SPECIAL REPORT

TD Economics



July 23, 2015

CHINA'S ECONOMY IS ENTERING A SLOWER, RISKIER PHASE (AND POLICY OPTIONS ARE RUNNING THIN)

Highlights

- Since the turn of the millennium, the growth of the Chinese economy has been the biggest story for the global economy. However, in recent years, that growth has been too dependent on credit-fuelled stimulus. Non-financial sector debt has risen to roughly 250% of GDP. This rise in debt presents serious risks. According to the two best indicators to help gauge banking crises risks by the Bank of International Settlements (BIS), China is above the threshold signaling financial vulnerability.
- In the first quarter of 2015, China's economy slowed to its weakest pace since the financial crisis. In response, Chinese authorities unleashed a sizeable array of stimulus measures while backtracking on certain reforms. Real GDP and a host of monthly indicators ticked up in the second quarter. However, there is a very real risk that growth flags again at the end of this year unless additional measures are undertaken.
- High financial vulnerability risks limit the available policy options to support economic growth. More
 interest rate cuts are likely, but rather than raise economic growth, they will simply offset elevated
 debt-servicing costs for businesses.
- On a longer-term basis, economic growth is likely to continue to slow alongside structural forces and the debt overhang. Moreover, the need to deleverage or at least contain credit growth implies a continued economic slowdown, or China risks exacerbating the vulnerabilities within its economy.
- For the rest of the world, the implications are that China will continue to periodically drain demand from an already demand-short global economy. Expect to see continued bouts of market volatility as authorities try to navigate the trade-off between near-term growth and long-term reform. Slower Chinese growth partly explains why the price of non-food

commodities remains subdued, and the feedback loop to other EMs suggests lower growth profiles than in the past.

For the last several decades, the growth of the Chinese economy has been the biggest story for the global economy. China contributed roughly 27% of annual global growth on average since the year 2000, compared to 16% combined for the U.S. and euro area¹ (see Chart 1). China's rapid development has transformed global trade patterns, putting downward pressure on consumer goods and fueling consumption in advanced economies. At the same time, its voracious demand for commodities drove the commodity super cycle of the 2000's that contributed to the growth of commodity-producing economies.

China's economy is now entering a new phase. As its economy matures, economic growth is slowing. In the first quarter of 2015, China's economy slowed to its weakest pace

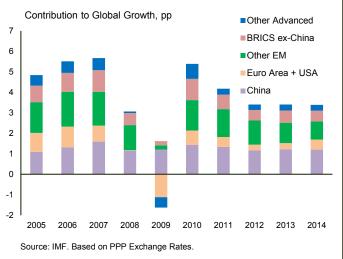


CHART 1. CHINA AND OTHER EMERGING MARKETS CONTRIBUTED LION'S SHARE OF GLOBAL GROWTH



since the financial crisis. Policymakers responded to the slowdown by announcing a dizzying array of additional stimulus. In effect, it chose additional near-term growth, at the cost of higher financial vulnerability risks down the road. While these initiatives appear to have had some success in temporarily lifting economic growth, high debt levels limit both the magnitude and effectiveness of the policy response. After several years of credit-fueled stimulus, non-financial sector debt has risen to roughly 250% of GDP.

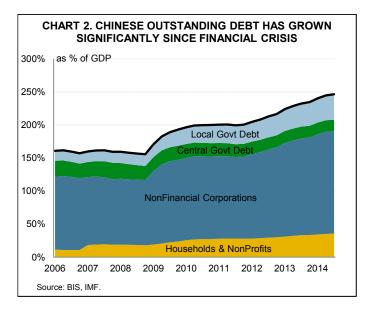
Higher near-term growth won the battle over financial stability this year, but the latter is likely to win the war. Concerns over financial stability will lead China into accepting slower economic growth. China will continue to be an important driver of the global economy, but less so than over the past decade. At the same time, with elevated debt levels and waning growth, China is becoming a more important source of downside risk to financial markets and global growth.

The Chinese economy is slowing on a structural basis

As an economy grows larger and wealthier, maintaining double-digit growth rates becomes increasingly difficult. This pattern of slowing growth is especially true of countries that were able to take advantage of technologies developed in more advanced economies. In this respect, China's growth history is similar to another rapidly developing Asian country – South Korea (see table).

