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Rethinking Monetary and Financial Policies in China

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Abstract

There is partial consensus that the size of money—or liquidity—in China should be large reflecting the high savings rate. Even so, with a sense of a liquidity overhang from the recent monetary expansion, many caution against expanding liquidity further lest it translate into a property bubble. Instead, they argue for ways to speed up the circulation of liquidity—in other words to raise velocity—to stimulate the real economy. The recent growth of the non-banking system adds to these concerns, and has been criticized as falling short of promoting effective financial intermediation. Some even claim that the monetary authorities may be losing control over the growth of key monetary aggregates. Against this background, this paper reviews recent monetary developments in China and considers how monetary aggregates and the financial system may have to change to support the rebalancing of the economy.

JEL Classification: E42, E51, E52, E58

Keywords: monetary system in China; money supply; monetary policy

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1. Introduction

Since the global crisis, China has relied on significant monetary stimulus to support domestic activity and compensate for the drop in global demand that has hit its manufacturing and export sectors. This has taken the form of both bank and non-bank lending. While successful at buttressing growth, this response has given rise to several questions:

- First, is the central bank losing monetary control as intermediation moves outside of the banking system, over which it has historically exercised powerful sway through a mix of price and quantitative restrictions?
- Second, is the economy suffering from a liquidity overhang, such that incremental credit injections lead less to supporting real activity than to pressures on asset prices and hoarding?
- Third, are deposit rates necessarily too low, in light of financial stability considerations?
- And fourth, looking ahead what kind of financial sector does China need, including in terms of the relative size of the bank and non-bank sectors and the optimal amount of liquidity to support growth?

This paper addresses these four questions, and argues that:

- The monetary authorities still retain relatively good control over the growth of monetary aggregates. While non-banks have grown rapidly, their activities are largely influenced by banks through various channels.
- Recent data point to a significantly diminished impact of liquidity on real activity. This may be an indication that credit is losing traction, and that increasingly more liquidity may be required to generate the same amount of activity. If this is the case, then a cleanup of bank balance sheets, as seen in the late 1990s, may need to precede financial sector reform.
- Allowing for the possibility of large NPLs that may be currently hidden away on the balance sheet of financial institutions, China's deposit rate may not necessarily be too low. If this is indeed the case, then as above, the implication is that a clean-up of these bad assets may need to be the first step in China's financial reform. Otherwise, households will need to bear the burden and the economy will become increasingly addicted and unresponsive to monetary stimulus.
- Going forward, the paper argues that a reform of the financial sector is urgent to ensure that institutions start building up capacity to assess risks properly. This will provide the necessary environment for resources to start being allocated optimally through market signals. Such a reform will require a fundamental rethink of the current governance structure, under which the financial sector is subservient to the growth model. The timing is propitious as the growth

model itself is being transformed through the structural reforms announced by the new leadership. With these conditions in place, the relative size of banks and non-bank system would not be important in itself and should be left for the market to determine over time. In terms of the overall size of the financial system, it should not be China's high savings rate that is the determinant, but the productive capacity of the economy. This, in turn, is a function of investment and productivity.

2. Literature Survey

The existing literature does not directly address the questions posed in this paper. Instead, a large part of the research focuses on the effectiveness of China's monetary policy and its policy framework. More specifically, studies range from describing monetary policy responses to economic fluctuations, transmission of price signals, and the impact of the policy on asset prices. On balance, these studies conclude that the monetary policy framework is functional despite rigidities in key interest rates reflecting the liberalization efforts in the past few decades, and addresses inflation and economic fluctuations relatively well.

On China's monetary policy responses to real fluctuations, studies indicate that the policy framework has been broadly appropriate. Several papers show, using a McCallum-type rule, that inflation and GDP growth are important inputs to policy responses (Burdekin and Siklos (2008), Fan *et al.* (2011), He *et al.* (2011), Jawadi *et al.* (2014)). Shu and Ng (2010) confirm this result using a discrete choice model based on a constructed People's Bank of China (PBC) policy stance index. Yet, some of the same authors and others (He and Pauwels (2008), Fan *et al.* (2011), Zheng *et al.* (2012), Jawadi *et al.* (2014)), conclude that only inflation matters when measured in a price-signal dependent Taylor-type rule. Relating to the exchange rate, Mehrotra and Sánchez-Fung (2010) argue that exchange rate shocks do not have a significant effect on monetary policy, although not many will disagree, like Li and Tsai (2013), that a relaxation of exchange rate regime increases the independence of market-based monetary policy in China.

Relating to the transmission mechanism and the effect of monetary policy on the real economy and asset prices, Dickinson and Liu (2007) show that the influence of interest rates on output increased over 1984 to 1997. This in part can be attributed to private enterprises becoming increasingly sensitive to monetary policy changes. Sun *et al.* (2010) confirm this outcome using bank balance sheets and a VAR/VECM model. However, He *et al.* (2013) argue that the non-market-based quantity limits on bank loans are more effective than the market-based instruments using a factor-augmented VAR method. In terms of asset prices, monetary policy is found to have a significant effect on housing prices in several studies (Zhang *et al.* (2011), Yan *et al.* (2011), Koivo (2012), Xu and Chen (2012)) while the estimated impact on stock prices is somewhat more mixed (Yao *et al.* (2011), Koivo (2012), Tang *et al.* (2013)).

Relating to the structure of the monetary policy framework, Cassola and Porter (2011) point out that changes in the PBC rates influence the structure of government, financial, and corporate bond yield curves, which in turn are associated with changes in growth and inflation, and on that basis argue

that necessary elements are in place to move towards indirect monetary policy. Garcia-Herrero and Girardin (2013) provide evidence on the ability of PBC communication to steer the money market in its intended direction. However, Chen *et al.* (2011) note that PBC's intervention on deposit and lending rate prevents the interbank rate from effectively signaling that monetary policy stance. More specifically, He and Wang (2012) suggest liberalizing the deposit rate first as the current ceiling has brought down the overall interest rate structure below equilibrium levels.

In terms of the growing non-bank sector, there are a few recent studies discussing its implications for monetary policy and providing some policy recommendations. Li and Ge (2011) argue that monetary control may become less effective because of the credit-creation function of "shadow" banking, and suggesting that monetary policy should pay more attention to asset prices. In a similar vein, Luo and Ke (2012) argue that as the shadow banking sector grows, the PBC's broader measure of liquidity called Total Social Financing (TSF)¹ should become the primary target of monetary policy instead of M2.

