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Reforms after leadership transition

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Reforms will likely accelerate

The 18th Party Congress last week confirmed a new leadership, led by Xi Jinping and Li Keqiang. We believe the new leaders are fully aware of the urgency of reform, as evidenced by Xi's inaugural speech which made numerous references to "the people" but with no mention of the traditional ideologies, and which candidly highlighted key challenges, including official corruption. The fact that Xi is simultaneously taking over the Party Secretary position and the chairmanship of the Military Committee is also positive, as it will allow the new leaders to move more swiftly on the reforms. In addition to these encouraging signs, we believe the very high public expectation of reforms and the technical readiness of many reform measures mean that economic reforms in many areas can move faster than expected.

Most likely economic reforms

We believe the most likely economic reforms in the coming three years include resource pricing reform, interest rate liberalization, greater exchange rate flexibility and capital account liberalization, nationwide implementation of the VAT reform to more service sectors, a new resource and environment tax system, and an increase in social spending. On the other hand, we believe SOE reform and the introduction of a property tax will likely be slower than hoped.

Incremental political reforms are feasible

We believe that, while radical changes to the political system will be not be accepted by the new leaders, many incremental steps will likely be taken to reform the political system and governance of the administration. The specific reforms we think are possible and impactful in the coming few years include intra-party democracy, public disclosure of official wealth and income, mega-department reform, and relaxation of controls on NGOs.

Macro impact of economic reforms

Our CGE model shows that the likely economic reforms will improve the economic structure. They should lift the consumption to GDP ratio by 1.3ppts in the coming three years compared with the baseline. These reforms should also reduce the investment to GDP ratio by 0.4ppts and reduce the net exports to GDP ratio by 0.9ppts. The reforms will also help reduce the long-term economic risks and thereby improve the sustainability of economic growth.

Investment implications

Gas, power, water and refined oil will benefit significantly from the resource pricing reform; brokers will benefit from financial liberalization; telco, transport, construction, health care and education will likely enjoy the benefits from the next round of VAT reform and the increase in social spending.

Our updated top Buy list, which reflects these views, now includes Huaneng Power (0902.HK), BEWG (0371.HK), Sinopec (0386.HK), Mindray (MR.N), CRC (1186.HK), China Unicom (0762.HK), ICBC (1398.HK), China Life (2628.HK), Haitong Securities (6837.HK) and Belle Int'l (1880.HK).

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Reforms to accelerate

The 18th Party Congress concluded last week confirmed a new leadership, led by Xi Jinping and Li Keqiang. We believe the new leaders are fully aware of the urgency of reform, as evidenced by Xi's inaugural speech, which made numerous references to "the people" but with no mention of the traditional ideologies, and which candidly highlighted key challenges, including official corruption. The fact that Xi is simultaneously taking over the Party Secretary position and the chairmanship of the Military Committee is also highly positive, as it will allow the new leaders to move more swiftly on the reform agenda.

In addition to these encouraging signs from the Party Congress, we believe that the exceptionally high public expectation for reforms, the technical readiness of many reform measures, as well as weaker-than-perceived opposition, will provide the impetus for acceleration of economic reforms in many areas in the coming few years.

Unprecedented political pressure for reform

Many China bears are predicting a collapse of the Chinese economy, as they believe Chinese leaders, regardless of whether old or new, will not reform. The rationale behind their argument is that the Chinese leadership is "captured" by very powerful interest groups which benefit from the status quo, including state controls on prices, resources and market access, monopoly positions for SOEs, and official corruption.

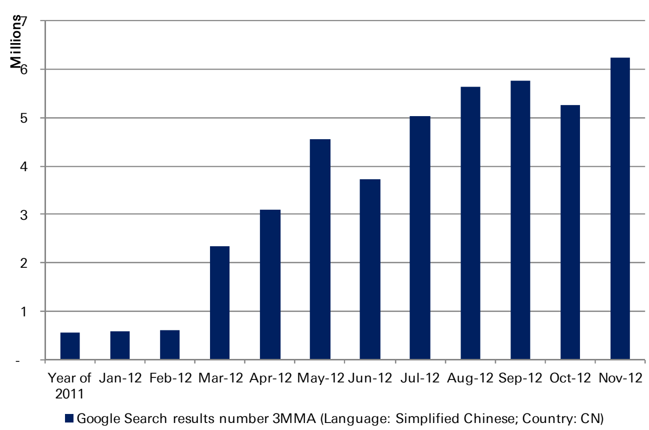
Our view is more optimistic. We think the chances of the new leadership undertaking more aggressive reforms are high for two reasons:

1. **The surge in public expectations is the key determinant of the reform agenda.** Our positive outlook for reform is not so much based on who the new leaders are, but on what the people are telling the new leaders to do. To measure the level of public expectation for reforms, we designed an algorithm to capture the number of references to the word "reform (改革)" on the Chinese Internet by month in past years. It indicates that in recent months, the frequency of reforms mentioned skyrocketed (Figure 1). Most of these discussions on reforms are with the hope that the new leaders will embark on the long-awaited reforms. Note that social media (including Internet articles, blogs and Weibo comments) have already become the most powerful channel for transmitting public opinions to the leaders, and have successfully changed many public policies and brought down incompetent and corrupt officials. To name a few cases, since the beginning of this year, the village leaders of Wukan in Guangdong province, the Mayor of Shifang City of Sichuan province, the head of industrial safety department of Shanxi Province were all dismissed due to corruption or environmental scandals revealed on the Internet.

   In recent months, economists, policy advisors and former officials have all raised their voices for the need to speed up reforms. Think tanks such as State Council Development Research Center, Boyuan Foundation, China Finance 40 Forum, and prominent policy advisors and opinion leaders including Wu Jinglian, Qin Xiao, Hu Deping, and Li Youwei have been especially proactive in drafting roadmaps for economic and political reforms for the new government. The momentum for reaching a consensus appears quite similar to what precluded the market-oriented reforms in the early 1990s, after the South China trip of Deng Xiaoping in the spring of 1992.

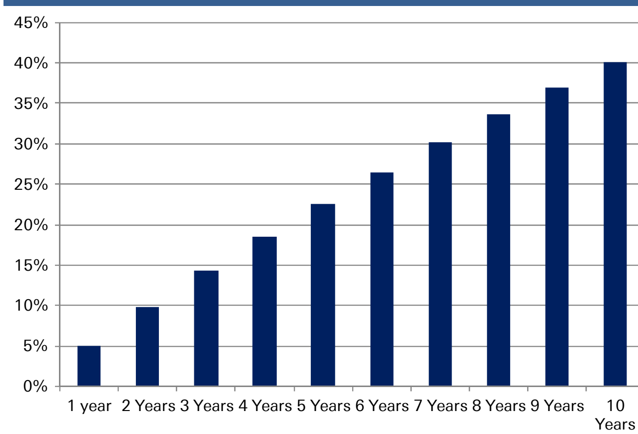
2. **Xi Jinping and Li Keqiang will be more inclined to initiate reforms with longer-term benefits of avoiding crises.** Of the seven new members of the Politburo Standing Committee, the Party's General Secretary Xi Jinping and the forthcoming new Premier Li Keqiang are the youngest. They are respectively 59 and 57 years old. Given the unwritten rule within the Chinese communist party, their ages will give them the chance to be reelected in 2017 and therefore run the country for the next ten years. Given a longer-term vision, Xi and Li will have to care more about the sustainability of economic growth and social stability throughout their tenure. It is clear that many reforms can be delayed for a while as a compromise to opposition forces, but they cannot be delayed for too long. This point can be easily illustrated by a simple math exercise, which we believe the leaders clearly understand. Assuming that without reforms (i.e., permitting all the distortions, corruption and income inequality to grow at the current pace), the chance of China slipping into a crisis (whether it is due to the eruption of an economic crisis or a political upheaval) is 5% in a year. Then without reforms, the probability of having a crisis within two years will be 9.8% (=100%-95%*95%), and the probability of having a crisis within 10 years will be 40.1% (Figure 2). Simply put, leaders with a ten-year horizon will be eight times more fearful of a crisis due to the absence of reforms, compared with leaders of a one-year career outlook.

Figure 1: "Reform" becomes a hot keyword on Internet in China: monthly # of mentions of "reform" on Internet



Source: Google, Deutsche Bank

Figure 2: Hypothetical probability of a crisis under no reform scenario



Source: Deutsche Bank

Unsustainable growth model demands reform

In addition to the above-mentioned political reasons for re-launching reforms, economic and social considerations are also strong enough to convince the new leaders to take more aggressive actions. In particular, we believe the new leaders clearly understand that the current economic growth model – driven largely by investment and export growth – is unsustainable, and that the rapidly worsening income distribution will eventually lead to large-scale social unrest.

1. The investment- and export-led growth model has come to an end. Profound changes will happen on both the supply and demand sides of the Chinese economy. From the supply side, the benefits from the past few decades' demographic dividends, such as the abundant cheap capital provided by China's high domestic savings rate, as well as the unlimited cheap labor provided by the expansion of the labor force and migrant workers, will no

longer be available. On international trade, the demand for China's exports will be constrained by the global "rebalancing", including G3 governments' fiscal consolidation and their households' deleveraging.

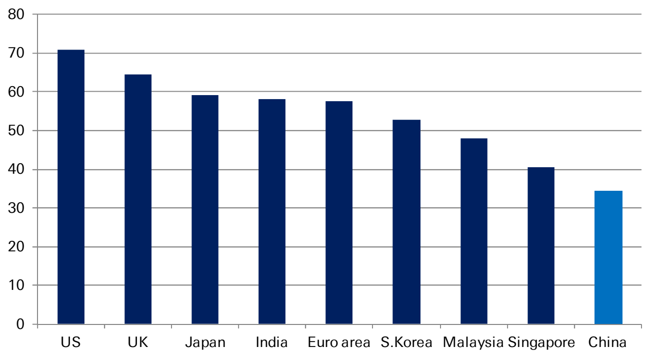
2. The past growth model has led to serious environment degradation and extremely high dependence on natural resources. For example, to produce one unit of GDP (in USD terms), China's consumption of crude oil and electricity is 1.4 and 2.5 times, respectively, that of world average, and China's emission of CO_2 is 3.3 times the world average.

3. Structural imbalances are manifested by: 1) domestic demand is still insufficient. Compared with the heavy reliance on investment and exports, China's household consumption only accounted for about 35% of GDP in 2011 (Figure 3, Figure 4); 2) China's current account balance is still in a surplus of 2.8% of GDP (2011), although it has declined rapidly from about 10% in 2007; 3) the service sector as a percentage of GDP remains at 43% in 2011, significantly lower than middle income countries' average of 55%, and even lower than India's 56%.

Without reforms, the current unbalanced growth model may eventually lead to economic crises as such massive overcapacity (due to over-investment) and then a sharp rise in NPLs in the banking system, which will be followed by a prolonged economic recession. Excessive dependency on nature resources will also make the Chinese economy highly vulnerable to shocks to the global commodities prices. Further a very high export-GDP ratio exposes the Chinese economy to significant volatility of global demand.

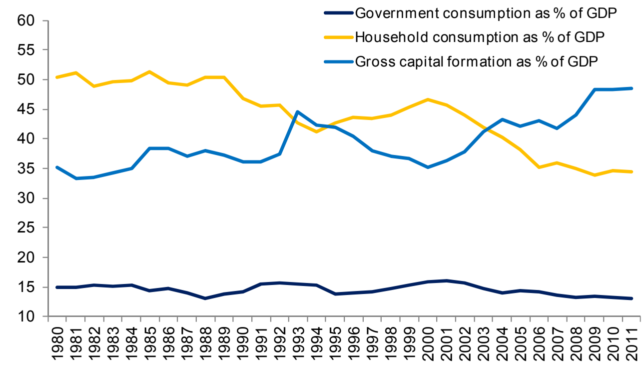
To avoid these potential crises, China will have to reform the economy by removing a range of economic distortions, such as government controls on or excessive intervention in the setting of natural resources prices, interest rates, and the exchange rate. These reforms will need to restore the equilibrium prices for natural resources and financial resources, so that such resources can be allocated more efficiently and in a more balanced way. For example, by rationalizing the prices of natural resources, raising the resource taxes and imposing an environmental tax, China will be able to avoid excessive consumption of energy and other mining resources. By liberalizing the interest rates, China will be able to permit the most efficient companies to obtain financing, instead of favoring only SOEs. By liberalizing the capital account, Chinese investors will be able to allocate their financial resources globally. The resulting exchange rate flexibility will also help China to avoid persistent external (BoP) imbalances.

