Deutsche Bank
Markets Research

Asia
China

Strategy
2013 China Strategy

Date
4 January 2013

Strategy Update

Jun Ma, Ph.D
Chief Economist
(+852) 2203 8308
jun.ma@db.com

Lin Li, Ph.D
Strategist
(+852) 2203 6187
lin.li@db.com

Linan Liu
Strategist
(+852) 2203 8709
linan.liu@db.com

Audrey Shi
Research Associate
(+852) 2203 6139
audrey.shi@db.com

Recovery and reforms

Our baseline economic forecast is that GDP growth will accelerate to 8.5% in 2H13 from 8.0% in 1H13 and 7.6% in 2H12, and may accelerate further to 8.9% in 2014. The main drivers for growth recovery include corporate and infrastructure investments, as well as a rebound in export growth in 2H this year. Against this baseline economic forecast, we expect 15% upside to the MSCI China Index in the remainder of 2013.

The key themes for investment in 2013 include: 1) growth recovery: cement, construction, infrastructure machinery, and shipping companies will likely outperform, as 2013's cyclical recovery will be led mainly by investment and exports; 2) resource pricing reform: the power, gas, water and refined oil sectors will be the main beneficiaries; 3) VAT reform, social spending, and urbanization: health care and construction will enjoy the resulting upside potential; 4) NPL cycle: banks may continue to underperform for the first half of 2013, given that the system NPL ratio will likely rise further until 3Q; 5) capacity rationalization: coal and steel will likely underperform cement due to slower pace of capacity rationalization; and 6) anti-corruption: Macau VIP gaming, watches and gift card sales at department stores will likely suffer from revenue deceleration due to the new government's anti-corruption campaign.

Deutsche Bank AG/Hong Kong

Deutsche Bank
Markets Research

Asia
China

Strategy
2013 China Strategy

Date
4 January 2013

Strategy Update

Jun Ma, Ph.D
Chief Economist
(+852) 2203 8308
jun.ma@db.com

Lin Li, Ph.D
Strategist
(+852) 2203 6187
lin.li@db.com

Linan Liu
Strategist
(+852) 2203 8709
linan.liu@db.com

Audrey Shi
Research Associate
(+852) 2203 6139
audrey.shi@db.com

Recovery and reforms

Our baseline economic forecast is that GDP growth will accelerate to 8.5% in 2H13 from 8.0% in 1H13 and 7.6% in 2H12, and may accelerate further to 8.9% in 2014. The main drivers for growth recovery include corporate and infrastructure investments, as well as a rebound in export growth in 2H13.

The key downside risks include a stalemate on the US debt ceiling, geopolitical risks in the Middle East and an escalation in tensions between China and Japan. The main upside risk in China is higher-than-expected fiscal spending by the government.

Against the baseline economic forecast, we expect 15% upside to the MSCI China Index in 2013. This forecast is based on a modest re-rating of equity market valuations (i.e., forward P/E expanding to 10.8x from the current 10.3x) and normalized 10% EPS growth beyond 2013.

We highlight the following **investment themes for 2013**:

1. **Growth recovery:** cement, construction, and shipping companies will likely outperform, as 2013's cyclical recovery will be led mainly by investment and exports. However, the performance of FAI-related sectors will likely be short-lived, as inflation concerns could lead to policy tightening by the end of 2013.
2. **Resource pricing reform:** the power, gas, water and refined oil sectors will be the main beneficiaries.
3. **VAT reform, social spending, and urbanization:** healthcare and construction will enjoy the resulting upside potential.
4. **NPL cycle**: banks may continue to underperform the index, given the NPL ratio will likely rise until 3Q, but large banks are more resilient.
5. **Capacity rationalization**: coal and steel will likely underperform cement, due to the slower pace of capacity rationalization.
6. **Anti-corruption**: 2013 will likely witness the most vigorous anti-corruption fight in decades. Macau VIP gaming, fine watches and gift card sales at department stores may suffer from revenue deceleration.

Based largely on the above themes, our updated top buy list includes Bank of China (3988.HK), Sinopec (0386.HK), Ping An (2318.HK), China Unicom (0762.HK), COLI (0688.HK), CCC (1800.HK), Huaneng Power Intl (0902.HK), CR Cement (1313.HK), China Shipping Container Liners (2866.HK) and Mindray (MR.N).

Deutsche Bank AG/Hong Kong

Table Of Contents

Table of Exhibits

Table of Exhibits (Continued)

Macroeconomic outlook

- We expect GDP growth to recover modestly to 8.0% in 1H 2013 and reach its potential of around 8.5% yoy in 2H 2013. The back-loaded trajectory of growth recovery is led mainly by corporate investment after shaking out excess capacity, and also reflects the export acceleration in 2H 2013. For 2013 as a whole, we expect the nominal growth rate of gross capital formation (GCF) to accelerate to 11.5% from 9% in 2012, export growth to rise to 10% from 8% in 2012, and consumption growth to remain largely steady.
- The key downside risk to our 2013 China forecasts is worse-than-expected external demand due to, e.g., a stalemate on the US debt ceiling, oil price shocks from the Middle East and an escalation of the China-Japan conflict. A 1.6ppts downgrade in G2 GDP growth will likely reduce China's GDP growth by 1ppt and delay our expected China recovery by about three quarters. The main upside risk to our 2013 projection is a higher-than-expected budget deficit and/or better-than-expected fiscal revenue performance, which may allow stronger-than-expected government capex in areas such as subway and light rail construction.
- On the macro policy stance for 2013, we expect the government's GDP growth target to be set at 7.5% and its M2 growth target at 13-14%. We think the PBoC may begin to raise interest rates by the end of 2013 or in early 2014 when inflation pressure intensifies. We forecast 2.5% RMB appreciation against the USD in the coming 12 months.
- Structural reforms in areas such as resource pricing, VAT, interest rate liberalization, capital account management and social spending will likely witness significant progress in 2013. These reforms are positive for the gas, water, power, refined oil, transport, health care and education sectors.
- For 2014, our baseline forecast is that GDP growth will continue to accelerate to 8.9%, with growing concern over the risk of economic overheating. The key drivers for growth acceleration include a global economic recovery and accelerating corporate and government investments. The PBoC and NDRC may have to tighten policies when overheating occurs.

Growth recovery in 2013

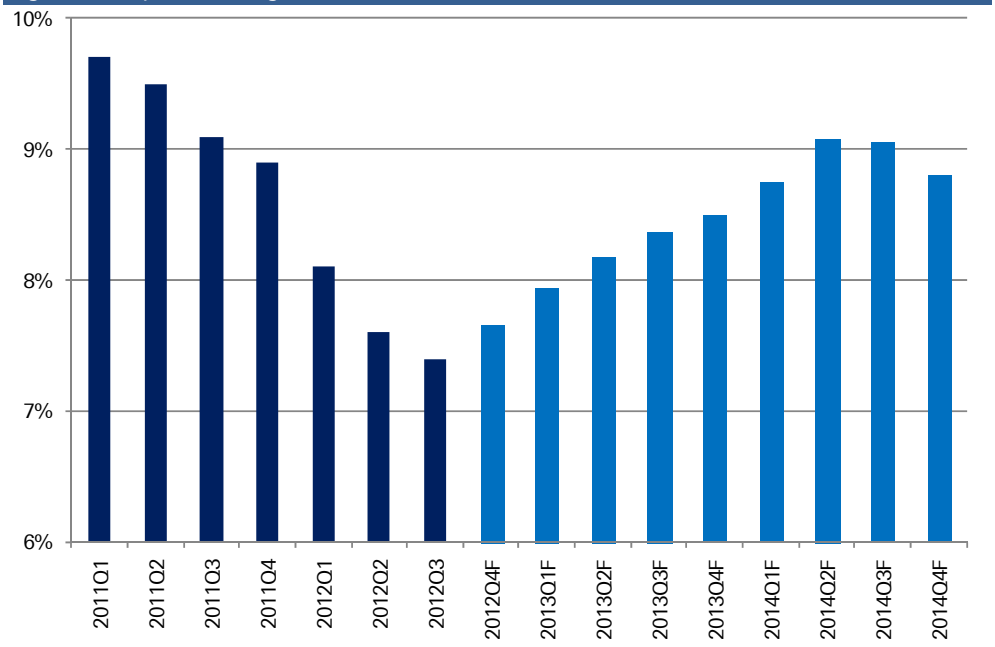
We maintain our 8.2% GDP growth forecast for 2013. On a quarterly basis, our updated yoy and qoq GDP growth forecasts are shown in the following figures (Figure 1, Figure 2).

Figure 1: Yoy and qoq annualized GDP growth forecasts

	yoy%	qoq%, saar
2011Q1	9.7%	9.1%
2011Q2	9.5%	10.0%
2011Q3	9.1%	9.5%
2011Q4	8.9%	7.8%
2012Q1	8.1%	6.6%
2012Q2	7.6%	7.4%
2012Q3	7.4%	9.1%
2012Q4F	7.7%	8.5%
2013Q1F	7.9%	8.2%
2013Q2F	8.2%	8.2%
2013Q3F	8.4%	8.6%
2013Q4F	8.5%	9.0%
2014Q1F	8.7%	9.2%
2014Q2F	9.1%	9.5%
2014Q3F	9.0%	8.5%
2014Q4F	8.8%	8.0%

Source: NBS and Deutsche Bank forecasts

Figure 2: Yoy real GDP growth forecasts



Source: CEIC, Deutsche Bank

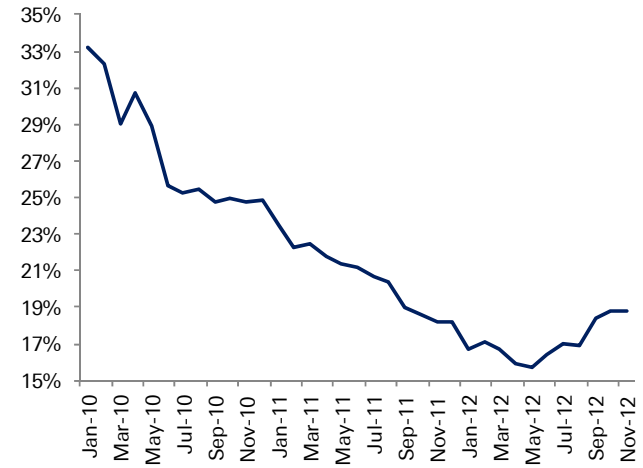
We believe 3Q 2012 was the trough for yoy GDP growth and a 4Q recovery is already underway. Since September, several positive changes have contributed to a modest acceleration in IP growth. First, raw material prices began to recover from mid-September, ending a five-month inventory destocking process. In October and November, the raw material inventory index in the PMI report continued to improve. Second, demand has recovered modestly in the past two months, with the new orders sub-index (partly reflecting end-user demand) rising to an average of 50.8 in October-November, up from an average of 49.2 in 3Q. Third, the growth in ytd total social financing (TSF) accelerated sharply to 23% yoy in November, up from 0% in the first half of 2012. The stock of TSF has grown at 19% in recent months, up from 16% in the

middle of 2012 (Figure 3). These figures, together with a 20.5% yoy rise in manufacturing profit growth in October, suggest that financing has become less of a constraint for corporate investment. Based on these trends, we expect 4Q GDP growth to rise to 7.7% yoy from 3Q's 7.4%.

For 2013, we expect a modest recovery in GDP growth to around 8.0% in 1H, before it reaches the potential of around 8.5% in 2H. This projection of a back-loaded recovery reflects both domestic and external factors. On the domestic front, we believe it will take another two to three quarters for the corporate sector to shakeout the excess capacity and normalize the manufacturing sector's capacity utilization rate. By 3Q this year, an improved capacity utilization rate and higher profitability will begin to drive an acceleration in corporate investment. We believe that the reduction in excess capacity started at the beginning of 2012, when listcos' capex growth fell to 7% yoy. Note that listcos' capex growth slowed even further (to -2% yoy) in 3Q. At the current pace, capacity growth is already slower than demand for capacity, and excess capacity should largely be absorbed by mid-2013.

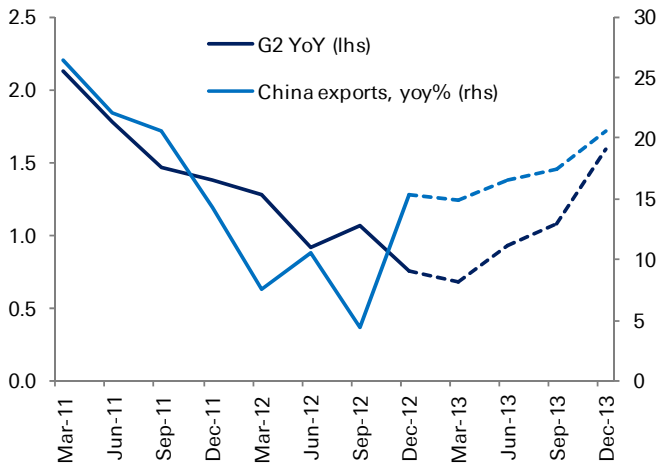
On the external front, Deutsche Bank's forecast shows that G2 (the US and EU) GDP growth will likely remain subdued in 1H 2013 (estimated at 0.8% yoy), partially due to the impact of the fiscal cliff in the US, before recovering to 1.4% yoy in 2H 2013, driven mainly by capex growth. Therefore, China's export growth will likely be relatively weak in 1H but stronger in 2H. Specifically, we expect China's export growth to rise from 8% in 1H to 12% in 2H (Figure 4).

Figure 3: Growth of stock of total social financing, yoy %



Source: Deutsche Bank , CEIC

Figure 4: G2 GDP growth and China exports growth forecasts, quarterly yoy



Source: Deutsche Bank, CEIC

Sensitivity of GDP growth to downside risks

The US debt ceiling

The US government and Congress reached a deal on extending many of the Bush tax cuts, but allowed the expiration of the payroll tax holiday and increased marginal income tax rates and rates on capital gains and dividends on high income individuals and households. Our US economists estimate that the expiration of the payroll tax holiday would subtract about 75 bps from real GDP growth via slower consumption. Higher marginal income tax rates and rates on capital gains and dividends will also have a mildly depressing impact on output that could be worth another 25 bps on lost output. Hence, we are likely to get at least a one percentage point drag on 2013 real GDP.

According to the CBO, the debt ceiling will need to be raised sometime later in February. This means that both the Administration and Congress will have to deal with the sequestration issue, which was delayed for two months in the cliff deal. The dilemma is that if there are no meaningful long-run reductions in spending, another debt downgrade is likely, which may negatively affect the financial markets; but if there are sharp reductions in spending, growth and sentiment will be hurt. To what extent 2013 growth will be at stake due to the battle on the debt ceiling remains uncertain.

For China, the key question is how a negative scenario for US fiscal cliff resolution may affect Chinese exports and GDP growth. Let's us assume that in a very negative scenario, an agreement cannot be reached within the next few months on the debt ceiling and spending cuts will be very aggressive, and as a result US GDP growth falls to zero. Also, assume that the US growth deceleration cuts Eurozone GDP growth to -1% via its spillover effect. Thus, G2 GDP growth in the negative scenario will be -0.5%, compared with our baseline forecast of 1.1%. Based on the historical correlation between G2 GDP and Chinese export growth, we estimate that the negative scenario would knock China's export growth by about 9ppts. This will in turn reduce China's GDP growth by about 1ppt.

Our quantitative analysis shows that the 2ppt GDP growth deceleration in 2011-2012 has led to overcapacity that requires a 1.5 year-long adjustment process of capacity reduction. Therefore, another 1ppt fall in demand as a percentage of GDP should potentially require a further nine-month extension to the adjustment period. In other words, the negative scenario that we assume for the US fiscal cliff may delay China's growth recovery by about three quarters compared with our baseline forecast.

Geopolitical risks in the Middle East and Asia

In addition to the US fiscal cliff, we also see potential military conflicts in the Middle East and an escalation of China-Japan tensions as key downside risks. As regards the Middle East, the biggest threat is that either Israel could strike Iran's nuclear program, or Iran would make a pre-emptive attack on Israel. Israeli Prime Minister, Benjamin Netanyahu, is likely to be re-elected in January 2013, and could interpret his victory as a 'mandate for war'. In Iran, Amir Ali Hajizadeh, a brigadier general of the Islamic Revolutionary Guard Corps, has said that: "Iran will not start any war, but it could launch a pre-emptive attack if it were sure that its enemies were putting the final touches to attacking it." According to some political analysts, the probability of Iran initiating a strike is growing as its economy is unlikely to hold for too long, given the economic sanctions by the West. If military conflict between Iran and Israel leads to a war in the Persian Gulf, this could drive a huge spike in oil prices, and even send the world economy back into a recession.

In Asia, the key risk is the escalation of tensions between China and Japan into military action. The recent election victory of the LDP and the appointment of Shinzo Abe as the new prime minister imply that Japan will likely adopt a more robust defense policy, which could antagonize China. On the other hand, the newly-elected Chinese leadership also appears to be more assertive in its foreign policy. In mid-December, a Chinese maritime surveillance aircraft cruising around the disputed islands was intercepted by several Japanese Air Self-Defense forces. This has caused a fierce debate in China on whether to dispatch its warships and air forces to the disputed territories. If the confrontation sparks a war, its impact on trade, investment and the financial markets in Asia will be substantial.

Upside risk to growth forecast: fiscal spending

In our baseline forecast, the 0.5ppt rise in GDP growth in 2013 is explained by a modest acceleration in export growth (by 2ppts) and a modest increase in corporate investment growth (by 2ppts), by assuming monetary and fiscal policies are largely neutral. However, we do believe that the main upside risks to our baseline growth forecast are that the government may budget a larger-than-expected fiscal deficit, and that stronger-than-expected fiscal revenue will allow higher-than-budgeted government capex. Based on our GDP forecast and the historical correlation between GDP and fiscal revenue, we found that 2013's fiscal revenue growth will likely reach 16%, up from 11% in 2012.

The outperformance of revenue growth vs. expectation will likely permit additional government spending of RMB500bn next year beyond the approved budget, after taking into account some allocation to the fiscal reserve fund. This means that the government's fiscal spending, especially capex, will likely exceed the original budget and provide some upside momentum to gross capital formation next year. In a sense, this extra government spending is equivalent to a pro-cyclical fiscal expansion. Assuming that the fiscal multiplier is 1, RMB500bn in fiscal expansion should boost GDP growth by 0.8ppts, if the fiscal deficit/GDP ratio is set at 1.6% in 2013, unchanged from 2012. If we assume that the 2013 fiscal deficit will be set at the more likely 1.3% of GDP, then the fiscal expansion could boost GDP by 0.5%.

Macro policy outlook for 2013

For 2013, we expect the government to set its GDP growth target to 7.5% and its CPI inflation target at around 3.5%. As in previous years, the growth target is set conservatively compared to what the government believes is achievable. At its economic work conference held in December, the government continued to label 2013's monetary policy as "prudent" and fiscal policy as "proactive". The M2 growth target may be later released via informal talks by senior officials from the State Council or the PBoC. The fiscal deficit target will be finalized only at March's National People's Congress.

We expect the M2 growth target be set at 13-14%, 2-3ppts higher than the likely nominal GDP growth rate (12%, based on 8% real GDP growth and 3% inflation). We will view a 13% number as a bit conservative, while 14% would be slightly expansionary. On the fiscal front, our academic view is that when the economy is recovering, the government should maintain the absolute level of the fiscal deficit or tolerate a small decrease in the absolute amount of the fiscal deficit (e.g., from RMB800bn in 2012 to RMB750bn in 2013). This implies that the fiscal deficit/GDP ratio "should" fall from 1.6% in 2012 to 1.3% in 2013. However, recent indications[1] suggest that the government may plan an increase in the fiscal deficit (e.g., to RMB1.2tr) in 2013. In addition, as we pointed out earlier, the cyclically-adjusted fiscal stance may still be quite expansionary in 2013, as revenue growth in 2013 may accelerate by as much as 5ppts (equivalent to RMB600bn).

As for specific monetary policy instruments, we expect a modest increase in benchmark interest rates towards the end of 2013, as inflation will likely rise from the current 2% to about 4% by end-2013, due to the increase in food prices and higher PPI (Figure 5). If food inflation is benign in 2013, then the PBoC may delay its rate hike to 2014. We are not looking for a change in RRR policy, as the BOP surplus seems to have resumed and a

[1] According to First Finance Daily (Jan 4 2013) reported that the government may be considering an increase in the fiscal deficit to RMB1.2tn this year, up from RMB800bn in 2012)http://epaper.yicai.com:81/site1/html/2013-01/04/content_164562.htm).

liquidity injection via FX reserve accumulation and open market operations will probably be sufficient to maintain the needed growth of M2.

Figure 5: Monthly CPI forecasts, yoy %

Source: Deutsche Bank, CEIC

On the exchange rate, we forecast a 2.5% RMB appreciation against the USD in the coming 12 months. This is more bullish than our earlier expectation a few months ago (we expected a 1.5% appreciation) due to: 1) the GDP growth outlook has improved, and we are more confident that China can achieve 8.2% GDP growth in 2013; 2) net capital inflow has resumed; 3) the recovery of the global economy in 2013 will mean that most EM currencies tend to appreciate vs. the USD.

More aggressive reforms and anti-corruption efforts from 2013

Contrary to the perception of many western observers who believe the new party leadership is conservative and risk averse, our view is that the new leaders will likely accelerate the pace of economic reforms and take more aggressive steps to fight corruption. Several indications from the past two weeks reinforce our expectations: First, Li Keqiang, who is expected to be the next premier, stressed that: "Reform is the biggest dividend for China", indicating that full efforts will be made to speed up economic reforms; Second, party secretary, Xi Jinping, and anti-corruption chief, Wang Qishan, repeatedly said that, "If unchecked, corruption will cause the collapse of the party and fall of the state." In a recent consultation meeting convened by Wang Qishan, the proposal of public disclosure of officials' wealth has become a highlight.

In the economic field, we classify reforms into three categories, according to our assessment of their probability in the coming three years (Figure 6):

Figure 6: Likelihood of economic reforms in the coming three years

Most likely reforms	Possible reforms	Least likely reforms
Resource pricing reform	Personal income tax reform	SOE reform
Interest rate liberalization	Hukou reform	Property tax
Capital account liberalization	Rural land reform	Central-local relations
Greater exchange rate flexibility	Budget transparency	
VAT reform	De-monopolization	
Resource/environmental tax reform	Pension reform	
Increase in social spending		

Source: Deutsche Bank

We believe that the most likely reforms include resource pricing reform, interest rate liberalization, capital account liberalization, increased exchange rate flexibility, VAT and resource tax reform, and an increase in social spending from the budget. These reforms have largely become a consensus in the government; technical preparation is most advanced; pilot programs have been run with generally successful results; and the opposition from interest groups is relatively less organized.

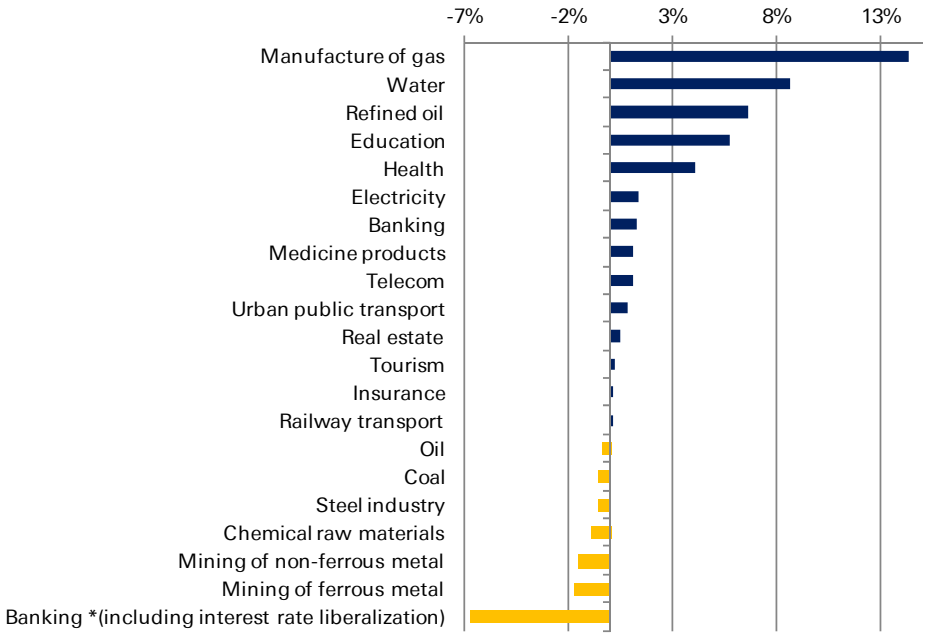
We classify personal income tax reform, Hukou reform, rural land reform, budget transparency, de-monopolization, and pension reform as desirable but likely to take somewhat longer than those in the first category. This is largely because, at the policy research level, there are still many competing proposals on technical design, there remain political and ideological concerns (especially on land reform and transfer of SOE shares to the pension system), and interest groups opposing reforms are relatively more vocal (e.g., on de-monopolization and aspects of income tax reform).

We believe SOE privatization, property tax, and central-local fiscal relations are the most difficult and therefore the least likely to take place in the coming few years. These reforms are subject to most ideological obstacles, perceived political risks and strongest opposition from interest groups, and have the least technical readiness.

We used our dynamic CGE model (Deutsche Bank CGE) to simulate the impact of the most likely reforms on 135 specific industries. The key results are (Figure 7):

- The top beneficiaries are natural gas manufacturing and distribution with a 14.4ppts increase in pre-tax margin, the water sector (+8.7%), petroleum processing (+6.6%), education (+5.8%), health (+4.1%) and electricity (+1.4%). Higher resource prices contribute greatly to resource sectors' benefit, since higher prices of their products improve these sectors' revenue and profit sustainability. Sectors like education, health and telecom benefit on the back of reasons such as a lower tax burden post VAT reform, higher fiscal expenditure in these fields and higher consumption as a share of GDP.
- At the same time, some sectors, mostly heavy industry ones, will be slightly hurt as higher resource prices incur higher costs and thus lower margins for them. Chemicals, non-ferrous and ferrous metal mining see a moderate decline in their gross margins compared with the base case without the reforms. In addition, a higher resource and environmental tax rate also causes net profit to shrink a little.

Figure 7: Impact of reforms on sectors' pre-tax margin (ppt change from baseline)



Source: Deutsche Bank

Watching out for overheating in 2014

In this note, we also briefly present our projection of China's 2014 GDP growth. We expect a further acceleration in GDP growth to 8.9% in 2014. Despite a gradual deceleration of growth potential due to changes in demographic factors – based on our model, structural factors such as demographics will likely lower China's growth potential by 0.2-0.3ppts per year between 2008 and 2018 – we believe several cyclical factors will continue to push up the GDP growth rate in 2014, or at least in the first half of 2014. These factors include:

First, stronger global demand will lift China's export growth. Our global forecast shows that G2 GDP growth will accelerate sharply to 2% in 2014 from 1.1% in 2013. This reflects the partial success of fiscal consolidation and rising credit growth in Eurozone, as well as the recovery in confidence after the resolution of the US fiscal cliff. Given that EM growth has very high correlation with G2, it is likely that global GDP growth may rise by 1ppt in 2014 as a result. This implies that China's export growth may accelerate to 15% in 2014 from 10% in 2013.

Second, domestic investment growth will enjoy upward momentum. As discussed before, we expect China's corporate sector to accelerate its investment in 2H next year on stronger profitability. This capex-led recovery tends to generate higher PPI and further improve profitability, and therefore create further incentives for companies to invest. In addition, better-than-expected fiscal revenue will allow the government to invest more, generating a passive fiscal stimulus to the economy. The combination of a corporate capex-led recovery and a de facto fiscal expansion will probably result in an overheating of the economy.

As for the timing of the potential economic overheating, our best guess is that GDP growth may exceed 9% yoy and CPI inflation may get closer to 4% yoy at the end of 2013 or early 2014. If that occurs, the PBoC will likely tighten monetary conditions by withdrawing liquidity from the banking system and raising interest rates. The NDRC may also begin to slow the pace of project approvals. This may lead to a deceleration in growth in the second half of 2014 (Figure 8).

Figure 8: Forecasts for Chinese macroeconomic indicators

	2011	2012F	2013F	2014F
National Income				
Nominal GDP (USD bn)	7270	7986	9078	10539
Population (mn)	1348	1355	1362	1369
GDP per capita (USD)	5393	5894	6665	7698
Real GDP (yoy%)[1]	9.3	7.7	8.2	8.9
Private consumption	9.0	8.4	8.8	8.8
Government consumption	9.9	8.4	9.0	8.5
Gross capital formation	10.0	7.5	8.5	10.0
Export of goods & services	12.6	7.0	8.0	12.0
Import of goods & services	14.0	7.8	9.5	13.5
Prices, Money and Banking				
CPI (yoy%) eop	4.1	2.0	4.0	3.5
CPI (yoy%) ann avg	5.4	2.6	3.0	3.5
Broad money (M2)	13.6	14.5	13.5	14.0
Bank credit (yoy%)	15.8	15.1	13.5	14.0
Fiscal Accounts (% of GDP)				
Budget surplus	-2.0	-1.6	-1.3	-1.0
Government revenue	22.7	22.7	23.2	23.4
Government expenditure	24.7	24.3	24.5	24.4
Primary surplus	-1.3	-0.9	-0.6	-0.3
External Accounts (USD bn)				
Merchandise exports	1898.6	2031.5	2234.7	2569.8
Merchandise imports	1743.5	1856.8	2088.9	2433.6
Trade balance	155.1	174.7	145.8	136.3
% of GDP	2.2	2.2	1.6	1.3
Current account balance	201.7	214.7	180.0	165.0
% of GDP	2.8	2.7	2.0	1.6
FDI (net)	170.4	140.0	100.0	70.0
FX reserves (USD bn)	3270.0	3300.0	3500.0	3700.0
FX rate (eop) CNY/USD	6.30	6.22	6.06	5.91
Debt Indicators (% of GDP)				
Government debt[2]	19.4	19.0	18.1	17.0
Domestic	18.9	18.5	17.6	16.5
External	0.5	0.5	0.5	0.5
Total external debt	9.6	10.4	10.2	10.4
in USD bn	695.0	830.0	930.0	1100.0
Short-term (% of total)	70.0	65.0	60.0	60.0
General (yoy%)				
Fixed asset inv't (nominal)	23.8	19.0	21.0	23.0
Retail sales (nominal)	17.1	14.2	14.8	15.2
Industrial production (real)	13.9	10.0	11.0	12.5
Merch exports (USD nominal)	20.3	8.0	10.0	15.0
Merch imports (USD nominal)	24.9	5.5	12.5	16.5
Financial Markets	*Current*	*3M*	*6M*	*12M*
1-year deposit rate	3.00	3.00	3.00	3.25
10-year yield (%)	3.55	3.60	3.65	3.70
CNY/USD	6.22	6.23	6.17	6.06

Source: CEIC, Deutsche Bank Global Markets Research, National Sources
Note: (1) Growth rates of GDP components may not match overall GDP growth rates due to inconsistency between historical data calculated from expenditure and product method. (2) Including bank recapitalization and AMC bonds issued

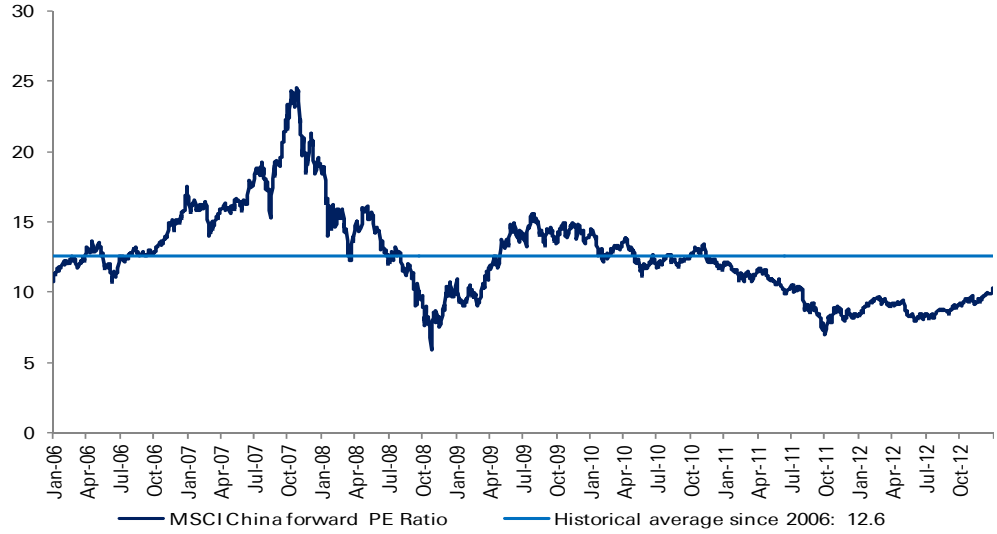
Equity market strategy

- We expect 15% upside to the MSCI China Index in the remainder of 2013 on growth recovery. This forecast is based on a modest re-rating of equity market valuations (i.e., forward P/E expanding to 10.8x from the current 10.3x) and normalized 10% EPS growth beyond 2013.
- Cement, construction, infrastructure machinery, and shipping companies will likely outperform, as 2013's cyclical recovery will be led mainly by investment and exports. However, the performance of FAI-related sectors will likely be short-lived as inflation concerns could lead to policy tightening by the end of 2013.
- Power, gas, water and refined oil sectors should benefit from resource pricing reform in 2013.
- Services, especially healthcare, should benefit from higher social spending, VAT reform, and acceleration in urbanization.
- Banks may continue to underperform for the first half of 2013, given that the system NPL ratio will likely rise further until 3Q, but large banks should outperform smaller banks.
- Coal and steel will likely underperform cement due to a slower pace of capacity rationalization.
- Macau VIP gaming, watches and gift card sales at department stores will likely suffer from revenue deceleration, due an aggressive anti-corruption campaign.

15% upside to MSCI China in rest of 2013

Based on our economic forecast of a gradual recovery of GDP growth to 8.0% in 1H13 and 8.5% in 2H13, we see 15% upside to the MSCI China Index by the end of 2013 from its current level. This upside can be split into two components: First, a 5% re-rating of the forward P/E from the current 10.3x to 10.8x (Figure 9); Second, a 10% EPS growth rate in 2014 to be priced in by the end of 2013. In the following section we discuss the rationales behind these two assumptions.

Figure 9: MSCI China forward P/E (10.3x) is far below historical average of 12.6x



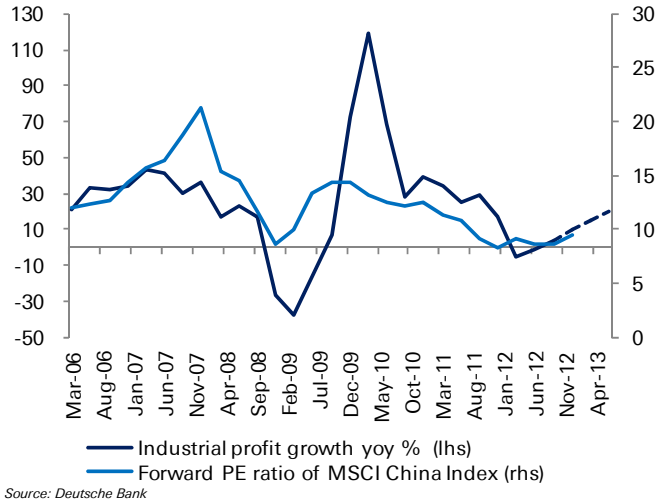
Source: Bloomberg Finance LP, Deutsche Bank

Re-rating of forward P/E

The following reasons help justify the modest 5% re-rating of MSCI China's forward P/E assumed in our calculation of index upside.

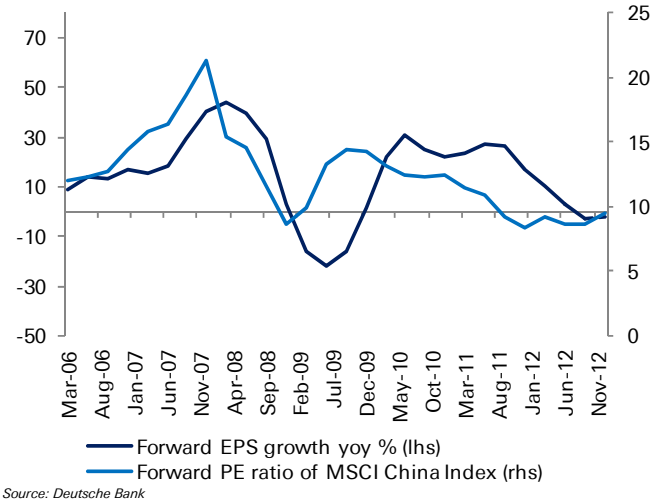
1) **Stronger earnings growth in 2013.** Given our forecast of economic recovery in 2013, manufacturing profit growth will likely accelerate to 20% in 2H13, up from nearly zero in the first 10 months of 2012 (Figure 10). Simply based on the historical correlation between manufacturing profit growth and MSCI China P/E, this could expand the forward P/E from 10.3x to 10.8x. Even if one takes into account the potential decline in banking sector profit due to rising NPL and further margin contraction, a 10% EPS growth rate for MSCI China is still achievable. Based on the correlation between MSCI China EPS growth and P/E, the 10% EPS growth in 2013 (vs. zero in 2012) should also justify an expansion of the market multiple to 10.7x (Figure 11).

Figure 10: Industrial profit growth vs. forward P/E



Source: Deutsche Bank

Figure 11: EPS growth vs. forward P/E



Source: Deutsche Bank

2) **Reduced political uncertainty and refocus on reforms**. In 2012, market sentiment suffered not only from the significant economic deceleration and a decline in profits in many sectors, but also from the political uncertainty associated with the Bo Xilai scandal and the 18th Party Congress. Now that the 18th Party Congress is behind us, and the new leadership has signaled a very strong intention to fight corruption and continue with market-oriented economic reforms, we think the political and policy environment will improve. In the past few weeks, the new Politburo announced that it would adopt eight measures to reduce formalities and "reconnect" with the People, and Li Keqiang emphasized that "reform is the biggest dividend." The fact that the new leaders will refocus on reforms to improve economic efficiency, income equality, and reduce corruption should increasingly be viewed positively by investors.

3) **Reduced uncertainties in the US and Eurozone.** Globally, we expect the US fiscal cliff be finally resolved in early 2013 and the Eurozone economy to regain positive sequential growth from 2Q next year. The improvement in the external environment should also help lift investor confidence in EM and China equity markets.

2014 EPS growth

By the end of 2013, the market expectation of EPS growth in 2014 will be another important determinant of the MSCI China Index, in addition to the forward P/E. Our economic forecasts show that China's GDP growth will likely accelerate further to 8.9% in 2014, up from 8.2% in 2013. This reflects our view that investment growth, which recovers in 2H13, will continue with a momentum into 2014 and the further improvement in external demand (due to a better US and EU outlook) will also help lift aggregate demand for the economy. We expect this cyclical uptrend to continue until 1H 2014 when GDP growth peaks at slightly over 9%, despite the long-term structural deceleration of the economy due to demographic factors.

With 8.9% GDP growth in 2014, historical correlation suggests that EPS growth should accelerate to 10-15%. To be conservative – taking into account the further NIM contraction in the banking system due to interest rate liberalization, we believe an EPS growth rate of 10% in 2014 will most likely be achievable.

Earnings and valuation outlook by sector

The following table shows the projections of sector EPS growth by Deutsche Bank analysts and their valuations relative to historical averages. These forecasts show that earnings growth will likely be robust in sectors including shipping, power, materials, autos, and insurance (Figure 12) in 2013. Valuation-wise, the forward P/Es of shipping, power, and materials sectors are trading at significant discounts to their historical averages.

Figure 12: Sector valuation (based on stocks under Deutsche Bank coverage)

Sectors	No. of Companies	Sector Weights	2013F Earnings growth	P/E discount to 5-yr average
Consumer Discretionary	**24**	**3%**	**30%**	**31%**
Automobiles & Components	7	1%	32%	16%
Others	17	2%	27%	42%
Consumer Staples	**12**	**3%**	**12%**	**19%**
Energy	**8**	**20%**	**8%**	**18%**
Oil and Gas	5	16%	12%	15%
Coal	4	4%	-8%	32%
Financials	**42**	**47%**	**1%**	**25%**
Banks	17	36%	-3%	19%
Brokers	4	2%	17%	-19%
Insurance	3	5%	30%	28%
Real Estate	18	4%	27%	49%
Health Care	**8**	**1%**	**19%**	**36%**
Industrials	**37**	**6%**	**35%**	**43%**
Capital goods	25	4%	19%	46%
Transportation-Airlines	4	1%	20%	18%
Transportation-Shipping &	5	1%	89%	58%
Transportation-Road	3	0%	6%	0%
Information Technology	**17**	**5%**	**28%**	**34%**
Materials	**16**	**3%**	**70%**	**38%**
Telecommunication Services	**4**	**11%**	**7%**	**23%**
Utilities	**15**	**2%**	**38%**	**40%**
Gas	4	1%	23%	13%
Power	5	1%	50%	56%
Others	6	1%	21%	31%
Total coverage	**183**	**100%**	**7%**	**26%**

Source: Deutsche Bank

In addition to analysts' forecasts, which are largely based on indications from companies and a bottom-up sector outlook, several other factors will also be important to share price performance. These include:

1) The impact of growth recovery that is not fully reflected in analyst models. We believe that 2013 growth recovery will likely be driven by a rebound in investment and export growth, which suggests that demand and EPS growth in sectors like raw materials and international shipping may still be underestimated by analysts;

2) Reforms that we believe are more likely to occur than general perceptions. In particular, resource pricing reform, and an increase in social spending, and VAT reform will most likely provide additional earnings upside to sectors in the power, water, gas, oil refining and healthcare sectors, which are largely not priced in yet by our equity analysts; and

3) Sector re-rating when earnings growth recovers. History tells us that when the economy begins to recover, a number of cyclical sectors tend to benefit from a significant valuation re-rating. Although empirically it is difficult to find a solid pattern (as to which sector tends to see more of a re-rating than others), as each period of economic recovery is driven by somewhat different factors, such a potential does provide an important upside in 2013.

To sum up, we expect the materials, shipping, power, insurance, and healthcare sectors to show at least three out of four qualifying criteria: strong earnings growth; significant P/E discounts to historical averages; likely P/E expansion; and macro catalysts that are not yet fully priced in by analysts' forecasts. These constitute some of our favored sectors in our 2013 equity strategy.

In the next two sections, we elaborate on how the two major macro trends may affect sectors. One is the impact of the cyclical recovery. The other is the range of structural reforms.

Impact of cyclical recovery on sectors

As we pointed out in the economic section of this report, we expect the economic recovery to be led mainly by corporate investment and, to a lesser extent, by export growth. Corporate investment will likely rise as a result of rising profitability after the adjustment period that shakes out the excess capacity. In the section on "overcapacity reduction", we used a quantitative model to estimate that duration of the adjustment period. We found that for the industrial sector as a whole, the adjustment process started from the beginning of 2012 and will likely last for another 7-8 months. That is, by 3Q13, the industrial sector's capacity utilization rate should recover to a normal rate. As a result of increased utilization, unit production costs will fall and the pricing power of the companies will rise. With higher selling prices and falling costs, profitability will increase. Companies will then be incentivized to make more aggressive investment. In addition, as profits are a major source of financing (historically they fund about 50% of corporate investments), higher profitability will also make investments feasible from a funding perspective.

