Ten Questions about China

- Where is the China economy heading in 2013?
- Will new leadership lead to new economic agenda and new stimulus? Which areas will reform more likely to move first?
- Will investment collapse in China?
- Will housing continue to be a drag on 2013 economic growth?
- How big is the risk of systemic, significant increases in banking sector’s NPLs?
- How big is the risk in the shadow banking system?
- Will inflation concerns return next year?
- What will be the major focus of monetary policy tools in 2013?
- What is the outlook on capital inflow/outflow in 2013?
- The CNY has been rather volatile in 2012. What about 2013?

1. Where is the China economy heading in 2013?

The China economy continued its downward trend in 2012. The slowdown was driven by deceleration in export growth amid weakness in global final demand, and deliberately tightening on the domestic front to address overheating in the housing market and sectors with overcapacity. Policy started to shift towards the easing side in mid-2012, and the economy has showed clear signs of bottoming out since 3Q.

Entering 2013, China’s economic outlook depends on two fundamental forces: cyclical recovery and structural slowdown. From the cyclical perspective, the recovery in growth momentum will continue. This will benefit from the impact of policy easing, the recovery in the housing market, the turn-around of the destocking process in the manufacturing sector, and a moderate recovery in the global economy. From a structural perspective, the potential growth rate of the China economy has continued to trend down since 2007. The structural slowdown is attributable to the shrink in the WTO dividend, the softness in global final demand, the change in the demographic structure and labor market condition, rising production costs and declining competitiveness on the domestic front.

With the combined effects of cyclical and structural factors, we expect the China economy to growth by 8% in 2013, compared to 7.6% in 2012. We expect net exports to drag economic growth by 0.4%-pt.
similar to the impact in 2012. On the domestic front, consumption will remain resilient, with steady labor market condition and solid wage gains. Growth on the fixed asset investment (FAI) is likely to tick up to 21.5% in 2013, compared to our forecast of 21.1% in 2012. Due to the turn-around in the de-stocking process, we expect the contribution from fixed investment will increase from 3.9%-pt in 2012 to 4.2%-pt in 2013.

Our forecast is based on the assumption of the continuation of active (modest easing) fiscal policy and prudent (neutral) monetary policy. On the fiscal side, we expect the 2013 fiscal deficit to be around 2% of GDP. In addition, structural tax cuts will continue. The VAT reform, which lowers the tax burden and support the service sector, is likely to be further expanded from 10 provinces/cities to nationwide. On the monetary policy front, we expect the central bank to target M2 growth at 14% (the same as this year). The PBoC will likely keep policy rates on hold throughout 2013, and focus on liquidity management through the combined use of open market operations and RRR requirements.
2. Will new leadership lead to new economic agenda and new stimulus? Which areas will reform more likely to move first?

2012 is the year of once-a-decade political transition. The first plenary session of the 18th CPC Party Congress confirmed the new leadership team, led by Xi Jinping, Li Keqiang and five new politburo members. It is worth noting that Hu Jintao relinquished the title of Central Military Committee Chairman, which marked the first clean and complete handover of political power.

The CPC Party Congress is a political event rather than an economic working conference. The fact that the political transition occurs in the middle of five-year economic plan suggests that there will be no fundamental change in economic policy. Nonetheless, the new leadership could bring in new strategic focus at the implementation level.

In our view, the new leadership will stick to the economic agenda as outlined in the 12th 5-year plan (2011-15). The priority economic task is to accelerate the transition of growth model, from export-driven to domestic driven, and by encouraging consumptions. In order to maintain sustainable growth in the next decade, we think sources of growth could come from three key areas: urbanization; innovations and industry upgrade; and domestic consumption.

Given the very high public expectation of reforms and the increasing challenges on sustainable economic growth, we believe that economic reforms will continue under the new leadership. In particular, there are several key areas that economic reform may move faster in the coming years.
First, **urbanization** is an important driver of China’s economic growth in the coming decade. The urbanization ratio first exceeded 50% in 2011, and if excluding the urban population who do not have urban resident permits (“Hukou” in Chinese) and thus do not enjoy urban citizen privileges, the actual urbanization ratio is still below 40%. Urbanization can support economic growth via two channels, i.e. the strong demand in infrastructure investment and a more inclusive growth model, the latter of which would call for Hukou reform and further improvement in social welfare system. From sector perspective, the urbanization process will benefit infrastructure and construction sectors, as well as those sectors related to social welfare, in particular the health industry (given population aging).

Second, **resource pricing reform** is very likely to accelerate in the coming years. Pricing of most resource products, such as gas, water and power, is still subject to heavy government regulation and introduces distortion to the allocation of resource products. Reform in these areas will generally improve the earnings outlook of power/gas/water producers and oil refiners.

In addition, **financial reform** will continue to improve the efficiency of financial resource allocation. This includes interest rate liberalization (as part of it, the deposit insurance scheme could be introduced soon), capital account liberalization and exchange rate regime reform. While financial sector reform in general would benefit brokers but pose challenges to banks (due to intensified competition), those banks with stronger deposit base and solid regulatory buffers could be the winner in this process ("China banks & macro data", October 15, 2012).

By contrast, progress is likely to be slower in areas such as state-owned enterprise (SOE) reform and de-monopolizing in certain sectors, as they requires sacrifice of certain vested interest groups. Reaching consensus support is more difficult in these areas.

**One concern is whether China will see a comeback of investment boom in 2013.** Based on data in 1981-2010, a visible impact of the political cycle on economic activity is the large pickup in FAI activity in the first year after political transition (political transition occurs in the second year of each 5-year plan). This is not surprising as higher FAI growth can support economic growth, which is the most important criterion for career promotion of new leaders at local levels.

We do not expect such pattern will repeat this time. With clear signs that economic recovery is gaining traction, and inflation and unemployment remain at comforting levels, there is no need to push up the scale of policy easing. The negative side effects from the large-scale stimulus package in 2008-09 still weigh heavily on policy decisions of the central government. In fact, we think it is very likely that the government will lower the 2013 growth target to 7% (from 7.5% in 2012), thus sending a clear signal that new leadership cares about not only the pace of
economic growth, but also the quality and sustainability of economic growth.