Figure 3: Household consumption as a percentage of GDP



Source: WIND

Figure 4: Percentage of household consumption shrinking



Source: WIND

Income disparity can only be addressed by reforms

According to the official survey of the National Bureau of Statistics, the ratio between per capita incomes of the top (the richest) 10% and the bottom (poorest) 10% of urban households expanded from 3 in 1985 to nearly 9 in 2010 (Figure 5).

The reality of the income disparity can be much larger than the official data suggests, given that many “grey” income sources are not disclosed to the official survey conductors. Prof Li Shi, Director of Beijing Normal Income Distribution and Poverty Research Center, conducted private surveys and concluded that the ratio between per capita incomes of the top 10% and the bottom 10% of the households expanded from 7.3 to nearly 23 from 1988 to 2007. In the paper on "Grey Income and National Income Distribution," Wang Xiaolu (2010) [1]estimated that such a ratio is as high as 26 times in 2008 after taking into account the large amounts of grey income. These studies suggest the actual income gap may be about three times the official numbers (Figure 6).

A large and growing income gap constrains the growth potential of the economy, as it shifts towards a consumption-driven growth model. This is because low income people tend to have a higher propensity to consumption, so a larger income disparity implies lower growth of consumption. According to Berg and Ostry (2011)[2], better income distribution is the No.1 factor supporting the sustainability of economic growth in developing countries, and is even more important than trade openness or FDI.

The more serious implication of the growing income disparity is it increases the chance of social unrest. International experience, as suggested by Edward Muller’s (1985) empirical study[3], is that the income inequality (measured by the income share of the top 20% households) has a strong positive correlation with the death rate in political violence.

The causes of China’s growing income disparity are complicated. The drawback of the fiscal system is certainly to blame. The current tax system has not effectively

[1] Wang Xiaolu (2010) , Grey Income and National Income Distribution,", http://wang-xl.blog.sohu.com/157084578.html

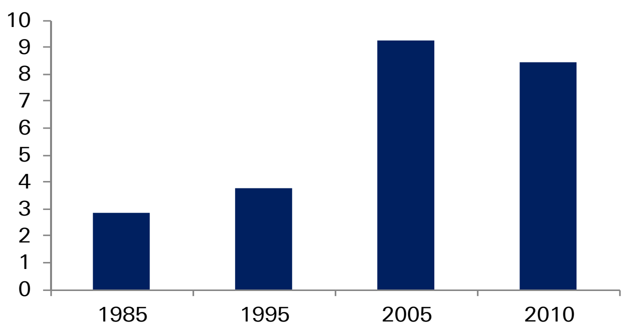
[2] Andrew Berg and Jonathan Ostry (2011), “Equity and Efficiency, Finance and Development”, Finance & Development, September, 2011.

[3] Edward Muller (1985), “Income Inequality, Regime Repressiveness, and Political Violence”, American Sociological Review, 50(1).

redistributed income; the social spending program is too small relative to demand and the distribution of its benefits is not well targeted. The monopoly power in certain industries also contributed to the widening gap between capital return and labor income. And special interest groups and corrupt officials benefited much more significantly from real estate development than others.

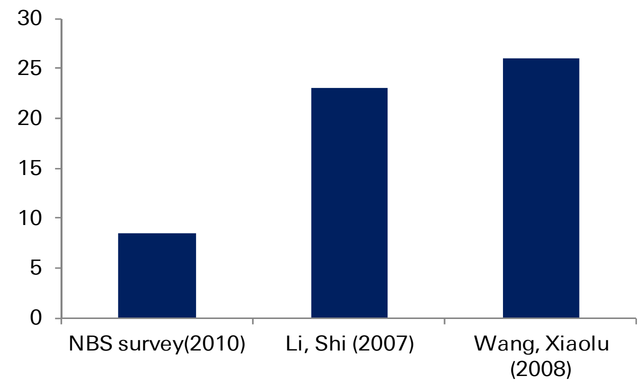
To address these issues, fundamental reforms will be needed. These reforms should include building a more redistributive tax system, increasing fiscal spending on social services especially for low-income population, eliminating the monopoly status of SOEs in many sectors, and reducing the role of the government in approving projects and in allocating resources such as land.

Figure 5: Ratio of per capita incomes between top 10% and bottom 10% urban households, NBS survey



Source: NBS

Figure 6: Ratio of per capita incomes between top 10% and bottom 10% of urban households: NBS vs. estimates



Source: NBS, Li Shi (2007, and Wang Xiaolu (2008)

Most likely economic reforms

We classify economic reforms into three categories according to our assessment of their probabilities in the coming 3-4 years (Figure 7):

Figure 7: Likelihood of economic reforms in the coming three to four 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 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 somewhat less likely (and therefore we label them as possible) 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 remains 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.

To be relevant to our readers, we focus on the most likely reforms in this chapter and on the quantitative analyses in the last two chapters. The next section will briefly summarize the objectives of these reforms and the remaining sections will offer some details on each of these reforms in terms of rationale, technical design, and likely timing.

Objectives of reforms

The main objective of these reforms is to ensure sustainability of economic development via improving the economic structure (or addressing the imbalances) and income distribution. On the structure of the economy, these reforms will likely increase the consumption as a percentage of GDP, raise the proportion of services in GDP, reduce the share of investment and net exports in GDP, and minimize the environmental impact of economic activities. On income distribution, some of these reforms will help raise the relative income level of low-income households and narrow the income gap between urban and rural areas. The longer-term macro implications of these reforms are that the economy will be less vulnerable to external demand shocks, less likely to suffer from over-investment, less dependent on natural resources, and more inclusive in the distribution of benefits of economic development.

In the following, we summarize the specific objectives of the reforms that we believe as most likely (Figure 8).

Figure 8: Reforms and objectives

Most likely reforms	Main objectives
Power tariff reform	Normalize ROE
Gas tariff reform	Pricing in line with alternatives
Water tariff reform	Normalize ROE
Refined oil pricing reform	Normalize margin of refining business
Interest rate liberalization	Improving allocation of financial resources
Exchange rate flexibility and capital account liberalization	Reduce external imbalance, permit global allocation of financial resources, promote RMB internationalization
VAT reform	Promote the service industry
Resource and environment tax reform	Reduce excessive use of natural resources and pollution discharges
Personal income tax reform	Improve income distribution
Increase social expenditure	Improve income distribution

Source: Deutsche Bank

- **Resource price reform:** via nationalizing the pricing systems, to raise the return on equities (ROE) of electricity, refined oil, water and gas upstream industries to reasonable levels, so as to guarantee the long-term stability of profitability in these industries. This will help improve the supply condition and at the same time reduce excessive consumption of nature resources. In addition, the introduction of a sliding scale pricing mechanism for electricity, water and gas will also help improve income distribution as low-income households that consume less can enjoy relatively lower charges.
- **Interest rate reform:** with the establishment of a deposit insurance system, will further expand the floating range for both deposit and lending rates, eventually eliminate the benchmark deposit and lending rates and switch the intermediate target of monetary policy from money supply to the benchmark policy rate (overnight rate or seven-day repo rate). This reform, via permitting market-based pricing of interest rates, will help improve the efficiency of financial resource allocation.
- **Exchange rate reform and capital account liberalization:** further reduce central bank intervention in the foreign exchange market, and thus allow the market to play a bigger role in the determination of the exchange rate; remove most administrative restrictions on FX conversions and cross-border capital flows. These reforms should help reduce the probability of fundamental external imbalances due to a distorted exchange rate, permit Chinese companies and individuals to deploy their financial resources globally, further develop China's financial market, and remove the major bottleneck to the internationalization of the RMB.
- **VAT reform:** expand the pilot VAT reform to all service sectors (except the financial industry) in all regions. This reform, by reducing the indirect tax on service firms by 15%, will speed up the growth of the service industry.

- **Personal income tax reform**: expand the tax base, reduce the number of tax brackets, and initiate a pilot program for global income tax system. The main objectives of this reform are to improve income distribution and raise more fiscal revenue.
- **Resource and environment tax reform**: Increase resource tax rates and introduce environmental protection taxes. This reform will discourage the excessive use of natural resources, pollution discharges, and increase government revenue.
- **Increasing social expenditure**: significantly increase the fiscal expenditure in education, health care, and social security as a percentage of GDP. The main objective is to improve income distribution via better provision of social services and social protection. The budgetary implication is shown in an illustrative example in Figure 9.

Figure 9: National fiscal revenue and expenditure, in RMB bn and as a percentage of GDP

	Base scenario		Reform scenario		Change
	Revenue	as % of GDP	Revenue	as % of GDP	
Fiscal revenue	10,374	22.0%	15,748	22.0%	0.0%
VAT and business tax	1,368	2.9%	1,727	2.4%	-0.5%
Import taxes	1,612	3.4%	2,113	3.0%	-0.5%
Resources & environment taxes	100	0.2%	384	0.5%	0.3%
Personal income tax	605	1.3%	1,341	1.9%	0.6%
Others	6,689	14.2%	10,183	14.2%	0.0%
Fiscal expenditure	10,893	23.1%	16,536	23.1%	0.0%
Education	1,612	3.4%	2,918	4.1%	0.7%
Healthcare	607	1.3%	1,061	1.5%	0.2%
Social safety net	1,114	2.4%	1,949	2.7%	0.4%
Environment protection	262	0.6%	474	0.7%	0.1%
Others	7,299	15.5%	10,134	14.2%	-1.3%

Note: the base case scenario is based on 2011 data. The reform scenario is DB estimates for 2015 assuming reforms are completed within next 3 years.
Source: Deutsche Bank

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

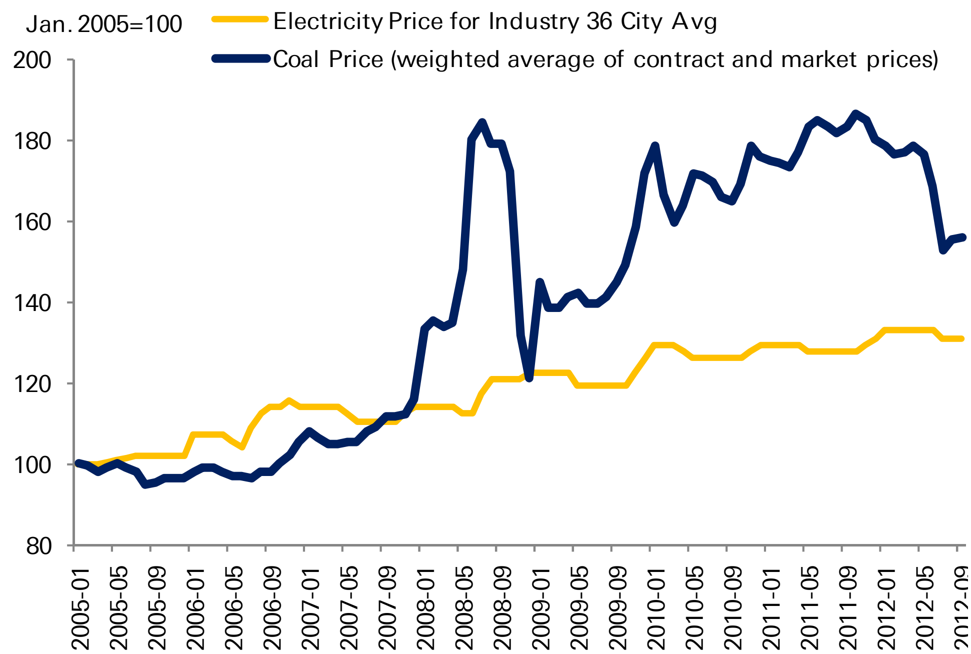
#1: Power tariff reform

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 suffer from a very low ROE and have little incentive and financial resources to invest; at times of serious losses due to price control, some IPPs tend to reduce production and thus exacerbate 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 the coal's recent price peak in late 2011, the weighted coal price increased 86%, while the average electricity price for industrial users in 36 major cities only increased 28% (Figure 10).

Figure 10: Coal price for industrial users and power tariff



Source: CEIC, Deutsche Bank

Given that the coal price is largely market driven and 60% of IPP companies' 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 Q109, 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.

We expect reforms in 2013

We believe that a better designed and well-implemented power pricing scheme and some moderate electricity tariff increases are likely in the coming few years. Recent government initiatives suggest the power tariff reform is likely to expedite in the near future. For example, on 16 June 2012, the State Electricity Commission published "Implementation Opinions on Improving Electricity Regulation and Supporting Private Investment in the Power Industry". The document stated the government's intention to actively promote the power tariff reform and form a tariff mechanism conducive to fair competition.

