Under our first extreme scenario, we assess the impact on the central government of assuming all the problem loans of the local governments—local government agency debt (RMB 5.7 trillion) and problem LGFV obligations (RMB 3.0 trillon). With respect to the former, for the purposes of this scenario we assume that the central government bears responsibility for debt of local government agencies. This is admittedly a strong assumption, but it reflects, in our view, the most likely outcome given the nature of central/local government relations and the degree of integration of their budgets (see footnote 3).

In total, this "worst case" scenario would add RMB 8.7 trillion (22% of GDP) to the central government's debt level. This would bring outstanding central government debt to around 59% of GDP (Chart 4), including the debt instruments of the central bank, bank restructuring costs, and liabilities of the Railway Ministry as discussed above. While high, this level of debt would be manageable, all the more so given China's expected rapid GDP growth and fiscal revenue growth (Chart 5). In particular, we project GDP growth of 8-9% during 2011-2015, and a steady rise in fiscal revenue by 20% in nominal terms per year during 2011-2015.

[3] The central government controls 51.7% of total national government revenue while the local governments bear the vast majority of public expenditure (81.2% in 2010). It therefore makes fiscal budgets of central/local governments highly integrated in sense that the local governments are dependent on the fiscal transfer from the central government. In addition, the relevant laws of national fiscal system also rule out the possibility of the bankruptcy of local governments.

Scenario 2: Write-offs by banks

Under an alternative extreme scenario, we assess the impact on banks if they, rather than the central government, were to absorb the cost of non-performing LGFV loans (RMB 3.0 trillion), equivalent to 60% of banks' end-2010 capital. We continue to assume in this scenario that the central government bears the cost of direct local government agency debt (RMB 5.7 trillion, or USD 880 billion) for the reasons noted above.

There are two possibilities open to banks for addressing this scenario. One option is for them to provision and write-off these loans as they come due over the next 5 years. Using this approach, banks would need to raise additional capital RMB 700 billion—above and beyond any capital needs to maintain minimum CARs stemming from the normal growth in their loan books—over the 5-year period. (This calculation is based on our projections of annual risk-weighted asset growth of 15%, annual profit growth of 20%, and an assumption of no dividend payouts.) This would be a large capital-raising requirement, but not impossible — to put the magnitude in perspective, banks raised around RMB 300 billion in 2010, which was considered an unusually large capital raising year necessitated by rapid lending growth and stricter capital adequacy requirements. Moreover, much of the capital would likely come from the government (around RMB 250 billion) given its stakes in the large commercial banks.

A second option open to banks would be to carry the problem loans as NPLs for an extended period, rather than writing them off as they come due. All else equal, this would imply an increase in the banking sector's NPL ratio to 4.3% by end-2015 from the current level of 1.1%[4] (projected loan growth of 15% per year would prevent the ratio from rising even higher). Such a scenario, of course, would require banks to restructure loans and take capital losses at a later stage.

Which scenario is most likely?

In practice, we view a combination of the two scenarios as most likely. Indeed, a widely publicized news report by Reuters this past June suggested government discussion under way to absorb RMB 2-3 trillion (USD 310-460 billion) of local government debt through a combination of bank losses and government funds. In the past, in 1999, the Chinese government relied on an Asset Management Company (AMC) model to clean up NPLs of state-owned bank whose magnitude (RMB 2.7 trillion, or USD 420 billion) is roughly similar to Scenario 2 above. In such a framework, all or part of LGFV loans could be moved from banks' balance sheets to an AMC at a discount (which would constitute the cost born by the banks in cleanup process).

Conclusions

There are two implications worth noting from our scenario analysis. First, although problem LGFV loans may generate a vast amount of new NPLs on bank balance sheets if not addressed, they appear manageable at a national level. Still, it does not seem likely that banks on their own would be asked to bear the full cost, especially given the importance of the sector in facilitating economic growth. It seems most likely, therefore, that a combination of government and banking sector involvement would be needed. Second, the manageability of these LGFV loans would be heavily dependent on the macro economic outlook. A sharp slowdown in economic growth would make either of the scenarios more difficult.

[4] Including impaired assets held in AMCs and by the Ministry of Finance, the current NPL ratio would be around 7% (see Garcia-Herrero and Santabarbara, 2011).

