CHINA: BEYOND THE MIRACLE
Part 1 – China’s next transition

- This is the first in a series of reports titled China: Beyond the Miracle that will analyse the major structural issues facing the Chinese economy.

- We think China is about to experience a transition from ‘economic miracle’ to what can be considered normal development in the next five to ten years. This process will not only transform the Chinese economy, but will also have significant implications for the rest of the world.

- The key to the upcoming transition lies in the anticipated reform of factor markets, including rapid wage growth, interest rate and exchange rate liberalisation, and market-based resource prices.

- We identify a number of important trends that will emerge during the transition process. Growth is likely to moderate steadily, economic cycles will probably become more violent, and inflation pressures could escalate, as a result of widespread increases in factor costs.

- Industrial upgrading is likely to accelerate, with a rapid move into high value-added manufacturing and service sectors, and faster development of inland provinces. We also expect income distribution to improve.

- The economy should see the beginning of great rebalancing, which is likely to mean an end to investment-led growth but much stronger consumption. As a result, demand for commodities could slow.

- China will likely achieve basic convertibility of the capital account over the next five years, and its capital outflows are likely to primarily take the form of direct and portfolio investment.

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Emerging economic trends

As economies show visible signs of weakening trends around the world, market participants, economists and policymakers are again looking for likely policy actions by the Chinese government. We think China probably would respond quickly if global economic conditions deteriorated sharply. However, it probably will not be able to repeat the action it took three years ago at the height of the global financial crisis, given elevated inflation, large local government borrowing, an expected deterioration in the quality of banking assets, worsened structural imbalances and the upcoming leadership transition.

Beyond short-term cyclical considerations, the biggest challenge facing Chinese policymakers is how to transform the economic development pattern, as identified by the 12th Five-Year Program (FYP). Some market participants are sceptical that China can ever achieve this policy objective. Since the government failed to improve the growth model during the 11th FYP, why should it be different this time?

The current economic development pattern, however, is no longer sustainable. Despite China’s great success in achieving rapid growth during the past decades, its economy has developed a number of structural problems, including a high investment ratio, large current account surplus, unequal income distribution, high resource intensity, serious environmental degradation and widespread corruption. The Politburo meeting in late-July 2011 also reiterated its concerns about China’s uncoordinated, unbalanced and unsustainable development pattern.

Many of these structural problems have worsened sharply since the global financial crisis as a result of the aggressive fiscal and monetary expansion implemented to support economic growth. Investment’s share of GDP, for instance, rose from 41.7% in 2007 to 48.5% in 2010 (see Figure 1). Asset bubbles and excess capacity have become more serious and widespread (see Figure 2), and prompted many predictions of a hard landing. For instance, James Chanos, founder of Kynikos Associates, a New York-based investment company, has predicted a slump due to excessive property investment in China. Similarly, James Rikards, former General Counsel of hedge fund Long-Term Capital Management, warned that China was in the midst of “the greatest bubble in history”.

Figure 1: GDP: Unsustainable investment-led growth

![Figure 1: GDP: Unsustainable investment-led growth](image)

Source: CEIC, Barclays Capital

Figure 2: Continued build-up of a property bubble

![Figure 2: Continued build-up of a property bubble](image)

Note: We assume an average house size of 70 sqm. Source: CEIC, Wind, Barclays Capital
Still, we do not see a high probability of a hard landing or a fiscal/financial crisis in the near term...

...largely because of China’s flexible policy regime and the still-healthy balance sheets of various agents in the economy

That said, risks of a major crisis could increase exponentially

While acknowledging these serious – and even worsening – structural risks, we do not see a high probability of a hard landing or a fiscal/financial crisis in the near term. In our view, the pessimists are wrong on at least two fronts. One, they often underestimate the flexibility and resilience of the policy regime. Chinese policymakers have proved their ability to respond and adjust in the face of crisis risks, as evidenced by their decision to adopt the household farming system at the beginning of the 1980s, to privatise loss-making state-owned enterprises (SOEs) in the mid-1990s and to enter the WTO at the beginning of the century, despite strong political resistance to these changes.

Secondly, in predicting a hard landing, the pessimists ignore the still-healthy balance sheets of households, corporates, banks in China, and the external economy and government. For instance, mortgage loans in early 2011 amounted to only c.13% of banks’ total outstanding loans. These loans are also equivalent to less than 20% of GDP and less than total household savings (see Figure 3). This implies that, even if house prices decline, we are unlikely to see forced and widespread deleveraging that could lead to a meltdown of the financial system and economic activity. Again, public debts are equivalent to only c.18% of GDP. Even after including local government debt (27% of GDP reported by NAO), it remains below the 60% international warning line (see Figure 4). Fiscal revenues have been growing at a rate of 20-30% pa for years. The government also has massive assets, including state-owned ones totalling CNY207.8trn, equivalent to more than six times annual GDP (CNY33.7trn). Clearly, this suggests that government solvency is not at risk in the near term.

But that does not mean the structural problems can continue for a long time. If China fails to transform its development pattern over the next five years, then the risks of a major crisis could increase exponentially. In the past, the government always stretched the financial and fiscal systems to contain near-term downside risks. But there is a limit to how much longer this approach can be employed. After the Asian financial crisis, for instance, it took years for China to reduce nonperforming loan levels and contingent fiscal liabilities. But China may not always have the luxury of a long ‘adjustment period’ to deal with such problems.

Whether or not China is able to transform its development pattern is critical for growth sustainability. There are many economies in the world, most notably in Latin America, that achieved a successful takeoff in the immediate post-war period but then failed to sustain growth, falling into the so-called ‘middle-income trap’.

Figure 3: Chinese households, not that leveraged

Figure 4: Chinese government debt, still manageable

Note: Majority of household debt is mortgages. Source: CEIC, Barclays Capital

Note: China’s figure includes both official public debt and local govt debt. Source: IMF, National Audit Office (NAO), Barclays Capital
This is not our base-case scenario for China. We believe China will be able to gradually change its growth model, rebalance its economy and reduce inefficiency over the next 5-10 years. The key will be the reform of factor markets. By providing extra incentives for producers, investors and exporters, factor cost distortions have been an important force driving China’s strong economic growth in past decades. These same forces have also created serious structural problems, such as economic imbalances, huge commodity consumption and various types of inefficiencies.