In addition, fiscal revenue will likely outperform the budget announced in March 2013 due to improved growth performance. Therefore, actual government spending will likely deliver a stronger-than-budgeted fiscal expansion, mainly in the form of capex. We think that government capex can exceed the original budget by as much as RMB500bn

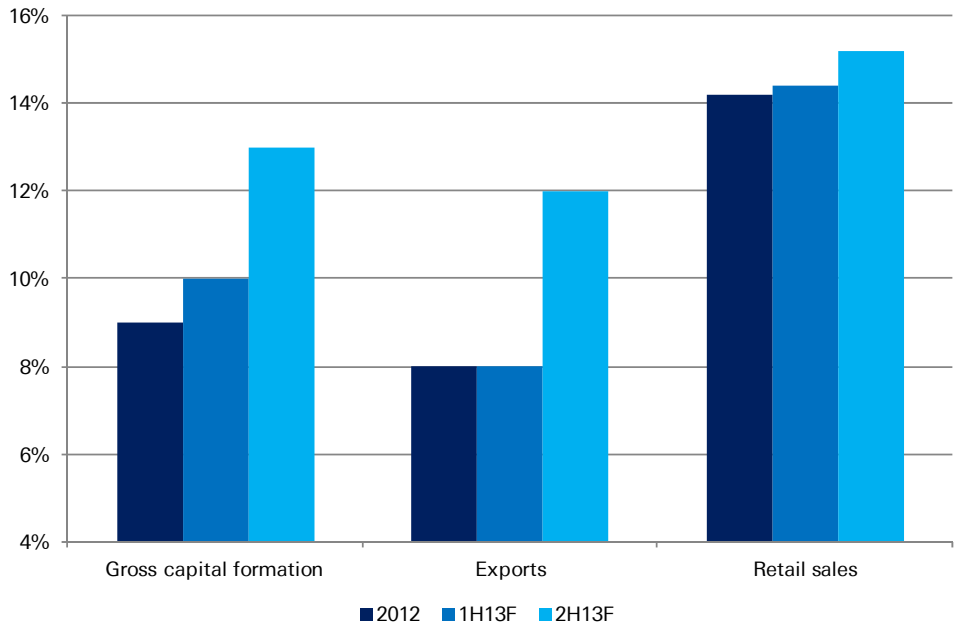
in 2013, with back-loaded implementation, i.e., extra spending, to take place mainly in 2H 2013.

On the export side, our global economic forecast suggests that G2 GDP growth will rise to 1.4% yoy in 2H13, up from 0.8% in 1H13. This will translate into a Chinese export growth rate of 12% in 2H, up from 8% in 1H.

As for consumption, our expectation is that nominal retail sales growth will accelerate only marginally to 14.8% in 2013 from 14.2% in 2012. This is because retail sales growth has not decelerated much, i.e., it has not been the main reason for the past two years' cyclical deceleration, and thus its upside when the economy recovers will also be limited.

The following chart compares the pace of recovery of the three main sources of economic growth: gross capital formation, exports, and retail consumption. It is apparent that most of the recovery will be led by capex growth, followed by exports. And in terms of nominal growth, the recovery looks back-loaded, partly because inflationary pressure will likely rise faster in 2H 2013 (Figure 13).

Figure 13: Recovery led by capex and exports and is back-loaded: yoy % growth



Source: Wind, Deutsche Bank

Three investment implications can be derived from the above chart:

1) **Investment- and export-related sectors may outperform consumer sectors in the first 2-3 quarters of 2013;**

2) **The performance of export-related sectors may lag that of investment-related sectors;**

3) **Investment-related sectors may begin to face headwinds by the end of 2013 or early 2014, due to the inflation concern and the resulting policy tightening to contain investment growth.**

Note that typical investment-related sectors include raw materials, construction services, and construction machinery producers. Export-related firms include shipping, ports and exporters.

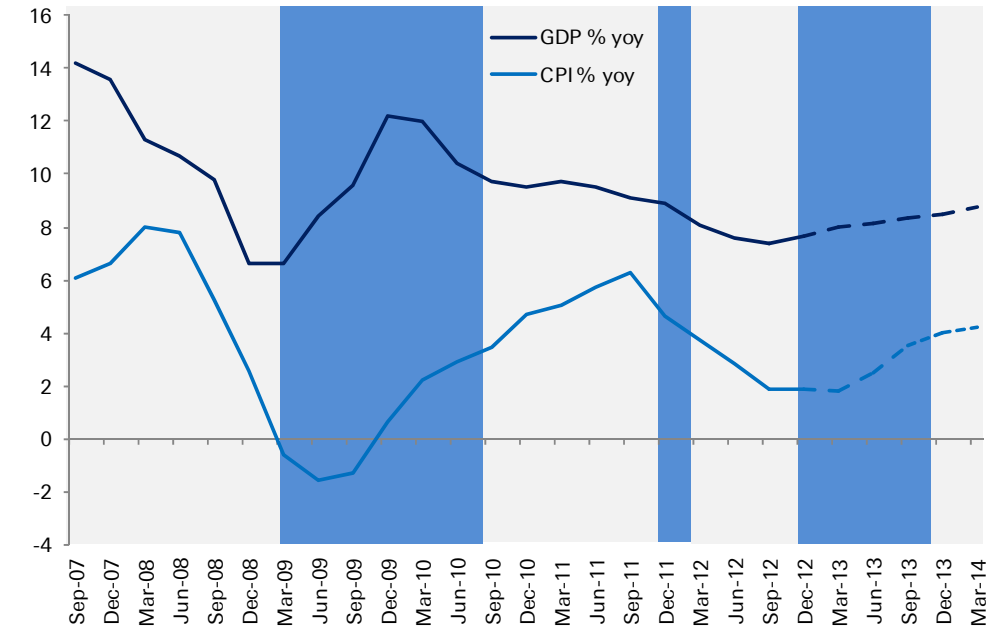
Impact of reforms and structural themes on sectors

In addition to the cyclical trend as described above, the other major factors that will influence the earnings outlook of many sectors are reforms and structural themes. Several major themes are discussed in detail in separate sections of this report. In the following section we briefly summarize the key conclusions of our research on the sectoral implications of reforms and structural trends.

1) Resource pricing reform: positive for power, gas, water and refined oil

For two reasons we believe that resource pricing reform will likely accelerate in 2013. First, 2013's macro environment is very conducive to the reform. Historically, when GDP growth is too low (economic downturn) or CPI inflation is too high, the government has been reluctant to implement resource pricing reforms. When GDP growth is low, company profits are typically low or falling. In this environment, liberalizing resource prices (normally implying higher resource prices) would further enhance production costs and depress profits. When inflation is high, liberalization resource prices tend to exacerbate the inflationary pressure. The following chart shows that in the past five years, there was only one window of opportunity for such reform (when GDP growth is not too low, and CPI inflation is not too high). All other periods in the past five years were characterized either by overheating (CPI inflation over 4%) or economic downturn (GDP growth below 8%). Looking forward, our forecast shows that the first three quarters of 2013 will provide a rare window of opportunity for resource pricing reform (Figure 14).

Figure 14: 2013 offers a rare opportunity for pricing reforms (blue color indicates an appropriate CPI and GDP environment for reforms)



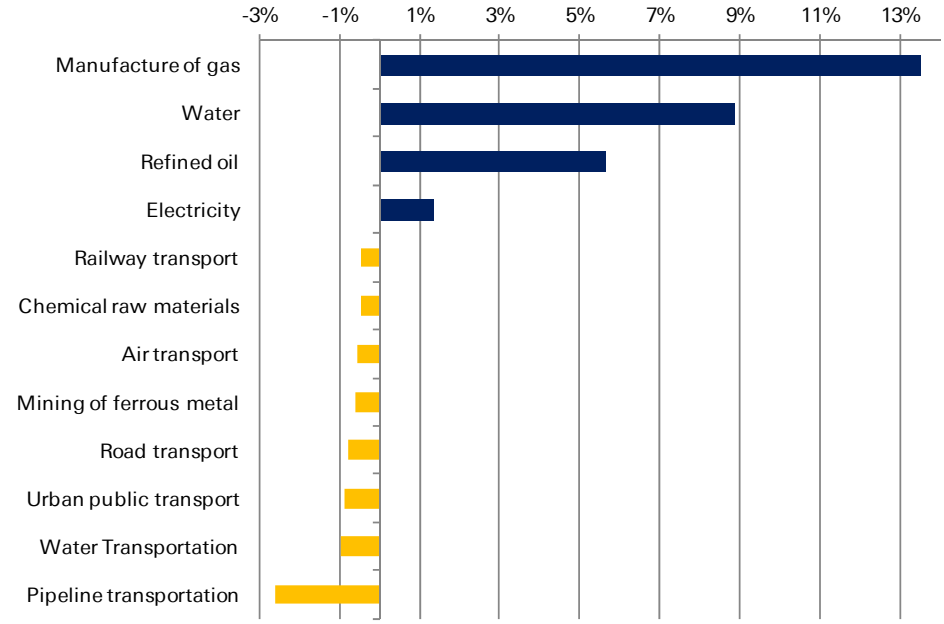
Source: Deutsche Bank, CEIC

Second, technically, many of the resource pricing reforms are ready to be rolled out. For example, water price hikes have been implemented in a few dozen cities with success. Gas pricing reform was conducted in Guangdong and Guangxi and the experience is

ready to be transferred to other places. As for power tariff reform, the recent State Council decision to abolish controls on coal prices sends a strong signal that the government is getting ready to liberalize power tariffs as well. The timetable for refined oil pricing reform is relatively unclear but the broad direction of lifting (normalizing) the refining margin remains unchanged.

As discussed in our recent report, "*Reforms after Leadership Transition*" (published on 19 November 2012), these reforms should substantially boost the pre-tax margin of the gas, water, refined oil, and power sectors. The following chart reproduces our CGE model estimates of the reform impact on profit margin, assuming a 30% rise in water and gas tariffs, a 5% rise in the power tariff, and a 10% increase in refined oil prices relative to the baseline (Figure 15).

Figure 15: Impact of resource pricing reform on sector pre-tax margin



Source: Deutsche Bank

2) New catalysts for services: positive for healthcare

We see three policy catalysts that will further enhance the growth of the service sectors in the coming few years: 1) the government will implement a VAT reform which will benefit many service sectors; 2) to address the issue of growing income inequality, the government will likely increase its social expenditure substantially in the coming few years, benefiting the healthcare and education sectors; and 3) accelerating the pace of urbanization has become the main strategy for growth in the coming decade. Urbanization will push up demand for health care, tourism, and entertainment. Healthcare, insurance, and construction will benefit from stronger demand for urban services.

3) A rebound in property prices

We believe that property demand will remain healthy as urbanization will likely speed up and affordability has improved. This, combined with a decline in inventory and the deceleration of floor space started, suggests upward pressure on property prices. Our model estimates a 5% rise in property prices in major cities in 2013, but we would not be surprised if in a few places, price hikes were to reach 10%. Developers that have replenished their land bank at low land costs, have the ability to grow via new acquisitions or construction starts, and those with revenue exposure to prime city-center areas should outperform.

4) NPL cycle: banks may underperform in 1H

Banks' share prices may continue to underperform the index for the first half of 2013 for two reasons. First, the NPL ratio will likely rise further until 3Q, despite GDP growth recovery. By looking at the correlation between GDP growth and NPL ratios in several countries, we found that the NPL ratio is a lagging indicator. That is, banks' NPL ratio tends to peak only after GDP growth recovers to its potential. In other words, from the time of the economy bottoming (in the case of China, 3Q 2012) to the time of achieving potential GDP growth of 8.5% (2H 2013), bank NPLs will continue to climb. Second, China and other countries' market experiences also suggest that banks' NPL performance has a concurrent correlation with their share price performance.

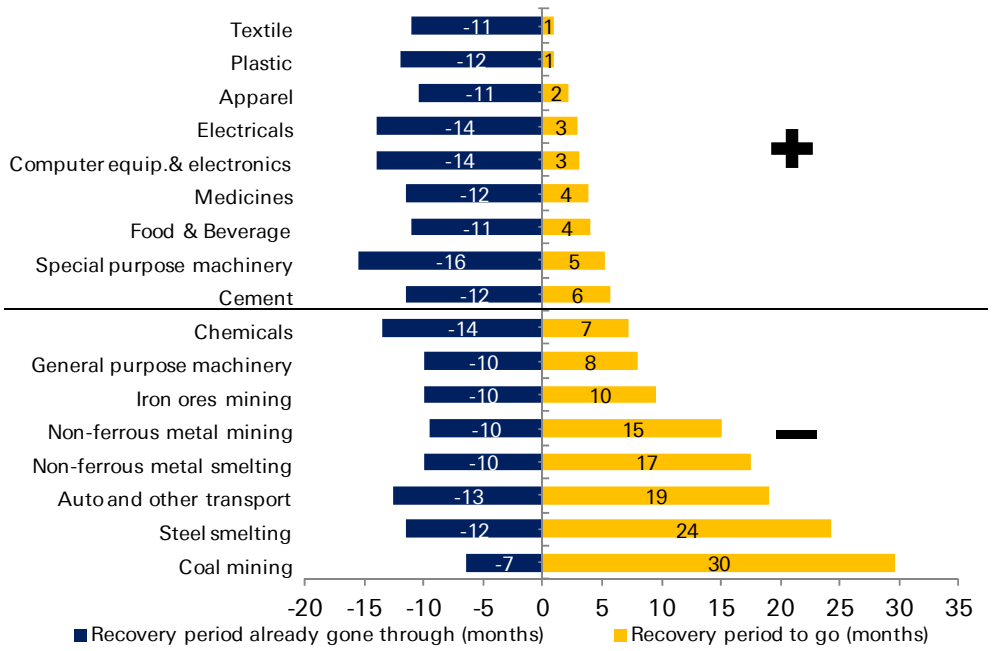
5) Overcapacity: cement to outperform coal and steel

In our section on "Forecasting the pace of capacity rationalization," we predict that the textile/apparel, electronics, PC, medicine, and cement sectors will likely recover at a relatively faster pace as their overcapacity is less severe and SOEs are not important players in these markets. We found that the normalization of these sectors' capacity utilization and profit growth can take place as soon as within the next two quarters.

On the other hand, sectors such as coal, steel, auto, and non-ferrous metal could experience prolonged adjustment periods, due to severe overcapacity and SOEs' lack of adjustment flexibility. With a stable demand outlook, their adjustments can take at least two more quarters and up to three years. Investors should therefore be more patient in expecting a full recovery of utilization rates and profit growth in these sectors.

The following chart shows our estimated "remaining adjustment periods" for 19 sectors. One stock implication is that coal and steel, while equally dependent on investment growth, will likely resume good earnings growth at a slower pace than cement, in which sector capacity rationalization is faster (Figure 16).

Figure 16: Model prediction of the "remaining adjustment period" (in number of months)



Source: Deutsche Bank

6) Anti-corruption: negative for VIP gaming and selected luxury sales

We believe that China's new leadership will turn substantially more aggressive in fighting corruption in 2013, as it clearly recognizes that "if unchecked, corruption could lead to the demise of the Party and the fall of the State." Specific actions that could be taken include a clampdown on officials' consumption at restaurants, a tightening in the enforcement of rules on the receipt of gifts, restrictions on overseas visits by officials, especially to Macau, and requiring public disclosure of officials' personal and family wealth in pilot regions and departments.

These actions will likely result in, in our view, revenue deceleration in sectors such as Macau VIP gaming, highly-priced spirits (such as Maotai and Wuliangye), luxury watches, and gift card sales at department stores, and may result in the selling of equity stakes and properties by corrupt officials who fear future regulation on wealth disclosure.[2] While these equity market implications may be tentatively negative for the above-mentioned sectors and some companies, we think the overall impact on the Chinese equity market will be very limited, as these sectors account for only 3.7% of A-share market cap and 0.6% of MSCI China market cap. Over the medium term, we believe that the success of the anti-corruption program will lead to increased social stability and improved economic efficiency, and will, in turn, enhance investor confidence and market valuation.

Our top buy list for 2013

In this section, we present our updated top buy list for 2013. These stocks reflect the macro trends and themes that we highlighted in the previous section and are discussed in detail in subsequent chapters. They also take into account valuation factors and company-specific catalysts. The linkages between the each of the stocks in the list and the macro trends and themes are as follows:

1. **Investment-led growth recovery in 2013:** We believe that the incremental change in 2013 growth will be mainly explained by corporate and infrastructure investments. This macro trend implies that cement producers, construction companies, and selected real estate developers will likely outperform. **CR Cement (1313.HK, HKD5.32), China Communications Construction (1800.HK, HKD7.64), and COLI (0688.HK, HKD24.35)** are good-quality beneficiaries, in our view. In addition, our analysis suggests that cement will likely perform better than steel and coal due to faster capacity rationalization.

2. **Export recovery in 2H2013:** In our baseline projection, export growth will accelerate in 2H 2012, reflecting an improved US outlook after overcoming the fiscal cliff and a gradual European economic recovery. Shipping companies, such as **China Shipping Container Lines (2866.HK, HKD2.46)**, will be the most leveraged play on export recovery, as a result of a rebound in global demand.

3. **Resource pricing reform in 2013:** We believe that one of the most important and fruitful reforms in 2013 will be of the resource pricing mechanisms. This reform will substantially improve the level and stability of sectors such as power, refined oil, gas and water. **Huaneng Power Intl (0902.HK, HKD7.20) and Sinopec (0386.HK, HKD3.63)** are the two large cap names that will benefit from this reform.

[2] Note that DB gaming analyst Karen Tang's current view on the Macau Gaming sector as a whole is constructive, as she sees cyclical factors that may support gaming revenue and the completion of high speed railway to help drive the mass market demand. Our discussion here, focusing on anti-corruption, refers to only one downside risk to the sector.

4. **VAT and social spending reforms:** The VAT reform will likely improve the profitability of selected service companies such as **CCC (1800.HK, HKD7.64) and China Unicom (0762.HK, HKD12.86).** The social spending reform should continue to support healthcare players such as **Mindray (MR.N, USD31.28).** In addition, health-related companies will continue to enjoy strong secular growth due to lower penetration.

5. **Financial liberalization and NPL cycle:** Financial liberalization will continue to favor non-bank financials such as **Ping An (2318.HK, HKD70.00)**, while further depressing the NIM of the banking system. In addition, our analysis of the NPL cycle in 2013 suggests that large banks – such as **Bank of China (3988.HK, HKD3.63) --** with low exposure to SMEs should avoid a substantial increase in credit costs and thus outperform smaller banks in 1H.

In addition to the above macro themes, we also consider a number of company-level factors in selecting our top Buys (Figure 17):

- Rated as Buy by Deutsche Bank analysts;

Figure 17: Valuations of our top picks – 2013 outlook

Company	Ticker	Sector	Rating	3-Jan Price local	M. cap (US$m)	PE 2013	PE 2014	PB 2013	EPS CAGR 13-14	PEG (2013PE/ EPS CAGR 13-14)	PE Discount to 5Y AVG
Bank of China	3988.HK	Banks	Buy	3.63	130,717	6.7	7.2	0.9	-1%	NA	22%
Sinopec-H	0386.HK	Energy	Buy	9.16	102,452	9.4	8.4	1.2	15%	0.62	9%
Ping An	2318.HK	Insurance	Buy	70.00	63,031	16.7	15.6	2.6	18%	0.91	75%
China Unicom	0762.HK	Telecommunication Services	Buy	12.86	39,091	23.6	15.3	1.1	57%	0.41	46%
Coli	0688.HK	Real Estate	Buy	24.35	25,671	8.5	6.9	1.9	32%	0.27	43%
China Comms Construct	1800.HK	Capital Goods	Buy	7.64	15,941	8.3	7.2	1.1	10%	0.81	42%
Huaneng Power Intl	0902.HK	Utilities	Buy	7.20	13,055	8.1	7.8	1.3	28%	0.29	59%
Cr Cement	1313.HK	Materials	Buy	5.32	4,474	10.1	7.5	1.4	48%	0.21	19%
China Shipping Container	2866.HK	Transportation	Buy	2.46	3,708	11.7	7.8	0.8	NA	NA	NA
Mindray Medical	MR.N	Health Care Equipment & Services	Buy	31.28	3,605	15.5	13.8	2.4	13%	1.22	26%
Average						11.9	5.7	1.1	24%	0.59	38%
MSCI China						10.0	9.0	1.6	6%	1.54	31%

Source: Bloomberg Finance LP, Deutsche Bank

- Earnings upside provided by the macro trends and reform themes is not yet fully reflected in analysts' forecasts;
- Valuations based on analysts' EPS forecasts are not demanding. For example, the average PEG of the 10 stocks we selected is about 0.6x vs. 1.5x for MSCI China.

In the remainder of this section, we summarize some of the company-level catalysts for these companies.

Bank of China (3988.HK, Buy, HKD3.63): Besides its relatively low SME exposure, we like BOC as it will also benefit from further progress towards RMB internationalization and capital account liberalization in 2013. These reforms will substantially boost FX-related transactions, a market in which BOC has a leading position. In addition, interest

rate liberalization will be less negative to large banks like BOC. We believe the BOC's current valuation presents an attractive risk/reward profile. Our bank analyst, Tracy Yu, also sees a lower risk of BOC being subject to selling pressure from major strategic investors. Her target price is based on 1.0x 2013E P/B.

Sinopec (0386.HK, Buy, HKD9.16): The company explores crude oil and natural gas in China and also owns major refineries, which will benefit from the oil and gas pricing reforms. Sinopec has reported strong 3Q12 results, and Deutsche Bank analyst David Hurd believes that Sinopec's refining business could break even in 2013. The potential pricing reforms and the likelihood of the parentco's injection of E&P assets should provide longevity (2013-15E) to Sinopec's growth story. David expects an EPS growth rate of 19% in 2013 and 15% CAGR 2013-2014.

Ping An (2318.HK, Buy, HKD70.00) We expect Ping An to benefit most from the A-share market recovery given its relatively high leverage to equity investments and wider exposure to the general economy through its securities, trust and banking businesses. We believe market concerns on the capital position should ease with improved A-share market performance. In addition, Ping An should be well positioned to capitalize on positive regulatory changes. Its stronger exposure to China's coastal cities with more sophisticated customer base and agents should enhance its ability to sell more innovative products.

China Unicom (0762.HK, Buy, HKD12.86): Deutsche Bank telco analyst Alan Hellawell believes the MIIT and relevant government organization's single highest priority will be to continue restructuring. In particular, the government promotion of TD technologies would be beneficial to China Unicom. In 2013, we envision China Unicom to deliver the greatest growth of the three operators from both top and bottom-line perspectives, the latter largely due to an operational leverage. We raise Unicom 3G net adds for 2013 from 36m to 38m in expectation of continued momentum in 3G expansion. Although China Unicom has the highest 2013 P/E multiple of 22.8x among China telcos, its 2013 PEG is relatively low (0.4x) due to its strong EPS growth (2013-2014 EPS CAGR of 57%).

COLI (0688.HK, Buy, HKD24.35): In a market where most developers have less than five years' track record of consistent growth, COLI stands out with its continuous strong growth over the past decade. Deutsche Bank property analyst Tony Tsang believes that COLI will continue to widen its lead over peers and trade at premium valuations. While P/E and P/B are around their historical averages, COLI is still attractive (17% discount to NAV; 8.0x 2013E P/E), given its consistent strong growth. We see strong upside potential to COLI's NAV as its property sales and land bank expansion continues.

China Communications Construction (1800.HK, Buy, HKD7.64): There are positive catalysts ahead for the overall sector, including 1) stronger railway and subway investment, 2) potential VAT reform; 3) a stable or slight improvement on margin resulted from changes in business mix. Deutsche Bank infrastructure analyst Phyllis Wang forecasts China's railway infrastructure capex to grow 6% in 2013 and 3% 2014, and subway infrastructure spending to grow 25% in 2013. Given that CCC engages primarily in infrastructure construction (mainly ports/roads/bridges/railways), Phyllis expects CCC to perform well in 2013, due to the company's strong earnings visibility, good execution and risk management. Besides, we believe CCC is one of the biggest beneficiaries of the potential upside to infrastructure spending. CCC is trading at 8.3x 2013E P/E, which looks attractive on the 10% EPS CAGR during 2013-14E.

Huaneng Power Intl (0902.HK, Buy, HKD7.20): Huaneng Power Intl develops, constructs, owns and operates coal-fired power plants throughout China. The company is the largest IPP in Asia and we expect it to be one of the key beneficiaries of the

improving sector fundamentals, including stronger demand and the power tariff reform. Our sector analyst Michael Tong recommends Buy on the stock as: 1) its valuation of 1.2x 2013E P/B is still attractive; 2) the parentco reiterated its commitment to injecting all unlisted thermal/hydro assets into the listco by 2015, with assets in Shandong province mentioned in particular; 3) Huaneng has turned FCF positive, and we expect this trend to continue to 2013 due to reduced capex and improved profitability.

CR cement (1313.HK, Buy, HKD5.32): China Resources Cement produces, distributes and sells cement, clinker and concrete. For the sector as a whole, Deutsche Bank analyst Johnson Wan expects that as property and infrastructure construction revives and captive supply supports production halts in 2013, we are likely to see more stable cement prices and an earnings recovery. We like CR Cement especially, for it will likely enjoy a healthy turnaround in supply/demand in South China. Johnson values CRC at 12x P/E, in line with its historical mid-cycle average, on 2013E earnings.

China Shipping Container (2866.HK, Buy, HKD2.46): The company is the second largest container liner in China and ranks eighth in the world in terms of operating capacity. It operates in all the major international lanes and holds a dominant position in the domestic market. Deutsche Bank analyst Sky Hong believes CSCL will be a major beneficiary of export recovery in 2013. Specifically, given that furniture is the largest cargo for the company's trans-pacific route, the potential US housing recovery may lead to positive surprises on this route going forward. CSCL is thus our top Buy in the container space. We like it because of its higher leverage to the spot market and reasonable valuation (0.8x P/B). Sky's target price of HKD3.1 is based on 1.1x P/B.

Mindray (MR.N, Buy, USD31.28): Mindray is a major player in the health equipment space, which should benefit from the further increase in government spending on health and continuous demand growth. Deutsche Bank healthcare analyst Jack Hu expects further upside for Mindray, due to 1) its robust growth in China is likely to continue for at least two years, as the infrastructure build-up cycle is completed and equipment purchases ensue, 2) it is aggressively taking market share internationally, 3) it has room for operating margin stabilization. Mindray is trading at 17x 2013E EPS, with a 2013-2015E EPS CAGR of 12%.

Pace of capacity rationalization

China bears have been saying that the colossal overcapacity is going to swamp the country in a wave of bankruptcies. However, our research, which carefully compares history and the current state of play, tells a different story: not only is the overcapacity situation less severe this time than in 1998, but also the capacity reduction process already kicked off at the beginning of 2012. Our model, which quantified the duration of the "adjustment period", shows that at the current pace of capacity reduction, **China's industrial utilization rate will likely return to normal by 3Q 2013, and thus manufacturing profit growth will likely recover to around 20% yoy by then,** up from 0.5% in the first ten months of 2012.

At the sector level, our model suggests that the **coal, steel, auto, and non-ferrous metal sectors will likely experience the longest adjustment (capacity reduction) process, while light manufacturing such as textile, electronics, and PC sectors, together with the cement sector will likely recover at a relatively faster pace**. We found that the three key factors that determine the adjustment period of an industry are the severity of overcapacity, the share of SOEs in total production, and the investment growth rate in past years.

Ownership & demand shock are key determinants of recovery pace

We believe that the trajectory of China's economic recovery this time will be similar to the three-year U-shaped recovery from 1998 to 2001 (see our report, *"A U-shaped recovery and Q4 catalysts"*, published on 20 October 2012), but the most interesting issue for most investors is how long the adjustment period (i.e., bottom phase of the U shape) will be this time, as this will, to a large extent, determine the timing of their investments. In this section, we look at two of the most important explanatory variables – demand shock and ownership structure – that influence the duration of the adjustment period.

We start with an analysis on causes of the economic adjustment in 1998-2000 (Figure 18) and compare them with the current phase of economic deceleration.

Figure 18: Similarity between 1998-2000 adjustment and the current one

	1998-2000	Current
Overcapacity sectors	All (esp. light industries)	All (esp. heavy industries)
External environment	Asian financial crisis	European debt crisis
Domestic causes	Banks' inability to lend	Restrictions on loans to LGFVs
Recovery process	U-shaped	U-shaped
Government stimulus	Limited	Limited

Source: Deutsche Bank

In 1998, the combination of overinvestment in prior years and a major external demand shock due to the Asia Financial Crisis resulted in serious overcapacity. Largely as a result of the external shock, exports declined 15% in 1998. The sharp contraction in demand hammered companies' profit margin and wiped out lots of businesses. In 1999, 35% of the SOEs were operating at a loss. During 1998-2001 about 30 million SOE employees were made redundant, 20% of SOEs were closed down. It was a

painful capacity reduction process that lasted for about three years, before the economy began to see normalized capacity utilization rates and growth. During the process, the government was unable to provide much policy stimulus as the banking system was laden with 50% of NPLs.

At the sector level, it is very interesting to see that, in the aftermath of the Asian Financial Crisis, the performance of the 41 industrial sectors varied a great deal: some sectors recovered much faster than others due to faster adjustments. We define the adjustment period as the duration starting from the first sharp decline in employment growth and ending at its first positive growth. We found that the adjustment period varied from 13 months (1.1 years) to 60 months (5 years) across industries. Industries including electrical, metallic products, plastic, apparel, leather and furniture experienced a much speedier adjustment than sectors such as steel, coal, non-ferrous, and chemicals.

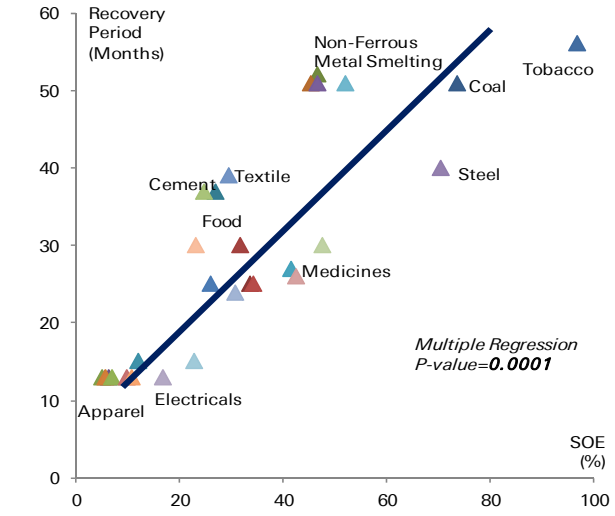
What are the key determinants of the adjustment period? After conducting statistical tests with many different variables, our analysis concludes that the most important explanatory variables are 1) the size of the demand shock (severity of overcapacity); and 2) the ownership structure.

Our cross-sectional regression has employed the following variables: 1) the dependent variable is the adjustment period of the 41 industries (as defined above[3]); 2) independent variable A is percentage of output from state-owned enterprises (SOEs) in total output in the industry in 1998; 3) independent variable B is the demand shock, measured by the percentage change of 1998 industry Return on Asset (ROA) from its 5-year-average (1993-1998).

The results are surprisingly robust in statistical terms. The R-square of this regression reached 0.7. The coefficients on two independent variables are statistically highly significant with P values at 0.0001 and 0.01 respectively. All the signs are correct. That is, the higher the SOE dominance and the more severe the demand shock, the slower the pace of the adjustment (Figure 19, Figure 20).

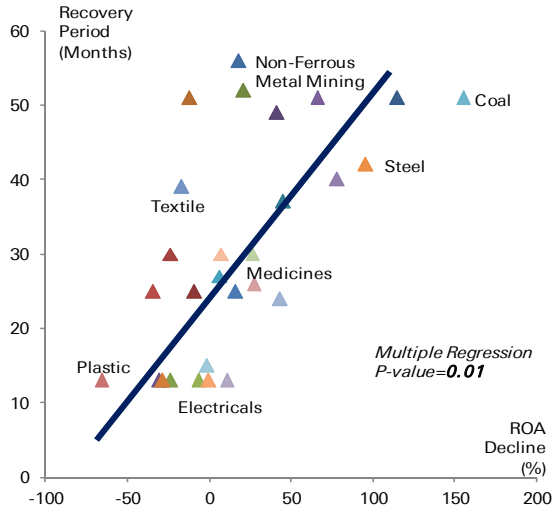
[3] For the industries whose employment number is inapplicable before 1999, its production value is used as a substitute. The two time series have shown a correlation of 0.8.

Figure 19: Percentage of SOE affects recovery speed



Source: CEIC, Deutsche Bank

Figure 20: Severity of overcapacity links recovery speed



Source: CEIC, Deutsche Bank

The rationales are straightforward. First, SOEs generally bear more social responsibilities and thus are less flexible in cutting capacity via shutting down firms and laying off workers. Therefore, they tend to be slower in responding to changes in market conditions. This means that over-capacity and low utilization tend to last longer in sectors dominated by SOEs. Second, if over-capacity is serious, as evidenced by a very sharp fall in profitability such as ROA, it obviously takes longer for this industry to remove the excess capacity, i.e., the adjustment period tends to be longer.

Note that over-investment and a sharp reduction in demand can both contribute to overcapacity. We believe that the fall in ROA has captured both factors. When we added past FAI growth into the cross-sector regression, it did not enhance the explanatory power of the model.

Faster adjustment this time than 1998-2000

By examining the aforementioned key determinants of recovery, we conclude that the outlook for this round of adjustment is more optimistic. First, SOEs, which produced 41% of total industrial output in 1997, have accounted for a mere 27% of production in recent years (Figure 21). Taking the textile industry for example, in which state-owned factories suffered bitterly during the Asian financial crisis, has cut its SOE percentage to 2% in 2010 from 29% in 1997. And all other sectors also witnessed a reduction in the significance of SOEs. The rise in the share of the private sector in total production implies that the economy is now more flexible in shaking out overcapacity.

Figure 21: With SOEs as a smaller part of industrial output, the adjustment will be quicker

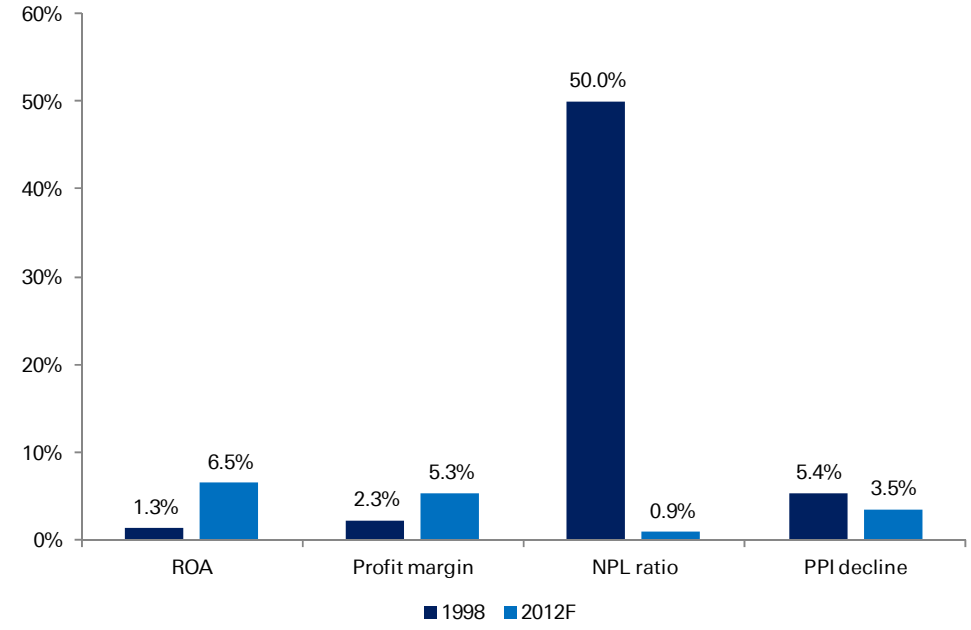
SOE output as % of total industrial output

	1997	2010	% Change
Coal mining	73%	56%	-17%
Oil and gas extraction	92%	95%	3%
Iron Ores Mining	34%	14%	-20%
Non-ferrous metal mining	46%	27%	-19%
Food	27%	7%	-20%
Beverage	45%	16%	-29%
Textile	32%	2%	-29%
Oil processing	83%	71%	-12%
Chemicals	47%	19%	-27%
Medicines	41%	13%	-29%
Cement	25%	10%	-15%
Steel smelting	70%	39%	-31%
Non-ferrous metal smelting	52%	28%	-24%
General purpose machinery	31%	13%	-17%
Electricals	17%	9%	-8%
Computer equip. & electronics	23%	8%	-15%
Power & heat power	73%	92%	20%
Gas	89%	44%	-45%
Water	81%	69%	-12%

Source: NBS,WIND and Deutsche Bank

Secondly, the overcapacity situation in 2012 is more manageable than that in 1998. Note that in 1998, manufacturing industry underperformed its 5-year average ROA by 23%, while the same figure for 1H12 is only 4%; the overall industrial ROA numbers are 1.3% (1998) and 6.5% (2012). A series of other indicators are also supporting this conclusion. With less overcapacity, the pricing power (as indicated by PPI) of the manufacturing sector declined less than expected (3% in 2012 versus 5.4% in 1998), and therefore the profit margin of enterprises remained relatively more resilient (5.3% in 2012 versus 2.3% in 1998). The NPL ratio, as a result of better financial performance, is much healthier (0.9%) in 2012 versus about 50% in 1998. The economy clearly demonstrates its ability for quick capacity absorption (Figure 22). All these factors suggest that the economy is "less sick" in 2012 than in 1998, and as a result a faster recovery will ensue.

Figure 22: Overcapacity is less serious this time than in 1998



Source: WIND, CEIC, and Deutsche Bank

Only 2-3 quarters before utilization rate normalizes

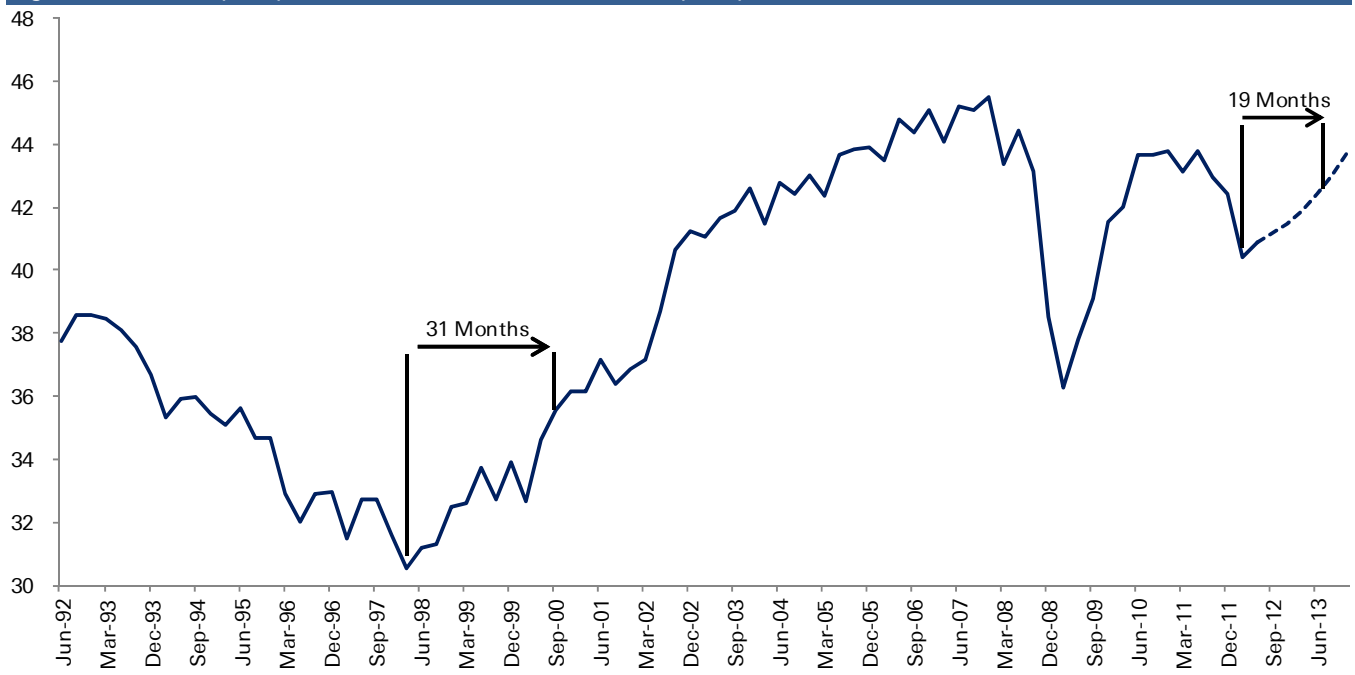
As elaborated in the previous section, we believe the bottom of the U-shaped recovery (i.e., the adjustment period) will be relatively shorter than in 1998-2000. This conclusion is supported by our cross-sectional regression of the "adjustment period" of 41 sectors on SOE dominance and overcapacity. By applying the severity of overcapacity (the reduction of ROA in 2012 from its 5-year average) and the average output share of SOEs in the entire industrial sector in 2012 to the model, we found that the adjustment period for the industrial industry as a whole will last about 19 months, or 1.6 years. This is roughly half of the length of the adjustment period during 1998-2000.

A remaining key question is: when did the adjustment period start? We found that this process kicked off from the beginning of the year, as capex growth (of 2,400 listed companies) fell sharply to 7% yoy in 1H12 and to -2% in 3Q (from over 19% in 2011) and the resulting capacity growth declined to a rate below the growth of demand for capacity. Therefore, at the time of the writing of this report, we have gone through 11 months of adjustment and 7-8 months (or, to be less precise, two to three quarters) are left for the remainder of the adjustment period. That is, by the middle of 2013, the economy should see the normalization of capacity utilization.