<table>
<thead>
<tr>
<th>Selected economic indicators</th>
<th>11th 5-year plan</th>
<th>Outcome</th>
<th>12th 5-year plan</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urbanization ratio</td>
<td>43</td>
<td>47</td>
<td>47.5</td>
<td>47.5</td>
</tr>
<tr>
<td>New urban employment (mn)</td>
<td>[45]</td>
<td>[45]</td>
<td>[57.7]</td>
<td>[45]</td>
</tr>
<tr>
<td>Urban disposable income per capita</td>
<td>10493</td>
<td>5</td>
<td>19109</td>
<td>9.7</td>
</tr>
<tr>
<td>Rural disposable income per capita</td>
<td>3255</td>
<td>5</td>
<td>5919</td>
<td>8.9</td>
</tr>
<tr>
<td>Share of service sector</td>
<td>40.5</td>
<td>43</td>
<td>43 [2.5]</td>
<td>47</td>
</tr>
<tr>
<td>R&amp;D share in GDP</td>
<td>1.3</td>
<td>2 [0.7]</td>
<td>1.75 [0.45]</td>
<td>2.2</td>
</tr>
<tr>
<td>Energy consumption per GDP</td>
<td>[-20]</td>
<td>[-19.1]</td>
<td>47 [-16]</td>
<td></td>
</tr>
</tbody>
</table>

* [] refers to cumulative changes in 5 years

China: FAI growth during five year plan

%ooya, five year average

3. Will investment collapse in China?

The transition of China’s growth model involves moving away from over-reliance on investment and encouraging consumption. What is the implication for the outlook of FAI growth? **Different answers to this question leads to divided views on China’s growth outlook**. The “hard-landing” camp suggests that FAI growth will collapse due to over-investment in the past several years, thus China’s GDP growth may drop to around 5%. The opposite (“soft-landing”) camp suggests that there is still strong investment demand in China, and thus FAI growth can maintain stable growth, although at a lower level, in the medium term, and China’s potential growth rate is in the range of 7-8% in the next 3-5 years.
We agree on the second view. During the 2008-09 stimulus period, China registered very high FAI growth (31% growth in 2009) and investment was the largest contributor to economic growth (contributing 87.6% of GDP growth in 2009). In addition, high investment went along with the expansion of public investment, which was supported by cheap funding from the banking system. It is generally agreed that such a growth model is distorted and unsustainable, and causes significant economic (investment inefficiency, unbalanced economy) and social (rent-seeking, inequality and social dissatisfaction) problems.

Nonetheless, one needs to distinguish between the flow and stock concepts of fixed investment. Accordingly to a recent study by the IMF, capital stock per capita in China was only about 4% of the level in the U.S. and Japan in 1990, about 6% in 2010, and 12-13% in 2010. The dramatic catch-up process in investment activity contributes to the very high investment/GDP ratio (a flow concept) in the past decade. But in terms of capital stock, there is no clear evidence of over-investment in China at this stage. The ratio of capital stock in China vs. the U.S. and Japan is roughly in line with the ratio of GDP per capita.

Our interpretation of the transition of growth model is to lower the FAI growth to a more reasonable and sustainable level in the coming decade, yet investment will continue to be an important growth engine. In the medium term, we expect consumption will contribute about 50-60% of GDP growth, and investment will contribute about 40-50% of GDP growth. The demand for investment may come from the following areas: infrastructure (related to the urbanization process); innovations and industry upgrade; and social welfare (e.g. hospital and health care).

A more challenging issue is how to improve the efficiency of investment activities, which involves the shift from public to private investment and the transition of the government’s role towards provision of public services.

For 2013, we expect that FAI growth can maintain a stable growth at 21.5%, in line with estimated FAI growth this year (at 21.1%).

There are three major components in FAI activities: manufacturing investment, infrastructure and construction investments, and real estate investments, which accounted for about 34%, 18% and 25% of total FAI in 2011. We expect that the three components will show different dynamics in 2013. Manufacturing investment will maintain stable growth at about 23%, roughly in line with 2012 growth but lower than the average growth rate in 2006-2010 (30%). Infrastructure and construction investment has picked up strongly since 2H12 due to policy easing, and the trend will continue. We expect it will expand by 22% in 2013, compared to 16% (estimated) in 2012. On the real estate sector, we expect to see modest recovery in private housing investment, but the slowdown in affordable housing investment will bring down total real investment growth from 17% in 2012 to 14% in 2013 (see Question 4 for more details).
IMF study: China's capital stock per capita

% relative to US and Japan

China: public, private sector, and infrastructure FAI

% oya, 3mma

China's FAI growth

% oya
4. Will housing continue to be a drag on 2013 economic growth?

Rapid house price growth amid credit boom in 2009-10 is a major policy concern. Benefiting from the tightening measures introduced since 2009 (with several rounds of step-up efforts), the housing market has cooled down since 2011. On the other hand, the slowdown in housing market activity, especially real estate investment, has been a major drag for the economic growth. Based on our estimates, the impact of housing market slowdown contributed about two thirds of economic slowing in 2012 (Special report: “China’s housing markets: wide regional differences in manageable overall price adjustment”, November 4, 2011; and Special report: “China’s housing market revisited”, July 6, 2012).

The adjustment in the housing market seems to have turned around since 3Q12. Although property tightening measures stay unchanged, the general easing in economic policies has changed market sentiments and supported the comeback in housing demand. Housing prices, after declining by about 3% between 3Q11 and 2Q12, have gradually moved up since June 2012. The rebound in housing transaction volume is more remarkable: between July and October, home sale areas rose 10% over the same period in 2011 and home sale value rose 23.7%. This was in sharp contrast with the decline of 10% in home sale areas and the decline of 6.5% in home sale value in 1H12 (vs. 1H11).