Fortunately, we have already started to see changes in the factor markets. Wages have been rising rapidly due to emerging labour shortages (see Figure 5). The government has begun to adjust the prices of resources, including electricity, oil, gas and water (see Figure 6). The authorities also plan to introduce market-based interest rates and increase exchange rate flexibility during the 12th FYP. These changes should gradually remove distortions to the incentive structure for economic entities, and eventually drive the transition of the Chinese economy – from economic miracle to normal development.

Assuming this transition takes place, we are likely to witness a sea change in China. If the transition is smooth, then we think the Chinese economy should be able to avoid the ‘middle-income trap’ and move to the next level of economic development. During this process, there is likely to be a series of important changes that could have significant implications for market participants, both at home and abroad. We identify the most important emerging economic trends as:

1. Growth is likely to moderate, although steady growth should continue;
2. Inflation pressures to rise;
3. Income distribution will likely improve;
4. Industrial upgrading to accelerate;
5. The economy will start to rebalance;
6. Commodity demand could slow visibly;
7. Capital account liberalisation should proceed rapidly; and
8. Economic cycles are likely to become a lot more violent.

Source: Lu Feng, “Employment expansion and wage growth (2001-2010)”, China Macroeconomic Research Center, Peking University, Beijing, 12 June 2011

Source: CEIC, Barclays Capital
The making of an economic miracle

When Deng Xiaoping and his colleagues decided to start economic reforms in the cold winter of 1978 in Beijing, China had just ended the decade-long and disastrous "Cultural Revolution". The poor, closed agrarian economy was on the verge of collapsing. Urban industry churned out large volumes of low-quality, unwanted heavy industrial products, and there were severe shortages of consumer goods. Many farmers could not even feed themselves in a normal harvest year. About 84% of the population lived under the international poverty line of USD1.25 a day.

In the following three decades, the Chinese economy underwent a profound transformation (see Figure 7). Per capita GDP measured in 2005 price purchasing power parity (PPP) terms rose from USD525 in 1979 to USD6,200 in 2009. By 2010, China was the second-largest economy in the world (see Figure 8), the largest manufacturing producer, the biggest market for luxury goods and greatest commodity consumer. Despite China’s still relatively modest income level, it is already a ‘large country economy’ whose economic influence is felt in almost every corner of the globe, from Australian wool farmers to American consumers, from European brand name producers to South African goldsmiths.

Growing global economic influence

China’s global economic influences are reflected in a number of areas:

- During the past decade, China contributed between one-fifth and one-third of global GDP growth. During the global financial crisis (GFC), its stimulus package quickly reversed the slowing trend of economic growth and helped to support recovery in many neighbouring economies.

- China is already a dominant player in many global markets for consumer goods, including textiles and clothing, toys and electronics. For years, its low-cost products helped to hold down inflation worldwide. Consumers like Chicago-based journalist Sara Bongiorni found it impossible to completely avoid buying made-in-China products.1

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China has been a key driver of the so-called ‘super cycle’ in global commodity markets. China consumes about 30% of the world’s commodities (see Figure 9) and accounts for almost 60% of Australia’s exports of ore and metals. Chinese growth, especially its import growth, has become a key indicator of economic conditions in Japan and many other economies in East Asia, Oceania, Europe and Latin America. This has also raised the issue of interdependence of macroeconomic policy between the economies of China, the US and Europe (see Figure 10 and 11).

With US$3.2trn in foreign exchange reserves, China is also a major exporter of capital and a key player in global capital markets, especially markets for sovereign debt. Some economists have also found that the renminbi (RMB) is as important as the US dollar in Asian policymakers’ exchange rate decisions.²

According to IMF forecast, based on PPP-data, China is likely to overtake the US and become the world’s largest economy by 2016, when it will account for about 18% of global GDP (see Figure 8). If the same trends continued, China would account for more than one-fifth of the world economy soon after that date. This is the basis for the widespread claim that the 21st century will be the “China Century”.

China’s growing global economic influence has led to suggestions that China needs to play a more prominent role in global economic affairs. Fred Bergsten, of the Peterson Institute of International Economics, for instance, recommends that the US and China form a Group of Two (G-2) to jointly manage important global issues.³ World Bank President Robert Zoellick and its Chief Economist Justin Lin suggested a similar mechanism.⁴ So far the Chinese government has rejected such proposals. But there is an increasing recognition in the international community that cooperation between these two countries is critical for resolution of many important global economic problems.

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³ Fred C. Bergsten, Charles Freeman, Nicholas Lardy and Derek J. Mitchell, China’s Rise: Challenges and Opportunities, Peterson Institute of International Economics, 2008, Washington D.C.
How did China achieve it?

The ascendancy of the Chinese economy within a relatively short period from the late 1970s is widely regarded as an economic miracle. Economists have offered various explanations for this extraordinary performance:

- Justin Lin, Fang Cai and Zhou Li argued in their award-winning book “The China Miracle” that the key was transition from the heavy-industry-oriented development strategy to comparative advantage-oriented development strategy.⁵

- Barry Naughton suggested the term “growing out of the plans”, ie, allowing incremental growth of the market-oriented, private activities, while maintaining support to the old central planned activities and state-owned enterprises (SOEs).⁶

- Jeffery Sachs and Wing Thye Woo, however, pointed out that Chinese economic success was explained not by its policy innovation but rather its convergence to the typical market system of East Asia, which previously underpinned the ascendancy of the other Asian economies.⁷

Despite the differences in their angles and perspectives, these and many other economists appear to share a consensus view that the fundamental change leading to the great success of the Chinese economy was its transition from a centrally planned to a market system. This is certainly correct. The central planning system created at least two types of inefficiency problems in the economy: the misallocation of resources among different industries and activities, and productive inefficiency at the micro level. We believe the removal of these problems could result in a dramatic expansion of economic activity.

