

Slowdown in China: what risks for the world economy?

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Analysts are suggesting more and more frequently that there is a risk that imbalances in the Chinese economy will result in a crisis. The Chinese economy, as measured in the national accounts, has unquestionably slowed considerably since the beginning of 2012. Growth settled at around 7.7% in 2012 and 2013, against 10% per year on average between 1999 and 2011. Although this slowdown may have been magnified by short-term economic factors (backlash from stimulus plans, monetary tightening, crisis in the Eurozone), it is mainly structural. Demographic changes, natural and ecological constraints, especially regarding hydrocarbon resources, and above all the loss of momentum in the recovery process all lend weight to the idea that growth in the longer term will be less than 10%. On the one hand, cost competitiveness seems to be eroded and investment in capital goods is slowing markedly. On the other hand, China is approaching the level of GDP per capita at which countries in catch-up mode generally start to slow. The experiences of other Asian countries (especially Singapore and South Korea) which have gone through an intense catch-up period show similarities, especially in the turning-point of the construction sector, which always happens just at the moment when the economy slows.

As is only logical, Chinese imports, and hence the country's contribution to world trade overall, have slowed substantially. The effect of the slowdown in imports was accentuated by the drop in the rate of trade openness resulting from the reduction in the proportion of processing trade in the economy. However, the upward trend of imports for domestic demand does not seem to have been affected. The consequences for France remain limited: the slowdown by around 3 points per year in domestic demand from China converts to a loss of 0.1 points of annual growth in French GDP. In fact, the restabilising of the Chinese economy has resulted in a significant improvement in the balance of trade with China since 2008, especially in services.

In the medium term, two factors increase the risk that the Chinese slowdown will be magnified: first the construction sector, which had boosted the country's activity since 2009, clearly seems to be suffering a reversal; second, outstanding credit has increased considerably since 2009 with rapid growth in non-bank loans. However, there is very little risk that these factors will pull China down into a real economic crisis, especially since with the scale of currency reserves the country has accumulated, it has the means to keep its financial system afloat. However, if credit dries up this could amplify the slowdown in current activity which, even without financial contamination by the rest of the world, could have a marked effect on world trade. ■

Slowdown in China: what risks for the world economy?

Marked slowdown in activity in China for the last 2 years

After a decade of growth at an average annual rate of over 10% from 1999 to 2011, activity, although still very dynamic, did slow markedly from 2012 onwards: Chinese GDP grew 7.7% in 2012 and 2013, which is the lowest growth recorded for the last 15 years, apart from 2009, the year of the great world recession (see [Graph 1](#)). Although the slowdown concerns all sectors of the economy, it is particularly pronounced in industry. Nominal value added in industry increased 5% in 2012 and 2013, a similar increase to that observed in 2009 (world recession) and in 1998 during the Asian financial crisis. The reason for this slowdown can be found in short-term factors (less demand from the Eurozone, monetary tightening, backlash from stimulus plans) but it does also have some structural qualities.

An unfavourable short-term context has heightened this slowdown

Chinese growth suffered as recovery plans ran out of steam...

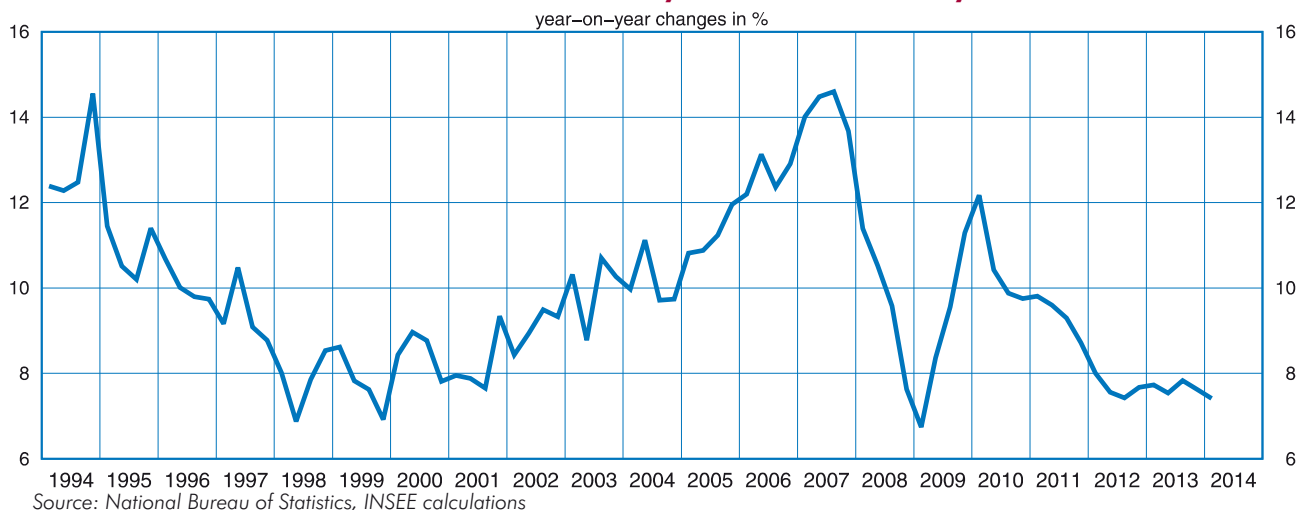
... along with the Eurozone recession in 2011 and mounting tensions with Japan...

Some short-term economic factors may account for this slowdown. At the end of 2008, the massive stimulus plan adopted by the authorities (4,000 billion yuan, or approx. 13% of GDP in 2008) triggered a rapid upswing in activity, especially in construction. Expenditure was planned two years ahead until the end of 2010. Activity then suffered in turn when funds linked with this stimulus plan ran out.

From mid-2011, recovery in the European Union, China's primary trading partner (20% of its exports) ground to a halt. The sovereign debt crisis and the fiscal consolidation measures adopted by the countries of southern Europe resulted in a levelling off of European imports, especially from China. Chinese exports to the EU (in current dollars) fell by 6.2% in 2012 and increased by barely 1.3% in 2013 compared with an average annual increase of 22.5% between 2000 and 2011.

In addition, from mid-2012, diplomatic tensions with Japan over the Senkaku islands (Diaoyu in Chinese) caused a slump in trade between the two countries. Chinese exports to Japan increased by only 2.2% in 2012 and dropped 0.9% in 2013. At present, this dispute seems to have resulted in a longstanding drop of about 10% in bilateral trade between the two countries.

1 - Marked slowdown in activity in China for the last 2 years



Slowdown in China: what risks for the world economy?

... and monetary tightening from the beginning of 2011

Faced with a vigorous recovery and in particular with soaring commodities prices and assets from 2010, the Chinese monetary authorities gradually tightened their monetary policy, like most central banks in the emerging countries. From the beginning of 2010 until mid-2011, the Chinese central bank increased its base interest rate from 5.3% to 6.6% and the minimum reserve requirement ratio imposed on major banks from 15.5% to 21.5%. This policy contributed to slowing activity, especially in the property market.