By the time capacity utilization normalizes, one should expect an average capacity utilization diffusion index seen in "normal times" before the crisis. Figure 23 shows the diffusion index of manufacturing capacity utilization published based on the PBoC's 5,000-company survey. It shows that the drop in the index between mid-2011 (when GDP growth and inflation were considered very comfortable) and 1Q 2012 (the recent trough of 40.4) was about 3ppts. We expect it to return to around 43 by the middle of 2013. The latest figure shows that a modest recovery of utilization began in 2Q, as the index rose to 40.9. A similar recovery process during the Asia financial crisis started in early 1998 but lasted for more than 30 months before the index returned to a normalized rate at end-2000. [4]

[4] Note this is a diffusion index of capacity utilization, rather than a capacity utilization rate. The diffusion index is calculated based on 5,000 company managers' perceptions of "improving" or "deteriorating" utilization, and therefore its mean (or the "normalized rate") tends to shift overtime depending on managers' changing view of

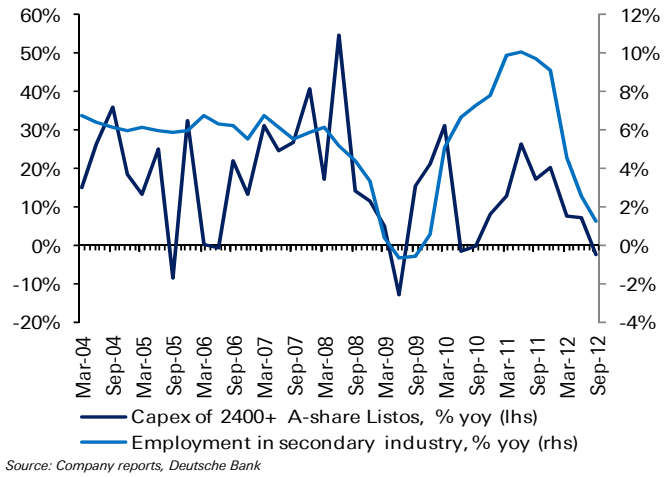
Figure 23: Recovery may take 19 months this time (PBoC capacity utilization diffusion index)



Source: WIND, Deutsche Bank

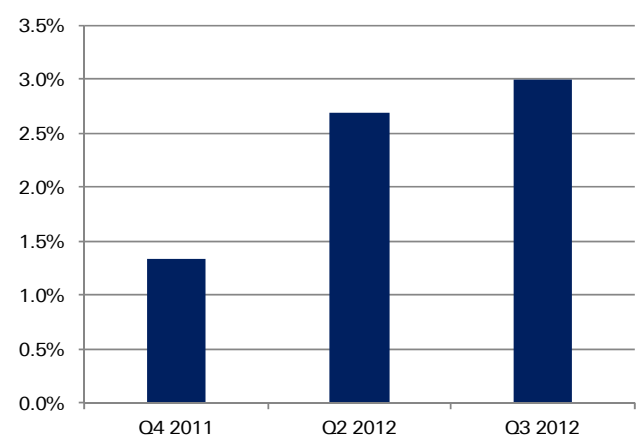
The recent employment data confirms our view that adjustment started from about a year ago. The yoy growth of employment in the industrial sector declined sharply from 11% yoy growth a year ago to only 1.3% in 3Q12. The magnitude of the employment growth deceleration (by 10ppts) within one year was in fact more drastic than that in 2008-09. In 2008-09, the cumulative decline in the yoy growth rate of industrial employment was only 6ppts (Figure 24). Anecdotal stories that we hear from Wenzhou, Guangdong, and banks lending to SMEs suggest that many SMEs have indeed opted to close their operations in the past year. As a result, the NPL ratio in Wenzhou, a city where virtually every family runs an SME, has risen to 3% in 3Q12 from 1.3% in 4Q11 (Figure 25).

Figure 24: Capacity reduction has been underway



Source: Company reports, Deutsche Bank

Figure 25: Wenzhou city's Bank NPL ratio



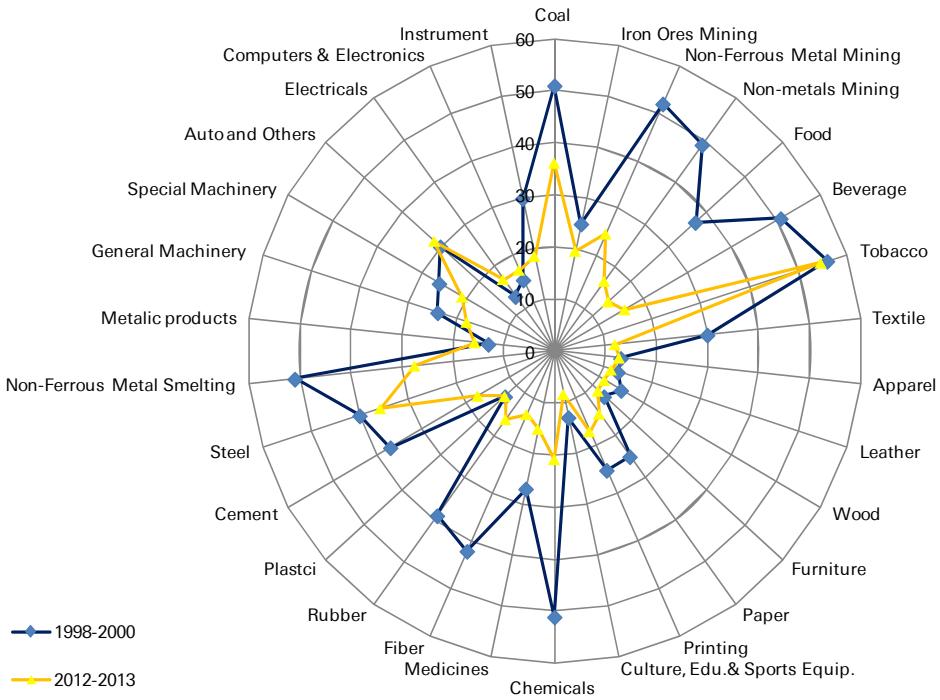
Source: Deutsche Bank

"what is normal". We take the most recent "mean" in a stable macro environment (e.g., 2011) as the reference for normalized utilization rate, which can be very different from what was regarded as a norm 15 years ago.

Which sectors will adjust more quickly?

In order to be more useful for investors who look at specific sectors and companies, we need to quantify the pace of adjustment by sector. Applying the coefficients derived from our cross-sectional regression model to 41 sectors based on the current 2012 SOE shares and overcapacity measures, we found that the duration of their adjustment process will vary from as short as 12 months (timber manufacture) to as long as 56 months (tobacco industry) (Figure 26).

Figure 26: Recovery will be faster for most industries this time than in 1998-2000 (in number of months)

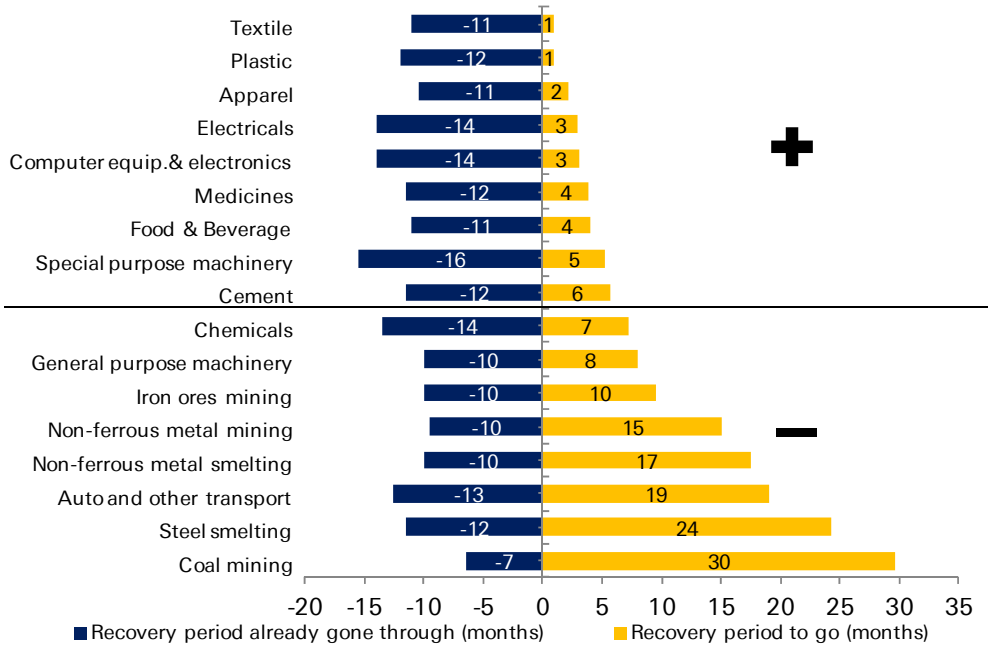


Source: Deutsche Bank

After knowing the duration of the adjustment, we need to pin down the starting time of the adjustment for each industry. Our definition of the beginning of the adjustment period is the first major drop in yoy employment growth. We found that this time around, some industries, like fibers, started to adjust more than 13 months ago, while the others, like instrument production, have just witnessed the beginning of the process.

Based on the duration (estimated by the regression model) and the abovementioned starting time, we can then calculate the "remaining adjustment period" for each of the 41 industries (Figure 27). Please note that a few sectors that are subject to price controls (e.g. power, oil and water) are not included, as their profitability is largely a function of government policy rather than degree of overcapacity.

Figure 27: Model prediction of the "remaining adjustment period" (in number of months)



Source: Deutsche Bank

The nine sectors that will lead the recovery have an average of only three months before their utilization rates are expected to be normalized according to our model. These sectors include plastic, textiles, computer equipment and electronics, apparel and footwear, food, electrical, medicines, special purpose machinery and cement. These sectors have two common features: 1) SOEs are a very small part of sector output, with an average SOE share at 10.5% (vs. 27% for the entire industrial sector), and 2) a less dramatic ROA decline (by 1.7% compared with the 5-year average, vs. 4% for the entire industrial sector), suggesting that overcapacity is manageable. Keeping other things constant, listed companies in these sectors should enjoy better potential upside in the next few months, as their earnings will likely rally at a faster pace than others.

Other sectors with a sharper fall in ROA (i.e., worse overcapacity) and high SOE dominance, will take longer to recover. The remaining adjustment periods may last from seven months to 30 months according to our model. These sectors are beverages, chemicals, general purpose machinery, iron ore mining, non-ferrous metal mining, non-ferrous metal smelting, autos, steel and coal. Note that SOEs still produce 31% of total output in these eight sectors, and they experienced a 6.4% ROA contraction in 2012.

Thus, for these sectors, investors should be a bit more patient in anticipating profit recovery, given that overcapacity will be a lingering problem for longer. Of course, there could be upside surprises (i.e., faster-than-expected adjustment) due to government policies. For example, the NDRC has been advocating "capacity swap and reduction" in areas like power, coal, steel, non-ferrous metals, coke, paper-making, tannery, printing and dyeing. The principle is that increased new capacity in these industries should be smaller than the elimination of outdated ones. Some outdated capacity, once eliminated, will never be restored. Therefore, we may have reasons to hope that even in SOE-dominated sectors, this time around the capacity reduction could be slightly faster than our model predicts.

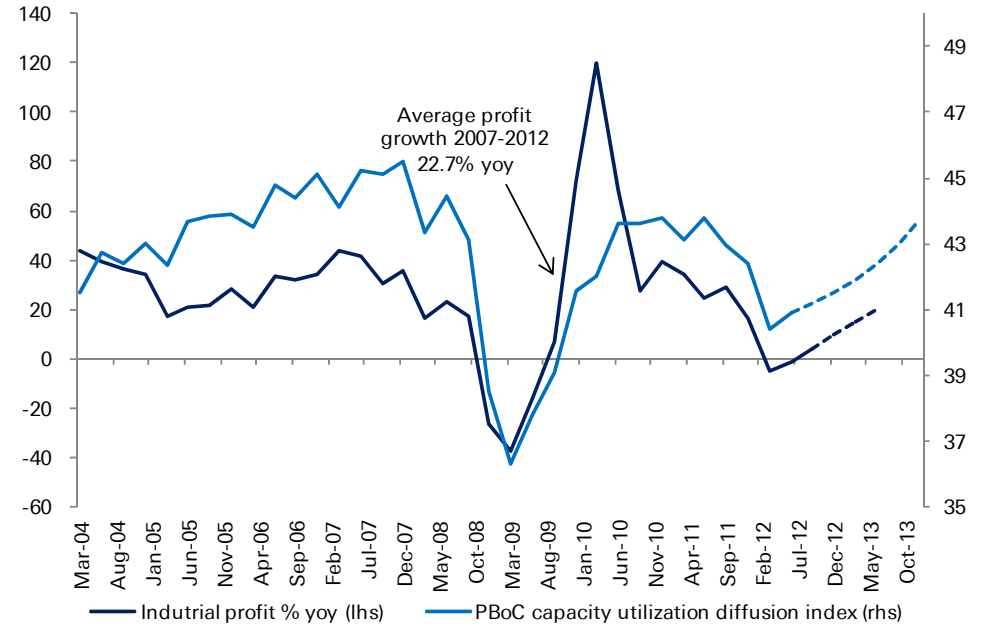
Timings of market rerating and sector rotation

Relative to China bears who believe the current excess capacity is more serious than ever, we are more constructive. Our quantitative study shows that overcapacity is in fact much less serious now than 2012 and SOEs as a percentage of total production is much lower than in 1998, and therefore the adjustment period that is needed to shake out overcapacity will be shorter.

Better utilization will drive higher profit growth and market rerating

We believe that capacity utilization will likely return to normal by 3Q 2013 and as a result, industrial profit growth will likely recover to around 20% yoy by then. This implies that the market P/E will likely experience a meaningful re-rating in the coming 2-3 quarters. Our expectation of industrial profit growth is based on a strong historical correlation (60%) between profit and capacity utilization (Figure 28). Based on our previous analysis that the utilization diffusion index is likely to recover to 43 by mid-2013, it implies that manufacturing profit growth will rise to 20% yoy. The logic behind the correlation is straightforward: 1) as the utilization rate rises, the unit production cost will go down and profit will rise; 2) when overcapacity is taken out of the system, companies' pricing power will rise and better output pricing will push up profits.

Figure 28:Profit growth should normalize in mid-2013

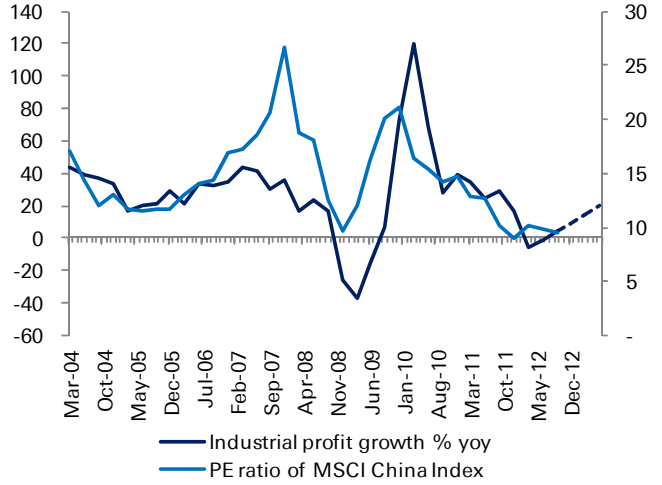


Source: CEIC, Deutsche Bank

Stronger profit growth will almost certainly push up market valuation. Historically, a 10ppt rise in yoy industrial profit growth implies a 0.5pt increase in trailing P/E. This implies, ceteris paribus, a rerating of MSCI China P/E ratio by about 10% in 2013. Of course, in forecasting the market valuation for next year, we will have to take into account many other factors, such as the likely profit decline in the banking sector due to further margin contraction and rising NPLs. Nevertheless, we believe that 20% industrial profit growth will be a solid support for at least a modest rerating of MSCI China's forward P/E in 2012 (Figure 29).

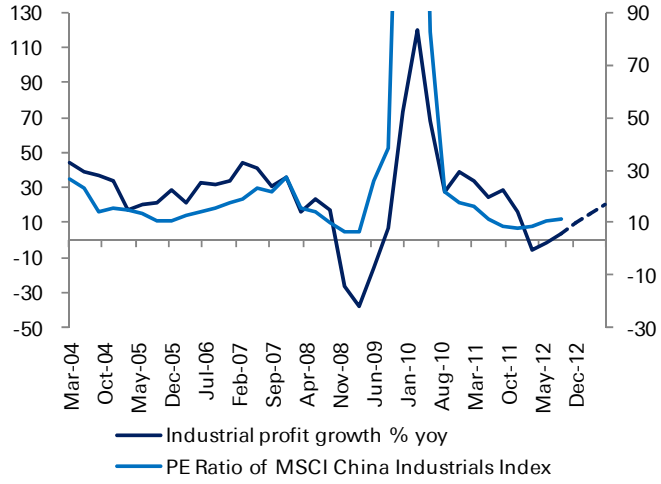
As industrial profit has an even stronger correlation with the market P/E of MSCI China's Industrial Index, Figure 30 suggests that this sector's P/E ratio could rise by as much as 30% in 2013.

Figure 29: MSCI China P/E ratio rerates according to industrial profit growth



Source: CEIC, Bloomberg Finance LP, Deutsche Bank

Figure 30: MSCI China Industrial Index P/E ratio rerates according to industrial profit growth



Source: CEIC, Bloomberg Finance LP, Deutsche Bank

Sectoral implications

Our sector-by-sector prediction of the "remaining adjustment period" suggests that the textile/apparel, electronics, PC, medicine, and cement sectors will likely recover at a relatively faster pace as their overcapacity is less severe and SOEs are not important players in these markets. We found that the normalization of these sectors' capacity utilization and profit growth can take place as soon as within the next two quarters.

On the other hand, sectors such as coal, steel, auto, and non-ferrous metal could experience prolonged adjustment periods due to severe overcapacity and SOEs' lack of adjustment flexibility. With a stable demand outlook, their adjustments can take at least two more quarters and up to three years. Investors should therefore be more patient in expecting a full recovery of utilization rates and profit growth in these sectors.

Resource pricing reform

Resource pricing reforms are likely to accelerate in 2013 as they have largely become a consensus in the government and are technically ready. Pilot programs have been run with generally successful results and opposition from interest groups is relatively less organized. A low CPI inflation environment also provides a precious opportunity for the reforms.

The ultimate objectives of resource pricing reforms are to reduce over-investment and dependency on the natural resources of the economy. The operating targets of the reforms are to normalize the ROEs/profit margins for the resource sectors by pricing resources according to market equilibriums or close substitutes.

Sectors like natural gas, power, water and refined oil will enjoy direct and significant benefits from the reforms. Our preferred stocks in the resource sectors include Huaneng Power (0902.HK), BEWG (0371.HK), and Sinopec (0386.HK).

In the following sections of this chapter, we will provide details on the rationales for the reforms, how each of these reforms may be designed and the likely impact on sectors and companies.

No.1: Gas tariff reform

Momentum of reform

The gas tariff reform looks set to be expedited in the near term, as suggested by the recent government initiatives and provincial level experiments. Pilot programs for gas tariff reform started in December 2011 in Guangdong and Guangxi provinces. The new "market net-back value" method linking domestic gas tariffs to imported alternative fuels was lunched. On 30 October 2012, a new natural gas utilization policy was unveiled by the State Council. It highlights the urgency of improving the pricing mechanism, rationalizing the relative prices between gas and other alternative fuels, and establishing a linkage between upstream and downstream prices of natural gas. On 7 December 2012, the Sichuan Development and Reform Commission announced that it would set the city gate natural gas tariff in Sichuan with a price ceiling of RMB1.98/cm for all users (except for residential, vehicle CNG, and fertilizer users), roughly a 20% rise from the original price.

We believe that given the recent momentum, gas price reform will accelerate in 2013. Within three years, the average price of natural gas in China will likely increase cumulatively by about 30% as a result of the reform.

Current mechanism and its drawbacks

There are three components of natural gas prices in China: upstream price (wellhead price), gas transportation fee, and city gas distribution tariff. The first two are fixed by the NDRC while the last is regulated by local pricing authorities. All three components are "in principle" decided based on a cost-plus pricing method, taking into account the production/transportation cost and relevant taxes. The actual implementation of this pricing mechanism is problematic, for it doesn't reflect the fact that gas producers actually import a significant amount of natural gas from abroad at much more expensive prices, and the 'cost' that NDRC refers is domestic gas production cost. Two major drawbacks were created: 1) gas prices and the profit margin of upstream

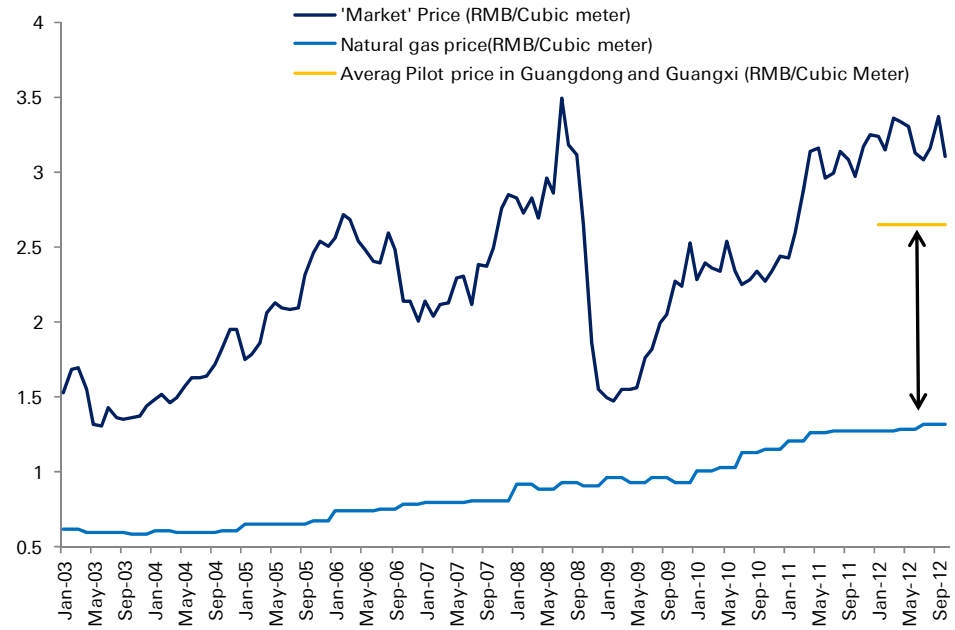
producers were artificially suppressed; 2) gas prices tend to be very sticky and therefore the profit margin of natural gas producers are volatile.

Natural gas price is much lower than what it should be

The current natural gas price in most locations (other than the three pilot regions for reform) is at almost a 60% discount to the "market price" (the level it should be). The way to find the "market price" is to calculate a weighted average of the alternative fuels with similar heating value. Taking Guandong and Guangxi's pilot programs as an example, in calculating this theoretical 'market' natural gas price, fuel oil and liquefied petroleum gas are used as alternatives, with a weight of 60% and 40% respectively.

The dark blue line in Figure 31 is the calculated 'market' price of natural gas. The current natural gas price is cheap implied by the large significant gap between the 'market' price and the actual natural gas price. The room for potential price hikes is ample. The current average national natural gas price is RMB1.3/cubic meter while the prices in Guangdong and Guangxi (where the pilot reform programs are implemented) are RMB2.75/cubic meter and RMB2.57/cubic meter, respectively. The average natural gas price in Guangdong and Guangxi is now about 100% higher than the current national price. Further, the current average natural gas price of Guangdong and Guangxi is at c.15% discount to the implied 'market' price level.

Figure 31: Implied 'market' natural gas prices are much higher than the actual prices



Source: WIND, Deutsche Bank

No.2: Power tariff reform

Power tariff reform to accelerate in 2013

We believe power tariff reform will accelerate in 2013. The most recent indication is that on 25 December 2012, the State Council Office approved the NDRC proposal to abolish the contract thermal coal prices, effective from 1 January 2013. It is a historical breakthrough, which ended the "dual track" coal pricing system that has been in place for the last 20 years.

This decision to put an end to the thermal coal price control essentially signals that the government is determined to move forward on the power tariff reform. This is because with the market volatility of coal prices, a sticky power tariff will imply violent changes in the profitability of the power sector and its ability/incentive to produce power. To ensure stable power supply, a power tariff reform should be in place in the very near future.

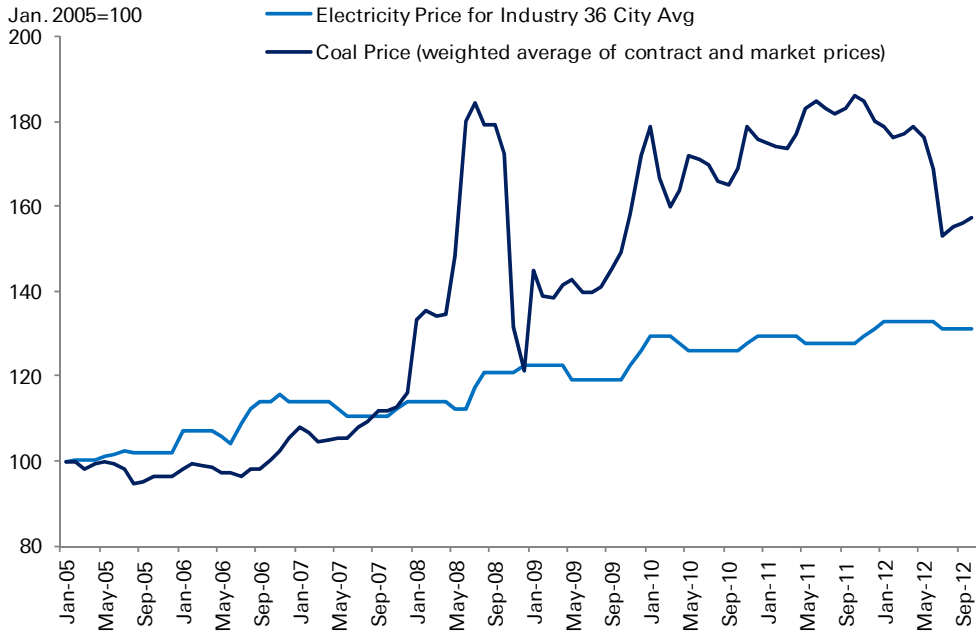
In the 25 December document from the State Council Office, it is stated that the government will refine the coal-power pass-through mechanism. According to this new method, on-grid tariff adjustment will be triggered when the thermal coal price changes by more than 5% on a yoy basis, and the power tariff change should allow power producers to pass-through 90% (up from the previous 70%) of the coal price changes.

Flaws of the current pricing system

Although China "officially" announced a "coal-power tariff pass-through mechanism" by the end of 2004, the rules were not strictly adhered to by the government, and in reality the current mechanism is a "non-system", or a discretionary system managed by the NDRC. In most of the past few years, power tariffs were so low that power producers suffered from a very low ROE and had little incentive and financial resources to invest; at times of serious losses due to price control, some IPPs tended to reduce production and thus exacerbated power shortages. In addition, artificially low power tariffs encouraged excessive use of electricity by heavy manufacturing firms and contributed to the over-investment and over-capacity in these sectors.

We calculated the weighted average coal price for IPPs based on contract coal prices and spot coal prices (QHD 5500). Since the end of 2004 and until its recent price peak in late 2011, the weighted average coal price increased 86%, while the average electricity price for industrial users in 36 major cities only increased 28% (Figure 32).

Figure 32: Coal price for industrial users and power tariff



Source: CEIC, Deutsche Bank

Given that that 60% of IPPs' coal consumption is based on market prices, the excessive government intervention in the power tariff setting implies that the thermal power producers' financial performance is highly contingent upon coal price movement. The thermal power producers' ROE bottomed at -2.5% in 1Q09, down from a much higher level of 13% in late 2007. This cost-revenue imbalance suppressed the industry's profitability and discourages the companies' incentive and ability to produce and invest. In the past few years, the ROE of thermal power producers was on average around 5%, vs. 10% in most developed countries and the 6-7% benchmark lending rates in China.

Macro environment for the reform

2013 will be a window of opportunity to conduct the power tariff reform as CPI inflation will likely be in a comfortable range of 2-4% and GDP growth will likely be near growth potential of 8.0-8.5%. This macro environment presents a rare opportunity for resource pricing reform, as inflationary pressure should not be a major constraint (as in 2010-11) and concerns on growth deceleration (as in 2012) will also be lessened. Note that at times of higher inflation, policy makers tend to worry about the inflationary impact of resource pricing reform; at times of slow growth, policy makers tend to be concerned about the negative consequences of resource pricing reform on production and economic growth.

A 'managed' market-based pricing scheme is a likely direction

We believe the overall direction of power tariff reform is a 'managed' market-based pricing scheme. In detail, a combination of three pricing methods can be adopted:

A. Part of electricity output is priced based on the refined pass-through formula as stated in the State Council Document on 25 December: IPPs can pass through 90% of the thermal coal price changes. This mechanism will ensure the broad stability of the thermal power producers. Under the newly proposed 90% pass-through, the ROE volatility of IPPs will be significantly reduced, compared with previous policy of 70% pass-through.

B. Part of the electricity output is priced based on direct negotiation between the large and medium-sized users and power producers;

C. The rest of the electricity output is priced based on real time spot price (free market competition).

In the coming years, we believe that method A (formula-based pricing) will still be applied to the majority of the power production. Over time, methods B and C will see a gradual increase in importance.

A 5% power tariff increase relative to baseline

The new policy helps to reduce IPPs' vulnerability to coal price change; however, anchoring power tariff adjustment to coal price changes alone will not solve the reality of low profitability of the sector. On the final-user electricity price, we expect a 5% increase in power tariffs in the next three years, relative to the base case of no reform and no change in coal prices. From the experience of major international countries, a reasonable ROE for power enterprises is around 10%. Given the 2012 China power industry's ROE (5.5%), we believe reforms should allow another 4~5% increase in ROE, which requires a 5% electricity tariff increase assuming coal prices are unchanged.

No.3: Water tariff reform

Reform to expand to more regions

Within the various areas of resource pricing reform, water tariff reform is likely to be implemented with the fewest obstacles, since the share of water expenditure in total household expenditure is quite low, and the water tariff policy is set by local governments rather than the central government. In 2012, water tariff reforms already occurred in some cities (including Guangzhou, Changsha, Wuhan, and Guilin) without much opposition from the general public. As a result of the reform, water tariffs were raised aggressively in Changsha (by 37%), Guilin (23%), Guangzhou (30%), and Wuhan (30%). This momentum of reform is likely to be expanded to other cities in 2013 and the coming years, in our view.

The direction of water tariff reform

The water pricing reform is to find the proper pricing mechanism and right level of water tariff to reduce waste, ensure supply and service quality, and alleviate the current loss-making situation of some water enterprises. Within three years, we expect a 30% water tariff increase nationwide, and a pricing mechanism with linkage to the cost should be established to ensure a reasonable and stable rate of return for water supply enterprises. Under the new water tariff policy, while average tariffs will be raised substantially, low-income households will be subsidized.

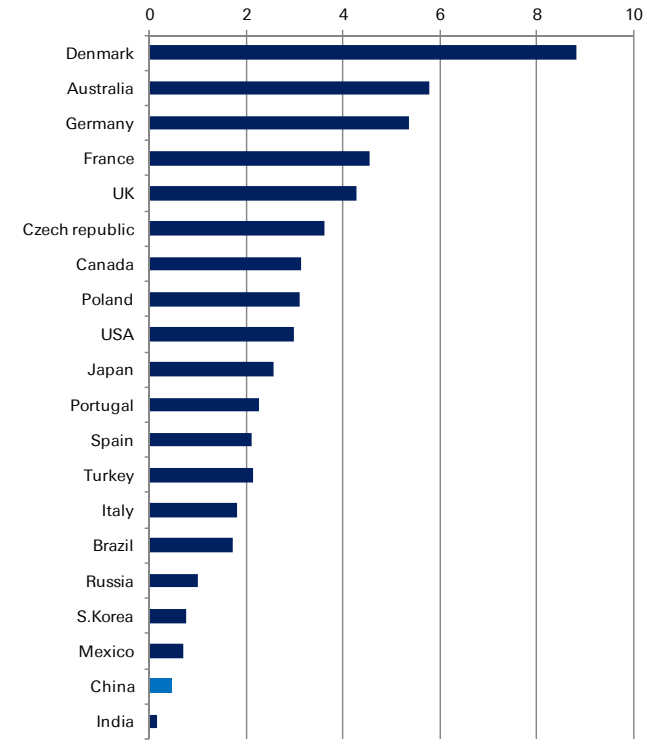
Water tariffs are too low

China's total freshwater resource may look ample in most places for now, but on a per capita basis, it is only 28% of the world average. However, the current water pricing policy – a "cost-plus" policy method – does not take into account the need to conserve water resources for the future and the environmental costs of water pollution. This policy leads to low efficiency in water usage and excessive water pollution. From this angle, the current water tariffs look too low.

According to Global Water Intelligence's 2011 Water Tariff Survey (Figure 33), the average water tariff in 25 major Chinese cities is USD0.46/m^3, 77% lower than the world average (308 cities) of USD2.03/m^3. Comparing the water bills for households across countries (Figure 34), water expenditure as a percentage of disposable household income is only 0.5% in China, much lower than Australia's 8.6%, Japan's 3%, United State's 3% and South Korea's 1.5%. In addition, the wastewater treatment fee accounts for merely 26% of total water tariff in China, far below the levels in the US (57%), the UK (51%), Japan (42%) and Russia (39%).

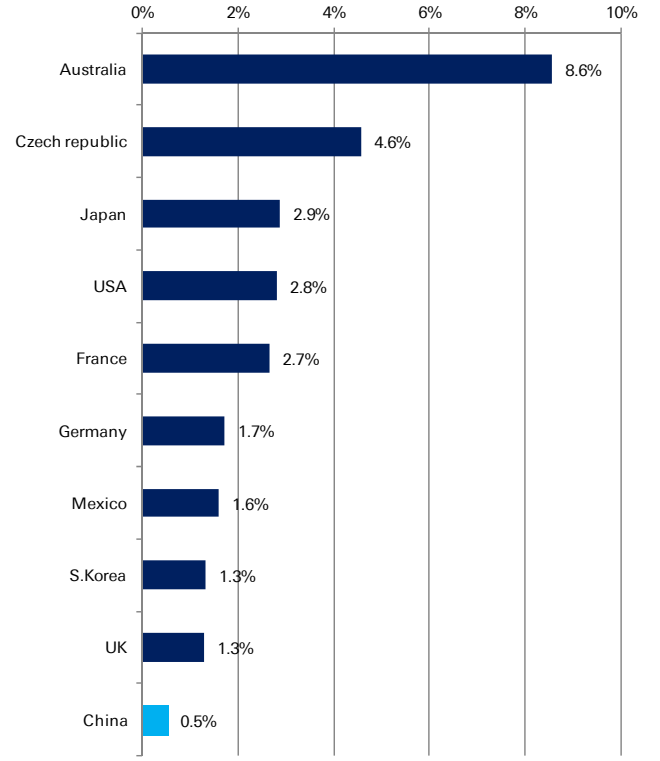
Under the current water tariff mechanism, many water producers in China are operating at a loss. By the end of August 2012, 38% of water producers experienced a loss. Moreover, the ROE of the water sector averaged 2.1% during the past three years, far below the desirable target of 8-10% (ROE) and the benchmark lending rate of 6-7%.

Figure 33: Average water tariff (USD/m3)



Source: Global Water Intelligence, Deutsche Bank

Figure 34: Water expenditure as a percentage of total disposable income, September 2011



Source: Global Water Intelligence, CEIC, Deutsche Bank

No.4: Refined oil pricing reform

We expect the government to embark on the long-awaited refined oil pricing reform in the next few years. Several factors should contribute to its increased likelihood: First, macroeconomic conditions in 2013 (low inflation, stable growth) will be conducive to the reform. Second, the new State Council, which will be headed by Li Keqiang, will likely be able to coordinate the needed fiscal subsidies to facilitate the pricing reform. Third, given the commitment the government made on this reform in the 12th Five Year Plan, the fact that the five-year plan will only have three remaining years will provide some urgency. Fourth, the continued loss-making of oil refining sector and the need to achieve the goals of energy saving and environmental protection will put pressure on the new government to take concrete action.

In recent months, some government officials and policy advisors have expressed optimism on the prospects of the reform. In early October, a research fellow from the Energy Research Institute of the NDRC said that the launch of the new oil pricing mechanism faces few obstacles and he expects the reform to take place soon.

Refined oil prices are too low

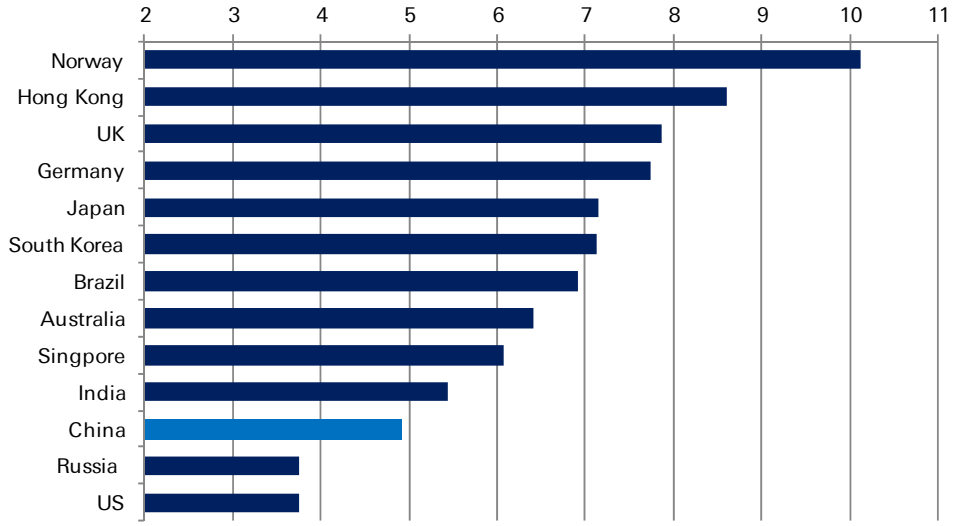
In past years, China's refined oil prices were set (by the NDRC) at levels that resulted in frequent loss-making by the refining oil sector. Although the government has announced a number of formulae to link crude oil prices to the domestic refined oil prices, the government itself never faithfully implemented these mechanisms, especially in times of higher CPI inflation.

Such policies generated negative impacts on the oil refining business and overall economy, as well as on the environment. First, the partial and slow adjustments to refined oil prices resulted in extremely volatile and low profitability for oil refining enterprises. Second, it led to shortage of refined oil products. Third, the low refined oil prices encouraged excessive consumption of oil.

Keeping crude price unchanged, a 10% rise in refined oil price is needed

China's domestic crude oil prices are in line with international prices, but its domestic refined oil price is far lower than international refined oil prices (Figure 35). As a result, the profit margin of China's oil refining sector has been low or even negative over previous years. Taking the two largest refining oil providers for an example, the average operating margin in the past five years was negative 5% for PetroChina's refining business, and that for Sinopec's refining business averaged negative 2% in the past seven years starting from 2006 (Figure 36).

Figure 35: Premium gasoline price USD/per gallon, July 2012



Source: Bloomberg Finance LP, Deutsche Bank

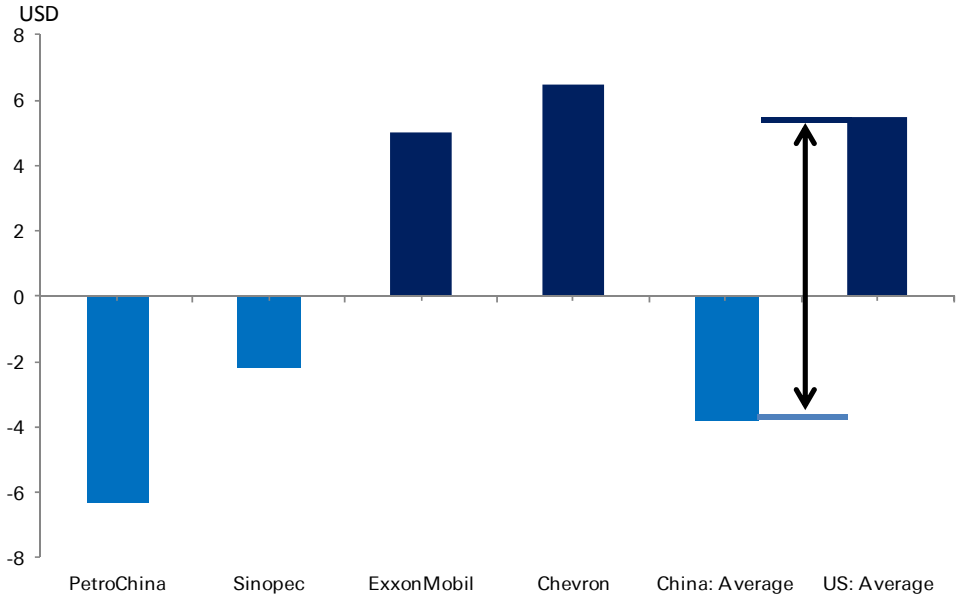
Figure 36: Struggling refining business for major producers

	2006	2007	2008	2009	2010	2011	2012 Q1-3
Sinopec- Refining							
Operating Margin	-4.3%	-1.6%	-7.3%	3.3%	1.6%	-3.0%	-1.8%
PetroChina- Refining and Chemicals							
Operating Margin			-16.7%	3.5%	1.2%	-7.3%	-5.8%

Source: Company annual reports, Deutsche Bank

To make an international comparison, we look at the net income per barrel refined for major Chinese and US refiners. The average profit a US refiner made in the first three quarters of 2012 was USD5.5 per barrel, while it was negative USD3.7 for Chinese oil majors. The difference between the net income per barrel refined in the US and China is roughly USD9.3 (Figure 37). Given that the current crude oil price is around USD100 per barrel, a 10% rise in China's refined oil price would make Chinese refiners' profitability comparable with its US peers.

Figure 37: Net income per barrel refined (1Q-3Q, 2012)



Note: the US universe contains: ExxonMobil, Chevron, Hess, Phillips66 and Marathon Petro; the China universe contains Sinopec and PetroChina

Source: Deutsche Bank

Ways to reform the refined oil pricing mechanism

Officially, the current pricing mechanism requires that if the 22-day moving average of three major international crude oil prices changes 4% or move, the domestic refined oil price should be adjusted accordingly. In reality, this formula has not been strictly adhered to by the government, resulting in persistent losses and significant volatility of refiners' profitability. While no specific version of the next reform has been agreed upon, we believe the key principle will be to permit an increase in refiners' net income per barrel to a reasonable level (e.g., USD4-5 per barrel). On top of that, technical changes should also be made to ensure the stability of their margin: e.g. by allowing more frequent price adjustments (than the 22-day rule); removing the cap on each price adjustment, etc. Alternatively, the government should also consider giving oil companies the autonomy to set prices with a wider price band, and the band itself could be based on a formula consisting of international prices.

Quantifying the impact of the reforms

In this section, we quantify the impact of the resource pricing reforms on China's macro economy and various sectors in the coming years. The primary analytical tool we used is Deutsche Bank's 135-sector China Deutsche Bank CGE model (Computable General Equilibrium Model), which we have used to estimate the impact of many other policy changes in past years. A few other econometric and statistical models are also employed to estimate the parameters needed by the Deutsche Bank CGE model.

Key assumptions of the quantitative analysis

We assume these reforms will be completed within the next three years (2013-15). Relative to the baseline of a no reform scenario, assumptions of the accumulative price changes by the end of 2015 on individual reforms are:

1. A 5% increase in power tariff, which is needed to improve the ROE of the power industry to 10%.

2. A 30% increase in water tariff, which helps to ensure the water industry a reasonable profit margin and an increase in the ROE to about 10% in 2015.

3. A 30% increase in gas tariff, which is necessary to ensure upstream gas producers achieve ROE of about 10%.

4. A 10% increase in the refined oil price, which helps to increase the net income per barrel refined to USD5.

Impact on GDP growth and CPI

Resource pricing reforms will have a slightly negative impact on the GDP growth rate in the short and medium term, but can help improve the long-term sustainability of growth. We also find that its impact on CPI is manageable (Figure 38).

Figure 38: Impact of resource pricing reforms: cumulative changes (percent, ppt) from baseline

	2013	2014	2015
Real GDP	-0.07	-0.25	-0.48
Consumption as % of GDP	0.00	-0.01	-0.04
Investment as % of GDP	0.01	0.03	0.06
Trade balance as % of GDP	-0.01	-0.02	-0.01

Source: Deutsche Bank

- Impact on GDP growth

  The reforms will have a slightly negative impact on both the level and growth rate of real GDP in the next three years. Compared with the base case, 2015 GDP will be 0.48% lower under the reform scenario, which translates roughly into a 0.15ppt reduction in annual GDP growth rate in the coming three years.

  The reason for the slightly negative impact on GDP growth is that higher resource prices imply higher production costs and thus are negative to production.

- Impact on growth sustainability

  Although their impact on GDP growth in the short and medium term may be slightly negative, resource pricing reforms will help reduce excessive consumption of resources and environment degradation, and thereby increase the stability and the sustainability of economic growth. These benefits are difficult to quantify by a model but they cannot be ignored.

