Change of gear in the Chinese economy: contagion channels and global implications

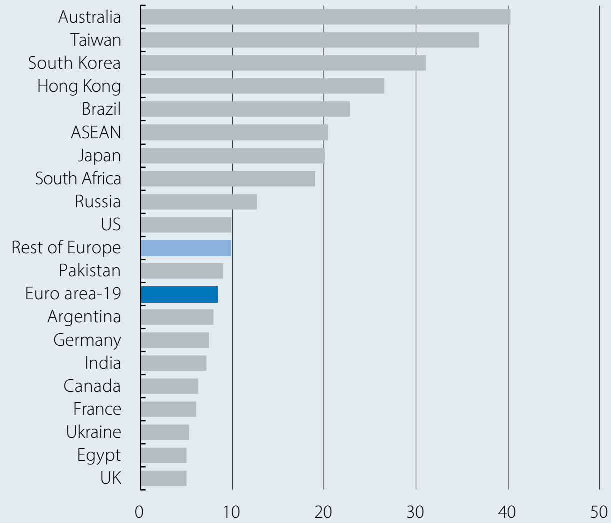
China's economic history in recent decades is one of multiple successes, with rapid GDP growth, a sharp reduction in poverty and the country's emergence as the world's largest exporter of goods. But China's economic development model, anchored in the strength of the external sector and the rapid accumulation of capital, has also developed imbalances, such as a rapid accumulation of debt and an excessive dependence on the real estate sector. On the other hand, China's high global market share makes it more difficult to continue expanding its exports, particularly in an environment of geo-economic fragmentation. The Chinese authorities also seem willing to tolerate a slower pace of growth, prioritising economic security. What implications will this new macroeconomic environment have for China and what will be the ramifications globally?

Slowdown in China and global contagion channels

This «new era» of growth in China will undoubtedly entail a significant slowdown compared to the growth rates recorded over the past few decades. Between 2000 and 2019, for example, China sustained an average growth rate of 9%. But various headwinds are accumulating. Beyond those already mentioned, there are also demographic factors; the difficulty in rebalancing the economy and stimulating domestic consumption as a driver of growth; foreign competition, particularly from other emerging Asian economies; the recent «regulatory reform» directly affecting some of the fastest growing sectors (such as big tech), and heightened trade tensions. Thus, the IMF forecasts that China's growth will converge towards 3% by the end of this decade.

Although a gradual transition to lower growth rates would act through different channels compared to a «hard landing», and would have different global implications, recent estimates suggest that a slowdown in China would generate ramifications for the global economy in both cases. The ECB estimates that in a scenario with a gradual slowdown in growth, every 1 pp of less growth in China would deduct between 0.1 and 0.4 pps from euro area GDP growth.[1] The Bank of England, meanwhile, estimates that a gradual slowdown in Chinese growth would have a similar impact on the British economy, while a «hard landing» would lead to 1 pp less growth in the year of the impact,

Exports to China
(% of each country's total exports)



Notes: *The rest of Europe includes the following countries: Czech Republic, Denmark, Hungary, Iceland, Norway, Poland, Sweden, Switzerland, Turkey, Belarus, Bulgaria, Croatia, Romania and Ukraine. The chart uses the average between 2015 and 2020 and only includes countries with exports to China in excess of 5% of their total.*
Source: *CaixaBank Research, based on data from the OECD.*

although this figure could even double if it were to significantly impact global financial markets.[2]

In both scenarios, traditional contagion channels to other economies would be activated. On the one hand, there would be an activation of financial channels, which have historically played an important role in the transmission of international shocks. Despite China's size in the global economy, its financial system is still not very directly integrated with the global financial system.[3] However, indirect financial channels could be more important, through a perception of increased risk among investors and a deteriorating in the earnings outlook for many large corporations for whom the Chinese market represents an important source of revenues.

Another channel of contagion is through commodity markets, as China accounts for a significant fraction of the global production and consumption of some of these products and a drop in demand could have substantial

1. See A. Dieppe *et al.* (2018). «The transition of China to sustainable growth — implications for the global economy and the euro area», ECB Occasional Paper nº 206. The authors estimate that a gradual slowdown in growth in China, as a result of the introduction of more ambitious structural reforms by the authorities in order to rebalance the economy (assuming a stimulus to consumption and a reduction in the investment-to-GDP ratio), would produce lower growth in China in the short term (approximately 1 pp less per year), leading to a cumulative drop of 3.4% in China's GDP level after three years. This shock would produce a cumulative negative impact of 0.3% on euro area GDP, which could be as high as 1.1% depending on the response from the Chinese authorities and on whether the strength of the different transmission mechanisms intensified.

2. See R. Gilhooly *et al.* (2018). «From Middle Kingdom to United Kingdom», Bank of England Quarterly Bulletin (Q2 2018). The scenario with a gradual slowdown is estimated to be a slowdown of 2 pps in China's growth in the first year and of 1 pp in the second, reducing China's GDP level by 3% after three years. In this scenario, British GDP would be 0.5% lower in the third year. The «hard landing» scenario assumes a rapid 8-pp drop in China's level of growth in the first year, and despite a rebound from the second year onwards this would lead to 10% lower GDP in China in the third year. In this scenario, British GDP would be between 1.4% and 2.8% lower after three years, depending on the extent to which global amplification channels are activated, such as financial turbulence or sharp corrections in asset and currency prices.

