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Managing risk, enabling trade

Most vulnerable countries to Chinese economic downturn

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Summary

- **A sharp economic slowdown in China will affect countries trading with China and commodities prices worldwide.**
- **Countries with a high concentration of export to China and commodity dependency are the most vulnerable.**
- **The combination of a high concentration of exports to China and dependency on metals export make Hong Kong, Mongolia, Laos, Zambia, Mauritania, Sierra Leone especially vulnerable.**

Affected channels

After years of high economic growth China now plays a major role in the world economy. A sharp economic slowdown in China, interpreted as a deceleration of growth to less than 5%, would have an adverse impact on other countries. This research note investigates which countries are particularly vulnerable to such a downturn. We identify three channels through which a sharp economic slowdown in China will affect other countries.

These channels are;

- trade
- commodity prices
- capital flows

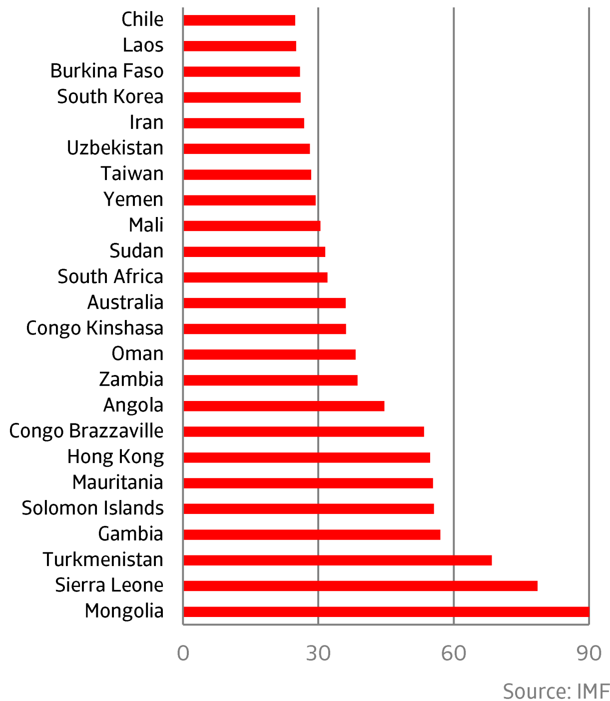
For many countries China has become an important destination for export products. Not only capital goods, but in line with the significant growth in investment in China these exports increasingly included commodities; especially commodities which are necessary for infrastructure, such as copper and iron ore.

Moreover, in order to secure the flow of critical commodity imports China has invested heavily in the metals sector in other countries over the past decade as well. Chinese companies were encouraged to invest abroad due to the "Going out" strategy. Now, the question is: will this change if China faces a significant economic slowdown?

Trade flows

The first channel via which a Chinese slowdown would affect other countries is trade. Countries that are highly export dependent are vulnerable to fluctuations in their export revenues, which could have an impact on their overall economic growth. The extent to which a country is vulnerable to an external shock depends on its export products and its trading partners. To identify which countries are most vulnerable to a Chinese hard landing we first looked at the share of Chinese exports in total exports. All countries in the world with a share of 25% or more are listed in the graph below.