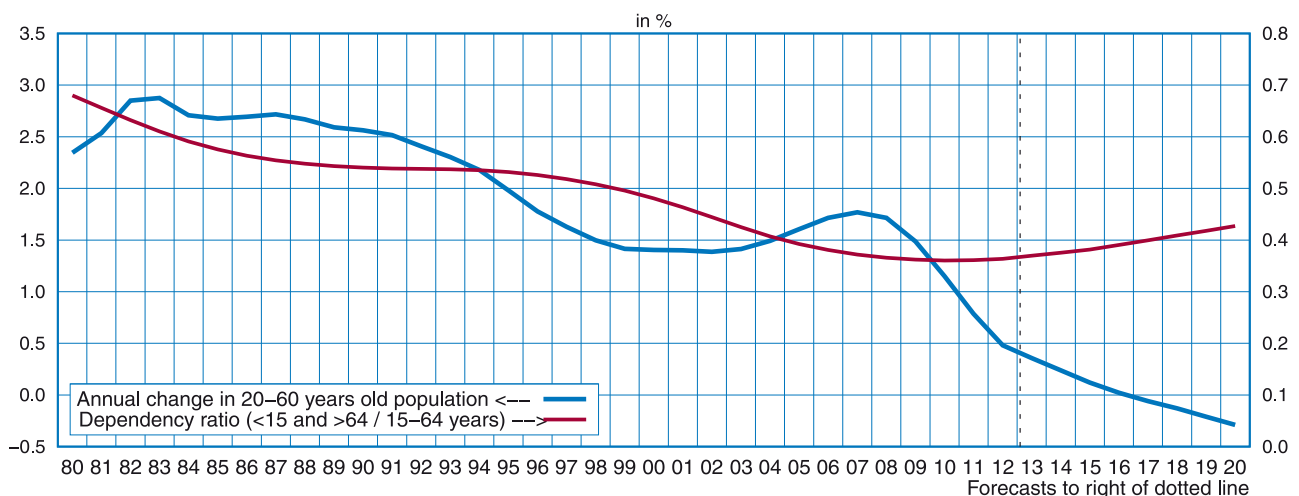
In addition to short-term uncertainties, the Chinese economy is undergoing a structural slowdown

As well as these short-term economic aspects, which certainly had an effect in 2012 and 2013, Chinese activity in the future will probably not return to the rate of progress it enjoyed from 1999 to 2011. The reason for such strong growth in the 2000s was above all a technological and capitalist catch-up phenomenon. Although this has not halted, several indices show that it is slowing: for example, capital seems to be moving into property, which in turn is leading to a slowdown in productivity gains; cost competitiveness has also declined as a result of the appreciation of the yuan and wage rises. In addition, the Chinese economy is ageing rapidly with the working age population even set to fall from 2017. Lastly, the Chinese economy is struggling with the physical impossibility of increasing its consumption of raw materials when its pollution emissions will then increase at the same rate.

The aging population is the major shock of the 2010 decade

China's one-child policy, which came into effect in 1979, resulted in a demographic «golden age» from 1980 to 2009 as in this period the dependency ratio was halved (see [Graph 2](#)). However, as the population ages, this ratio has once again started to increase since 2011. The 20 to 60-year-old age bracket which increased by an average of 1.5% per year in the 2000s, increased by only 0.4% in 2012 and is likely to stabilise by 2015 before dropping between 2015 and 2020, according to projections by the World Bank. The working age population is no longer increasing, which accounts for half of the slowdown in activity observed in 2012 and 2013.

2 - Chinese demography



Source: World Bank

Slowdown in China: what risks for the world economy?

In view of past experiences of convergence, the recovery appears to be running out of steam

The decade from 2000 was marked by a very dynamic recovery in the Chinese economy, a recovery that was both technological, with sustained productivity gains, and capitalist, with a very high investment rate, especially in capital goods. In 15 years, GDP per capita in China increased four-fold (from about \$2,500 * in 1998 to more than \$10,000 * in 2013). This convergence phase was both longer and more intense than similar phases observed in other Asian countries (Japan in the 1970s, Korea in the 1980s, *see Box 1*).

Based on observations of growth in 128 countries since 1950, Eichengreen, Park and Shin (2011) estimate that the slowdown in economies in a catch-up phase (which they put at about 3.5 annual growth points on average) occurs when GDP per capita reaches about \$17,000 *, a level that China will probably not reach until 2018. However, Melkin and Spiegel (2012) apply the same methodology to a scope limited only to countries in Asia and conclude that the threshold at which the regime changes is lower in this region of the world, at around \$10,000 *, a level that China exceeded in 2013. And more particularly, by using regional data they show that the slowdown has already taken hold in the richest regions (Beijing and Shanghai) and thus forecast a fairly gradual slowdown in global growth.

As well as what has been learned from previous experiences in neighbouring countries, several indices seem to suggest that the dynamics of China's recovery are running down: first, capital has been skewed for the last 3 years in favour of property assets while investment in capital goods is merely marking time; second, cost competitiveness is being eroded with the increase in wages.

* 2005 dollars in purchasing power parity

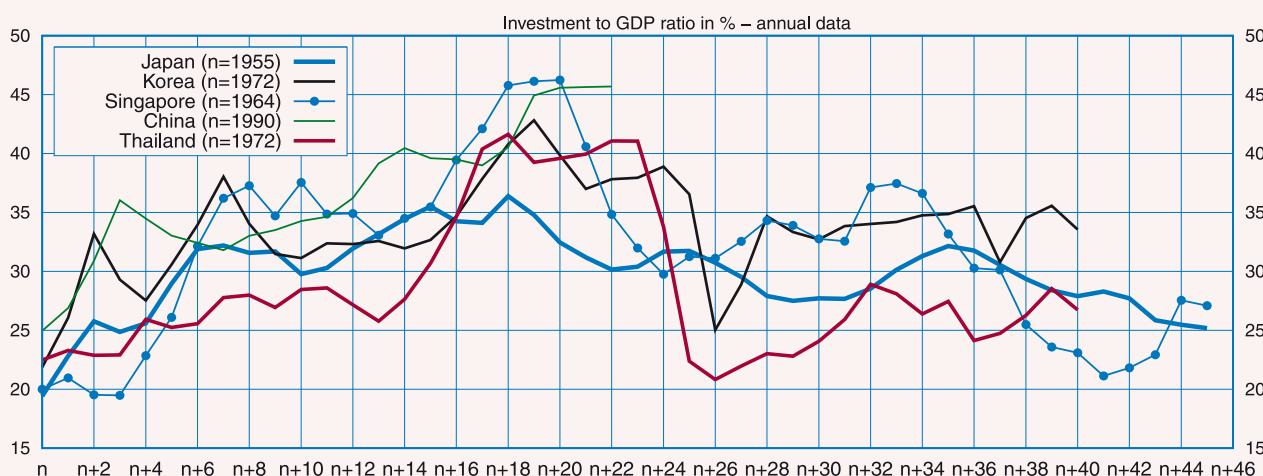
Box 1 - The catch-up cycle in China compared with that of its neighbours

Strong growth for the last 30 years

Chinese GDP grew by 10% per year on average between 1980 and 2010. This strong economic growth over a long period (30 years) is indeed exceptional both in its scale and duration (Aizenman and Spiegel (2010) maintain that rapid catch-up phases do not generally last longer than 10 years), and it can be

compared with that observed in other Asian countries such as Korea between 1963 and 1992 (8.4%), Singapore between 1966 and 1995 (9.1%), Thailand between 1966 and 1995 (7.7%), and even Japan between 1956 and 1995 (6.7%). As described by Eichengreen, Park and Shin (2011), once this recovery period was over, growth in these countries slowed by about 3.5 percentage points per year.

1 - Investment rate from take-off point in several Asian countries



How to read this chart: for each country, the year in brackets corresponds to the first point on the graph
Sources : National Statistical Institutes

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Investment rate is slightly higher in China

An important feature of the Chinese recovery is its very high investment rate, of around 46% of GDP. This «imbalance» in domestic demand in China, which is to the detriment of consumption, and reflects the overabundance of savings by households which, when combined with restrictions on the movement of capital, facilitates the funding of investment projects that are relatively weak in production. Nevertheless, the existence of overinvestment has been debated: while Bai, Hsieh and Qian (2006) believe that the return on capital is comparable with that in other countries from business data, Ding, Guariglia and Knight (2010) conclude that there is overinvestment. Similarly, by comparing China's trajectory with that of other Asian countries, Lee, Syed and Xueyan (2012) consider that overinvestment is around 10 GDP points.