In both countries, integration into the global economy initially allowed for double-digit economic growth rates. As Korea's experience took place 20 years earlier it offers a glimpse into what the future may hold for China. As Korea's economy developed, its growth rate slowed from double digits to high single digits and eventually to low single digits. In all likelihood, the same will happen in China. China's economy will slow as real GDP growth per capita continues to rise (or in economist jargon, as it moves

TABLE 1	Real GDP Growth		Real GDP per capita Growth		GDP per capita, USD	
	CHN	KOR	CHN	KOR	CHN	KOR
1960s	3.4	8.3	1.2	5.5	88	143
1970s	7.4	10.5	5.3	8.6	153	792
1980s	9.7	8.6	8.2	7.3	247	3,032
1990s	10.0	6.7	8.8	5.7	562	9,802
2000s	10.3	4.7	9.6	4.1	1,950	16,762
2010-14	8.0	3.1	7.5	2.5	6,116	24,862
Source: World Bank, IMF.						



closer to the technological frontier), but also as its labor force growth slows due to population aging and a low birth rate.

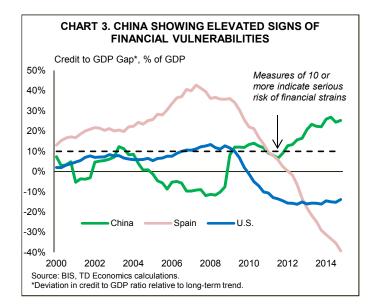
Estimates vary on long-term growth in China, but all are lower than where China is today. IMF forecasts as of the last World Economic Outlook have Chinese growth cyclically decelerating to 6.0% in 2017, and averaging 6.3% in 2019-2020. In contrast, the OECD long-term projections sees potential growth in China decelerating to 4.6% in 2022. Using Korea's experience as a simple benchmark and extrapolating would imply a trend growth rate of roughly 6.5% this year for China, slowing to roughly 5.5% in 2020. This is lower but not so far off from what Chinese authorities are currently targeting for economic growth.

China's debt overhang is weighing on its economy

As swift as economic growth has been in China, credit growth over the last several years has been even more rapid. Following the financial crisis in 2008-09 and again as growth flagged in 2011 and 2012, China undertook large-scale credit-fuelled stimulus in order to boost its economy. This led to a surge in non-financial sector debt, which has grown from 156% of GDP in 2008 to roughly 250% of GDP at the end of 2014 – levels surpassing that in some advanced economies (see Chart 2). On a sectoral basis, the biggest growth in debt has been within the non-financial corporate sector², where overinvestment in many sectors has led to overcapacity.

This can only go on so long. The resulting debt overhang is already putting serious strains on the economy. Nonfinancial private sector debt was equal to 193% of GDP as of the fourth quarter of 2014. Simplistically assuming





a seven-year rolling average of the weighted lending rate, the sector is currently spending roughly 12.1% of GDP on annual interest expenses alone. This is over 50% more than it was paying in early 2009. Lowering this debt burden would require deleveraging and/or lower interest rates. For this reason alone, further interest rate cuts from the People's Bank of China (PBoC) appear likely.

A number of financial stability indicators are flashing red

In addition to the challenges posed by high debt, the rapid pace of credit accumulation raises financial stability concerns. According to the two best indicators to help gauge banking crises risks by the Bank of International Settlements (BIS), China is above the threshold signalling financial vulnerability³. One of these indicators is the credit-to-GDP gap,



which looks at the relationship between the credit-to-GDP ratio and its long-term trend⁴. On this measure, China stacks up higher than the U.S. before the financial crisis, less than Spain, but still above the 10% risk threshold (see Chart 3).

Another measure of financial vulnerability identified by the BIS is the debt-service ratio (DSR). The DSR represents the interest and debt repayments as a share of income for the non-financial private sector, relative to long-term trends. Unsurprisingly given the elevated interest payments on China's private sector mentioned above, China ranks high on this criterion. Among a subset of large countries, China comes in at a 9.7%, almost double the second highest country, Turkey, at 5.4%. A DSR above 6% is deemed by the BIS to be a "very strong indication that a crisis may be imminent"⁵.

These heightened financial vulnerability risks point to the need for deleveraging in China. Yet, even with credit growth decelerating, it continues to rise faster than GDP. Total social finance – China's widest ranging measure of credit – excluding equity issuance, rose 11.5% in June, down from 16.7% over the same period last year. Meanwhile, the BIS's measure of private-sector credit shows growth of 15.8% in the fourth quarter of 2014. Both these measures are on a downtrend, but so is GDP. Nominal GDP grew only 7.1% year-over-year in the second quarter of 2015, so overall indebtedness relative to GDP continues to rise.

