

China Macro View

Has Debt Reached a Dangerous Level? An Apples-to-Apples Comparison

- **China's total debt level is not threatening** – We estimate total debt at 210-220% of GDP in 2012, and the debt ratio was way below those in ten major advanced economies based on an apples-to-apples comparison. Debt ratios of China's households and financial institutions were particularly low, at 31% and 20% of GDP respectively. Government debt looks manageable. The debt ratio of nonfinancial corporations was strikingly high and poses major risks.
- **Government debt seems manageable if new borrowing is kept under control** – We estimate government debt at 16% of GDP based on a narrow definition, and 45-52% of GDP based on a broad definition. The interest-growth differential—a main determinant of debt dynamics—is expected to remain significantly negative for an extended period, reducing debt ratios over time. The official budget deficit may stay below 3% of GDP, following historical patterns. The debt ratio could be brought down were the government willing to privatize some state assets. However, local government debt is a risk factor, and the central government has become increasingly vigilant as the broadly-defined debt ratio is approaching 60% of GDP, the debt ceiling in the Maastricht Treaty, which has been cited by the Chinese officials as a warning line.
- **Corporate leverage is a cause of concern** – According to our estimate, the debt of China's nonfinancial corporations reached 151% of GDP in 2012, the highest among the ten major advanced economies. The debt ratio increased by almost 40ppts during 2008-12, and may exceed 160% in 2013. Even excluding debt issued by the former Ministry of Railways and local government financing vehicles, the debt ratio was still high at 114-121% of GDP. Increased reliance on debt financing amplifies volatility of corporate earnings. Looking ahead, interest rate liberalization and growth slowdown may undermine profitability of highly-leveraged corporations, eventually contributing to higher NPLs and debt defaults.

Shuang Ding

+852-2501-2769
shuang.ding@citi.com

Minggao Shen

+852-2501-2485
minggao.shen@citi.com

Enjiang Cheng

+86-10-5937-6038
enjiang.cheng@citi.com

Serena Wang

serena.wang@citi.com

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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Has Debt Reached a Dangerous Level? An Apples-to-Apples Comparison

The total debt level in China is not threatening, and government debt appears manageable if new borrowing—especially by the local governments—is kept under control. However, the corporate debt level is strikingly high and may rise further. Interest rate liberalization and a growth slowdown may undermine profitability of highly-leveraged corporations, eventually contributing to higher NPLs and debt defaults.

Total Debt Level Not Threatening

We estimate total debt in China at about 210-220% of GDP in 2012 – Cross-country comparison of debt is made difficult by differences in definition and coverage. To make an apple-to-apple comparison, we have compiled data on China's debt based on the methodology used by McKinsey.¹ In our calculation, total debt includes debt of households, nonfinancial corporations, financial institutions and government (Figures 1 and 2).

- **Households' debt was 31% of GDP.** In China, bank loans are the predominant source of household debt. As of end-2012, total bank loans to households stood at Rmb16tn, or 31% of GDP. In addition, private lending is popular in some areas, although there are no reliable data. A PBOC study dated 2011 put the size of such financing at Rmb3.4tn, or 8.5% of 2010 GDP. However, following the methodology of McKinsey, such debt is not included because the debt is essentially between households and offset against each other on a consolidated basis.
- **Nonfinancial corporations' debt was 151% of GDP.** The debt of this sector includes bank loans, corporate debt securities, international commercial loans and trade credits, as well as off-balance-sheet credits (trust loans, designated loans and undiscounted bank acceptance bills). SOE debt is included here. In addition, since a large part of the local government debt is raised in the form of corporation debt (local governments are not allowed to issue debt on their own according to the current law), debt issued by local government financing vehicles (LGFVs) is included here. In addition, the debt of former Ministry of Railways (MOR) is also included here since the Ministry acted like an SOE when borrowing from the banks or the capital market. According to our estimate, nonfinancial corporations' debt reached Rmb78tn at end-2012, or 151% of GDP.
- **Financial institutions' debt was 20% of GDP.** The debt of this sector includes PBOC bills and bonds issued by policy banks, commercial banks, insurance and securities firms and other financial institutions. Following the methodology of McKinsey, interbank borrowing is not included since the debt is between financial institutions and offset against each other on a consolidated basis. In addition, deposits of the banks are not regarded as debt. As of end-2012, the debt of financial institutions amounted to Rmb10tn, or 20% of GDP.
- **Government debt was 16% of GDP based on this methodology.** Since the debt issued by LGFVs and former MOR is already included in corporations' debt, government debt here only includes central government debt and debt issued by MOF on behalf of the local governments. As of end-2012, government debt was

¹ Debt and Deleveraging: Uneven Progress on the Path to Growth, McKinsey Global Institute, January 2012.

Rmb8.4, or 16% of GDP. Following the methodology of McKinsey, loans from one branch of government to another and unfunded pension liabilities are excluded.