Housing affordability has improved significantly over the past two years. Based on our calculation, house price-income ratio (defined as the ratio of average house price of a 90-square meter apartment vs. average household income) was as high as 10.0 at the national level at end-2010. Beijing, Hangzhou, Shanghai and Shenzhen ranked as the most expensive cities in China, with house price-income ratios at 20.6, 20.3, 20.2 and 19.6, respectively.

We re-calculated house price/income ratios at the national level and in 35 cities using house price data in October 2012. At the national level, the house price-income ratio dropped to 8.1, close to the reasonable range as we proposed (between 6 and 8). At city level, the number of cities with the price-income ratio above 10 declined from 18 to 11, and the number of cities with the ratio below 8 increased from 3 to 18. While the most expensive cities are still concentrated in coastal areas, the price-income ratios in Beijing, Hangzhou, Shanghai and Shenzhen dropped to 17.8, 15.4, 15.7 and 16.1, respectively.

The improvement in housing affordability is not driven by house price decline, instead it was mainly due to strong income growth. In fact, national house prices increased modestly by 2.7% between end-2010 and November 2012. This is very important to understand the differences in housing market correction processes between China and advanced economies (such as the U.S., Spain, Ireland and the UK), where income growth is slow or even negative and housing market corrections would require significant decline in house prices.
As the housing market gradually stabilizes, we expect that national house prices will increase modestly by 3-5% in 2013. A strong rebound or sharp decline in house price is unlikely in the near term.

First, we expect the government will continue the existing property tightening measures to ensure a healthy development in the housing market. Property tax, which was experimented in Shanghai and Chongqing, is likely to be expanded in other cities in 2H13 but the impact on the housing market tends to be limited. From the policymaker’s perspective, stable housing market developments remain a priority policy objective.

Second, the market condition supports a stable housing market outlook. In most time of the past decade, an important reason for the strong house price increase is because home supply was lagging behind demand. The situation is different at this moment. Our calculation shows that the ratio of housing under construction is about 4.2 times the home sales in the last 12 months, which is significantly higher than the historical average of 3.3. This reduces the likelihood of another housing boom in the near term.

Third, there are remarkable differences across the region. Although house prices are more expensive in tier-1 cities and the coastal area, the oversupply condition seems more severe in some inland provinces. This is not surprising. In the past two years, many developers chose to “go under” (i.e. to expand into tier-3 or tier-4 cities) and go inland where house prices were less expensive and property tightening was less strict. This has caused the rapid increase in new supply in these areas. As demand for housing is mainly driven by local residential need (and hence less sensitive to policy and price changes) in these areas, the pressure of high supply may persist in the next 1-2 years.

The stabilization in the housing market may cause private housing investment to bottom out. We expect 2013 private housing investment (in nominal term) to increase by 13% in 2013, compared to estimated 10% growth in 2012.

By contrast, affordable housing investment, which increased substantially in 2012 and partially offset the deceleration in private housing investment, may flatten in 2013. The annual target of affordable housing starts was 10 million units in 2011, 7 million units in 2012, and may be further reduced to 6 million units in 2013. As a housing project typically span over 2-3 years, we estimate that affordable housing investment will increase by 5% in 2013 (vs. 34% increase in 2012).
China: average housing price
RMB/Sqm

China: commodity building floor space
%oya, 3mma

China: forecasts of real estate investment

<table>
<thead>
<tr>
<th></th>
<th>2012 (est.)</th>
<th>2013 (est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment (CNY tn)</td>
<td>Market share</td>
</tr>
<tr>
<td>Private housing</td>
<td>4.76</td>
<td>59.3</td>
</tr>
<tr>
<td>Commercial property</td>
<td>2.20</td>
<td>27.4</td>
</tr>
<tr>
<td>Affordable housing</td>
<td>1.07</td>
<td>13.3</td>
</tr>
<tr>
<td>Total</td>
<td>8.03</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Property prices by region (2010)

- House price to income ratio > 10
- House price to income ratio btw 8 - 10
- House price to income ratio btw 6 - 8
- House price to income ratio < 6

Property prices by region (2012 Est)

- House price to income ratio > 10
- House price to income ratio btw 8 - 10
- House price to income ratio btw 6 - 8
- House price to income ratio < 6
5. **How big is the risk of systemic, significant increases in banking sector's NPLs?**

The rapid credit expansion in 2009-10, in combination with a housing boom, has been a major concern for regulators and market investors over the past 2-3 years. In an earlier note *(Special Report “Chinese banks: rising risks, but still manageable”, October 14, 2011)*, we have pointed out that the accumulated risk in the banking system remains manageable, and the likelihood of a banking crisis in the next 2-3 years is low.

The developments in the past year supported our arguments. Despite sluggish performance in the stock market (which reflected market concerns), the banking sector has generally performed well. Surprisingly, the non-performing loan (NPL) ratio has stayed at very low levels (0.95% by 3Q12). The resilience of the banking system can be attributable to the following factors.

First, the rapid growth in bank credit has been effectively contained thanks to deliberate policy tightening in the past several years. Since 2010, credit growth has come down in line with nominal GDP growth (the credit-to-GDP ratio has changed little since 2010). This has prevented further accumulation of credit imbalances in the system.

Second, the property tightening measures adopted by the government has mitigated the risk of a housing bust and potential hit on the banking system (see above discussion on Question 4).

Third, the low interest rate environment has delayed the materialization of default risks in the banking system. For most time since 2010, real deposit rates have been negative. Low interest rates reduce the financial burden for borrowers and lower the NPL ratio. In
addition, interest rate control continued to support decent profitability in the banking sector.

Finally, **strengthened bank regulation and supervision in recent years have built up a cushion for Chinese banks** to withstand potential deterioration in credit quality. The banking regulator issued a series of guidelines to address potential risks in the banking system, such as irregular lending practices, LGFV loans and real estate lending. In addition, it established a new regulatory framework that includes minimum requirements on capital adequacy, provisioning, leverage, and liquidity.

