China's economic rise has inflation implications for the whole world

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China's economy has been growing rapidly for the past three decades. The vigorous pace of growth has increased China's weight in the world economy, and it is now the third largest economy in the world, after the United States and Japan. Its significance in world trade is larger still, as it occupies a unique position as the manufacturing workshop of the world. Developments in China therefore affect prices elsewhere too, including the euro area.

China influences world price trends in a number of ways. The opening of the Chinese economy has brought hundreds of millions of new workers onto the world labour market with a level of pay so low it has led to a fall in the prices of many consumer goods. A large share of clothes, shoes, toys and electronics are now produced at lower cost than before. On the other hand, rapid economic development and a consequent rise in living standards have also increased consumption in China itself. The recent price peaks for energy and other commodities are partly due to growth in China. Chinese eating habits have also changed, and higher prices for food caused by increased demand have also been reflected in the shops in the euro area.

China also exerts an indirect influence over price formation in other countries. Companies and their products must be able to compete on the open world market, in China every bit as much as elsewhere. Competition for jobs is also worldwide in many sectors. When production can be more freely located close to major markets and in low-cost economies, this gives employers in eg the euro area a stronger position in pay negotiations at the expense of their employees.

This article considers the significance of the different channels through which China influences prices in the euro area. Before that, however, we shall take a brief look at some background factors relating to the Chinese economy, starting with a review of Chinese inflation in recent years and a consideration of what factors could generate price pressures in the future.

China has kept inflation under control

During the period of economic reforms, China has successfully combined extremely rapid growth with low inflation (Chart 1). In the first half of the 1990s, the Chinese economy was overheating, primarily as a result of the rapid pace of growth in lending and investment, and record GDP growth of 14% fuelled annual consumer price inflation that, at its worst, reached over 20%. Later, in the second half of the 1990s, prices in China were inclined more to fall than rise. The background to this deflation was a rapid improvement in productivity. But characteristic Chinese features such as a high investment ratio and consequently tough competition, and possibly even overcapacity, also eroded companies' pricing power.

In 2004, production problems with cereals brought a brief acceleration in consumer price inflation in China. The same phenomenon occurred again a couple of years ago, and at the beginning of 2008 inflation touched a momentary peak of almost 9%. This was partly for the same reasons as in the brief inflationary peak of 2004: problems with food production. An outbreak of disease restricted pork output, leading to a rapid rise in the price of meat products. At the same time, the strongly import-dependent cooking oil and soy beans became more expensive worldwide due to poor harvests and a simultaneous increase in demand for foodstuffs as many countries increased their use of biofuels.

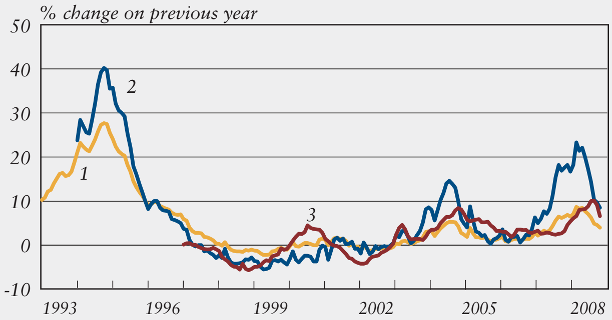
Extremely high raw material prices were still pushing up producer prices in China in summer 2008, but a simultaneous slowing of demand growth prevented companies passing their higher production costs on to final product prices. The statistics rather suggest that companies absorbed their higher production costs in the form of a substantial deceleration in the pace of rise in profits.

In order to prevent economic overheating and control inflation, China tightened its monetary policy in autumn 2007. One effect has been to restrict growth in construction and thereby substantially ease price pressures in recent months. Slower economic growth worldwide has reduced demand for goods produced in China and therefore also restricted growth in the Chinese economy. In November, consumer prices were only 2% higher than a year earlier.

Chart 1.

Chinese consumer and producer prices plus the price of food

% change on previous year



1. *Consumer prices (incl. food)*
2. *Price of food*
3. *Producer prices*

Source: Chinese statistical authorities.