The existing Chinese literature on liquidity overhang focuses on China's high M2/GDP ratio and provides various explanations for this. Li (2007) argues that the exchange function of money is gradually replacing its asset function and this leads to an ever growing M2/GDP. Zhang and Wu (2008) attribute it to the high ratio of deposit to credit and the high ratio of bad loan, while Huang and Shijun (2011) argue that M2/GDP is at least 30 percent higher because of financial repression.

Against these findings, this paper approaches the questions on observed facts, supplementing the analytics with charts. It reviews the main elements of the monetary and financial system in China, identifies the inter-connections between the bank and non-bank sectors, presents theoretical arguments for how to think about the level of liquidity and interest rates in China from macroeconomic and financial stability perspectives, and takes a first pass at outlining the broad contours of the new financial system that China will need to sustain and rebalance its growth in the coming years. The rest of the paper is organized as follows. Section 3 examines whether the PBC is losing monetary control as intermediation moves from banks to non-banks. Section 4 assesses the extent to which China may be suffering from liquidity overhang that is fueling asset bubbles and reducing the effect of monetary stimulus on the economy. Section 5 reconsiders whether China's deposit rate is too low from a financial stability perspective and Section 6 ponders the question of the future of China's financial system. Section 7 concludes.

3. Is the PBC Losing Monetary Control?

3.1. A Stylized Model of Monetary Transmission in China

The PBC's monetary policy is anchored on growth targets for key monetary aggregates, usually M2 and bank credit (Figure 1). The transmission works through the signaling effect of this

¹ Recently, the definition has been changed to Aggregate Financing.

announcement as well as through a combination of interest rates and quantity channels. The main policy instrument is the deposit rate (ceiling), supplemented by window guidance as necessary. The deposit rate steers the whole interest rate structure, setting the tone for monetary conditions in China (Figure 2). Its level relative to foreign interest rates is also important because that influences the overall balance of payments condition including through the cost of capital across countries, although much less than the case if capital account was fully convertible. The deposit rate rose in tandem with foreign interest rates during 2007-08, and was then reduced during 2009, influencing credit growth accordingly. For example, the easing in 2009 and 2012 was followed by credit booms with 6 month lags.

Figure 1. Monetary Aggregates

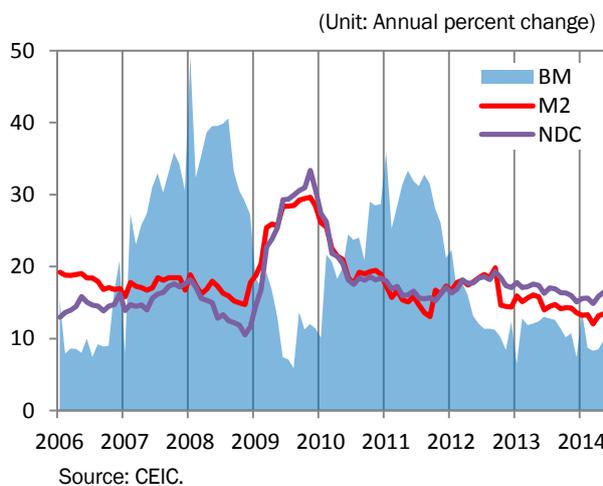
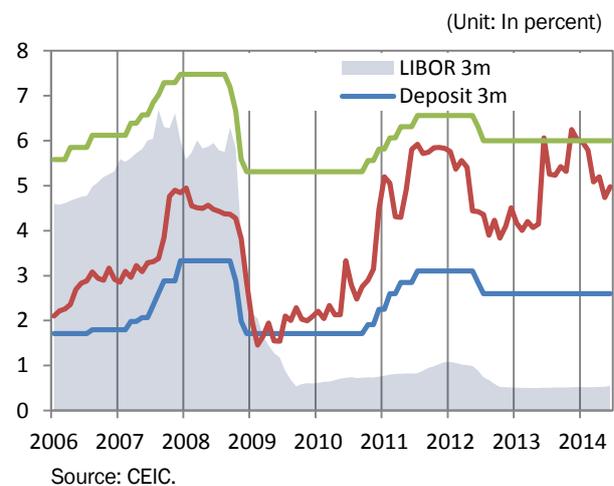


Figure 2. Interest Rates



Another key interest rate is the interbank rate, which serves as the wholesale funding rate for non-bank credit instruments that largely cater to SMEs. By controlling liquidity conditions in the interbank market, the PBC influences the interbank market rates (SHIBOR, CB bill and the repo rates), thereby helping shift funds in and out of bank balance sheets (Figure 3). Until mid 2012, due to large balance of payments inflows, managing interbank liquidity largely centered on how much of foreign exchange intervention to sterilize. Given the nature of the inflows, more permanent instruments such as the RRR or longer term CB bills were used to mop up liquidity. However, more recently, with more balanced external flows, short term instruments are being used to manage liquidity, i.e., short-term reverse repos. The divergence of net domestic credit of banks (NDC) from M2 is in most cases due to transactions with the central bank.

The money multiplier has remained broadly within the 3.5-4 range since 2007, rising briefly above 4.5 in 2009 (Figure 4). However, the role of base money in influencing M2 seems to be small in the short term. Given the way monetary policy framework is set up, base money appears to be endogenously determined by the aforementioned activities of the PBC. During a policy induced rapid expansion of money, base money lags behind M2 as initially banks convert their reserve position at the PBC to credit, immediately translating into deposits in the first instance. Thus, changes in base money tend to decline and the money multiplier increase during the expansionary phase.

