Box I.1: China's economy in transition: dealing with the twin challenge of deleveraging and rebalancing growth

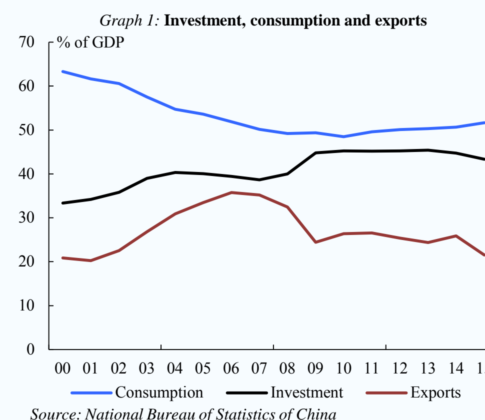
Real GDP growth in China has fallen steadily since 2010, as China's investment-driven growth model has run into diminishing returns. China has also seen a rapid accumulation of both private and public debt to finance investment, particularly after China deployed major fiscal (and monetary) stimulus to offset the effects of the global financial crisis. In an effort to prop up flagging growth rates and to meet short-term growth targets, investment by state-led firms continues to support demand, aided by continued monetary and fiscal support. However, this comes at the expense of further sharp increases in debt. Increased porosity of the capital account and large capital outflows since late 2014 have sharpened the trade-offs between domestic monetary policy and management of exchange rates and added to the challenges of finding the appropriate policy mix.

China's dependence on investment-led growth

Since 2000, China's growth has been driven by a combination of exceptionally high capital investment and a rapid expansion of foreign trade. The state-dominated banking system and a largely closed capital account allowed for a policy of financial repression and low lending rates, while the Renminbi's (RMB) peg to the US dollar until 2005 led to an undervaluation of the RMB in real terms. Both domestic and FDI-funded companies benefitted from a range of implicit subsidies. In parallel, privatization of urban housing in the late 1990s created a market for residential property that stimulated a boom in real estate development. As a result, investment's share of GDP in China rose sharply, with a corresponding fall in the share of household income and consumption. Household incomes fell steadily as a percentage of GDP from 67% in 2000 before stabilizing at around 60% of GDP in 2011.

In the wake of the global financial crisis, the Chinese government undertook a large fiscal stimulus to offset a sharp slowdown in foreign trade and a rapidly cooling real estate sector. This was channeled via local governments and state-owned enterprises and a large share was poured into infrastructure development, financed by a rise in local government debt and debt owed by state-owned firms. This helped stabilise short-term growth but reinforced China's over-reliance on investment. China's incremental capital-output ratio has climbed steeply over the past five years. Investment returns have fallen due to fading gains from technological catching-up and the structural biases that have led to excess capital accumulation in heavy industry, infrastructure and real estate.

Graph 1: **Investment, consumption and exports**



Source: National Bureau of Statistics of China

The Chinese authorities have acknowledged the need for fundamental reforms and adopted an ambitious reform agenda at the Chinese Communist Party (CCP) Third Party Plenum in November 2013. Subsequent reforms include interest rate liberalisation, tax and social security reforms, further steps to loosen capital controls and a shift to a more market-led exchange rate in August 2015. China's external imbalances have in fact narrowed significantly, with the current account surplus falling sharply from a peak of 10% of GDP in 2007 to just 3% in 2015, due to a stronger RMB, high commodity prices, and the high import intensity of stimulus-led investment.

The build-up in debt is continuing unabated

Progress on domestic imbalances has been much less clear, as China's credit and debt growth has continued at a high rate. Credit growth remains around twice the pace of nominal GDP growth, and the corporate debt-to-GDP ratio rose to around 170% at the end of 2015, an increase of 70 pps. since 2008 [1]. Much of the increase in leverage is concentrated in the state sector. A significant part of the debt expansion has been linked to the growth of lending outside the formal banking system, or

(1) See BIS database on non-financial credit at: http://www.bis.org/statistics/totcredit.htm

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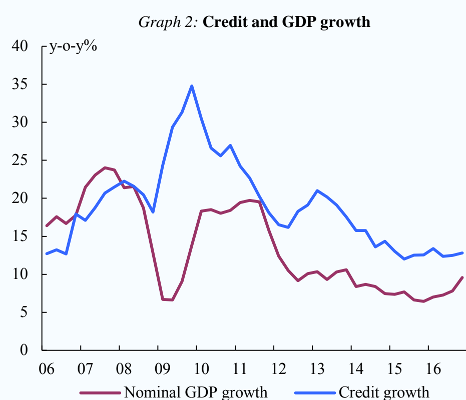
Box (continued)

'shadow banking' [(2)]. Banks themselves are widely considered to be rolling over or evergreening existing loans that are under water, either to avoid declaring such loans as non-performing, or because state firms carry a strong implicit guarantee and a future bail-out is expected. As a consequence, while official non-performing loan ratios are around 2%, other estimates typically put them much higher, at between 10 and 20% of total loans. [(3)] BIS estimates [(4)] show that the credit to GDP trend gap, a good indicator of potential financial stress, now stands at around 30% of GDP.