On the other hand, **the current low NPL ratio is not a true reflection of the credit quality in the banking system**. As the NPL ratio is a lagging indicator, we expect that it will move up to the range of 2-3% in the next 2-3 years.

Where will potential risks come from? The market has been highly concerned about **banks’ real estate exposures and local government financing vehicle (LGFV) loans. In our view, the risks of these two types of loans have been overstated**. By contrast, credit quality of corporate loans, especially manufacturing loans, wholesale & retail trade loans and SME loans, may pose a bigger risk for the banking system in the near term.

**Real estate loans accounted for approximately 20% of bank loans**, of which two thirds are mortgage loans. Due to strict regulation (maximum loan-to-value ratio is 70%) and low leverage of households, the delinquency ratio of mortgage loans tends to be low, even if house prices declined significantly. The credit quality of loans to real estate developers is more sensitive to the housing market development, but the size is limited and the potential risk has been mitigated given recent recovery in the housing market.

**LGFV loans pose a much bigger risk, but it is essentially a fiscal problem** and hence it is unlikely that banks have to bear all potential losses. Indeed, an implicit principle in regulators’ clean-up of LGFV loans is “everyone should take care of his/her own baby”, suggesting that fiscal resources will be the first defense against potential losses from LGFV loans. Given the relatively strong fiscal condition, we do not expect LGFV loans will pose a near term risk for the banking system. The market concern is to a larger extent related to the lack of transparency in the government’s solution.

**We have good reasons to be more concerned about corporate loans in the near term.** In the past, corporate loans are usually the major sources of NPLs for Chinese banks. Will this time be different?

To start with, **corporate loans remain the largest component in bank loans in China**. Especially in recent years, the government has tightened
bank lending to LGFVs and the real estate sector, and at the same time has encouraged bank lending to small and medium-size enterprises (SMEs). Between 3Q11 and 2Q11, LGFV loans did not increase, real estate loans increased by CNY 1.05 trillion (about 13% of total new loans), but SME loans increased by CNY 3.76 trillion (about 46% of total new loans), of which loans to small and micro firms accounted for nearly CNY 2 trillion. Using balance sheet data from eight major banks in China, manufacturing loans, wholesale & retail trade loans and transportation loans each accounted for 19%, 9% and 10% of total loans at this stage.

**Corporate loans are sensitive to the economic cycle.** Amid sluggish business environment, the corporate sector may face increasing difficulty in meeting its financial obligations. For most time of this year, corporate profits have continued to decline. According to the National Bureau of Statistics (NBS), from January to October, corporate profits declined in 13 industries (out of 41 industries), including smelting and processing of ferrous metals (-60.3%oya) and raw chemical materials and chemical products (-14.3%oya).

**The liability ratio is also much higher in the corporate sector.** Based on a recent study by China’s Academy of Social Science (CASS), corporate liability in China accounted for 107% of GDP in 2011, significantly higher than the threshold value of 90% in OECD economies.

**Recent data suggest that the credit quality of corporate loans is truly an emerging risk.** Using official statements from eight major Chinese banks (“China asset quality & 3Q trends: divergence on NIM & NPLs; Sifting through WMPs”, November 7, 2012), in 1H12 the NPL ratio is the highest for manufacturing loans (1.7%) and wholesale & retail trade loans (1.5%), and NPLs increased the most in wholesale & retail trade (rising 31% in 1H12). In addition, the expansion in SME loans encouraged by the government could be worrisome (though no official NPL data are available for this category), as interest rate liberalization is not complete yet and credit registry system is not functioning in China.

**A related issue is the resurgence of triangular debt problem,** as shown in increases in “receivables” in the corporate sector. According to the Development Research Center of the State Council, “receivables” of industrial companies rose to CNY 7.12 trillion in March 2012. This was 18% higher than one year ago and was equivalent to about 12% of total loans. The account in arrears is more severe in cyclical sectors. In 1990s, the triangular debt problem turned into a banking crisis in China. This time, although the scale is much more limited and it is still early to call it a systemic risk, it is worthy of special attention if the problem continues to evolve in the coming quarters.
Ten Questions about China

05 December 2012

Haibin Zhu
(852) 2800-7039
haibin.zhu@jpmorgan.com

**China: credit boom**

% of GDP

![chart showing total social financing and bank credit](chart.png)

**China: Loan and M2 growth**

% oya

![chart showing loan and M2 growth](chart.png)

**Chinese banks: NPL ratios by loan category**

% from top to bottom:
- Wholesale & retail trade
- Manufacturing
- Real estate
- Consumer
- Transportation

![chart showing NPL ratios](chart.png)
6. How big is the risk in the shadow banking system?

The shadow banking system in China is vaguely defined and it could include the following activities: trust loans, wealth management products (WMPs), and underground lending (or curb lending). It overlaps in part with non-bank financing in the concept of “total social financing”.

Estimating the size of the shadow banking system in China is not easy, mainly for several reasons. First, it is not clear whether some activities, such as bank acceptance bills and corporate bond financing (both are major non-bank financing components in total social financing), should be counted. Second, official statistics is typically
absent, especially for underground lending. Third, the aggregation is subject to the double counting problem. For instance, a large portion of wealth management products have been invested via trust loans.

We first collect a few relevant estimates of the size of the shadow banking system in China.

(1) Trust loans. According to China Association of Trust Companies, total asset under management of trust companies reached CNY 6.3 trillion by 3Q12, 54% higher than one year ago and double the size of end-2010. Sectors that are subject to credit tightening, for instance real estate companies and local governments, have actively tapped trust loans as a funding source in recent years. Trust companies are also subject to CBRC regulation (but with lighter regulation), and the borrowing cost of trust loans is often higher than bank loans.