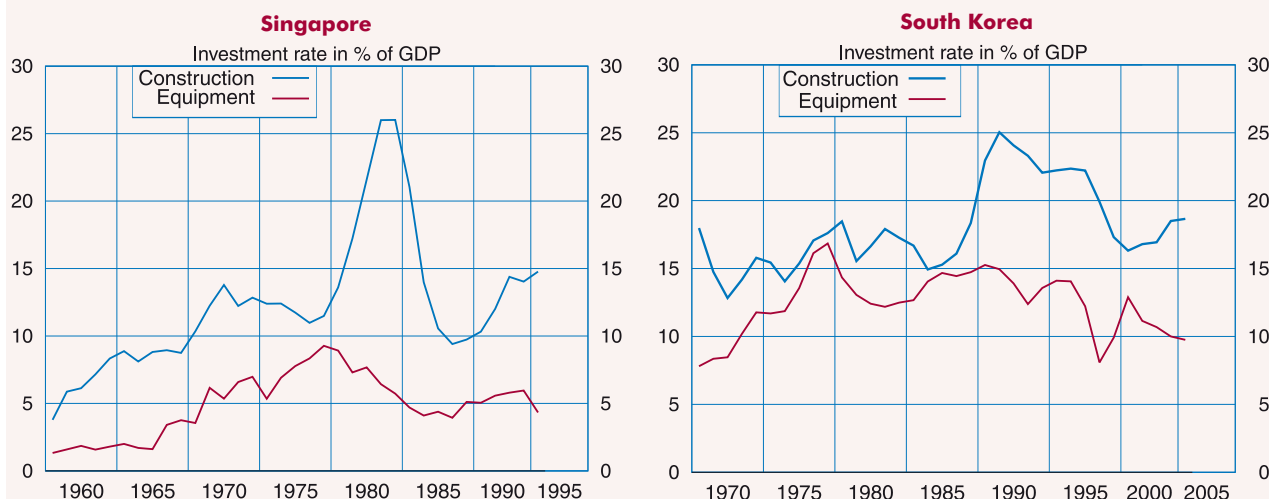
The proportion of investment in China has reached a considerably higher level than that recorded in Japan during the catch-up phase, and which is comparable to levels achieved before the turning point in Thailand, Korea or Singapore (see *Graph 1*). In each of these examples, the investment rate held this level for less than 5 years before falling back, fairly sharply, and settling 5 to 10 points lower. During the period when

the investment rate was declining, activity was significantly affected, falling back in 1974 in Japan, in Thailand and Korea in 1998 and in Singapore in 1985.

Skew towards construction foreshadowed the change in regime in South Korea and Singapore

At the beginning of the 1980s in Singapore and at the beginning of the 1990s in Korea, investment in construction was out of control while investment in capital goods stagnated against a backdrop of accelerated activity (see *Graphs 2a and 2b*). In both cases, this rapid rise in the investment rate in construction preceded the beginning of the slowdown identified in both countries by Eichengreen et al. (2011). The sharp rise recorded in construction investment in China since 2009 may therefore represent a prelude to a phase of pronounced slowdown and continued productivity. ■

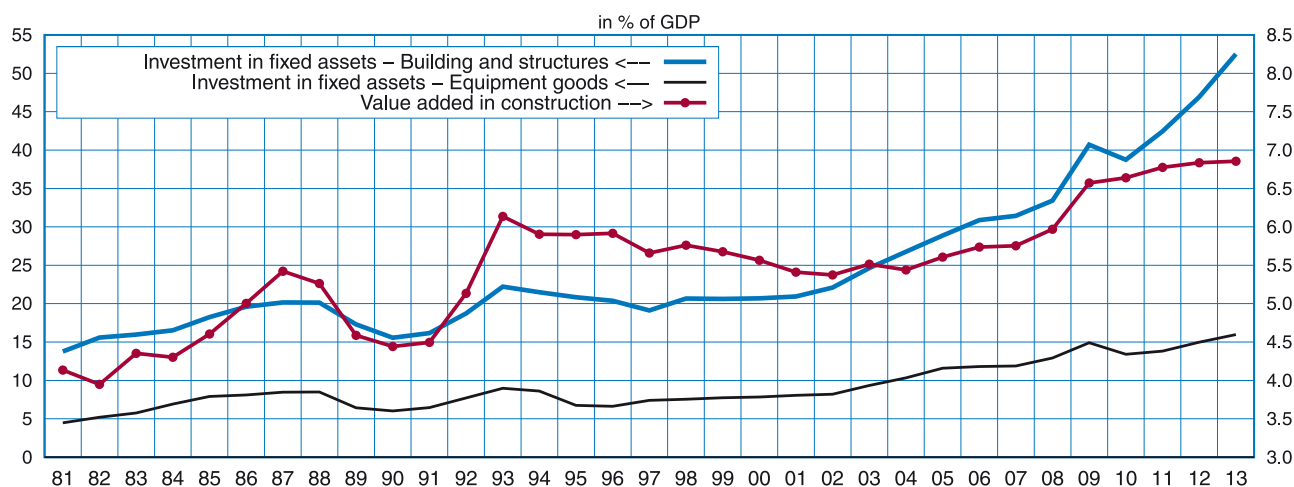
2a et 2b : Investment in construction and in capital goods in Singapore in South Korea



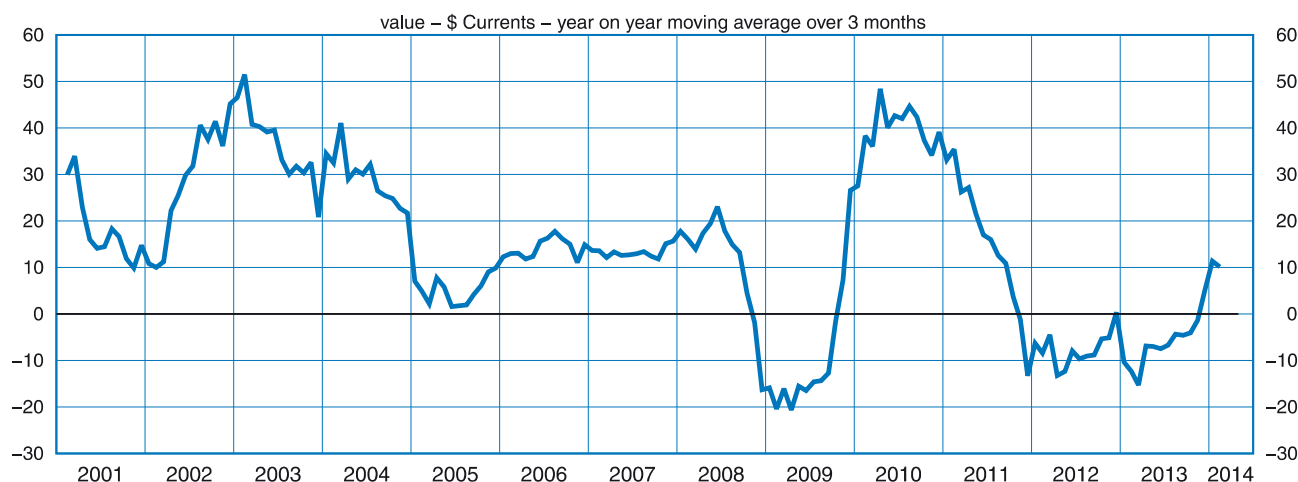
Sources: National Statistical Institutes

Slowdown in China: what risks for the world economy?

3 - Investment in China



4 - Imports of machine tools



5 - Annual average growth rate of wage per capita in China



Slowdown in China: what risks for the world economy?

Capital skewed towards property assets

Yet even when demographic factors are taken into account, fewer productivity gains have been observed since 2007. This slowdown is attributable in part to the distortion of the structure of capital in favour of property assets, which are less productive than capital goods. While acquisitions of property assets and capital goods evolved at similar rates in 1981 and 2007, the acquisition of property has increased much more quickly since then (see Graph 3). According to customs data, this relatively sluggish investment in capital goods is confirmed, particularly for machine tools (see Graph 4). Overall, the share of industry in value added, which increased at a regular rate until 2006, fell back between 2007 and 2013, from 42% to 37%. Conversely, the share of construction increased over the period.