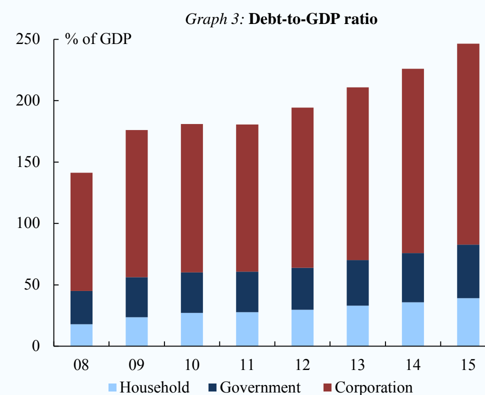
Graph 2: **Credit and GDP growth**



Source: National Bureau of Statistics, People's Bank of China

Although central government debt remains modest, below 20% of GDP, this does not incorporate local authority debt which also expanded rapidly after 2008, nor the debts linked to the Ministry of railways and state asset management companies. The central government is also implicitly liable for the debts of state-owned enterprises. Estimates of overall public debt therefore vary according to the precise boundaries drawn around the government sector. The BIS estimates government debt to have reached 45% of GDP by mid-2016, having increased by 20 pps. from 2008, while the IMF estimates government debt to be between 40% and 60% of GDP, depending on the precise definition used, with a similar sharp increase after 2008. The central government deficit is around 2% of GDP, but the IMF argues that the underlying fiscal deficit is close to 8-10% of GDP when accounting for off-balance-sheet borrowing and reliance on asset sales by local governments to fill a structural spending gap. [(5)]

Graph 3: **Debt-to-GDP ratio**



Source: BIS

Linked to the continued growth in debt, is a recent shift in the composition of investment spending. While private investment is now around 60% of total investment, it has slowed sharply over the past two years. This has been largely offset by a rapid expansion in state-led investment. The revived countercyclical role of state firms has gone in parallel with a slowdown in the pace of state-owned enterprises' governance reforms. Importantly, the rate of return on investment is typically only half that of the private sector [(6)], which suggests that the share of relatively unproductive investment is growing. This in turn exacerbates the risk that this additional capacity will generate insufficient returns to service the additional debt being accumulated.

Outward capital flows are complicating the policy environment

Growing concerns over rising debt levels and inefficient investment patterns are linked to, and complicated by, external developments. China has been seeing sustained capital outflows since late 2014. These flows have been partly driven by a shift to net outflows of FDI but there have also been rising non-FDI flows. These may reflect a

(2) There is a lively debate on the possible risks that shadow banking poses to China. For a balanced assessment, see Elliot, D., A. Kroeber and Y. Qiao (2015). *'Shadow Banking in China: a primer'*. Brookings.

(3) International Monetary Fund (2016). *'Global Financial Stability Report'*. April Annex 1.1. Estimates of NPLs by private analysts are also higher than official figures – e.g. Deutsche Bank (2016). 'Chinese Banks – the degree of evergreening'. and McKinsey Global Institute (2016). *'China's Choice'*.

(4) Ehlers, T and C. Koch (2016). 'Highlights of global financial flows'. *Bank for International Settlements Quarterly Review*, September.

(5) For BIS data see link in footnote 3. For IMF data see IMF Article IV Staff Report for China for 2016 (table 5). For a discussion of deficit measures see Appendix III of Article IV Staff Report for 2014

(6) Official data on returns to state industrial enterprises is available in NBS National Statistical Yearbooks at http://www.stats.gov.cn

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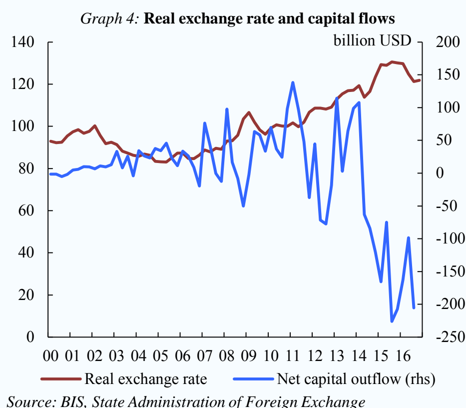
growing wish by Chinese residents to diversify assets and reduce exposure to the Chinese financial system. Flows have also been driven by shifting expectations over the future direction of the RMB. The sharp rise in the US dollar since mid-2014 pulled the RMB's real exchange rate up, put severe pressure on Chinese exports, and increased speculative outflows.