- Impact on inflation

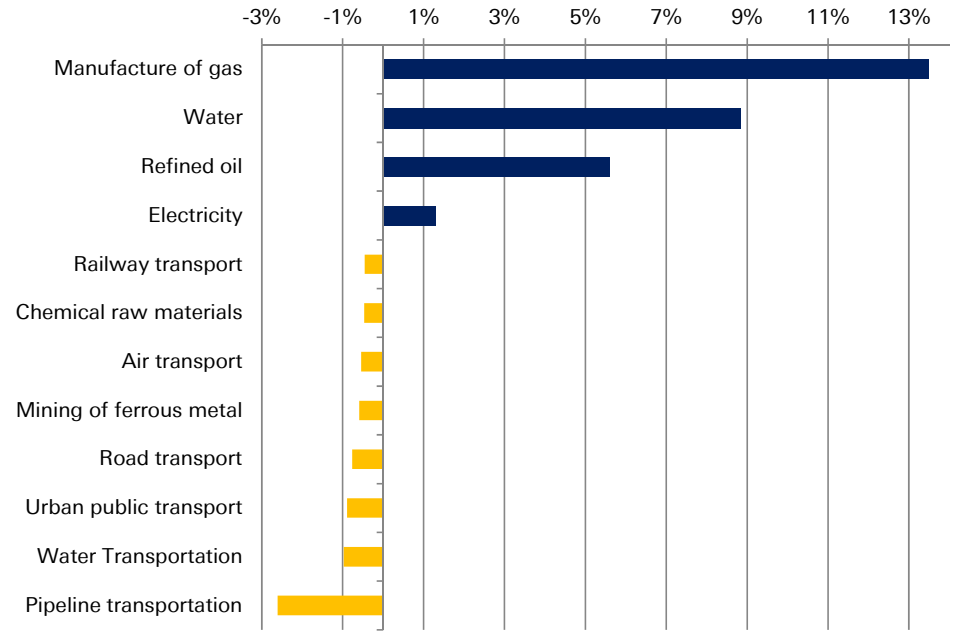
  We use several methods (including calculation of the price impact based on estimated weights of water, gas, power and oil in the CPI basket, and a CGE model) to estimate the impact of the resource pricing reform assumed above on CPI. We found that in the extreme case of all these reforms occurring and completed in one day, it would push up CPI by about 1.5% immediately. However, in the longer run, as supply increases and demand contracts in response to the higher prices, prices tend to fall back. The final CPI will only rise by 0.8% compared with the initial level, based on our CGE model simulation. If these reforms are spaced within three years with an even pace, our analysis suggests that CPI inflation would be boosted by about 0.4ppts per year.

Model simulation of sectoral impact

Our Deutsche Bank CGE model is able to simulate the impact of reforms not only on macro indicators, but also on 135 specific industries. In this section, we present the key findings from the sector-level simulation (Figure 39).

- The top beneficiary is natural gas manufacturing with a 14.3ppts increase in its pre-tax margin, followed by water (+8.6ppts), petroleum processing (+6.6ppts), and electricity (+1.2ppts).
- Heavy manufacturing and transport sectors including pipeline transport, water transport, mining of ferrous metal, are hurt as higher resource prices imply higher costs and thus lower margins for them.

Figure 39: Impact of reforms on sectors' pre-tax margin (ppt change from baseline)



Source: Deutsche Bank

As a caveat, investors should be careful about translating these numbers into specific assumptions for financial projections of individual listcos, because: 1) the sector definition used in this simulation is based on NBS classification and may not be identical to those commonly used by financial investors; 2) the magnitude and timing of these reforms is still hypothetical, and in reality they may not occur simultaneously as we assumed; 3) these reforms are assumed to be completed within three years and the estimated impacts refer to the cumulative change in profitability rather than an annual change; 4) some companies have enjoyed ad hoc policy treatment (such as tentative tax exemption or reduction) and therefore the impact of sector policy changes may be very much firm-specific. Having said this, we still believe that the above simulation results are useful in ranking the significance of the reform impact across sectors.

Beneficiaries of reforms: power, gas, water, refined oil

In this section, we present more detailed analysis on the likely impact of resource pricing reforms on the power, gas, water and oil refining sectors and selected companies. This analysis consolidates the findings from our CGE model and sector analysts' views.

Oil refining

With a refined oil pricing reform (i.e., a 10% price increase of the refined oil price relative to the baseline) during the next three years, oil refiners should resume a normal profit margin. Our model simulation suggests this pricing reform alone should increase oil refiners' pre-tax margin by 5.7ppts, taking into account the potential demand responses to the 10% price hike of refining oil.

Gas

With the gas pricing reform (i.e., a 30% increase in natural gas price), our model estimates that the natural gas sector would see an improvement in pre-tax margin by 13.2ppts. As for PetroChina (0857.HK, HKD11.30), the largest gas producer and transporter in China, our sector analyst David Hurd estimates that a 5% increase in natural gas tariff would imply a 3.6% increase in net income in 2013.

The situation would also benefit natural gas importers. The pricing reform would reduce the gap between the higher imported LNG prices and the lower city-gate selling prices. Upstream LNG importing businesses in Sinopec (0386.HK, HKD9.16) and CNOOC (0883.HK, HKD17.30), which frequently operate at a loss, should see an improvement in profit margin. The implications on city gas distributors are ambiguous, given that both their costs and revenues would increase.

Power

According to our model, a 5% tariff increase relative to the baseline would boost the power sector's pre-tax margin by 1.5ppts. The reform should further boost the performance of the listed IPPs, even though their performance (ROE of 9.6% 2012E) has been significantly better than the industry average (ROE at about 3.8% 2012E). These companies enjoy big capacity units, relatively high efficiency, as well as lower transportation costs. Going forward, given our assumptions of 1) <10% coal price rebound in 2013; 2) potentially higher utilization with a better economic outlook; and 3) a lagged positive impact from interest rate cuts in 2012, large IPPs will likely post 35-82% earnings growth in 2013, even without taking into account the potential power tariff reform. Should the coal-electricity tariff pass-through reform be implemented, the thermal power sector would be able to better cope with future coal price fluctuation. That is, reduced earnings volatility and even better profit growth are the upside potentials for IPPs due to the reform.

For hydro power producers, the reform may bring another round of opportunities. The hydro sector, which sells electricity at the lowest on-grid price (75% that of thermal power, 44% that of wind, and 67% that of nuclear power (see Figure 40)), will benefit the most if the "same quality-same grid-same price" policy were to be adopted. This mechanism, aimed at standardizing power tariffs, would substantially raise the hydro power selling price, according to international experience. Guizhou Province, whose hydro power contributes 50% of its electricity consumption, would probably be the pilot region for such a unified price mechanism. Such a reform should boost the market share of hydro power producers and benefit hydro power equipment makers.

Figure 40: Average on-grid power tariffs by sub-sector (RMB/1000KWH)

	Total AVG	Thermal Power	Hydro Power	Wind Power	Nuclear Power
2007	336	346	244	618	436
2008	360	355	266	542	449
2009	382	377	245	554	429
2010	385	395	291		432

Source: WIND, Deutsche Bank

Among the Chinese power companies listed in Hong Kong, our top picks are Huaneng Power Intl (0902.HK) and China Resources Power (0836.HK, HKD19.78).

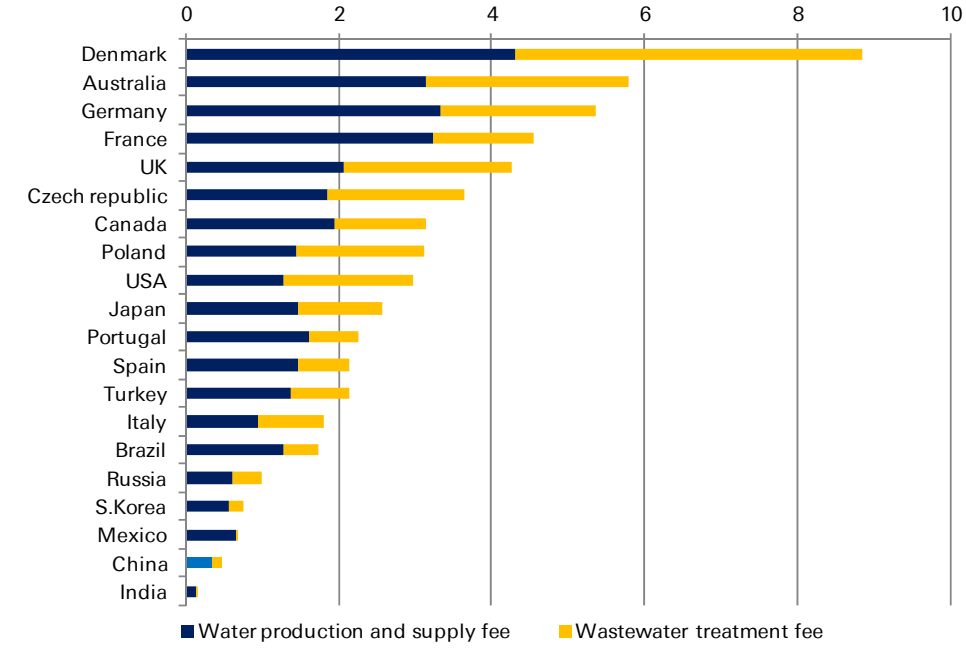
Water

Our model shows that a 30% water tariff increase would improve the pre-tax margin of water production and waste-water treatment by 8.8ppts. It is worth noting that a few listed water enterprises operate with a much higher ROE (about 13%) than the industrial average of 3%. The likely water tariff reform should provide them with an additional boost to earnings. Given that water tariffs are local decisions, local governments' attitude towards reform makes a key difference. Cities including Guangzhou, Guilin, Changsha and Wuhan have already kicked off such reforms.

Water tariffs can be split into four parts: 1) water resource fee; 2) water project fee (if any); 3) water production fee and 4) wastewater treatment fee. Fees for water production and waste water treatment account for the majority of the total tariff. Wastewater treatment fee is the main source of revenue for wastewater treatment enterprises. According to the experience of the pilot reform programs, wastewater treatment fees would likely be increased at a faster pace than the overall water tariff hikes. The rationale behind this is that the wastewater treatment fee in China is much lower than the world average. In China, wastewater treatment fee accounts for merely 26% of the total water tariff, far lower than 57% in the US, 51% in the UK, 42% in Japan and 39% in Russia (Figure 41).

Deutsche Bank analysts cover three Chinese water enterprises listed in Hong Kong. These are Beijing Enterprises Water Group (0371.HK, HKD1.97), China Everbright Int'l (0257.HK, HKD3.96) and Guangdong Investment (0270.HK, HKD6.24). Our top Buy is BEWG for its nationwide project coverage and its strong waste-water treatment business which is more leveraged to the benefits of water tariff reform.

Figure 41: Water production/supply and waste water treatment fees (USD/m3)



Source: Global Water Intelligence, Deutsche Bank

Company-level beneficiaries

In the following paragraphs, we highlight three companies covered by Deutsche Bank analysts as the main beneficiaries. These are Huaneng Power Intl (0902.HK), BEWG (0371.HK), Sinopec (0386.HK). Although they are rated Buy by our sector analysts, their earnings forecasts have not fully reflected the upside potential from the reforms.

Huaneng Power Intl (0902.HK): Huaneng Power Intl develops, constructs, owns and operates coal-fired power plants throughout China. The company is the largest IPP in Asia and we expect it to be one of the key beneficiaries of the improving sector fundamentals, including stronger demand and the power tariff reform. Our sector analyst Michael Tong recommends Buy on the stock as 1) its valuation of 1.2x 2013E P/B is still attractive; 2) the parentco reiterated its commitment to inject all unlisted thermal/hydro assets into the listco by 2015, with assets in Shandong province mentioned in particular; 3) Huaneng has turned FCF positive, and we expect this trend to continue to 2013 due to reduced capex and improved profitability.

BEWG (0371.HK): As the leading waste water treatment (WWT) operator in the industry, Beijing Enterprises Water (BEWG) will be a key beneficiary of the rapid growth in the environmental sector and the water pricing reform. Its nationwide project presence guarantees its benefits from local water tariff hikes in various regions. With a highly experienced management team and a significant project pipeline, the company enjoys higher earnings visibility than many of its peers. At 12.3x P/E in FY13 vs. a 29% EPS CAGR (2012-14E), the risk reward balance of the stock looks attractive.

Sinopec (0386.HK): The company explores crude oil and natural gas in China and also owns major refineries, which will benefit from the oil and gas pricing reforms. Sinopec has reported strong 3Q12 results, and Deutsche Bank analyst David Hurd thinks that Sinopec could actually break even in 2013 as long as oil prices remain subdued at +/- USD100/bbl. The potential pricing reforms and the likelihood of the parentco's injection of E&P assets should provide longevity (2013-15E) to the Sinopec story. David expects an EPS growth rate of 18.8% in 2013 and 14.8% CAGR 2013-2014.

Banks' NPL cycle

- Banks' share prices may continue to underperform the index for the first half of this year for two reasons. First, the NPL ratio will likely rise further until 3Q this year, despite GDP growth recovery. Second, other countries' experiences suggest that banks' NPL performance tends to have a concurrent correlation with their share price performance.
- SME defaults are the single-most important reason for the forthcoming rise in NPLs, while LGFVs and WMPs will unlikely be meaningful contributors. Therefore, during the period of rising NPLs in the coming 2-3 quarters, banks with higher SME exposure (which will see a faster increase in the NPL ratios) will likely underperform other banks.

The biggest worry among investors is that China's banking system NPLs may rise substantially. Some "China bears" (including brokers and academics) are predicting that the NPL ratio will rise to 5-20% soon, citing different reasons including local government financing vehicles (LGFVs) and the rapid growth of wealth management products (WMPs) as part of the shadow banking system.

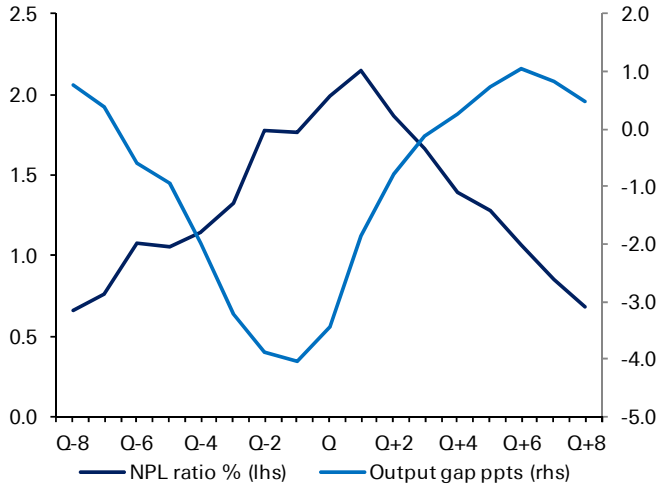
Our view is different. We believe that China's banking system NPLs will continue to rise in the coming 2-3 quarters but will peak at around 1.5%, and the main reason for the rise in NPLs is SME defaults rather than LGFVs and WMPs.

NPL ratio will likely rise until 3Q despite GDP growth recovery

By looking at the correlation between GDP growth and NPL ratios in several economies, we found that the NPL ratio tends to be a lagging indicator. That is, banks' NPL ratio tends to peak only after GDP growth recovers to its potential. In other words, from the time of the economic bottoming (in the case of China, 3Q of 2012) to the time of achieving potential GDP growth of 8.5% (2H of 2013), bank NPLs will continue to climb.

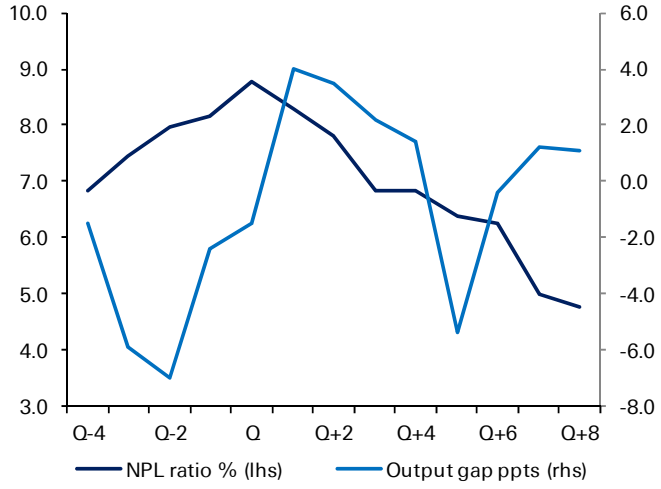
Figure 42 shows the case of the US banking sector during its three NPL cycles since 1985. It says that the NPL ratio tends to peak at a time when the output gap is closed (i.e., economic growth recovers to its potential rate). Figure 43 shows the Taiwan case, which suggests a similar pattern. For China, we believe that the current below-trend economic growth will last about 1.5 years, starting from early 2012. More specifically, we expect China's GDP growth to recover to around 8.5% yoy in 3Q 2013, and bank NPL ratios will peak at about the same time. For more detailed discussion on why China's GDP will likely recover to 8.5% in 3Q, see the macroeconomic section in this report.

Figure 42: US NPL ratio for C&I loans and output gap, average of 3 cycles since 1985



Source: CBO, FED, Deutsche Bank

Figure 43: Taiwan NPL ratio and output gap, cycle of 2000



Source: CEIC, Deutsche Bank;
Note: Output gap is estimated with the HP filter, the ditch in June 2003 was due to SARS.

SME defaults explain majority of NPLs; LGFVs and WMPs not key concerns

The majority of bank NPLs will come from the SME sector, while LGFV loans are not a concern because of LGFV issues are being and will continue to be resolved via injection of funds or assets by local fiscal authorities.

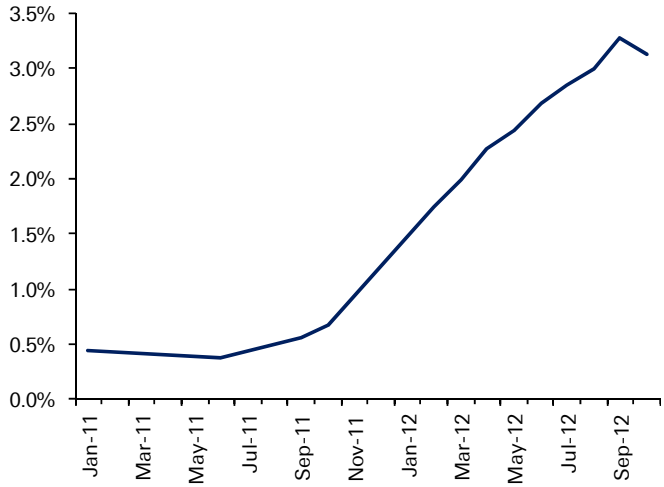
SME defaults have been the major reason for the recent build-up in bank NPLs. In Wenzhou, where the SME sector is the most developed in China, the NPL ratio at local banks reached above 3% by 3Q 2012 (Figure 44). As a result, in the case of Ping An Bank (000001.SZ, RMB16.02) as of 3Q 2012, although only 2.7% of its total loans were made in the Wenzhou area, 28% of its NPLs were from this city. In the case of Pudong Development Bank (600000.SS, RMB9.92), among the RMB2bn of new NPLs in the first three quarters of 2012, 70% were from Wenzhou.

In contrast, LGFV loans won't be a concern. Many LGFVs have received new asset injections by local governments (in the forms of new funding from proceeds of local government bonds, enterprise bonds, and trust loans, selling of A shares of SOEs, as well as injection of land and other cash generating assets). Accordingly, the cash flow of those LGFVs has improved significantly. That is why nearly RMB3tr of LGFV loans (accounting for 33% of total outstanding LGFV loans by the end of 2011) have been re-classified as normal corporate loans by CBRC. Note that by the end of 2010, many market commentators expected a surge in NPLs before the end of 2012, as more than 40% of these loans would mature within two years. However, there were very few actual defaults in the past two years, and in the case of ICBC (1398.HK, HKD5.81) which accounts for 1/3 of all LGFV loans among the big-five banks, the NPL ratio of LGFV loans actually dropped from 0.73% in mid 2011 to 0.67% in mid 2012.

Out of about 8,000 LGFVs, there were very few cases that came close to default in 2011. These names include Yunnan Highway, Shaanxi Highway, and Shanghai Rainbow. Moreover, actual defaults were avoided and new bank syndicate loans were arranged in all of these cases and in some cases new assets were injected.

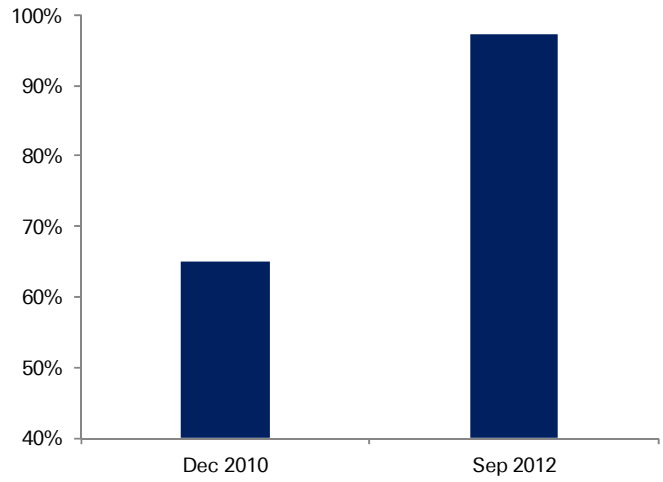
According to Mr Shang Fulin, Chairman of CBRC, by the end of September 2012, 97.3% of the LGFV loans have at least a 70% cash flow coverage ratio[5]. In contrast, back in 2010, while the aggregate figure was not available, for ICBC (the largest bank in China, 1398.HK), only 63% of the LGFV loans had 70%+ cash flow coverage ratio (Figure 45). In other words, the credit risk faced by the banking system due to LGFV problem has already diminished substantially. We expect very little change in the NPL ratios on LGFVs going forward, as further asset/cash injections will be done by local governments to the remaining problem LGFVs.

Figure 44: NPL ratio of banks in Wenzhou



Source: CBRC, Wenzhou Bureau of Statistics

Figure 45: % of LGFV loans largely covered by cash flow (70%+)



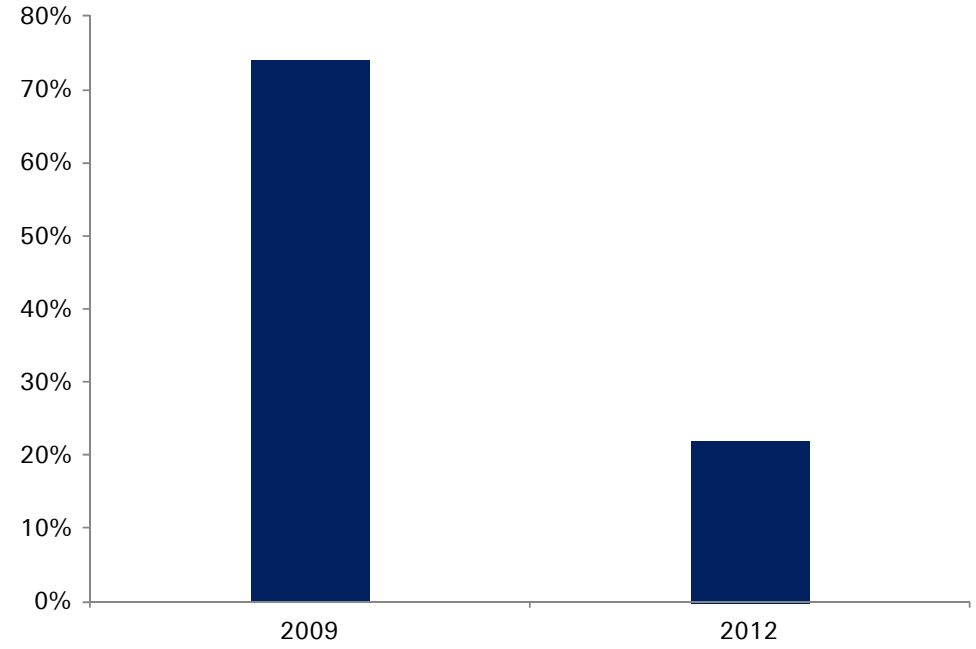
Source: CBRC, individual bank reports

Another concern raised by many investors lately is whether the rapidly-growing WMPs will imply a huge default risk for the banking system. Again, we think this is a gross exaggeration of the problem. First, the total amount of WMPs is still limited. According to Xiang Songzuo from Agricultural Bank of China (1288.HK, HKD3.96), the outstanding amount of WMPs is about RMB6.7tr by September 2012. This is equivalent to about 10% of the outstanding bank loans. Second, between 2009 and 2012, the risks associated with WMPs have decreased sharply, partly due to the tightening of regulations.

There are two types of WMPs. The first type is equivalent to money market or bond funds, which are essentially invested in fixed income instruments traded on the interbank bond market. These products, accounting for about 80% of total WMPs (for the year 2012 according to CNBENE consulting), tend to offer an annualized rate of 3.4-5.0%, vs. the 3% 1-year benchmark deposit rate. These are very safe products and no defaults have been reported in the past many years. The second type that causes most worries is the WMPs on the back of trust loans underwritten by trust companies. According to CNBENE, these WMPs now account for only 20% of total outstanding WMPs in 2012, down from 74% in 2009 (Figure 46).

[5] The ratio is calculated as borrower's net cash flow / required cash flow to meet debt payment.

Figure 46: WMPs invested in trust loans, % of total



Source: CNBENE consulting, Deutsche Bank
Note: Some WMPs are mixed products

NPL ratio will likely peak at 1.5%, lower than perceptions

Potentially, how serious is the SME problem for China's overall banking sector? Here we use the case of Wenzhou as a sample to estimate the potential SME loans default rate. According to data from PBOC Wenzhou, the overall NPL ratio in Wenzhou dropped a tad from the historical high of 3.27% in September 2012 to 3.13% in October 2012. Let's assume that the September 2012 number is the peak in the current cycle, up from 0.67% in October 2011.

Even if one assumes that the peak of NPL ratio in Wenzhou will be 4%, we believe that the overall NPL ratio of the banking system will be unlikely to exceed 1.5%. Note that the percentage exposure of bank loans to SMEs in Wenzhou is about three times that of the China average. Given that SMEs are the main source of NPLs, it implies that the banking system NPL ratio will peak at only 1.4%.

We can also try to gauge the potential NPL ratio from a top-down approach. Historical experience in other countries is that the bank NPL ratio will climb when the GDP growth rate is below potential, and will peak when the output gap closes to zero. But the dynamic relationship is not quite linear: NPLs tend to break out in clusters. Here we use the six cases of NPL cycles in Asian countries since 2000 as a reference, and try to find a simplified relation between the peak NPL ratio and the trough of output gap. The results are listed in the table below (Figure 47):

Figure 47: Average of the 6 NPL cycles in Asian countries since 2000

	Output gap（ppts）	Change in NPL ratio
Q-4	-0.12	
Q-3	-1.11	0.22
Q-2	-1.87	0.85
Q-1	-1.61	0.77
Q-0	-1.39	0.49
Q+1	-0.67	-0.36
Q+2	0.17	-0.49
Q+3	-0.04	-0.50
Q+4	0.59	-0.50

Source: Bloomberg Finance LP, CEIC, Deutsche Bank
Note: Output gap is estimated with HP filter.

A simple OLS regression shows that a 1ppt in output gap (measured by actual GDP yoy minus potential GDP yoy) will lead to a 0.4ppt increase in the bank NPL ratio. Given that China's GDP growth fell to 7.4% in 3Q 2012, about 1ppt below the potential figure of 8.5%, this elasticity implies that China's NPL ratio should rise (with a lag) by 0.8ppts, on top of the current 0.9%. This implies that the banking system NPL ratio may peak at 1.7%.

Taking the average of the above two estimates (1.4% and 1.7%), it would be reasonable to expect the banking system NPL ratio to peak at around 1.5%. This is lower than many investors' perception.

Other risks

Other than SMEs, LGFVs and WPMs, another source of credit risk that has recently drawn attention is that of the steel trading companies.

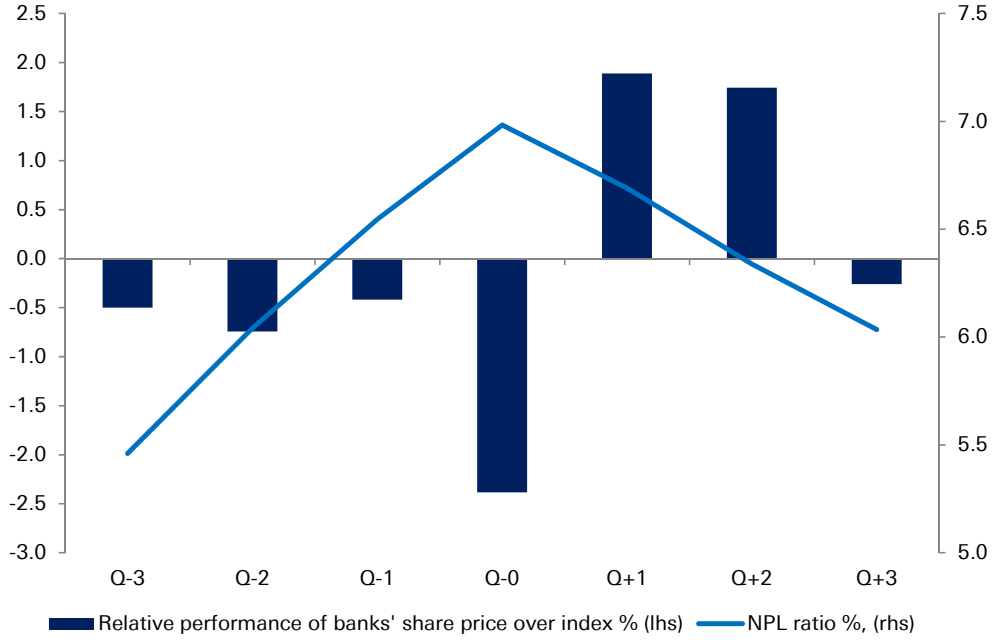
Between 2011 year-end and 3Q 2012, the composite steel price index published by the China Steel Association dropped by 18%. The decline in steel prices caused serious liquidity difficulties for China's steel trading companies. On the one hand, their ability to obtain/roll-over bank loans is heavily dependent on the market value of their steel inventory. On the other hand, steel trading companies normally use leverage to purchase steel products at a 20-30% margin, which means that a 20% price decline could render them insolvent. Nevertheless, the default risk of steel trading companies seems to be contained for now, as the steel price index has recovered by 7% since its bottom in September 2012. The total amount of bank loans to steel trading companies is estimated to be around RMB1.9tr, or about 3.5% of total bank loans in China. In the case of Shanghai (which accounts for about 10% of China's total bank loans to steel trading companies), according to CBRC Shanghai Bureau, the default rate of bank loans to steel trading companies was 1.31% as of September 2012. And in the case of Foshan of Guangdong Province, the default rate was 0.8% as of August 2012.

Investment implications

We believe that Chinese banks' share prices will likely underperform the market indices until the NPL ratio peaks in mid-2013, but may begin to outperform when the NPL ratio begins to decline. Our analysis of international experience supports this conclusion: as shown in Figure 48, which represents the average of nine international cases – including Korea (2010), Indonesia (2006), Philippines (2001), Malaysia (2001), Taiwan (2002), Thailand (2003), Pakistan (2011), and the US (1991 and 2001) – the MSCI financials index underperformed the market indices in the four quarters before the

peaking of the NPL ratios. On the other hand, as soon as the NPL ratio begins to decline, banks' share prices tend to outperform the indices.

Figure 48: NPL ratio and banks' relative share price performance, average of nine cases



Source: Bloomberg Finance LP, CEIC, Deutsche Bank
Note: Sample countries include Korea, Indonesia, Malaysia, Taiwan, Thailand, Pakistan and US

We also believe that large banks with less exposure to SME loans will likely outperform smaller banks that tend to lend more aggressively to SMEs, as most of the NPLs will arise from the SME sector. In addition, we believe that 2013 will witness major progress towards interest rate liberalization, which will tend to depress net interest margins for smaller banks more than large banks. The following figure shows the percentages of small- and micro-firms loans extended by listed banks (Figure 49).

Figure 49: Share of loans to small and micro firms as percentage of total loans

China Merchants Bank (3968.HK)	25.0%
Industrial Bank (601166.SS)	25.0%
ICBC (1398.HK)	23.0%
National average	23.0%
Huaxia (600013.SS)	21.0%
Shanghai Pudong Development Bank (600000.SS)	20.0%
Minsheng (600016.SS, 1988.HK)	19.0%
China Everbright Bank (601818.SS)	14.0%
Bank of China (3988.HK)	12.0%
Agricultural Bank of China (1288.HK)	11.0%
China Construction Bank (0939.HK)	9.6%
Bank of Communications (3328.HK)	7.0%

Source: Company reports 1H 2012, Deutsche Bank estimates
Note: Numbers for most of the banks are based on MIIT 2011 definition of SMEs and include loans to individual businesses. Exceptions are the Industrial Bank, Minsheng Bank, and Huaxia Bank.

The anti-corruption campaign

In his inaugural speech, Xi Jinping, the newly elected party secretary, admitted that official corruption is one of the most serious challenges that the party faces. On 31 December 2012, the newly elected Standing Committee of the Party convened to discuss the anti-corruption program, and concluded that in intensifying the supervision of officials' adherence to discipline, the party will "use the most effective measures and observe a material impact". We believe that 2013 will mark the most vigorous anti-corruption fight by the Chinese leadership in decades, as it clearly recognizes that "if left unchecked, corruption would lead to the demise of the Party and fall of the State". Specific actions that may be taken include a clampdown on officials' consumption at restaurants, tightening enforcement of gift receiving rules, restrictions on overseas visits (especially to Macau) by officials, as well as public disclosure of officials' personal income and family wealth in pilot regions and departments.

These actions will likely lead, in our view, to revenue deceleration in sectors including Macau VIP gaming, highly priced spirits (Maotai (600519.SS) and Wuliangye (000858.SZ) for example), and luxury watches, as well as gift card sales at department stores, and may result in equity stakes and properties being sold by corrupt officials for fear of future regulation on wealth disclosure. While these equity implications may be tentatively negative for some specific sectors and companies, we think the overall impact of the anti-corruption campaign on China's equity market indices will be modest, as the related sectors account for less than 3.7% of A-share market cap, 0.6% of MSCI China and 8% of MSCI Hong Kong market cap. Over the medium term, we believe that the success of the anti-corruption campaign will be positive for the market, as it will lead to improved social stability and higher economic efficiency, which will therefore enhance investor confidence and push up market valuations.

Note that Deutsche Bank gaming analyst Karen Tang's current view on the Macau Gaming sector as a whole is constructive, as she sees cyclical factors that may support gaming revenue and the completion of high speed railway to help drive the mass market demand. Our discussion here, focusing on anti-corruption, refers to only one downside risk to the sector.

Minimal market impact of anti-corruption measures in past years

In recent years, Chinese authorities have taken several rounds of measures to fight corruption. In this section we review the impact of these measures on share prices in three relatively recent cases involving the dismissal of three very senior officials, namely Chen Liangyu, Bo Xilai and Liu Zhijun.

On 25 September 2006, Chen Liangyu, ex-Shanghai Party Secretary, was sacked for his involvement in the social security fund scandal. The immediate impact on the A-share index was minimal (-0.17% on day one of the announcement of Chen's dismissal), but the share prices of several companies in both mainland and Hong Kong markets took a nosedive. For example, Shanghai Industrial Development (600748.SH), China Enterprise Company (600675.SH), China Overseas Land (0688.HK) and Shimao Property (0813.HK) fell by 4-7% on that single day, as the market was convinced that real estate developers with local business operations had strong ties to Chen. Nonetheless, given that the related real estate companies accounted for merely 1% of the A-share market, the impact on the overall index was negligible. Historical data has indicated that the total

value of all the affected "Shanghai concept" stocks which experienced a price decline on day one was less than 4% of the A-share market (Figure 50).

Figure 50: Share price changes after the case of Chen Liangyu

	1 day	3 days	1 month	3 months
Shanghai Composite Index	-0.17%	-0.02%	4.63%	41.17%
HSCEI	0.09%	-0.50%	5.49%	35%
Shanghai Industrial Development(600748.SH)	-6.91%	-11.04%	-0.73%	52.39%
China Enterprise Company(600675.SH)	-5.11%	-4.44%	-7.26%	34.56%
China Overseas(0688.HK)	-4.34%	-4.98%	4.02%	45.50%
Shimao Property(0813.HK)	-4.39%	1.83%	22.20%	69.51%

Source: Wind, Deutsche Bank

On 15 March 2012, Bo Xilai, the former Communist Party Chief of Chongqing, was removed from his position for corruption and abuse of power. On the same day, both the Shanghai Composite Index and HSCEI fell slightly (0.7% and 0.5% respectively), while the prices of "Chongqing-related" equities suffered noticeably. For instance, the share price of Chongqing Brewery (600132.SH) plummeted 8%, and several other names, including Chongqing Changan Automobile (000625.SZ), Chongqing Wanli (600847.SH) and Chongqing Rural Commercial Bank (3618.HK), were down around 3% on day one. Similar to the Chen Liangyu case, the negative impact on the indices was modest. As the affected companies accounted for about 0.9% of the A-share domestic market capitalization, the Shanghai composite index quickly recovered within three days, after having slipped by 0.7% on the first day (Figure 51).

Figure 51: Share price changes after the case of Bo Xilai

	1 day	3 days	1 month	3 months
Shanghai Composite Index	-0.73%	0.56%	-1.34%	-3.98%
HSCEI	-0.53%	-2.34%	-3.22%	-15.77%
Chongqing Brewery (600132.SH)	-8.28%	-11.10%	-17.66%	-35.43%
Chongqing Changan Automobile (000625.SZ)	-3.02%	-1.07%	1.92%	15.38%
Chongqing Wanli (600847.SH)	-2.80%	-0.53%	-2.80%	-8.47%
Chongqing Rural Commercial Bank (3618.HK)	-2.95%	-6.82%	-6.14%	-27.50%

Source: Wind, Deutsche Bank

In the case of Liu Zhijun, Minister of Railway, who was ousted for corruption scandals on 12 February 2011, railway sector stocks and the market indices went in opposite directions. As the government decided to drastically slow high-speed-railway construction, the share price of CSR Corporation (1766.HK) fell 3% on day one, and declined 20% in the subsequent three months. The whole high-speed-railway sector performed sluggishly due to a substantial cut in the earnings growth forecast. Yet the impact of this small sector (1.7% of total A-share market cap) was limited; both the Shanghai Composite Index and the H-share index rose by about 2.5% on that day, as the market probably interpreted the removal of corrupt officials from the railway sector as a positive sign of a much more balanced economic structure in the future (Figure 52).

Figure 52: The effect of anti-corruption actions on share prices: the case of Liu Zhijun

	1 day	3 days	1 month	3 months
Shanghai Composite Index	2.54%	3.42%	3.90%	1.55%
HSCEI	2.62%	1.64%	5.55%	5.91%
CSR Corporation (1766.HK)	-2.96%	-3.77%	-15.90%	-19.47%

Source: Wind, Deutsche Bank

Long-term positive impact: experience of Indonesia

Indonesia has implemented some very aggressive anti-corruption policies in the past decade, and some investors believe that its experience may be relevant to China. In this section, we review Indonesia's market reaction to such measures.

In Indonesia, anti-corruption actions have been implemented intensively since 2003. The key measures adopted included, but were not limited to: 1) public disclosure of officials' wealth. The 2003 Corruption Eradication Commission Law obligated all state officials to report their wealth to the commission. The number of officials subject to the disclosure requirement rose from 43,668 in 2004 to 146,803 in 2011; 2) improving the supervision system by establishing the Corruption Eradication Commission, which operates independently from the executive, legislative, judiciary powers and thus is internationally known as an effective anti-corruption body; and 3) strengthening judicial integrity, capacity and professionalism in the fight against corruption.

As a result of these efforts, hundreds of officials were arrested on corruption charges, and among them many were very high-ranking. The equity market reaction was fairly similar each time a major scandal was revealed. On 20 May 2005, Nazaruddin Sjamsuddin, the head of Indonesia's national election commission, was arrested for corruption related to the 2004 presidential poll. The MSCI Indonesia Index dropped slightly by only 0.2% on day one but recovered 6% within one month of the arrest. A similar case occurred on 8 April 2008, when Indonesia's former central bank governor Burhanuddin Abdullah was arrested for corruption. The market reacted negatively in the first three days after the arrest (down 3%), but rebounded quickly afterwards. Two other major cases involved the arrest of Minister of Home Affairs Hari Sabarno and Treasurer of the Democrat Party Muhammad Nazaruddin. After the initial negative shock to the market, the index recovered rapidly as investors realized that the impact on the overall economy was small and a cleaner government would eventually be positive for market valuations.

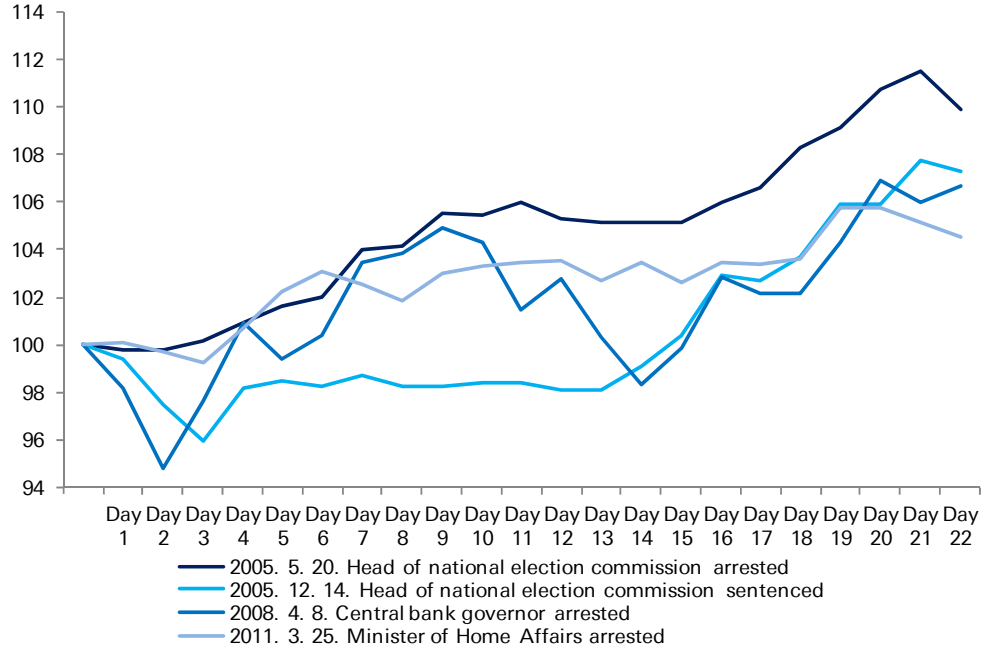
Figure 53 shows that in all of these cases, MSCI Indonesia performed positively, rising by an average of 2.8%, within the first three weeks of the events. In sum, despite the fact that the equity market was subject to some short-term volatility in the first few days of the event, anti-corruption measures did not generate any persistent negative impact on the equity market (Figure 54).