Tight monetary policy and reform efforts contributed to China's growth slowdown

Chinese authorities are cognizant of the debt problem, and in response, monetary policy had been kept relatively tight. Although much of the world was easing policy, China kept interest rates unchanged until November 2014. With producer price inflation turning negative as a result of overcapacity and with consumer price inflation coming in very subdued, real interest rates rose (see Chart 4). In addition, the housing market turned south last year, and this has had knock-on effects on local government finances, which previously had relied on land sales to finance much of their budgets. Reforms at the local government level, while necessary, may also have had an impact on infrastructure spending (see Box 1).

The result was that the Chinese economy stumbled in the first quarter of the year. Real GDP growth grew 7% year-over-year, its weakest since the first quarter of 2009, but growth on a quarterly basis fell to as low as 5.3%. Even these low numbers for China have come under suspicion



Textbox 1: China's Local Government Debt Reforms

An important issue on the top of the reform agenda in China is local government debt. While central government debt remains low, local debt levels are much more opaque and carry a higher interest rate. This is because of historical restrictions on direct borrowing. Local governments have relied on off-budget borrowing through local government financing vehicles (LGFVs) in order to finance their budgets and massive expansions in infrastructure spending⁶. An IMF paper released in March 2015 found that "local government debt, on average, has risen to nearly 70 percent of total fiscal revenue in 2013 (or 23 percent of provincial GDP). Adding government guaranteed and contingent liabilities would push the average to about 33 percent of provincial GDP, and to over 60 percent of GDP in some provinces—a high level given the small revenue base."⁷ Additional risks also exist due to maturity mismatches between short-term LGFV liabilities and longer-term investment returns.

Mindful of these issues, reforms are under way in the local government sector. China's State Council released a Directive in October 2014 restricting local governments from raising debt via LGFV's. Instead, local governments would be permitted to issue more municipal bonds in order to finance spending, thereby ensuring greater transparency. A debt swap scheme was also announced to allow local governments to convert RMB1 trillion (\$160 billion) in high interest LGFV debt into longer-maturity bonds with interest rates close to that of the central government's bonds (since doubled to RMB2 trillion). Assuming the scheme would be further expanded in the future, this would allow local governments to roughly halve their interest expenses on this debt – an important objective given China's high debt levels.

These reforms suffered a number of setbacks however. Local banks who were expected to be some of the prime buyers of local bonds issued under the debt swap, initially balked at purchasing these bonds given the low level of interest offered. The central government then issued orders forcing commercial banks to purchase these bonds while also incentivizing them by allowing the bonds to be used as collateral for loans from the central bank. Backtracking on the directive issued in October, China has also instructed its banks to continue providing funding to LGFV's for on-going projects, while instructing banks to extend loans terms in cases where LGFV were unable to cover interest payments⁸.

Overall, the backtracking on LGFV reforms will be positive for the economy in the near-term as it will mean additional infrastructure spending. However, the setback to much-needed LGFV reform and coaxing by Chinese authorities on Chinese banks are representative of some of the challenges that China faces in balancing strong near-term economic growth, as well as long-term sustainable growth.

(see Box 2 at the end). Real industrial production in particular – usually a solid indicator for gauging economic growth - has been gapping far below measured economic activity (see Chart 5).

One of the clear examples of slower Chinese growth, and one of the most relevant for the rest of the world, can be found in international trade patterns. Import volumes declined for three consecutive months, tumbling 32% annualized in the first quarter, suggesting very weak domestic demand.

Weak import volumes in China have exerted considerable drag on the rest of the world. Real exports to the euro area rose strongly in the first quarter, while imports from the region weakened considerably (see Chart 6). This partly contributed to the nearly 1pp (annualized) drag on euro area growth from net exports in the first quarter, in spite of the lower euro. Meanwhile, the U.S. trade deficit with China – which is little affected by currency movements given the Renminbi's de facto peg with the dollar – surged \$6.4bn in Q1, the largest rise on record. Part of it may be related to