Cost competitiveness is deteriorating

This slowdown in productivity in a context of sustained wage rises (see Graph 5), especially in the manufacturing industry, has damaged cost competitiveness. These wage rises are surprising as they were implemented even though the processes of job reallocation between sectors, especially from agriculture to industry, did not appear to be complete: the proportion of the rural population continued to decline rapidly in 2013 and according to Das and N'Diaye (2013), the «Lewis turning point», i.e. the moment when the supply of labour from the agricultural sector runs out, would not be reached until 2020 or 2025. Be that as it may, since 2008, the real effective exchange rate of the Chinese yuan has appreciated by almost 30%. At present, the export performance of the Chinese economy has been only slightly affected by this phenomenon: market shares have certainly experienced a slowdown, especially in the United States and Europe, but they continue to gain ground at world level. Indeed, export prices remain stable as wage rises have been passed on in their entirety through the drop in profit margins: while the share of the payroll in value added in industry was stable at around 38% between 2000 and 2008, it climbed to 48% in 2012.

The rate of increase in energy consumption is not sustainable

Growth in China has resulted in an almost equivalent rise in the consumption of commodities. On average, oil consumption has increased by 7% per year for the last 14 years and that of coal by 6% per year. China's share in world consumption has therefore doubled over this period to reach 12% for oil and 50% for coal. Forecasts for world production indicate that a rise on this scale is not sustainable in the future given China's position in global consumption. Pollution too has increased tremendously over this period, with China the largest source of greenhouse gas emissions (27% of total worldwide) in 2012. Air quality too has seriously deteriorated in Chinese cities¹: according to the United States Embassy, more than 21% of the hourly readings taken in 2013 in Beijing exceeded the threshold of 150 µg/m³ of fine particles (PM 2.5).

(1) The WHO recommends that levels should not exceed 10 µg/m³ on average over the year and 25 µg/m³ on average over 24 hours.

Slowdown in China: what risks for the world economy?

The consequences for the global economy of the slowdown in China are mainly coming through trade channels

Chinese imports have slowed

Imports have slowed, especially from the European Union and Japan

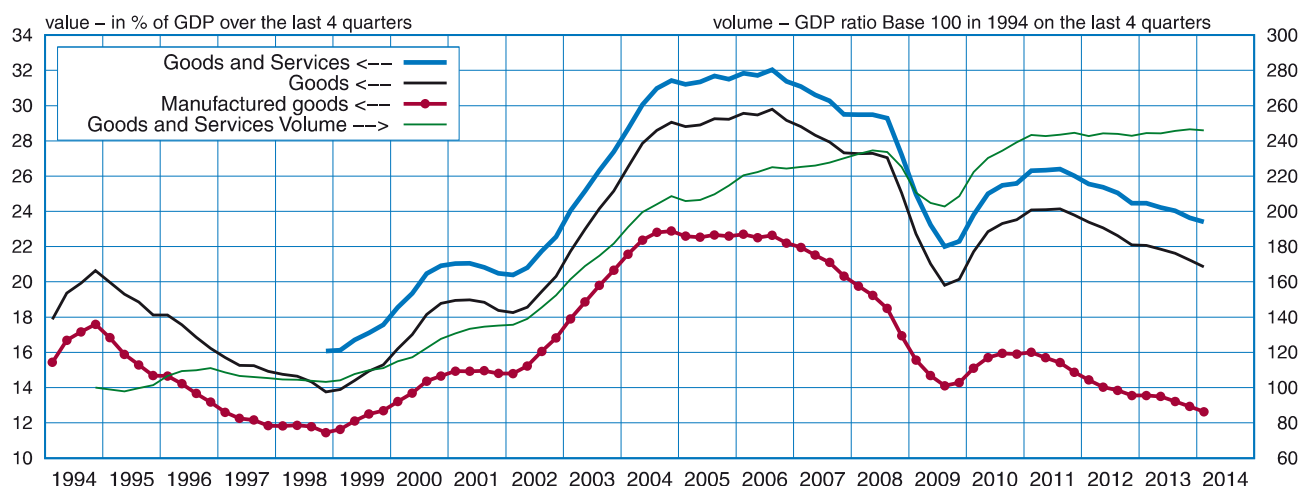
For France, the direct effect is limited

The slowdown in activity in China has resulted in a curbing of final demand and imports have slowed significantly. The increase in imports of goods in dollars was 4.3% in 2012 and 7.3% in 2013 against an average increase of 23% per year between 1998 and 2008. Of China's main economic partners, imports from the European Union and Japan have suffered most as a result of this slowdown. The territorial dispute over the Senkaku/Diaoyu islands resulted in a very large drop in imports from Japan (-6.9% in 2012 and -9.4% in 2013). Imports from the European Union were up only very slightly (+2.2% in 2012 and +3.4% in 2013), due to the reduction in imports of machinery (see Graph 4).

Imports from France slowed first to +9.4% in 2012 and in 2013 they even dropped by 5.4% against an average annual increase of 16% between 1998 and 2011². However, the direct effect was limited, as exports to China account for only 3.2% of French exports overall. When the knock-on effects of the various Asian stimulus plans in 2009 are taken into account, i.e. the indirect effects of the shock on domestic demand in the Asian countries excluding Japan, Lalanne and Mauro (2010), using elasticities from "Mesange" Model, conclude that a 10% rise in domestic demand in Asia, excluding Japan, caused a 0.7-point increase in French GDP (0.3 points as a direct effect). By estimating that China represents about half of domestic demand in Asia excluding Japan, these results suggest that the slowdown in growth in China of around 3 points «costs» about 0.1 points of annual growth in France. The impact is broadly comparable for Germany, the United States and Canada. In contrast, Australia and Japan are about three times more affected than France by a Chinese slowdown.

(2) French customs estimate that exports to China shrank by -0.4% in 2012 and increased by 5.3% in 2013. The average increase from 1998 to 2011 is exactly the same.

6 - Share of imports in the Chinese GDP



Sources : National Bureau of Statistics, INSEE calculations

Slowdown in China: what risks for the world economy?

Deceptive drop in the degree of openness of the economy

Slowdown is magnified as the process of openness has been checked...

... linked with the rebalancing of the Chinese economic model

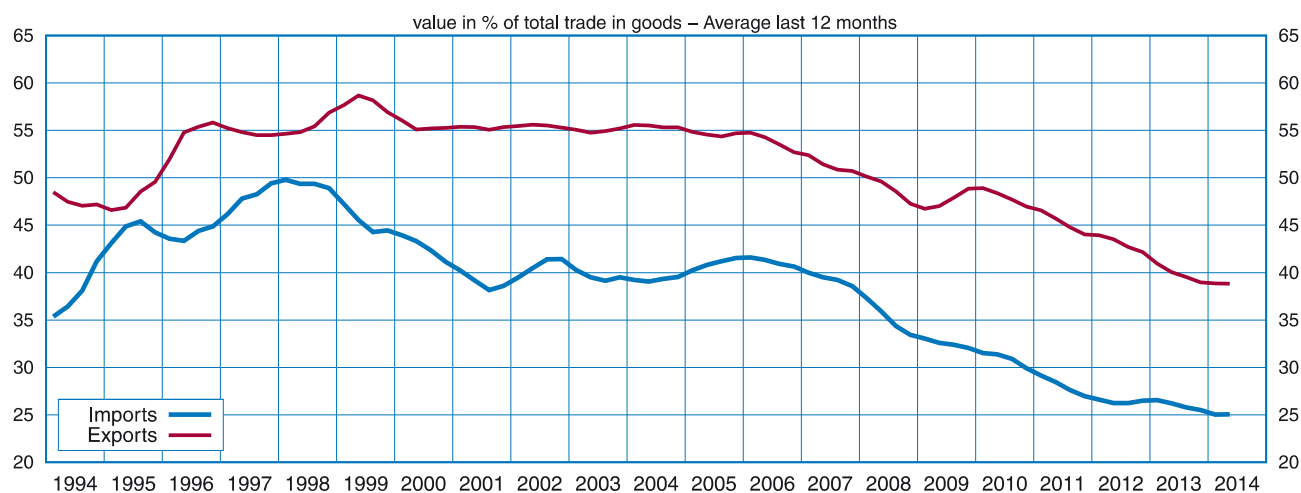
The effect of the present slowdown on imports has been magnified because the process of opening up the Chinese economy has halted. When expressed in value terms, imports of goods and services represented only 24% of Chinese GDP in 2013 against almost 32% in 2005 (see [Graph 6](#)). This drop is much more marked for imports of manufactured products (goods excluding raw materials and food) of which the share has fallen back from 23% to 13%, a similar level to that of 1999, before the country became a member of the WTO. The scale of this drop can be explained to a large extent by the appreciation of the yuan since 2005 (25% against the dollar from 2005 to 2013), but, even in volume, the degree of openness, calculated as the ratio of imports to GDP, has stagnated since 2010 to reach a level that is barely higher than the pre-crisis level,³ whereas it had increased steadily between 1998 and 2008.