But this is only part of the story. In fact, we think an overemphasis on the role of market liberalisation could prevent a proper understanding of China’s extraordinary economic performance, especially if implications are made for other underdeveloped countries. Many low-income countries probably have freer market systems than China but, for decades, they

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have failed to achieve significant economic growth. In September 1993, the World Bank published its famous report, “The East Asian Miracle”, which examined the experiences of eight High Performing Asian Economies (HPAEs). The World Bank summarised the essence of the HPAEs’ public policy as “limited price distortion and careful policy intervention”.

In our view, the unique policy that contributed to China’s extraordinary economic performance was its asymmetric market liberalisation approach during the reform period – in other words, the almost complete liberalisation of product markets but heavily distorted factor markets (see Figure 12). Free markets for products ensure that production decisions are based on demand and supply conditions in the economy, and resources are allocated efficiently. Distortions in factor markets are a way of providing incentives for economic entities and, sometimes, overcoming market failures.

Factor market distortions and, more generally, the active role of government in China are often criticised for causing economic inefficiency. This is true. But we view this as the critical element in China’s economic success. We think that while market liberalisation is important, what distinguishes China from many other low-income economies in achieving economic takeoff has been the role of government. The reason is simple. If the government does not carefully intervene, the market system may not function properly in many low-income economies where market failure is common. The financial system, for instance, is often not well developed to channel savings effectively to investment. To induce economic takeoff, the government needs a relatively free market system, but it also needs carefully designed policies to support economic activities.

One good example is China’s FDI policy. In the early years of economic reform, the Chinese government designed a range of preferential policies to attract FDI, including tax holidays, free use of land, subsidised credit, cheap inputs such as energy and water. Government support for FDI projects also reduced problems related to an undeveloped legal system for property rights protection. In typical economic textbooks, such policies are described as policy distortions. But they have been successful. By 2010, cumulated FDI inflows into China reached USD923bn since 1997 (see Figure 13). Today, foreign-invested firms (FIEs) account for more than half of China’s total exports (see Figure 14).

We think China’s uniqueness lies in the almost complete liberalisation of product markets, but heavily distorted factor markets...

...as well as the active role of government

Figure 13: China is now the second largest recipient of FDI

![Cumulated FDI, 1997-2010 (USD bn)](chart)

Source: CEIC, Barclays Capital

Figure 14: Share of foreign-investment firms of exports

![Foreign-funded enterprise % total exports](chart)

Source: CEIC, Barclays Capital

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Comprehensive policies have set incentives at both the government and corporate levels. FDI policy is only one example of the positive role played by the Chinese government in economic development. Over the years, the government has developed a comprehensive policy package to support economic growth. This package includes incentives at two levels:

- At the government level, there is a very clear policy objective set for all officials of achieving the fastest possible GDP growth. This is built into the political system, through assessment of performance and determination of promotion. It is often noted that provincial governors and municipal mayors act more like corporate CEOs than senior government officials given their focus on boosting local investment and production.

- At the corporate level, generally repressed factor costs, resulting from factor market distortions, act as subsidies, artificially raising profits from production, returns on investment and the competitiveness of Chinese exports. For years, China’s competitive advantages have included not only cheap labour but also cheap capital, land and resources. In the short term, such a favourable environment induces faster economic growth, although it also creates structural problems over time.

It is well known that the Chinese government has focused on maintaining an 8% GDP growth rate. Although in recent years the government has set growth targets below 8%, growth has not dropped below this level for at least a decade (see Figure 15). Government officials often point to job creation and political stability as important motivations for this target. As China has not developed good social welfare systems, high unemployment could lead to economic and political instability. Therefore, job creation is by far the most important policy objective.

![Figure 15: 12th FYP target and actual outcomes](image)

<table>
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<th>8th (91-95)</th>
<th>9th (96-00)</th>
<th>10th (01-05)</th>
<th>11th (06-10)</th>
<th>12th (11-15)</th>
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<td>8.0</td>
<td>7.0</td>
<td>7.5</td>
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<tr>
<td>Actual (%)</td>
<td>12.3</td>
<td>8.6</td>
<td>9.8</td>
<td>11.2</td>
<td>8.4*</td>
</tr>
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</table>

*Forecast. Source: Barclays Capital

The government has focused on maintaining an 8% GDP growth rate... and job creation.

The economy needs to maintain strong growth to create jobs. Some officials explain that, in the 1990s, China’s new job market entrants totalled about 8 million a year. Including rural-urban migration and re-employment demand, this means that the country would need to create at least 10 million jobs every year. Historically, in order to create this number of new jobs, the economy had to grow by 8% pa. Of course, we need to make a few qualifications for this calculation. First, the job intensity of the economy varies depending on economic structure (capital-intensive versus labour-intensive industries). And second, the number of job market entrants has actually dropped to 4-5 million annually in recent years. But these factors appear to have been ignored by policy considerations, which has reinforced the perception that China needs to achieve 8% growth.

There is probably a more fundamental reason for the government’s focus on economic growth. Tsinghua University’s Hongbing Li and his collaborators once raised an interesting research question: Of all the provincial Party Secretaries and Governors, why are some promoted while others demoted after their terms finish? Li and his collaborators pulled together a data set of all provincial Party Secretaries and Governors covering the entire reform period. Not surprisingly, statistical analysis confirmed that the most important variable determining the probability of promotion for those senior officials was GDP growth.⁹

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Such behaviour is probably driven by performance assessment mechanisms for local government officials. During Deng Xiaoping’s famous tour of Southern China in 1992, he laid down two very important policy guidelines: one “development is a hard principle” and the other “whoever does not implement reforms should step down from their official posts”. For better or worse, this policy system ensures that government officials focus relentlessly on achieving rapid economic growth. Senior government officials spend lots of time negotiating with investors and bargaining with higher level governments to attract more investment into their local economies. This can also cause certain problems, such as negligence of economic stability and social justice. It is, nevertheless, very effective in stimulating economic growth.

Distortions in factor markets

Parallel to the incentives for government officials was the widespread factor market distortions. These distortions, whether legacies of the central planning system or recent introduction by the government, serve at least two purposes in supporting economic growth in China:

1. Generally repressed factor prices, especially those for capital and energy, lower costs for producers, investors and exporters and, therefore, induce higher levels of economic activity than otherwise would be the case.