% of exports to China

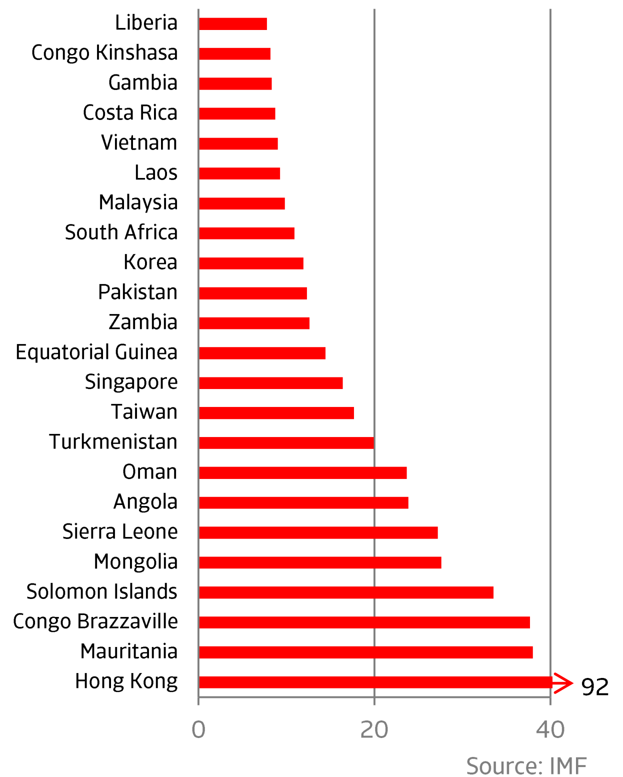


We are aware that countries with an open economy are more dependent on exports for their economic growth. We therefore take a second step and look at Chinese exports as a share of GDP.

The graph suggests that it is especially Asian and African countries that are vulnerable to a sharp Chinese slowdown. The Asian region is not much of a surprise. China is an important pivot in Asia and most Asian countries have a very open economy. In Asia countries like Hong Kong, Mongolia, Singapore and Taiwan are most vulnerable through the trade channel. Although a few countries in Asia export commodities (most notably Mongolia) most of them export capital goods, components and electronics to China.

In Africa most countries export commodities. Although oil is one of the most important commodities in this region a few countries are mainly exporting metals (iron ore and copper). In line with the high economic growth in China, trade between Africa and China has been growing rapidly since 2002. As a consequence China is now by far the most important trading partner for a number of African countries. This means that metal exporting countries in Africa will be impacted by both lower prices and lower demand.

Chinese export % GDP

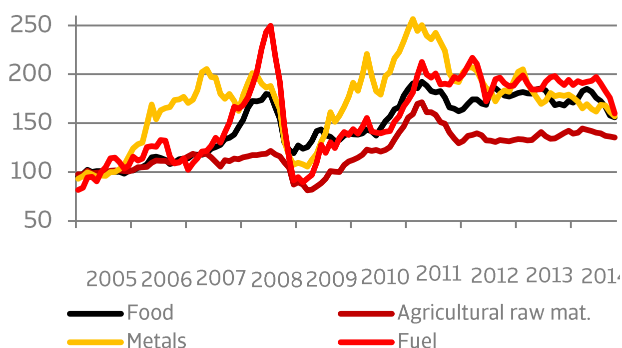


The most vulnerable countries are Hong Kong, Mongolia, Mauritania and Congo Brazzaville.

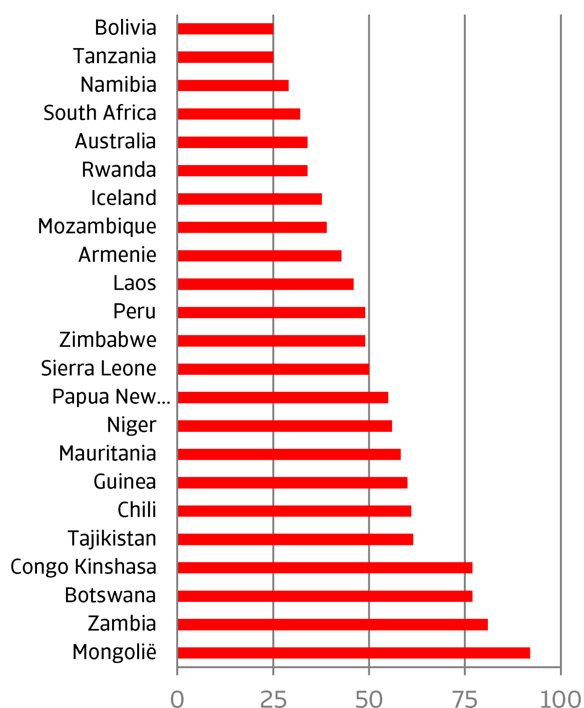
This is leading us to the second channel of contagion, namely commodity prices.