Figure 53: The effect of anti-corruption actions on MSCI Indonesia

	1 day	1 week	3 weeks	1 month
2005.5.20 Head of national election commission arrested	-0.21%	1.86%	3.47%	6.03%
2005.12.14 Head of national election commission sentenced	-1.87%	0.72%	4.80%	3.14%
2008.4.8 Central bank governor arrested	-3.38%	5.87%	2.40%	3.69%
2011.3.25 Minister of home affairs arrested	-0.36%	3.35%	0.36%	1.66%

Source: Bloomberg Finance LP, Deutsche Bank

Figure 54: One-month MSCI Indonesia performance upon major anti-corruption cases (the closing price prior to the event = 100)

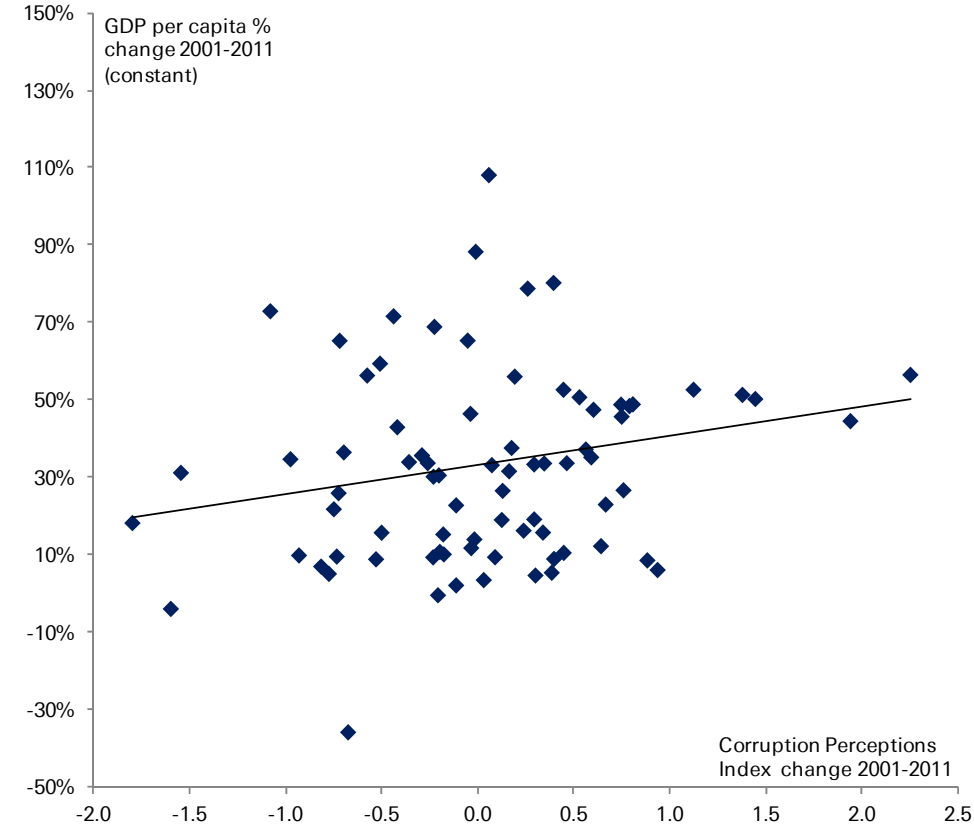


Source: Bloomberg Finance LP, Deutsche Bank

To the contrary, from an economic perspective, our statistical analysis shows that the anti-corruption measures are likely to be positive to economic growth over the medium term. This conclusion is supported by our cross-country regression analysis. Our study employs the well-accepted Corruption Perceptions Index (CPI) published by Transparency International to measure a country's degree of corruption (10 as most clean and 0 as most corrupt), and uses a dataset of 80 countries. Our results show that the cleaner the government is (with a higher CPI), the stronger per capita GDP can grow. Specifically, we find that a one-unit improvement in the CPI tends to be associated with a 0.6ppt increase in annual average per capita GDP growth. A similar study by Podobnik (2008) also concluded that during 1999–2004, for all countries in the world (the term "all countries" is used in the paper, although it does not specify the numbers.), an increase in the CPI by one unit is associated with an increase in the annual GDP per capita growth rate by 1.7ppts.

A simple comparison between Indonesia and the rest of the world reinforces the story. Indonesia, where the CPI improved 1.1 pts (world average increase was 0.04pts) from 2001 to 2011, enjoyed a cumulative per capital GDP growth of 53% vs. the world average of 33% (Figure 55).

Figure 55: Anti-corruption measures promote economic growth



Source: Deutsche Bank, Transparency International, WDI

China's next anti-corruption campaign

As for China, we expect its anti-corruption policy to get tougher in the coming months and years. In fact, immediately after the election of the 205 members of the new Central Party Committee, Li Chuncheng, one of the new members and the deputy Communist Party secretary of Sichuan province, was investigated for corruption. Wang Qishan, new Chairman of the Party's Disciplinary Commission, also convened a high profile meeting to discuss the next steps for fighting corruption. We believe that the new party leadership is likely to take actions such as: 1) clamping down on officials' consumption at restaurants; 2) tightening the enforcement of gift receiving rules; 3) restricting overseas visits (especially to Macau) by officials, as well as 4) public disclosure of officials' personal income and family wealth in pilot regions and departments.

While we think the overall impact of the anti-corruption campaign on China's equity market indices will be modest, specific stocks could be negatively affected. The following is a brief analysis of the likely implications of anti-corruption measures on sectors and listed companies.

1. **Liquors and cigarettes.** The clampdown on officials' consumption (either expensed as government spending or as costs of companies that bribe officials) will negatively affect the sale of highly priced liquors such as Maotai (600519.SS, RMB209.05), Wuliangye (000858.SZ, RMB28.23), and Xiangeqing (002306.SZ, RMB9.92). To take Wuliangye as an example, government

spending represents about 15% of the company's gross revenue, according to the company's Deputy General Manager Zhu Zhongyu[6]. As it does not account for bribery-related consumption, the total percentage of revenue from officials' consumption should be higher. A recent regulation issued by the State Council – the National Regulation on the Administration of the Institutional Affairs of Government – in June 2012, banned high-end liquors and high-grade cigarettes from official banquets. On 25 December 2012, China's Central Military Commission issued a ban on liquor and luxury banquets at receptions for high-ranking officers. These liquor producers account for roughly 2.5% of the A-share market cap, but are not represented on the H-share and red chip markets.

2. **Watches and gift cards.** Heightened government control on gifting and increased public scrutiny on officials' possession of luxury items (such as watches) will have a negative impact on the sale of luxury goods and the pre-paid cards (gift cards) issued by department stores (such as Golden Eagle (3308.HK, HKD19.24), and Intime Department Store (1833.HK, HKD10.16), Lianhua (0980.HK, HKD7.57)). According to Zhao Zhongxiu, Vice President of the University of International Business and Economics and Chief Consultant of Luxury Research Center, gift-giving explains about 40% of China's luxury consumption[7].

   In recent months, in an online anti-corruption campaign launched from the grassroots level, Weibo users publicized several officials wearing expensive watches. These officials were then quickly investigated by anti-corruption agencies and dismissed. According to the Federation of the Swiss Watch Industry, sales from China declined a sharp 27% yoy in September 2012.

   In 2011, the government also began to regulate the sales of gift cards by department stores by prohibiting officials from accepting any kind of gift cards. This resulted in a 20% decline in the sale of such cards in Shanghai, which represented 20-30% of department stores' total revenue[8].

   Watch distributors and high-end department stores represent 0.8% of the A-share market cap.

3. **Macau VIP gaming.** Macau VIP gaming will suffer from possible new travel restrictions on mainland officials and state-owned enterprise managers. Note that VIP gamblers' spending contributes around 70% of Macau's total gross gaming revenue (USD33.5 bn in 2011). According to a research report written by the Macau Polytechnic Institute, 53% of Chinese high-rollers out of the 99 cases studied were either government officials or senior state-owned company managers[9]. As a result of the anti-corruption measures, the impact on gaming companies that mainly derive revenue from VIPs will be significant. These names include SJM Holdings (0880. HK, 18.54), Galaxy Entertainment Group (0027.HK, HKD31.15) and Sands China (1928.HK, 36.45).

---

[6] Guo Xinzhi, "Changes in Wuliangye's distribution system", China Securities Journal, April 22 2012, http://www.zqb.cn/ssgs/03/201204/t20120422_3326408.html

[7] Liu Qiong, "Luxury sales decline in China," China Business News, July 16 2012, http://www.yicai.com/news/2012/07/1902035.html

[8] Chen Hua, "Gift card sales fell sharply in Shanghai", Dongfang Daily, November 24 2011, http://www.dfdaily.com/html/113/2011/11/24/702497.shtml

[9] Zhonglu Zeng and David Forrest (2009), "High rollers from Mainland China: A Profile based on 99 Cases," UNLV Gaming Research & Review Journal, Volume 13, Issue 1, p29-43.

4. **Others.** Many corrupt officials and their family members may pull money out of real estate and stock markets for fear of the possible introduction of a public disclosure requirement. In a number of regions, a system that requires officials to publicly declare their income and wealth has been introduced. For example, in Shunde, located in Guangdong province, all newly-appointed officials (deputy section chiefs and above) must disclose their personal and family wealth from January 2013. These pilot efforts may be further expanded in 2013 to other regions and some departments. The beginning of this reform is already worrying some corrupt officials, who may take the next few years – the transition period – to liquidate assets (stocks or properties) under their or family members' names and move them abroad.

Conclusion

Based on analyses of China's past experience and the case of Indonesia, we believe that the new anti-corruption campaign by China's new leadership will likely be negative for a number of sectors, including liquors, watches, gift-card sales, and Macau VIP gaming. However, given that these sectors account for only 3.7% of A-share market cap, 0.6% of MSCI China market cap and 8% of MSCI Hong Kong market cap, we do not expect any significant impact on the market indices. To the contrary, we believe that the success of the anti-corruption program should help improve investors' confidence in the country's political stability and economic efficiency, and therefore may support the re-rating of the market over the medium and long term.

New catalysts for services

We believe that China's service sector will enjoy substantially higher growth than the overall economy in the coming few years. The macro backdrop is that China has entered a development stage (per capita GDP at USD6000) typically associated with an acceleration in demand for services. In addition, we see three policy catalysts that will further enhance the growth of the service sectors in the coming few years:

1. The government will implement a **VAT reform** which will benefit many service sectors.

2. To address the issue of growing income inequality, the government will likely increase its **social expenditure** substantially in the coming few years, benefiting the healthcare and education sectors.

3. Accelerating the pace of **urbanization** has become the main strategy for growth in the coming decade. Urbanization will push up demand for healthcare, tourism, and entertainment.

In this section, we use our computable general equilibrium (CGE) model to quantify the impact of the above three catalysts – VAT, higher social spending, and a higher urbanization ratio – on various service sectors. We found that the pre-tax profit margins of health, education, urban transport, insurance, and tourism sectors can be boosted by 0.5-2.5ppts. Volume-wise, their annual average revenue growth can also be enhanced by 0.5-2.8ppts.

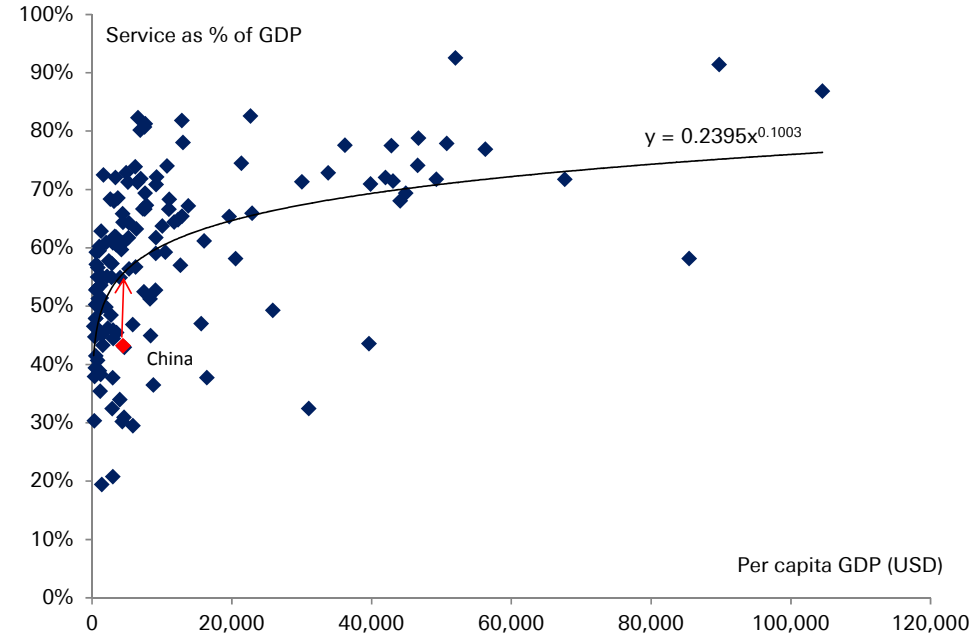
China's service sector/GDP ratio is 12ppts below potential

The weight of China's service sector in GDP is only 44%, 13ppts below the 'potential' level implied by a cross-country regression (with a data set of 138 countries) of the service sector/GDP on per capita GDP levels. In other words, in "normal countries" where per capita GDP is the same as in China (at USD6000), their service sector as a percentage of GDP should be around 56% (Figure 56).

The under-development of China's service sector has to do with the excessive consumption of production inputs by the export and heavy manufacturing sectors (partly due to government controls on factor prices), the flaws of the tax system (e.g., the cascading effect of the business tax on services, which discourages specialization), the Hukou system which constrains the pace of urbanization and thus demand for services, and the income disparity that limits the consumption power of a large low income segment of the population.

As the abovementioned distortions are gradually removed, we believe China's service sector will grow at a much faster pace than GDP. In the following sections we will discuss the three important new catalysts for the acceleration of service sectors in the coming years.

Figure 56: Per capita GDP level vs. service sector/GDP ratio



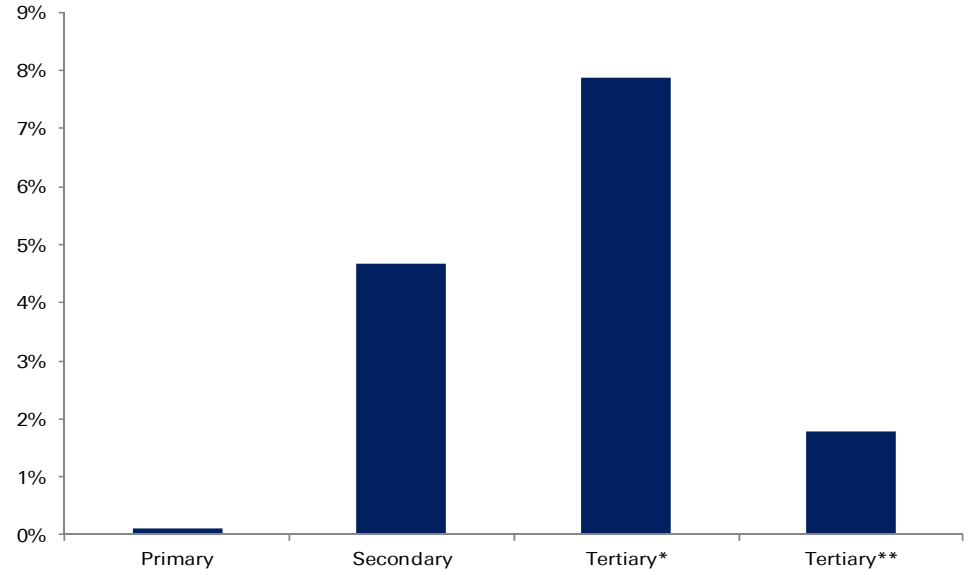
Source WDI, Deutsche Bank; Note: 2010 data

Catalyst No.1: VAT reform

The VAT reform will be one of the most likely and most important economic reforms in the coming few years. The pilot VAT reform program, which converts the business tax on selected service sectors such as transport to a VAT, started at the beginning of 2012.

Before the pilot reform, China's service sectors were subject to a business tax, which is levied on the gross revenue. Compared to a VAT, a business tax results in double taxation and discourages specialization (division of labor). The VAT reform is designed to reduce the overall tax burden and avoid double taxation. Figure 57 shows the indirect tax burden of tertiary industry – measured by tax revenue as a % of gross revenue – is significantly higher than that of secondary industry.

Figure 57: Ratio of indirect tax to total revenue, 2011



*Source: NBS, Deutsche Bank; Note 1: Tertiary * includes transport, storage, postal, IT, computer services & software, wholesale and retail, hotels and catering services, real estate, leasing and business Services, and financial intermediation; Tertiary ** includes health care, education, tourism, entertainment, culture, science, and public administration.*

On 1 January 2012, Shanghai was chosen to be the first city in the pilot program. As of now, 11 provinces and municipalities have since been included in this VAT reform pilot program. These include Beijing, Tianjin, Jiangsu, Zhejiang, Anhui, Fujian, Hubei, Guangdong, Ningbo, Xiamen, and Shenzhen. The impact of this reform has been positive. Taking Shanghai as an example, during the first eight months of this year, this reform helped reduce the tax burden by over RMB17bn for companies. About 90% of the companies in Shanghai that participated in the reform enjoyed a reduction in taxation due to the reform and most of the other 10% will also see benefits but in the longer term. The tax burden of some small and micro enterprises was reduced by 40%.

We think the experience gained from the pilot program will be quickly applied to other regions and other service industries. Currently, the sectors included in this VAT pilot reform are transportation (including road, air, and water transportation), and a few modern service sectors. In a speech on 18 October 2012, Li Keqiang, who is widely expected to become China's next premier in March 2013, said that the VAT reform will be further expanded to other regions and more sectors into the pilot program. Mr. Li specifically mentioned that telecommunications, railway transportation, construction and installation sectors will be included in the VAT reform program. We expect that within the next three years, the VAT reform will be applied to all major service industries. According to tax experts, the implementation of the VAT reform will reduce the total indirect tax burden by about RMB300bn based on 2011 data.

For the banking and insurance sector, we assume that the current 5% business tax rate will be cut to 4%, along with the VAT reform. The reason that we expect the business tax system to continue in the financial sector is that the invoice-credit VAT system is hard to apply in a margin-based sector. We believe that a 1ppt reduction in the business tax is necessary as interest rate liberalization will continue to depress net-interest margin in the banking system and some tax relief is needed to offset part of the margin contraction.

Catalyst No.2: Social expenditure reform

We believe in the coming few years, the government will allocate a significantly larger proportion of total fiscal spending to education, health and social security (social spending). The major beneficiaries of an increase in social expenditure are low- and middle-income people. Sector-wise, the key beneficiaries will include education, health care, insurance, and fund management industries. This reform will help improve the degree of equalization of public services and thus income distribution. The following are the specific rationales behind the reform.

First, the government will likely increase the proportion of fiscal spending on education to GDP. In the budget law, it is stated that fiscal spending on education should reach a minimum of 4% of GDP. The government is under pressure to achieve that goal. Another rationale is that education spending is one of the most effective tools to lift rural children out of poverty, and therefore has a significant role to play in improving income distribution. In addition, China is facing the risk of falling into a middle income trap, if innovation cannot quickly replace cheap labor as the main source of competitiveness. Obviously, innovation capability will have to come from better education.

Second, the share of the fiscal spending on health care and social security in GDP will have to rise. Our analysis of China's national balance sheet suggests that the pension deficits and rising health expenditure will become the most important sources of fiscal pressure in the medium and long term due to the rapid aging of the population. We estimate that the present value of the cumulative pension deficits in the coming 38 years (2013-2050) will amount to 83% of 2011's GDP. And total health expenditure will rise from the current 5% of GDP to 10% of GDP in 2050. According to international experience, around one-third of this extra 5% of GDP in health spending will need to be financed by the government.

Catalyst No.3: Urbanization

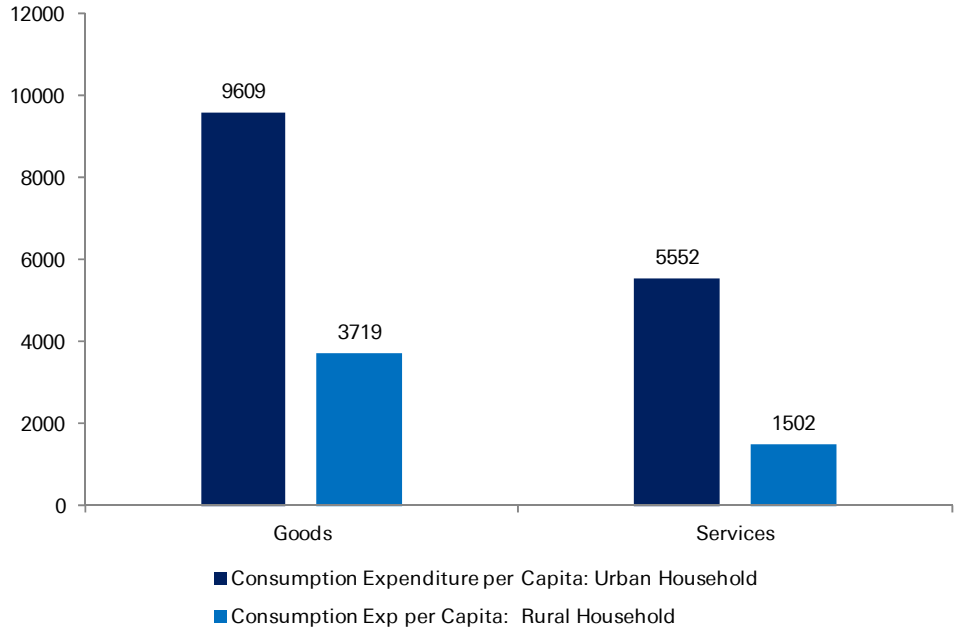
Of the four key elements of China's new development strategy, most attention has been given to urbanization in the official report of the 18th Party Congress. The report specifically mentioned that China would speed up the Hukou (urban residency) system reform, promote the migration of rural residents to urban areas, and achieve the full coverage of public services for all urban residents (including migrant workers living in cities).

Mr. Li Keqiang, widely expected to be China's next premier, in his recent speeches emphasized that China's true urbanization rate is only 35% (rather than the widely cited 51%) when the urban population is defined as those with Hukou (permanent residents). His message suggests that the potential for urbanization to further boost China's economic growth is far greater than what was previously perceived. In addition to these reforms, we believe investments in urban infrastructure (e.g. subways and light rails) and better provision of education and health care services will likely be focuses as well.

Previously, the general consensus and the target set in the 12th Five Year Plan is for China's urbanization ratio to rise 0.8ppts per year in the coming few years till 2015, vs. the increase of 1.4ppts per year during 2006-2010. Given the planned reforms under the new leadership, we now believe that China will likely maintain the pace of urbanization at 1.4ppts per year for the coming few years. The 0.6ppt rise in the pace of the urbanization ratio over the past projection would translate into the migration of an additional 8m rural residents to the urban area every year.

Figure 58 shows that urbanization tends to substantially boost the consumption of services. In 2011, the amount of goods (in RMB) consumed by an average urban resident is 2.6 times that consumed by an average rural resident, but the amount of services consumed by an urban resident is 3.7 times that of a rural resident. The higher elasticity of services to urbanization suggests that when more rural residents relocate to cities, demand for services tends to grow faster than demand for goods.

Figure 58: Per capita annual consumption by urban and rural households (RMB), 2011



Source: CEIC, Deutsche Bank

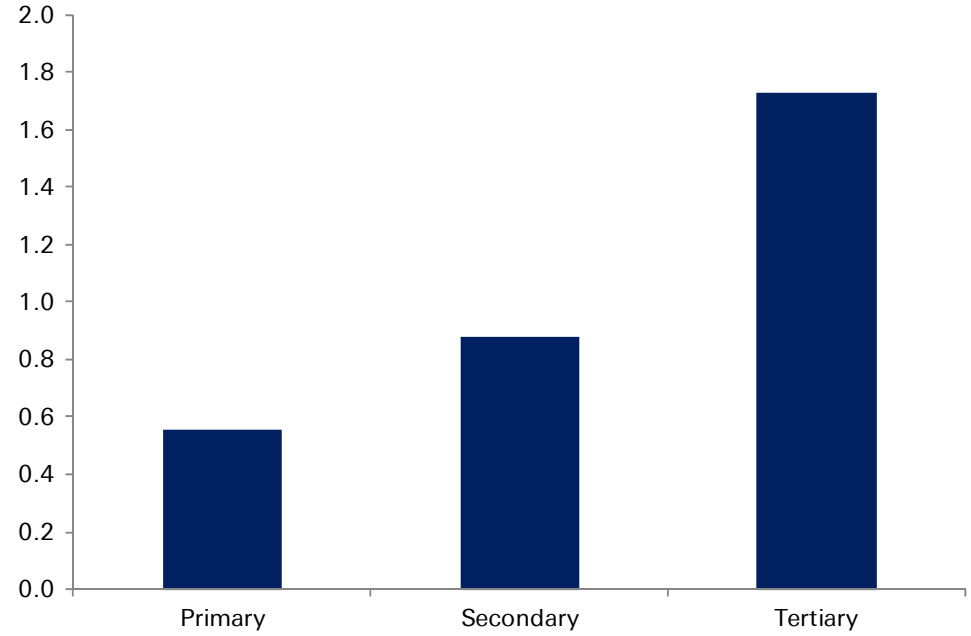
Quantifying the sectoral impact of catalysts

The above discussion provides a qualitative assessment of the impact of three catalysts on services. For investors who need to forecast company earnings, it is more important to quantify the significance of these catalysts. In this section, we present the simulation results from our computable general equilibrium (CGE) model, which shows the impact of the VAT reform, an increase in social spending, and a higher urbanization ratio in the coming three years on sectors. In order to provide a more meaningful assessment of the financial system, we also include the assumptions of a business tax reduction (from 5% to 4%) and of further interest rate liberalization.

The specific assumptions we used in this simulation include: 1) The VAT reform is to be expanded nationwide and to all major service sectors within the next three years, and it will reduce indirect tax by 20%; 2) fiscal expenditure as a percentage of GDP on education and healthcare will rise by 1.2ppts within the next three years; 3) an annual increase of 1.4ppts will be seen in the urbanization ratio in the next three years; 4) the business tax on banking and insurance will be cut from 5% to 4%; and 5) interest rate liberalization will depress banks' net profit margin by 60bps.

Our simulation results suggest that most service sectors will benefit from the reforms (Figure 59). Compared with the base case of no reform, the reforms will increase the real output of the service sector (tertiary) by 1.7ppts, the real output of the secondary sector (industry and construction) by 0.9ppt, and the real output of agriculture by 0.6ppts.

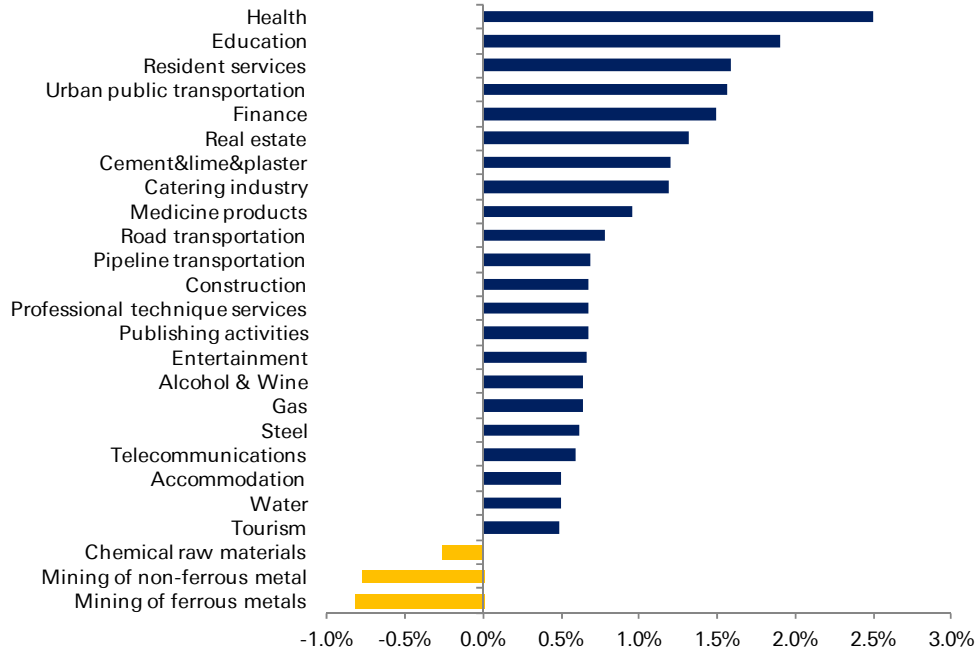
Figure 59: Impact of reforms on real output by sector – 2015 (ppt change from baseline)



Source: Deutsche Bank CGE model

We also simulated the impact of reforms on pre-tax margins for 135 industries (Figure 60). Sectors such as education and health will benefit the most (with margins improving by 2-2.5%), largely due to social expenditure reform; sectors like insurance, professional services and road transport will also benefit (with margins improving by 0.7-1.5ppts) but largely due to the VAT reform.

Figure 60: Impact of reforms on pre-tax margin (ppt change from baseline)

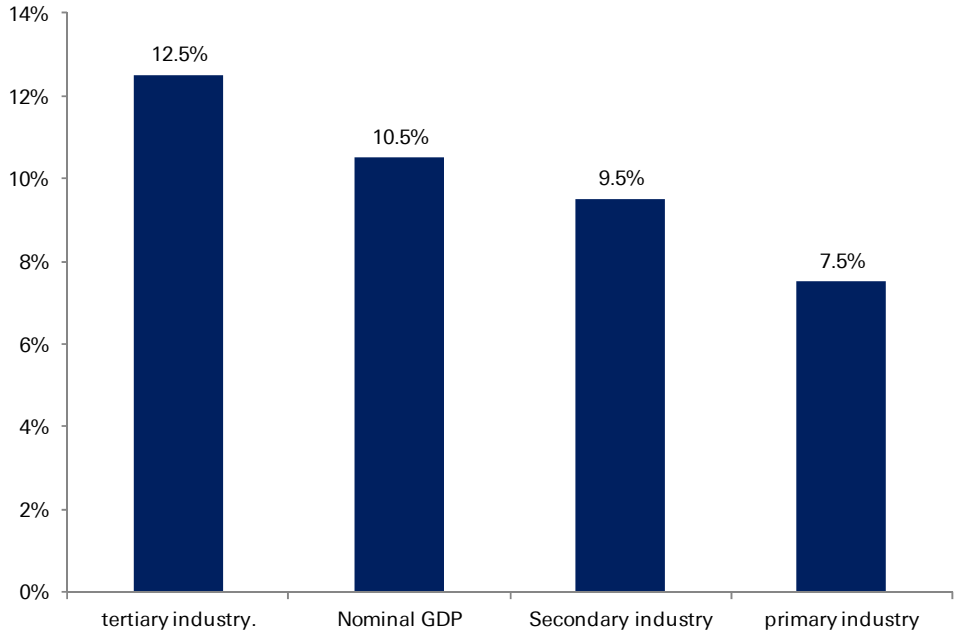


Source: Deutsche Bank CGE Model

Service sector will likely grow 12% p.a.

Given that in the past five years, the nominal value-added growth of the tertiary industry (service sector) has already outperformed that of the secondary industry (industry and construction) by about 2ppts, and our CGE simulation shows that the three catalysts will likely further boost service sector growth, we are confident that the service sector will outperform the secondary industry by at least 2ppts in the coming years or even decade. With nominal GDP growth likely to continue at 10.5% for the coming five years (7.5% real GDP growth plus 3% inflation), we estimate that the growth of the tertiary industry will be 12.5%, that of the secondary industry will be 9.5%, and that of the primary industry will be 7.5% (Figure 61). This implies that the value added of the service sector as a percentage of GDP will increase to 49% in 2017 from 44% in 2012.

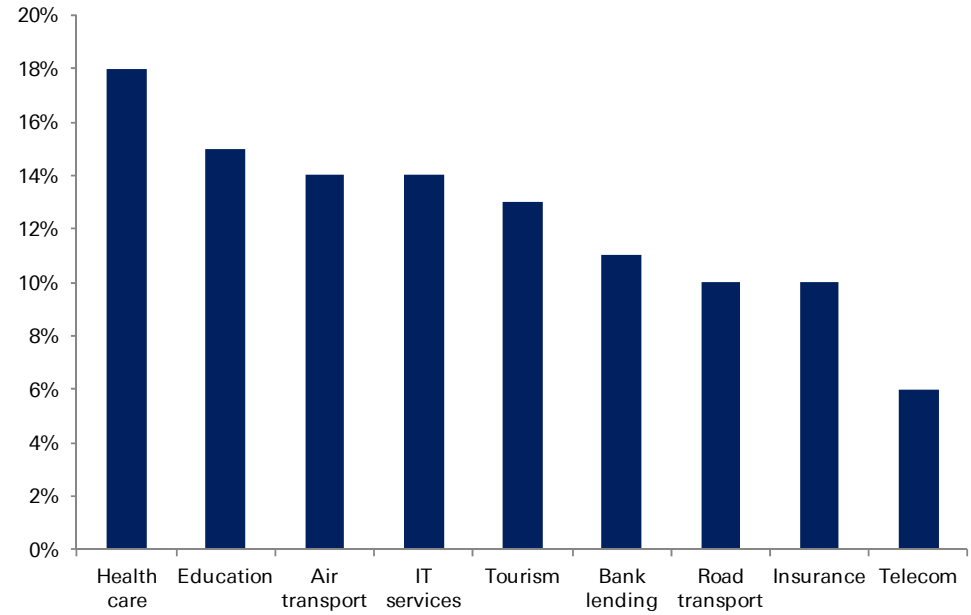
Figure 61: Deutsche Bank forecasts of annual average nominal growth, 2013-17



Source: Deutsche Bank forecasts

Within the service sectors, we also estimated the revenue growth rates of key subsectors for the coming three years, largely based on our analysts' views (Figure 62). The healthcare sector stands out as the top performer. In addition to the catalysts we mentioned above, healthcare will also be supported by a few other factors such as the aging population, growing availability of more expensive treatments due to technological progress, and improved rural access to and affordability of healthcare services.

Figure 62: Annual average revenue growth forecasts by sector, 2013-2015



Source: Deutsche Bank

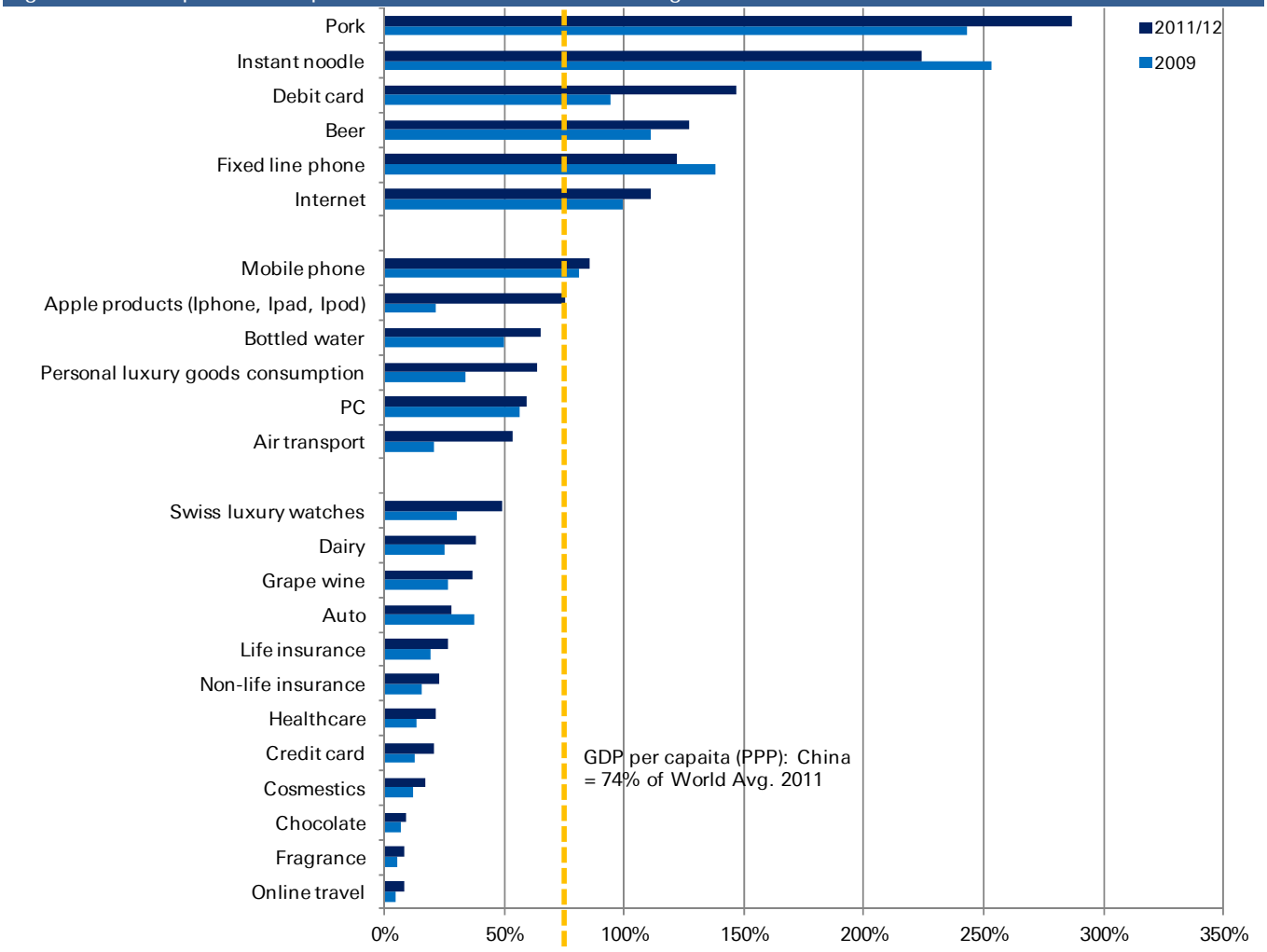
Low penetration also supports service sectors

From a bottom-up perspective, penetration rates (per capita consumption levels) provide a useful guide to gauge the growth potential of various sectors. In China, most service items still have much lower penetration rates relative to the norm, while the penetration rates of most goods are much higher. This also suggests stronger growth for the service sector.

In this section, we compare the penetration rates (measured by per capita consumption) of various goods and services in China as a percentage of world averages. We did this exercise in our 2010 China Strategy Report (using 2009 data), and many investors requested an updated version. Figure 63 shows the most updated figures. The dark blue bars represent the latest (2011/12) ratios, while the light blue bars represent the 2009 ratios.

The penetration rates of many goods have exceeded 74% of the global average – note that China's per capita income is about 74% of the global average, so this is where the "normal penetration ratio" should be if income is the only determinant. The penetration rates of pork, instant noodles, fixed-line phones, beers, and Internet exceeded 100% of the global average. In contrast, the penetration rates of many services, including healthcare, insurance and tourism, are significantly below the world average.

Figure 63: Per capita consumption in China as % of world average



Source: 2011 data (or 2012 data if available) complied by Deutsche Bank;
GDP per capita: WDI
Pork, beef: carcass weight kg per capita; USDA
Instant noodle: package per capita; World Instant Noodle Association
Debit card, credit card: card holding per capita; PBoC;
Beer: Liter per capita; The Brewers of Europe
Fixed phone: lines per 100 people; Mobile phone: user per 100 people; Auto: Auto per 100 people; Internet: user per 100 people; WDI;
Apple products: sales per capita; Apple company reports;
Bottled water: gallon per capita; Beverage Market Corporation
Apple products: sales per capita: Apple company report;
PC: Ownership per capita; International Telecommunication;
Air traffic: passenger carried per 1000 people; Airports Council International, CEIC
Swiss luxury watches: import value per capita; Deutsche Bank Equity Research
Dairy: Liter per capita; Deutsche Bank estimate based on International Dairy Federation;
Grape wine: liter per capita; OIV
Life insurance, non-life insurance: USD premium per capita; SwissRe
Healthcare: USD expenditure (incl. both government and private) per capita; WHO
Cosmetics: USD per capita; China Association of Fragrance Flavor and Cosmetic Industries, Deutsche Bank estimate
Chocolate: USD per capita; Euromonitor
Fragrance: USD per capita; Euromonitor
Online travel: online travel revenue as % of total tourism, CNNIC.

The property sector

In this section, we discuss several issues that will influence the performance of the property market in 2013: 1) real estate policy, including Home Purchase Restrictions (HPRs) and property taxation; 2) credit policy for developers; and 3) demand outlook and housing supply conditions, including inventory and housing starts. We conclude that:

1. The current real estate policy is unlikely to change, and the HPRs are unlikely to be relaxed meaningfully in the coming one to two years due to difficulties in implementing the property tax.

2. Credit policy is likely to be relaxed for real estate developers, especially in major cities.

3. We believe that demand will remain healthy as urbanization will likely speed up and affordability has improved.

4. These, combined with the decline in inventory and the deceleration of floor space which has started, suggest upward pressure on property prices. We see a 5% rise in property prices in major cities in 2013, but will not be surprised if in a few places price hikes reach 10%. But in tier-2 and 3 cities, where inventory remains abundant, prices should be largely stable.

Policy outlook for 2013

We expect the broad framework for real estate policies to remain largely unchanged. Specifically, we believe that in 2013: 1) HPRs are unlikely to be relaxed; 2) the pilot program for property taxes will not be expanded aggressively; 3) credit conditions will improve for property developers in selected regions; 4) benchmark interest rates will likely remain unchanged throughout most of 2013.

Lately, some market participants have become more hopeful of an easing in real estate policies due to a few purported signals from the government. For example, in some cities, the down-payment ratio requirements for certain apartments were reduced (i.e. Nanjing and Zhongshan); the ceiling for mortgage loans from the Provident Housing Fund (PHF) was raised in some cities and provinces; and lending restrictions on real estate developers were relaxed in some locations. In response to market speculation about policy easing, on 12 November 2012, Jiang Weixin, Minister of Housing and Urban-Rural Development, said that "we haven't thought about relaxing the current policies".

In our view, the probability of the government significantly loosening real estate policies in 2013 is low, as prices are now edging up and there are no obvious policy instruments that can replace HPRs. Preventing property bubbles remains one of the key objectives of the government.

HPRs will remain tight in 2013

HPRs have been successful in curbing property prices in the past two-and-a-half years. In 2013, we believe that HPRs will remain strictly enforced, as property supply will be tighter in major cities and thus any relaxation of HRPs will likely lead to another round

of speculative buying. One reason that the government will continue with HPRs is that the property tax is not ready to replace HPRs.

Property tax unlikely to replace HPRs in foreseeable future

For at least the following reasons (though in fact there are many more), we believe the property tax pilot program is unlikely to be extended rapidly to other regions.

1. There is no consensus as to the main purpose of the property tax. Some argue that it is to curb speculation demand, as the tax could increase the holding costs of speculators; some say that the tax can help generate steady local revenue so that local governments will be less inclined to pursue land sales; yet others argue that the property tax can improve income distribution. Opponents argue that all these objectives can be achieved by using alternative policy instruments.

2. There is no consensus on who should have the legal right to levy the tax. Recently, Wu Xiaoling, Vice Chairman of NPC's Economic and Finance Committee, said that the decision to introduce a property tax should be the right of the People's Congress, rather than the executive branches (the state council or the local governments). This contradicts the recent practices in Shanghai and Chongqing.

3. There is no consensus on whether the property tax will effectively curb property prices. Xu Shanda, former Vice Commissioner of the State Administration of Taxation, argues that the introduction of a property tax may actually push up property prices when there is a shortage in the market, as sellers will pass the additional tax to buyers via higher selling prices. Xu's proposal is to introduce a very high business tax (transaction tax) to curb speculation, which he believes is much easier to implement and would be much more effective.

4. There is no consensus on numerous implementation issues, such as whether and how to offer exemption for low-income households who live in prime locations; how to treat old properties whose selling prices have already included very high land charges; and how to identify the number of units held by each household.