(2) Wealth management products (WMPs). The emergence of WMPs is similar to the CD market in the U.S., against the background that deposit rates are controlled by regulation. WMPs have been developed to offer higher yields than bank deposits and hence to keep deposits within the banking system. The PBoC estimated that China’s WMPs totaled CNY 3.57 trillion by 2Q11 (about 4.5% of bank deposits at that time). This year, the IMF estimated that WMPs amounted to CNY 8-9 trillion in 3Q12, nearly 10% of bank deposits.

(3) Underground lending. Underground lending is not subject to regulation and there is no official data. It is popular in some provinces such as Zhejiang and Inner Mongolia. Last year, the report on “run-away bosses” brought up the underground lending to the center of public attention. We estimate the size of underground lending is in the range of CNY 2-3 trillion, or about 5% of China’s GDP.

In the past 1-2 years, the growth in trust loans, WMPs and corporate bond financing has been remarkable, and it provides new sources of funding for supporting economic activity. Meantime, there are growing concerns whether the rapid expansion in shadow banking activities has posed a new threat for the financial system in China.

Overall, we think the expansion of shadow banking activities helps to diversify the risk in the financial sector and represents an important part of interest rate liberalization and financial reform. Nonetheless, certain irregularities imply that market discipline needs to be established in these markets to mitigate possible risks in the future.

The shadow banking activities in China started to develop against the background that the banking system has been dominating the financial sector. In 2011, bank loans accounted for 116% of China’s GDP, much higher than the combined size of equity and bond markets. This is in sharp contrast with advanced economies (e.g. the U.S. and
Japan), where the capital market (especially the bond market) is the dominant financing source. Even in emerging Asia countries, the role of banking system have been much smaller compared to China. In addition, the corporate bond market in China is still at infant stage, accounting for less than 5% of total issuance in the past 2-3 years.

The growth in shadow banking activity has several advantages. First, it supports the growth in the capital market and reduces the over-reliance on the banking system. Second, it helps diversify risks between the banking system and the capital market. Third, it is to some extent a “dual-track” approach in China’s financial reform. That is, when the banking system is still not fully liberalized, developments of competing non-bank financing channels will provide incentive for pushing financial reform. For instance, the funding cost in trust loans and underground lending is perceived to have better reflected market condition, and WMP is an effective way to circumvent the control on deposit rates (similar to the CD market in the U.S. under Regulation Q).

Is the shadow banking posing a new systemic risk for the financial sector? Our short answer is no. However, it is helpful to discuss the different shadow banking activities separately.

Trust loans and corporate bond market have developed very quickly. This is particularly important for local governments, given that the traditional funding sources are constrained this year: fiscal revenue growth slowed down, land sale revenue collapsed, and LGFV loans were subject to strict regulation. According to the PBoC, trust loans and corporate bond issuance increased by CNY 2.7 trillion in the first 10 months of this year, much higher than the full year increase of CNY 1.57 trillion in 2011.

There are mixed news from these market developments. On the positive side, compared to LGFV loans in 2008-09, there are stricter requirements in terms of collateral assets, and interest rates are typically higher to compensate the underlying default risk.

On the negative side, there have been certain market irregularities in these markets. The biggest problem is the government’s reluctance to allow defaults, which leads to the moral hazard problem and introduces market distortion. There have been quite a few reported cases that local governments stepped in to prevent defaults of corporate bonds or trust products, even when the issuers are not government-related entities. The implicit guarantee has distorted market discipline and stimulated investment demand in these products, as investors perceive a “risk-free” premium. The moral hazard problem, if not solved, may increase the financial risk with further expansion of these products.

The risk involved in WMPs is relatively low. Currently, most WMPs offer yields in the range of 4-5%. To compare with, 1-year deposit rate is currently around 3.25% (as most banks offer up to 10% premium above the 3% minimum deposit rate). If taking into account the reduction in
regulatory cost (20% required reserves are only compensated at 1.6% and thus represent a net loss for banks), the break-even deposit rate is about 3.7%. Hence the difference in yields is moderate.

Some investors are concerned about the fact that WMPs are mostly short-term (less than one year) but are used to fund long-term projects. In theory, there exists a maturity mismatch problem. However, in practice this simply implies higher volatility generated by the shift between bank deposits and WMP products. Unless the large pool of deposits can find alternative investment channels (or a big change in regulatory policies for WMP products), it is unlikely that WMPs will face a collapse of its funding model in the near term.

Lastly, recent distresses in Wenzhou (Zhejiang province) and Erdos (Inner Mongolia) caused concerns on underground lending. However, underground lending is only a regional phenomenon. It could cause local financial instability, but is unlikely to spill over and cause a systemic risk at a national level. The fundamental solution to this problem is to bring underground lending into the formal financial system, by opening access to various financial activities, including micro lending, private equity and private sector banks.

Sources of social financing

<table>
<thead>
<tr>
<th></th>
<th>CNY bn</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011</td>
</tr>
<tr>
<td>Total social financing</td>
<td>12,830</td>
</tr>
<tr>
<td>Loans in local currency</td>
<td>7,470</td>
</tr>
<tr>
<td>Loans in foreign currency</td>
<td>571</td>
</tr>
<tr>
<td>Entrusted loans</td>
<td>1,300</td>
</tr>
<tr>
<td>Trust loans</td>
<td>201</td>
</tr>
<tr>
<td>Bankers acceptance bills</td>
<td>1,030</td>
</tr>
<tr>
<td>Net corporate bond financing</td>
<td>1,370</td>
</tr>
<tr>
<td>Nonfin enterprise equity</td>
<td>438</td>
</tr>
</tbody>
</table>
7. Will inflation concerns come back next year?

In 2012, inflation pressure has been easing for most of the year. Headline CPI inflation eased to 1.7% y-o-y in October, compared to the peak at 6.5% y-o-y in July 2011. PPI inflation entered the negative territory since March 2012, reflecting the trend in global commodity prices as well as the impact of slowing domestic activity in the manufacturing sector, and will only come back to positive zone by May 2013 in our forecast.