2. The government directly plays a role in resource allocation to support economic activity in priority areas, since lower prices inevitably lead to supply shortages in many areas such as bank credit and electricity.

We think these are important reasons why the Chinese economy has been so successful in the past three decades. But we should caution against generalising about this policy practice. One, this policy regime is different from the central planning system, which led to the economic disasters in the pre-reform period. Two, state intervention is only useful if it is carefully designed to promote economic growth in a market environment. Three, even in the case of China, such distortions have had serious adverse consequences. But in the initial stage of economic development, it has been very effective at jump-starting economic growth.

Financial repression and underestimation of capital costs

Underpricing of capital is probably the most important form of factor price distortion in China today. After more than 30 years of financial reform, China has a very comprehensive financial industry, including different types of banks, securities companies, insurance companies and various forms of money and financial markets. Degree of financial deepening, often measured by the ratio of broad money supply M2 to GDP, is already among the highest in the world. In fact, China’s M2 is already greater than that of the US, although its economy is still only about a third the size of the latter (see Figure 16). Nevertheless, the Chinese financial system exhibits almost all typical signs of financial repression: the authorities maintain heavy regulations over lending and deposit interest rates, the state continues to influence lending decisions by the commercial banks, and the government still intervenes frequently in foreign exchange rates.

Interest rates were strictly controlled by the state during the early years of economic reform. In 1993, the State Council presented the first plan for interest rate liberalisation with specific proposals for freeing money market rates and bond yields. In 1996, the government established CHIBOR for interbank short-term borrowing. This market, however, remained underdeveloped, judging from transaction volumes and price stability. In 2007, the PBOC had another go at setting up a separate interbank money market, SHIBOR. The hope was
that SHIBOR would replace CHIBOR and serve as China’s benchmark short-term rate, which could eventually become the target for PBOC’s rate policy, just like the Fed funds rate in the US. In 1997, the authorities also set up the interbank bond market when the bond yields were freed.

One example of underpriced capital is provided by comparing the relationship of GDP growth potential and government bond yields across countries. In theory, nominal GDP growth potential indicates average return on investment. Therefore, risk-free government bond yields should converge with this rate of return. In China, however, the gap is around 8-10 percentage points – assuming nominal GDP growth at 11-13% and the 5-year government bond yield at 3% (See Figure 17). This is high compared with 6.5pp in India, 6.2pp in Thailand, 5.7pp in Malaysia and 2.6pp in Korea at the end of 2008. Clearly, capital is too cheap in China according to these measures.

In the Chinese system, however, deposit and lending rates of the commercial banks are often more high profile interest rate indicators. But the commercial bank rates are probably undervalued. To verify this, we can look at two useful indicators. The first is real interest rates. In many years during China’s reform period, real deposit rates were negative or close to zero (see Figure 18). In economics literature, a negative real interest rate is an important indicator of financial repression. Low real interest rates imply that capital is not properly priced for both owners and borrowers of capital. While the low rates often encourage borrowing, depositors are hurt by low returns and are sometimes forced to engage in speculative activities.

Low real interest rates imply that capital is not properly priced for both lenders and borrowers
The other indicator relates to interest rates in the informal lending market. One consequence of negative real interest rates is excess demand for capital, often leading to government intervention in credit allocation. In the case of China, large state-owned, foreign-invested and private enterprises often receive most of the bank loans, while small- and medium-sized enterprises lack access to proper financial services (see Figure 19). In Zhejiang province, where the private sector is more vibrant, only about 20% of SMEs obtain bank credit. The proportion is much smaller for small-sized enterprises. While the one-year base lending rate was below 6% at the start of 2011, the interest rate in the ‘kerb’ market in Zhejiang province was above 20%. This very high interest rate in the informal market reveals two important facts: 1) the official lending rate is too low, although the kerb market rate might not be the equilibrium rate; and 2) underpricing of capital is true only for the formal sector, especially large corporations. A large number of SMEs actually incur very high capital costs.

Another form of capital cost underestimation, which is probably much more noticeable for international observers, is China’s currency. Currency undervaluation has been the focus of some international policy debate. There are different approaches to measuring equilibrium exchange rates based on purchasing power parity information, structural characteristics of the economy, and/or imbalances. While most economists agree that the RMB is probably undervalued, they disagree on the magnitude of the undervaluation. The normal range of the undervaluation estimated for the RMB is between 5% and 50%.10

**Restrictions on labour mobility and segregation of the labour market**

During the pre-reform period, there was no labour mobility. The household registration system essentially required that a person who was born into a village should stay in that village until his or her death. Urban wages in pre-reform China were directly set by the state, based on experience, seniority, and type of job. Urban wages at that time were also kept artificially low in order to reduce the cost of industrial production, but the government supplied cheap food and other consumer goods to compensate for the low wages. Rural incomes were even lower. In 1978, when the government decided to start economic reform, urban income was roughly 2.4 times that of rural income (see Figure 20).

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At the beginning of economic reform, the urban and rural labour markets were almost completely segregated, with very limited labour mobility between the two. But this situation started to change from the early 1990s. After Deng’s tour of Southern China, the urban economy began to grow rapidly. Foreign-invested firms, especially those from Hong Kong, Korea and Taiwan, were mostly in labour-intensive industries. These enterprises began to recruit workers directly from farms to take advantage of cheap labour. At the same time, controls over the urban employment system were loosened gradually. Even SOEs started to recruit temporary workers from the countryside. This gave rise to a new phenomenon of massive numbers of migrant workers. According to the National Bureau of Statistics, there were a total of 240 million migrant workers in 2010. In fact, the majority of the workforce in the export sector in China today is migrant workers.

The existence of migrant workers provided strong evidence that the household registration system had become ineffective in restricting labour mobility. But importantly, the system still discriminates significantly against workers without official urban household registration. Even though farmers are able to find jobs in urban areas, they are still not treated as urban residents. For instance, their children normally cannot go to the public schools in the cities. Migrant workers are also not entitled to urban housing benefits. During the past years, the government tried to make the social welfare system universally applicable, but the gaps between urban residents and migrant workers remain wide. For instance, in 2009, about 57% of urban workers had pensions. The same was true for only 9.8% of migrant workers. The coverage rates for unemployment benefits were 40.9% for urban workers and 3.7% for migrant workers. And the coverage rates for basic medical insurance were 52.7% for urban workers and 13.1% for migrant workers.