We also believe that 2013 will be a window of opportunity to conduct the power tariff reform as CPI inflation will likely be in a very 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 likely direction of power tariff reform is a 'managed' market-based pricing scheme. We expect this scheme to initially involve several provinces before eventually covering the country. In detail, a combination of three pricing methods can be adopted: part of electricity output is priced based on NDRC guidance; part of the electricity output is priced based on direct negotiation between the large and medium-sized users and power producers; the rest of the electricity output is priced based on real time spot price.

A 5% power tariff increase relative to baseline

On the final-user electricity price, we expect to see 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 implies a 5% electricity tariff increase assuming coal prices are unchanged.

#2: Gas tariff reform

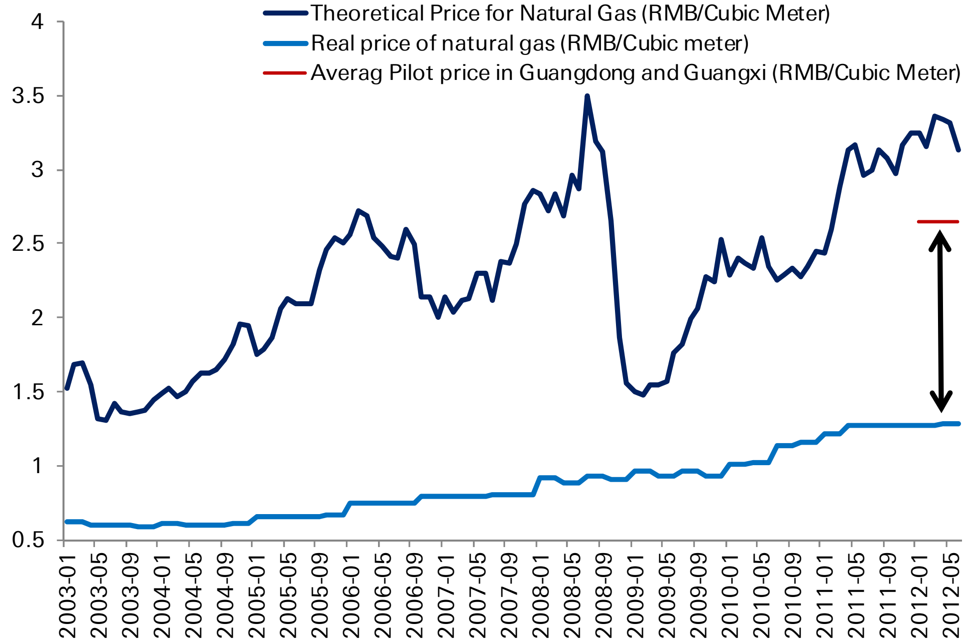
Current mechanism and its drawbacks

There are three types of natural gas prices in China: upstream price (wellhead price), gas transportation fee, and city service tariff. The first two are fixed by the NDRC while the last one 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. However the actual implementation is problematic and creates two major drawbacks: 1) it artificially suppresses gas prices and the profit margin of upstream producers; 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 is much lower than the equilibrium price as defined by the weighted average prices of alternative energies that are close substitutes, including fuel oil and liquefied petroleum gas. We weigh these two alternatives by 60%:40% and also take into account the price impact of the VAT. The blue line in Figure 10 is the calculated 'market' price using the formula. The significant gap between the implied 'market' price and the actual natural gas price means that current natural gas price is much lower than it should be and there is ample room for price hikes. The current average national natural gas price is RMB1.3/cubic meter while the prices in Guangdong and Guangxi (where the pilot reform program is implemented) are RMB2.75/cubic meters and RMB2.57/cubic meter, respectively. The average natural gas price in Guangdong and Guangxi is now about 107% 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 11).

Figure 11: Implied 'market' natural gas prices are much higher than the actual prices



Source: WIND, Deutsche Bank

Direction of reform

The gas tariff reform looks set to expedite in the near term, as suggested by the recent government initiatives. On October 16, Liu Tienan, Secretary of National Energy Administration, pointed out that "natural gas is a clean energy and must be consumed efficiently" and emphasized the need to accelerate the gas tariff reform. The new natural gas utilization policy unveiled on October 30, 2012 also highlighted 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.

A pilot program 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. Recently the NDRC indicated the need of further expansion of the pilot program to more provinces. We believe the goal of the reform is to establish a dynamic natural gas pricing mechanism and achieve: 1) a balanced market supply and demand; 2) awareness of resource scarcities; 3) a better reflection of the substitution between other alternative energies and natural gas. We believe that within the next three years, the average price of natural gas in China should increase accumulatively by about 30% as a result of the reform.

#3: Water tariff reform

Among the few areas of resource price reform, water tariff reform is likely to be implemented with the least 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. This year, water tariff reforms have 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 expended to other cities in the coming years, in our view.

The direction of water tariff reform

The water price reform is to find the proper pricing mechanism and right level of water tariff to accentuate the water as an important fundamental resource, ensure the availability of this increasingly scarce resource, reduce waste, alleviate the current loss-making situation of some water enterprises and promote operating efficiency and service quality of the water enterprises. Within three years, we see 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. At the same time, it is necessary to establish a system requiring the water supply companies to disclose their cost and monitor the water supply enterprises' cost. Under the new water tariff policy, low-income families will be subsidized to ensure their welfare does not worsen.

Water tariffs are too low

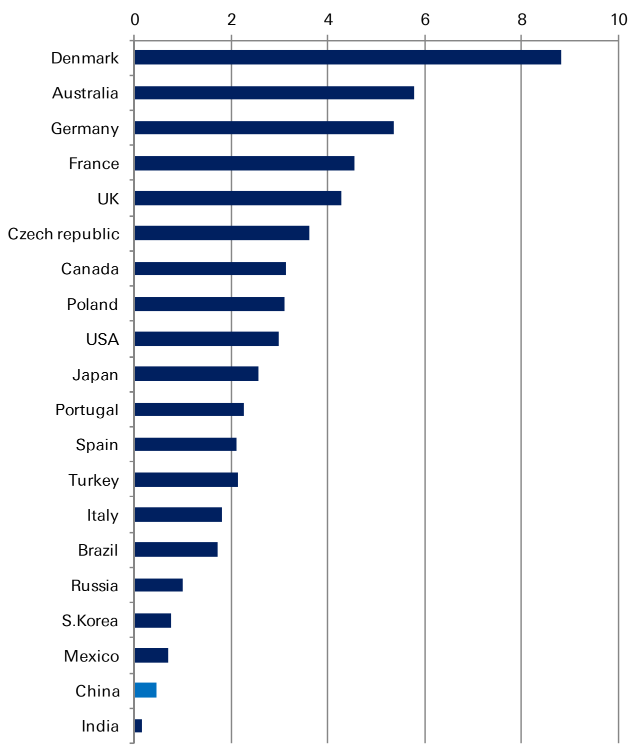
China's total freshwater resource may look ample in most places for now, but on a per capita basis, it is only 28% of the world average. Considering the limited water resources and the supply disparity across regions, water shortage in some regions (such as Northern China) could become severe. However, the current water pricing policy – a "cost-plus" policy method (成本加成) – 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 12), 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 13), water expenditure as a percentage of disposable household income is only 0.5% in China, much lower than Australia's 9%, 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%).

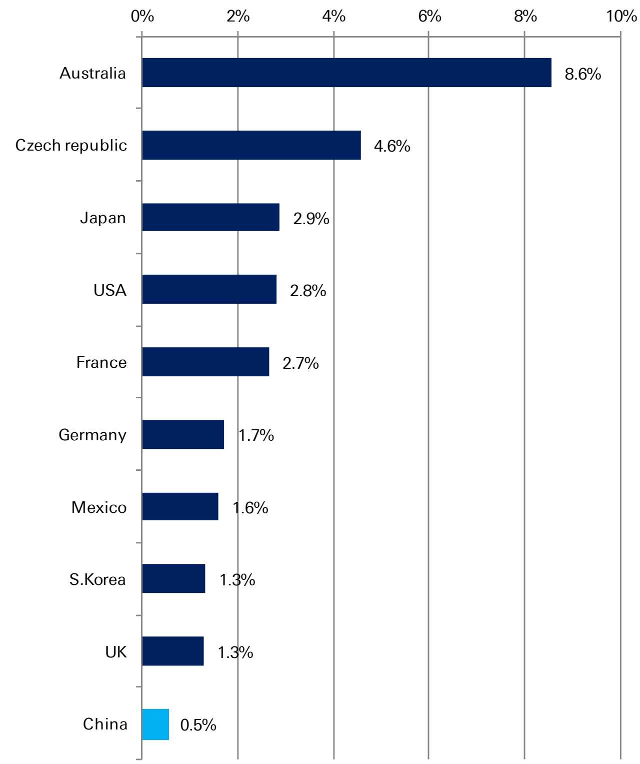
Under the current water tariff mechanism, many water producers in China are operating at a loss. By the end of August 2012, 38% of water producers experienced a loss. Moreover, the ROE of the water sector averaged 2.1% during the past three years, far below the desirable target of 8-10% (ROE) and the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

Figure 12: Average water tariff (USD/m3)



Source: Global Water Intelligence, Deutsche Bank

Figure 13: Water expenditure as a percentage of total disposable income



Source: Global Water Intelligence, CEIC, Deutsche Bank

#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 actions.

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

Refined oil prices are too low

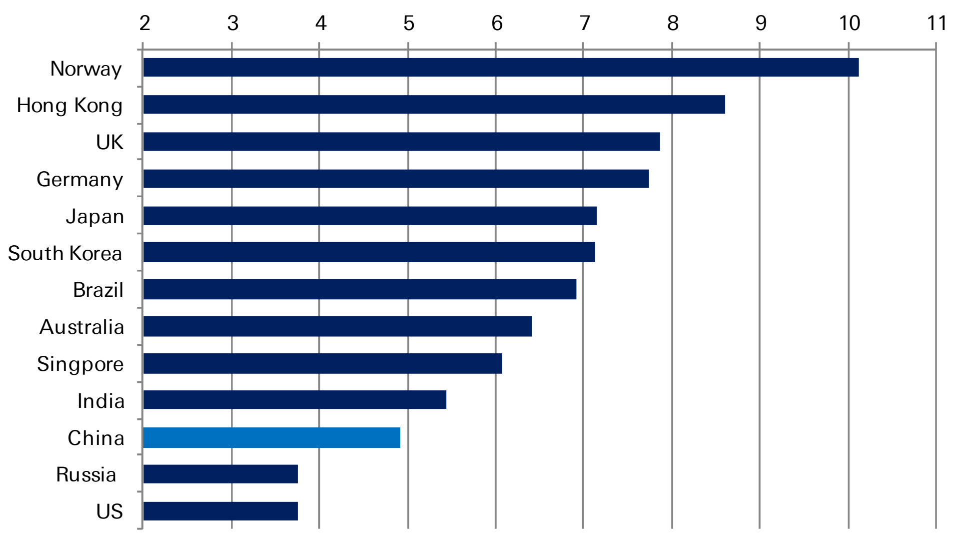
In past years, China's refined oil prices were set (by the NDRC) at levels that resulted in frequent loss-making of the refining oil sector. Although the government has announced a number of formulas to link crude oil prices to the domestic refined oil prices, the government itself never faithfully implemented 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, refined oil price adjustment lagging behind or insensitive to crude oil price changes resulted in extremely volatile and low profitability of 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 China's domestic refined oil price is far lower than international refined oil prices (Figure 14). As a result, the profit margin of China's oil refining sector has been low or even negative over past years. Taking the two largest refining oil providers for an example, the average operating margin in the past five years was negative 5% for Petro China's refining business, and that for Sinopec's refining business averaged negative 2% in the past seven years starting from 2006 (Figure 15).