The decline in the degree of Chinese openness does not necessarily mean that the import content of domestic demand is decreasing. The «bazaar economy» model, to use the expression coined by the director-general of the German institute for economic research, IFO (Sinn, 2006), reached its peak in the middle of the 2000s in China. The import content of exports increased on a regular basis from 1997 culminating at around 45% in 2005 (see [Koopman, Wang and Wei \(2008\)](#)) while that of investment reached 22% and household consumption 12%. Indeed, customs duties are reduced for the processing trade, i.e. for imported components which are assembled in China, then re-exported. From 2005, the share of processing trade imports and exports in total trade nevertheless started to decline (see [Graph 7](#)). In 2013, only 22.5% of imports were of the processing type compared with 37.4% in 2004. The decline in the degree of openness can therefore be interpreted in part as a drop in the import content of exports, whereas the import content of domestic demand is increasing slowly. This was the result obtained by Roucher and Sicsic (2013), from the latest Chinese input-output tables available at that time⁴ (2007): between 2005 and 2007, the import content of consumption and investment remained stable while the import content of exports had already plummeted by 6 points.

(3) There are no national accounts by volume for China. The calculation of imports and exports by volume is from Roucher and Sicsic (2013) and should be interpreted with caution. Nevertheless, these values are consistent with estimates given by the IMF and the OECD.

(4) In February 2014, the National Bureau of Statistics of China published new tables for 2010.

7 - Share of processing trade in the Chinese trade



Source : National Bureau of Statistics

Slowdown in China: what risks for the world economy?

Modelling confirms that there has been no interruption in the trend towards openness underlying the Chinese economy

On the basis of this observation, an import model was constructed using an error-correction equation as a function of domestic demand by volume⁵ (calculated according to the balance between changes in GDP on the one hand and changes in imports and exports on the other) and processing trade exports.⁶ A trend towards openness of the economy was added. The model was estimated from Q1 1997 to Q4 2007 in one stage, using the procedure suggested by Ericsson and MacKinnon (2002) for small samples. The results were as follows:

$$\Delta M_t = -0,13 - 0,50(M_{t-1} - 0,63X_{t-1}^{proc} - 0,37DI_{t-1} - 0,8Trend_{t-1}) + 0,51\Delta X_t$$

(-3,8) (3,2)

* Ericsson MacKinnon value test at 5%: 3.7

where, expressed in logarithms:

M = total imports

X = total exports

Xproc = processing trade exports

DI = domestic demand

Trend is a linear trend

The sum of the coefficients of processing trade exports and domestic demand in the long term equation is limited to 1. Exports excluding processing trade were taken out of the equation because the estimated coefficient would have been too close to zero.

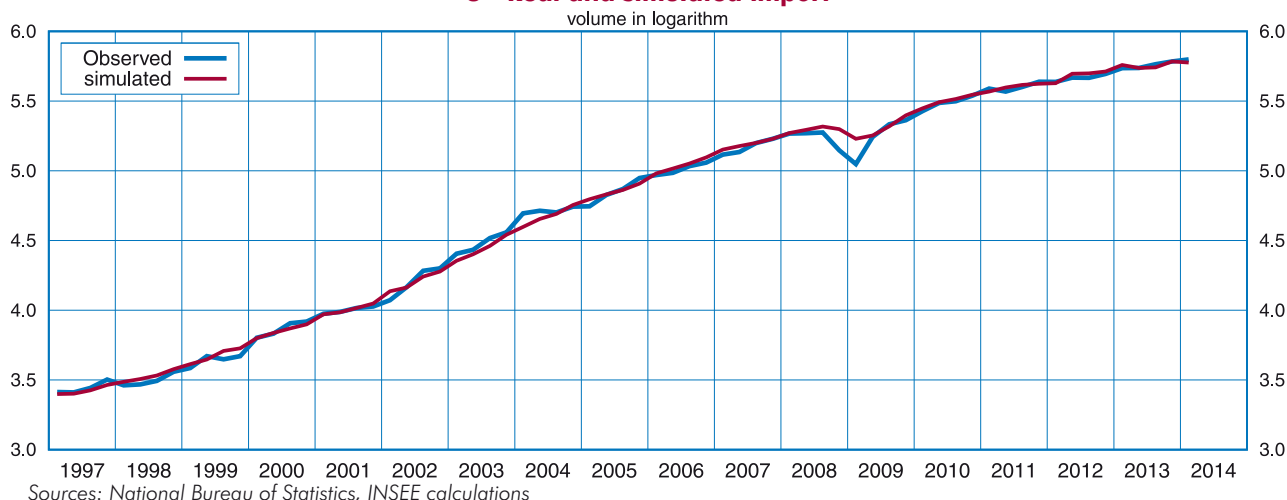
The estimated openness trend is in the order of 0.8 points per quarter, which is scarcely more than the values obtained by Borey and Quille (2013) for European economies. The weakness of this trend may be surprising, but it nevertheless proves that the rise in the degree of openness recorded for the estimate period is almost entirely attributable to processing trade exports. Thus since 2007, imports simulated⁷ using this equation are not based on observed imports (see Graph 8) and they take account of the slowdown in Chinese imports not by a break in the trend towards openness in domestic demand (which does exist but which remains weak) but by the gradual decrease in assembly activity in the Chinese economy.

(5) Quarterly volume series are constructed using the method put forward by Roucher and Sicsic (2013).

(6) There are no processing trade series by volume. The share of processing trade exports in the total by value is used to estimate processing trade exports by volume.

(7) This is a dynamic simulation: at each period, the equation is brought into play by allocating imports simulated by the equation to the preceding quarters and not to observed imports.

8 - Real and simulated import



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The estimated long-term elasticity of imports to domestic demand is low (in the order of 0.4 points), with the result that, if we assume that the weakening trend in processing trade continues, China's contribution to any variation in world trade in the years to come would be substantially less than the average in the 2000s.

At the same time, the deterioration in cost competitiveness is due to services and the contraction in processing trade

The trade surplus fell...

... affected by stimulus plans and the change in the economic model...

... and also because of a deterioration in the balance of services.

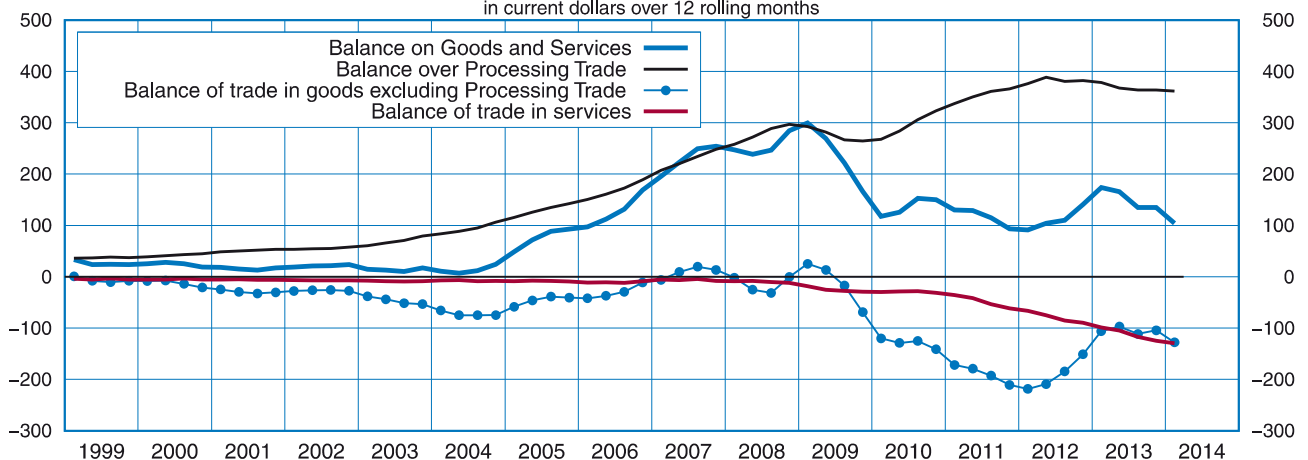
The slowdown in imports has not produced an improvement in China's external balance. After reaching a peak at around \$300 billion in 2008, trade surpluses in goods and services have hovered around \$120 billion per year since 2010 (see Graph 9).