Figure 1. Composition of Total Debt

	2007	2008	2009	2010	2011	2012
Classification I						
(In billions of RMB)						
Households	5,067	5,708	8,182	11,259	13,607	16,138
Nonfinancial corporations 1/	30,698	35,469	46,533	56,515	65,815	78,184
Domestic loans	22,707	26,297	34,378	38,864	43,479	49,783
Corporate bond balance 2/	794	1,346	2,583	3,689	5,055	7,305
Foreign borrowing 3/	2,508	2,291	2,462	3,256	4,048	4,241
Off-balance sheet items 2/	4,688	5,536	7,111	10,707	13,233	16,856
Financial institutions	6,651	8,754	9,081	9,465	9,222	10,178
Central Bank bills	3,395	4,629	4,057	3,703	1,942	1,158
Financial Bonds 4/	3,256	4,125	5,025	5,762	7,280	9,020
Government	5,207	5,327	6,224	7,155	7,804	8,407
Central Government Debt	5,207	5,327	6,024	6,755	7,204	7,757
Local Government Debt 5/	-	-	200	400	600	650
Total Debt	47,624	55,258	70,020	84,394	96,449	112,907
(As % of GDP)						
Households	19	18	24	28	29	31
Nonfinancial corporations	115	113	136	141	139	151
Financial institutions	25	28	27	24	19	20
Government	20	17	18	18	16	16
Total Debt	179	176	205	210	204	217
Classification II						
(In billions of RMB)						
Households	5,067	5,708	8,182	11,259	13,607	16,138
Nonfinancial corporations 6/	25,529	29,032	36,213	43,906	52,685	59,391 to 63,238
Financial institutions	6,651	8,754	9,081	9,465	9,222	10,178
Government	10,376	11,764	16,544	19,764	20,935	23,353 to 27,200
Central Government Debt	5,207	5,327	6,024	6,755	7,204	7,757
Local Government Debt	-	-	200	400	600	650
Local Government Debt 7/	4,510	5,569	9,017	10,717	10,718	12,153 to 16,000
Ministry of Railways	659	868	1,303	1,892	2,413	2,793
Total Debt	47,624	55,258	70,020	84,394	96,449	112,907
(As % of GDP)						
Households	19	18	24	28	29	31
Nonfinancial corporations	96	92	106	109	111	114 to 121
Financial institutions	25	28	27	24	19	20
Government	39	37	49	49	44	45 to 52
Total Debt	179	176	205	210	204	217

1/ Including debt of local government financing vehicles and former Ministry of Railways.

2/ Based on data on total social financing.

3/ Including international commercial loans and trade credits.

4/ Including policy bank bonds, commercial bank bonds and subordinate bonds, and bonds issued by securities firms, insurance firms and other financial institutions.

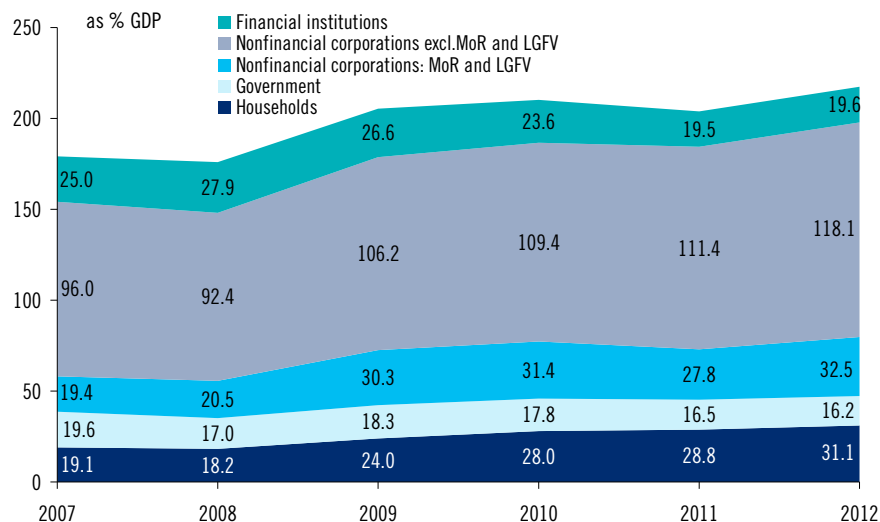
5/ Including debt issued by MOF on behalf of local governments.

6/ Debt issued by former Ministry of Railways and LGFVs is excluded here but included under government debt.

7/ Including debt issued by LGFVs.

Source: PBOC, Wind, CEIC and Citi Research

Figure 2. Composition of Total Debt 2007-2012



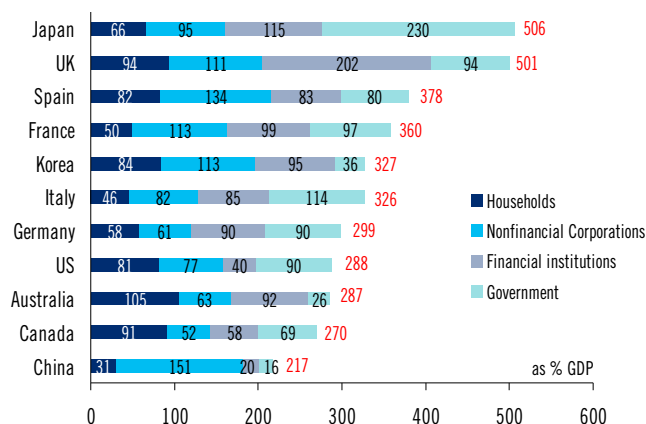
Source: PBOC, Wind, CEIC and Citi Research

■ **An alternative methodology would put government debt at 45-52% of GDP**, but nonfinancial corporations' debt would have to be adjusted downward by the same magnitude. If we include the debt issued by former MOR and LGFVs as local government debt, government debt is estimated to have reached Rmb23-27tn at end-2012, or 45-52% of GDP (see [China Macro View - Fiscal Vista: Expect Conservative Policy and Aggressive Reform](#)). However, the reclassification should not affect the total amount of debt, and nonfinancial corporations' debt would be lower at 114-121% of GDP.