If companies strictly followed policies on social welfare contributions, their payrolls would generally have to rise by at least 35-40%, including for contributions to pensions (20% of payroll), medical insurance (6%), unemployment benefits (2%), work injury insurance (1%), maternity benefits (0.8%) and housing entitlement (5-10%). By contributing less than required, especially for migrant workers, companies essentially reduce their cost of labour.

It is possible that migrant workers are often underpaid. In many companies that employ both urban and rural residents, migrant workers often receive fractions (often half or even one-third) of what is paid to urban workers. This is possible only because of the household registration system. It is common to hear of half a dozen of migrant workers squeezed into...
one dormitory room. They save most of their earnings to support the family back home. Many young migrant workers came to the cities planning to stay 5-10 years and then return home, either to get married or to start their own businesses. Many, however, change their minds later and want to remain in the cities, having lived there for extended periods.

While the household registration system and the resultant differential coverage of social welfare systems clearly discriminate against rural residents, it is uncertain if these institutions actually repress wages at the margin. In theory, there are two possibilities. One is that the household registration system provides an institutional basis for discrimination against migrant workers. This reduces labour cost at the margin. Since migrant workers are mostly employed in market-oriented sectors such as exports, private enterprises and FIEs, cheap labour was an important factor contributing to economic growth during the reform period. The other possibility is that that since the registration system restricts labour mobility it reduces the number of migrant workers and, therefore, increases wages. In other words, without the household registration system, there might be more migrant workers in the urban economy and wages would be even lower.

Would lower wages still attract more migrant workers? The critical question is whether the current wages for migrant workers are the minimum (see Figure 21) that farmers would accept for migrating to the cities. In a typical dual economy model, farmers receive subsistence income in agriculture. In order for them to move to the cities, “urban minimum wages” have to be substantially higher than subsistence income in agriculture, since they would incur higher living costs and be exposed to unemployment risks. If migrant workers’ current wages are significantly higher than the “urban minimum wages” in the dual economy model mentioned above, then relaxation of restrictions under the household registration system could result in more migrant workers and lower urban wages.

Price distortions for land, energy and other resources

Land is owned by collectives in the countryside and by the state in the cities. Until recently there was no market for land. Land transfer for non-agricultural uses has to be approved by the government. In the past, the local authorities would determine land use fees. But since they were keen to attract more investment, they often provided concessions on land use fees. It was common when local governments competed with each other to attract investment projects by offering tax exemptions and lower land use fees.

Figure 22: Average growth rate in land prices

![Figure 22: Average growth rate in land prices](source: CEIC, Barclays Capital)

Figure 23: Domestic oil price vs international crude oil prices

![Figure 23: Domestic oil price vs international crude oil prices](source: Bloomberg, NDRC, Barclays Capital)
In recent years, however, the local governments have turned to more market-oriented land transfer mechanisms, such as auctions and negotiations, to improve transparency and boost local government revenues (see Figure 22). This practice is more applicable in the case of property development. For industrial use it is still common for the government to apply land use fees. And on average the land use fees are only about 16% of the costs through auction. Manufacturers, therefore, receive implicit subsidies on land inputs.

Institutional distortions in domestic energy markets are widespread, although the magnitudes of cost distortions have varied wildly over the years. Of the different types of energy products, coal prices are the closest to market prices. The authorities also set electricity tariffs through public consultation. The most visible and sometimes also most volatile distortions are in oil products.

In 1998, in an important step in oil price liberalisation, the State Council announced a formula linking domestic prices to the weighted average of prices in New York, Singapore and Rotterdam. The NDRC would adjust domestic prices, with a couple of months’ delay, if the international weighted average moved by more than 8%. In 2000, the NDRC raised oil prices seven times in order to bring domestic prices closer to international levels.

However, when international prices moved violently, the NDRC was reluctant to follow for fear of disrupting economic growth (see Figure 23). For instance, when international crude prices reached their recent peak, at close to USD150 per barrel in 2008, the equivalent domestic prices were only around USD80 per barrel. Oil price distortions are highly volatile, given the State Council’s formula and fluctuations in the international markets.

Moreover, environmental concerns are not a conventional factor of production. However, compensation for pollution should be counted as part of production costs. Over the past three decades, the Chinese authorities instituted a relatively complete set of environmental protection regulations and policies. The problem, however, is the big gap between the intent of these policies and their implementation. Local governments, especially those in underdeveloped areas, are often not willing to protect the environment at the expense of income and GDP growth. Such lapses in policy implementation constitute an effective subsidy to producers.

The NDRC and the Ministry of Environmental Protection (MOEP) once estimated the net damage to the environment at 3% of GDP in 2004. Pollution of air, water and soil not only affects economic productivity but also generates serious health problems. Some have argued that environmental degradation in China has contributed to global climate change, and have suggested melting of glaciers in the Himalayas as evidence. Climate change is also said to have led to regular drought in Northern China and frequent floods in Southern China (Woo and Huang 2004).

Crude estimation of factor cost distortions

How serious are these distortions? Assessing this is an almost impossible task given that in most cases the equilibrium prices are unknown. Here we cite estimates by Yiping Huang and Kunyu Tao just as an illustration.\(^ {11} \) The numbers are likely disputable but the problems are probably real. Due to complications in labour market conditions, we do not include their estimates for labour cost distortion (see Figure 24).

Their estimation results reveal some important patterns. First, of all the distortions, capital market distortions are by far the most important. Capital cost distortions contribute about

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40% of total cost distortions on average. This helps to explain the persistent problem of overinvestment in China and also rapid development of capital-intensive industries despite continued job market pressures.