Growth will eventually lead to higher prices

From the perspective of keeping the value of money stable, the most important element has been the success of China's monetary policy. Daily decision-making and implementation of monetary policy have taken place within a framework created by the pegging of the renminbi to the dollar, tight restrictions on capital flows and the phased reform of the financial sector. Although the central bank has to submit important monetary policy decisions for approval by the government, price stability has remained one of China's key economic policy objectives. An inflationary economic policy was not adopted even in the aftermath of the Asian crisis around a decade ago, when there was a substantial slowdown in the pace of Chinese growth.

In economics it is a generally acknowledged fact that countries with lower levels of income also have lower prices than countries with higher levels of income. This is because productivity in sectors open to foreign trade is much higher in the wealthiest countries than in poor countries. In contrast, the differences in productivity between countries are smaller in sectors that are less exposed to foreign trade, such as services. However, it is often the case that wages in wealthy countries are much higher than in poor countries in these sectors, too, as pay rates in different sectors within a country tend to follow each other fairly closely. As a result, the general price level in a wealthy country ends up being higher than in a poor country.

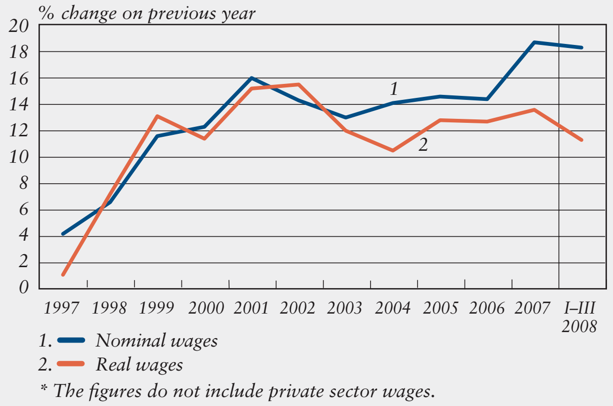
Economic growth is, in fact, often closely related to rising price levels, in the manner outlined above. This has been the case in the new member states of the EU, for example, where prices have risen hand-in-hand with economic growth in approaching the level of the old member states.

In China, too, growth is expected to eventually lead to higher prices. To date, this, known as the Balassa-Samuelsson effect, has not occurred, due particularly to the sheer size of the Chinese labour force. With a substantial proportion of the labour force underemployed, particularly in the countryside, and wages agreed mainly at a very local level, the negotiating power of employees has been extremely weak. As a result, wage development among the uneducated labour force has more or less stood still for years even in those sectors where productivity has been growing rapidly.

Wage development among the educated labour force, which is what official statistics on wages mainly depict, has been very different. The pace of wage rises was already accelerating appreciably at the turn of the millennium, and real wages have subsequently grown at over 10% per annum (Chart 2).

Chart 2.

Average nominal and real wages*



* The figures do not include private sector wages.

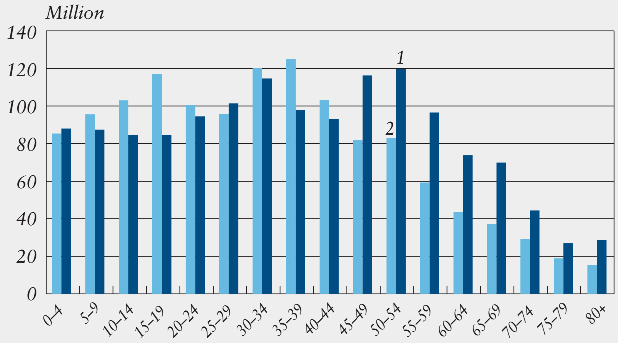
Sources: Chinese statistical authorities plus authors' own calculations.

We can, however, already discern the first signs of upward movement in the wages of uneducated labour as well. The long period of sustained economic growth has already drawn a large proportion of the underemployed rural population into the cities to work, and newspaper stories tell of numerous villages that have lost an entire generation of young adults. On the other hand, rising prices for agricultural products have raised the standard of living in the countryside, too, in recent years. This has removed some of the attraction of low-paid work in the cities, particularly when it is extremely difficult for country people to get an official residence permit for city living. This, in turn, makes it very hard to arrange accommodation, health care or school for their children. Prior to the current downturn, there were increasing stories of the recruitment difficulties facing companies on the Chinese coast that pay very low wages.