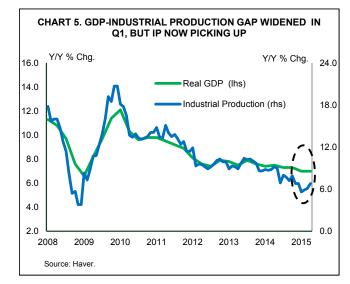




CHART 6. POOR TRADE DATA WITH CHINA WEIGHED ON EURO AREA GROWTH IN THE FIRST QUARTER Index Jan2010=100 3mth MA 150 Euro Area Real Exports to China 140 Euro Area Real Imports from China 130 120 110 100 90 Janto Jan 2 JUN 2 JU1-70 Janni Julia Source: Eurostat. Data until March 2015

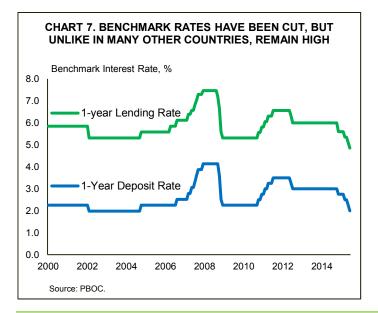
West Coast port disruptions, but this occurred at a time of otherwise subdued U.S. domestic demand.

Policy reversal has been swift and deliberate

The slowdown in China set off alarm bells in Beijing, with China responding with a number of stimulus measures. We go through some of these below.

Monetary policy: measured loosening

While the PBoC was reluctant to lower interest rates last year, they have reversed course swiftly as weaker economic growth materialized. Lending and deposit interest rates have been cut four times since November. From 6.00%, lending rates fell to 4.85%, while deposit rates have been cut from 3.00% to 2.00% (see Chart 7). Still, benchmark interest rates in China stand in contrast to their counterparts



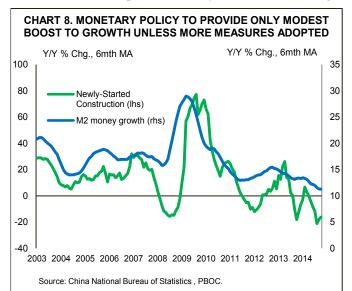
in more developed markets in that they are not particularly low from a historical perspective. Moreover, as the flow of credit is controlled through a host of levers in China, lower interest rates do not necessarily lead to credit growth in the same way they would in more market-oriented economies.

In addition to rate cuts, China also cut bank reserve requirement ratios (RRR) by 50bp and 100bp in February and April, respectively, with several rounds of additional targeted cuts for rural and agricultural-focused banks. However, banks can choose not to lend the additional liquidity provided by the cuts, which would limit the impact. Moreover, with high debt loads and elevated interest payments, private sector demand for credit remains tepid.

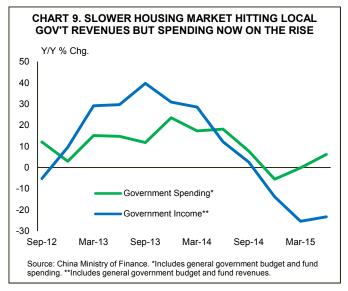
The People's Bank of China also unveiled a new monetary policy tool last year, Pledged Supplementary Lending (PSL). Under PSL, the PBoC delivers targeted liquidity to Chinese policy banks, which are then used to finance specific fiscal expenditures – in contrast to general RRR cuts which release liquidity in a more broad-based manner. In this way, money is funneled directly to areas that the government is trying to support. Monetary expansion via the PSL may be more supportive to growth, pound for pound, as the funds are more likely to be spent.

Overall, quantifying the impact of all these monetary easing measures on economic activity remains difficult. Broad money (M2) growth is one way of capturing the impact of these monetary measures with a turn in the pace of M2 growth generally acting as a leading indicator of stronger construction activity (see Chart 8).

M2 money growth has been on a general downward trend since the third quarter of last year. However, a slight







pickup in growth to 11.8% Y/Y from 10.8% in May suggests it may be stabilizing. If so, the impact of the monetary measures will provide a modest lift to the economy. From a longer-term perspective, the slowdown is healthy, but it also suggests less of an impulse to near-term growth.

Direct fiscal spending

Given elevated debt levels and risks, Chinese authorities are somewhat limited in how much support can be provided to the economy via monetary stimulus. The other available option is traditional fiscal policy. China's National Development and Reform Commission has recently approved a slew of infrastructure projects. Additionally, backtracking of reforms that resulted in a more restrictive environment of local government financing should also be modestly supportive for additional near-term infrastructure spending (see Box 1). This has led to a rise in fiscal spending, which had previously fallen considerably (see Chart 9). Still, the drawback to additional fiscal spending is that while it may be supportive for near-term growth, its impact turns negative once the spending is ended, turning the stimulus into a drag on activity (unless additional spending is announced again).