The total debt ratio was way below that in major advanced economies – The calculation done by McKinsey based on the same methodology shows that China's debt ratio was lower than any of the ten major advanced economies covered by the study (Figure 3). The debt ratios in Japan and UK were twice as high as that in China. Debt of China's households and financial institutions were particularly low. Government debt, even based on broader definition (45-52% of GDP), still looks manageable. However, the debt ratio of nonfinancial corporations was the highest among these economies.

Debt appears to be adequately covered by assets – Rapid economic growth in the past three decades has enabled all sectors to accumulate assets. It remains challenging to compile a balance sheet of the nation due to valuation difficulties, but estimation of assets by different organizations can help us understand how solvent the government, enterprises and households are (Figure 4). Among different sectors, the financial conditions of the households seem to be most solid, with financial assets covering four times their debt in 2010. The government assets (excluding SOE assets) also appear to be at a comfortable level relative to their debt. For enterprises, the extent to which the asset value can be realized in the market is questionable. Assuming only 50% of the value can be realized, the enterprises' asset value was still reasonably higher than their debt level.

Figure 3. Cross-Country Comparison of Debt, 2012



Sources: Haver; McKinsey Global Institute; and Citi Research

Figure 4. Estimation of Total Assets by Different Organizations (in trillions of RMB)

Households, financial assets, 2010 1/	49
Of which: Currency in circulation	4
Deposits	32
Bonds and stocks	6
Enterprises, 2008 2/	208
of which: SOEs	48
Government, 2010 3/	66
Fiscal Deposits at Central Bank	2
Reserve Assets	20
Land and Resource Assets	44

1/ China Financial Stability Report, PBOC, published in 2012. 2/ The Second National Economic Census, NBS, released in 2009. 3/ China Sovereign Balance Sheet and Risk Assessment, CASS, published in 2012. We exclude assets of SOEs and administrative institutions to avoid duplication.

Sources: PBOC, NBS, CASS, and Citi Research.

Current Government Debt Manageable

The current level of government debt should be sustainable if new debt is kept under control – The conventional debt sustainability analysis breaks down factors affecting debt dynamics (change in debt-to-GDP ratio Δb_t) into three main components:

$$\Delta b_t = \frac{i_t - g_t}{1 + g_t} b_{t-1} - pb_t + dda_t$$

- (1) the interest-growth differential which captures the impact of debt increasing real interest rate (i) and debt decreasing real GDP growth rate (g);
- (2) the primary balance (pb), which is fiscal balance excluding interest payment. A surplus helps to reduce the debt ratio;
- (3) the deficit-debt adjustment (dda), which may include debt increasing government recapitalization of banks and debt decreasing privatization of government assets.

- China's interest-growth differential will likely remain negative in the foreseeable future, reducing the debt ratio over time. Despite growth deceleration, China's GDP growth rate is expected to stay above 6% (in real terms) in the next five years. On the other hand, five-year sovereign bond yield has been below 4% (in nominal terms) in the past few years. Considering most of China's government debt is domestically financed, the cost of government debt (especially in real terms) should not rise above GDP growth rate in the next few years.
- Local government debt is a risk factor. Judging from public finance, fiscal policy has been quite conservative, with official fiscal deficit consistently below 3% of GDP. As the growth-interest differential will most likely be larger than 3%, deficits lower than 3% of GDP should not add to the debt ratio. However, fiscal policy was more expansionary if local government activity of a fiscal nature is considered. According to the official audit, local government debt (including

LGFV borrowings) increased from roughly 18% of GDP in 2008 to 28% in 2010, implying a quasi-fiscal deficit of roughly 10% of GDP for 2009-10 combined. To reduce the risks, the LGFV debt should first be recognized as formal government debt, and the debt level needs to be contained.

- Privatization of state assets can help address the local government debt problem. Even if the government does not officially recognize the LGFV borrowings as government debt, those borrowings may eventually become explicit government debt, if some of those borrowings turn into non-performing loans (NPLs) and the government is called to recapitalize the banks. Fortunately, investment financed by local government borrowings has helped built state assets, and debt ratio can be reduced by selling those assets.

The government appears to see 60% of GDP as a ceiling for government debt

– There is no formal fiscal rule in China. However, MOF often cites the deficit and debt ratio ceiling (3% and 60% of GDP, respectively) in the Maastricht Treaty as a reference when discussing fiscal and debt policies. To leave sufficient fiscal space, the government is likely to become very vigilant when the debt-to-GDP ratio exceeds 50%, especially in light of future obligations related to pension and medical insurance. Recent measures to contain the expansion of LGFV debt seem to reflect the government's intention not to top the indicative debt ceiling.

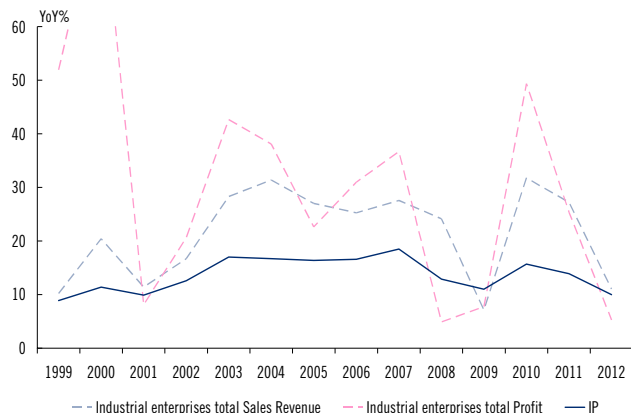
Corporate Leverage Is Cause of Concern

Corporate debt level is strikingly high, and may rise further – While the total debt level is not threatening, the debt of China's nonfinancial corporations reached 151% of GDP in 2012, the highest among the ten major advanced economies. In particular, the debt ratio increased by almost 40ppts during 2008-12. If credit and total social financing continue to expand as we expect, the corporate debt-to-GDP ratio is likely to exceed 160% in 2013. Even excluding debt issued by the former MOR and LGFVs, the debt ratio was still high at 114-121% of GDP in 2012.