An item by item analysis identifies trends in how competitiveness has changed in China. The trade balance, excluding processing trade, was balanced overall until 2009, but deteriorated dramatically when stimulus plans were put in place and has remained very much in deficit since then. The improvement observed in 2012 and 2013 was linked mainly with the boom in exports to Hong Kong but which did not appear to be a real trade flow (see Box 2). After correcting for this effect, the deficit is around \$200 billion. The trade balance for processing trade improved constantly until mid-2011 (apart from the few quarters of the crisis). Since then it has fallen back, providing confirmation of the idea put forward by Masson, Tianhe and Urban (2013) of a very gradual shifting of low value-added industries (toys, textiles) into other Asian countries (Indonesia, Vietnam, etc.).

Finally, the balance of trade in services has deteriorated substantially over the last two years, mainly due to activities related to transport and tourism. Across 2013, the deficit settled at \$125 billion compared with \$30 billion in 2009. France recorded a surplus of \$3.9 billion in trade in services with China in 2013 compared with \$0.8 billion in 2009.

9 - Foreign trade balance

in current dollars over 12 rolling months



Source: National Bureau of Statistics

Slowdown in China: what risks for the world economy?

Box 2 - Can Chinese customs data be relied upon?

Data are reliable overall...

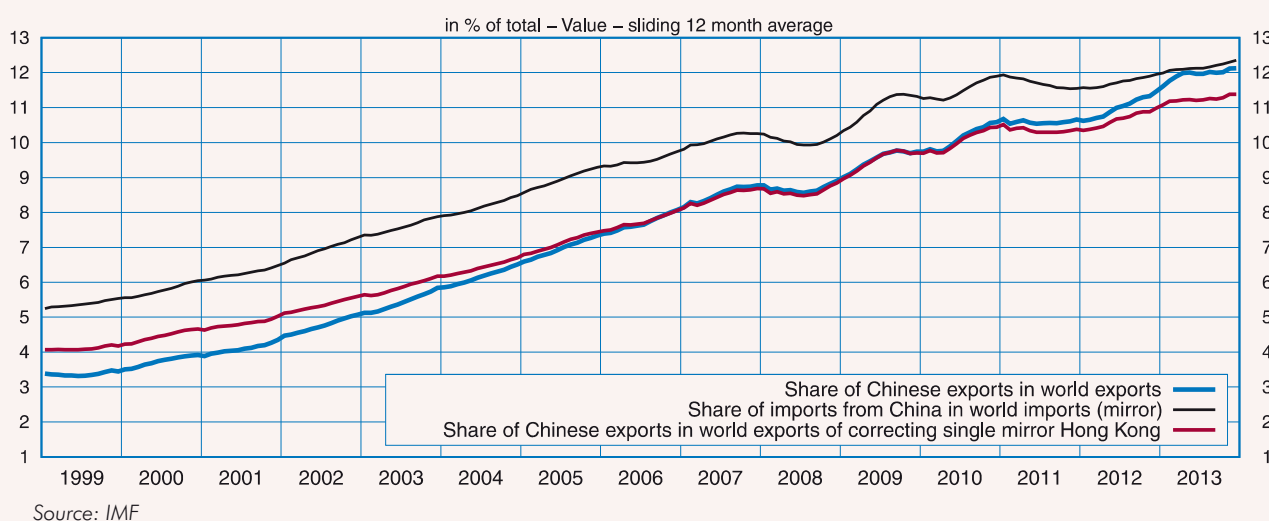
The reliability of data produced by the Chinese statistics system is regularly called into question. Studies generally conclude that on the whole trends are shown correctly (see Holz (2005, 2013), Chow (2006), Klein and Ozmuur (2002)) although the decentralised data collection system and the lack of separation between data collection and the local authorities accounts for a certain number of inconsistencies (see Koch-Weser (2013), Koech and Wang (2012)). Of all the data produced, the external trade in goods data appear to be most robust as they were collected directly by the customs authorities that levy the duties. In addition, it is easy to verify their quality as these data can be compared with the «mirror» trade flows recorded by the customs authorities of trading partners. For most of China's major economic partner zones (Australia, Japan, Korea, Taiwan, European Union), variations and levels are similar, proof that these data are robust. The correlation is less marked in bilateral trade with the United States and it is very much less so concerning trade with Hong Kong, especially for the recent period.

... except in bilateral trade with Hong Kong

Trade with Hong Kong appears very differently according to Hong Kong customs and Chinese customs, for whom it is much more dynamic. In particular, exports to Hong Kong soared from

mid-2012, as Chinese exporters tried to bypass the restrictions on movement of capital by overcharging their Hong Kong affiliates in order to repatriate funds into China. The Chinese authorities have apparently strengthened their inspections in order to restrict this practice and sales to Hong Kong plummeted 11.5% in the first quarter of 2014. At the beginning of 2013, Hong Kong became China's top client, ahead of the European Union and the United States, accounting for more than 20% of the total for about \$106 billion of exports in one quarter, whereas the Hong Kong customs recorded only \$56 billion of imports from China. Hong Kong seems to be the only country for which there is such a discrepancy. Using data from the IMF (Direction of Trade Statistics), we compared Chinese exports in the world total with imports from China in the world total (see Graph). As well as some differences in levels, the graphs are not perfectly parallel, especially for the recent period when market shares increased rapidly according to Chinese customs, whereas the «mirror» flows show a clear slowdown. The only explanation for this difference seems to be in bilateral trade with Hong Kong. By correcting Chinese exports from trade with Hong Kong alone (using the «mirror» values rather than the Chinese statistics), China's share in global exports seems to be perfectly consistent with the share of imports from China.

Chinese market shares and «mirror» flows



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The fragile nature of the financial system could accentuate the slowdown in the medium term

The beginning of 2014 was marked by some very high-profile cases of credit default in trust companies (issued by investment funds, trust companies) which in some respects were a reminder of the triggering of the subprime crisis in the United States. Indeed, the recent expansion of shadow banking raised fears of a possible subprime financial crisis in China, which in the medium term would harm growth prospects. Although there is probably only a very small risk that this rise in shadow banking will degenerate into a financial crisis, nevertheless the general weakening of Chinese banks since 2009 and of their ability to fund the economy could heighten the risk of an increase in the medium term of the slowdown that we see today.

There is no major risk to the Chinese economy from the substantial growth in shadow banking and especially not to global activity

Two categories of «shadow banking»

According to the European Commission's definition (2012), shadow banking is «a system of credit intermediation that involves entities and activities outside the regular banking system». In China, it can be divided into two parts: first are the unregulated or poorly regulated family or local credit businesses, and second are new regulated bodies that can provide credit but which are not banks.

Parallel financing is an ancient and stable phenomenon...

The first category of shadow banking, through informal tontine investment or small local credit companies, has grown in parallel and fulfils an important role in funding the private sector since small and medium-sized businesses have very little access to credit from banks. Interest rates (these are very high, at around 20% per year on average), and analysis and risk control are very different from those in the banking system. Outstanding loans in this category are estimated at between 6% and 13% of GDP according to different sources (see IMF (2012), Artus and Xu (2013)). As there is little interaction between this sector and the banking system, this means that it is relatively autonomous. As a result, the systemic risk to China's banking system is very small, even virtually non-existent.