Mortgage regulation easing

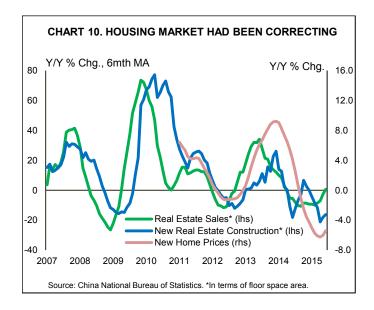
Besides fiscal and monetary measures, authorities in China have also eased mortgage regulations in order to support what had been a flagging housing market (see Chart 10). In March, the PBoC lowered the down payment required on a second home loan for people with an existing mortgage. This follows an easing in home price restrictions in many cities, and several other housing-supportive measures in September of last year. These measures have had some success in propping up the housing market. The prices of new homes across 70 residential markets declined 5.4% year-over-year (Y/Y) in June. However, on a month-over-month basis, average prices rose +0.2%, only a second monthly gain since April 2014, (albeit with 32 out of 70 markets still showing a decline).

In terms of the wider real estate market, including commercial real estate, sales rose 16% Y/Y in floor space terms in June. The pace of newly-started construction continues to remain particularly subdued however, at -15.0% Y/Y.

Nonetheless, the support to the economy from stabilized home prices and rising sales is likely to be limited. Traditionally, there has also been a six-month lag between real estate sales and construction; however, this may not be the case this time around. The housing market is showing signs of oversupply, which is likely to dampen construction growth. Looking at the cumulative difference since 2004 between residential building starts and residential building sales one year later suggests that there is excess supply equivalent to 1.5 years of sales. This is slightly higher than estimates from an IMF Working Paper earlier this year which placed oversupply at 1.2 years of sales⁹.

One policy option which is unlikely to be used: RMB devaluation

One policy option which Chinese authorities could resort to and which has yet to be used is RMB devaluation. With the USD's appreciation over the past two years, and with the RMB pegged within a 2% trading band to the dollar, the trade-weighted RMB rose 12.7% in the year to June. All





things considered, this has reduced China's competitiveness in its exports markets.

Still, far from seeking to devalue the renminbi, China has actually intervened at times to support the RMB. This suggests that China would prefer not to rely on RMB depreciation as a tool to support its economy. One reason may be China's attempt to have the renminbi included in the IMF's basket of reserve currencies, a decision which will be made in November. Moreover, with a lot of economic uncertainty both in China and abroad, authorities appear loathe to change its long-term stance of relative RMB stability versus the USD.

A short detour on the road to slower growth

The implication of all of China's stimulatory measures is that economic activity appears to have risen modestly in recent months, and should continue to improve over the next several months. Real GDP rose to 7.0% on a quarterly basis in the second quarter, industrial production and retail sales have also ticked up, and so have alternative measures of growth, such as electricity consumption and freight traffic. Net trade has improved somewhat and suggests that China will be less of a drag on its trading partners midway through the year. However, there is a very real risk that growth flags again at the end of this year unless additional measures are undertaken. Overall, real GDP growth in China is expected to print at 6.9%, just below its target for the year, with downside risks, and is expected to decelerate further to 6.5% next year.

Beyond this time period, growth is likely to continue to slow alongside structural forces and the debt overhang. The need to deleverage or at least contain credit growth implies a continued economic slowdown, or China risks escalating the financial vulnerabilities within its economy.

Bottom Line

China's authorities attempt to target a 7% economic pace of growth appears to be in conflict with the structural headwinds, market policy reform and the high indebtedness of the country. High financial vulnerability risks limit the available policy options of authorities, and explains why targeted measures have been the preferred stimulus tool. At the very least, more interest rate cuts appear to be on the horizon in order to reduce debt-servicing costs for businesses.

The number of sometimes-conflicting objectives that China is pursuing, including interest rate liberalization, internationalization of the RMB (including its addition to the IMF SDR basket), local government financing reform, and managing the economy's transition to a more sustainable growth rate, suggests a difficult road ahead. Fortunately, China's central government has a low level of government debt and has room to manoeuver. At its extreme, it could resort to larger-scale bailouts or taking on bad loans from banks as it did in 1999 (the local government debt swap scheme described in Box 1 is a mild form of bailout). However, doing so without further reforms runs the risk of moral hazard and continued suboptimal allocation of resources in the economy.