High corporate leverage reflects in part the under-development of capital markets – China's financial system continues to be dominated by banks, and nonfinancial corporations rely heavily on financing intermediated by the banking system. At end-2012, China's stock market capitalization totaled Rmb23tn, only 44% of GDP. Since late 2009, market capitalization has stagnated at Rmb20-30tn, and its share to GDP has steadily declined from 72% of GDP at end-2009. To some extent, the expansion of debt financing is a compensation for the shrinkage of the equity financing. However, the shift in the relative importance of financing sources has exacerbated the maturity mismatch of bank financing, since short-term bank and off-balance-sheet credits have been used to finance long-term investment (which ideally should be financed by long-term financing such as stock and bond issuance).

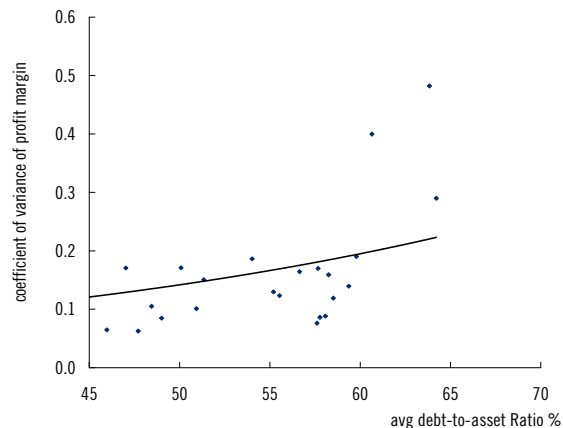
Increased reliance on debt amplifies earnings volatility – Annual data since 1999 show that industrial profit growth has been significantly more volatile than industrial production and industrial sales growth (Figure 5). High corporate leverage provides some explanation for earnings volatility, since debt financing would normally enhance positive returns during an economic up-cycle but eat into earnings disproportionately during a downturn. More specifically, industries with high debt ratios tend to have more volatile profit margins (Figure 6).

Figure 5. High leverage increased profit volatility



Source: CEIC and Citi Research

Figure 6. Higher debt ratio corresponds to more volatile profit margin

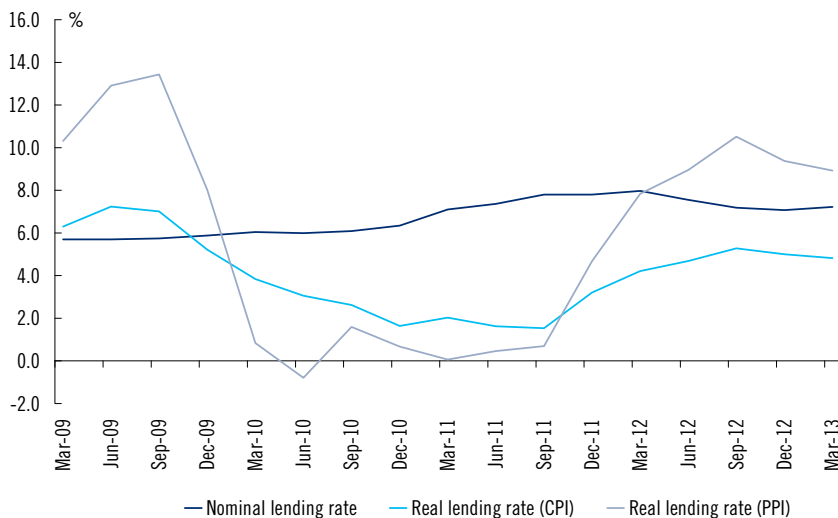


Source: CEIC and Citi Research

Interest rate liberalization and growth slowdown may squeeze corporate profits

Due to declining potential growth and excessive capacity in a number of upstream industries, we think China will rarely see a growth rate above 8% in the years to come, which would slow down sales of nonfinancial corporations. On the other hand, interest rate reform is expected to proceed further, which tends to raise the cost of debt, especially in real terms (Figure 7). Slowing sales and rising interest payment would undermine corporate profitability, eventually contributing to higher NPLs and debt defaults. Therefore, unless China's companies (including LGFVs) start to deleverage and increase reliance on capital market to finance long-term investment, the risk of a corporate debt crisis will increase, with spillovers to the banking sector and the government balance sheet.