Going ahead, we expect CPI inflation to move up gradually in 2013. In particular, the decline in food prices for most of this year will likely have come to an end, and the favorable base effect will have disappeared. In addition, our global team expects major global commodity prices, including oil and copper, will likely trend up gradually next year. On the
domestic front, as we expect China's industrial activity to gradually warm up going ahead, PPI will likely stop falling and begin to rise at a gradual pace. Meanwhile, the moderate easing in the pace of wage inflation since early this year will likely somewhat constrain the pace of general non-food CPI inflation in the near term (see chart).

Overall, concerns on inflation may come back in 2013, but inflation will remain at benign levels, averaging at 3.2% %oya in our forecast. As such, inflation will unlikely be a top issue for policymakers.
8. What will be the major focus of monetary policy tools in 2013?

We expect the central bank to maintain the current neutral monetary policy stance. The PBoC will likely keep interest rates on hold throughout 2013, and focus on liquidity management through the combined use of open market operations and RRR requirements.

The neutral monetary policy stance is appropriate for 2013 as the output gap is narrowing and the forecasted 8% economic growth is in line with the potential growth rate. An interesting phenomenon this year is that reverse repos have become a new standard monetary policy instrument, due to its flexibility (both in terms of size and direction of liquidity provision) and its impact on inter-bank funding costs. In terms of reserve requirements, we think there is room for another 2-3 RRR cuts before end-2013, but the increasing use of open market operations has added complexity in predicting the number and timing of RRR cuts going ahead.

Another important development is the increasing focus on the broad concept of total social financing, which includes bank loans and non-bank financing. In the first 10 months of this year, bank lending (including foreign currency loans) increased by 7.9 trillion CNY (vs. 6.8 trillion in the first months in 2011), and non-bank lending increased by 5.1 trillion (vs. 3.8 trillion). The expansion of trust funds and corporate bond financing is particularly remarkable, and they have become the important funding sources for those sectors that are subject to credit tightening, such as local governments and real estate developers.

Such development reflects more cautious monetary policy stance and bank lending compared to periods of policy easing in the past. We expect that this trend will continue in 2013. CNY bank loans may increase by around 9.2 trillion yuan in 2013, compared to an estimated increase of 8.4-8.5 trillion in 2012 (or 14.5% vs. 15.4% in terms of growth rates).
Meantime, along with the efforts to develop the capital markets and to improve risk diversification, non-bank financing will continue to maintain solid growth in 2013.
9. What is the outlook on capital inflow/outflow in 2013?

For the first three quarters of the year, China’s current account surplus came in at 2.6% of GDP, compared to 2.9% during the same period last year. Meanwhile, capital and financial account (including net errors and omissions) recorded a deficit at $71.0 billion in 3Q, with the first three quarters registering a deficit at $85.4 billion. This differed significantly from the surplus of 234.1 billion during the first three quarters of last year. Overall, the balance of payments (BoP) picture for the first three quarters of this year has shown a rather notable deviation from the previous trend of “twin surpluses” across the current as well as capital and financial accounts, which had been observed for more than a decade.

In particular, notable deficit in the capital and financial account (including net errors and omissions) this year has raised the worries that international capital may have been exiting China on a major scale, and will continue to do so, with important implications for China’s medium-term BoP positions, FX policy, and monetary policy operations. While the deficits in capital and financial account have raised concerns about “capital outflow” or even “capital flight”, further analysis suggests that it mainly reflected the shift of foreign asset holding from the central bank to domestic corporates and households, while there was no obvious trend in notable withdrawal of foreign capital. In particular, onshore foreign currency deposits gained notably by $142.6 billion during the first ten months of this year, which reflects the inclination of domestic private sectors, especially the corporate sector, to adjust the currency mix of their assets and to increase FX deposit holdings, as CNY appreciation was no longer seen as a one-way bet amid global economic uncertainty.

On the other hand, with regard to the more fundamental foreign direct investment (FDI) trend, net foreign direct investment still came in at a
solid $127.2 billion in the first three quarters of this year, modestly higher than $121.4 billion recorded during the same period last year. Indeed, it is worth noting that net direct investment flows have been in decent surpluses in recent years (even during the 2008-09 global financial crisis). Going ahead, as long as China’s economy manages to show steady growth pace, especially with regard to domestic demand, the decent surplus on net direct investment flows will likely continue in the next few years.

Along with these considerations, we have derived a proxy measure of monthly “hot money” flows, which is calculated as the difference between banks’ forex purchases and trade surplus, FDI as well as onshore fx deposits. Our estimates suggest that such “hot money” outflow, which expanded to a monthly average of $33.5 billion for the five months ending August, eased rather notably to $15.5 billion in September.

Looking into 2013, the capital and financial account will likely continue to show volatility from time to time. For the year as a whole, we have penciled in a forecast that the overall capital and financial account (including errors and omission) will register moderate deficit of about $75 billion. Meanwhile, the fundamental factors, in terms of current account surplus and net foreign direct investment flow, would remain in steady surplus, hence support some modest pace of appreciation in the currency (see the next section).
China: onshore foreign currency deposits

US$ billion, m/m change

China: BoP direct investment

US$ billion

China: "hot money" proxy

US$ bn
10. The CNY has been rather volatile in 2012. What about 2013?

CNY exchange rate has come much closer to the equilibrium level in 2012. In April, the PBOC announced to widen the daily trading band from 0.5% to 1%, and later eased restrictions on net open position requirements. Along with that, the CNY/USD bilateral rate has become rather volatile through the course of the year. In the middle of 2012, the currency market was dominated by depreciation expectations. However, this has been reversed since August. CNY spot rate has appreciated by about 2%, shifting from the upper bound to the lower bound within the trading band, and daily fixing has been adjusted lower since October.