5. Local governments are reluctant to take initiative. Since the pilot programs in Chongqing and Shanghai were started in 2009, very few local governments have expressed willingness to follow suit. It is generally believed that many local officials hold (often in other people's names) multiple units, and a property tax would certainly be hard on these cash-poor, asset-rich officials.

6. The pilot programs in Shanghai and Chongqing didn't deliver desirable results. For example, prices of new residential buildings in Shanghai have risen 1% since the pilot program was introduced in January 2011, a similar increase to that Beijing experienced during the same period; the property tax revenues derived in Shanghai and Chongqing were very limited, as they amounted to only 0.3% and 0.07% of total local government revenue in 2011.

Credit conditions should improve for developers

Under the tight credit conditions, property developers' investment activities decelerated quickly to only 15% yoy in 3Q 2012 from their peak of 38% yoy in 2Q 2010. Given that inventory has declined and project starts have decelerated sharply, further deceleration of real estate investment will likely imply a shortage of supply on the market in 2013.

Recognizing the resulting upward pressure on the market, we believe the regulators will need to relax their control of loans to developers, especially in major cities. Specific actions that can be taken by the government include relaxing the LTV ratios and collateral requirements as well as removing certain developers from the blacklist.

Benchmark rates are likely to remain largely stable in most of 2013

We believe that benchmark interest rates will remain largely unchanged for most (namely, the first three quarters) of 2013 before CPI inflation rises to 3.5% yoy. We think the PBoC may begin to raise interest rates in 4Q 2013 or early 2014, when inflation pressure intensifies (see our economics section of this report). Against this backdrop, mortgage rates will likely remain stable.

Demand supported by urbanization and affordability

For several reasons, we believe that property demand growth may be stronger than expected in 2013. First, urbanization will likely be faster than previous market expectations and thus drive an acceleration of demand for properties. Second, affordability has improved substantially in the past year and will continue to be supportive of property demand for most of 2013.

Urbanization will likely be faster than expected

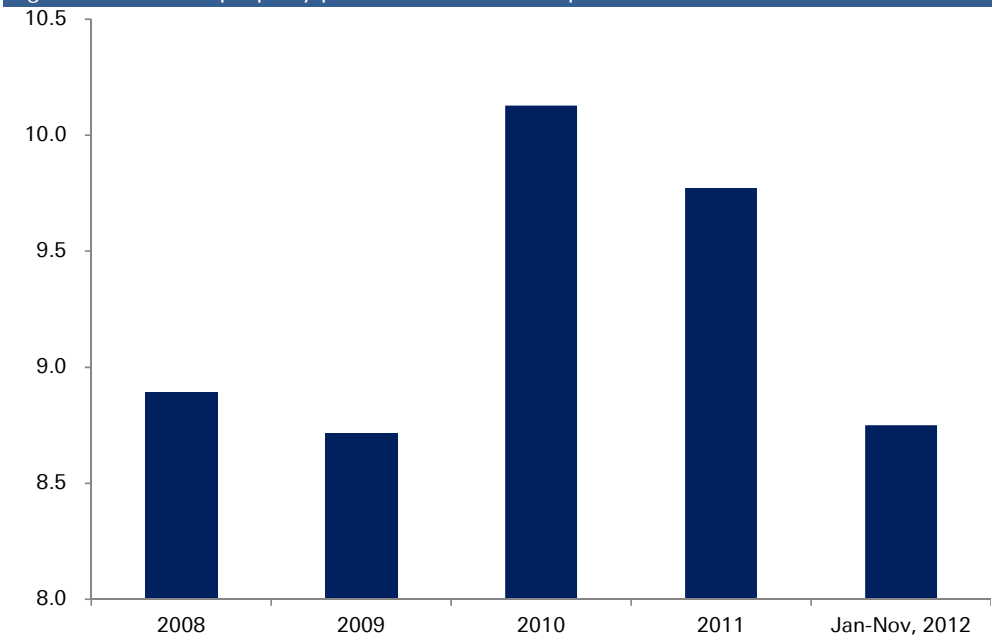
Until recently, the general perception was that China's urbanization would slow down due to labor shortages as part of the demographic trend. In the 12th Five Year Plan (2011-2015), the target was for the urbanization ratio to rise 0.8ppts per year on average, in contrast to the increase of 1.4ppts per year during 2006-2010. However, the most recent indications from the 18th Party Congress as well as several high-profile speeches made by China's next premier Li Keqiang suggest that the pace of urbanization is unlikely to decelerate in the coming few years. That is, the annual migration of rural residents to cities may therefore be 5m-6m higher than previous market expectations. This trend will be supported by government policies to improve urban infrastructure, to reform the Hukou and rural land systems, and to improve social services to migrant workers.

Even if the extra 5m rural migrants per year do not have the ability to purchase apartments, the incremental rental demand will be substantial. Assuming each migrant worker will need a rental space of 10sqm, 5m people will translate into an additional demand for 50m square meters. This represents a 5% rise in total sales in urban residential property per year.

Housing affordability at its best level in recent years

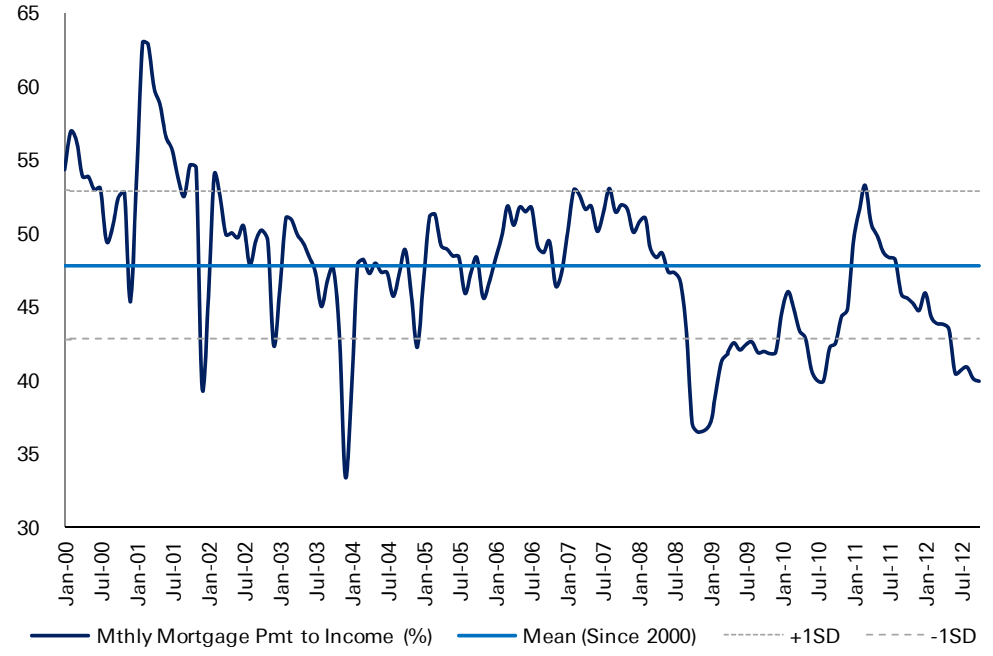
China's housing affordability has improved significantly over the past years. The price-to-income ratio in 36 cities has declined from 10.1 times in 2010 to the current 8.8 times, as household disposable income has risen by 27% but average housing prices rose only 10% during this period (Figure 64). Measured by mortgage payment as a percentage of monthly income (Figure 65), this ratio also declined to a level below one standard deviation from the 12-year average. Given that mortgage rates will likely remain stable throughout most of 2013, and income will continue to rise at a pace of about 10% per annum, China's housing affordability was at its best in the past five years and will continue to improve. This means that affordability will provide the best support for the demand outlook in 2013 compared with any of the past five years.

Figure 64: Ratio of property price to household disposable income in 36 cities



Source: China (3Q 2012) NBS, Soufun, Deutsche Bank; US (3Q 2012) Bloomberg Finance LP; Malaysia (2011): CEIC, Deutsche Bank; UK (2011): CEIC, OECD, Deutsche Bank; France (2011): CEIC, OECD, Deutsche Bank; Japan (Tokyo 23wards+ Tama area, 2011): Tokyo metropolitan government,

Figure 65: Ratio of mortgage payment to household disposable income in 36 cities



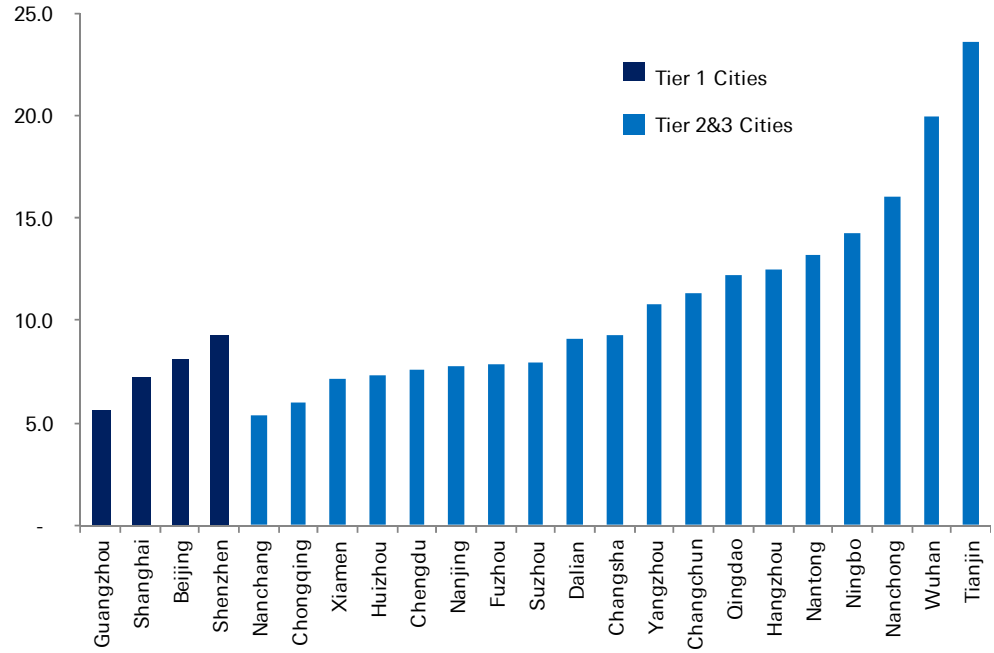
Source: NBS, Deutsche Bank

Supply is tightening

Inventories have declined sharply

For the 21 major cities that we monitor, the average available supply measured in the number of months to clear[10] has declined sharply from its peak of 21.5 months in February 2012 to 10.4 months in November 2012. The inventory in tier-one cities looks particularly tight. For example, the inventory in Beijing has declined to 8.2 months, and those in Guangzhou (5.7 months), Shenzhen (9.3 months) and Shanghai (7.3 months) are also very low (Figure 66). Note that the past five-year average of inventory levels was 10.3 months in tier-1 cities. However, in some tier-2 and 3 cities, inventories remain excessive.

Figure 66: Current inventory is low, especially in Tier-1 cities



Source: Soufun, Deutsche Bank

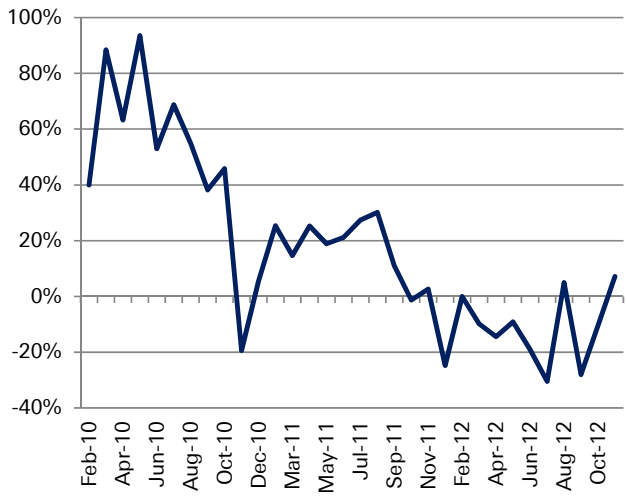
New supply will be tight due to low housing starts

In the commodity residential construction cycle, both new construction starts and land sales serve as good leading indicators of new supply. New construction starts lead new supply by 9-12 months, while land sales lead new supply by 12-24 months. The following figures suggest that new supply will be tight in 2013:

- Commodity new GFA starts contracted about 7% yoy and new GFA starts of commodity residential housing projects contracted 18% yoy in the first 11 months of 2012 (Figure 67).
- Land sales in 300 cities dropped in both volume and value at rates of 27% yoy and 23% yoy respectively in January-November 2012. This is the second annual contraction in land sales since 2011 (Figure 68).

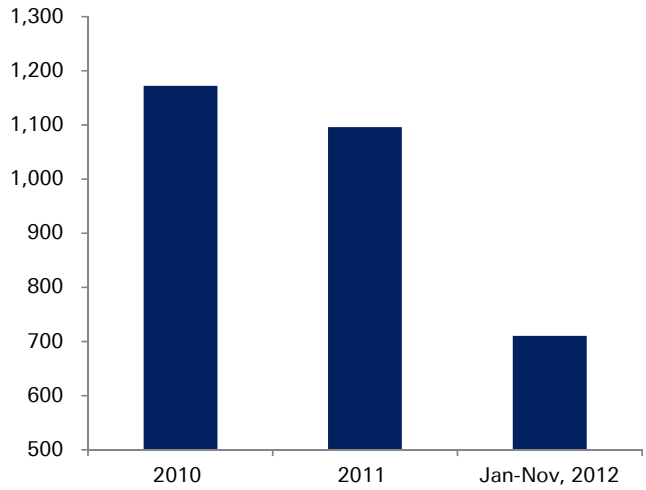
[10] Including completed but unsold inventory and properties under construction with pre-sale permits but which are not yet sold.

Figure 67: New GFA starts for residential housing, % yoy



Source: NBS, Deutsche Bank

Figure 68: Land floor area sold (msqm) – 300 cites res.



Source: NBS, Soufun, Deutsche Bank

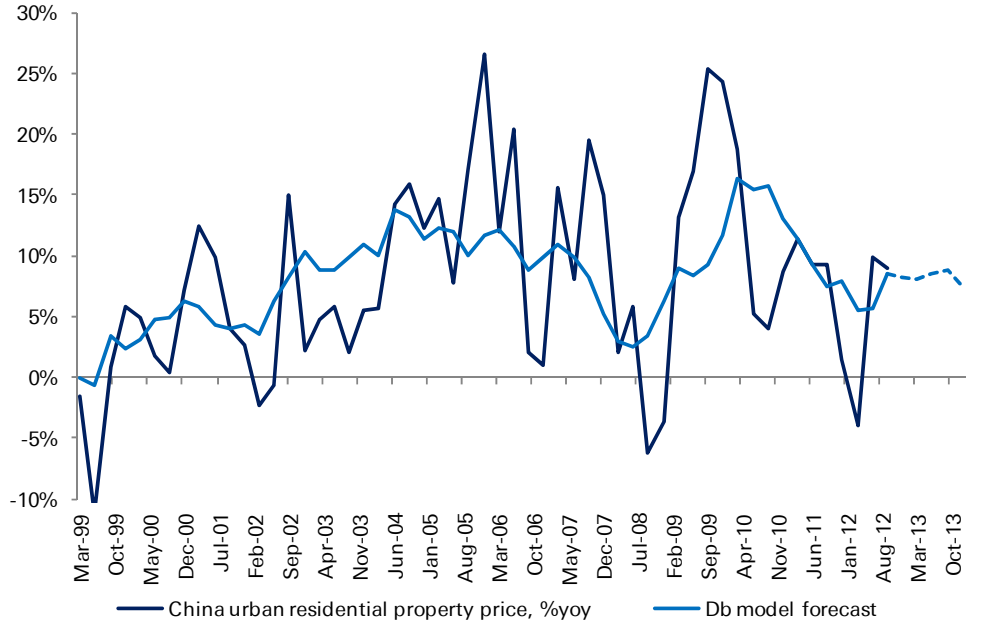
Model forecast: 8% property price increase

Given our outlook that real estate policies will remain largely stable, demand will be healthy, and supply will be tight, we believe that pricing power will return to developers and property prices in major cities are likely to rise by 5-10% in 2013.

In addition to the qualitative discussions above, we constructed a property price forecast model, based on the variables reflecting demand/supply conditions, monetary policy and the degree of leveraging. The independent variables used in the model include the nominal GDP growth rate (proxy of income), the value of floor of space completed (supply), policy interest rate (affordability), and mortgage to GDP ratio (leveraging). The model provides a reasonably good fit for property prices on data from 1999 (Figure 69).

Based on the model coefficients estimated from the regression model, we use the following assumptions for 2013 to estimate the likely property price change: real GDP growth rate (8.2%), inflation rate (3%), one-year lending rate (6%), growth of value of buildings completed (17%), and mortgage to GDP ratio (15.6%). The model yields an 8% increase in China's national commodity property price index.

Figure 69 : China urban residential property price, yoy %



Source: NBS, Deutsche Bank

Companies we prefer

The above discussion suggests that the overall macro environment will be reasonably favorable for the property sector in 2013. At the company level, given our outlook of rising property prices and supply shortage in 2013, we favor developers meeting the following criteria: 1) those which have replenished their land bank at low land costs in 2011/1H12; and 2) those which have the ability to grow via new acquisitions or construction starts without being constrained by incurrence covenants; and 3) those which have revenue exposure to prime city-center areas where property prices tend to rise faster. Based on these criteria, our analysts' top picks include COLI (0688.HK, HKD24.35), China Overseas Grand Oceans (0081.HK, HKD10.02), China Resource Land (1109.HK, HKD23.30) and Guangzhou R&F Prop (2777.HK, HKD14.72).

Upgrading of labor-intensive industry

The general perception among global investors is that China's labor-intensive industry is rapidly losing export competitiveness and is declining in output, as the rise in labor costs is forcing production to relocate to low-income countries like Vietnam and Bangladesh. We believe otherwise. Our data analysis suggests that China's export growth has in fact outperformed the rest of the EM countries in recent years despite its rapid labor cost increase, as China's productivity growth has been much stronger and unit labor costs (in USD terms) have risen at a much slower pace than perception. As a result, China continues to gain export market share in the world.

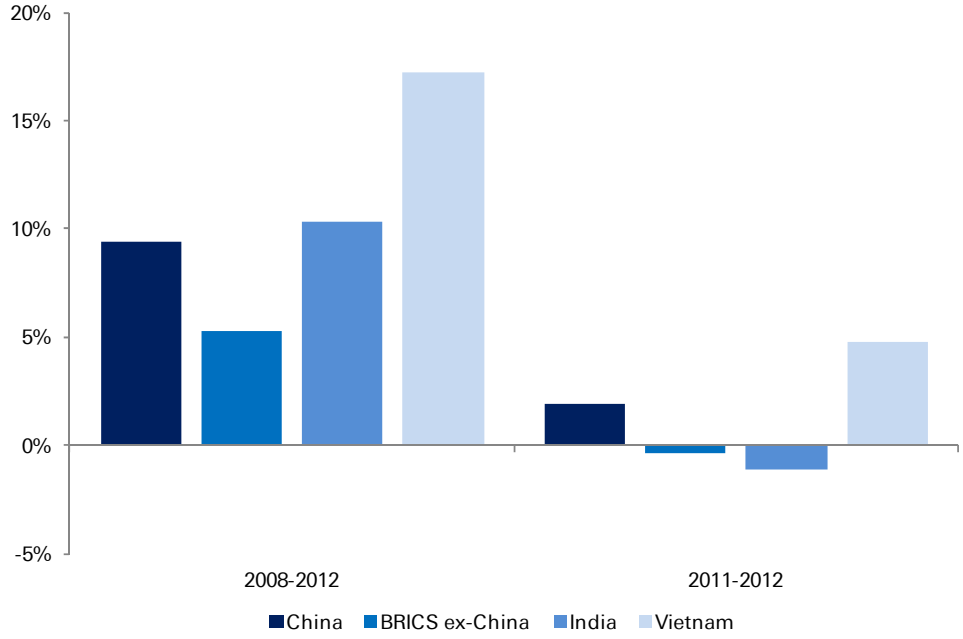
One particular example of rapid upgrading is the textile/apparel industry – the largest labor-intensive industry in China. This industry has demonstrated strong growth in the past few years, and will likely continue its output growth at about 14% p.a. in the coming few years. The key reasons for this are: 1) despite the decline in the most labor-intensive segment of the industry, the textile sector is rapidly upgrading to high value-added segments with brands and better designs; 2) a large part of the relocation of production is from coastal to inland areas and thus remains in China; 3) domestic demand for textiles is growing rapidly and may continue at a pace of 18% per year. Thus, despite the deceleration in exports in the textile/apparel industry, China's domestic demand and the sector's upgrading capacity growth will likely continue to support its robust growth for many years to come.

China's export growth has outperformed EM

A general perception in the financial market is that China's export industry is a sunset industry, as labor costs are increasing at 15% per annum and China is quickly losing competitiveness to low-cost neighbors such as Vietnam and Bangladesh. The reality is not as dire. In the past five years (2008-2012), despite the deceleration in China's labor force growth, China's export growth still averaged 9% per year, much stronger than 5% for BRICS ex-China and only slightly lower than 10% for India, where the labor supply is abundant and growing.

Since 2011, China's export growth has not decelerated by more than that of other EM economies, suggesting that the recent Chinese export deceleration is not mainly driven by China-specific factors, such as rising labor costs, but much more as a result of the global demand slowdown. As shown in Figure 70, China's export growth has performed better than the BRIC countries (ex-China) as a group since 2011.

Figure 70: Export growth of China and other EMs, % CAGR



Source: CEIC, Wind, Deutsche Bank; Note: 2012 data until November

China's unit labor cost grew at a slower pace than perception

Over the past few years, wage inflation (especially in USD terms, partly due to RMB appreciation) is much higher than in most other EM countries. Between 2008 and 2012, the average Chinese wage rate in current USD terms increased by a 14% CAGR. Part of this reflects the RMB appreciation (by an average of 4% p.a. vs. the USD in the past four years). A key reason for the outperformance of Chinese exports over EM despite the much faster wage inflation in China is productivity growth. Although the wage rate as measured by nominal wage per employee has been growing fast, the output value per employee has also been increasing.

Figure 71: ULC changes in China and other countries in USD, % CAGR, in 2008-2012

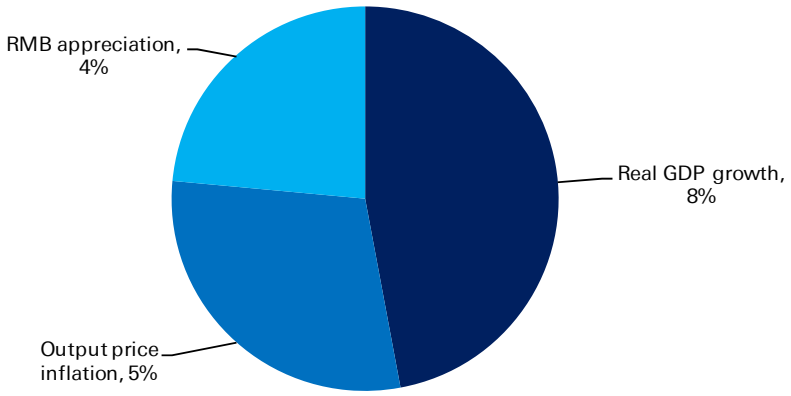
	Wage rate	Labor productivity	ULC
China	16%	17%	-1%
India	4%	6%	-2%
Malaysia	7%	5%	2%
Vietnam	6%	5%	1%

Source: CEIC, Conference board, IMF, Deutsche Bank estimates, Deutsche Bank; Note: Labor productivity is calculated from PPP $ numbers from the Conference Board; *Note: Indian wage rate is the average of textile mills and major public organizations.*

Figure 71 compares the annual average changes in the unit labor cost (ULC) in China and those in other countries between 2008 and 2012, measured as nominal wage cost per unit of GDP in current USD. The ULC change is essentially the difference between labor productivity growth and nominal wage inflation. As China's labor productivity (nominal GDP measured in USD divided by the labor force) growth has been substantially higher than other major emerging market economies, it has offset most of the negative effect of nominal wage inflation on China's labor competitiveness. The unit labor cost in China has actually come down a bit over the past years, contrary to the general perception – note that many people have the misperception that labor cost is identical to unit cost.

China's high growth of labor productivity (17% p.a.) reflects three factors. The first factor is real productivity growth in constant local currency terms, which has been about 8% p.a. since 2008. The second factor is the increase in output prices, which can be largely captured by the GDP deflator. It rose by about 5% per year in the past four years. The third factor is RMB appreciation (against USD), which has averaged 4% p.a. since 2008. The following chart shows the contributions of these three factors to China's productivity growth as measured in USD (Figure 72).

Figure 72: Contributors to China's labor productivity growth, 2008-2012



Source: Deutsche Bank. Note: Output price inflation is GDP deflator.

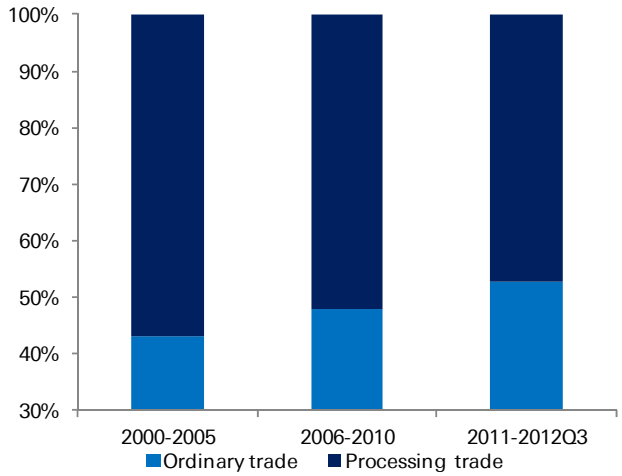
Upgrading of export sector has also been evident

In recent years, China has steadily shifted away from labor-intensive and low value-added exports to higher-end exports. This is reflected in the gradual decline in the share of processing trade in total exports from 55% to 43% over the last decade. Note that most processing trade – taking raw materials and inputs from abroad, processing it with labor in China, and then exporting the finished products – is much more labor-intensive and of lower value added than ordinary trade, which accounts for the majority of exports. According to a 2012 study by Dr Zhang Jun of Fudan University, the "domestic value-added ratio" in China's processing trade was 44% in processing trade and 90% in ordinary trade, based on 2008 data[11] (Figure 73).

In terms of the export breakdown by sector, it is evident that the share of machinery products is rising rapidly, while the share of textile and mineral products (labor and resource intensive) has declined. As shown in Figure 74, the share of machinery and transport equipment in China's exports has risen to nearly 50% of total exports in recent years, up from about 10% in the early 1990s. By product, exports of ships, electronics and auto parts were substantially faster than steel, toys and TV sets (Figure 75).

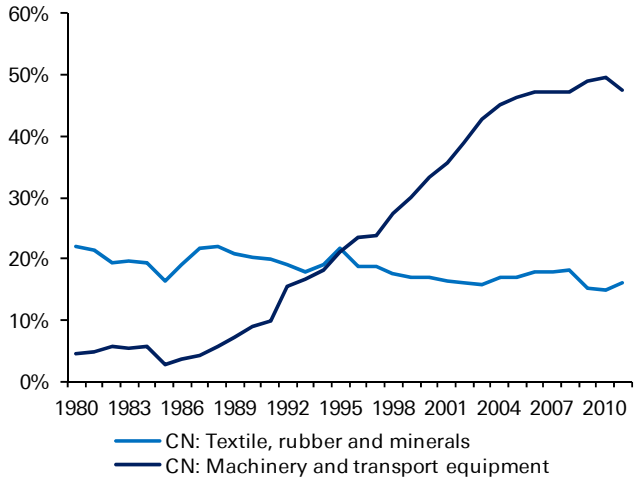
[11] *Zhang Jun, The Foreign Value Added in China's Manufacturing Exports: An Estimate, China and World Economy, Jan-Feb 2012.*

Figure 73: Breakdown of China exports (%)



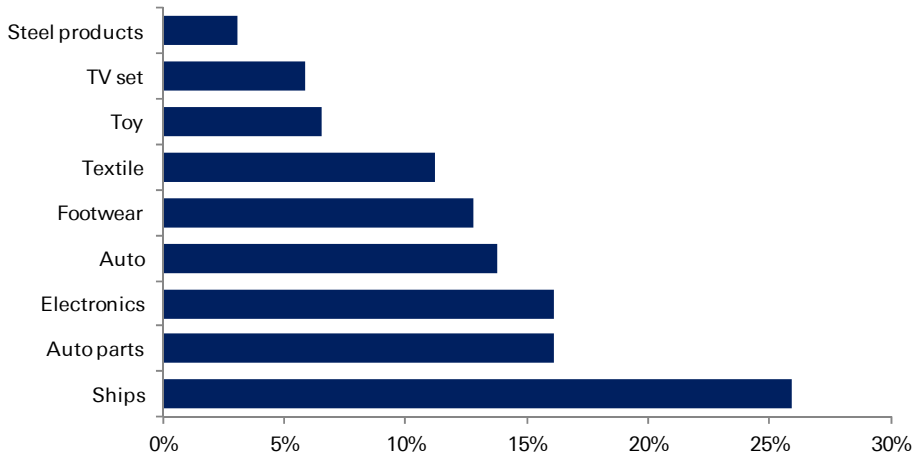
Source: CEIC, Deutsche Bank

Figure 74: Share of China exports by sector (%)



Source: Wind, Deutsche Bank

Figure 75: Growth of China exports by product, CAGR in 2007-2012



Source: CEIC, Deutsche Bank

How the textile/apparel industry upgrades itself: a case study

The textile/apparel sector is a good example of the upgrading of labor-intensive sectors in China. The textile/apparel industry accounted for 13% of China's total exports in 2012, and roughly 16% of its production costs were for labor compensation (in A-share textile companies). Among the major industries, the textile/apparel sector is the most labor-intensive industry in terms of per capita revenue generation. It is also the industry where we hear the most anecdotes about the relocation of production to Vietnam and Bangladesh and closure of local production in China. Contrary to common beliefs, the textile/apparel industry has maintained a high growth rate in recent years, despite rising labor costs and weaker external demand.

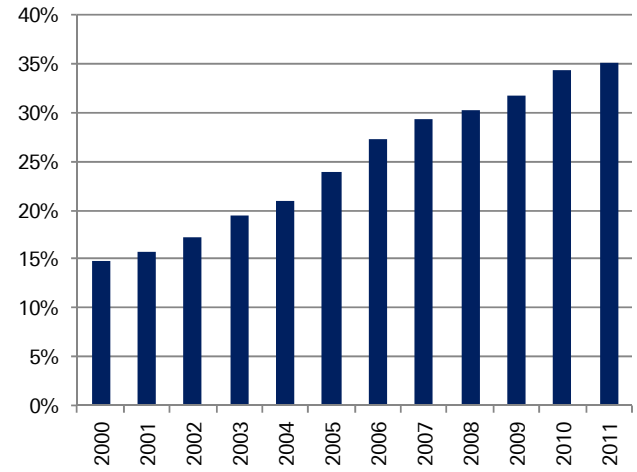
China's textile/apparel sector continues to grow at 10% p.a. and gain export market share. China's textile/apparel industry experienced serious deceleration in 2012. In terms of revenues, the yoy growth rate dropped from 25%+ in 2010 and 2011 to 6% in January-October 2012. But China's textile/apparel exports as a share of total world textile/apparel exports increased from below 30% before 2007 to above 35% in 2011

(Figure 76). It is evident that the recent slowdown in China's labor-intensive sectors was not due to country-specific changes (such as China's labor competitiveness), but rather the effect of a global recession.

Relocation to inland areas is much more important than relocation to other countries. Textile/apparel companies in coastal areas have been relocating their production capacities and technologies to provinces in central and western regions, such as Jiangxi and Sichuan. The yarn output growth rate in the central and western regions, which was 17.2% in 2011, has been higher than that of the eastern regions since 2007. As a result, the middle regions now account for 21% of total yarn production in China, up from 14% in 2008.

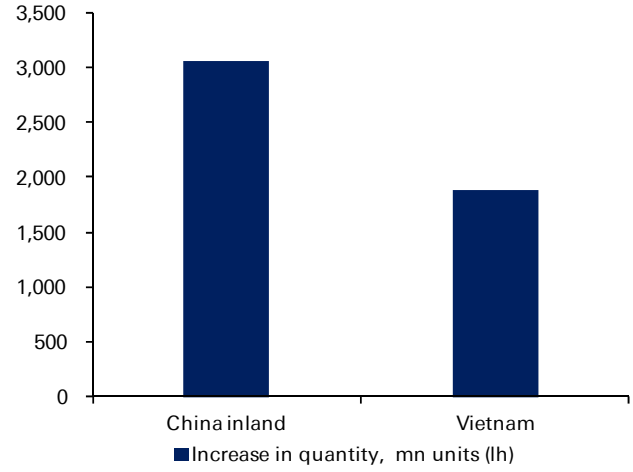
On the other hand, textile/apparel exports in countries like Vietnam and Bangladesh have indeed been growing faster than China exports. Between 2006 and 2011, textile and apparel exports from Bangladesh and Vietnam witnessed a 21% and 17% CAGR, as compared with China's 12% CAGR. But these countries altogether still account for less than 10% of the world total textile/apparel exports, as compared with China's 35% market share. A large part of the relocation of China's textile/apparel production has been toward the inland regions. As shown in Figure 77, from 2006 to 2011, the cumulative increase in apparel production (quantity in units of finished clothes) was larger in inland China than in Vietnam. Although Vietnam has now become the No.2 exporter of apparel to the US, it only accounts for 7% of the market share compared with China's 35% as of 2011.

Figure 76: China textile/apparel exports as % of world total



Source: Wind, Deutsche Bank

Figure 77: Cumulative increase in apparel production in inland China and Vietnam, from 2006 to 2011



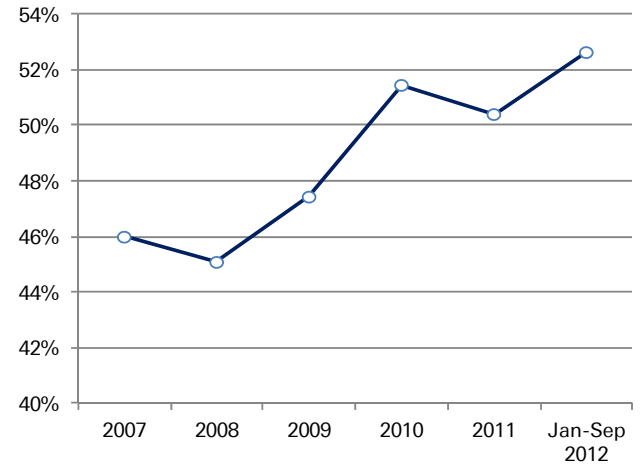
Source: CEIC, Wind, Deutsche Bank

Improving labor productivity and rising profit margin. In fact, both productivity and the profit margin of the textile/apparel industry have been increasing in China. The growing labor productivity partly offsets the rising labor costs. Between December 2006 and July 2012, labor productivity in textile/apparel industry, measured by RMB/worker, increased by a 10.3% CAGR. At the same time, the profit margin has continued to improve in the past five years, from 3.5% in 2007 to 4.5% in 2012. This implies that the unit labor cost has been rising at a slower pace than the unit price increase. Between 2006 and 2011, the ULC in China's textile/apparel industry actually dropped at a -0.8% p.a. CAGR. The general perception that faster wage inflation inevitably depresses the profit margin is wrong, at least in this case.

Product innovation and brand-building of Chinese textile producers. China's textile/apparel producers have been building their brands in the domestic market and moving up the value chain in exports. This is reflected in the increasing share of local brands in China's apparel market. According to surveys by CNCIC and Horizon China, in the middle-up tier of China's domestic apparel market (for households with an annual income between RMB150-500,000), the market share of local brands increased from below 30% in 2003 to 63% in 2011. In addition, on the exports side, the US Ministry of Commerce (OTEXA) data show that the unit price of apparel imports from China was 0.45:1 of the imports from EU as of 2008; the gap closed to 0.53:1 in January-September 2012 (Figure 78).

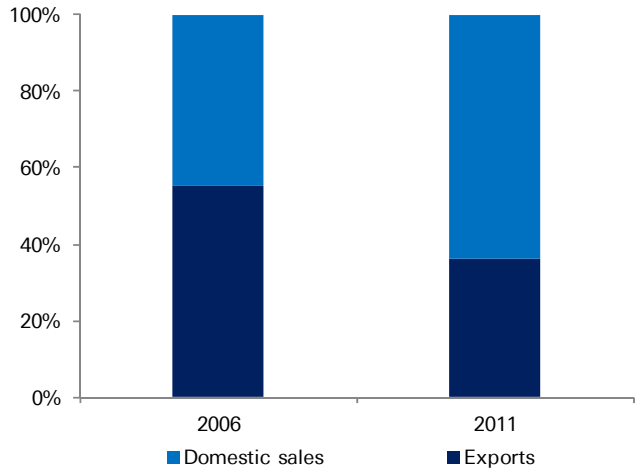
Domestic demand replaces export demand. More and more of China's textile/apparel products are oriented towards the domestic market. Back in 2006, 55% of China's total production of textile/apparel was for export; the ratio dropped to 36% in 2011 (Figure 79). The growth of the domestic market is supported by strong household income growth in China as well as the textile manufacturers' desire to build their own brands, i.e. moving from OEM (original equipment manufacturing) to OBM (original brand manufacturing).

Figure 78: Unit price of China products as % of unit price of European products on US market



Source: US Ministry of Commerce, Deutsche Bank

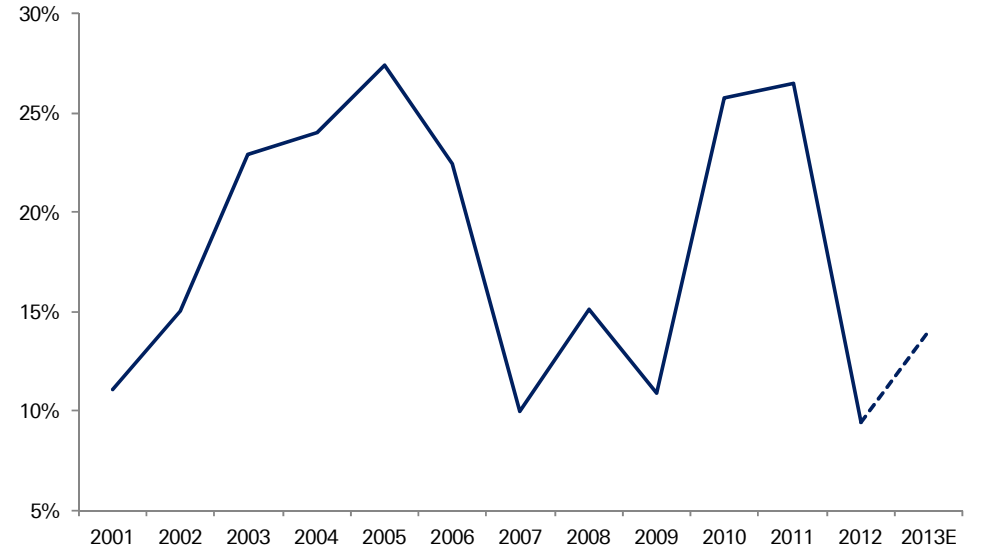
Figure 79: China textile/apparel sales to domestic and export markets (%)



Source: CEIC, Deutsche Bank

Growth will likely continue at 13% p.a. in coming years. We believe that the textile/apparel sector's gross industrial output will likely expand at above 10% per year in the coming few years, supported by strong domestic demand and the cyclical recovery in exports. Exports' yoy growth rate could recover to the 2009-2011 average level of 9%, up from zero in January-September 2012; domestic demand growth could recover to an average 15% (vs. the 2009-2011 average of 20%). As exports represent about 37% of total production, the overall revenue growth in the textile/apparel sector should grow at about 13% (15%*0.63+9%*0.37) in 2013 (Figure 80).

Figure 80: China textile/apparel sector output growth, yoy



Source: Wind, Deutsche Bank

Investment implications

The key investment implication is that "the end to the demographic dividend" should not be interpreted too pessimistically by investors in gauging the overall outlook and competitiveness of the Chinese economy. Even in the most labor-intensive sectors such as textile and apparel, the negative impact of the rise in labor costs has been largely offset by the upgrading of technology and rise in domestic purchasing power. This suggests that China's growth potential is unlikely to decelerate as fast as many China bears are suggesting. A 7-8% GDP growth rate is still very achievable in the coming years, in our view, despite the structural challenges.

In the export-related sector, investors should look for companies that are most innovative in upgrading their products and technologies, establishing brands, and enjoying domestic demand growth. A few examples of such listed companies include:

Texwinca (0321.HK, HKD7.30) is an established leader in China's knitted fabrics market, with an expanding finished clothes and retailing business. We view this company as a good example of upgrading from labor-intensive textile manufacturing to higher value-added finished apparel design, manufacturing, retailing and distribution business. About 75% of its EBIT is from its textile business and another 25% from retail operations, but the latter is quickly gaining share in the company's revenue composition. Between 2008 and 2012, Texwinca's sales revenue in its textile business saw a 6.7% p.a. CAGR, while its retailing business saw a much higher 12.4% p.a. CAGR. The ROE (2007-20121Q average) for Texwinca's textile and retailing business was about 18% and 27%, respectively, as the design/retail businesses are of higher value added. Besides, the company's retailing business in mainland China saw around a 17% CAGR in 2008-2012, suggesting that China's strong domestic demand is replacing exports as the main driver of its growth.

Mindray (MR.N, USD31.28) is a success story of Chinese firms exporting value-added products to the overseas market. MR is a leading domestic medical equipment producer in China, but it is also quickly expanding its global sales abroad. Its revenue from the overseas market, now accounting for about 55% of its total revenue, was 20% for FY11, 23% for FY11 and 18% for January-September 2012. Although inevitably hit by weakness in the overseas market, our sector analyst Jack Hu points out that Mindray's revenue growth has been ostensibly higher than that of its main competitors, e.g. Biolight and Philips Electronics. Over the last decade, Mindray has consistently spent about 10% of its sales revenue on R&D activities in order to catch up with the leading technologies in the industry. In the domestic patient monitor device (PMD) market, which contributed to more than 40% of Mindray's revenue, the company has successfully defended its market share of around 37-40% in the face of competition from other lower-end domestic players and the higher-end MNC competitors like Philips and GE. At the same time, the ASP of Mindray's PMD products increased by 26% between 2006 and 2011, or about a 5% CAGR. Mindray stands to be a major beneficiary of China's growing medical equipment market as well as its cost competitiveness in the global market. We expect the company to maintain an 18% EPS CAGR from 2013-2015.

Lenovo (0992.HK, HKD7.30) is the No.1 manufacturer of personal computers in China and is also ranked No. 1 in the global PC market (15.7%). Despite the rising labor cost in China, Lenovo's net profit margin has been stable at around 1.5% since 2011, higher than the 2006-2010 average of 0.7%. This demonstrates its ability to improve profitability and competitiveness via technology upgrading, economies of scale/scope, and acquisitions. About 55% of its revenue is generated from the overseas market, and the overall sales revenue witnessed a 16% CAGR in 2007-2012. In September 2012, Lenovo acquired CCE, a Brazilian IT brand, in order to tap into the fast-growing PC market in Brazil. We are long-term optimistic on Lenovo's overseas expansion which, combined with its solid position in the domestic market, will provide good potential in earnings growth.