Figure 7. Real lending rates are rising despite flat nominal rates



Source: CEIC and Citi Research

Macro and Market Outlook

Figure 8. China — Macro Outlook

Annual	2013		2014		Quarterly	2Q13		3Q13		4Q13		1Q14		2Q14	
	Citi	Survey	Citi	Survey		Citi	Survey	Citi	Survey	Citi	Survey	Citi	Survey	Citi	Survey
GDP (YoY%)	7.7	7.8	7.3	7.8		7.8	7.8	7.9	8.0	7.5	7.9	7.5	7.8	7.3	7.9
CPI (YoY%)	2.9	3.0	3.1	3.5		2.7	2.7	3.0	3.2	3.5	3.4	3.3	3.45	3	3.5
IP (YoY%)	9.6	10.7	9.1	10.8		9.7		9.9		9.4		9.3		9.1	
Exports (YoY%)	9.7	10.4	5.9	10.0		6.0		7.0		9.0		2.0		5.0	
Imports (YoY%)	9.6	10.2	7.2	11.5		10.0		12.0		8.0		8.0		7.0	
Trade Balance (\$US bn)	254.1	257.9	242.8	253.6		54.3		61.6		95.0		16		47	
FX reserve (\$US bn)	3678		3861			3494		3556		3678		3,674		3,706	
Current Account (as % GDP)	2.2	2.5	2.0	2.4											
Fiscal Account (as % GDP)	-2.0	-2.0	-2.0	-1.8											
1Y lending rate (eop)	6.00	6.00	5.75			6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.25
1Y deposit rate (eop)	3.00		3.25			3.00		3.00		3.00		3.00		3.00	
USDCNY (eop)	6.08	6.10	6.02	6.00		6.10	6.15	6.09	6.13	6.08	6.10	6.07	6.08	6.06	
5Y Government bond Yield	3.36		3.49			3.36		3.36		3.36		3.36		3.36	

Source: Bloomberg, Citi Research Estimates

Figure 9. China — Other Interest Rate / FX Forecasts

	31-May	2013 2Q F	2013 3Q F	2013 4Q F	2014 1Q F	2014 2Q F	2014 3Q F	2014 4QF
US Fed Fund Rate	0.09	0.25	0.25	0.25	0.25	0.25	-	-
10 Treasury	2.10	1.85	2.10	2.35	2.60	2.80	-	-
EUR/USD	1.30	1.28	1.27	1.26	1.25	1.25	1.25	1.25
USD/JPY	100.75	107	108	109	110	110	110	110

Source: Bloomberg and Citi Research Estimates

Figure 10. China — Real Economy Data

%YoY	2009 1Q	2009 2Q	2009 3Q	2009 4Q	2010 1Q	2010 2Q	2010 3Q	2010 4Q	2011 1Q	2011 2Q	2011 3Q	2011 4Q	2012 1Q	2012 2Q	2012 3Q	2012 4Q	2013 1Q	2013 Apr
Real GDP	6.6	8.2	9.7	11.4	12.1	10.3	9.6	9.8	9.7	9.5	9.1	8.9	8.1	7.6	7.4	7.9	7.7	
Nominal GDP	5.3	5.7	8.6	13.0	18.3	17.7	17.6	17.6	17.9	18.1	18.4	17.1	11.3	9.7	8.5	9.8	9.6	
CPI	-0.6	-1.5	-1.3	0.7	2.2	2.9	3.5	4.7	5.1	5.7	6.3	4.6	3.8	2.9	1.9	2.1	2.4	2.4
PPI	-4.6	-7.2	-7.7	-2.1	5.2	6.8	4.5	5.7	7.1	6.9	7.1	3.1	0.1	-1.4	-3.3	-2.3	-1.7	-2.6
Exports	-19.7	-23.4	-20.3	0.2	28.7	40.9	32.2	24.9	26.4	22.0	20.6	14.3	7.6	10.4	4.4	9.4	18.4	14.6
Imports	-30.9	-20.2	-11.6	22.7	64.8	43.6	27.3	29.8	33.0	23.1	24.9	20.1	6.9	6.4	1.4	2.9	8.4	16.8
Trade Balance (bn USD)	62.5	34.9	39.3	61.5	14.5	41.2	65.6	63.1	-0.7	46.7	63.8	48.1	1.1	68.8	79.2	82.8	43.1	18.2
IP	9.7	9.0	12.3	17.9	15.5	16.0	13.5	13.3	14.9	13.9	13.8	12.8	11.6	9.5	9.1	10.0	9.5	9.3
Retail Sales	15.0	15.0	15.4	16.5	17.9	18.5	18.4	18.8	16.3	17.2	17.3	17.5	14.8	13.9	13.5	14.9	12.4	12.8
FAI	28.6	35.9	32.9	26.2	26.4	25.2	23.1	23.9	25.0	26.0	24.0	21.2	20.9	20.8	21.0	20.4	20.9	20.6
Electricity Consumption	-4.0	-0.7	8.0	22.8	24.1	19.3	12.2	6.0	12.5	11.6	11.4	11.5	6.8	4.3	3.8	8.0	4.3	6.8
Steel Product Production	2.8	8.0	27.6	39.5	28.6	24.0	8.5	3.0	13.7	7.7	14.3	9.0	6.5	7.0	4.3	13.9	12.3	8.1
Cement Production	9.2	15.8	23.6	18.2	19.7	16.2	13.2	14.7	10.1	20.5	15.1	11.6	7.3	4.9	8.9	8.8	8.2	8.7
Baltic Index (eop)	-80.0	-60.8	-31.0	288.2	85.6	-36.0	10.2	-41.0	-49.0	-41.3	-22.4	-2.0	-39.0	-28.9	-59.7	-59.8	-2.6	-25.3
Cargo Carried Railway	-5.9	-1.1	0.6	12.2	17.8	7.4	7.4	4.4	6.8	10.1	7.6	7.5	4.0	1.4	-7.2	-1.1	-0.8	-6.3
Cargo Carried by Airline	-12.6	-0.3	17.5	35.5	48.2	32.9	18.0	14.0	1.0	-0.6	-0.7	-3.6	-6.7	-3.4	0.4	1.0	4.8	3.7
Cargo Carried by Highways	8.4	11.4	20.3	13.7	23.4	17.9	14.8	14.9	14.5	14.9	15.2	19.1	13.6	14.4	14.0	15.8	10.5	8.1
Official Mfg PMI (eop)	52.4	53.2	54.3	56.6	55.1	52.1	53.8	53.9	53.4	50.9	51.2	50.3	53.1	50.2	49.8	50.6	50.9	50.6