The volatility in the CNY has been driven by several factors. The first important factor is the outlook for the China economy. In mid-2012 when concerns of China’s economic slowing intensified, CNY depreciation pressure was high. By contrast, the latest appreciation of CNY coincided with positive economic readings that suggest economic recovery is firming up. The second factor is the strength of US dollar. The announcement of QE3 has caused weakness in USD and thus contributed to recent CNY appreciation. The third factor is the currency preference of the domestic private sector. Foreign currency deposits of the private sector (corporates and households) increased from US$ 290 billion in January 2012 to 415 billion in August 2012, which contributed to CNY depreciation and slowdown in official reserve accumulation. By contrast, recent CNY appreciation was related to increasing trade surplus and the declining willingness to hold foreign assets by the private sector.

We expect the CNY exchange rate to be more market determined going ahead. Although appreciation pressure in spot CNY may persist in the near term, we caution against overly optimistic expectations. Reflecting positive but reduced current account surplus, CNY may only see a modest 1-2% appreciation next year. We expect that USD/CNY exchange rate to register at 6.22 at end-2012 and 6.15 at end-2013. The exchange rate dynamics is more likely to exhibit two-side volatility rather than one-side linear movements. In addition, we expect further gradual liberalization in exchange rate regime, such as improvement in CNY daily fixing, less intervention or increased transparency in central bank intervention, ongoing capital account opening, and some possibility of further band widening.
CNY/USD spot exchange rate and fixing

Spot exchange rate

Mid-point fixing

Spot deviation from mid-point

% of GDP

Current account balance

JPmorgan forecasts

China

US
Disclosures

Analyst Certification: The research analyst(s) denoted by an “AC” on the cover of this report certifies (or, where multiple research analysts are primarily responsible for this report, the research analyst denoted by an “AC” on the cover or within the document individually certifies, with respect to each security or issuer that the research analyst covers in this research) that: (1) all of the views expressed in this report accurately reflect his or her personal views about any and all of the subject securities or issuers; and (2) no part of any of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report.

Analysts' Compensation: The research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of research, client feedback, competitive factors, and overall firm revenues.

Other Disclosures

J.P. Morgan (“JPM”) is the global brand name for J.P. Morgan Securities LLC (“JPM”) and its affiliates worldwide. J.P. Morgan Cazenove is a marketing name for the U.K. investment banking businesses and EMEA cash equities and equity research businesses of JPMorgan Chase & Co. and its subsidiaries.

Options related research: If the information contained herein regards options related research, such information is available only to persons who have received the proper option risk disclosure documents. For a copy of the Option Clearing Corporation's Characteristics and Risks of Standardized Options, please contact your J.P. Morgan Representative or visit the OCC’s website at http://www.optionsclearing.com/publications/risks/riskstoc.pdf

Legal Entities Disclosures

U.S.: JPM is a member of NYSE, FINRA, SIPC and the NFA. JPMorgan Chase Bank, N.A. is a member of FDIC and is authorized and regulated in the U.S. by the Federal Financial Services Authority. U.K.: J.P. Morgan Securities plc (JPM plc) is a member of the London Stock Exchange and is authorized and regulated by the Financial Services Authority. Registered in England & Wales No. 2711006. Registered Office 25 Bank Street, London, E14 5JP. South Africa: J.P. Morgan Equities Limited is a member of the Johannesburg Securities Exchange and is regulated by the FSB. Hong Kong: J.P. Morgan Securities (Asia Pacific) Limited (CE number AAJ321) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission in Hong Kong. Korea: J.P. Morgan Securities (Far East) Ltd, Seoul Branch, is regulated by the Korea Financial Supervisory Service. Australia: J.P. Morgan Australia Limited (ABN 52 002 888 011/AFS Licence No: 238188) is regulated by ASIC and J.P. Morgan Securities Australia Limited (ABN 61 003 245 234/AFS Licence No: 238066) is a Market Participant with the ASX and regulated by ASIC. Taiwan: J.P. Morgan Securities (Taiwan) Limited is a participant of the Taiwan Stock Exchange (company-type) and regulated by the Taiwan Securities and Futures Bureau. India: J.P. Morgan India Private Limited, having its registered office at J.P. Morgan Tower, Off. C.S.T. Road, Kaila, Santacruz East, Mumbai - 400096, is a member of the National Stock Exchange of India Limited (SEBI Registration Number - INB 230675231/IN/230675231) and Bombay Stock Exchange Limited (SEBI Registration Number - INB 010675237/IN/010675237) and is regulated by Securities and Exchange Board of India. Thailand: JPMorgan Securities (Thailand) Limited is a member of the Stock Exchange of Thailand and is regulated by the Ministry of Finance and the Securities and Exchange Commission. Indonesia: PT J.P. Morgan Securities Indonesia is a member of the Indonesia Stock Exchange and is regulated by the Bapepam Lk.

Philippines: J.P. Morgan Securities Philippines Inc. is a member of the Philippine Stock Exchange and is regulated by the Securities and Exchange Commission. Brazil: Banco J.P. Morgan S.A. is regulated by the Comissão de Valores Mobiliários (CVM) and by the Central Bank of Brazil. Mexico: J.P. Morgan Casa de Bolsa, S.A. de C.V., J.P. Morgan Grupo Financiero is a member of the Mexican Stock Exchange and authorized to act as a broker dealer by the National Banking and Securities Exchange Commission. Singapore: This material is issued and distributed in Singapore by J.P. Morgan Securities Singapore Private Limited (JPMSS) [MICA (P) 088/04/2012 and Co. Reg. No.: 199405335R] which is a member of the Singapore Exchange Securities Trading Limited and is regulated by the Monetary Authority of Singapore (MAS) and/or JPMorgan Chase Bank, N.A., Singapore branch (JPMB Singage) which is regulated by the MAS. Malaysia: This material is issued and distributed in Malaysia by JPMorgan Securities (Malaysia) Sdn Bhd (18146-X) which is a Participating Organization of Bursa Malaysia Berhad and a holder of Capital Markets Services License issued by the Securities Commission in Malaysia. Pakistan: J.P. Morgan Pakistan Broking (Pvt.) Ltd is a member of the Karachi Stock Exchange and regulated by the Securities and Exchange Commission of Pakistan. Saudi Arabia: J.P. Morgan Saudi Arabia Ltd. is authorized by the Capital Market Authority of the Kingdom of Saudi Arabia (CMA) to carry out dealing as an agent, arranging, advising and custody, with respect to securities business under licence number 35-07079 and its registered address is at 8th Floor, Al-Faisaliyyah Tower, King Fahad Road, P.O. Box 51907, Riyadh 11553, Kingdom of Saudi Arabia. Dubai: JPMorgan Chase Bank, N.A., Dubai Branch is regulated by the Dubai Financial Services Authority (DFSA) and its registered address is Dubai International Financial Centre - Building 3, Level 7, PO Box 506551, Dubai, UAE.