Commodity prices

Driven by urbanisation and industrialisation, China's footprint is clearly visible on the commodity market. China is the main consumer of several commodities. For instance, it accounts for 40% of the world consumption of coal, 40% of aluminium, 20% of oil and 40% of copper. For iron ore it even accounts for approximately two thirds of global demand. Prices of commodities, especially those of metals, rose sharply between July 2008 and the beginning of 2011. From then on prices have declined gradually as supply increased due to new mines coming on stream. More recently a deceleration in Chinese investment growth has also put downward pressure on commodity prices.



Exporters of commodities should experience a double impact from the combination of lower demand and lower prices for their commodities. We believe that an investment-led economic slowdown will particularly have an impact on metal prices. Therefore metal exporting countries will be especially vulnerable to such a slowdown.



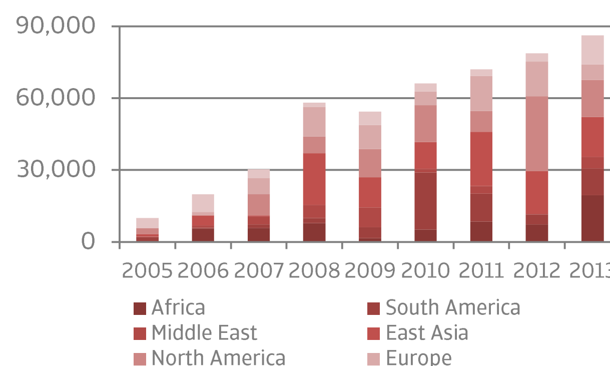
The graph above confirms our earlier contention that metal exporting countries are particularly present in Africa. Another region where many countries are commodity dependent is Latin America. However, in that region there is more diversification of export products as countries are exporting food and other raw materials as well. And China, despite having grown significantly as an export destination, is not a major destination for the region. Moreover, quite a few Latin American economies are relatively closed economies, which make them less vulnerable to lower Chinese demand. But a few countries are mainly exporting metals and these are quite vulnerable to lower prices, such as Chile, Peru and Bolivia.

In Europe there are also some metal exporting countries which are to some extent vulnerable to a decline in metal prices. These countries are Iceland (aluminium), Tajikistan (aluminium), Bulgaria (iron, steel) and Armenia (copper, gold).

Overall, the countries most vulnerable to lower commodity prices are Mongolia, Zambia, Congo Kinshasa and Chile.

Capital flows

A third possible impact channel is through capital flows. Investments from China have increased in past years and billions of loans have been provided to other countries. Lack of transparency hampers a clear view on the value and destination of the loans, but data from the Heritage foundation still gives an idea about the direction of Chinese foreign direct investments (FDI). In the below graph it is clear that FDI has increased significantly since 2005. In 2013 Africa was the main beneficiary of Chinese FDI, but throughout the full period 2005-2013 Eastern Asia, and Australia, topped the Chinese FDI list. Sectors where China has invested heavily were energy and metals.



We do not expect China to reduce its foreign investments drastically should it face a sharp economic downturn. This is due to the strategic importance of being certain about access to commodities for better days.

Conclusion

In this note we have used the channels trade flows, commodity prices and capital flows to investigate the impact of a Chinese downturn on the global economy.

Our conclusion is that an economic downturn in China will mostly impact countries through their exports and metal prices. FDI flows from China will hardly change, for strategic reasons. Exporters which have a less diversified economy and a concentration on China will be most vulnerable. Considering the openness of an economy, the share of its exports to China in relation to its GDP and

dependency on exporting metals we identify some countries which are the most vulnerable to a sharp economic slowdown. These countries are Australia, Mongolia, Hong Kong, Laos, Congo Kinshasa, Sierra Leone, Zambia, South Africa, Mauritania and Chile.

Table Most vulnerable markets to Chinese slowdown

Country	Trade	Commodity prices
Australia		X
Mongolia	X	X
Hong Kong	X	
Laos	X	X
Congo Kinshasa	X	X
Sierra Leone	X	X
Zambia	X	X
South Africa	X	X
Mauritania	X	X
Chile		X

For this research we only looked at the direct exposure to the Chinese economy. Other countries, however, are also affected indirectly via the potential impact on trade with countries that have large direct trade flows with China. This could result in a more severe outcome.

Afke Zeilstra, senior economist

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