Source: Bloomberg, CEIC and Citi Research

Figure 11. China — Monetary Data

%YoY	2009 1Q	2009 2Q	2009 3Q	2009 4Q	2010 1Q	2010 2Q	2010 3Q	2010 4Q	2011 1Q	2011 2Q	2011 3Q	2011 4Q	2012 1Q	2012 2Q	2012 3Q	2012 4Q	2013 1Q	2013 Apr
M1	17.0	24.8	29.5	32.4	29.9	24.6	20.9	21.2	15.0	13.1	8.9	7.9	4.4	4.7	7.3	6.5	11.9	11.88
M2	25.5	28.5	29.3	27.7	22.5	18.5	19.0	19.7	16.6	15.9	13.0	13.6	13.4	13.6	14.8	13.8	15.7	16.07
Loan	29.8	34.4	34.2	31.7	21.8	18.2	18.5	19.9	17.9	16.9	15.9	15.8	15.7	16.0	16.3	15.0	14.9	14.9
FX Reserve (\$US bn)	1954	2132	2273	2399	2447	2454	2648	2847	3045	3197	3202	3181	3305	3240	3290	3312	3440	
Position for FX Purchase (tn RMB)	17.3	17.8	18.5	19.3	20.1	20.6	21.3	22.6	23.7	24.7	25.5	25.4	25.6	25.7	25.8	25.9	27.1	27.4
Bond Issuance *																		
Gov't Bond	1049	5969	5817	3582	2300	5558	5356	4668	3260	5114	4544	2500	2180	4749	4673	2840	2640	2231
Corporate Bond	3258	4444	3849	3961	3827	4363	4160	2851	5722	4574	5003	6870	6714	7673	10561	11150	11153	4215
Gov't Supported Bond	-	-	300	700	-	-	1540	350	-	-	-	1000	-	200	850	450	-	-

* In 100mn RMB

Source: WIND, CEIC and Citi Research

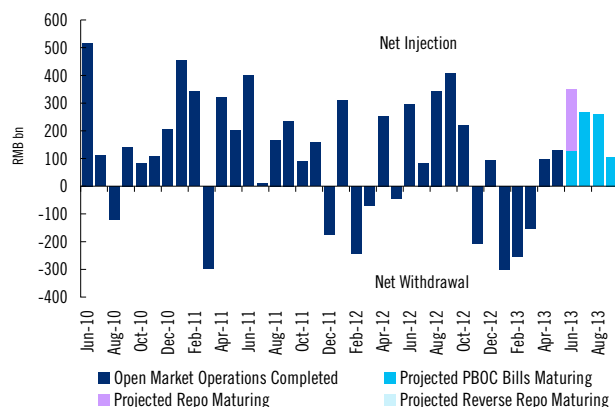
Figure 12. China — Market Snapshot

	31-May	1 Week change	YTD change	12 months Change		31-May	1 Week change	YTD change	12 months Change
Foreign Exchange					Interbank Rate, %				
USD/CNY	6.14	0.01	(0.09)	(0.23)	1D SHIBOR	4.50	1.00	0.64	2.62
EUR/CNY	8.01	0.04	(0.21)	0.11	7D SHIBOR	4.78	0.63	0.20	2.64
100JPY/CNY	6.09	0.04	(1.09)	(2.04)	1M SHIBOR	4.02	(0.58)	(0.88)	1.05
1M Vol, USD/CNY	2.05	-	0.33	(0.15)	3M SHIBOR	3.88	(0.00)	(0.02)	(0.32)
3M Vol, USD/CNY	2.21	(0.04)	0.46	(0.03)	6M SHIBOR	4.10	-	-	(0.53)
					1Y SHIBOR	4.40	-	(0.00)	(0.53)
Forward					Repo Rate, %				
USD/CNY 3M Forward, onshore	6.18	0.01	(0.09)	(0.23)	1D Interbank Repo Rate	4.51	1.51	0.65	2.63
USD/CNY 12M Forward, onshore	6.26	0.01	(0.09)	(0.23)	7D Interbank Repo Rate	4.81	0.65	0.23	2.65
USD/CNY 3M NDF	6.20	0.02	(0.21)	(0.41)	1M Interbank Repo Rate	4.00	(0.62)	(1.43)	1.17
USD/CNY 12M NDF	6.27	0.04	(0.16)	(0.40)	3M Interbank Repo Rate	5.10	1.00	1.10	-
PBOC Benchmark Rate, %					IRS, %				
Demand Deposit	0.35	-	-	(0.15)	3M IRS	3.44	0.08	(0.19)	0.98
3M Deposit	2.60	-	-	(0.50)	1Y IRS	3.32	0.05	(0.02)	0.87
6M Deposit	2.80	-	-	(0.50)	2Y IRS	3.33	0.03	(0.03)	0.82
1Y Deposit	3.00	-	-	(0.50)	5Y IRS	3.52	0.02	(0.12)	0.74
2Y Deposit	3.75	-	-	(0.65)	10Y IRS	3.70	-	(0.08)	0.76
3Y Deposit	4.25	-	-	(0.75)	IRS Curve, bp				
5Y Deposit	4.75	-	-	(0.75)	2Y-3M	332.50	2.50	(2.50)	81.50
6M Lending	5.60	-	-	(0.50)	5Y-2Y	19.50	(0.50)	(9.50)	(7.50)
1Y Lending	6.00	-	-	(0.56)	10-2Y	37.50	(2.50)	(5.50)	(5.50)
1-3Y Lending	6.15	-	-	(0.50)	10-5Y	18.00	(2.00)	4.00	2.00
3-5Y Lending	6.40	-	-	(0.50)	Stock Market				
5+Y Lending	6.55	-	-	(0.50)	Shanghai Composite	2,319	30	50	(53)
Govn Bond, %					- Turnover, RMB bn	104	(8)	(2)	18
PBOC 3M	2.93	-	0.13	-	Shenzhen Composite	1,046	17	165	79
PBOC 6M	2.94	-	0.09	-	- Turnover, RMB bn	44	(2)	6	9
CGB 1Y	2.83	-	(0.01)	0.62	HSCEI	10,610	(112)	(826)	924
CGB 2Y	3.02	-	(0.08)	0.50	- Turnover, HKD bn	7	(4)	0	(16)
CGB 5Y	3.15	(0.04)	(0.07)	0.38	Other Indicator				
CGB 10Y	3.43	(0.01)	(0.16)	0.04	5Y Sovereign CDS	82.34	4.68	23.00	(52.15)
Govn Bond Yield Curve, bp					Required Reserve Ratio	19.50	-	-	-
2Y-3M	9.00	-	(21.00)	-					
5Y-2Y	13.00	(4.00)	1.00	(12.00)					
10-2Y	41.00	(1.00)	(8.00)	(46.00)					
10-5Y	28.00	3.00	(9.00)	(34.00)					