**Figure 24: Estimated cost distortions in China, 2000-2009 (% GDP)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital</th>
<th>Land</th>
<th>Energy</th>
<th>Environ</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>4.1</td>
<td>0.5</td>
<td>0.0</td>
<td>3.8</td>
</tr>
<tr>
<td>2001</td>
<td>3.9</td>
<td>0.5</td>
<td>0.0</td>
<td>3.5</td>
</tr>
<tr>
<td>2002</td>
<td>3.9</td>
<td>0.4</td>
<td>0.0</td>
<td>3.3</td>
</tr>
<tr>
<td>2003</td>
<td>3.8</td>
<td>1.1</td>
<td>0.0</td>
<td>3.3</td>
</tr>
<tr>
<td>2004</td>
<td>3.1</td>
<td>0.9</td>
<td>0.6</td>
<td>3.0</td>
</tr>
<tr>
<td>2005</td>
<td>3.0</td>
<td>1.3</td>
<td>1.7</td>
<td>3.0</td>
</tr>
<tr>
<td>2006</td>
<td>3.1</td>
<td>2.0</td>
<td>1.6</td>
<td>2.8</td>
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<tr>
<td>2007</td>
<td>3.6</td>
<td>1.2</td>
<td>1.6</td>
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<tr>
<td>2008</td>
<td>3.4</td>
<td>1.0</td>
<td>0.7</td>
<td>1.9</td>
</tr>
<tr>
<td>2009</td>
<td>3.5</td>
<td>0.9</td>
<td>0.7</td>
<td>1.8</td>
</tr>
</tbody>
</table>


**Energy cost distortions are sometimes asymmetric**

Second, energy cost distortions fluctuated widely across years, reflecting volatilities in international oil prices and the varying response of Chinese authorities to these changes. China has already adopted a price mechanism which closely tracks changes in international energy prices. But the authorities hold down domestic prices when international prices surge rapidly. Therefore, energy cost distortions are sometimes asymmetric. When international prices are low, there is little distortion. When international prices are high, distortions increase rapidly.

**Environmental cost distortions have shown consistent improvements**

Third, environmental cost distortion was the only item that showed consistent improvement. This is a very important result, assuming the estimates reflect actuality. Despite the perception of a worsening in the environment, the pollution problem has probably reached a turning point, which we attribute mainly to a stepping-up of policy efforts in recent years. The growing public awareness of the problem has probably also helped.

**Remarkable successes and growing risks**

How did such cost distortions affect the economy during the reform period? At the simplest level, we may view the distortions as a production subsidy; that is, cost distortions are like producer subsidy equivalent (PSEs). They boost profits from production. This was essentially why China quickly rose as a global manufacturing centre within a few years following its WTO accession. There was no better place to produce than in China – labour was cheap; capital was cheap; land was cheap; energy was cheap; producers further enjoyed tax exemptions; and there was no real charge for pollution.

Low costs also stimulated investment. Most importantly, capital is cheap. According to the estimates cited above, capital was by far the most important item in total cost distortion over the past ten years. This explains why China moved into heavy industries so quickly in the early 21st century even though the government still hoped to create more jobs. As the investment share of GDP was close to 50%, it is easy to understand why China consumes such large volumes of raw materials.
Cost distortions make Chinese products a very competitive in international markets. This was behind the unusual growth in China’s economic openness, with the export share of GDP rising from 8% in 1978 to 35% in 2008, an unusually high level for a large economy. This also explains why China’s international influence is disproportionate to its income level and even its economic size. Close to 70% of Chinese GDP is externally-oriented (exports plus imports), compared with 20-30% for the US and Japan. This also explains why China exports so much capital.

But these cost distortions also created structural problems...

But over the years, these distortions also created a series of structural problems, alongside strong economic growth:

- Low costs inevitably lead to overuse and inefficiency of production inputs. This problem is most clearly highlighted by China’s unusually high energy- and commodity-intensive GDP. That China consumes so many resources at its current income level leads many to worry that the world does not have enough resources to support its future growth.

- Low costs and the associated state interventions also lead to important imbalance problems. While investment and exports are unusually strong, consumption has been weakening relative to the overall economy for the past decade. Massive investment raises the question of potential bubbles in the economy and large external surpluses invite external disputes with economic partners. The private sectors, which are generally discriminated against in state-dominated resource allocation, also face significant hurdles for development.

- The distortions and interventions may be self-sustaining, as over time special interest groups are formed to resist further liberalisation. For instance, SOEs enjoy policy preferences and monopoly profits. They have become strong opponents of market liberalisation. Some analysts worry about state capitalism and interlocking interests between the state and the SOEs.

...putting the sustainability of China’s growth at great risk

If these problems continue, then the sustainability of Chinese economic growth may well be at great risk. As early as 2001, American lawyer Gordon Chang published a bestseller, “The Coming Collapse of China”, in which he predicted disintegration of the Chinese economy following the country’s WTO accession.12

So far, the most credible warnings about China’s economic risks have come from Chinese Premier Wen Jiabao. Shortly after taking office in early 2003, Wen undertook a close diagnosis of China’s growth model. Worried about various risk factors, he concluded that the Chinese growth was “unbalanced, unstable and unsustainable”. The particular problems that Wen pointed out include:13

- Overinvestment;
- Under-consumption;
- High commodity intensity;
- Inefficient resource use;
- Large current account surpluses;
- Income inequality;
- Pollution;
- Corruption among local officials.

13 Wen Jiabao, Government Work Report, Delivered at the National People’s Congress meeting, March 5th, 2006.
In the following years, Wen discussed the policies needed to adjust economic structures and improve growth quality in his Government Work Report, delivered at the annual meeting of the National People’s Congress (NPC) almost every year during his tenure.

Unfortunately, however, the policy actions taken by the Wen government failed to reverse the trend of worsening growth quality. First, when the government took office in 2003, gross capital formation (GCF) accounted for 38% of GDP. In 2010, the investment share was 48.5%. Investment is one of the key drivers of economic growth as it facilitates capital stock accumulation and technological progress. China’s investment rate rose significantly during the reform period, from about 20% in the early years. Accumulation of capital stock was one of the important contributors to China’s rapid economic growth. Too much investment, however, could be problematic for growth outlook. China’s current investment share is already extraordinarily high, even compared with the high-investment economies in East Asia. During the entire post-war period, there were three economies, in addition to China, which once had above-40% investment shares. The first was Singapore in the early 1980s, when its investment share was around 48%. It had to experience a dramatic adjustment in the mid-1980s to lower the investment share to below 40%. The other two economies were Malaysia and Thailand in the mid-1990s when investment in manufacturing, real estate and capital markets experienced extraordinary booms, partly helped by inflows of foreign capital. Only a couple of years later, however, both countries suffered financial crises (see Figure 25).