Appendix A: Next steps in capital account liberalization

- In 2012, one of the factors restraining growth in the offshore RMB market was the stagnation of the offshore RMB liquidity pool. We believe the slow growth in offshore RMB liquidity can be explained primarily by four factors: (a) The deceleration of China's export/import growth volume in 2012 – in particular, the slow growth of net RMB payments to the offshore market. (b) Strong growth in RMB repatriation under the RMB FDI (foreign direct investment) program in 2012, which net-drained offshore liquidity. (c) Offshore RMB investment programs such as the RMB QFII and RMB interbank bond market direct access program, which net-remitted more than RMB100bn offshore liquidity. (d) Weaker expectation of RMB appreciation in 2012.
- We believe the above factors and the stagnation in offshore liquidity point to the key policy vulnerability in the existing offshore RMB circulation mechanism – that is, RMB trade settlement is unlikely to drive strong growth in offshore RMB liquidity in the future, and the asymmetric nature of the policy design (which seems to favor RMB remittance to the onshore market under the capital account via RMB FDI, RMB QFII, and RMB interbank bond market access) has become a policy constraint to further RMB internationalization.
- Now is the time to liberalize RMB cross-border transactions under the capital account; otherwise, offshore RMB market development may stall and slow down the pace of RMB internationalization. We believe that in order to deepen RMB internationalization, cross-border RMB flows for capital account purposes must be allowed. Specifically, we propose 11 reform measures to further relax controls over cross-border RMB capital flows for short-, medium- and long-term funding needs and to promote the development of the offshore RMB market.
- These reforms, which will pave the way for the eventual capital account liberalization, are supported by real business demand, and their risks to China's financial stability are manageable.

Capital account liberalization is key to offshore RMB liquidity

What constrained offshore RMB liquidity growth in 2012?

In 2012, one of the factors restraining growth in the offshore RMB market was the stagnation of the offshore RMB liquidity pool. The charts below show that the yoy growth of RMB liquidity in Hong Kong, after the initial surge to over 500% in early 2011, decelerated sharply from 2H2011 and stayed in the negative range in the past few months. The RMB bank deposits in Hong Kong were RMB571bn by the end of November 2012, contracting by 9% from November 2011. If we add the outstanding Certificate of Deposit (CD) balance of RMB118bn, total RMB liquidity in HK as of November 2012 was RMB689bn, 1.93% lower than it was in November 2011.

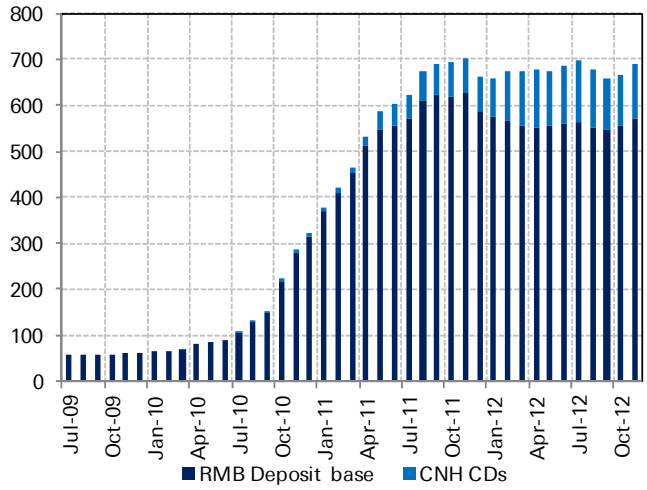
The RMB deposits in London totaled RMB109bn by the end of 2011, of which RMB35bn were retail deposits and RMB74bn were interbank deposits. We believe RMB deposits in London could have increased by about RMB10-20bn in 2012. RMB deposits in Singapore grew from RMB40-50bn in 2011 to RMB60bn in June 2012. In Taiwan, RMB deposits were RMB17.45bn as of August 2012, up by RMB1.5bn from January

and by 210% from end-2011. Taking into account RMB deposits in the above four markets, we estimate the global aggregate balance of offshore RMB liquidity was about RMB885bn in 2012, about 7-8% higher than in 2011.

The slow growth in the offshore RMB liquidity pool can be explained primarily by four factors:

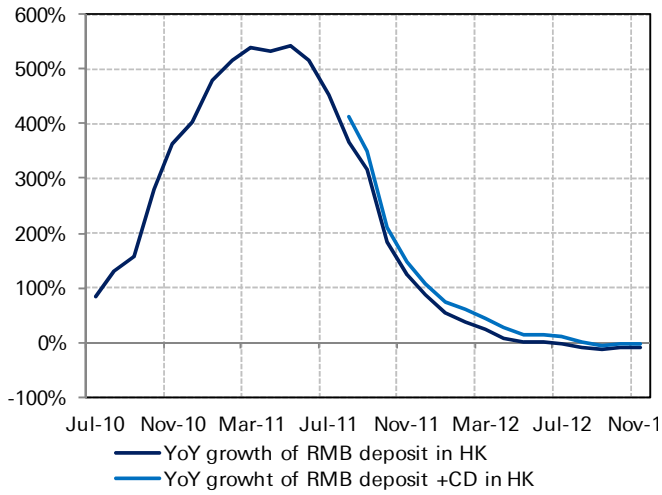
1. **The deceleration of China's export/import growth volume in 2012 – in particular, the slow growth of net RMB payments to the offshore market.** Despite RMB trade settlement, which account for about 11.7% of China's global trade in 2012, rose 8.4% in 2011, a slower pace than that in the past decade. Moreover, the main contributor to offshore RMB deposit growth -- net RMB payment by Chinese importers in RMB to the offshore market – slowed even faster. According to the PBoC, the ratio of cross-border RMB payments vs. RMB receipts declined notably from 5.5x in 2010 to 1.7x in 2011, to 1.4x in 1H 2012 and further to 1.2x in 3Q 2012.

Figure 81: RMB liquidity in Hong Kong (RMB bn)



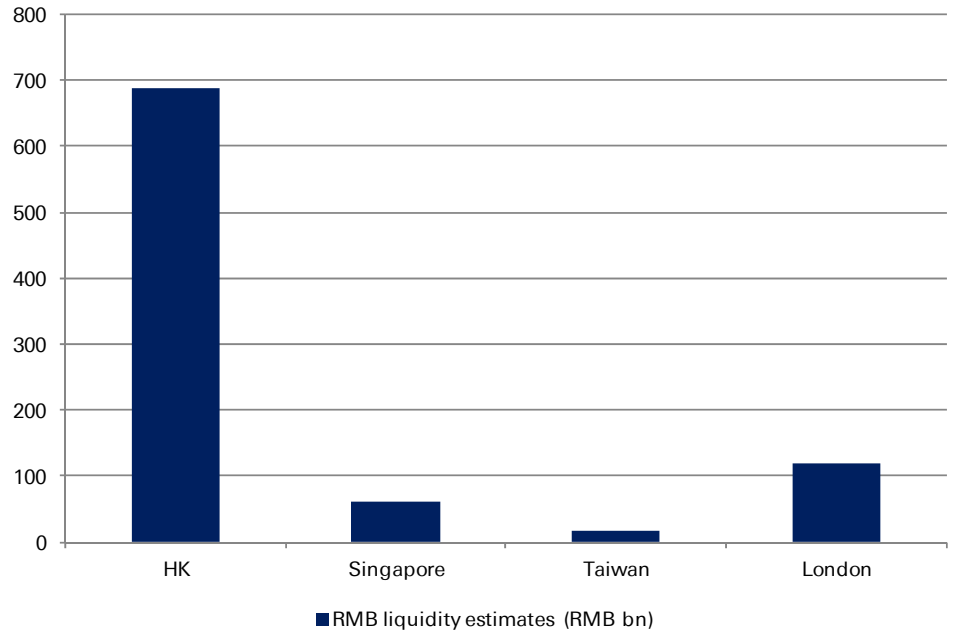
Source: Deutsche Bank, HKMA

Figure 82: Yoy growth of RMB liquidity pool in HK



Source: Deutsche Bank, CEIC

Figure 83: Offshore RMB liquidity at a glance



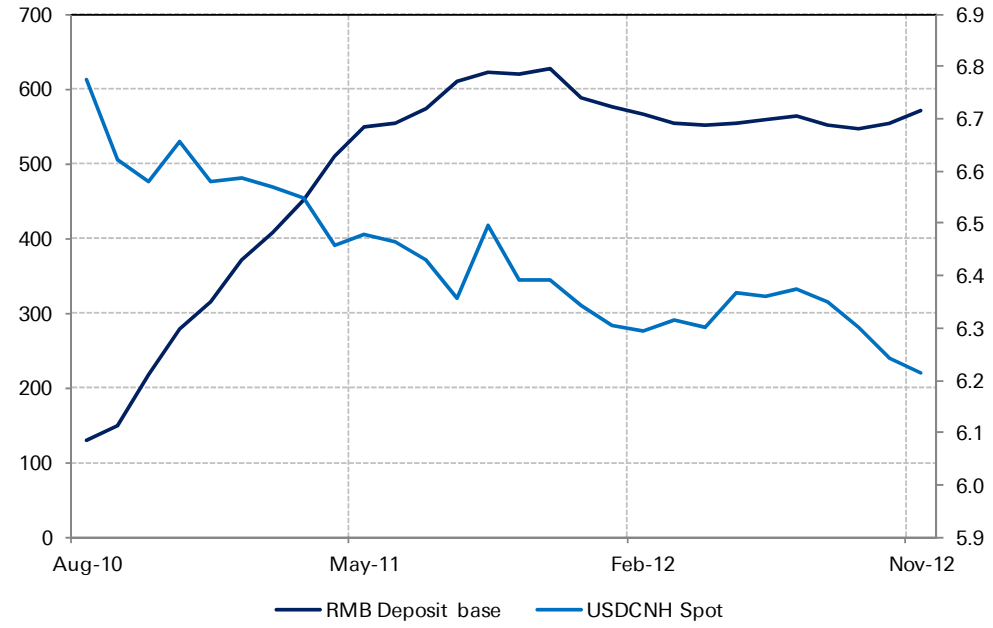
Source: Deutsche Bank, various public sources

2. **Strong growth in RMB repatriation under the RMB FDI (foreign direct investment) program in 2012, which net-drained offshore liquidity.** RMB FDI was RMB90.72bn in 2011. From January to November 2012, RMB FDI surged to RMB195.3bn. The strong growth in RMB FDI implies RMB repatriation from the offshore market to the domestic market through this channel increased rapidly.

3. **Offshore RMB investment programs, such as RMB QFII and the RMB interbank bond market direct access program, net-remitted more than RMB100bn offshore liquidity.** Since the launch of the RMB QFII program in 2012, about RMB48bn of the RMB QFII quota has been granted, and about 15 offshore institutions have been granted quotas to access the CNY interbank bond market, with an estimated amount in excess of RMB50bn. These investment quotas have largely been invested in the onshore capital markets.

4. **Weaker expectation of RMB appreciation in 2012 resulted in low demand for FX conversion into the RMB by offshore investors.** The expectation of RMB appreciation played an important role in driving offshore demand for RMB-denominated asset holdings in 2010-11. As USD/CNH rate reversed its descending trend and depreciated by 1.9% from mid-January to early August 2012, RMB bank deposits in Hong Kong shrank by approximately CNH36bn as on a net basis.

Figure 84: USD:CNH spot and RMB deposits in Hong Kong



Source: Deutsche Bank, CEIC, Bloomberg Finance LP

Next policy step should be liberalization of RMB cross-border flows

We believe the above factors and the stagnant offshore liquidity growth in 2012 point to the key policy vulnerability in the existing offshore RMB circulation mechanism – **that is, RMB trade settlement is unlikely to drive strong growth in offshore RMB liquidity, and the asymmetric nature of the policy design (which seems to favour RMB remittance to the onshore market under the capital account) has become increasingly a policy constraint to further RMB internationalization.** Without an open capital account, RMB internationalization can only achieve 10% of its full potential, as RMB outflow merely through the current account is unsustainable.

Let's look at how different types of cross-border RMB transactions are constrained by capital control.

First, the use of the RMB for investment purposes is severely limited when the capital account is controlled. If foreign residents can only receive RMB through trade channels (such as Chinese importers paying in RMB), the amount of RMB liquidity made available will be only a very small fraction of the potential demand for RMB-denominated investments.

Second, also due to the limited liquidity channelled from the trade channel to the offshore market, the use of RMB as a source of financing will be highly constrained.

Third, the use of the RMB as a reserve currency is virtually impossible if the capital account is controlled. If RMB outflow is only through the trade channel in the next few years, and assuming most offshore RMB assets are held by reserve managers, the size of offshore RMB liquidity will be no more than 2% of total global foreign reserves according to our estimate.

Fourth, from a macro perspective, the Triffin dilemma may derail RMB internationalization if the RMB is only channelled to non-residents via the trade channel. In this scenario, the deepening of RMB internationalization has to be accompanied by an increase in the trade deficit, and we know that a very high trade deficit will lead to a devaluation of the RMB, which may drive a decline in global demand for the RMB.

Looking at the experience of JPY internationalization, and assuming RMB outflow is only through trade and settlement, then RMB-settled trades may account for up to 40% of China's total foreign trade, about 4x the current level. This implies that offshore RMB deposits may increase from the current RMB860bn to RMB2-3tr. However, if the capital account is liberalized, then based on the experience of USD internationalization, non-residents' holding of RMB assets may rise to 80% of GDP when the RMB becomes "fully" internationalized. In absolute terms, this means RMB30tr is to be helped by non-residents, even if we base the calculation on the current size of Chinese GDP. This is why we state that without capital account liberalization, RMB internationalization may reach less than 10% of its full potential.

We are at a critical juncture in terms of liberalizing RMB cross-border transactions under the capital account; otherwise, offshore RMB market development may stall and slow down the pace of RMB internationalization. In order to deepen RMB internationalization (i.e. going beyond just trade settlement), cross-border RMB flows for capital account purposes must be allowed.

Our specific policy recommendations

Based on the above discussions, we propose the following eleven reform measures to further relax controls over cross-border RMB capital flows for short-term, medium-to-longer-term funding needs and to promote the development of offshore RMB market. Our specific recommendations are as follows.

1. **To allow offshore banks to issue RMB-denominated banker's acceptance (including letter of credit (LC)), which can be pledged as collateral to borrow from the onshore interbank market.** RMB-denominated banker's acceptance and RMB-denominated LC have been the main short-term funding instruments to support RMB cross-border trades; in the past, most of these instruments have been issued by onshore commercial banks. Offshore trade suppliers use these instruments to obtain funding in the offshore market. Now, with offshore short-term funding cost not only converging on the onshore market but potentially rising above onshore funding, we think it is important to permit onshore RMB short-term liquidity access to offshore end users through collateralized borrowing to meet demand for trade financing and other real economic activities.

2. **To expand the pilot program to allow RMB cross-border lending by onshore MNCs to more onshore corporations.** The program, introduced in late November in Shanghai, allows multinational corporations (MNCs) registered in Shanghai to lend their own RMB funds to offshore parent companies or related companies within the same group. The MNC acts as the lender and the RMB funds must be the MNC's own funds. The amount of lending is regulated by an RMB lending quota that is approved on a case-by-case basis by local PBoC regulators.

There are two key implications of the program, as follows. (a) The program will allow onshore MNCs to make better use of excess RMB funds onshore to fund related offshore business, improving the efficiency of global corporate liquidity management. Successful implementation of the program may attract more MNCs to use RMB for cross-border trade settlement/lending.

(b) In our view, permitting RMB cross-border lending is a policy breakthrough in liberalizing RMB flows to the offshore market under capital account transactions. It will help replenish the offshore RMB liquidity pool and is a critical channel in the offshore-onshore RMB circulation mechanism.

We think after a certain period of successful experimentation, the program will be expanded to more onshore corporations with cross-border funding needs.

3. **Permit RMB borrowing by offshore banks from onshore interbank market for capital account purposes.** We believe offshore RMB participating banks (via onshore mainland correspondent banks) should be allowed to borrow RMB funds from the onshore interbank market and remit the funds to the offshore market. Such borrowing should not require verification of underlying trade-related transactions. In the near term, the total amount of borrowing from the onshore interbank market can be capped at 1% cap of the MCB's deposit base, and the cap is to be lifted gradually to 2% or above. The ceiling of the term of such cross-border funding should be increased from 1-month currently up to 6~12M.

4. **Permit offshore banks to participate in repo transactions collateralized by onshore bonds.** For offshore RMB participating banks with direct interbank bond market investment quota, we propose to allow offshore RMB participating banks to obtain collateralized RMB funding by putting their bond investment under repo transactions; such funds should be remitted to the offshore market.

5. **Permit offshore banks to participate in repo transactions collateralized by CNH bonds.** For offshore RMB participating banks holding CNH bonds, we propose to allow offshore RMB participating banks to obtain collateralized RMB funding by putting their CNH bond under repo transactions in the onshore interbank market and such funds should be remitted to the offshore market. The PBoC, HKMA, China Central Depository & Clearing CO, CMU, CFETS, etc should coordinate on the legal and technical arrangement of cross-border repo transactions.

6. **Permit Certificate of Deposit (CD) issuance in the onshore interbank market by offshore banks.** A CD program in the onshore market has not been officially launched and we propose to initiate a pilot program by offshore RMB participating banks as these banks have had lots of experience in issuing and trading offshore RMB CDs. Initially, the size of the program can be regulated by case-by-case approval.

7. **Permit Panda bond issuance in the onshore bond market by offshore RMB participating banks and remittance to the offshore market.** The size of the program can be regulated by case-by-case approval.

8. **Increase the RMB daily conversion quota for HK residents from RMB20K to RMB100K.**

9. **Relax restrictions on individual and corporate FX conversion and on RMB outward remittance.** Currently, individuals can remit USD50K/per annum (about RMB320K) and most corporations can obtain approvals to remit foreign currency to the offshore market for FDI purposes. We recommend to permit the remittance of corresponding amounts of RMB to the offshore market under the quota. For example, individuals should be allowed to remit up to RMB320K/per annum (equivalent to USD50k) to the offshore market, and companies that are authorised to remit USD should be allowed to remit the equivalent amount of RMB.

10. **To enhance emergency liquidity facilities in the offshore RMB market through coordination by local central banks and clearing banks.** Currently, there are four main sources of offshore RMB liquidity provision.

    (1) Interbank market based funding through FX swaps: This is the most active interbank RMB funding market with an average daily volume of USD1.8-2.6bn; RMB liquidity can be obtained on the same day or overnight, and up to one year.

    (2) Interbank market CNH funding at CNH offered rates: This is available from overnight to 12 months, and there are about 13 market makers currently. However, due to counterparty credit concerns, actual transaction volume has been low.

    (3) HKMA's RMB repo facility was introduced in June 2012 and is provided to offshore participating AIs to obtain one-week liquidity with eligible collaterals and with settlement on a T+2 basis. Given that such RMB funds are available T+2, it is not ideal as an emergency funding window, particularly for meeting demand for daily shortage of RMB liquidity arising from RMB trade settlement or investments. The total amount of actual borrowing from this facility is not public information so far and we believe there has been very limited access to this facility by interbank players.

    (4) Borrowing from the Clearing Bank (Bank of China HK), which will likely get emergency funding from the PBoC. For RMB trade settlement, which cannot be cleared in the interbank market, participating AIs can try to settle with the Clearing Bank using the RMB cross-border trade settlement quota, the amount of which is currently undisclosed. For transactions not necessarily related to trade settlement, it is currently difficult to obtain liquidity from the Clearing Bank due to counterparty risk limits.

    In short, other than the FX swap market, which can be volatile and not reliable at the time of severe liquidity shortage, we think it is necessary to enhance the existing facilities provided by HKMA or the Clearing Bank. We suggest that the authorities consider the provision of same day or overnight liquidity with a shorter settlement period through HKMA's repo facility.

11. **To ensure fungibility of offshore RMB liquidity between various offshore RMB centers.** Currently, regulators from the Mainland, HK and Taiwan are coordinating on policies with regard to RMB cross-border flows, aiming to ensure offshore RMB liquidity can circulate freely between different RMB centres. This may improve the efficiencies of offshore RMB pricing, and if more channels of RMB supply can be opened up to Hong Kong, some of this liquidity can effectively flow to Taiwan and other offshore RMB centres when needed.

Macro risks are manageable

We believe that conditions to launch the above reform measures are ripe; i.e. once new channels of RMB cross-border flows are introduced, they will effectively guide new sources of RMB liquidity to the offshore market. In particular, with the recent convergence of CNH and CNY interest rates, sometimes CNH interest rates are above CNY interest rates, and this interest rate differential should drive RMB flow to the offshore market under capital accounts channels as proposed above. Meanwhile, demand from Taiwan for RMB liquidity is another good opportunity to push for new reform measures to boost offshore liquidity supply.

We believe risks from the above reforms to the domestic financial market and domestic monetary policies are manageable. As the RMB exchange rate approaches its equilibrium level and onshore offshore interest rates are converging, we expect RMB cross-border flows to be stable and chances of significant inflows and negative impact on the domestic interest rates are low. Even in the event of hitting the 1% borrowing quota by offshore RMB participating banks in a few months, the total amount of borrowing would be only about RMB900bn, or 1% of China's total M2. Such a scale of reduction in onshore liquidity can be easily offset by domestic liquidity management tools. Furthermore, at the initial stage of reforms, CDs/Panda bond issuance by offshore RMB participating banks will be controlled by regulatory approvals, and therefore RMB cross-border flows are unlikely to run out of control.

We believe our proposed reforms have important long-term implications. These reforms should not only pave the way for the eventual capital account liberalization. For the offshore RMB market, these reforms will boost offshore RMB liquidity, support the growth of offshore RMB asset market, better serve global investors' demand for RMB denominated assets, further expand RMB cross-border trade settlement and eventually elevate the offshore RMB market development to a new stage.

Appendix B: Promoting direct financing

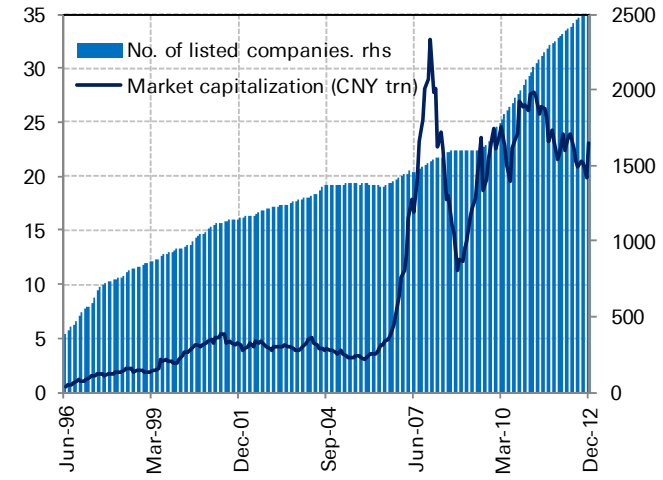
China's desire to support economic structural transition has reinforced the urgency of accelerating financial sector reforms in the next few years. The "12th Five Year Plan of Financial Sector Development and Reforms" has formalized the guiding principles of financial sector reforms during 2011-2015. Specifically, among the six main objectives set forth in the Plan, one objective is to rebalance the financing structure of the domestic economy with the goal of increasing the share of direct financing in the aggregate social financing to above 15% by the end of 2015.

We believe that promoting direct financing requires a range of reforms and will have broad implications. In this article, we will take a look at the progress that has been made so far, review the key challenges facing direct financing, and discuss the policy options that can foster strong growth of direct financing.

Recent developments

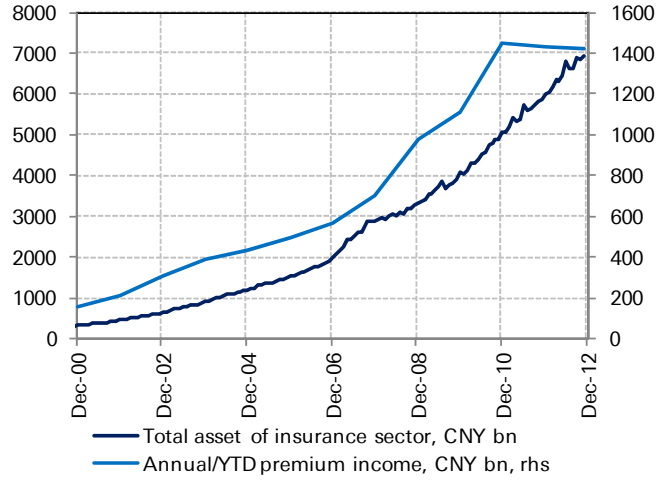
Direct financing is capital market-based financing for governments and corporate borrowers, while indirect financing is borrowing through commercial banks or other financial intermediaries. Promoting direct financing is to shift the source of funding from bank credits to either capital raising in the equity market or placement of debt securities in the bond market or funding from alternative markets. Since 1996, China has made remarkable progress in developing a multidimensional domestic capital market. On the equity market, by the end of 2012, a total of 2494 companies had been successfully listed on Shanghai and Shenzhen bourses with a combined market capitalization of CNY23trn, up a respective 22 times and 3.7 times from the end of 1996. In addition to strengthening the market infrastructure of the Main Board, the Small and Medium Enterprise Board (launched in 2004) and the ChiNext Board (launched in 2009) were introduced to provide small and medium enterprises and start-ups with access to equity market funding. By the end of 2012, 701 companies had been listed on the SME Board and 355 companies had been listed on the ChiNext Board with a combined market capitalization of CNY3.75trn.

Figure 85: Shanghai and Shenzhen Stock Exchange combined market capitalization



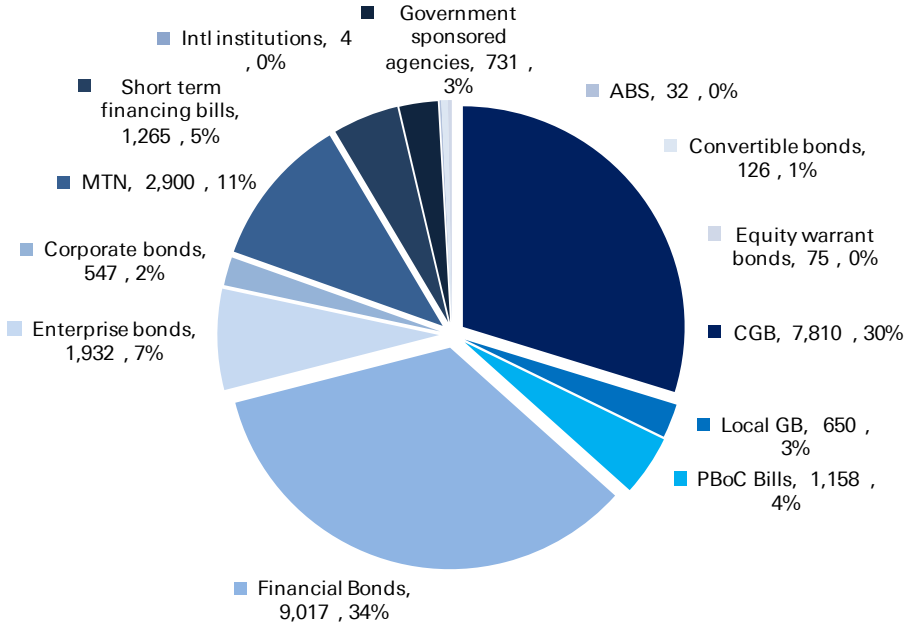
Source: Deutsche Bank, CEIC

Figure 86: Insurance sector premium income and total assets (CNY bn)



Source: Deutsche Bank, CEIC, last point as of November 2012

Figure 87: China domestic bond market breakdown (CNY bn)



Source: Deutsche Bank, Wind

The domestic bond market has grown both in terms of scale and debt instruments. From 1996 to the end of 2012, a total of 6896 corporate credit instruments had been issued with a cumulative debt funding of CNY11.13trn. Specifically for non-financial corporations, a number of fixed-income financing instruments have been created to meet their funding needs – ultra short-term financing bills, short-term financing bills, medium-term notes, enterprises bonds, corporate bonds, convertible bonds, SME collective notes, SME private placement bonds, SME high yield bonds and credit risk mitigation instruments. By the end of 2012, the outstanding notional amount of corporate credit market was CNY6.877trn, accounting for 26% of total outstanding domestic bond market.

The money market, foreign exchange market, gold market also grew rapidly thanks to innovative financial products. The commodities futures market and equity index futures market saw steady growth and the total turnover of commodities futures was CNY187.5trn in 2011 according to CSRC, and there are over 20 types of commodities futures contracts traded on the market. Insurance companies developed rapidly with total premium income of CNY 1.42trn YTD and total asset of CNY 6.92trn in November 2012, up by 792% and 19.5 times since 2000.

Challenges facing direct financing

Despite impressive development in the domestic capital market, there remain significant imbalances in China's domestic financing structure, which are major obstacles to the efficient allocation of financial resources.

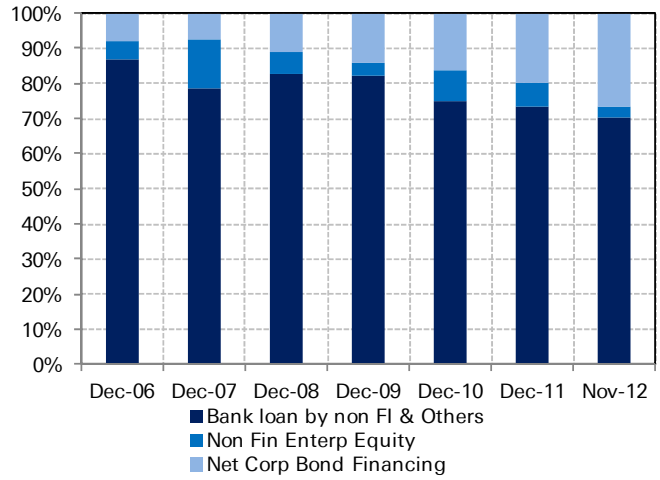
1. **Corporate financing structure is heavily biased towards bank loan financing.** Non-financial corporations' bank loan funding accounted for 87% of their total funding in 2006. Although the ratio of bank loans dropped to 70% of total funding as of November 2012, it remains quite elevated relative to that in developed countries where the corporate bond market is more developed. For example, in the first three quarters of 2012, corporate bond issuance represented 71.5% of total borrowing by non-financial corporations in the US.

2. **Bond financing as % of total direct financing has been very unstable.** Capital market funding can be highly cyclical – equity valuation tends to correlate positively with the amount of net issuance of corporate equities, while a low interest rate environment tends to attract more debt placement. During 2002-07, corporate bond issuance lagged equity funding, when equity market funding was on average 1.5 times that of bond market funding, although the monetary policy environment was favorable. To some extent, the preference of equity funding over bond funding reflected the shareholding reforms in domestic corporate sector back then and the relatively slow progress on establishing market infrastructure for corporate bond placements.

   With a significant correction in the domestic equity market in the past few years, the equity to bond market funding ratio fell sharply to 0.12 in 2012 (up to November). The surge in net corporate funding in 2012 was partially driven by relatively low interest rates and poor valuation in the equity market, and it is highly uncertain if this ratio will stabilize in 2013 if the equity market recovers.

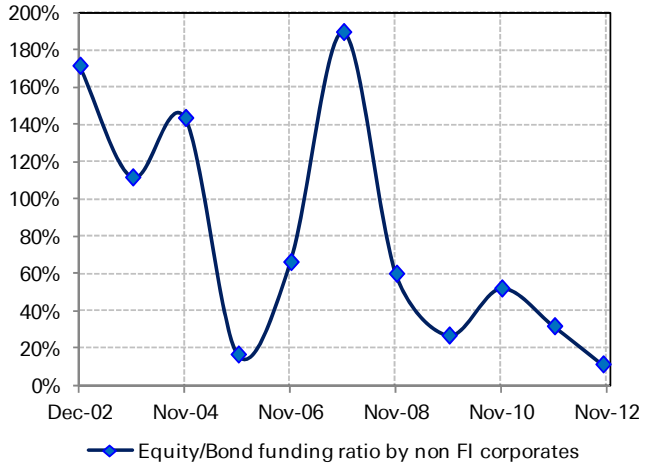
   In our view, a necessary condition for strong corporate credit market growth is to improve the market infrastructure in terms of issuance regulation, legal framework, transparent risk disclosure and proper investor protection, which will ensure cost-efficient capital raising and attract investors to share the risk/return of corporate business. We think domestic corporations, particularly those with high credit worthiness, should increasingly rely on the corporate bond market as a stable source of funding. This will improve corporate capital structure (as equity issuance leads to ownership dilution) but also allow market forces to play a role in monitoring the efficiency of corporate business investment, operation and risk management, which optimizes capital allocation.

Figure 88: Breakdown of non-financial corporation funding source



Source: Deutsche Bank, CEIC

Figure 89: Imbalance between equity and bond funding



Source: Deutsche Bank, CEIC

3. **Banks are excessively exposed to credit concentration risk and maturity mismatch.** China's outstanding bank loans by the end of November 2012 reached CNY62.54tr, of which CNY 46.42tr (74%) were loans to non-financial enterprises and other sectors. The risk to banks is that if credit risk correlation among corporate borrowers rises during an economic downturn, banks may not have enough risk capital to protect themselves against rising NPLs.

   Moreover, managing the asset-liability maturity mismatch in the banking sector has become increasingly challenging. In November 2012, the outstanding medium- to long-term loans were CNY35.3trn, about 56% of total bank loans, while total time deposits were approximately CNY31.7trn, and the average maturity of banks' loan portfolio is much longer than that of the deposit base (according to Deutsche Bank's bank analyst, the average maturity of big 4 banks' deposit base was about 0.5 years, while the average maturity of their loan portfolio was about 2.5 years in 1H 2012). With the rapid growth of the domestic capital market, wealth management business expansion and interest rate liberalization, the tenor of the deposit base in the banking sector is more likely to shorten further, which could exacerbate the liquidity risk in the banking sector. Increasing direct financing offers one solution to effectively reducing the credit concentration risk and liquidity risk in the banking system.

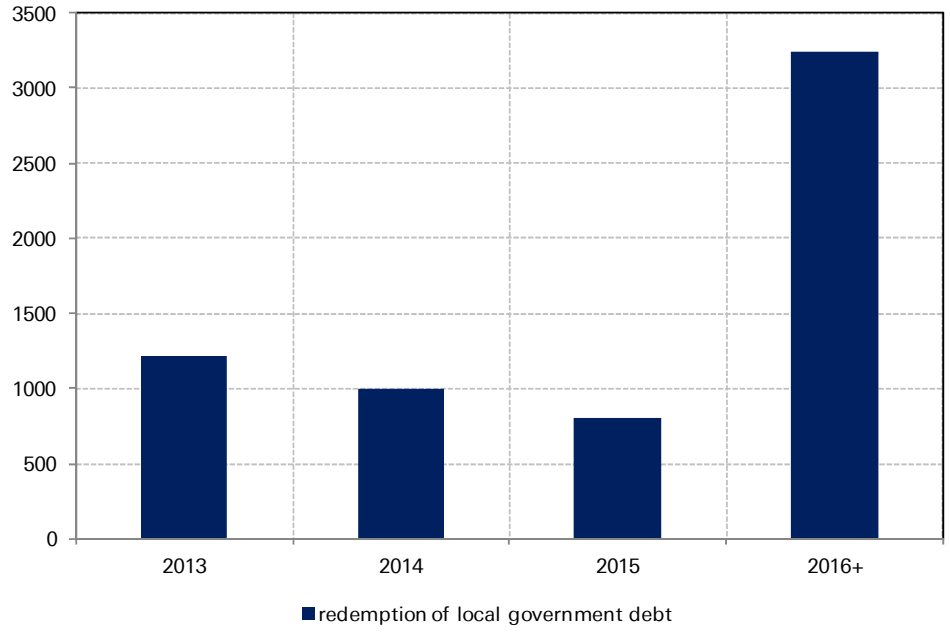
4. **Funding channels for small and medium enterprises are very limited.** Chinese commercial banks typically favor large SOEs over small and medium enterprises (SMEs) in their lending practice due to the lack of effective assessment of the repayment capacity of SMEs. This has led to rampant growth of the so-called "shadow banking" system where private lenders can earn higher lending rates and SME borrowers receive funding although at higher costs.

5. **Municipal bond market program is limited to only four provinces/municipalities.** A municipal bond market offers direct financing for local governments. China launched the independent municipal bond pilot program in October 2011 and approved four municipalities/provinces (Shanghai, Shenzhen, Zhenjiang and Guangdong) to independently issue bonds

under the pilot program. Other local government bonds are currently issued by the MoF on behalf of the local governments.

The most significant risk posed by local government liability is the rollover risk of debt issued by local government financing vehicles (LGFVs) with a total outstanding amount of CNY10.7trn by the end of 2010 according to the National Audit Office. Since 2011, regulators focused on tightening oversight of LGFV debt and managing orderly rollover/repayment of upcoming LGFV redemption. Furthermore, there will be additional net funding needs by local governments for infrastructure spending to push forward urbanization.

Figure 90: Local government debt redemption schedule



Source: Deutsche Bank, National Audit Office of China, including debt directly owed by local government and debt guaranteed by local government, as of end of 2010

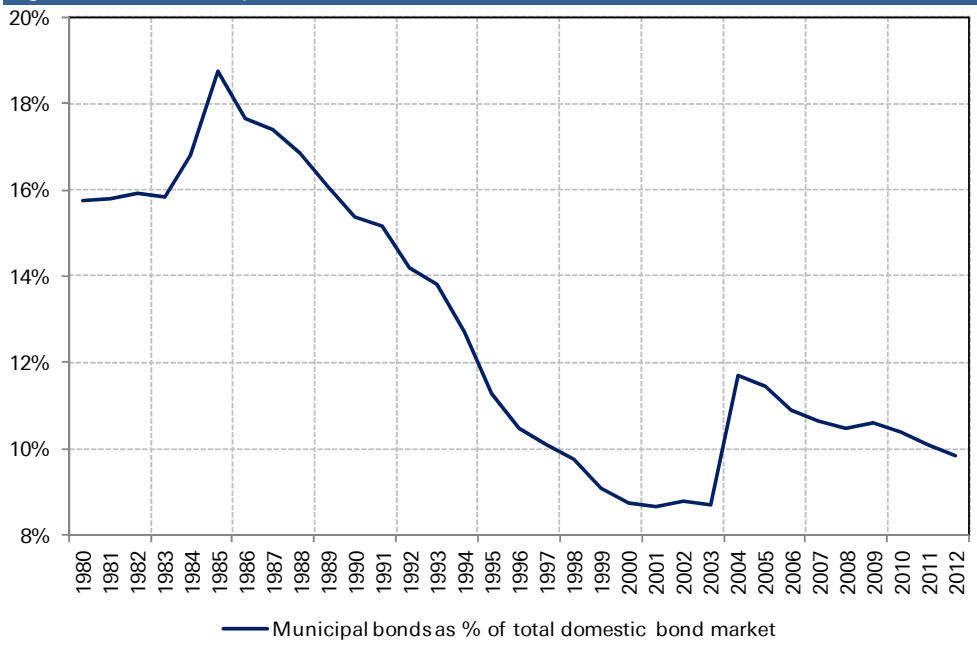
Policy options for promote direct financing

To reduce the above five key imbalances in the domestic financing structure, we suggest considering the following policy options in order to effectively promote direct financing.

1. **Relaxing issuance restrictions; standardizing requirements on market access, information disclosure, credit rating, and investor protection; and reducing market segmentation to support the growth of the corporate credit market.**

2. **Accelerating the development of the municipal bond market.** We believe that allowing independent bond issuance by local governments has the benefits of (i) providing a refinancing channel for LGFVs and mitigating potential default risks on bank loans; and (ii) improving the transparency of local government finances. China's local government bonds (includes independent municipal bond issuance and LGB issuance by MoF) represented about 2.48% of total domestic debt by the end of 2012. It has a significant room for growth when compared with municipal debt in the US, which amounted to 10% of total domestic debt in 2012.

Figure 91: US municipal bond market share

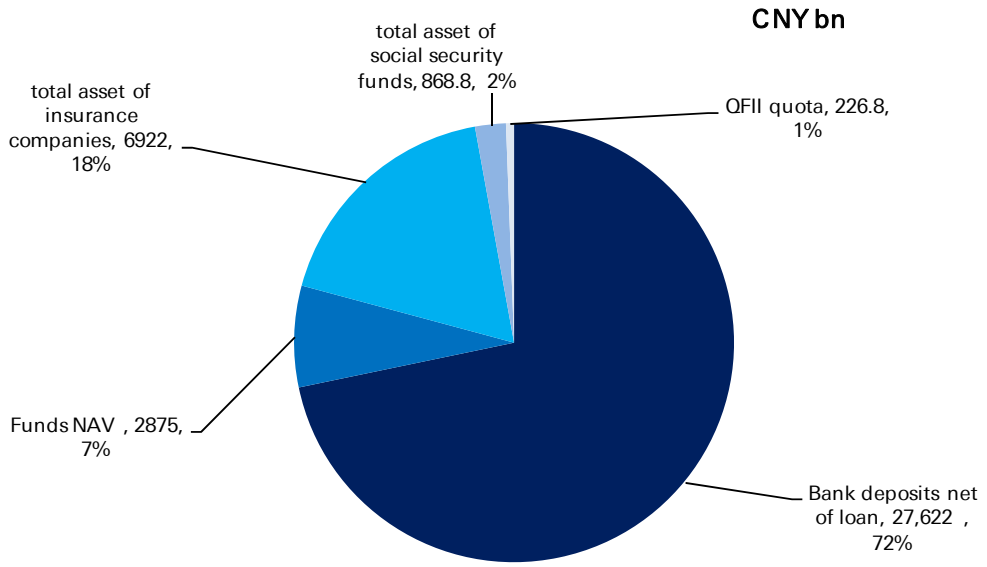


Source: Deutsche Bank, Sifma

3. **Exploring alternative funding channels for SMEs.** We suggest relaxing regulatory restrictions on establishing dedicated SME financing institutions such as village/county banks and micro-financing firms, to improve regulatory oversight of shadow banking, to properly channel private capital to SMEs through the private placement market, to introduce credit guarantee mechanism (by third party) to support SME bonds.

4. **Relaxing investment restrictions on domestic and foreign institutional investors.** Growing the institutional investor base in the domestic capital market is a critical step in expanding direct financing. China's domestic savings are concentrated in bank deposits (CNY90trn in bank deposits by November 2012), where investment management skills are relatively low. On the other hand, investable funds at securities houses, bond funds, the insurance sector and pension funds are relatively limited. To address the mismatch between the amount of investable funds and investment skills, regulators should relaxing investment/market access restrictions on institutional investors. In 2012, the CSRC and CIRC relaxed a number of QFII regulations and investment restrictions for the insurance sector, which we view as welcoming steps toward broadening the investor base for domestic capital markets.

Figure 92: Distribution of funds/assets among institutional investors



Funds include equity funds, bond funds, hybrid funds, money market funds and other funds
Source: Deutsche Bank, Wind

In conclusion, we believe the present challenges and imbalances in the domestic capital structure require further reforms to boost direct financing so as to optimize capital resource allocation. In 2013, we expect financial policy makers under the new leadership to accelerate these reforms.