Figure 3. Net Injection in Interbank Market

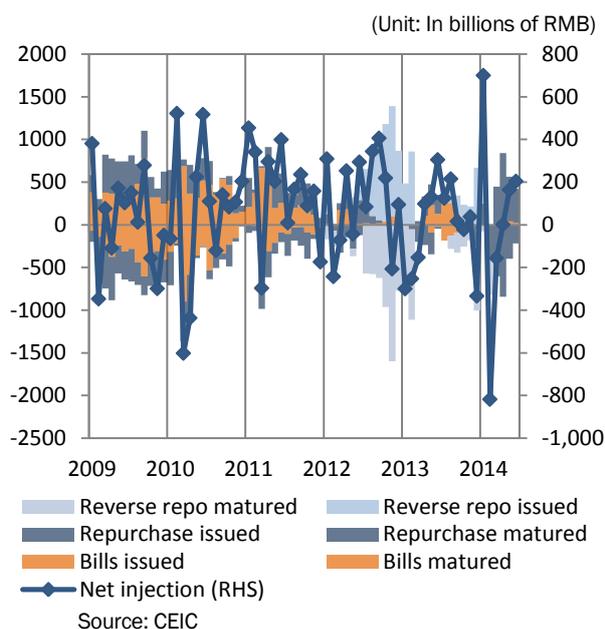
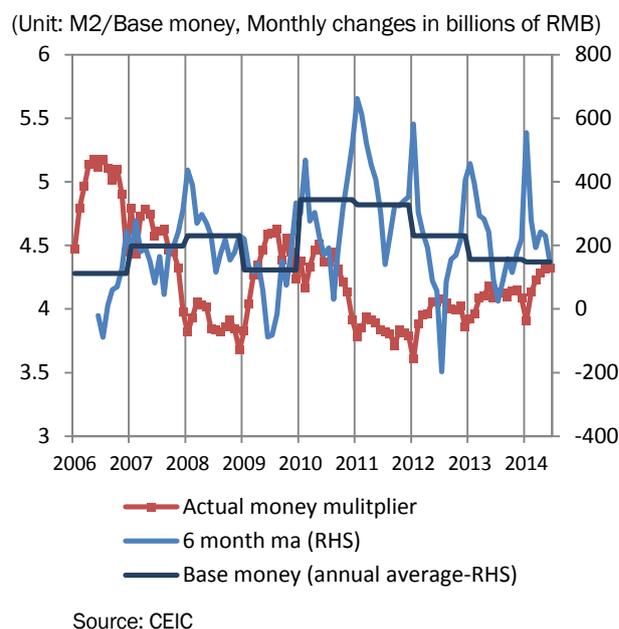


Figure 4. Money Multiplier



3.2. Are “Non-bank” Balance Sheets Independent of Banks?

Despite the growth of non-bank financing in recent years, China’s credit supply is still largely dominated by banks. Bank deposits provide the bulk of financing resources, which are then passed onto off-balance activities or non-banks through lending in the interbank market. On the liability side, banks compete with other savings instruments such as wealth management products (WMPs). If the difference between net domestic credit and deposits is positive, it implies that other funding sources such as drawdown of reserves at the PBC or bond financing are being used to finance credit (Figure 5). If total social financing minus deposits is positive, it means other sources of financing such as bond or WMPs are used for TSF financing beyond the bank channel. This differential rose sharply in the third quarter of 2011 and in the second half of 2012. In both cases, TSF well exceeded net domestic credit, implying that financing was provided outside the banking system, most likely through WMPs.

The relative levels of the interbank rate, returns on wealth management products, and the deposit rate influence the allocation of funds between bank deposits, off-balance non-principal guaranteed saving certificates, and various forms of non-bank deposit savings (Figure 6). The return on WMPs used to be defined broadly as the deposit rate (guaranteed return) plus some mark up for risk premia until late 2010, when monetary tightening started to push up interbank market rates (shown in Figure 6 by the 3 month repo rate). When the monetary policy stance reversed in 2012 in response to slowing demand, returns on WMPs also fell in line with the whole interest rate structure. However, as demand started to pick up again in the second half of 2012 and the monetary policy stance remained unchanged, returns on WMPs picked up in line with the interbank rate, thus widening the gap with the deposit rate. This increased differential appears to have pulled funding

away from bank deposits to WMPs and contributed to the widening gap between TSF and net domestic credit of banks.

Figure 5. TSF and M2

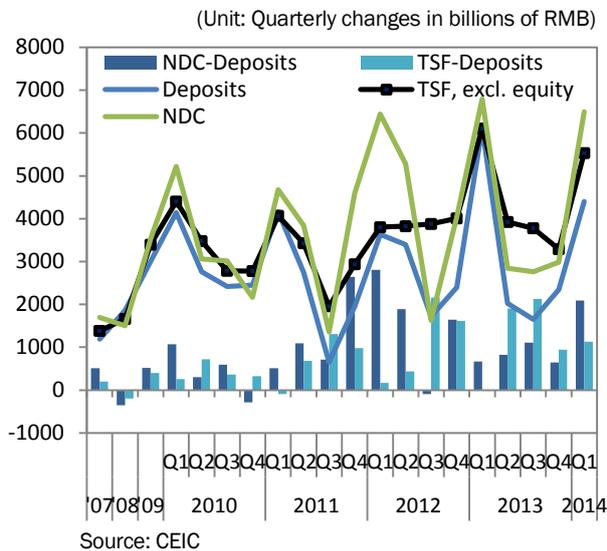


Figure 6. Funding Market Interest Rates

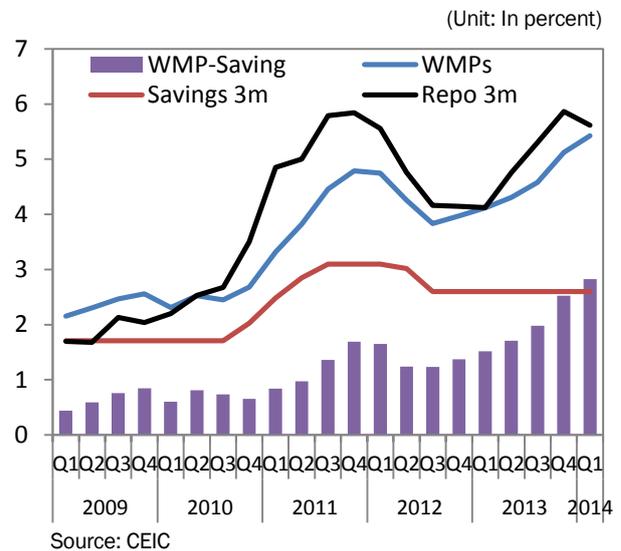
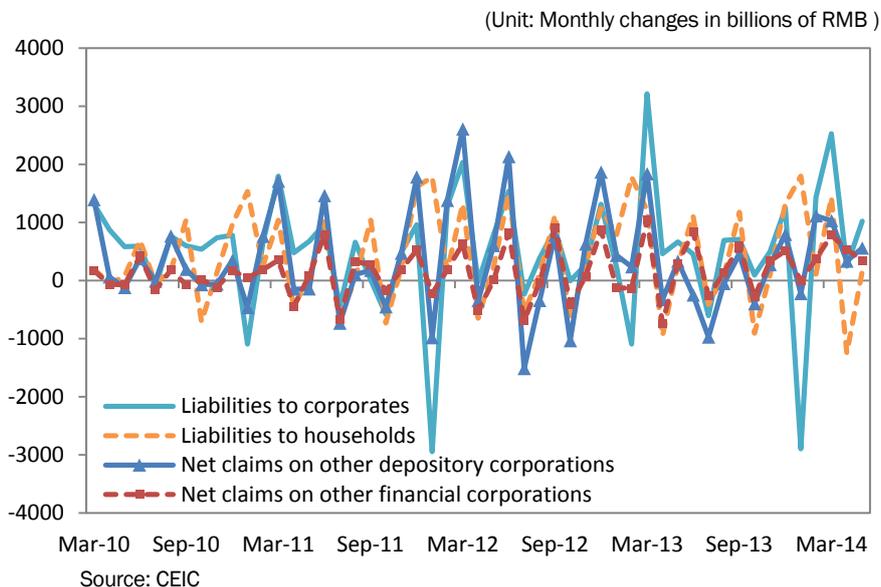