Second, the current account surplus grew from about 3% of GDP in 2003 to 10.8% in 2007 (see Figure 26). This ratio moderated in the following years due to the global financial crisis but still stood above 5% of GDP in 2010. Large current account surpluses were initially the result of government policies, especially following the Asian financial crisis. The government deliberately promoted a trade surplus and accumulated foreign exchange reserves in order to reduce risks of a balance of payment crisis. In 1997, China had a total of USD160bn in foreign reserves; by mid-2011, reserves totalled USD3.2trn. These reserves are useful for supporting investor confidence and deterring speculators. However, large foreign reserves have their own problems. They imply that, as a relatively low-income and capital-scarce country, China is lending a large amount of capital to other countries. Since a significant portion of China’s foreign reserves is held in forms of US dollar assets, especially US Treasury bonds, China is exposed to dollar risk. If the dollar starts a journey of long-term...
decline, it will be almost impossible for China to preserve the purchasing power of its foreign reserves. Finally, since China now holds about USD1.2trn in Treasury bonds – 26% of total foreign holdings of Treasury bonds – it will be almost impossible for China to liquidate these assets when needed without incurring serious losses.

Third, the Gini coefficient, an economic indicator (ranging from 0-1) measuring income inequality among households or individuals, increased from 0.3 during the early years of economic reform to 0.47 in 2008. Unequal income distribution has a number of adverse consequences. It lowers the general level of consumption, since the wealthier normally have a lower propensity to consume while the poorer do not have enough income for much consumption. Therefore, income inequality seems to be at least one of the factors contributing to under-consumption in China. More importantly, unequal income distribution often leads to social or even political instability. Low-income households often do not benefit equally from economic growth. In fact, the tension between the rich and the poor in Chinese society is already quite high. This is, perhaps, most clearly seen on internet forums, where the wealthy and government officials are targets for criticism.

Unequal income distribution could also have a number of adverse consequences

Why the next five years might be different

The 11th FYP delivered some impressive results, such as continued strong economic growth at the time of GFC. However, it failed to achieve the policy objective of changing the growth model. Of the four rebalancing indicators listed by the Program, only one – reduction of energy intensity of GDP by 20% – was achieved. Even this, according to some analysts, was realised through the government’s mandatory order to suspend production in some areas. In our view, the policy failure of the 11th FYP can be traced back to two problems:

- While the government always highlighted the importance of transforming the development pattern, it was not the most important policy objective. And it was often sacrificed when it ran into conflict with some other policy objectives, such as growth and inflation.

- The government mostly relies on administrative measures to adjust economic structures. Administrative measures are often inaccurate and have a “stop-and-go” nature. More importantly, without changes in the incentive structure, economic agents’ behaviour remained unchanged.

China faces a unique macroeconomic policy trilemma. Since 2003, the Chinese government’s macroeconomic policies have focused on three important objectives: 1) supporting growth, 2) controlling inflation, and 3) adjusting the structure (changing the growth model). However, these objectives often cannot be achieved simultaneously. For instance, the famous Philips Curve dictates that high unemployment (low growth) is usually associated with low inflation, while low unemployment (high growth) is normally related to high inflation. Thus, when the government prioritises growth objectives (such as during the Asian and global financial crises), it would be almost impossible to achieve the objective of structural adjustment simultaneously. The trade-off relationship among the three objectives – supporting growth, controlling inflation and adjusting the structure – is what we describe as the “Wen Trilemma”.

The second cause for lack of progress in structural adjustment is policymakers’ continued reliance on administrative measures rather than economic incentives. During the past years, the government appeared to us to be sincere and serious about the problems of its
development pattern. It also adopted many policy measures to deal with these problems. However, the government had a very clear preference for administrative tools. It rarely touched the incentive structure and, therefore, hardly changed behaviour of economic agents.

Some of the problems that the government has been trying to resolve since the Asian financial crisis include overinvestment and excess capacity. These have almost become fixtures of the Chinese economy. During the first decade of the 21st Century, China’s investment rate climbed by 10 percentage points. At the start of that period, China had excess capacity in the sectors of television sets, refrigerators and air conditioners. And at the end of that period, China had excess capacity in the industries of steel, cement and coal. In between those two points, China also suffered from excess capacities in the areas of building materials, automobiles, aluminium, copper smelting.

The NDRC would publish a list of industries where it saw high risks of overcapacity every year and would then take policy actions to reduce the excess. These certainly confirm the persistence of the excess capacity problem in China. However, it is puzzling that, after decades of market-oriented reforms, the government is still busy telling businesses where to and where not to invest.

Unfortunately, the government might not be the best organisation to judge likely excess capacity in the economy. Peking University’s Lu Feng and his research team pulled together all the policy documents issued by the NDRC and other departments dealing with the excess capacity problems between 2002 and 2009. They then compared official predictions of total demand and capacity with actual outcomes years later (see Figure 27). A general conclusion was that the government was often wildly inaccurate in such judgments.

We believe that the next five years are likely to be different. The main reason is that we have already started to see changes in the factor markets. For instance, the government has already begun to adjust resource prices. Prices of oil and electricity are gradually being adjusted according to market conditions, although the magnitudes still appeared to be insufficient. But this is likely to continue.