Chart 1
Debt Structure of China

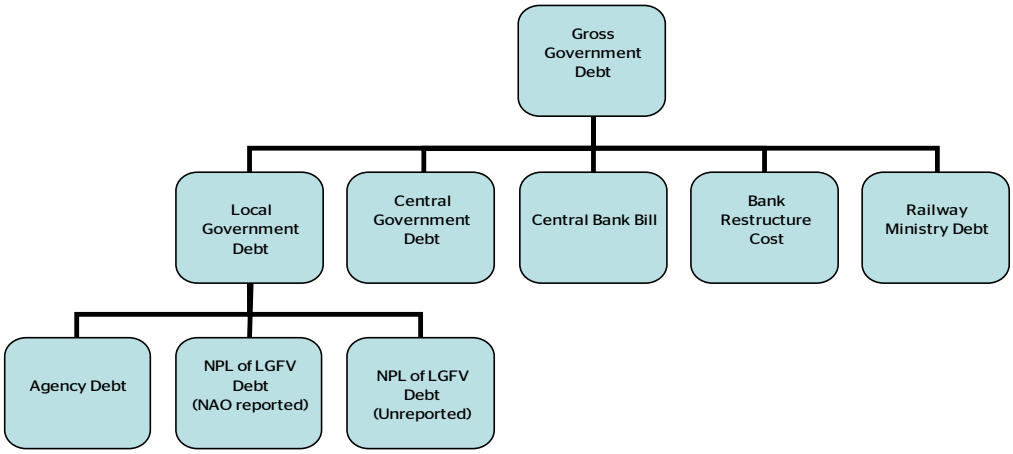
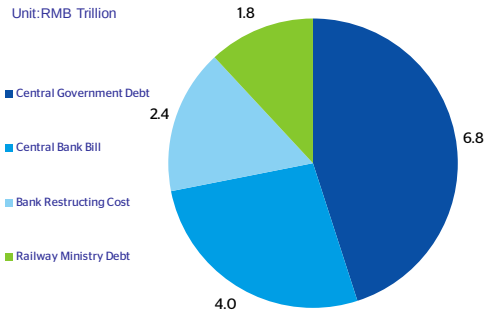
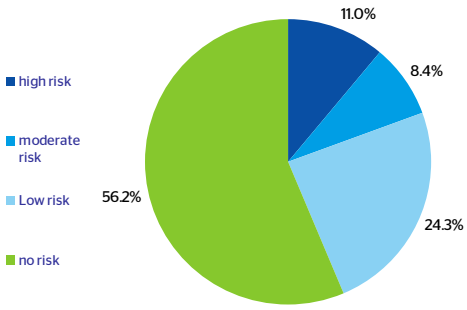


Chart 2
The composition of China's national debt



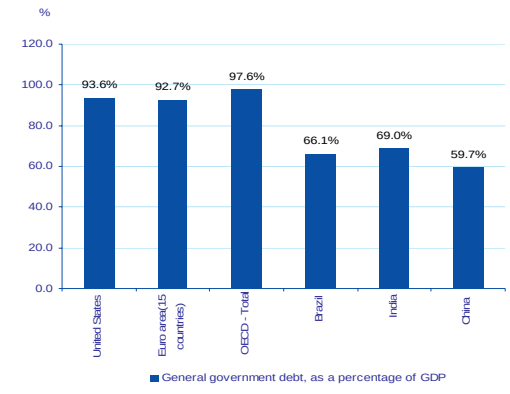
Source: CEIC and BBVA Research

Chart 3
Risk Profile of LGFV Loans



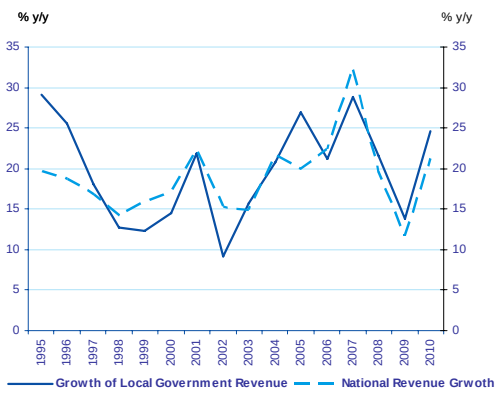
Source: Based on reports of CBRC data, and BBVA Research

Chart 4
China's public debt level is at a manageable level



Source: OECD,, Haver and BBVA Research
Note: Data for China is the sum of central and local government debt.