Figure 14: Premium gasoline price USD/per gallon, July 2012



Source: Bloomberg Finance LP, Deutsche Bank

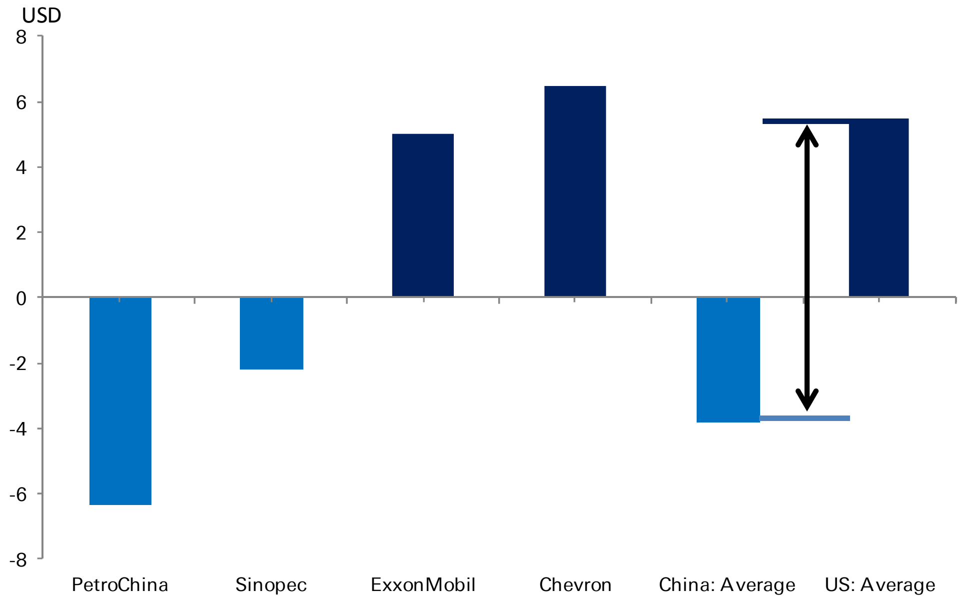
Figure 15: Struggling refining business for major producers

	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 this year 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 16). 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 16: Net income per barrel refined (Q1-3, 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, several 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); including WTI in the benchmark basket; remove the cap on each price adjustment. Alternatively, the government should also consider giving oil companies the autonomy to set prices with a wider price band, and the band itself is based on a formula consisting of international prices.

#5: Interest rate liberalization

Interest rate liberalization is the key for achieving market-based pricing of capital and for allocating financial resources efficiently. A flexible interest rate system can also reduce the probability of negative real interest rates that induced excessive investment in the past. A market-based yield curve is also an important basis for the development of the financial market. To fully achieve the desirable results of the interest rate liberalization reform, a deposit insurance system is likely to be established for the overall commercial banking system.

With the strong determination of the Chinese government expressed in the recently published 12th Five-Year Financial Sector Plan and the expansion of the floating range for both lending and deposit rates (in June 2012), we believe that within the next three years, interest rates liberalization can be largely completed. Specifically, we expect four steps in the coming few years. First, the deposit insurance scheme will be established, so as to avoid potential runs on smaller banks and credit unions once interest liberalization poses stronger competitive pressure on them.[4] Second, the floating ranges for both the deposit and lending rates will be widened further. Third, the ceiling on deposit rates and floors on lending rates will be removed. Fourth, abolishing the benchmark deposit and lending rates altogether, and switching the central bank's intermediate target for monetary policy from M2 growth to a policy rate (e.g., the overnight rate or the 7-day repo rate).

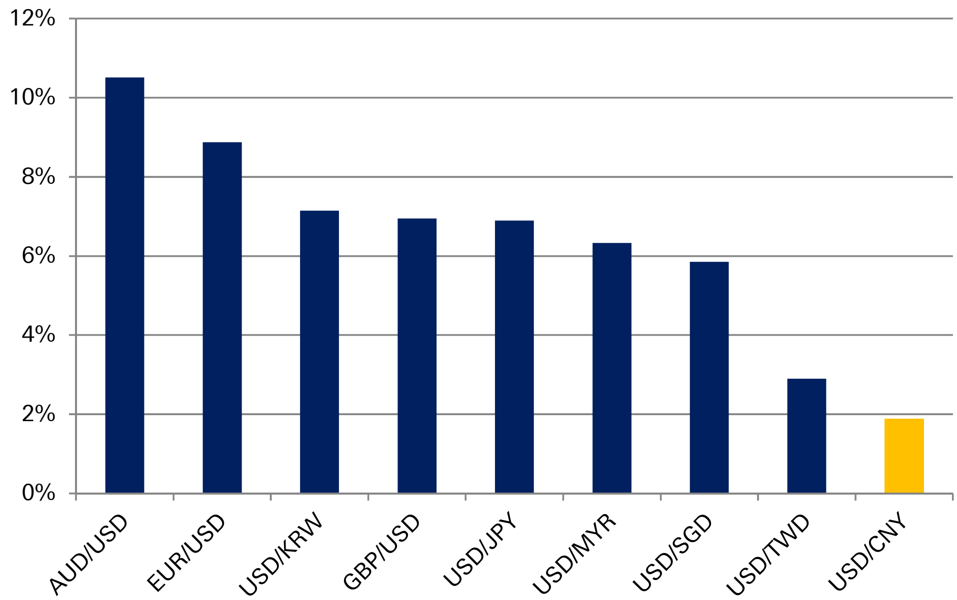
#6: Greater exchange rate flexibility and capital account liberalization

Greater exchange rate flexibility requires less central bank intervention in the foreign exchange market, and implies a more market-based pricing of the exchange rate. A market-determined exchange rate can provide a mechanism to avoid excessive external imbalance, which in the past resulted in China's excessive trade surplus and massive reserve accumulation. Exchange rate flexibility also implies a lower probability of trade sanctions by other countries on China's exports on the basis of "currency manipulation".

Since 2005, when China adopted "managed floating" exchange rate regions, the PBOC has slowly allowed an increase in the flexibility of the RMB/USD rate. In recent years, the annualized daily volatility of this bilateral rate has risen to about 2% (from zero before the 2005 reform), but remains very low relative to most other major currencies in the world (see Figure 17 below). With the recent signs (in the past few weeks) of a significant reduction in the PBOC's FX intervention, China will likely allow even greater two-way volatility going forward. For the RMB/USD rate, we expect its annualized daily volatility to increase 2-3 folds from the current 2%, and to be at a level comparable with that of the Ringgit, in five years' time. .

[4] Without a deposit insurance scheme, depositors prefer making deposits in large banks (rather than smaller banks or credit unions) to avoid the default risk if deposit rates are the same. To compete for the deposits, small banks and credit unions will have to lift deposit rates aggressively and pursue risking investments, which imply a higher failure risk for some of them. The perceived risk may result in runs at smaller financial institutions.

Figure 17: Annualized daily volatility of CNY against USD is low relative to other major exchange rates, during past 12 months



Source: Bloomberg Finance LP, Deutsche Bank

Capital account liberalization

Capital account liberalization is an important part of the reform that will also contribute to greater exchange rate flexibility. Of course, capital account liberalization is not designed merely to increase exchange rate volatility. The more important reasons for opening the capital account are to permit global allocation of financial resources by Chinese companies and individuals, to facilitate the internationalization of the RMB, to develop the financial market, and to help avoid excessive external imbalance.

During the next few years, we expect the following specific steps towards capital account liberalization: 1) the quota on FX conversion by domestic individuals to be raised significantly, and enterprises to be allowed to convert FX freely up to a certain annual limit. 2) The quotas of foreign institutional investors' investment in inter-bank RMB bond market and via the QFII scheme to be raised. We think the actual allocation of QFII quota could rise from a few billion USD in 2011 to USD15bn in 2012 to USD30-40bn a few years later. 3) Non-residents (companies and banks) will be permitted to raise RMB in the domestic market by issuing bonds (and also stocks and borrowing from other banks). It is likely that, on the Panda bond market the RMB proceeds raised by non-residents in the domestic market can be remitted to the offshore market and to convert into foreign currencies. 4) Non-residents will be allowed to invest in part of the domestic RMB market, including in wealth management products, mutual funds and bonds.

Many would argue that the opening of the capital account may result in excessive capital flows, currency volatility and therefore more shocks to the economy. We think these risks are manageable. First, with a gradual increase in the exchange rate volatility, most companies will opt to use FX hedging instruments to hedge against exchange rate risks. As hedging instruments are more widely used, a 6% annualized daily exchange rate volatility is perfectly tolerable by the experience of most developing countries. Second, to avoid excessive capital flows under an open capital account, new prudential regulations such as a Tobin tax could be put in place to discourage undesirable short-term flows.

#7: VAT reform

The pilot VAT reform program – converting the business tax to a VAT on selected service sectors such as road transport – which started at the beginning of this year and is now implemented in ten cities has achieved positive results. We think the experience gained from the pilot program will be quickly applied to other regions and other service industries. We expect that within the next three years, the VAT reform will be applied to all major service industries except the banking and insurance sector. In particular, we expect the telecom, railway, and construction sectors to benefit from this reform. For many of these sectors, the indirect tax could be reduced by 15% due to the VAT reform.

In China, the service sector was subject to a business tax, which is levied on the revenue of the business. 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. It would stimulate the service sector's development and increase its weight in the economy.

In January 1, 2012, Shanghai was chosen to be the first city in the pilot program. As of now, eleven provinces and municipalities are included in this VAT reform pilot program. These include Beijing, Tianjin, Jiangsu, Zhejiang, Anhui, Fujian, Hubei, Guangdong and Ningbo, Xiamen, Shenzhen. The impact of this reform is positive. Taking Shanghai as an example, during the first eight months of this year, this reform helped reduce tax burden by over RMB17bn for companies. About 90% of the companies in Shanghai that participated in the reform have already 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%.

Currently, the sectors included in this VAT pilot reform are transportation and a few modern service sectors. In a recent speech on October 18, 2012, Li Keqiang, who is widely expected to be China's next premier, expressed the intention of further expanding the VAT reform by including more regions and more sectors into the pilot program. Mr. Li specifically mentioned the telecommunications, railway transportation, construction and installation sectors. The potential positive impact of this reform on the economy wpuld be significant since the whole service industry except financials would eventually benefit from this tax reform.

#8: Personal income tax reform

As we pointed out in the first section, income disparity has widened sharply in the past 30 years and become a major source of public discontent and social instability. The government is under significant pressure to come up with a plan for improving "income distribution". We expect such a plan to be announced by the end of this year, as reported by the Ministry of Human Resources and Social Security. A personal income tax reform will likely play a major role in reducing income disparity.

Flaws of the current personal income tax system

We see at least three major drawbacks of the current personal income tax system. First, the tax base is very narrow. The current personal income tax is de facto a salary tax since many other kinds of income (including most capital gains, property rental income, and other sources of labor remuneration) are taxed only on a schedule basis but collection is very poor. That is, taxes on these non-wage incomes are collected separately from wage income tax but in practice most of these incomes are not reported to the tax authority. Such a narrow tax base is rare in other countries. According to the Ministry of Finance, after the tax reform in 2011, only 24 million people are paying the personal income tax, which accounts for 4% of the total employment. The individual income tax only contributed 7% of total tax revenue in 2011, much lower compared to other countries, e.g. the US (>40%), Germany (30%), and Korea (40%).

Secondly, since the personal income tax covers only 4% of the employed population, most of the high income individuals are not taxed. Therefore, this tax does not play a major role in adjusting income distribution. Due to pressures from so-called "public opinions", the tax exemption threshold has been raised several times over the past decade, leading to an increasingly narrower tax base. While the perceived benefit of a higher exemption threshold is that it would help poor people, the truth is that it further reduced the proportion of high-income individuals who pay taxes. Therefore, it has worsened the income distribution.

Thirdly, China's current tax system is mainly based on production and turnover taxes (the VAT, business tax and corporate income tax), and this feature has contributed to the distortion of the economic structure. Although it was appropriate at the time, the system was designed considering the development stage of the economy; this tax structure resulted in the excessive desire of local governments' in investment and industrial production (as industries are the major source of tax revenue), as opposed to providing services to local residents (due to very low contribution from personal income taxes).

Options for personal income tax reform

While it may take a while to form a consensus on the best options for reforming the personal income tax system, we believe the key principles guiding the reform will be to reduce income disparity, expand the tax base for the personal income tax, and increase the proportion of personal income tax revenue in overall fiscal revenue. We believe the good options are as follows:

First, stabilize the exemption threshold, i.e., avoid raising the exemption threshold in the coming few years. If the current exemption threshold of RMB 3500/month is unchanged in the coming several years, with the increase of personal income, we estimate that by 2015, the proportion of personal tax revenue in the total fiscal revenue will increase to 10% from 6% of 2011, and would thus boost personal income tax revenue as a percentage of GDP from 1.3% (2011) to 1.9% (2015). We estimate that by 2015 about 30% of the employed population will be covered by the personal income tax. Therefore, a much higher percentage of high income population will be subject to the tax, and income distribution will be improved.