... whereas growth in «off-balance-sheet» has been spectacular

The second category of shadow banking, on the other hand, has expanded only recently. One reason for this is recent monetary tightening and another is that stricter and stricter banking standards are being put in place. This category consists mainly of investment trusts and the number of loans has increased significantly from 2012 (see Graph 10). The banks work very closely with these trusts, transferring credit into them from their balance sheet, to achieve higher interest rates. In contrast to credits, these funds provide wealth management products (WMP) which are sold by the banks to investors, who may be households attracted by the high yields.

A systemic risk...

As a result of this transformation, there is a liquidity risk due to the maturity mismatch between the WMP terms, which are very short (most mature after 6 months or less), and those of assets to offset the WMPs, i.e. loans that have been made. The default risk with these loans can be high since these are borrowers who have been refused by the banks themselves. According to the China Trustee Association, investment trusts invest mainly in infrastructure projects (25%), which rarely show immediate profit, and industrial and commercial firms (28%), which may have to face production overcapacity and/or project procyclicality. As a result, credit risk may affect capital repayment and interest on the WMPs that investors have taken out. The close interlinking between the banks and the investment trusts is a clear indication of the existence of systemic risk. In addition, measuring the dilution of risk via this securitisation of loans provided by the investment trusts is probably fragile.

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... but Chinese shadow banking credits are different from American subprimes.

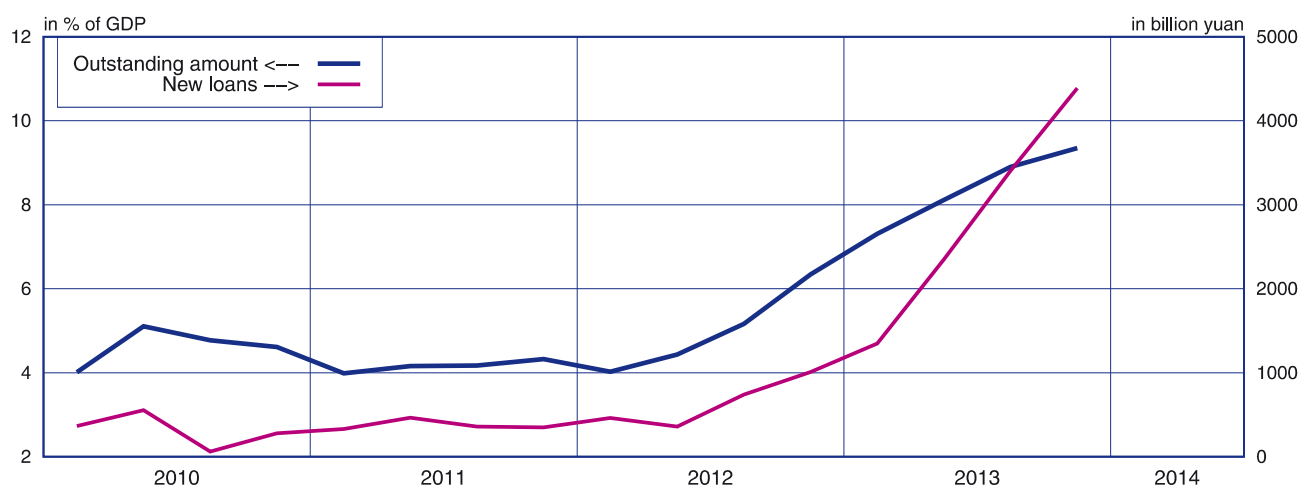
This arrangement is often compared to the American subprimes since the structuring of the credit is somewhat questionable. However, there are two differences between the two:

- in China, structured products are not allowed, whereas in the United States products could be structured several times, hence the loss of traceability of credit risk;
- the main agents involved in marketing these WMPs are commercial banks, which are public (see [Table](#)); if there were a severe risk to the Chinese banking system, it is difficult to believe that the Chinese state would not intervene;
- Chinese banks have a very limited impact at global level as their activities tend to be domestic and capital flows between China and the rest of the world are still relatively small because of capital controls (thus the bankruptcy of an important Chinese player would not at the present time have the same effect on the global financial system as did that of Lehman Brothers in September 2008);
- lastly, the amount of credit provided by the trust funds is still relatively small, despite their rapid growth; at the end of 2013, outstanding credit from these funds represented only 9.4% of Chinese GDP, and the nominal value of WMPs was 17.4%, whereas bank credit has reached 130% of GDP: even in the event of systemic risk, the strong presence of the State and its financing capacity (currency reserves stood at \$3,821 billion at the end of 2013 or 41% of GDP) should be able to maintain the stability of the financial system (see [Box 3](#)).

Structure de l'actionnariat des banques chinoises

Bank of China		China Construction Bank	
Chinese sovereign wealth funds	67.5 %	Chinese sovereign wealth funds	57.1 %
Hong Kong Securities Clearing Company Nominees Limited	24.7 %	Hong Kong Securities Clearing Company Nominees Limited	19.1 %
Social Security Fund	3.3 %	Social Security Fund	11.0 %
Industrial and Commercial Bank of China		Agricultural Bank of China	
Chinese sovereign wealth funds	35.4 %	Chinese sovereign wealth funds	40.0 %
Ministère des finances	35.3 %	Ministère des finances	39.2 %
Hong Kong Securities Clearing Company Nominees Limited	20.5 %	Hong Kong Securities Clearing Company Nominees Limited	8.9 %

10 - Loans from trust companies



Sources: People's Bank of China, China Trustee Association

Slowdown in China: what risks for the world economy?

Box 3 - How were credit default cases settled at the beginning of 2014?

The first case involved the ICBC bank and the China Credit Trust Co. This was a WMP (Credit Equals Gold No.1) of which the main component was a loan to a coal company, Shanxi Zhenfu Energy Group, in 2010 even though this company was already very much in debt and the owner had been arrested in 2012 for corruption. The ICBC bank sold the WMP and the China Credit Trust Co issued the loan. As the creditor had defaulted, the WMP - with a principal of 3 billion yuan (\$495 million) - also ran the risk of defaulting before term in January 2014. A third body, whose identity remains unknown, bought out these assets and thus default was avoided at the very last moment.

The second case in the year (Shanxi Liansheng Resources Co.) concerned a network of fairly complex links in a shadow banking system financing over-indebted sectors: Liansheng is a coal company with very sizeable debts (28 billion yuan, of which 4.5 billion was generated by 6 trust companies). After payment difficulties with one of these fiduciary loans (Jilin Province Trust)

this led to problems with a WMP (Songhua River No.77 with 289 million yuan outstanding) sold by the China Construction Bank (one of the four largest Chinese banks). As one of the other major creditors, the China Development Bank alone owns 4.5 billion yuan. This is one of China's policy banks¹ and had apparently restructured Liansheng debts, as the largest creditor.

The third case is a default that has not been the subject of a rescue package. This is a default on the interest of a bond issued by Shanghai Chaori Solar Energy. This first default on the bond market of continental China was for a small amount, and did not in itself present any systemic risk, but it seems to have been used as a warning to investors, to limit any future moral hazard phenomena. ■

(1) The policy banks, created in 1994, are responsible for financing the economy in accordance with the aims of the State.

Fragilities in the banking system create a greater risk

Steep rise in bank debt since 2009...

The post-Lehman period has been marked by major monetary expansion in China through the country's economic stimulus plan. Growth has thus become even more dependent on investment and debt. The credit-to-GDP ratio has increased from 110% before the crisis to 130% today (see *Graph 11*). The monetary environment, which is highly favourable both in terms of liquidities and interest rates, has made it possible to allocate massive amounts of credit to sectors benefitting from the stimulus plan, such as some heavy industries in production overcapacity, the commodities sector or even property. With the economic slowdown, credit risk increases, as in some cases credit has been given to projects where profit potential is doubtful.