China is operating a reactionary playbook, responding to slower growth as it materializes. For the rest of the world, the implications are that China will continue to periodically drain demand from an already demand-short global economy. Expect to see continued bouts of market volatility as authorities try to navigate between the trade-off of nearterm growth and long-term reform. This is one reason why the price of non-food commodities remains subdued and the feedback loop to EMs suggest lower growth profiles than in the past.

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Textbox 2: The Reliability of China's Growth Figures

The reliability of China's growth figures have been the subject of much doubt for a number of years. Several factors add to the doubt. For instance, it is difficult not to notice just how smooth the year-over-year profile of China's GDP figures are. China also reports its quarterly GDP figures extremely rapidly – two weeks after the quarter ends, compared to roughly 4 weeks for the U.S. and the UK, 6 weeks for Germany, 7 weeks for Japan and two months for Canada.

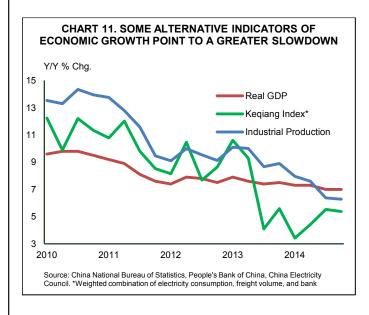
Concerns were previously raised over the reliability of Chinese growth figures as the housing market slowed in 2012. A subsequent paper from the San Francisco Fed came to the conclusion that there was no evidence that growth had slowed more than official figures indicated¹⁰.

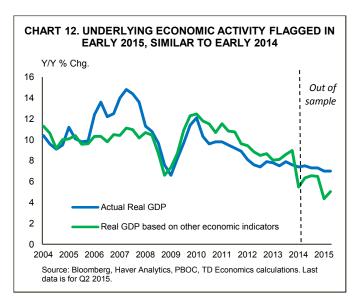
Recently, China's growth figures have come under question again, spurring examination of other alternative indicators to gauge growth. If one looks at the Keqianq Index – coined after Chinese vice-premier Li Keqianq following remarks with the U.S. Ambassador in 2007 – which includes electricity consumption, freight volumes and bank loans, it suggests that activity may have begun to undershoot official figures last year (see chart).

The Keqiang index has some drawbacks however. It is overly exposed to heavy industry, rather than the services sector. As China's economy is slowly shifting to a services-based one, it may not accurately capture growth seen in the latter.

In order to calculate a more widespread measure, we take five more representative alternative indicators of Chinese economic activity, including construction in floor space terms, air passenger traffic, total freight transportation, electricity generation/consumption, and motor vehicle sales. We extract the first principal component and forecast real GDP using this principle component as well as a lag of GDP, from the end of 2013, following a similar methodology to that of the Fed paper (see chart).

According to this analysis, real GDP appears to have declined more than official numbers suggest in the first quarter of 2015, followed by only a modest rebound in the second. This is similar to the weakness observed in the first quarter of 2014, with the economy then somewhat rebounding as a result of increased government spending, in order for it to hit its growth target for the year.





End Notes

- 1) Excluding 2009.
- 2) Note that the line between local government and non-financial corporate debt is blurrynot well defined, given the reliance of off-balance sheet financing by local governments. Furthermore, much of the debt in the corporate sector is owed by state-owned corporations. As this debt is implicitly-backed by the central government, the line between private and public debt is similarly unclear.
- BIS Quarterly Review, September 2012. "Do debt service costs affect macroeconomic and financial stability?" http://www.bis.org/publ/qtrpdf/r_ qt1209e.pdf
- 4) The historical record shows that credit-to-GDP gaps (the difference between the credit-to-GDP ratio and its long-term trend) above 10 percentage points have usually been followed by serious banking strains within three years. BIS Annual Report 2014. http://www.bis.org/publ/arpdf/ar2014_ec.pdf
- 5) BIS Quarterly Review, September 2012. "Do debt service costs affect macroeconomic and financial stability?" http://www.bis.org/publ/qtrpdf/r_ qt1209e.pdf
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- 7) Ibid.
- 8) State Council. People's Republic of China. http://english.gov.cn/policies/latest_releases/2015/05/15/content_281475108010150.htm
- IMF Working Paper. "Understanding Residential Real Estate in China. WP/15/84, April 2015. http://www.imf.org/external/pubs/ft/wp/2015/wp1584. pdf
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