One very significant change that occurred during the past years is the transition of the labour market from excess supply to excess demand, the so-called “Lewis turning point” in developing economies. It is still a highly debatable subject among economists and policymakers whether China has passed the Lewis turning point. Opponents often point to 250 million farmers in the official statistics. But some labour economists argue that the actual number of farmers left in the countryside is far less than the official statistics suggest.
and that many remaining are either children or relatively aged people. Stanford University’s Scott Rozzel, a regular surveyor of rural China, once argued there was no surplus labour left in the villages. Regardless, it is clear that businesses already find it increasingly difficult to hire new employees. And labour costs have been on the rise, at around 15-20%, for years, only briefly disrupted by the global financial crisis (see Figure 28). For the first time, coastal and inland cities competed fiercely for migrant workers after the Chinese New Year in 2011.

Rapid wage increases cause problems at both the macro and micro levels. At the macro level, they create new inflationary pressures and threaten macroeconomic stability. At the micro level, firms are forced to absorb higher costs, affecting their competitiveness. But in general, this is a very positive development for the rebalancing of the Chinese economy:

- Higher wages increase household income and, therefore, should promote consumption;
- If consumption does increase as a result of faster wage growth, it should eventually help reduce the economy’s reliance on investment and exports;
- Higher wages actually contribute to more equal income distribution as wage earners are often in low-income households;
- Cost increases push industrial upgrading, moving from low to high value-added sectors; and
- They (cost increases) also facilitate more balanced regional development, as factories move from coastal to inland provinces.

The next most fundamental change is capital market reform, specifically interest rate and exchange rate liberalisation. The 12th FYP explicitly incorporates introduction of market-based interest rates. The government will probably also make significant moves on the exchange rate and the capital account. These reforms can bring profound changes to the Chinese economy. Liberalised interest rates, for instance, would likely increase household income and, at the same time, reduce incentive for investment. There are still some uncertainties about the pace of these reforms, but the direction and determination appear to be firm and clear.

Figure 28: Labour costs on the rise

![Figure 28: Labour costs on the rise](image)

Source: CEIC, Barclays Capital

Figure 29: Approving rates of the government

![Figure 29: Approving rates of the government](image)

Pessimists would probably point to urgently needed political reforms. We agree. But we are not certain China is going to move in that direction any time soon. However, it is important to point out that, while dissatisfaction in the Chinese society appears to be widespread and serious, the government’s approval rates are not terribly low, according to surveys by Harvard University’s Tony Saich (see Figure 29). More importantly, the central government is trying to deemphasise the importance of GDP growth in assessment of local officials’ performance. Even without significant success in that area, the major liberalisation of the factor markets would likely reduce the power of the government in economic activities.

The great rebalancing

With the anticipated reforms during the 12th FYP period, we expect the Chinese economy to experience the next transition, from economic miracle to normal development. In this transition process, we expect a number of new economic trends to emerge, which we intend to explore in more detail in future reports. All of these are likely to have important implications for policymakers and investors, both in China and abroad.

- **Moderation in growth.** The expected and broad-based increases in factor costs will reduce the implicit subsidies enjoyed by producers, investors and exporters. This could slow the pace of economic growth, possibly from the average of 10.4% during the first decade of the 21st century to around 6-8% in the second decade. But slower growth should be higher quality growth and, therefore, more sustainable growth.

- **Higher inflation pressures.** Higher production costs are likely to lead to higher product prices, although productivity gains may partially offset that effect. We think the average CPI rate could accelerate from 2% during the past decade to 5-6% in the coming decade, which is in the normal range for many emerging market economies. This may also eventually translate into upward pressure in global inflation if China continues to dominate the world consumer goods market.

- **Improvements in income distribution.** Rising factor prices should be favourable for household income growth, especially in the form of labour and deposit incomes. In other words, China may embrace the so-called Kuznetz turning point – when income distribution transitions from worsening to improving during the process of economic development. This would have important implications for social and economic stability and the rebalancing of the economy.

- **Acceleration of industrial upgrading.** Rapidly rising production costs could quickly erode the competitiveness of many Chinese industries. This should force Chinese industries to climb the industrial ladder, moving from low value-added manufacturing activities into high value-added industries and services. While such a development is critical for China’s growth sustainability, including avoiding the middle-income trap, it will likely create significant stress on both entrepreneurs and investors (see Figure 30).

- **Rebalancing of the economy.** China will likely see the beginning of a great economic rebalancing, as higher household income stimulates consumption, higher capital costs calm investment and a stronger currency helps to lower external sector surpluses. While rebalancing might be a gradual process, the investment-led growth model should come to an end relatively sooner, given the unusually high investment ratio. External surpluses, however, will likely persist, but probably as a lower proportion of GDP.

- **Slowdown in commodity demand.** Given the expected continuation of industrialisation and urbanisation, China’s commodity demand should remain strong. But its pace should
slow soon, as GDP growth moderates and the commodity intensity of the economy declines.

- **Liberalisation of the capital account.** We expect China to achieve basic convertibility of the capital account during the current FYP period, although restrictions on cross-border portfolio flows may remain. This probably means the implementation of floating exchange rate regime at the same time. We think the composition of capital outflows may also become more dominated by portfolio and direct investment. We would need to monitor financial risks more closely following liberalisation. But even if a financial crisis occurred, we would expect it to disrupt China’s growth trajectory only briefly.

- **More dramatic economic cycles.** China’s economic cycles have been smoothed by government policies in the past decades. But such smoothing is likely to be increasingly more difficult to achieve as factor markets experience significant liberalisation. Therefore, China will probably experience more normal economic cycles like those in other emerging market economies. And given China’s increasing weight in the world economy, a major downturn in the Chinese economy might be the case of the next regional, if not global, recession.

**Figure 30: The seven strategic new industries in the 12th FYP**

<table>
<thead>
<tr>
<th>Strategic Emerging Industries – 12th Five-Year Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biotechnology</td>
</tr>
<tr>
<td>New energy</td>
</tr>
<tr>
<td>High-end equipment manufacturing</td>
</tr>
<tr>
<td>Energy conservation &amp; environmental protection</td>
</tr>
<tr>
<td>Clean energy vehicles</td>
</tr>
<tr>
<td>New materials</td>
</tr>
<tr>
<td>Next generation information technology</td>
</tr>
</tbody>
</table>

Source: Xinhua, Barclays Capital

Government aims to increase these industries’ value-added as percentage of GDP to 8% by 2015 and 15% by 2020.
Analyst Certification(s)

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