Figure 7. Bank Balance Sheet



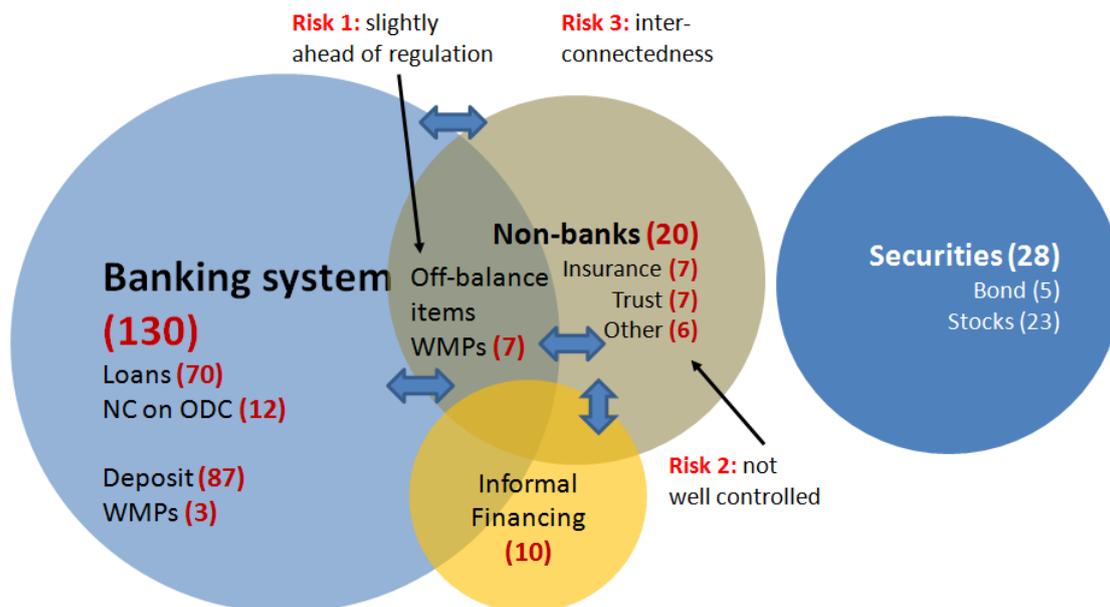
Quarterly data hide strong monthly flows of deposits and net lending to the interbank market as well as movements between on and off-balance sheets (Figure 7). The amount of the movement is larger by households than the corporate sector, which is understandable as the former hold a greater share of WMPs that are usually of short term. Shifting of funds between on- and off-balance sheets takes

place on both the asset and the liability side, the former through lending to other depository corporations and the latter through deposits.

3.3. What is “Shadow Banking”?

Shadow banking is used to mean at least three different groups of the financial system. The first group is captured under non-banks and includes insurance, trust, and other small financial institutions such as leasing, registered pawn shops, guarantee, and microfinance companies. At the end of 2012, trust companies’ assets surpassed those of the insurance sector. The assets of all other small financial institutions are still estimated to be smaller than the insurance companies. The second group consists of informal financing and all non-registered financial activities including intercompany lending, informal lending institutions, and OTC transactions. It also includes all off-balance activities of banks and comprises banks acceptance bills, entrusted products, and securitization of loans linked to wealth management products. The TSF definition also includes securities (bonds and equities) which thus often get lumped as the third group of “shadow banking”.

Figure 8. China’s Financial Market Assets

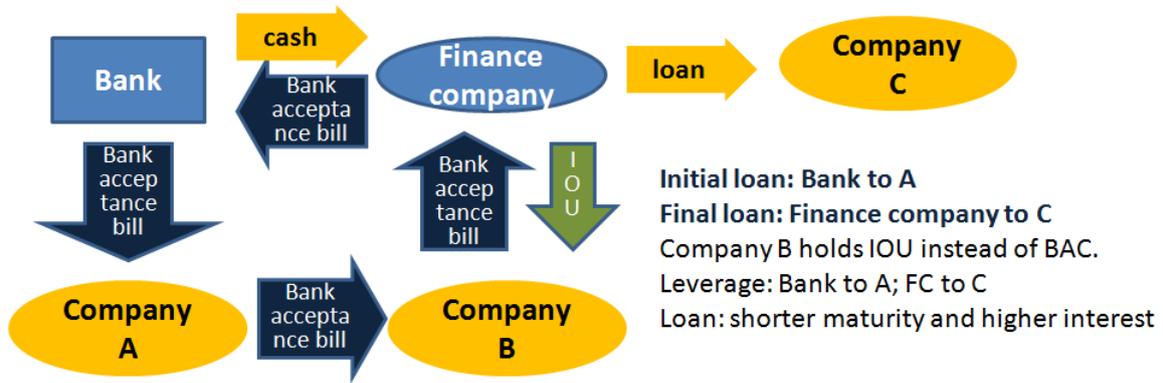


Note: Estimates as of end 2012. (.) are assets rounded to RMB trillion; 2012 GDP was RMB 52 trillion.