A contraction in the size of the Chinese labour force, which is expected to begin just a few years from now, will in the future increase upward pressures on pay levels. The one-child policy has slowed population growth, and the Chinese population will start to age, with young age cohorts smaller in the future and the number of old people rapidly growing (Chart 3).

Chart 3.

Population by age group in 2005 and 2020



1. 2020
2. 2005

Source: UN population forecast 2006.

Major structural changes in an economy take time. It is generally estimated that increased agricultural efficiency and the consequent migration from the land to the cities will continue to augment the supply of labour in manufacturing and service sectors for several years yet. Growth in demand for services brought about by increased wealth will further fuel migration to the cities. Some assessments envisage massive migration continuing for 20 years still. Moreover, the wages of uneducated workers are so low that even large increases will not significantly alter the level of wages in China relative to wage levels in the developed economies.

Thus, the Chinese authorities' most important objective remains to increase the number of jobs by several million each year, although they are also aiming for a controlled increase in the level of wages. In some areas the authorities have increased the level of minimum wages in recent years at a very rapid pace. There is, admittedly, much room for improvement in abiding by the minimum wage requirements, particularly in the most slowly developing areas. The higher minimum wages are, nevertheless, helping to push up the general level of wages. Moreover, the new labour contract law that came into effect a year ago will, at least in principle, improve the position of employees and increase the costs on employers.

In addition to rising wages, more active environmental protection will also serve to push up production costs. Until recently, the observation of environmental legislation has been largely dependent on the actions of local authorities, but the central government has in its recent statements clearly indicated the increased importance it attaches to environmental protection.

The Chinese authorities are also able to influence prices directly by dismantling price controls. Although, officially, only a few per cent of consumer prices are regulated, the very recent deregulation of retail fuel prices was highly desirable, if only for the positive impact this will have on energy efficiency.

Productivity development a key issue

So far, companies operating in China have been able to compensate for rising production costs by improving productivity. When a larger quantity of usable steel is produced from the same amount of iron ore, or twice as many mobile phones are produced in the same number of working hours, the prices of the final products can be kept unchanged despite rising wages or higher raw material costs.

In the years ahead, productivity growth will continue to be an important factor in Chinese price developments. Chinese productivity is still very poor compared with the world's leading economies. Output per worker is, however, growing very quickly (Chart 4). The efficiency of the Chinese economy can easily be improved through labour force training, reorganisation of work and the introduction of new, more efficient technology. Here, China's position in catching up with higher-income countries is rather attractive, as it allows the adoption and adaptation to their own needs of

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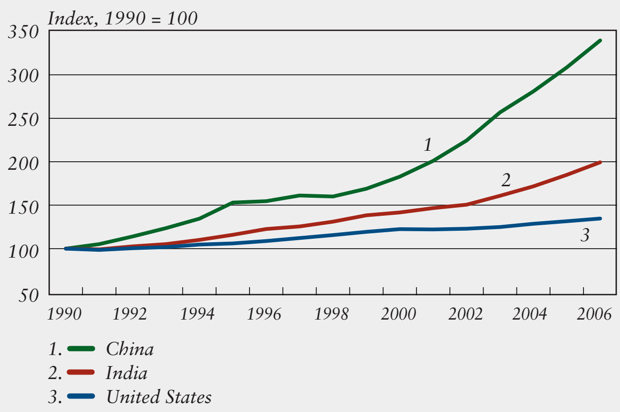
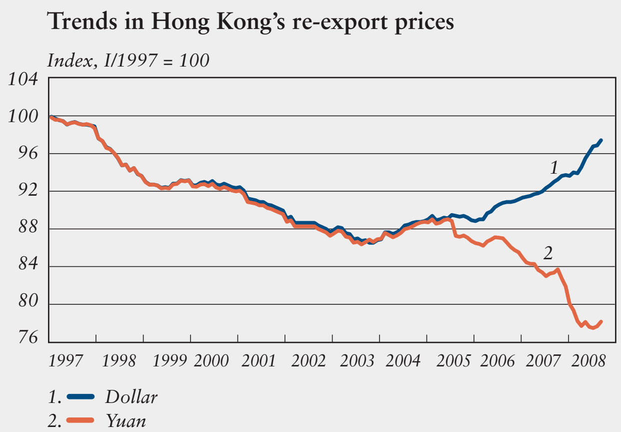
Chart 4.