Country and Region Specific Disclosures

U.K. and European Economic Area (EEA): Unless specified to the contrary, issued and approved for distribution in the U.K. and the EEA by JPM plc. Investment research issued by JPM plc has been prepared in accordance with JPM plc's policies for managing conflicts of interest arising as a result of publication and distribution of investment research. Many European regulators require a firm to establish, implement and maintain such a policy. This report has been issued in the U.K. only to persons of a kind described in Article 19 (5), 38, 47 and 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (all such persons being referred to as "relevant persons"). This document must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is only available to relevant persons and will be engaged in only with relevant persons. In other EEA countries, the report has been issued to persons regarded as professional investors (or equivalent) in their home jurisdiction. Australia: This material is issued and distributed by JPMASL in Australia to "wholesale clients" only. JPMASL does not issue or distribute this material to "retail clients". The recipient of this material must not distribute it to any third party or outside Australia without the prior written consent of JPMASL. For the purposes of this paragraph the terms "wholesale client" and "retail client" have the meanings given to them in section 761G of the Corporations Act 2001. Germany: This material is distributed in Germany by J.P. Morgan Securities plc, Frankfurt Branch and J.P.Morgan Chase Bank, N.A., Frankfurt Branch which are regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht. Hong Kong: The 1% ownership disclosure as of the previous month end satisfies the requirements under Paragraph 16.2(a) of the Hong Kong Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission. (For research published within the first ten days of the month, the disclosure may be based on the month end data from two months prior.) J.P. Morgan Broking (Hong Kong) Limited is the liquidity provider/merchant market for derivative warrants, callable bull bear options.
contracts and stock options listed on the Stock Exchange of Hong Kong Limited. An updated list can be found on HKEx website: http://www.hkex.com.hk.

**Japan:** There is a risk that a loss may occur due to a change in the price of the shares in the case of share trading, and that a loss may occur due to the exchange rate in the case of foreign share trading. In the case of share trading, JPMorgan Securities Japan Co., Ltd., will be receiving a brokerage fee and consumption tax (shouhizei) calculated by multiplying the executed price by the commission rate which was individually agreed between JPMorgan Securities Japan Co., Ltd., and the customer in advance. Financial Instruments Firms: JPMorgan Securities Japan Co., Ltd., Kanto Local Finance Bureau (kinsho) No. 82 Participating Association / Japan Securities Dealers Association, The Financial Futures Association of Japan, Type II Financial Instruments Firms Association and Japan Investment Advisers Association. **Korea:** This report may have been edited or contributed to from time to time by affiliates of J.P. Morgan Securities (Far East) Ltd, Seoul Branch. **Singapore:** JPMSS and/or its affiliates and/or subsidiaries (collectively J.P. Morgan) do not warrant its completeness or accuracy except with respect to any disclosures relative to JPMSAL.

**India:** For private circulation only, not for sale. **Pakistan:** For private circulation only, not for sale. **New Zealand:** This material is issued and distributed by JPMSAL in New Zealand only to persons whose principal business is the investment of money or who, in the course of and for the purposes of their business, habitually invest money. JPMSAL does not issue or distribute this material to members of "the public" as determined in accordance with section 3 of the Securities Act 1978. The recipient of this material must not distribute it to any third party or outside New Zealand without the prior written consent of JPMSAL. **Canada:** The information contained herein is not, and under no circumstances is to be construed as, a prospectus, an advertisement, a public offering, an offer to sell securities described herein, or solicitation of an offer to buy securities described herein, in Canada or any province or territory thereof. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the dealer registration requirement in the relevant province or territory of Canada in which such offer or sale is made. The information contained herein is under no circumstances to be construed as investment advice in any province or territory of Canada and is not tailored to the needs of the recipient. To the extent that the information contained herein references securities of an issuer incorporated, formed or created under the laws of Canada or a province or territory of Canada, any trades in such securities must be conducted through a dealer registered in Canada. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed judgment upon these materials, the information contained herein or the merits of the securities described herein, and any representation to the contrary is an offence. **Dubai:** This report has been issued to persons regarded as professional clients as defined under the DFSA rules.

**General:** Additional information is available upon request. Information has been obtained from sources believed to be reliable but JPMorgan Chase & Co. or its affiliates and/or subsidiaries (collectively J.P. Morgan) do not warrant its completeness or accuracy except with respect to any disclosures relative to JPMS and/or its affiliates and the analyst's involvement with the issuer that is the subject of the research. All pricing is as of the close of market for the securities discussed, unless otherwise stated. Opinions and estimates constitute our judgment as of the date of this material and are subject to change without notice. Past performance is not indicative of future results. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients. The recipient of this report must make its own independent decisions regarding any securities or financial instruments mentioned herein. JPMS distributes in the U.S. research published by non-U.S. affiliates and accepts responsibility for its contents. Periodic updates may be provided on companies/industries based on company specific developments or announcements, market conditions or any other publicly available information. Clients should contact analysts and execute transactions through a J.P. Morgan subsidiary or affiliate in their home jurisdiction unless governing law permits otherwise.

"Other Disclosures" last revised September 29, 2012.

Copyright 2012 JPMorgan Chase & Co. All rights reserved. This report or any portion hereof may not be reprinted, sold or redistributed without the written consent of J.P. Morgan.