The risks in the “shadow banking” space are mainly associated with the off-balance activities of banks whereby banks often lack transparency on risks associated with the products they sell. Another category of risks involve the “other” financial institutions that are not well regulated. Finally, off-balance products are often sold in the informal and non-bank markets and it is not clear to what extent these products could pose risks in terms of spillovers from banks to non-banks and

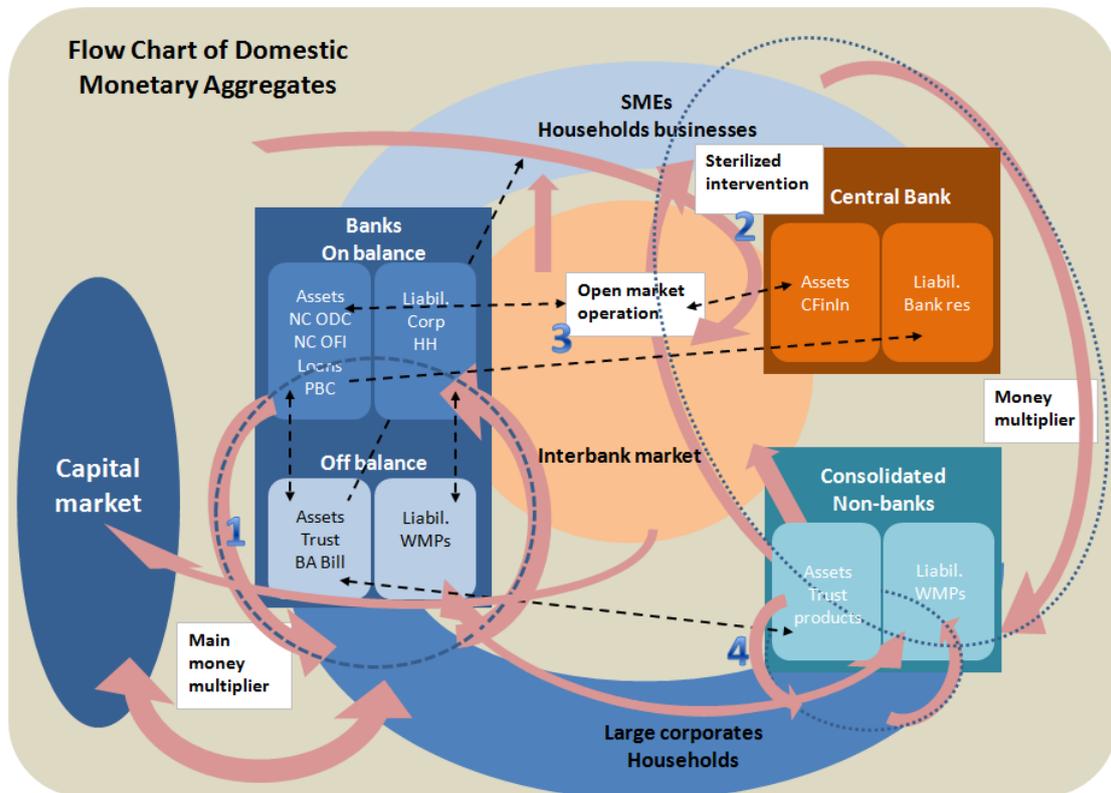
vice versa. One possible securitization process is illustrated below. For now, at least, the total amount does not appear large enough to pose a systemic risk.

Figure 9. An Illustration of the Securitization



3.4. Bottom line: Monetary Control

Figure 10. Summary



Monetary aggregate control:

1. Setting deposit rate as policy rate; window guidance (credit growth target consistent with M2 growth); off-balance items are influenced partly by prudential rules.
2. Net injection through adjusting the amount of sterilized intervention.
3. Influence liquidity in interbank through OMO that control flows into SMEs.
4. Supervision of trust products control influence non-bank asset size.

Inter financial institutions flows:

- Bank and non-bank liabilities depending on risk adjusted relative rates offered;
- On and off-balance sheet liabilities of banks depending on banks' needs to meet prudential rules;
- On and off-balance sheet assets of banks depending on credit limits banks' need to meet prudential rules.

Money is created through the usual money multiplier and central bank injection that largely comprises of the unsterilized part of foreign exchange intervention. The money multiplier operates through bank on-balance sheets and to a lesser extent through their off-balance sheet and non-banks. The central bank can control the growth of monetary aggregates through various channels. While significant progress has been made, window guidance and differentiated degree of regulatory enforcement continue to play an important role. Figure 10 summarizes the above discussions.

4. Is China Suffering from Liquidity Overhang?

4.1. Optimal Liquidity: Theory

The issuer of a financial asset in an economy will typically use the proceeds to invest in the capital stock to generate goods and services for future consumption. Thus, the optimal level of liquidity in an economy is defined as the amount that will broadly match the value of the physical assets, which in turn is broadly equal to the net present value of the future stream of goods and services.

If the amount of liquidity—which is a liability of the economy to itself—exceeds the optimal level, the price of the physical stock—which is an asset of the economy—will tend to increase to ensure that assets and liabilities match. This is an unstable situation since claims on future goods and services exceed the actual capacity of the economy to meet those claims. Thus, in this case, either the prices of goods and services have to increase or capacity has to increase from efficiency gains or innovation. This situation could be termed as a monetary overhang.

A country with a high savings rate such as China, however, does not necessarily need to have large liquidity compared to a country with a lower savings rate. What determines the size of liquidity, on the basis of the above definition, is the amount of investment. In other words, in an extreme case where a country does not invest at all but has a very high savings rate, its savings will be invested abroad, i.e., $S = X - M$ since $I = 0$. Thus, despite the high savings, this country has de facto exported liquidity to another country, and thus also productive capacity.

Suppose a country runs a zero current account balance, or savings is equal to investment. In this case, the amount of optimal liquidity would be larger if investment is higher as it will contribute to productive capacity of that country. In the extreme case where a country does not invest at all and

lives off some windfall gains, i.e., $Y = C$, then that country's optimal liquidity would be equivalent to the net present value of the windfall gains.

In sum, $P_A K = L \approx P_G C$ where P_A is the price of physical assets, K is the capital stock, L is liquidity, P_G is the price of goods and services (i.e., CPI or GDP deflator), and C is the productive capacity. Thus, to preserve optimal level of liquidity, an increase in L should be matched by an increase in K and C . Otherwise, if L is not properly used, i.e., does not lead to an increase in K , it will lead to an increase in P_A , creating a transitional disequilibrium. The equilibrium will be restored either through an eventual increase in P_G , a drop in L , or an increase in C . In real terms, the equation is:

$$\frac{P_A}{P_G} K = \frac{L}{P_G} \approx C \quad (1)$$

An increasingly wasteful pattern of investment fueled by liquidity (L) will lead to monetary overhang and an increase in asset prices without increasing productive capacity. Eventually, such a situation could lead to a drop in L , which in most cases will not be an orderly unwinding of financial assets, but rather NPLs as a counterparty to the wasteful investment.