Trends in output per employee in India, China and the United States



Source: World Bank.

Chart 5.



Source: Hong Kong's statistical authorities.

technology developed elsewhere. There is no need to invent entirely new technology in order to boost productivity.

Chinese prices have a direct impact on inflation in other countries

The impact of Chinese price developments on inflation in the euro area is hard to assess due to the lack of detailed statistics. The best way to get a picture of recent price trends is to examine the price data on goods imported from China collected in recent years by the United States.[1] Only a few years ago both yuan and dollar-denominated prices of these goods were declining. Within the past two years, however, the dollar-denominated prices of Chinese goods have begun to rise, and in September 2008 they were 3% higher than a year earlier. This would, however, appear to be a consequence of the Chinese currency's strengthening relative to the dollar, as the yuan-denominated prices of Chinese goods have continued to fall rather than rise.

Statistics from Hong Kong provide a similar picture (Chart 5). It used to be the case that goods that passed through Hong Kong became cheaper year on year, but in recent years this trend has been reversed. However, if, instead of the Hong Kong dollar, which is tightly bound to the US dollar, we examine the prices of Chinese goods in terms of China's domestic currency, the downward trend in prices appears to have continued until 2008. It would now appear to have come to an end, but, as yet, there is no sign of an upward trend.

Several studies have been conducted into the impact of falling Chinese prices on inflation figures in Western countries.[2] They have all come to the same conclusion: developments in China, or globalisation more generally, have had little direct impact on price trends in developed economies. A general assessment is that increased international trade and the entrance into the production chain of low-cost economies such as China have eased the pace of inflation in recent years by at most just a few tenths of one per cent.

[1] The US statistics take account of improvements in product quality.

[2] Côté & de Resende (2008); Feyzioglu & Willard (2008); IMF (April 2006) World Economic Outlook; Kamin, Marazzi & Schindler (2004); Kumar et al. (2003); Morel (2007) and Wheeler (2008).

These results are understandable if we consider how small a share of our consumption is taken up by products made in China. In most euro area countries, consumption of Chinese goods corresponds to under 2% of GDP. Price fluctuations in such a small segment of consumption can make little difference to inflation even in the short term.

A more significant impact on inflation follows from growth in the market share of Chinese goods. When expensive goods are replaced with less expensive ones, the impact on the overall level of prices can be considerable. China's share of imports to the euro area has grown substantially in recent years (Chart 6). The average figure for 2007 was almost 6%, compared with less than 3% at the start of the decade.

Chinese growth boosts competition

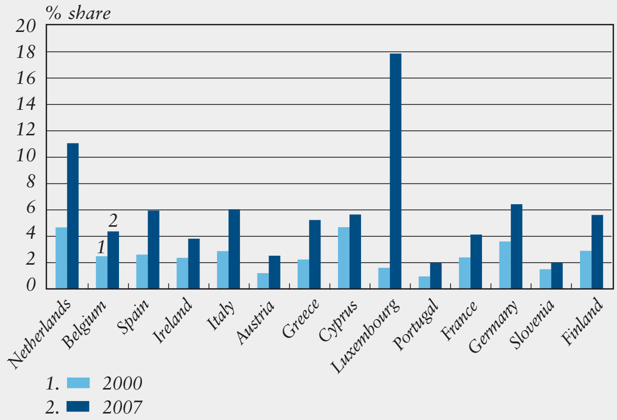
In the case of some products, China's emergence as the driving force of the world economy has actually caused considerable movements in prices. The rapid rise of China and other emerging economies to become major consumers of raw materials is in fact considered to be the main cause of the recent peak in commodity prices.[3] For example, China has become the world's largest consumer of iron ore and steel, and the second largest consumer of crude oil, after the United States (Chart 7).

[3] IMF (October 2008) World Economic Outlook.

The rising standard of living has also led to increased consumption of food products in China. The change in diet brought by higher incomes has caused particularly rapid growth in consumption of meat and milk.

Chart 6.