Source: Bloomberg and Citi Research

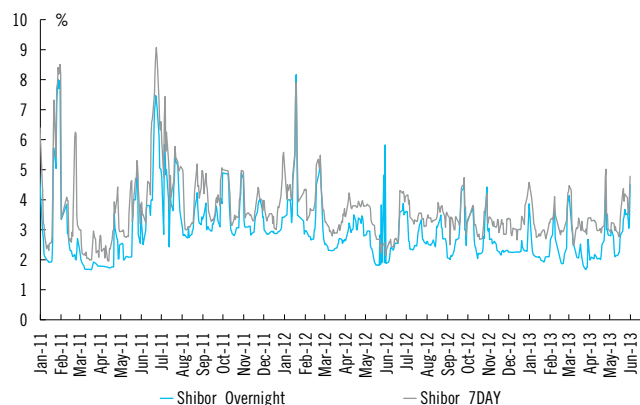
Liquidity Conditions

Figure 13. PBOC Open-Market Operations



Source: POBC, CEIC and Citi Research

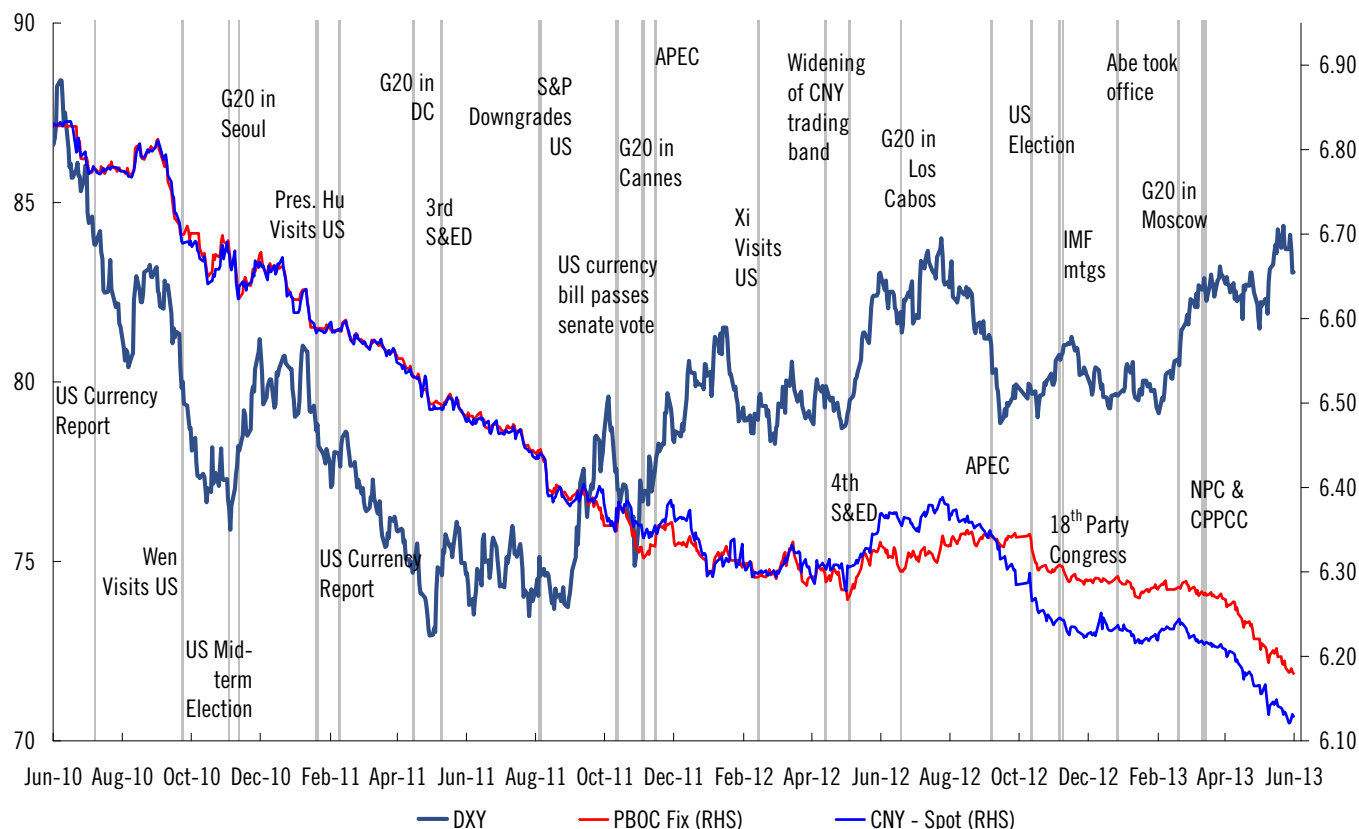
Figure 14. China Interbank Rates



Source: Bloomberg and Citi Research

FX Markets

Figure 15. USDCNY



Source: Bloomberg and Citi Research

Our Recent Notes

Figure 16. List of Recent Reports

Name	Date
China Macro Flash - Provincial AMC: A New Vehicle for Debt Restructuring?	28-May 13
China Macro Flash - Official PMI May Fall Below 50	23-May 13
China Macro Flash - Will Weak Growth Trigger Reform or Stimulus?	15-May 13
China Macro Flash - April Data Points to Flattish Growth in 2Q	13-May 13
China Macro Flash - Apr Data: Monetary Easing Bias May Stay for Longer	10-May 13
China Macro View - Fiscal Vista: Expect Conservative Policy and Aggressive Reform	10-May 13
China Macro Flash - Beijing Trip Notes: Early Signs of Reforms	9-May 13
China Macro Flash - Benign Inflation May Keep Accommodative Policy for Longer	9-May 13
China Macro Flash - April Trade Data: Stronger Import Growth Is a Positive Sign for Domestic Demand	8-May 13
China Macro Flash - Apr Data May Highlight External Weakness	2-May 13
China Macro Flash - April PMI Highlights External Headwinds	1-May 13
China Macro Flash - Faster Appreciation Signals Emphasis on Reform at this Stage	26-Apr 13
China Macro View - Interest Rate Liberalization: Next Steps and Implications	24-Apr 13
China Macro Flash - Official PMI May Stay at Low 50s in April	23-Apr 13
China Macro View - Getting Used to the New Normal	17-Apr 13
China Macro Flash - 1Q Data Point to Modest Downside Growth Risks	15-Apr 13
China Macro Flash - Mar Monetary Data: Easing Bias Remained in 1Q	11-Apr 13
China Macro Flash - March Trade Data: Imports Surprised on the Upside	10-Apr 13
China Macro Flash - March Data: Inflation Not a Threat But May Trend Up	9-Apr 13
China Macro Flash - Data for 1Q May Confirm a Modest Recovery and Benign Inflation	3-Apr 13
China Macro Flash - March PMI: A Weak Economic Recovery with Uncertainty Ahead	1-Apr 13
China Macro Flash - New Agenda: Interest Rate Liberalization, WMPs, BRICS...	28-Mar 13
China Macro Flash - Oil Pricing Mechanism Changed to Better Reflect International Prices	26-Mar 13