The relationship shown in (1) does not hold if an economy does not have a mature financial system and monetary deepening is still taking place. Monetary deepening includes in this case capitalization of the equity market, which is also a form of financial claim in the form of ownership of the capital stock. In this case, $P_A K > L$ and $C P_G > L$, and an increase in L would signify a monetization process and not necessarily lead to an increase in P_A .

A narrower definition of liquidity, closer to the traditional money concept, is also relevant to the extent that it could influence P_G , i.e., $MV = P_G Y$

$$\frac{M}{P_G} V = Y$$

where M is a subset of L , or $\delta C = Y$ where $\delta < 1$. Then:

$$\frac{M}{P_G} V = \delta C \approx \frac{\delta L}{P_G}$$

This implies that $MV \approx \delta L$; and as δ increases, M is becoming larger as a share of L . In other words, as the current period income increases as a share of the economy's productive capacity (i.e., the net present value of the future stream of income), the narrow definition of money that influences CPI becomes larger as a share of total liquidity. If velocity increases, however, the share of M to L does not have to increase. Indeed, previous work has shown that the most relevant monetary aggregate influencing consumer inflation in China is M1.

On the basis of the framework described above, until the late 2000s, liquidity in China was below its capacity to generate future goods and services.² However, in 2007 and since 2009, liquidity has

² See Han and Lee (2012) for definitions. Here, GDP is scaled for the whole period shown in the chart by the difference between estimated capacity in Han and Lee and actual GDP for 2006-2009.

exceeded this capacity (The gap between the two is shown as bars in Figure 11). This gap seemed to play a role in asset price hikes.

Obviously, depending on how liquidity is measured, the magnitude of this gap will change. For example, adjusting liquidity by non-on-balance sheet items in TSF data will show that the gap closes only by 2010 instead of 2006. Furthermore, the gap is not the only factor contributing to asset price increases. Equity prices rose in 2000, 2007, and in 2010 with the sharpest spike observed in 2007. Although the gap was large in 2007, bank credit to individuals appears to have played a major role (Figure 12). In the same year, the number of individual accounts opened in both Shanghai and Shenzhen market rose almost by 50 percent as bank credit to individuals rose by about 115 percent.

Figure 11. Liquidity and Capacity Gap and Asset Prices

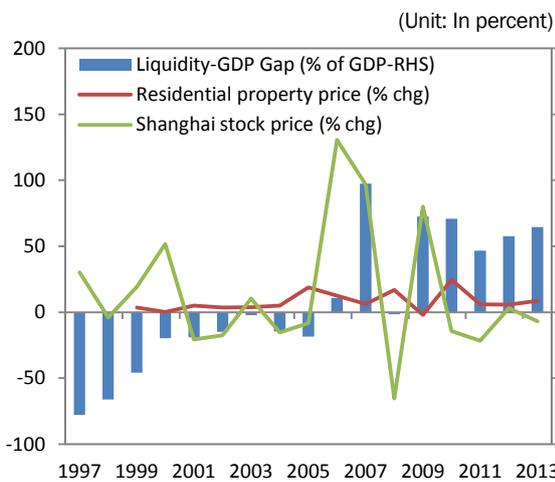


Figure 12. Liquidity and Capacity Gap and Stock Market Indices

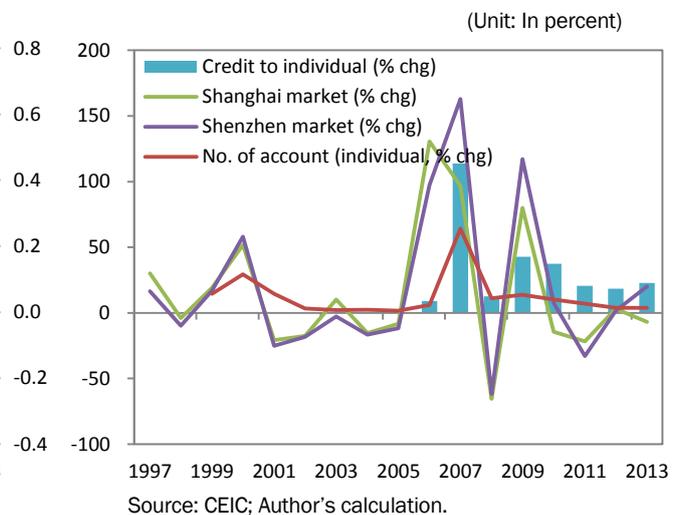
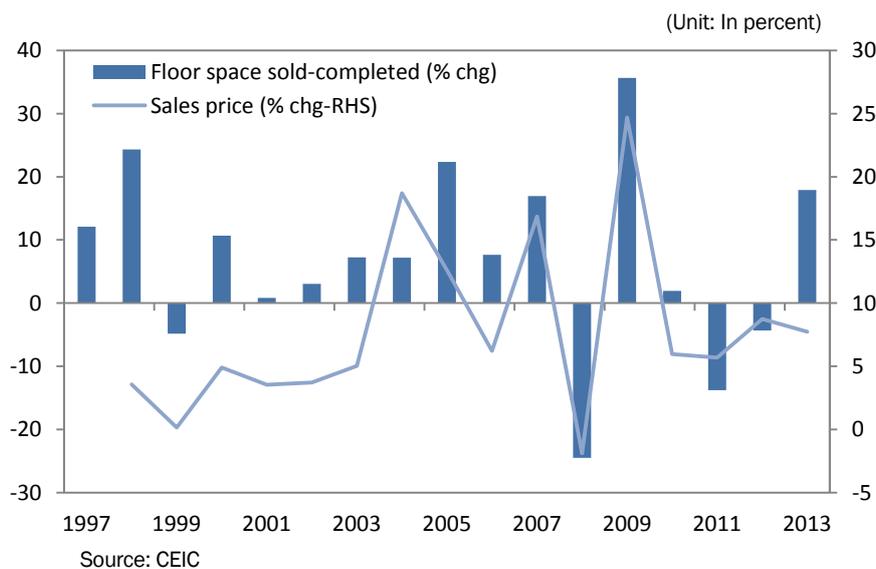


Figure 13. Property Market Floor Space and Price



In the case of the property market, other factors include the net supply of floor space. Figure 13 shows that the recent episodes of property price hikes in 2004, 2007, and 2009 were all associated with excess demand, defined as the annual percent change of floor space sold minus annual percent change of floor space completed—we note that this measure does not account for the changing quality of floor space over time and hence could be biased. However, previous occasions of excess demand for property, e.g., in 1998 and 2000, were not associated with price hikes, partly because there was no liquidity overhang as measured by the gap. On the other hand, the resurgence of price pressures in 2012, despite the excess supply of floor space could be attributed to the gap.