Secondly, reduce the number of the progressive rates and lower the top rate. The excessive top-level tax rate leads to significant tax avoidance and tax evasion among high-income earners. In the end, the government does not actually collect any meaningful tax income from the top bracket of 45%, but such a high top rate tends to scare away many entrepreneurs. According to the Private Banking White Paper 2011 published by Hurun Research Institute together with the Bank of China, 70% of China's wealthier individuals have already obtained a foreign passport or are intending to do so, partly due to the excessively high top bracket tax rate.

Thirdly, initiate a pilot reform program to convert the current scheduler income tax system to a global income tax system. A scheduler income tax is one in which separate taxes are imposed on different categories of income. A global income tax is one in which a single tax is imposed on all incomes, whatever their nature. The incomes of the global tax system should include salaries, micro firms' business profits, other labor remunerations, rental income, interest and dividend income, and capital gains, etc. This reform should be taken as an opportunity to require government officials to declare their wealth and incomes, which will serve as an important policy tool to fight corruption. Another important objective for the global personal income tax reform is to broaden the tax base and permit a reduction in the top tax rate. In addition, since newly included taxable items in the global tax system are typically earned by the high-income group, this reform can help improve income distribution.

#9: Resource and environmental tax reform

The direction of this reform is to further raise the resources tax rates, and to convert the levies on waste discharges into an environmental tax and raise the tax rate. These reforms will help curb the excessive consumption of resources and contain environment degradation.

The reform of the resource tax system has achieved some results. In order to better play the role of resources tax in discouraging excessive production, promoting rational exploitation and efficient utilization of resources, and enhancing local finance, in June 2010, the central government started a resources tax reform pilot program on a few products such as crude oil and natural gas. The program initially only included Xinjiang, but was later extended to 12 Western provinces in December 2010 and eventually to the whole nation in November 2011. In the coming few years, we expect the government to raise the rates of these taxes to cover more mining products such as iron ore and rare earth.

The introduction of an environment tax reform is explicitly mentioned in the 12th Five-Year Plan. The detailed plan to impose an environmental tax on heavy polluters nation-wide is being finalized in Beijing, according to experts familiar with the program. The environmental tax, which will levy fees according to discharges of sulphur dioxide, sewage and other contaminants, is intended as a disincentive for polluting industries, and will replace the current low and ineffective waste disposal charge.

#10: 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. This reform will help improve the degree of equalization of public services and thus income distribution. The following is the specific rationale behind these expenditure reforms.

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 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 on 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 of health spending will be financed by the government.

Third, the proportion of fiscal spending on general administration and public investment in GDP will likely decline. On the one hand, the decline in the share of these spending items as a percentage of GDP is necessary to ensure fiscal balance. On the other hand, this decline will be a reflection of reduced government intervention in the economy.

Possible political reforms

Incremental political reforms are feasible

We believe that while radical changes to the current political system (such as universal suffrage of top leaders) will not be accepted by the new leaders, many incremental steps will likely be taken to reform the political system and governance of the administration. These incremental reforms are necessary to maintain political stability via limiting abuse of power by individual leaders, reining in official corruption, and permitting more active political participation of the civil societies. The recent Bo Xilai scandal, the rapidly rising public discontent of corruption, and the stronger aspiration from elite groups to participate in public policies reinforce the need for such reforms.

The specific reforms we think are possible and impactful in the coming few years include:

- **Intra-party democracy** via, for example, contested elections of senior party officials (below the national level);
- **Public disclosure of official wealth and income**, as a powerful tool to fight against corruption;
- **Mega-department reform**, by downsizing the government and forcing a reduction of its intervention in the economy; and
- **Relaxing controls on NGOs** and welcoming their participation in public policy making.

Compared with many pessimists who believe nothing will happen in China on political reform, our relatively more constructive view comes largely from the low-profile, but in fact significant, pilot programs of political reforms in the past years. For instance, in the Jiangsu province, an "open recommendation and balloting (公推直选)" mechanism was adopted to promote intra-party democracy. In Guangdong, Party Secretary Wang Yang has initiated reforms to build "a small government, and a bigger society" and introduced contested election (差额选举) for the party's standing committee members at the provincial level. Experiments of political and administrative reform have been observed at local levels in more than a dozen other provinces such as Zhejiang and Hunan (see Figure 18). Judging from the momentum of these reforms, we believe that they are likely to be extended to other places.

In the following sections, we will review the experience of these pilot reform programs and assess the likelihood of their replication in the rest of China.

Figure 18: Map of political and administrative reforms in China

Source: Deutsche Bank

Intra-party democracy

Over the past couple of years, the Chinese Communist Party (CCP) has been testing ways to promote intra-party democracy with "Chinese characteristics". The rationale behind this effort is: 1) being the largest ruling party in the world, CPC, with a current membership of 83 million and 4 million grassroots level organizations, has to institutionalize its rules for governance to prevent disasters such as the cultural revolution; 2) coping with the rising social tensions requires broader political participation, and intra-party democracy should be the first and safest step in that direction.

Although often overlooked by western observers, the recent experiments with intra-party democracy have achieved, in our opinion, a number of accomplishments in terms of rules for selecting party leaders and decision-making processes. In particular, "contested election" and "open nomination and direct election" are two key elements of intra-party democracy.

Contested elections are processes that elect party leaders (including members of the Party Congress and standing committee members at the local level) with a larger number of candidates than the number of positions. Non-contested elections (等额选举), which are still most widely used within the Party, are simple rubber stamp formalities designed for all candidates (nominated by current leaders) to be confirmed. Therefore, contested elections do introduce a key element of democracy and reduce the influence of current leaders in the selection of new leaders.

In May 2012, the 11th Guangdong Provincial Party Congress conducted a contested election, electing 13 standing committee members from 14 candidates. Similar experiments have taken place in Heilongjiang, Jiangxi and Fujian, especially during the most recent round of power transition prior to the 18th Party Congress.

"Open nomination and direct election (公推直选)" is an experiment for electing grass-roots level party cadres (villages and townships in rural areas, and sub-district offices in cities). "Open nomination" gives an opportunity to ordinary party members (not just the leaders) to jointly or individually nominate candidates and "direct election" refers to a ballot process by which every party member has a vote in selecting the cadres. It was first experimented in Sichuan province in 2001, and has been intensively promoted by Li Yuanchao in Jiangsu from 2002 to 2007.

These reforms are hailed by the public and scholars, and will likely be extended to more regions and even to the central level, in our view.

Disclosure of officials' wealth and income

Xi Jinping, China's new Party Secretary, noted last week that the Party is facing "many pressing problems, particularly corruption." The new leaders are fully aware that whether they can succeed in fighting corruption is a "life or death" issue for the Party. As the country has entered an era of "online anti-corruption", the unprecedented urge from the citizens (or more often "netizens") for a clean and transparent government has left no choice for the decision makers but to embark on a self-revolution. One specific action at the forefront of this reform is to publicly disclose (not just report to the Party) the income and wealth of government officials.

While many people believe that it is impossible for any government agency in China to impose such a requirement on itself, we are convinced such reforms are indeed feasible as long as they are skillfully designed to permit corrupt officials to gradually exit from the official sector while encouraging all new entrants to be clean – just like an amnesty program. We are encouraged to note that such experiments have taken place already in the past few years with some success.

For example, in 2009, the income and wealth of 1056 officials in Altay prefecture of Xinjiang were publicly disclosed. Information of the salaries, benefits, and gifts received by all county and division level officials were made available online, while their personal investments and other assets were declared internally for auditing purposes. Such a disclosure was required once a year. For newly appointed and retiring officials who take or leave the office, an immediate declaration is required.

Similar programs have been carried out in several other cities/counties since then. These include Lujiang County and Qingshui County in Anhui, Liuyang City in Hunan, Cixi City and Panan County in Zhejiang, Yinchuan City in Ningxia, Jiangbei District in Chongqing, and Gao County in Sichuan. Some of these programs require more comprehensive reporting by including wealth and investments of family members.

However, some of these reforms do face obstacles in implementation, either due to the pressure from local interest groups or due to the retirement or departure of reformers. The lack of institutionalization of these measures posed a challenge to their continuity. In 2012, the reform in Shunde District, Foshan City of Guangdong province, has broken new ground in institutionalization. In a well-praised reform package named "Comprehensive Reform Outline for Shunde District to Build Small Government and Big Society (2012-2015)", the district sets an ambitious target that "starting from January 1, 2013, all newly appointed officials (deputy section chiefs and above) should publicly disclose their personal and family wealth". This "outline" is now in a stage of soliciting opinions, and will be reviewed and likely be approved by the local People's Congress. Once approved by the legislature, the reform will obtain its full legitimacy and will not be easily disrupted.

These efforts, well recognized by high level officials, have pointed to the next step on the roadmap: legislation of the disclosure requirement for officials. We are optimistic at the provincial level that a few provinces such as Guangdong and Shanghai will likely go ahead. Huang Xianyao, Secretary of Guangdong Provincial Discipline Inspection Commission, emphasized on September 16 that the province would formulate anti-corruption laws and regulations and institutionalize the disclosure of officials' income and family wealth. Yu Zhengsheng, Party Secretary of Shanghai, has also declared during the 18th Party Congress that Shanghai is preparing for disclosing officials' income and that he himself is willing to take the lead.

Mega-department reform

Another reform that is worth attention in Shunde's pilot program is the "mega-department reform". In order to streamline the administrative structure to form small and efficient governments, Shunde merged 41 related and overlapping departments of the government to only 16 and around 400 officials were made redundant. The whole process, from the approval by Wang Yang, the provincial party chief, to the operation of the mega department system took only three days. Other cities in the province, including Shenzhen and Guangzhou have gone through a similar but less aggressive reform. Similar reforms were also experimented with in Shanghai, Suizhou of Hubei province, and Chengdu of Sichuan province in the past years.

Going forward, we believe these efforts are likely to be replicated by more regions, and will also become a source of pressure for the central government to reform. We believe the window of opportunity for the central government to initiate a mega-ministry reform is 2013-14, after the new State Council is put in place and expected to deliver. The reform will likely gain further momentum as market forces continue to call for reduced government intervention and the civil society voices stronger discontent with official corruption.

Independence of NGOs

A small and efficient government will clearly yield the stage to a bigger and stronger civil society, which will serve as a supplement to the social vacuum left by government operation and market competition. Such a transformation towards less bureaucracy and more civil participation depends on: 1) independence of Non-Governmental Organizations (NGOs) and 2) participation of citizens in public affairs.

In most parts of China, NGOs that want to legally operate are required to have a government agency as a supervisory entity. Those which do not have government supervisors are regarded as illegal (unregistered) and therefore can be shut down anytime by the government. As most government agencies are risk averse, it is difficult for many NGOs to find a supervisor. Without a proper identity as a civil group, NGOs are unable to openly recruit members, deliver services, raise funds and apply for a tax-exempt status. This system has suppressed the development of NGOs in past decades.

Reforms have been taking place in recent years. In Guangdong, several remarkable shifts in its policy concerning civil groups have been announced and implemented.

- On January 1, 2012, Guangzhou permitted registration of NGOs of all categories (except political groups and human rights organizations) without the requirement of a government supervisor, and strictly limited the registration process within 20 working days. Note that in the past this process usually took one year.
- From July 1, 2012, this reform (Guangzhou model) was extended to the entire Guangdong province. Not only NGOs are allowed to operate without a supervisory agency, but the local governments have also set up special funds (RMB5m in Guangzhou, RMB38m in Shenzhen, and RMB10m in Dongguan) to support the growth of NGOs by purchasing their services.

The simplified registration process and other supportive policies have fostered substantial growth of NGOs in Guangdong. From January to June this year, 227 NGOs have newly registered in Guangzhou, a 36% of year-on-year increase; none of them has a “supervisory entity”, and they enjoy tax breaks. The number of NGOs in the entire province also grew at a double-digit rate. These groups are active in the areas of protecting workers’ rights, health care, education, charity, and legal counseling.

The government also benefits from this “hands-off approach”, as NGOs provide government with better representation of public interests and possible solutions to social tensions. Sometimes, civil groups can directly resolve issues with their unique resources and expertise. Encouraged by the initial success, Guangdong aims ambitiously at having five NGOs for every 10,000 people, by the end of 12th Five-Year-Plan period. It should be noted that the boom of the civil society is not just a regional phenomenon.19 provinces have kicked off similar plans or pilot reform programs according to Li Liguo, the Minister of Civil Affairs, and the ministry will seek to further promote Guangdong’s experience to other regions. According to him, to promote nationwide implementation, a key task is to modify three regulations in the name of the State Council.