11 - Total bank loans



Slowdown in China: what risks for the world economy?

... and deterioration in the quality of loans over the last year

Chinese banks faced with a dilemma: consolidate or fund growth...

... by refocusing their loans on the private sector excluding property

Nonperforming loans have been increasing at a rate of 20% per year since 2013 and unrecoverable loans have risen sharply since Q2 2013 (see Graph 12). There is therefore an undeniable deterioration in bank credit quality, with the rise of the proportion of nonperforming loans since 2012.

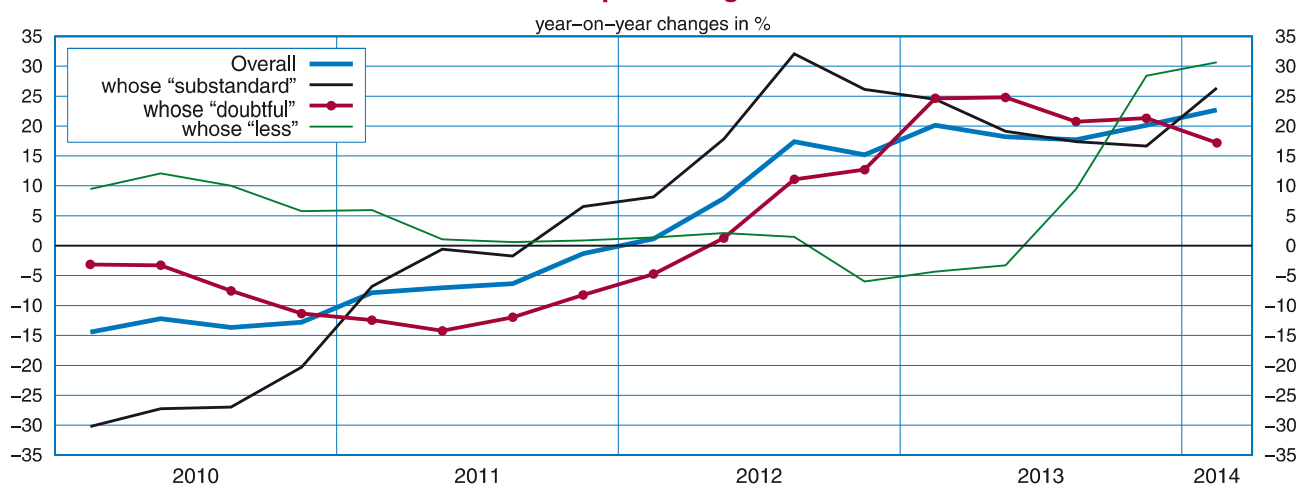
Chinese banks are caught in a vice-grip between increased credit risk and their «duty» to continue to fund economic growth. On the one hand the transition of China's growth model suggests a slowdown in the construction sector and associated industries, especially steel and cement which are already in production overcapacity. The increased credit risk in these indebted sectors is structural and costly for the banks. On the other hand, maintaining economic growth and developing new sectors favourable to the transition from the growth model requires financial resources. Given the need to regulate shadow banking and the absence of any mature financial markets, bank loans remain one of the preferred methods of funding, in the eyes of the Chinese authorities.

Meanwhile, liberalising current interest rates has the effect of reducing the interest rate margins which, thanks to the implementation of regulations concerning a ceiling on deposit rates and a lending rate floor, was a major source of banking income.

Paradoxically, the Chinese private sector is having difficulties finding funding: this situation is due to the eviction effect associated with priority being given to public or semi-public projects and inadequate levels of skills in the banks in terms of assessing credit risk (see Ding, Guariglia and Knight (2010)). Despite changes underway, bank loans still predominantly finance the public and semi-public sector. In the short term, there should not be any significant change and private enterprises (which are often smaller in size) will continue to experience difficulties in obtaining bank funding even though the aims behind rebalancing the growth model require the private sector to be more developed.

In addition, the sharp fall in recent property transactions, and the first indications of a drop in property prices (see *Emerging Economies* note) could exacerbate the situation for the banks. As properties are currently used as collateral for loans, a decrease in property prices would increase the risk of credit losses and would result in Chinese banks becoming even more fragile.

12 - Nonperforming loans



Source : China Banking Regulatory Commission

Slowdown in China: what risks for the world economy?

... especially weak signals are increasing in real estate.

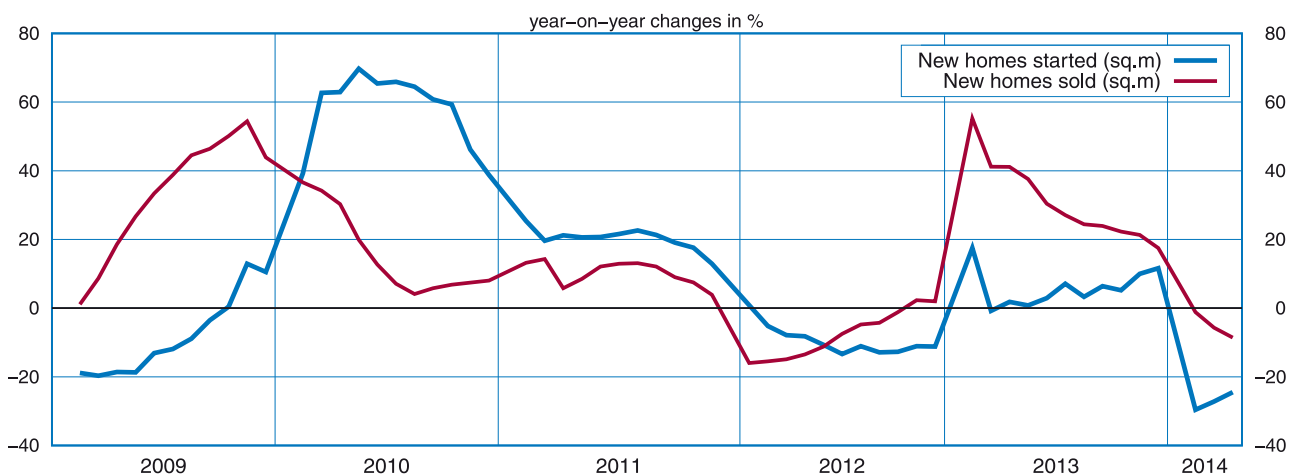
In addition, weak signals are increasing in real estate (see "Emerging Economies" note), which may worsen the situation of banks. Existing dwellings sales decreased sharply and prices start to adjust. New dwellings sales and housing starts have collapsed since the beginning of the year (respectively -24.5% and -8.6% yoy from January to April, see Graph 13) while stocks of houses for sale increased sharply (+23.9%). As properties are commonly used as collateral for a loan, decreasing real estate valuations increases the risk of losses on loans and weakens a little more Chinese banks.

Conclusion

The Chinese economy has slowed substantially since the beginning of 2012 and this long-term slowdown, by about 3 percentage points of annual growth, results from the loss of momentum in the dynamics of the recovery process. The effect on imports, and hence on China's contribution to the slowdown in world trade, has been amplified by the fall in the country's degree of openness as a result of the reduction in processing trade activity in the economy. On the other hand, the upward trend in the import content in domestic demand does not seem to have been harmed.

In the medium term, two factors could be accentuating the Chinese slowdown: first, the construction sector, which has boosted activity since 2009, clearly seems to be experiencing a reversal. Second, there has been a rapid development in shadow banking and the Chinese banking system shows signs of real fragility. The scale of the accumulated currency reserves means that China could contain any sizeable financial crisis, but if credit dries up this could amplify the slowdown in current activity which, even without financially contaminating the rest of the world, could have a marked effect on world trade. In the years to come, even if market share has risen for 10 years, China's contribution to world demand for French products, could be substantially less than its average levels between 2000 and 2010. However, the ongoing rebalancing of imports from *processing trade* to consumer goods and services could lead a stabilisation of France's market share in China. ■

13 - Weak signals in the Chinese construction



Source : National Bureau of Statistics of China

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