China subsequently shifted to a more 'market-driven' exchange rate regime in August 2015 and the RMB fell by around 7% in 2016 in real effective exchange rate terms and by a similar amount against the US dollar. Capital outflows have, however persisted and the fall in the RMB has been moderated by substantial intervention by the Chinese central bank to support the currency and prevent a downward overshooting. China's foreign exchange reserves have fallen by USD 800 billion in total over the last two years. Total reserves now stand at USD 3 trillion.

Graph 4: **Real exchange rate and capital flows**



Source: BIS, State Administration of Foreign Exchange

China has, in the past, emphasised the aim of moving towards a more open capital account, but it is now unclear how quickly this can safely be accomplished. In the current global context, capital outflows could persist for some time, either pulled by rising interest rate differentials as US rates normalise, or pushed by growing concerns about the outlook and financial risks in China itself. The exposure of the domestic financial system to high corporate leverage and growing non-performing loans may itself reduce the willingness to raise domestic interest rates, which could exacerbate pressure on indebted firms. The alternative of scaling back exchange market intervention and allowing a further downward shift in the RMB risks exacerbating capital flight. China has therefore started to review past changes to capital controls and has tightened controls on illicit flows. Continued high levels of capital outflows could precipitate a further policy shift in this direction.

China's current policy mix is buying time, but policy buffers are narrowing

China's current policy mix appears to be one of 'buying time' for necessary structural reforms by sustaining short-term growth through demand management measures and attemtping to stabilise expectations in financial and foreign exchange markets. To tackle the short-term problems of debt roll-over, China has undertaken debt swaps to underwrite the debts of local authorities and is exploring similar ideas for indebted state-owned enterprises.

This gradualist approach may prove viable if the pace of structural reforms is sufficiently fast to keep underlying productivity growth at a high level. A successful transition requires a structural shift to lower but higher-quality investment, with more bottom-up, innovation-led growth. This in turn means reforms to strengthen market institutions, open protected markets to greater competition, and to dissolve implicit guarantees in the financial sector that distort lending decisions [7]. In particular, China faces a fundamental question of how to reform the underperforming parts of the state-owned sector where there are potentially painful short-term adjustment costs. In the absence of necessary reforms, China could face a prolonged period of slowing productivity growth in which productivity falls well below the 6% that many estimate as China's potential medium-term growth rate.

At the same time, scaling back investment growth and restructuring state enterprises could slow GDP growth in the short run and threaten official growth targets unless slower investment demand is offset by faster consumption growth. A sustained rotation of demand would require consumption to grow somewhat faster than GDP for a prolonged period. Macroeconomic data on income shares is only available to 2013, but shows a stable share of household income in GDP. Robust consumption growth in recent years has therefore been boosted by a step-down in the saving ratio, which may not be repeated. In that case, future high consumption growth would require policies to reverse the substantial fall in household income's share of GDP seen from 2000-2010. An alternative would be to engage in large scale asset transfers from the public to private sector to boost consumption levels

[7] See for example The World Bank and the Development Research Center of the State Council of the P. R. China (2013). '*China 2030*'.

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by increasing household wealth, but this would likely run into political constraints [8].

Without an effective combination of structural reforms to revive productivity growth and greater reliance on consumption demand, China faces either a step down to somewhat lower real (and nominal) GDP growth in the medium term, or a continued expansion of debt. In either scenario, there are important risks. Slower short-term growth would put the credibility of the current political leadership under pressure, while raising pressures on highly indebted corporates. On the other hand, continued reliance on debt to sustain growth increases the risk of a financial crisis, as debt growth increasingly outstrips the capacity for repayment.

In the event of a disorderly adjustment, the state-dominated financial system would still allow for coordinated direct intervention. However, the greater the scale of hidden costs to be partitioned, the greater the risk that an eventual debt clean-up would have a severe impact on the public balance sheet, as well as reinforcing implicit guarantees embedded in the financial system. While China appears to have the fiscal capacity to deal with a financial crisis, the precise state of public finances is hard to assess due to the lack of comprehensive fiscal data, particularly for local governments. China's margin for manoeuvre may therefore be narrower than commonly assumed.

In short, China faces a substantial challenge in finding an appropriate policy mix that balances the desire for short term stability with the pressing need to unwind structural and financial imbalances. Pressing forward with sufficiently aggressive policies to make this transition may prove to be a difficult process, but there appear to be limited alternatives on offer if China is to maintain high growth rates into the medium and longer term.

(8) For a detailed discussion of the problems China faces in rebalancing demand and alternative policy options see Michael Pettis (2016). '*Avoiding the fall: China's Economic Restructuring*'. Carnegie Endowment for International Peace.