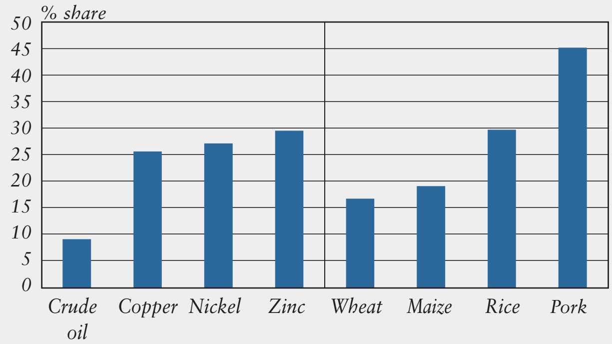
China's share of imports by euro area countries



Source: Eurostat.

Chart 7.

China's share of world consumption of selected commodities and foods



Sources: BP, ICSG, INSG, Antaike and USDA.

Price stability has remained one of China's most important economic policy objectives.

Although China is highly self-sufficient in food production, increased consumption in China combined with a number of other factors to rapidly push up world market prices for food in 2007 and early 2008.

Besides its effect on competition for raw materials and energy, China has also caused increased competition between companies. For European companies, competition with Chinese products is familiar both in the domestic market and in export markets. On the other hand, production specialisation means there are considerable differences between countries in eg the euro area in terms of whether they compete in the same products as China. The overlap with Chinese output is most marked in the southern European countries of Italy, Greece and Portugal, where textiles and shoemaking play a prominent role in the economy. In Finland, electronics occupies a large role similar to in China.[4]

At the same time, the possibility of investing in a lower-cost country and close to rapidly growing markets is increasing competition for jobs. The competitive impact of the opening of the Chinese economy on wage levels in OECD countries is, however, so far estimated to be small.[5]

Globalisation will not end with China

In contrast to many other emerging economies, China has for the past three decades successfully combined rapid economic growth and low inflation. Even occasional inflation peaks have not led to an inflation-feeding wage and price spiral. The most important element in preserving stability in the value of money in China has been economic policy. China has not taken refuge in inflationary politics, with price stability consistently being one of its most important economic policy objectives.

If China's rapid growth continues, wage and price levels are expected to gradually approach those of its wealthier competitors. Rising wages would then presumably increase the role of consumption in the economy at the expense of the present over-emphasis on investment. This would be a very positive trend.

To date, it is mainly just the educated labour force that has been able to benefit from wage rises. The pay of uneducated workers has remained almost unchanged due to the large reservoir of labour. Declining labour force growth will in future lead to increased competition for uneducated labour as well. However, with wages in this sector of the population averaging only a few per cent of equivalent wages in eg the euro area, a substantial adjustment in the direction of wage levels in developed economies will take years.

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4 Soares Esteves & Reis (2006).

5 Côté & de Resende (2008).

In addition to labour costs, companies' production costs in China will also be pushed up by their increased obligations in the area of environmental protection. Higher costs can, however, be compensated for by improvements in productivity. This is, of course, nothing new, as the transfer of labour from agriculture into more productive sectors of the economy, improvements in the educational level of the work force and the introduction of new technology have thus far, too, been the main engines of Chinese growth.

Although the many years of sustained economic growth have already raised China into the ranks of the largest economies, the impact on consumer price inflation in the euro area has so far been estimated to be rather small. China's large labour force has made production of many consumer goods much cheaper, and as these products have captured market share from more expensively produced goods, inflation has slowed. The impact is estimated to have been a few tenths of one per cent in recent years. China is also causing increased competition within markets. Competition between companies is increasing, but workers in many industries are also being forced into a global competition for jobs, which may erode the scope for pay rises. China is also exerting an upwards pressure on some prices. China, which has been described as the world's biggest commodity guzzler, was the main cause of the peak in commodity prices earlier this year. Growing consumption in China is also increasing competition for energy and food.

In the long term, the pace of inflation is determined by monetary policy, but the short-term impact of China on euro area inflation will grow hand-in-hand with the general increase in China's weight in the world economy. On the other hand, the increasing level of wages or other production costs in China could encourage companies to move production once again to other, lower-cost countries. This would mean the prices of some products could fall even further than they have so far. The first signs of this have already been seen, with companies moving production units away from China's newly wealthy coastal areas, either to inland provinces or neighbouring countries. Meanwhile, China is now moving into production of new high-tech products, which will mean increased competition on the world market, for example in the manufacture of products such as ships, cars and aircraft.

Keywords: China, inflation, monetary policy

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