China Macro View - Takeaways from 2013 China Policy Day	25-Mar 13
China Macro Flash - Official PMI May Stage a Post-Holiday Rebound	21-Mar 13
China Macro Flash - PBOC Survey Points to Continued Recovery	20-Mar 13
China Macro View - Growth and Reform: A Little Bit of Both for Now	18-Mar 13
China Macro Flash - Weak Recovery but in Line with Our Expectation	14-Mar 13
China Macro View - Capital Account Liberalization: A Calculated Advance	12-Mar 13
China Macro Flash - Government Restructuring: More Needs to Come	11-Mar 13
China Macro Flash - Feb Data: Balance of Risks Shifted Slightly Toward Inflation	11-Mar 13
China Macro Flash - Feb Trade Data: Surprising Trade Surplus Puts Pressure on RMB	8-Mar 13
China Macro Flash - 2013 Budget Less Expansionary Than 2012 Budget	6-Mar 13
China Macro Flash - NPC Government Report Offers Few Surprises	5-Mar 13
China Macro Flash - Feb Data May Fuel Inflation Fears	4-Mar 13
China Macro Flash - Modest Rebound Uninterrupted Despite Feb PMI Drop	1-Mar 13
China Macro View - NPC Outlook: to Reform, or to Wait for It to Happen?	25-Feb 13
China Macro Flash - Official PMI May Temporarily Fall Below 50 in Feb	25-Feb 13
China Macro Flash - Jan Trade Data Remain on Uptrend	8-Feb 13
China Macro Flash - Jan Monetary Data Indicate a Strong Start	8-Feb 13
China Macro Flash - Jan Headline Inflation Eased Thanks to Holiday Distortion	8-Feb 13
China Macro Flash - Distribution Reforms Focus on Low-Income Group	6-Feb 13
China Macro Flash - Jan Data Preview: The Art of Removing Holiday Distortion	4-Feb 13
China Macro Flash - Jan PMI Indicates Modest Rebound On Track	1-Feb 13
China Macro Flash - Official PMI May Improve Further on Positive HSBC Flash	24-Jan 13
China Economics Weekly - Over-capacity to Constrain Manufacturing Investment	18-Jan 13
China Macro Flash - Dec Data Confirm Mild Rebound and Signal Structural Changes	18-Jan 13
China Economics Weekly - Shadow Banking: to Be Suppressed or Regulated?	17-Jan 13
China Macro Flash - Dec Data: Weather-Related Inflation Jump Not a Threat Yet	11-Jan 13
China Macro Flash - Dec Trade Data Highlight Upside Risks	10-Jan 13

Source: Citi Research

Appendix A-1

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