Appendix C: Valuations of China/Hong Kong stocks under DB coverage

Figure 93: Listed China/Hong Kong stocks under Deutsche Bank coverage, 3 January 2013

Company	Ticker	Sector	Rating	M. cap (US$m)	Daily t/o (US$m)	Ratios 2013F					
						PE (x) (DB EPS)	PB (x)	ROE %	EPS gth % (DB EPS)	Div yield %	EV/ EBITDA (x)
Agile Property	3383.HK	Real Estate	Buy	5,285	14.1	6.2	1.1	19.8	23.9	4.0	5.2
AIA	1299.HK	Insurance	Buy	48,164	229.3	17.4	1.9	11.2	15.2	1.2	NA
Air China	0753.HK	Transportation	Buy	10,884	11.1	12.4	1.2	10.2	26.6	2.3	6.7
AutoNavi	AMAP.OQ	Software & Services	Buy	586	2.1	10.7	1.6	16.8	21.3	0.0	4.7
Bank of China	3988.HK	Banks	Buy	130,717	131.4	6.4	0.9	14.8	-1.8	4.3	NA
Baoxin Auto Group	1293.HK	Retailing	Buy	2,344	9.5	11.2	2.8	28.7	61.1	0.0	7.7
BBMG	2009.HK	Materials	Buy	4,100	7.4	7.7	1.0	13.7	15.1	1.2	5.4
Beijing Enterprises	0392.HK	Capital Goods	Buy	7,455	7.5	14.5	1.3	10.0	29.1	2.1	10.1
Belle Int'l Holding	1880.HK	Retailing	Buy	19,650	26.6	20.9	4.7	24.2	20.7	1.4	13.6
BEWG	0371.HK	Utilities	Buy	1,741	2.0	12.3	1.4	12.1	27.4	2.4	13.5
BOC Hong Kong Holdings	2388.HK	Banks	Buy	33,825	33.0	11.6	1.7	15.1	11.0	4.8	NA
Brilliance China	1114.HK	Automobiles & Components	Buy	6,817	16.8	13.9	3.4	28.2	28.9	0.0	238.8
C C Land	1224.HK	Real Estate	Buy	919	2.4	7.0	0.5	7.2	48.2	2.1	4.9
Central China Real Estate	0832.HK	Real Estate	Buy	933	0.7	3.8	0.9	29.0	77.5	6.7	0.2
Cheung Kong Hldgs	0001.HK	Real Estate	Buy	35,974	55.4	11.3	0.8	7.3	8.4	2.6	1.8
China Automation Group	0569.HK	Capital Goods	Buy	315	0.7	6.7	0.9	14.6	26.7	3.1	4.5
China BlueChemical	3983.HK	Materials	Buy	3,241	4.8	10.1	1.4	14.3	8.1	3.7	4.7
China Comm Services	0552.HK	Telecommunication Services	Buy	4,199	2.8	9.5	1.3	14.8	12.5	4.2	4.1
China Comms Construct	1800.HK	Capital Goods	Buy	15,720	20.4	8.3	1.1	13.6	5.4	3.0	7.0
China Cosco Hldgs	1919.HK	Transportation	Buy	5,535	10.6	31.0	1.2	4.1	NM	0.8	31.4
China Dongxiang	3818.HK	Consumer Durables & Apparel	Buy	841	2.3	14.0	0.7	5.4	20.4	5.0	-2.5
CHINA EASTERN AIRLINES	0670.HK	Transportation	Buy	4,626	4.7	8.2	1.0	13.3	18.0	0.0	6.6
China Foods	0506.HK	Food, Beverage & Tobacco	Buy	2,580	5.6	17.7	2.5	15.3	22.8	2.1	8.2
China High Speed Trans	0658.HK	Capital Goods	Buy	642	4.6	6.8	0.5	7.3	43.1	3.7	5.5
China Life	2628.HK	Insurance	Buy	98,811	93.2	19.3	2.4	13.2	36.3	1.6	NA
China Merchants	0144.HK	Transportation	Buy	8,252	11.4	15.2	1.3	8.9	21.3	2.7	11.4
China Merchants Securities	600999.SS	Diversified Financials	Buy	7,894	22.1	NA	1.8	NA	NA	1.1	NA
China Metal Recycling	0773.HK	Materials	Buy	1,292	3.5	4.1	1.0	27.6	29.6	4.9	5.0
China Modern Dairy	1117.HK	Food, Beverage & Tobacco	Buy	1,412	0.5	14.9	1.6	11.2	49.8	0.0	14.2
China Ovs Grand Oceans	0081.HK	Real Estate	Buy	2,950	4.2	5.2	2.0	46.4	87.2	1.5	0.7
China Power Int'l	2380.HK	Utilities	Buy	1,695	2.2	7.1	0.7	10.1	28.9	7.0	7.6
China Rail Construction	1186.HK	Capital Goods	Buy	13,958	18.9	9.1	1.1	13.0	17.7	3.3	3.4
China Railway Group	0390.HK	Capital Goods	Buy	12,502	12.9	9.6	0.9	10.2	18.6	2.1	7.7
China Resources Land	1109.HK	Real Estate	Buy	17,509	23.0	15.0	1.8	12.9	13.7	1.1	11.6
China Resources Power	0836.HK	Utilities	Buy	12,108	14.0	10.8	1.4	14.0	35.7	3.7	7.2
China Shenhua Energy	1088.HK	Energy	Buy	90,317	59.2	12.4	2.0	16.9	-3.9	3.2	6.7
China Shineway	2877.HK	Pharmaceutical & Biotechnology	Buy	1,419	1.9	10.7	1.9	18.6	16.3	2.8	6.0
China Shipping Container	2866.HK	Transportation	Buy	3,708	21.0	11.7	0.8	7.2	555.9	0.0	7.6
China Shipping Development	1138.HK	Transportation	Buy	2,192	12.2	30.6	0.6	1.9	NM	1.1	16.1
China Southern Airlines	1055.HK	Transportation	Buy	4,927	5.7	15.0	0.8	5.9	4.6	4.9	7.3
China State Construction	3311.HK	Capital Goods	Buy	4,299	9.8	14.9	2.3	16.6	10.8	1.6	11.7
China Telecom	0728.HK	Telecommunication Services	Buy	45,102	34.4	15.7	1.0	6.6	22.6	2.0	3.3
China Unicom	0762.HK	Telecommunication Services	Buy	39,091	39.6	23.6	1.1	4.9	59.5	1.0	3.9
China VTM Mining	0893.HK	Materials	Buy	484	1.9	8.1	0.8	10.3	0.8	2.5	4.0
Chongqing Rural Bank	3618.HK	Banks	Buy	5,495	7.3	NA	1.0	NA	NA	4.4	NA
Chow Tai Fook	1929.HK	Retailing	Buy	17,054	9.3	22.4	3.8	18.7	-13.6	0.9	15.4
CITIC Securities	600030.SS	Diversified Financials	Buy	23,629	117.5	NA	1.6	NA	NA	1.1	NA
CLP Holdings	0002.HK	Utilities	Buy	20,129	31.0	14.7	1.8	12.3	8.2	4.1	7.7
CNBM	3323.HK	Materials	Buy	8,386	60.6	7.2	1.4	21.0	23.1	2.0	6.7
COLI	0688.HK	Real Estate	Buy	25,671	53.2	8.5	1.9	24.5	41.6	1.8	4.6
Cosco Pacific	1199.HK	Transportation	Buy	4,114	8.6	9.8	1.0	10.5	15.7	4.1	13.0
Country Garden Holdings	2007.HK	Real Estate	Buy	9,801	11.6	8.2	1.6	21.6	14.0	5.0	7.3
CPIC	2601.HK	Insurance	Buy	34,780	34.9	20.1	2.2	12.1	47.5	1.7	NA
CR Cement	1313.HK	Materials	Buy	4,474	23.8	10.1	1.4	15.2	63.4	0.9	7.1
CRE	0291.HK	Food & Staples Retailing	Buy	8,754	11.4	26.9	1.7	6.5	-30.6	1.5	7.1
CST Mining	0985.HK	Materials	Buy	418	0.8	-33.5	0.5	-1.6	79.9	0.0	2.1

Source: Deutsche Bank

Figure 94: Listed China/Hong Kong stocks under Deutsche Bank coverage, 3 January 2013, continued

Company	Ticker	Sector	Rating	M. cap (US$m)	Daily t/o (US$m)	Ratios 2013F					
						PE (x) (DB EPS)	PB (x)	ROE %	EPS gth % (DB EPS)	Div yield %	EV/ EBITDA (x)
Dah Sing Banking	2356.HK	Banks	Buy	1,387	1.0	11.6	0.6	5.6	8.7	3.8	NA
Dah Sing Financial	0440.HK	Banks	Buy	1,313	1.7	8.2	0.6	7.5	8.4	4.0	NA
Datang Int'l Power	0991.HK	Utilities	Buy	5,271	4.5	6.5	0.7	11.8	51.8	5.4	7.6
Datang Renewable	1798.HK	Utilities	Buy	966	0.7	5.5	0.6	10.8	20.7	6.0	8.2
Digital China	0861.HK	Technology Hardware & Eqpt	Buy	1,930	6.6	10.2	1.9	20.2	17.4	3.4	5.9
Dongfang Electric	1072.HK	Capital Goods	Buy	4,389	11.1	9.4	1.4	16.5	7.2	1.1	2.6
Dongfeng Motor	0489.HK	Automobiles & Components	Buy	13,649	38.5	7.7	1.3	18.8	21.1	2.2	2.6
E-House	EJ.N	Real Estate	Buy	333	0.9	5.0	0.5	10.7	66.9	3.6	4.1
Evergrande	3333.HK	Real Estate	Buy	8,785	45.4	5.0	1.2	27.5	23.5	8.2	4.4
Far East Global	0830.HK	Capital Goods	Buy	433	1.7	29.4	3.0	10.7	NM	1.0	16.6
Fosun Pharma	2196.HK	Pharmaceutical & Biotechnology	Buy	2,992	1.7	21.1	1.1	5.4	24.6	1.4	8.4
Franshion	0817.HK	Real Estate	Buy	3,321	2.3	9.3	0.8	10.9	19.9	2.1	5.7
Galaxy	0027.HK	Consumer Services	Buy	16,774	66.7	16.1	4.4	32.1	15.4	0.0	11.9
Geely Auto	0175.HK	Automobiles & Components	Buy	3,863	31.3	11.7	1.8	17.7	23.3	1.1	6.4
Great Eagle Hldgs	0041.HK	Real Estate	Buy	2,132	1.8	11.3	0.5	4.3	1.0	2.3	4.1
Greentown China	3900.HK	Real Estate	Buy	3,228	6.8	5.4	1.2	24.3	22.2	3.3	3.8
G-Resources	1051.HK	Materials	Buy	813	1.8	17.0	1.0	6.7	NM	0.0	11.3
Guangdong Investment	0270.HK	Utilities	Buy	5,018	5.1	12.8	1.6	12.7	7.3	3.5	7.7
Guangzhou R&F Prop	2777.HK	Real Estate	Buy	6,119	11.2	6.6	1.2	20.1	4.8	5.1	4.3
Hang Lung Properties	0101.HK	Real Estate	Buy	17,826	23.9	23.1	1.2	5.2	38.3	2.4	17.5
Harbin Electric	1133.HK	Capital Goods	Buy	1,234	4.1	4.8	0.6	12.6	6.4	3.2	-0.7
Henderson Land Dev. Co.	0012.HK	Real Estate	Buy	16,470	24.7	17.9	0.7	3.8	1.6	1.8	18.6
Hengan Intl.	1044.HK	Household & Personal Products	Buy	11,320	25.1	19.9	6.0	32.4	25.3	3.0	14.4
Hengdeli	3389.HK	Retailing	Buy	1,679	5.4	13.1	1.7	15.7	0.0	2.4	7.5
HKT Trust and HKT Ltd	6823.HK	Telecommunication Services	Buy	6,200	12.8	20.3	1.5	7.5	18.1	6.6	8.4
Home Inns	HMIN.OQ	Consumer Services	Buy	2,677	6.8	39.1	4.3	11.5	27.3	0.0	14.5
Hopewell Holdings Limited	0054.HK	Real Estate	Buy	3,833	5.9	21.8	1.0	4.5	-3.9	3.0	19.5
HPH Trust	HPHT.SI	Transportation	Buy	7,054	15.7	25.6	0.8	3.3	0.9	7.3	12.8
HSBC Holdings Plc	0005.HK	Banks	Buy	193,925	131.9	10.1	1.1	NA	8.0	4.5	NA
Huabao Int'l	0336.HK	Materials	Buy	1,602	4.3	7.2	1.7	25.4	-0.9	4.2	4.9
Huadian Power	1071.HK	Utilities	Buy	2,518	3.2	6.4	0.8	12.4	74.6	3.9	6.0
Huaneng Power Intl	0902.HK	Utilities	Buy	13,055	13.3	8.1	1.3	16.8	57.9	6.2	6.2
Huaneng Renewables	0958.HK	Utilities	Buy	1,547	1.3	5.4	0.7	13.5	53.9	2.8	7.3
Hui Xian REIT	87001.HK	Real Estate	Buy	3,362	1.2	17.6	0.8	4.6	10.6	6.6	11.2
Hutchison Whampoa	0013.HK	Capital Goods	Buy	45,868	61.1	13.7	0.9	6.8	18.2	3.2	9.0
ICBC	1398.HK	Banks	Buy	261,636	173.4	7.4	1.3	18.5	-0.8	4.1	NA
Industrial Bank	601166.SS	Banks	Buy	31,676	123.4	7.4	1.1	16.1	-11.2	2.1	NA
Jiangsu Expressway-H	0177.HK	Transportation	Buy	5,251	4.3	12.2	1.7	13.9	8.1	5.9	7.5
Kaisa	1638.HK	Real Estate	Buy	1,702	5.8	5.5	0.8	17.9	36.7	0.0	5.5
Kunlun Energy	0135.HK	Energy	Buy	16,639	35.4	15.2	2.6	17.9	17.6	2.0	6.5
KWG Property	1813.HK	Real Estate	Buy	2,425	5.3	6.5	0.9	14.4	0.6	4.2	4.4
Li & Fung	0494.HK	Retailing	Buy	15,600	34.5	16.1	2.9	19.3	47.2	2.7	12.3
Lifestyle International	1212.HK	Retailing	Buy	4,322	6.1	16.1	3.3	22.4	14.9	2.5	12.1
Link REIT	0823.HK	Real Estate	Buy	11,236	31.7	26.8	1.3	5.0	11.3	3.7	22.4
Longfor	0960.HK	Real Estate	Buy	10,600	14.2	9.8	2.1	23.5	23.4	2.1	6.7
Longyuan Power	0916.HK	Utilities	Buy	5,296	7.9	9.1	1.1	12.3	18.7	2.2	7.7
Melco Crown	MPEL.OQ	Consumer Services	Buy	9,590	70.5	19.3	2.5	13.7	25.6	0.0	10.4
MIE Holdings Corp	1555.HK	Energy	Buy	859	4.2	6.1	1.2	20.9	11.0	2.3	3.2
Mindray Medical	MR.N	Health Care Eqpt & Services	Buy	3,524	15.1	14.9	2.3	17.8	13.2	1.3	9.7
Minmetals Land Limited	0230.HK	Capital Goods	Buy	603	1.4	5.0	0.6	12.5	52.2	1.2	3.7
MMG Limited	1208.HK	Materials	Buy	2,040	2.8	7.2	1.0	17.2	36.5	0.0	3.4
NCI	1336.HK	Insurance	Buy	12,988	12.4	19.7	2.0	10.6	-2.7	0.8	NA
New Oriental	EDU.N	Consumer Services	Buy	3,093	49.2	23.6	4.0	18.0	0.1	1.4	15.0
New World Dept Store China	0825.HK	Retailing	Buy	1,114	0.7	13.1	1.4	11.0	17.6	3.4	5.2
Nine Dragons Paper	2689.HK	Capital Goods	Buy	4,460	13.2	19.2	1.2	6.6	36.7	1.2	10.1
NVC Lighting	2222.HK	Household & Personal Products	Buy	853	5.6	8.3	1.2	16.0	28.2	3.4	4.1
Orient Overseas Int'l	0316.HK	Transportation	Buy	4,275	5.5	10.5	0.9	9.0	83.9	4.8	7.0
Pacific Basin Shipping Ltd	2343.HK	Transportation	Buy	1,140	2.1	17.6	0.9	4.9	7,241.0	2.8	8.6
Ping An	2318.HK	Insurance	Buy	63,031	130.2	16.7	2.6	16.6	31.0	0.9	NA
POLY PROPERTY	0119.HK	Real Estate	Buy	3,035	13.4	8.0	0.8	10.3	48.8	0.0	9.1
Seven Days Group	SVN.N	Consumer Services	Buy	1,856	1.6	39.0	5.7	15.9	37.8	0.0	14.4
Shandong Weigao	1066.HK	Health Care Eqpt & Services	Buy	4,406	11.0	19.2	2.8	15.7	25.4	0.2	14.5
Shanghai Electric	2727.HK	Capital Goods	Buy	5,719	11.4	9.1	1.0	11.9	11.0	3.3	1.6
Shanghai Industrial	0363.HK	Capital Goods	Buy	3,886	4.2	9.8	0.9	8.9	28.3	4.1	8.8
Shanghai Pudong Bank	600000.SS	Banks	Buy	29,707	109.1	6.0	0.9	16.5	-4.1	3.3	NA
Shenzhen Expressway-H	0548.HK	Transportation	Buy	866	1.0	6.8	0.5	8.1	4.4	5.9	6.6
SHK Properties Ltd	0016.HK	Real Estate	Buy	39,717	72.0	14.1	0.9	6.2	-0.4	2.8	12.8

Source: Deutsche Bank

Figure 95: Listed China/Hong Kong stocks under Deutsche Bank coverage, 3 January 2013, continued

Company	Ticker	Sector	Rating	M. cap (US$m)	Daily t/o (US$m)	Ratios 2013F					
						PE (x) (DB EPS)	PB (x)	ROE %	EPS gth % (DB EPS)	Div yield %	EV/ EBITDA (x)
Shougang Fushan	0639.HK	Materials	Buy	2,129	9.0	10.7	0.8	7.7	-8.4	4.2	3.8
Shui On Land Ltd	0272.HK	Real Estate	Buy	3,021	5.9	6.6	0.5	8.9	55.2	4.0	4.9
Sihuan Pharmaceutical	0460.HK	Pharmaceutical & Biotechnology	Buy	2,296	3.9	12.6	1.7	14.2	16.3	2.6	6.7
Sina Corp	SINA.OQ	Software & Services	Buy	3,471	130.0	42.9	3.0	7.3	690.6	0.0	23.7
Sino Biopharmaceutical	1177.HK	Pharmaceutical & Biotechnology	Buy	2,365	4.1	18.9	3.8	21.2	17.6	3.2	8.2
Sino Land Co	0083.HK	Real Estate	Buy	10,757	11.8	12.4	1.0	7.9	31.9	3.1	10.9
Sinofert	0297.HK	Materials	Buy	1,848	4.1	9.7	0.8	8.2	28.1	1.6	3.4
Sinopec-H	0386.HK	Energy	Buy	102,452	78.6	9.4	1.2	12.8	18.8	3.8	5.2
Sinopharm Group	1099.HK	Health Care Eqpt & Services	Buy	7,609	8.1	20.9	2.6	12.8	20.7	1.9	9.0
Sinotruk (Hong Kong)	3808.HK	Capital Goods	Buy	2,169	0.7	12.3	0.7	5.6	59.1	2.0	7.2
SOHO China	0410.HK	Real Estate	Buy	4,411	6.4	8.9	0.9	12.6	14.3	4.9	1.8
SouFun	SFUN.N	Software & Services	Buy	1,999	5.3	11.3	6.6	91.8	25.4	0.0	8.2
Spreadtrum	SPRD.OQ	Semiconductors & Eqpt	Buy	950	3.5	7.7	2.0	28.9	31.6	2.0	4.2
Sunac	1918.HK	Real Estate	Buy	2,380	9.7	4.2	1.2	31.5	31.2	3.0	2.5
TAL Education Group	XRS.N	Consumer Services	Buy	746	0.1	30.7	3.4	11.8	-2.5	0.0	15.8
Tencent	0700.HK	Software & Services	Buy	61,190	107.0	20.8	6.7	38.4	36.1	0.3	15.5
Texwinca Holdings	0321.HK	Consumer Durables & Apparel	Buy	1,282	1.4	16.4	1.8	11.7	-34.8	4.6	9.7
The United Laboratories	3933.HK	Pharmaceutical & Biotechnology	Buy	775	1.3	16.5	1.0	6.8	25.1	2.5	7.4
Tingyi	0322.HK	Food, Beverage & Tobacco	Buy	15,027	14.5	23.2	6.0	28.2	48.5	2.2	9.4
Tsingtao Brewery Co Ltd-H	0168.HK	Food, Beverage & Tobacco	Buy	8,121	7.8	23.3	3.5	16.2	23.2	0.9	13.2
West China Cement	2233.HK	Materials	Buy	924	4.2	7.6	1.1	16.2	65.9	2.9	5.1
Wumart Stores	1025.HK	Food & Staples Retailing	Buy	2,767	3.3	21.4	4.3	21.3	20.2	2.0	9.3
WuXi PharmaTech	WX.N	Pharmaceutical & Biotechnology	Buy	1,119	4.7	10.5	1.5	16.2	9.9	0.0	4.8
Yuanda China	2789.HK	Capital Goods	Buy	704	1.2	4.9	0.8	17.9	20.7	4.1	3.6
Yuexiu Property	0123.HK	Real Estate	Buy	3,090	8.5	7.0	0.8	11.8	2.9	3.4	5.9
Zhejiang Expressway Ltd	0576.HK	Transportation	Buy	3,552	3.0	11.9	1.4	11.8	4.9	5.9	5.8
Zhongsheng Group	0881.HK	Retailing	Buy	2,969	1.9	11.8	2.0	18.4	66.9	1.5	7.8
Zijin Mining	2899.HK	Materials	Buy	8,891	16.7	9.3	1.7	19.3	24.6	3.2	4.6
AEON Stores	0984.HK	Retailing	Hold	714	0.1	18.5	2.9	16.3	30.2	2.0	4.7
Agri. Bank of China	1288.HK	Banks	Hold	165,919	59.3	7.2	1.2	17.7	-4.1	4.2	NA
Angang Steel	0347.HK	Materials	Hold	6,169	9.7	57.6	0.8	1.4	NM	0.0	12.4
Anhui Conch Cement-H	0914.HK	Materials	Hold	20,098	43.2	15.1	2.2	15.6	30.5	1.1	8.9
Anta	2020.HK	Consumer Durables & Apparel	Hold	2,429	7.0	13.7	2.1	15.6	-12.2	4.4	6.8
AsiaInfo-Linkage	ASIA.OQ	Software & Services	Hold	794	2.6	9.5	0.7	8.1	10.6	0.0	4.4
Baidu	BIDU.OQ	Software & Services	Hold	36,423	500.0	18.1	6.0	39.2	18.2	0.0	13.0
Bank of Beijing	601169.SS	Banks	Hold	11,218	42.1	7.9	1.0	13.6	-18.2	2.1	NA
Bank of Communications	3328.HK	Banks	Hold	53,568	24.0	6.3	0.9	14.7	-7.1	4.0	NA
Bank of East Asia Ltd	0023.HK	Banks	Hold	8,215	7.2	15.4	1.2	8.0	-2.6	3.1	NA
Bank of Nanjing	601009.SS	Banks	Hold	4,385	27.5	7.1	1.0	14.7	-2.7	3.9	NA
Beijing Cap Int'l Airport	0694.HK	Transportation	Hold	3,352	2.8	12.9	1.3	10.1	24.5	1.5	8.1
Cafe de Coral	0341.HK	Consumer Services	Hold	1,598	1.3	24.1	3.9	17.4	8.7	3.1	11.3
China CITIC Bank	0998.HK	Banks	Hold	29,212	28.5	5.3	0.8	16.2	0.7	4.7	NA
China Coal Energy	1898.HK	Energy	Hold	15,291	30.3	11.9	1.0	8.7	-3.4	1.8	6.6
China Construction Bank	0939.HK	Banks	Hold	209,635	195.4	7.4	1.2	17.7	-3.5	4.1	NA
China Everbright Bank	601818.SS	Banks	Hold	19,799	36.5	5.7	1.0	17.9	-2.9	5.2	NA
China Gas Holdings	0384.HK	Utilities	Hold	3,566	8.1	27.4	2.6	10.8	25.0	0.9	11.4
China Lodging Group	HTHT.OQ	Consumer Services	Hold	4,107	1.1	95.9	9.7	10.7	63.4	0.0	34.5
China Mengniu Dairy	2319.HK	Food, Beverage & Tobacco	Hold	5,071	13.7	17.6	2.2	15.3	23.9	1.3	7.1
China Merchants Bank-H	3968.HK	Banks	Hold	55,367	35.4	9.8	1.4	15.6	-16.8	2.3	NA
China Minsheng	1988.HK	Banks	Hold	34,106	39.9	6.8	1.1	18.1	-13.4	2.9	NA
China Minsheng Bank	600016.SS	Banks	Hold	34,752	130.0	6.5	1.2	19.5	2.4	3.0	NA
China Mobile	0941.HK	Telecommunication Services	Hold	236,714	179.7	11.7	1.9	16.7	2.5	3.7	4.8
China Oilfield Services	2883.HK	Energy	Hold	9,731	17.2	12.4	1.7	14.3	6.2	1.6	8.3
China Shanshui Cement	0691.HK	Materials	Hold	2,154	6.6	8.9	1.4	16.3	-0.1	2.8	6.1
Citic Pacific	0267.HK	Capital Goods	Hold	6,298	11.5	6.1	0.5	9.0	74.2	4.1	7.1
CITIC Securities	6030.HK	Diversified Financials	Hold	28,424	24.7	NA	2.0	NA	NA	1.0	NA
CKI	1038.HK	Utilities	Hold	14,609	13.5	12.0	1.5	13.1	3.5	4.2	38.7
CNOOC Ltd	0883.HK	Energy	Hold	99,588	85.0	9.7	1.7	19.3	1.9	2.0	4.4
CSR Corp Ltd	1766.HK	Capital Goods	Hold	12,375	14.7	17.8	1.9	11.2	10.3	1.1	9.7
CTIH	0966.HK	Insurance	Hold	0	3.5	15.1	1.9	13.4	101.9	0.7	NA
Ctrip	CTRP.OQ	Consumer Services	Hold	3,217	13.0	25.9	3.0	12.3	32.5	0.0	14.4
Dongyue Group Limited	0189.HK	Materials	Hold	1,455	7.0	6.8	1.5	24.5	51.4	4.7	3.5
ENN Energy	2688.HK	Utilities	Hold	4,590	7.0	16.4	2.9	19.0	13.7	1.5	9.2
Esprit Holdings Ltd	0330.HK	Retailing	Hold	2,891	26.6	-139.4	1.1	-0.9	NM	2.4	47.9
Foxconn Int'l Holdings	2038.HK	Technology Hardware & Eqpt	Hold	3,634	13.1	532.6	1.1	0.2	NM	0.0	10.6
GCL-Poly	3800.HK	Semiconductors & Eqpt	Hold	3,473	47.7	-57.5	1.4	-2.4	-62.0	0.0	12.7
Giordano	0709.HK	Retailing	Hold	1,462	3.2	14.7	4.2	30.2	3.9	5.6	8.8

Source: Deutsche Bank

Figure 96: Listed China/Hong Kong stocks under Deutsche Bank coverage, 3 January 2013, continued

Company	Ticker	Sector	Rating	M. cap (US$m)	Daily t/o (US$m)	Ratios 2013F					
						PE (x) (DB EPS)	PB (x)	ROE %	EPS gth % (DB EPS)	Div yield %	EV/ EBITDA (x)
Golden Eagle Retail	3308.HK	Retailing	Hold	4,811	8.9	20.8	4.6	24.4	17.0	1.5	13.7
Goldwind Sci & Tech	2208.HK	Capital Goods	Hold	1,272	1.1	20.7	0.6	2.9	165.1	1.0	13.7
Gome	0493.HK	Retailing	Hold	2,314	12.2	31.4	0.9	3.0	NM	0.7	20.0
Guangzhou Auto	2238.HK	Automobiles & Components	Hold	5,845	6.0	9.8	1.1	11.8	49.4	3.1	-23.8
Haitong Securities	6837.HK	Diversified Financials	Hold	15,395	15.4	NA	1.7	NA	NA	1.1	NA
Hang Seng Bank	0011.HK	Banks	Hold	29,422	17.2	18.0	2.5	14.1	-2.3	4.4	NA
Hong Kong & China Gas	0003.HK	Utilities	Hold	23,767	13.4	26.9	3.9	15.1	12.6	2.1	14.2
Hysan Development	0014.HK	Real Estate	Hold	5,222	6.0	21.4	0.8	3.8	24.4	2.8	18.6
Jiangxi Copper	0358.HK	Materials	Hold	9,716	22.0	11.5	1.2	10.9	1.3	1.3	7.5
Lee & Man Paper	2314.HK	Materials	Hold	2,937	4.4	15.0	1.6	11.0	12.6	2.0	12.3
Lenovo Group Ltd	0992.HK	Technology Hardware & Eqpt	Hold	9,687	37.9	16.6	3.9	24.8	21.4	1.8	6.0
Li Ning Co Ltd	2331.HK	Consumer Durables & Apparel	Hold	778	3.8	19.1	1.3	8.1	72.7	3.3	6.0
Lianhua Supermarket	0980.HK	Food & Staples Retailing	Hold	1,096	1.2	11.8	1.8	15.7	4.7	3.6	-0.9
MGM China	2282.HK	Consumer Services	Hold	7,069	5.1	12.3	7.7	68.0	3.0	6.5	9.3
Netease.com	NTES.OQ	Software & Services	Hold	5,577	9.8	9.4	1.8	20.6	-0.1	0.0	4.1
New World Dev	0017.HK	Real Estate	Hold	9,698	26.2	12.8	0.6	4.8	-19.8	3.1	8.5
Parkson Retail Group	3368.HK	Retailing	Hold	2,433	3.7	15.1	2.5	17.7	12.8	3.0	7.2
PetroChina	0857.HK	Energy	Hold	266,791	89.8	12.7	1.5	11.8	14.8	3.5	5.6
Phoenix New Media	FENG.N	Software & Services	Hold	277	0.3	15.7	1.2	7.9	2.9	0.0	2.5
Ping An Bank	000001.SZ	Banks	Hold	11,070	42.4	7.7	0.9	12.0	-13.1	1.8	NA
POWER ASSETS	0006.HK	Utilities	Hold	18,047	22.5	14.7	2.1	14.8	1.2	4.1	15.5
Renren Inc	RENN.N	Software & Services	Hold	1,339	0.7	-103.5	1.2	-1.1	80.8	0.0	-10.6
SA SA International	0178.HK	Retailing	Hold	2,367	4.4	23.0	13.4	64.7	15.6	3.2	15.1
Sands China	1928.HK	Consumer Services	Hold	37,845	42.6	23.2	7.5	33.0	17.5	4.3	17.2
Shanda Games Limited	GAME.OQ	Software & Services	Hold	862	1.4	3.9	0.9	25.4	7.4	0.0	0.9
Shanghai Pharmaceuticals	2607.HK	Health Care Eqpt & Services	Hold	4,815	2.8	14.9	1.2	8.6	10.0	0.3	6.0
Shangri-La Asia	0069.HK	Consumer Services	Hold	6,576	3.5	21.1	1.1	5.2	44.3	1.6	9.1
Shun Tak	0242.HK	Transportation	Hold	1,589	4.0	12.0	0.7	5.6	24.1	2.1	9.8
Sinoma	1893.HK	Capital Goods	Hold	1,189	4.2	11.5	0.6	5.6	43.2	1.1	6.6
SJM	0880.HK	Consumer Services	Hold	13,247	12.9	15.1	4.9	33.3	0.5	5.0	11.0
Sohu.com Inc	SOHU.OQ	Software & Services	Hold	1,828	21.4	17.2	1.4	9.1	19.2	0.0	3.4
Standard Chartered	2888.HK	Banks	Hold	63,210	14.6	NA	1.4	NA	NA	3.5	NA
SUN ART RETAIL GROUP	6808.HK	Food & Staples Retailing	Hold	14,374	11.4	30.8	4.9	16.6	21.9	1.3	12.4
Swire Pacific	0019.HK	Real Estate	Hold	18,857	17.1	17.5	0.7	4.1	-6.6	2.9	15.9
Taomee	TAOM.N	Software & Services	Hold	145	0.0	13.5	1.2	9.1	29.9	0.0	2.7
Television Broadcasts	0511.HK	Media	Hold	3,215	3.7	13.5	3.3	25.3	4.9	4.7	8.3
Towngas China	1083.HK	Utilities	Hold	2,038	2.0	16.7	1.4	8.8	19.3	1.2	14.1
Trinity	0891.HK	Consumer Durables & Apparel	Hold	1,168	3.5	16.2	2.4	16.0	11.1	3.8	8.7
Uni-President China	0220.HK	Food, Beverage & Tobacco	Hold	4,030	26.7	25.9	3.1	12.7	17.3	1.2	14.7
Vipshop	VIPS.N	Retailing	Hold	734	1.6	18.3	7.2	48.7	NM	0.0	17.2
Weichai Power	2338.HK	Capital Goods	Hold	9,311	13.4	9.4	1.7	20.2	28.0	0.5	5.1
Wharf	0004.HK	Real Estate	Hold	23,757	29.4	17.4	0.8	4.6	-1.3	2.3	13.0
Wing Hang Bank	0302.HK	Banks	Hold	3,122	1.4	13.0	1.2	9.6	6.7	2.3	NA
Wynn Macau	1128.HK	Consumer Services	Hold	14,588	15.6	16.9	26.9	158.8	-1.2	5.9	14.5
YY	YY.OQ	Software & Services	Hold	432	1.9	17.4	2.9	19.8	-18.0	0.0	13.9
Zhaojin Mining	1818.HK	Materials	Hold	4,836	10.1	10.9	2.6	27.1	39.3	3.4	6.4
Zhengtong Auto Services	1728.HK	Retailing	Hold	1,685	2.6	10.5	1.3	13.6	45.9	0.0	6.9
Zhuzhou CSR Times Electric	3898.HK	Capital Goods	Hold	4,056	8.3	22.6	3.8	17.8	16.2	1.8	15.0
Zoomlion	1157.HK	Capital Goods	Hold	11,790	27.3	8.3	1.5	19.3	1.1	2.4	5.7
ZTE Corp-H	0763.HK	Technology Hardware & Eqpt	Hold	6,088	16.8	25.5	2.0	8.1	1,617.0	1.3	9.7
ASM Pacific Technology	0522.HK	Semiconductors & Semiconductor	Sell	4,682	7.3	27.3	5.3	20.5	46.7	1.9	17.4
Bank of Ningbo	002142.SZ	Banks	Sell	4,935	16.6	8.4	1.2	15.6	-5.3	2.1	NA
BYD	1211.HK	Capital Goods	Sell	7,061	10.2	31.0	1.9	6.2	44.1	0.0	9.7
Cathay Pacific	0293.HK	Transportation	Sell	7,297	6.3	40.6	1.0	2.6	NM	0.7	6.2
Chalco	2600.HK	Materials	Sell	6,543	8.4	-6.2	1.0	-15.4	-7.0	0.0	83.7
China Everbright Int'l	0257.HK	Commercial Services & Supplies	Sell	1,971	5.7	15.7	1.7	11.7	19.4	1.6	11.2
China Rongsheng	1101.HK	Capital Goods	Sell	1,282	10.3	-28.6	0.5	-1.9	NM	0.0	47.7
CR Gas	1193.HK	Utilities	Sell	4,268	14.7	18.6	2.6	14.8	19.0	1.1	10.6
Hidili	1393.HK	Materials	Sell	624	3.4	11.5	0.5	4.3	-7.3	1.7	9.0
Hongkong Land Holdings Ltd	HKLD.SI	Real Estate	Sell	16,683	11.6	20.5	0.7	3.2	12.3	2.3	22.1
Lonking	3339.HK	Capital Goods	Sell	1,226	14.2	13.9	1.0	7.6	6.6	1.4	7.2
Maanshan-H	0323.HK	Materials	Sell	2,702	7.5	-27.4	0.8	-2.7	84.3	0.0	10.2
Mongolian Mining	0975.HK	Materials	Sell	1,888	1.0	18.9	2.0	11.0	17.1	0.0	12.9
Sino Ocean	3377.HK	Real Estate	Sell	4,289	5.7	10.6	0.6	7.5	14.1	3.6	8.3
Yanzhou Coal-H	1171.HK	Energy	Sell	8,959	45.9	20.9	1.2	5.7	-50.7	1.4	10.7

Source: Deutsche Bank

Appendix 1

Important Disclosures

Additional information available upon request

For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, please see the most recently published company report or visit our global disclosure look-up page on our website at http://gm.db.com/ger/disclosure/DisclosureDirectory.eqsr

Analyst Certification

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst(s). In addition, the undersigned lead analyst(s) has not and will not receive any compensation for providing a specific recommendation or view in this report. Jun Ma/Lin Li/Linan Liu

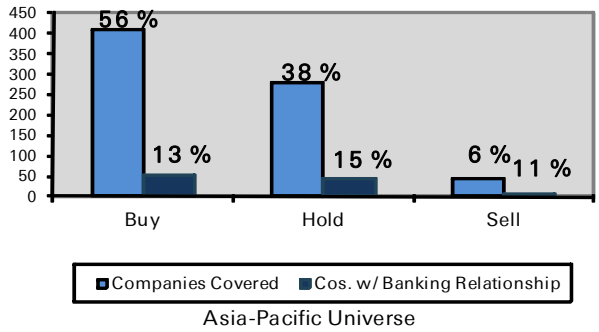
Equity rating key

Buy: Based on a current 12- month view of total share-holder return (TSR = percentage change in share price from current price to projected target price plus pro-jected dividend yield) , we recommend that investors buy the stock.
Sell: Based on a current 12-month view of total share-holder return, we recommend that investors sell the stock
Hold: We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.
Notes:

1. Newly issued research recommendations and target prices always supersede previously published research.
2. Ratings definitions prior to 27 January, 2007 were:

Buy: Expected total return (including dividends) of 10% or more over a 12-month period
Hold: Expected total return (including dividends) between -10% and 10% over a 12-month period
Sell: Expected total return (including dividends) of -10% or worse over a 12-month period

Equity rating dispersion and banking relationships



Asia-Pacific Universe

Regulatory Disclosures

1. Important Additional Conflict Disclosures

Aside from within this report, important conflict disclosures can also be found at https://gm.db.com/equities under the "Disclosures Lookup" and "Legal" tabs. Investors are strongly encouraged to review this information before investing.

2. Short-Term Trade Ideas

Deutsche Bank equity research analysts sometimes have shorter-term trade ideas (known as SOLAR ideas) that are consistent or inconsistent with Deutsche Bank's existing longer term ratings. These trade ideas can be found at the SOLAR link at http://gm.db.com.

3. Country-Specific Disclosures

Australia and New Zealand: This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act and New Zealand Financial Advisors Act respectively.
Brazil: The views expressed above accurately reflect personal views of the authors about the subject company(ies) and its(their) securities, including in relation to Deutsche Bank. The compensation of the equity research analyst(s) is indirectly affected by revenues deriving from the business and financial transactions of Deutsche Bank. In cases where at least one Brazil based analyst (identified by a phone number starting with +55 country code) has taken part in the preparation of this research report, the Brazil based analyst whose name appears first assumes primary responsibility for its content from a Brazilian regulatory perspective and for its compliance with CVM Instruction # 483.
EU countries: Disclosures relating to our obligations under MiFiD can be found at http://www.globalmarkets.db.com/riskdisclosures.
Japan: Disclosures under the Financial Instruments and Exchange Law: Company name - Deutsche Securities Inc. Registration number - Registered as a financial instruments dealer by the Head of the Kanto Local Finance Bureau (Kinsho) No. 117. Member of associations: JSDA, Type II Financial Instruments Firms Association, The Financial Futures Association of Japan, Japan Investment Advisers Association. Commissions and risks involved in stock transactions - for stock transactions, we charge stock commissions and consumption tax by multiplying the transaction amount by the commission rate agreed with each customer. Stock transactions can lead to losses as a result of share price fluctuations and other factors. Transactions in foreign stocks can lead to additional losses stemming from foreign exchange fluctuations. "Moody's", "Standard & Poor's", and "Fitch" mentioned in this report are not registered credit rating agencies in Japan unless “Japan” or "Nippon" is specifically designated in the name of the entity.
Russia: This information, interpretation and opinions submitted herein are not in the context of, and do not constitute, any appraisal or evaluation activity requiring a license in the Russian Federation.

Deutsche Bank AG/Hong Kong

Asia-Pacific locations

Deutsche Bank AG
Deutsche Bank Place
Level 16
Corner of Hunter & Phillip Streets
Sydney, NSW 2000
Australia
Tel: (61) 2 8258 1234

Deutsche Bank AG
Filiale Hongkong
International Commerce Centre,
1 Austin Road West,Kowloon,
Hong Kong
tel: (852) 2203 8888

Deutsche Equities India Pte Ltd
3rd Floor, Kodak House
222, Dr D.N. Road
Fort, Mumbai 400 001
SEBI Nos: INB231196834
INB011196830, INF231196834
Tel: (91) 22 6658 4600

Deutsche Securities Inc.
2-11-1 Nagatacho
Sanno Park Tower
Chiyoda-ku, Tokyo 100-6171
Japan
Tel: (81) 3 5156 6770

Deutsche Bank (Malaysia) Berhad
Level 18-20
Menara IMC
8 Jalan Sultan Ismail
Kuala Lumpur 50250
Malaysia
Tel: (60) 3 2053 6760

In association with
Deutsche Regis Partners, Inc.
Level 23, Tower One
Ayala Triangle, Ayala Avenue
Makati City, Philippines
Tel: (63) 2 894 6600

Deutsche Securities Korea Co.
17th Floor, YoungPoong Bldg.,
33 SeoRin-Dong,
Chongro-Ku, Seoul (110-752)
Republic of Korea
Tel: (82) 2 316 8888

Deutsche Bank AG
Singapore
One Raffles Quay
South Tower
Singapore 048583
Tel: (65) 6423 8001

Deutsche Securities Asia Ltd
Singapore
One Raffles Quay
South Tower
Singapore 048583
Tel: (65) 6423 8001

Deutsche Securities Asia Ltd
Taiwan Branch
Level 6
296 Jen-Ai Road, Sec 4
Taipei 106
Taiwan
Tel: (886) 2 2192 2888

In association with
TISCO Securities Co., Ltd
TISCO Tower
48/8 North Sathorn Road
Bangkok 10500
Thailand
Tel: (66) 2 633 6470

In association with
PT Deutsche Verdhana Indonesia
Deutsche Bank Building,
6th Floor, Jl. Imam Bonjol No.80,
Central Jakarta,
Indonesia
Tel: (62 21) 318 9541

International locations

Deutsche Bank Securities Inc.
60 Wall Street
New York, NY 10005
United States of America
Tel: (1) 212 250 2500

Deutsche Bank AG London
1 Great Winchester Street
London EC2N 2EQ
United Kingdom
Tel: (44) 20 7545 8000

Deutsche Bank AG
Große Gallusstraße 10-14
60272 Frankfurt am Main
Germany
Tel: (49) 69 910 00

Deutsche Bank AG
Deutsche Bank Place
Level 16
Corner of Hunter & Phillip Streets
Sydney, NSW 2000
Australia
Tel: (61) 2 8258 1234

Deutsche Bank AG
Filiale Hongkong
International Commerce Centre,
1 Austin Road West,Kowloon,
Hong Kong
Tel: (852) 2203 8888

Deutsche Securities Inc.
2-11-1 Nagatacho
Sanno Park Tower
Chiyoda-ku, Tokyo 100-6171
Japan
Tel: (81) 3 5156 6770

Global Disclaimer