4.2. How Much Liquidity Does China Need?

In China, financial flows are often described as the “virtual economy” and the main question asked is at what size and speed of flow the real economy is most active in a sustainable manner. In particular, with a sense of liquidity overhang from the recent monetary expansion, many caution against expanding liquidity further lest it translate into a property bubble. Instead, they recommend searching for a way to speed the circulation of liquidity, i.e., to raise velocity.

To the extent that the issuance of a financial asset creates “productive capital”, an increase in L will lead to an increase in economic activity. However, if the proceeds are used for consumption, then an increase in liquidity will not lead to an increase in economic activity, except when the initial transaction takes place. Likewise, if L is used for wasteful investment, then the impact on the economy will be similar to spending it on consumption.

Moreover, if there is a growing expectation that the value of physical assets will appreciate in an accommodative monetary environment, L will increase as investors will leverage up to purchase these assets. Thus, asset prices will start increase as hoarding takes hold and L will lose traction.

Finally, if an increasing share of assets of the financial sector becomes non-performing, then the share of L will begin to exceed the productive capacity and thus there will be a widening gap between L and GDP. An increasingly large amount of credit is required to provide new money as well as to service the non-performing debt. This is analogous to the situation of wasted investment, requiring increasingly larger amount of investment to keep economic activities afloat.

On the basis of the above observation that the amount of liquidity has probably exceeded the optimal size, a liquidity-induced demand increase does not appear to be the right approach. This is becoming clearly manifest as growth has slowed despite a relatively accommodative monetary policy stance in the last two years, and external demand holding up relatively well. An increase of L in excess of productive capacity risks leading to asset price spikes, potentially working against the government’s effort to increase the affordability of residential properties and discouraging speculative investment in assets.

Thus, going forward, liquidity should expand in tandem with the buildup of productive capacity. Given the difficulty in estimating productive capacity, a scaled version of GDP could be used as a proxy. In addition, it would be better to clean up bank balance sheets to ensure that no deadweight is carried forward. Indeed, the deadweight could snowball if not addressed at an early stage. Moreover,

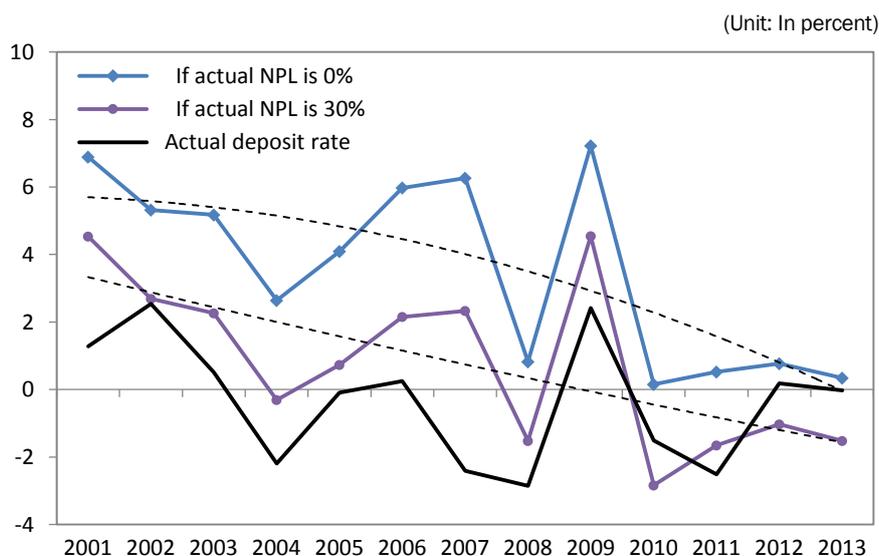
excessive expansion of a subcomponent of L could lead to consumer price inflation. Thus, care should be given to ensure that M1 for example, does not grow excessively even when overall L is appropriate.

5. Is China's Deposit Rate Too Low? A Financial Stability Perspective

In this section, we ask whether China's interest rate structure is necessarily too low from the perspective of the stability of its financial system. For this, we use the average observed in Asian economies, more specifically ASEAN+4, Korea and Hong Kong SAR bank spreads and GDP growth data. We assume that rate of return on financial assets cannot exceed real GDP growth, abstracting from short term variations. We then calculate the spread over real GDP growth to obtain the average cost of financial intermediation. Then, we apply this ratio to the Chinese GDP growth rate to obtain the "minimum" deposit rate for China. In other word, this estimated minimum deposit rate is the cost to banks that will keep them as profitable as the average of Asian economies. On this basis, we obtain the estimated minimum deposit rate for China (Figure 14). It clearly shows that the actual deposit rate in China is too low if we assume the banking system is sound.

However, this analysis changes if there is a growing deadweight loss being carried by the economy. For example, if we assume that the actual NPL ratio—which may not be observable now due to generous forbearance by banks, evergreening, creative accounting by corporates, and rapidly expanding balance sheets—is higher, then the actual deposit rate does not seem to be that far away from the estimated minimum deposit rate that would protect financial stability.

Figure 14. Actual and Estimated "Minimum" Real Deposit Rates¹⁾



Note: 1) Defined as the rate that will guarantee financial sector balance sheet stability. Higher NPLs imply lower minimum deposit rate since the upper lending rate is assumed to be the overall return on capital, which cannot exceed GDP growth rate

It is not inconceivable that actual (unobservable) NPLs, which have started to grow since 2009, may accelerate now that the economy is slowing. Indeed, the financial system in China has been prone in the past to misallocating capital, as reflected in NPL ratios of over 40 percent ahead of the banking clean up of the late 1990s and recent IMF staff estimates of excess capacity of around 40 percent (IMF 2012). For illustrative purposes, if the ratio were to rise from current levels of around 1 percent to 15-20 percent, then the current deposit rate may not be high.

The implication of this analysis is not so much to suggest that the current deposit rate is adequate, but that bank balance sheets may need to be cleaned up if bad assets rise significantly above current levels. Otherwise, households and some selected corporates with large savings will have to carry the burden of any growing bad debt, complicating the rebalancing of China's economy. In the short-term, inaction will also further undermine the ability to support growth through monetary stimulus.