At the national level, the Ministry of Civil Affairs has also quietly launched a similar reform. Since July 2011, more than 40 national NGOs without supervisory entities have successfully registered with the Ministry of Civil Affairs.

To summarize, we believe that China’s transition towards democracy will likely be an incremental process rather than an abrupt event; it is an ongoing process that should accelerate rather than an undecided option. We view each of the aforementioned reforms is a meaningful step toward the ultimate goal.

Quantifying the impact of economic reforms

In this section we quantify the impact of the most likely economic reforms on China's macro-economy and economic structure in the coming years. The reforms that we simulate include interest rate and exchange rates liberalization, resource price reforms, fiscal spending reform and tax reforms. The primary analytical tool we used is Deutsche Bank's 135-sector China DBCGE model (Computable General Equilibrium Model), which we used to quantify 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 DBCGE model.

Key assumptions of the quantitative analysis

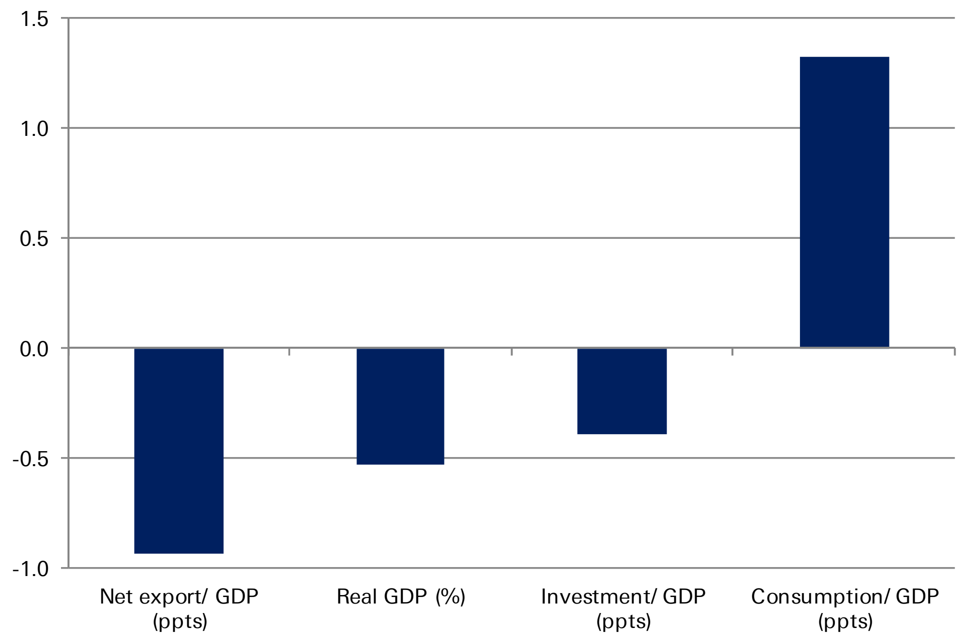
We assume these reforms will be largely completed within the next three years (2012-15). The specific assumptions on individual reforms used to simulate the potential impact are:

- Interest rate liberalization reform compresses banks' net interest margin by 60 basis points cumulatively;
- Exchange rate liberalization permits an appreciation of the RMB (in terms of nominal effective exchange rate) by 3% accumulatively;
- For resource price reforms, assumptions of accumulative price changes relative to the baseline (no reform scenario) by the end of 2015 are: 5% increase in power tariffs; a 30% increase in water tariffs; a 30% increase in gas tariffs, and a 10% increase in the refined oil prices;
- Fiscal expenditure as a percentage of GDP on education, health care and social security will rise by 1.2ppts;
- The VAT reform is to be expanded nationwide and all service sectors (except for financials) and it will reduce indirect tax as a percentage of GDP by 0.5ppts;
- As a result of the personal income tax reform, personal income tax revenue as a percentage of GDP will rise by 0.6%;
- Reforms on resource and environment taxes will raise resource and environment tax revenue as a percentage of GDP by 0.5ppts;
- A number of other reforms, including reduction in import taxes and partial transfer of SOE shares to the pension system.

Main findings: better structure, slightly slower growth

Our model simulations show that these reforms will help improve the economic structure, namely, lifting the share of consumption in GDP and reduce those of investment and net exports as a percentage of GDP, and will have a slightly negative impact on overall GDP growth rate.

Figure 19: Cumulative impact of reforms on 2015 economic variables: ppt (pct) change from baseline



Source: Deutsche Bank CGE model

- Impact on economic structure

  According to our model estimates (Figure 19), the reforms will lift the consumption to GDP ratio by 1.3ppts in 2015 compared with the baseline. These reforms will also reduce the investment to GDP ratio by 0.4ppts and reduce the net exports to GDP ratio by 0.9ppts.

- 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 0.53% lower under the reform scenario, which translates roughly into a 0.17ppt reduction in GDP growth rate per annum in the coming three years.

  The reasons for the slightly negative impact on GDP growth are that higher resource prices and environment tax, RMB appreciation, and individual income tax reform tend to be negative to production, although they play major roles in improving the economic structure and income distribution. The growth-enhancing reforms such as higher fiscal social spending and VAT reform can only offset part of these negative impacts.

- Impact on sustainability

  Although their impact on GDP growth in the short and medium term may be slightly negative, these reforms should significantly reduce the long-term economic risks and thereby increase the stability and the sustainability of the economic growth. For example, resource price reforms will help reduce excessive consumption of resources and environment degradation; the personal income tax will improve income distribution and social harmony. These benefits are difficult to quantify by a model but they cannot be ignored.

In the rest of the chapter, we explain the detailed impact of individual reform with a focus on liberalizations on interest rates and exchange rates, resource price reforms, VAT reform and fiscal reforms. We discuss the details of these reforms and their potential impacts on the real economy and financial enterprises, as well as macro-economic balances. Given this analytical framework, we use various models to quantify their effects.

Impact of interest rate liberalization

The two main impacts of interest rate liberalization are: 1) a reduction in banks' net interest margin, and 2) a reallocation of income from banks to consumers, which enhances consumption. We conclude the cumulative impact of interest rate liberalization will likely be a 60bps NIM contraction for the banking system and 0.4% boost to consumption.

Banks' NIM shrank by 30bps from the original 280bps (before June 2012) resulting from the interest rate policy changes on 7 June and 5 July this year, according to banking analysts. The compression of NIM was mainly due to the expanded floating range (from 100% to 110%) of the benchmark deposit rates. Other contributing factors include the expansion of lending rates' downward floating ranges (from 80% to 70% of the benchmark policy rates), and a reduction in the official spread between the benchmark lending and deposit rates.

The 30bps contraction in NIM implies that banks transfer RMB75bn worth of profits per year (= 30bps/280bps * RMB700bn in profit from net interest margin per year) to the depositors, of which about half go to corporate depositors and the rest go to households depositors. Compared with the base case of no reform, the interest rate policy changes in the past months would increase household income by about 0.2%.

Further interest rate liberalization, as described in the previous chapter, will continue to depress banks' NIM and transfer income to households. Nonetheless, should the macro environment be stable, the potential impact of further interest rate liberalization is unlikely to exceed that from the policy changes in June and July this year.

As the reform deepens, the interest rate liberalization (including the two in June and July) likely reduce NIM by 60bps in total. The impact is evaluated relative to the base case with no reform. This reform will increase household income by 0.4%, increase corporate profit by 0.6%, but reduce both banks' profit and fiscal income. Based on a number of theoretical and quantitative analyses, we believe that further contraction of the NIM can be limited to another 30bps. That is, the cumulative impact of interest rate liberalization on household income will be an increase by 0.4%. Therefore, consumption will rise 0.4% and consumption/GDP ratio will rise by about 0.4ppts relative to the baseline.

Impact of exchange rate liberalization

The main purpose of exchange rate liberalization is to permit the exchange rate to be closer to its equilibrium level based on demand and supply. For simplicity, we use a "balanced current account" as a proxy to its external balance. The level of exchange rate corresponding with this "zero current account surplus" is the level of equilibrium exchange rate while the domestic economy is at its full potential.

China's net exports-to-GDP ratio is about 2%, and we predict that it will shrink to zero in about four year's time (2016). A quantitative analysis done by Jun Ma (2010) suggests this could be achieved by a modest nominal appreciation of the RMB against the USD and structural factors such as demographic changes and reforms (e.g., pension reform, resource pricing reform, and health care reform). Based on this result and that the recent reduction in trade balance has been faster than expected, we assume a 1% annual average RMB appreciation against the USD (or an annualized 0.8% appreciation of the RMB against a basket of currencies) during the next three years.

The simulated effects of a 1% annual appreciation against the USD are the following: it slows cumulative GDP growth for the next three years by 0.24ppts, reduces the share of trade balance to GDP by 0.2ppts, raises the consumption-to-GDP ratio by 0.2ppts, and has little impact on the investment-to-GDP ratio.

Impact of resource pricing reform

This section presents our model estimates of the economic impact of power tariff, water tariff, natural gas price and refined oil pricing reforms. The assumed price changes (as compared with the baseline scenario with no reform) as a result of the reforms are as follows:

1. A 5% power tariff price increase relative to the baseline. This is needed to improve the ROE of the power industry to 10%.

2. A 30% increase in water tariff compared to the baseline. This should help ensure the water industry to achieve a reasonable profit margin and ROE of about 10% by 2015.

3. A 30% gas price increase compared to the baseline. This is also necessary to ensure upstream gas producers to achieve ROE of about 10%.

4. A 10% increase in the refined oil price. As a result, the net income per barrel refined can rise to 5 US dollar.

The main results of the simulation are as follows: the overall impact of reforms on the economy is a reduction in annual GDP growth by about 0.15ppts; and its impact on consumption and investment to GDP ratios are minimal. The potential positive benefits, which include a reduction in the economy's dependency on resources and an improvement in the environment is not captured by the current version of the CGE model.

Aggregate impact of factor price reforms

By factor price reforms, we refer to the combination of resource price reforms, interest rate liberalization and exchange rate liberalization. The aggregate impact of these reforms, assuming they are implemented simultaneously, is summarized in Figure 20. Overall, factor price reforms reduce real domestic production (relative to baseline) by 0.1%, 0.4% and 0.8% for 2013, 2014 and 2015 respectively. On the other hand, factor price reforms help the Chinese economy to move towards a more balanced economic structure, as consumption/GDP ratio would rise by 0.6ppts, and the investment/GDP ratio would fall 0.4ppts relative to the baseline.

Figure 20: Impact of factor price reforms: cumulative changes (%, ppt) from baseline

	2013	2014	2015
Real GDP (%)	-0.14	-0.43	-0.81
Consumption/ GDP (ppts)	0.20	0.39	0.57
Investment/ GDP (ppts)	-0.15	-0.28	-0.39
Net export/ GDP (ppts)	-0.05	-0.12	-0.18

Source: Deutsche Bank

Impact of fiscal expenditure and tax reforms

In coordination with the above market liberalizations, fiscal and tax reforms should also achieve substantive progress in the next few years. Such reforms should aim at making the government a genuine service provider in the aspects of public goods and the areas that private sectors are unwilling to operate (such as social security, justice and others with profit externality), and diminish the government's involvement in fields where market can surely play a good role. This section discusses the quantified impact of fiscal expenditures on the economy.

Assumptions

The DBCGE model employs the following detailed fiscal policy assumptions in the simulation: in the coming three years:

- Increase fiscal expenditure on education as a percentage of GDP by 0.7ppts, which helps boost the total factor productivity by 0.2% per year on an annual average basis;
- Increase fiscal expenditure on health care and social security as a percentage of GDP by 0.5ppts;
- Increase fiscal expenditure on energy saving and environmental protection as percentage of GDP by 0.1ppts;
- Reduce fiscal expenditure on other items as a percentage of GDP by 1.3ppts, to ensure the total fiscal expenditure as a share of GDP remains unchanged;
- Transfer the dividends from 25% of listed SOE shares to the social security system, to improve the financial sustainability of the pension system;
- Reduce indirect tax by 0.4% of GDP via the VAT reform, which will cover most service sectors other than financial industry;
- Increase fiscal revenue from the personal income tax reform by 0.6% of GDP; and
- Increase tax revenue by 0.3% of GDP from the new resource and environmental tax systems.

The aggregate impact of fiscal spending and tax reforms

Assuming simultaneous implementation of aforementioned fiscal and tax reforms, our model simulation yields the following results (Figure 21). Compared with the baseline, these reforms boost 2015 GDP by 0.3%, lower the trade surplus/GDP ratio by 0.8ppts, increase the consumption/GDP ratio by 0.75ppts, and keep the investment-to-GDP ratio virtually unchanged.