Chart 5
China's government revenue has grown rapidly



Source: CEIC and BBVA Research

DISCLAIMER

This document and the information, opinions, estimates and recommendations expressed herein, have been prepared by Banco Bilbao Vizcaya Argentaria, S.A. (hereinafter called "BBVA") to provide its customers with general information regarding the date of issue of the report and are subject to changes without prior notice. BBVA is not liable for giving notice of such changes or for updating the contents hereof.

This document and its contents do not constitute an offer, invitation or solicitation to purchase or subscribe to any securities or other instruments, or to undertake or divest investments. Neither shall this document nor its contents form the basis of any contract, commitment or decision of any kind.

Investors who have access to this document should be aware that the securities, instruments or investments to which it refers may not be appropriate for them due to their specific investment goals, financial positions or risk profiles, as these have not been taken into account to prepare this report. Therefore, investors should make their own investment decisions considering the said circumstances and obtaining such specialized advice as may be necessary. The contents of this document are based upon information available to the public that has been obtained from sources considered to be reliable. However, such information has not been independently verified by BBVA and therefore no warranty, either express or implicit, is given regarding its accuracy, integrity or correctness. BBVA accepts no liability of any type for any direct or indirect losses arising from the use of the document or its contents. Investors should note that the past performance of securities or instruments or the historical results of investments do not guarantee future performance.

The market prices of securities or instruments or the results of investments could fluctuate against the interests of investors. Investors should be aware that they could even face a loss of their investment. Transactions in futures, options and securities or high-yield securities can involve high risks and are not appropriate for every investor. Indeed, in the case of some investments, the potential losses may exceed the amount of initial investment and, in such circumstances, investors may be required to pay more money to support those losses. Thus, before undertaking any transaction with these instruments, investors should be aware of their operation, as well as the rights, liabilities and risks implied by the same and the underlying stocks. Investors should also be aware that secondary markets for the said instruments may be limited or even not exist.

BBVA or any of its affiliates, as well as their respective executives and employees, may have a position in any of the securities or instruments referred to, directly or indirectly, in this document, or in any other related thereto; they may trade for their own account or for third-party account in those securities, provide consulting or other services to the issuer of the aforementioned securities or instruments or to companies related thereto or to their shareholders, executives or employees, or may have interests or perform transactions in those securities or instruments or related investments before or after the publication of this report, to the extent permitted by the applicable law.

BBVA or any of its affiliates´ salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to its clients that reflect opinions that are contrary to the opinions expressed herein. Furthermore, BBVA or any of its affiliates' proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. No part of this document may be (i) copied, photocopied or duplicated by any other form or means (ii) redistributed or (iii) quoted, without the prior written consent of BBVA. No part of this report may be copied, conveyed, distributed or furnished to any person or entity in any country (or persons or entities in the same) in which its distribution is prohibited by law. Failure to comply with these restrictions may breach the laws of the relevant jurisdiction.

In the United Kingdom, this document is directed only at persons who (i) have professional experience in matters relating to investments falling within article 19(5) of the financial services and markets act 2000 (financial promotion) order 2005 (as amended, the "financial promotion order"), (ii) are persons falling within article 49(2) (a) to (d) ("high net worth companies, unincorporated associations, etc.") Of the financial promotion order, or (iii) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the financial services and markets act 2000) may otherwise lawfully be communicated (all such persons together being referred to as "relevant persons"). This document is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons. The remuneration system concerning the analyst/s author/s of this report is based on multiple criteria, including the revenues obtained by BBVA and, indirectly, the results of BBVA Group in the fiscal year, which, in turn, include the results generated by the investment banking business; nevertheless, they do not receive any remuneration based on revenues from any specific transaction in investment banking.

BBVA is not a member of the FINRA and is not subject to the rules of disclosure affecting such members.

"BBVA is subject to the BBVA Group Code of Conduct for Security Market Operations which, among other regulations, includes rules to prevent and avoid conflicts of interests with the ratings given, including information barriers. The BBVA Group Code of Conduct for Security Market Operations is available for reference at the following web site: www.bbva.com / Corporate Governance".

BBVA is a bank supervised by the Bank of Spain and by Spain's Stock Exchange Commission (CNMV), registered with the Bank of Spain with number 0182.