6. Rebalancing China's Growth: The Future of the Financial Sector

The purpose of the financial sector of an economy is to provide efficient financial services by facilitating inter-temporal consumption, i.e., savings and investment, and promoting effective financial intermediation. Controlling the size of liquidity in the financial market and providing a market framework to host the financial system are the responsibilities of the supervisors. International experiences indicate that proactive government intervention in allocating resources has worked well in some countries during their early development stage, when institutions and market signals are still weak, profitable investment opportunities are relatively easy to identify, and development plans with a subservient financial system allow the reaping of economies of scale. However, as the economy matures, the complexity of the system outgrows these development plans.

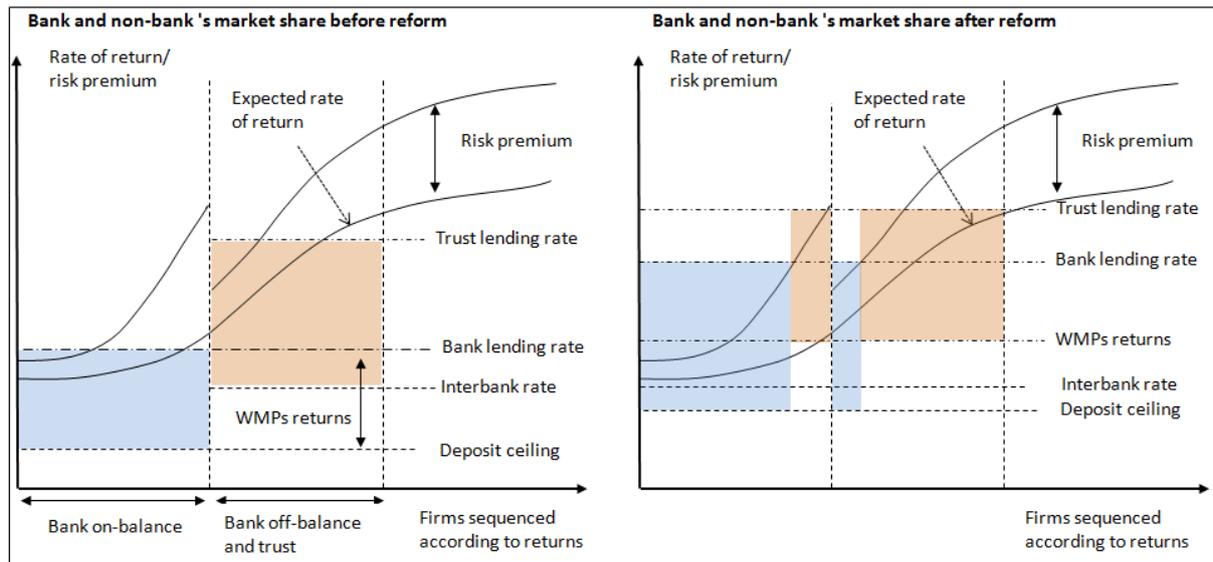
China may be approaching such a point. The main question going forward then is in what form and speed the financial flows should grow to best support the real economy. This question also coincides with the transitioning of the economy from an investment led to a consumption driven growth. The latter is equivalent to shifting toward a market based growth model in the sense of less investment induced growth. Thus, both the complexity of the real economy and the need to transit to a more market based growth necessitate a rethinking of the financial sector.

At present, China's financial system is segmented into banks and non-banks, with discontinuous links between these two institutions (Figure 15). This segmentation has roots in banks, particularly the larger ones, having an implicit guarantee on their operations from the government that discourage them from seeking out corporations that could generate higher risk-adjusted returns, irrespective of their size. Distortions created by such soft budget constraints—together with quantitative and price restrictions on credit with a lower than market clearing deposit rate ceiling—leads to a segmentation of the financial system as shown below.

Once restrictions are lifted and prices are indirectly influenced by monetary operations, the segmentation will disappear and interest rates will properly start reflecting risk-adjusted returns. Allocative efficiency will be gained as larger banks will start lending to companies that in the past

were borrowing from non-banks. Interbank market rates will hover just above deposit rates, and WMP rates, reflecting higher risks, above interbank rates but below lending rates. Currently, the guaranteed returns of banks—associated with the existing governance structure, soft budget constraints, little competition from other financial institutions, and interest rate regulation—provide little incentive for the system to settle into such an equilibrium.

Figure 15. China's Financial System: Bank and Non-bank Market



7. Conclusion

There is a partial consensus that the stock of money in China should be large reflecting the high savings rate. Even so, with a sense of a liquidity overhang from the monetary expansion used to counter the global crisis, many caution against pushing credit further, lest it translate into a property bubble or impose further strains on the financial system. In addition, the recent growth of the non-banking system adds to concerns about lack of effective financial intermediation through the banking system. Some even claim that the monetary authorities may be losing control over the growth of key monetary aggregates. Against this background, this paper reviewed recent monetary developments in China and assessed how the financial system will have to change to support the rebalancing of the economy.

While non-banks have indeed grown rapidly, we argue that their activities are largely influenced by banks through various channels. As a result, the monetary authorities still retain relatively good control over the growth of monetary aggregates.

However, the disparity between the amount of liquidity supply and the responsiveness of the real economy in recent times may be an indication that credit is losing traction. In addition, China's low deposit rate, while sub-optimal from the point of view of savers and providing a subsidy to

investment, may not be unjustified if there are large NPLs hidden away on the balance sheet of financial institutions.

The implication of both these possibilities—the loss in traction of credit and financial stability concerns justifying low deposit rates—is that a clean-up of bank balance sheets, as seen in the late 1990s, may need to precede financial sector reform. Otherwise, households will need to bear the burden, undermining the rebalancing of China’s growth, and the economy will become increasingly addicted and unresponsive to monetary stimulus.

More broadly, the paper argues that a reform of the financial sector is urgent to ensure that institutions start building up capacity to assess risks properly. This will provide the necessary environment for resources to start being allocated optimally through market signals. Such a reform will require a fundamental rethink of the current governance structure in China, under which the financial sector is subservient to the growth model. The timing of such a shift would be opportune, however, as the growth model itself is being transformed.

With these conditions in place, the relative size of banks and non-bank system would not be important in itself and should be left for the market to determine over time. Moreover, China’s high savings rate should not be used as the basis for determining the optimal size of total liquidity, but the underlying productive capacity of the economy.

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