Within the fiscal spending and the various tax reforms, fiscal spending on education, healthcare and social security contributes significantly to the overall benefits. Fiscal reform on education and others increases 2015's real GDP by 0.75% and the consumption to GDP ratio by 1%.

Figure 21: Impact of tax and fiscal expenditure reforms: cumulative changes from baseline

	2013	2014	2015
Real GDP (%)	0.15	0.25	0.28
Consumption/ GDP (ppts)	0.25	0.50	0.75
Investment/ GDP (ppts)	-0.05	-0.06	0.01
Net export/ GDP (ppts)	-0.20	-0.44	-0.76

Source: Deutsche Bank

Impact on income distribution

Many of the reforms considered in this study would affect income distribution. In this section, we discuss several fiscal reforms whose impacts on income distribution can be quantified relatively easily. These include the increase in social expenditure and the personal income tax reform. We also consider an increase in the urbanization ratio which could narrow the rural-urban income gap.

Based on the urban-rural income survey data published by the National Bureau of Statistics in 2011, we estimate the income distribution effects of the above reforms. We use the Gini coefficient as a proxy for measuring the income inequality. In the baseline case (no reform), the national Gini coefficient is 0.450; the Gini in the urban area is 0.356 and that in the rural area is 0.430. We found that the social spending reform (as defined above) could reduce the Gini coefficient by 0.0072; the personal income tax reform could reduce the Gini coefficient by 0.0025; and a faster pace of urbanization (i.e., increasing the urbanization ratio by 3ppts) could reduce the Gini coefficient by 0.0028.

Investment implications

In this section we discuss the implications of likely economic reforms in the coming years for key sectors and listed companies. Most of the estimates presented in this chapter are still from our CGE model, but this time at the 135 sector level, so they will provide much more specific implications for investors.

We conclude that **gas, power, water, and refined oil will significantly benefit from the resource pricing reform**; banks will continue to face challenges due to further interest rate liberalization; **telco, transport, construction, health care and education** will likely enjoy the benefits from the next round of VAT reform and the increase in social spending.

At the end of this chapter, we provide an updated top Buy list, reflecting these views.

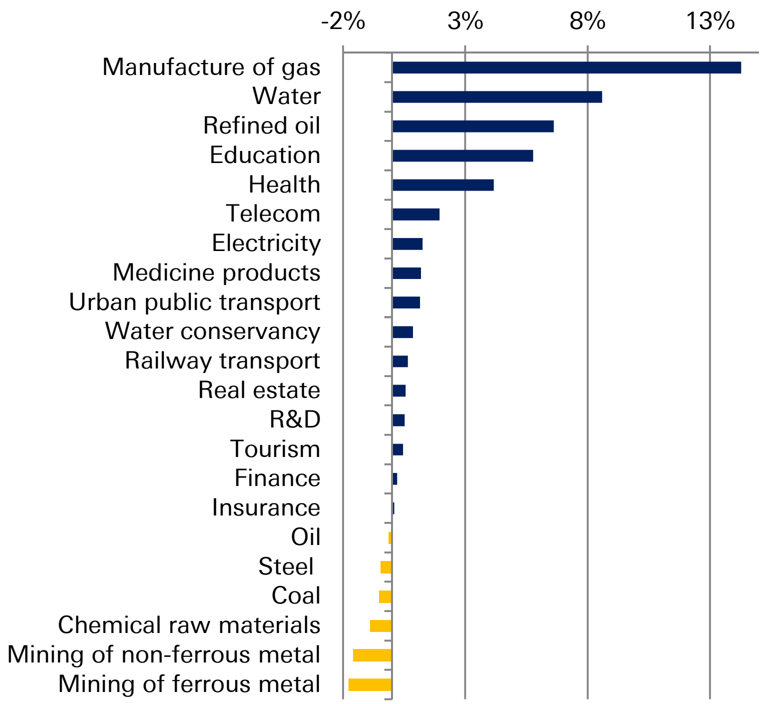
Model simulation of sectoral impact

Our dynamic CGE model (DBCGE) is able to simulate the impact of reforms not only on macro indicators, but also on implications for 135 specific industries. In this section, we present the results of the simulated impact of the ten most likely reforms (see Chapter on "Most likely economic reforms") on 135 industries. The main reforms are resource price liberation, interest rate liberalization, VAT reform, an increase in social spending, as well as resource and environmental taxation.

The 10 reforms improve the profitability of the aggregate of 135 industries, indicated by the 0.4ppt increase of the average operating margin (Figure 22). Among industries, however, there exists a large differentiation on the individual sector's operating margin:

- The top beneficiaries are natural gas manufacturing and distribution with a 14.3ppt increase in the operating margin, water sector (+8.6%), Petroleum processing (+6.6%), Education (+5.8%), Health (+4.2%) and Telecoms (+2%). Higher resource prices contribute largely to resource sectors' benefit since higher prices of their products improve these sectors' revenue and profit sustainability. Sectors like education, health and telecom benefit from reasons such as less tax burden post VAT reform, higher fiscal expenditure in these fields and higher consumption share of GDP.
- At the same time, 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 operating 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 22: Impact of reforms on sectors' operating margin (ppt change from baseline)



Source: Deutsche Bank

As a caveat, investors should be careful in translating these numbers into specific assumptions for financial projections of individual listcos. This is 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 are 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 that, we still believe that the above simulation results are indicative of ranking the significance of the reform impact across sectors.

Beneficiaries of factor pricing reforms: power, gas, water, refined oil, broker

In this section we present more detailed analyses on likely impact of resource pricing reforms on power, gas, water and oil refining sectors.

Oil refining

With a refined oil price reform (i.e. 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 price reform alone should increase oil refiners' operating margin by 5.7ppts. Currently China's oil refiners are operating at a loss, with Sinopec's operating margin at -1.8% and PetroChina's at -5.8%.

Gas

With the gas price reform (i.e., a 30% increase in natural gas price), our model estimates that the natural gas sector would see an improvement in operating margin by 13.2ppts. As for PetroChina (0857.HK, HKD10.14), the largest gas producer and transporter in China, our sector analyst David Hurd estimates that for 2013, a 5% increase in natural gas tariff would imply a 3.6% increase in net income.

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, HKD7.85) and CNOOC (0883.HK, HKD15.98), 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 operating 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 cost. Going forward, given our assumptions of 1) <10% coal price rebound next year; 2) potentially higher utilization with a better economic outlook; and 3) a lagged positive impact from interest rate cuts in 2012 loan re-pricing cycle, large listed IPPs would likely see another 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 raw material 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 sector, which sells electricity at the lowest on-grid price (75% as thermal power, 44% as wind and 67% nuclear power, see Figure 23), would likely benefit the most if the “same quality-same grid-same price” policy were to be adopted. This mechanism, aiming 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 would boost the market share of hydro power producers and benefit hydro power equipment makers.

Figure 23: 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

The main listed companies in the power sector are China Power Int'L (2380.HK, HKD2.10), Huaneng Power Intl (0902.HK, HKD6.28), China Resources Power (0836.HK, HKD16.86), Datang Int'L Power (0991.HK, HKD2.74), Huadian Power (1071.HK, HKD2.14), Datang Renewable (1798.HK, HKD0.82), Huaneng Renewables (0958.HK, HKD1.11), Longyuan Power (0916.HK, HKD4.82), and power equipment producers include Dongfang Electric (1072.HK, HKD13.26), Harbin Electric（1133.HK, HKD6.24）and Goldwind Sci & Tech (2208.HK, HKD3.01).

Our top picks are Huaneng Power Intl (0902.HK, HKD6.28), China Resources Power (0836.HK, HKD16.86). Given their coastal plant locations, they benefit more from recent coal price decline and suffer less from power demand weakness.

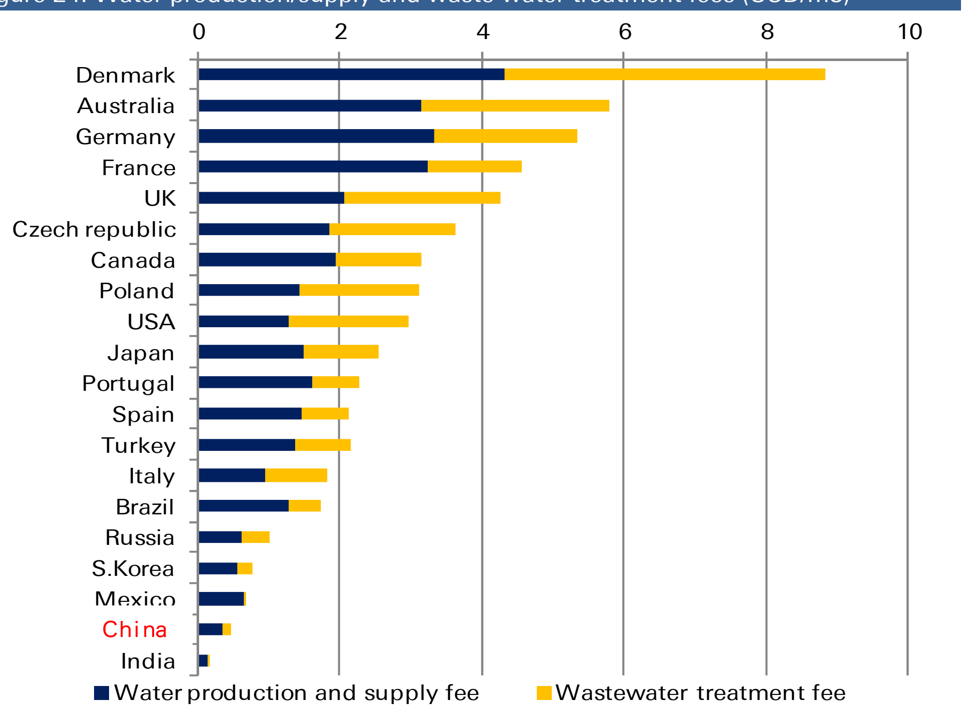
Water

Our mode shows that a 30% water tariff increase would improve the operating 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 make a key difference. Cities including Guangzhou, Guilin, Changsha and Wuhan have already kicked off such reforms.

Water tariffs can be decomposed 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.

Deutsche Bank analysts cover three Chinese water enterprises listed in Hong Kong. These are Beijing Enterprises Water Group (0371.HK, HKD1.76), China Everbright Int'l (0257.HK, HKD3.67) and Guangdong Investment (0270.HK, HKD5.97). Our top Buy is BEWG for its nation-wide project coverage and its strong waste-water treatment business which is more leveraged to the benefits of reforms.

Figure 24: Water production/supply and waste water treatment fees (USD/m3)



Source: Global Water Intelligence, Deutsche Bank

Financials

Financial sector reforms – including interest rate and capital account liberalization, faster development of capital markets – would continue to pose challenges to banks but would substantially benefit brokers.

As a result of the on-going interest rate liberalization, banks' NIM is under pressure. The expansion of the floating range in June and asymmetric rate cuts in June and July have already cut the banking sector NIM by about 30bps (on 2013 NIM), and we expect further financial reforms may continue to reduce the NIM by another 20-30bps. Of the total NIM contraction of up to 60bps, our banking analysts estimate that about one-third came from the asymmetric rate cuts, one-third from interest rate liberalization, and one-third is due to the disintermediation (i.e., bond financing as a substitute for bank lending).

Within the banking industry, large banks such as ICBC (1398.HK, HKD5.02) and CCB (0939.HK, HKD5.69) should perform better during the deregulation process due to their more stable deposit base, lower LDR ratio, and lower vulnerability to the substitution effect.

In contrast to banks, brokers should likely be the benefit more as a result of financial liberalization. The relaxation of quota restrictions on bond issuance implies that financing from the corporate bond market could grow at twice the pace of bank lending in the coming years. Brokers which underwrite and trade bonds would obviously benefit. In addition, we expect the 11 measures proposed in May to promote "broker innovations" will be put into effect by the end of this year. Among the 11 measures are: 1) improving brokers' asset management product innovation capability, 2) relaxing the restrictions on the business and investment scope, 3) expanding the range of financial products that can be underwritten, 4) development of cross-border businesses, 5) encouraging the listing of securities companies on the stock market, and 6) developing the over-the-counter market.

Beneficiaries of VAT reform: telco, transport, and construction

Currently, the transportation sectors (including road, shipping, and air transport) and a few modern services industries in selected regions enjoy the benefits of pilot VAT program. We expect more sectors and more regions to be included in the scope of the VAT reform in coming years. Three new sectors would likely include telecom, construction, and railway transportation, as highlighted by Li Keqiang in his recent speech on VAT reform.

Our model shows that if the VAT reform is carried out with an average reduction of 15% in the indirect tax (an assumption suggested by tax experts), the operating margin would increase for telecom, railway transportation, and construction by 1.4ppts, 0.9ppts and 0.2ppts. The existing levels of the sectors' profit margins matter the most in determining the outcome. That is, sectors and companies with lower net profit margins and higher capex should benefit more from the potential reform.

The construction sector would likely benefit notably from the VAT reform. Currently the sector pays a 3% business tax and has a low net profit margin. For example, the ratios of business tax-to-net profit for CRG, CRC and CCC are 198%, 157% and 75%, respectively, as of 2010. Deutsche Bank analyst Phyllis Wang estimates that a 0.1% decline in the tax rate would lead to a 5%, 4% and 2% increase in net profits of CRG (0390.HK, HKD4.21), CRC (1186.HK, HKD8.32), and CCC (1800.HK, HKD6.84).

The telecommunication sector should benefit from the potential VAT reform as well. Implementation of the reform should be easier than many other sectors due to the dominance of just a few SOE operators in the industry. Companies with lower initial net profit margin should benefit more from the VAT reform. Note that the net profit margin of China Mobile (~20%) (0941.HK, HKD84.85) is much higher than those of China Unicom (2.6%) (0762.HK, HKD11.48) and China Telecom (5.2%) (0728.HK, HKD4.15). Assuming 3% business tax for China Unicom (which is not disclosed by the company), our equity analyst estimates that for every 0.1% reduction in the rate of the business tax, China Unicom's net profit should increase 3%.

Beneficiaries of social spending: education and health

Healthcare and education would be the obvious beneficiaries of the likely increase in social spending. Our model shows that with the 1.2ppts assumed increase of social spending to GDP ratio, the healthcare sector's real output would increase 8% compared with baseline, the education sector's real output would increase 8% as well; and the real output of the pharmaceutical sector would increase 4%. With the assumed reform, the healthcare sector's operating margin would increase 4ppts. The education sector would see a 5.7ppts increase in operating margin.

Our updated top Buy list

Based on the views we presented above, we updated our China top Buy list of ten stocks to include a few more names that should benefit from the forthcoming reforms. The new additions to our basket include BEWG (0371.HK, HKD1.76), Sinopec (0386.HK, HKD7.85), and China Unicom (0762.HK, HKD11.48). The other seven stocks which were in our old list – Huaneng Power Intl (0902.HK, HKD6.28), Mindray Medical (MR.N, USD32.41), China Railway Construction (1186.HK, HKD8.32), ICBC (1398.HK, HKD5.02), China Life (2628.HK, HKD22.15), Haitong Securities (6837.HK, HKD10.08) and Belle Intl (1880.HK, HKD14.58) – remain as our top Buys as most of them will also benefit from reforms and the on-going economic recovery.

The selection criteria for the names in our basket are:

1) They are likely to benefit from catalysts that are not fully reflected by the market, including some of the reforms we discussed in this report and the 2013 economic recovery that we discussed in the past months.

2) They are rated Buy by our sector analysts, even though their earnings forecasts may not fully reflect the upside potentials presented by reforms.

3) Our analysts' target prices suggest significant upside potentials for most of these stocks, with an average 12m upside of 25%.

4) On average, the basket is trading at a PEG of 0.83x, vs. MSCI China's 1.46x.

In the remainder of this section, we discuss the specific rationales and catalysts for each of these companies.

Figure 25: Valuation of our top picks

Company	Ticker	Sector	Rating	17-Nov Price local	M. cap (US$m)	PE 2012	PE 2013	PB 2012	EPS CAGR 12-14	PEG (2012PE/ EPS CAGR 12-14)	PE Discount to 5Y AVG
Huaneng Power Intl	0902.HK	Utilities	Buy	6.28	11,387	11.1	7.1	1.3	106%	0.10	45%
Bewg	0371.HK	Utilities	Buy	1.76	1,555	14.0	11.0	1.4	29%	0.48	45%
Sinopec-H	0386.HK	Energy	Buy	7.85	87,801	9.6	8.1	1.1	1%	8.15	9%
Mindray Medical	MR.N	Health Care Equipment & Services	Buy	32.41	3,735	18.1	16.0	2.9	13%	1.40	28%
China Rail Construction	1186.HK	Capital Goods	Buy	8.32	13,242	10.1	9.1	1.2	8%	1.19	51%
China Unicom	0762.HK	Telecommunication Services	Buy	11.48	34,897	35.4	23.0	1.0	51%	0.70	11%
ICBC	1398.HK	Banks	Buy	5.02	226,065	6.3	6.4	1.3	2%	2.87	50%
China Life	2628.HK	Insurance	Buy	22.15	80,764	21.5	15.8	2.2	20%	1.06	23%
Haitong Securities	6837.HK	Diversified Financials	Buy	10.08	11,581	20.5	19.0	1.3	4%	4.81	N/A
Belle Int'L Holding	1880.HK	Retailing	Buy	14.58	15,877	20.4	16.9	4.5	18%	1.10	26%
Average						17.0	13.5	1.5	16%	0.84	31%
MSCI China						10.1	9.2	1.5	6%	1.46	31%

Source: Deutsche Bank estimates, Bloomberg Finance LP

Huaneng Power Intl (0902.HK, Buy, HKD6.28): 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 an improving sector fundamental outlook including stronger demand and the power tariff reform. We continue to recommend Buy on the stock as 1) its valuation of 1.0x 2013E P/B is still attractive; 2) the parentco reiterated its commitment to inject all unlisted conventional 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, Buy, HKD1.76): As the leading waste water treatment (WWT) operator in the industry, Beijing Enterprises Water (BEWG) will be the key beneficiary of the country's rapid growth in the environmental protection sector and water price reform. Its nationwide project presence and well-rounded business guarantees its benefits from local water tariff hike in various regions. In addition, the company, having a highly experienced management, a State Owned Enterprise (SOE) background, together with a significant project pipeline, enjoys high earnings visibility in the next few years. At 14.5x FY12E P/E, vs. a 29% EPS CAGR (2012-14E), the risk reward balance looks attractive.

Sinopec (0386.HK, Buy, HKD7.85): The company explores crude oil and natural gas in China and also owns major refineries, which should benefit from the oil pricing reform. The company has reported strong 3Q12 results, and we see potential upside to our refining estimates for 2012 and 2013. The new government's potential pricing reform and management's commitment to inject E&P assets should provide longevity (2013-15E) to the SNP story. We maintain our SNP 2.0% TG rate in anticipation of a growing E&P business, and our EPS growth estimates in 2013 and 2014 are 18.8% and 11.7% respectively.

Mindray Medical (MR.N, Buy, USD32.41): Mindray is a major player in the health equipment space, which should benefit from the further increase in government spending on health. With an evolving product portfolio catering to the mid/low-end global markets, MR's value proposition is manifested by its low cost model and economies of scale, which in turn drive operating leverage. Management increased NP guidance to 15% yoy growth, which implies 12% growth for 2H12. Jack Hu, Deutsche Bank's health care analyst, also expects MR's entry into the high-end domestic market to experience a rapid ramp-up. We reiterate our Buy rating and target price of USD38, based on 19x 2013E EPS of USD2.02, a multiple above its US- and HK-listed peers. The premium above the company's growth rate is warranted, in our view, given its proven track record to deliver EPS growth and because it is a high-quality Chinese medical device company listed in the US.

China Railway Construction (1186.HK, Buy, HKD8.32): We currently forecast total subway investment in 2011-2020 to be c.RMB2.65tr, implying 10% CAGR for the coming few years. Given the re-focus of policies on boosting urban infrastructure, we think the actual capex growth will likely accelerate in 2013-14, and CRC is a major beneficiary from this acceleration. We believe CRC could win more market share. In addition, the potential VAT reform will benefit the company, whose business tax is about 100% of its net profit. By our estimates, a 0.1% decline in the business tax rate would lead to a 4% increase in its net profit. The current forecast of Phyllis Wang, our railway analyst, is that CRC's EPS will grow 8% CAGR from 2012-2014.

China Unicom (0762.HK, Buy, HKD11.48): China Unicom operates GSM and CDMA networks in 30 provinces and provides nationwide calls, data and Internet services, and other related telecommunication value-added businesses, which are to benefit from the likely VAT reform in the future. Beyond that, while the 3Q miss speaks to continued challenges in controlling various cost elements, we believe that historically high churn rates are receding, and stick to our thesis that CU will continue to win market share in the current restructuring oriented environment. We thus forecast an EPS CAGR12-14 of 51% and a target price of HKD19.3, implying 73% upside potential from the current price.

ICBC (1398.HK, Buy, HKD5.02): Although we believe the banking sector will see NIM compression, our banking analyst Tracy Yu expects ICBC to outperform its peers given: (1) 75% of the RMB830bn LGFV loans (NPL:0.02%) are normal cash-flow-driven corporate loans and 70% of the remaining loans were extended to major tier 1 cities, (2) 94% of mortgage loans were extended to first-time home buyers and NPL should rise by 1.08% (sector: 2.2%) if property prices were down 30% and benchmark rates up 108bps, (3) we believe it is less vulnerable to divestment by strategic investors given its positioning. We have adopted a near-term ROAE of 18.5% from 2012 to 2014, 13.5% from 2015-2017, and a sustainable ROAE of 11%, and a payout ratio of 30% for 2012 to 2014, 30% for 2015 to 2017, and 60% for long term. COE is 11% and terminal growth is 4.4%. Our target price is equivalent to 1.35x 2013E P/B.

China Life (2628.HK, Buy, HKD22.15): We expect a bottoming out of life insurance growth and earnings, helped by low base and improving liquidity in China. In the medium term, we believe the sector should be supported by favorable government policy to privatize the social welfare burden in China. Esther Chwei, Deutsche Bank's insurance analyst believes that China Life, being the largest player with a strong brand name, nationwide distribution and renewed focus on value generation, should continue to outperform. In addition, China Life's capital position is relatively secured with a solvency margin ratio of 231% and ample sub-debt capacity to withstand further A share market weakness. Our target price for China Life is HKD26.6, which is based on a 9x2013E NB.

Haitong Securities (6837.HK, Buy, HKD10.08): On a longer term basis, Haitong will be a key beneficiary of financial liberalization measures. Although its price has rallied recently, compared with its peer, HTS is still priced favorably with a 2012E P/E of 20x and 2012E P/B of 1.3x. Among the Chinese brokers covered by Deutsche Bank analysts, HTS enjoys a leading position in new business (e.g. interest income from margin financing business), and a faster improvement in cost efficiency. Risk analysis done by Judy Zhang, Deutsche Bank, shows that HTS has 17% downside potential to low case valuation, compared with 48% upside potential to the high case valuation, which looks an attractive risk/reward balance.

Belle Int'l Holding (1880.HK, Buy, HKD14.58): We like Belle as its performance is in line with expectations on its strong cash flow and balance sheet, which are big positives in the current market environment. For 2012, Belle has guided for 10% + store growth and mid-high single-digit SSS growth for footwear, which translates to a 17% rise in sales. For FY13, we expect sales to recover to the high-teen level, with better SSS growth. Belle (core brand) has 2,000 stores in 300 cities and still shows growth potential, and the company hopes to have more brands in the future with RMB5bn sales like "Belle". This ambitious approach should benefit from households' growing purchasing power in the coming years. Our valuation translates into 20.0x FY12E and 16.6x FY13E PE.

Appendix 1

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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.

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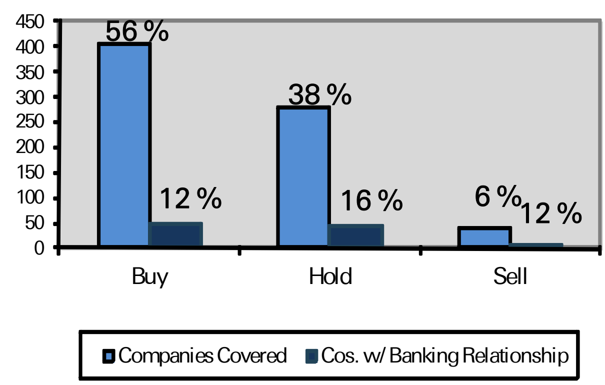

Asia-Pacific Universe

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