3. China's share of global foreign assets and liabilities is estimated to be around 5%. China's banking ties with most countries are also limited, with the exception of close ties with the United Kingdom, through Hong Kong.

implications for prices. For net commodity importing countries, such as the euro area, this effect could partly offset the negative impacts through other channels, boosting consumption while producing a disinflationary effect.

Finally, a shock in the Chinese economy would affect the rest of the world through international trade flows and the reduction of China's foreign demand. We can make an initial approximation of the importance of this channel by assessing a region's direct trade exposure to China. Standing above the rest of the world is almost all of the Asian region, for which China accounts for over 20% of exports, or other countries located geographically nearby, such as Australia (40%). In the US and the euro area this figure is around 10%. These direct trade links would suggest a significant, albeit limited, impact, but we must also add the indirect links, derived from China's status as the world's second largest economy and its central role in global value chains.

Contagion through international trade: the case of the euro area

In this regard, we must consider the fact that the euro area is also directly exposed to countries which themselves have a high exposure to China, so a slowdown in the Chinese economy would reverberate in the European economy indirectly through its trade connections with those countries. For instance, over 10% of euro area exports go to ASEAN countries, Japan, South Korea, Taiwan or Hong Kong, all of which have, in turn, direct exposures to China in excess of 20%. On the other hand, almost half of the euro area's total exports go to the US or the rest of Europe and the slowdown in these countries due to lower exports to China would also affect the euro area.

To illustrate the total impact, including both direct and indirect trade effects, we consider two scenarios of slowdown in the Chinese economy: one with a 10% fall in China's imports and another with a gradual decline of 2% per year over five years. In the first scenario, the direct impact on euro area exports is –0.8%, explained simply by the relative weight of exports to China in the European bloc. On the other hand, we estimate the indirect impact at 0.9%, bringing the total impact of a 10% fall in China's imports to 1.8% of European exports.

Thus, when we consider the indirect impacts, the total impact of China's slowdown on the European economy through international trade more than doubles. Taking a concrete example from this exercise, a 10% drop in China's imports would lead to a 2% drop in the exports of ASEAN countries, resulting in an additional 0.08-pp drop in euro area exports.[4] On the other hand, even if the US' exposure to China is lower, the euro area's closer trade ties with the Asian country would result in the additional indirect impact being approximately double, at 0.15 pps.

To translate the impact into GDP terms, we must bear in mind that a portion of the euro area's gross exports

4. We assume that each country would reduce its imports from the rest of the world in the same proportion as the reduction in its total exports to China (we do not take into account the potential increase in exports to other countries or regions).

Exposure to China and impacts of a slowdown in China for the euro area

	Exposure of the euro area (%)	Exposure to China (%)	Estimated impact on euro area exports (pps) *Scenario with 10% drop*	Estimated annual impact on euro area exports (pps) *Scenario with gradual slowdown*
Direct impact				
China	8.4	–	–0.84	–0.17
Indirect impact			–0.92	–0.18
Australia	1.3	40.2	–0.05	–0.01
Taiwan	1.0	36.8	–0.04	–0.01
South Korea	2.0	31.1	–0.06	–0.01
Hong Kong	0.7	26.5	–0.02	0.00
Brazil	1.8	22.8	–0.04	–0.01
ASEAN	3.8	20.4	–0.08	–0.02
Japan	2.9	20.1	–0.06	–0.01
South Africa	0.7	19.1	–0.01	0.00
Saudi Arabia	1.4	16.2	–0.02	0.00
Russia	3.1	12.7	–0.04	–0.01
US	14.8	9.9	–0.15	–0.03
Rest of Europe *	25.2	9.9	–0.25	–0.05
India	2.1	7.2	–0.02	0.00
Canada	1.8	6.3	–0.01	0.00
UK	11.5	5.0	–0.06	–0.01

Notes: ** The rest of Europe includes the following countries: Czech Republic, Denmark, Hungary, Iceland, Norway, Poland, Sweden, Switzerland, Turkey, Belarus, Bulgaria, Croatia, Romania and Ukraine. The euro area's exposure is calculated as the percentage of euro area exports to each country or region. The exposure to China is calculated as the percentage of each country's exports to China. The indirect impacts should be read as a sum, in pps, of the indirect impacts of a slowdown in China on euro area exports, through each country. The total impact, as a %, is the sum of the direct and indirect impacts. Countries such as Kazakhstan, Pakistan, Argentina, Ukraine and Egypt, all of which have exposures to China in excess of 5%, are not included in the table as they represent a low exposure for the euro area (below 1%).*
Source: *CaixaBank Research, own estimates based on data from the OECD.*

incorporate intermediate goods and services that are imported from other countries.[5] Thus, overall, we estimate that a sharper slowdown in China would have an impact, through the contraction of international trade flows, of 0.7% on euro area GDP, while a gradual slowdown could have an annual impact of between 0.1 and 0.2% on annual growth. These figures are consistent with the ranges suggested by the ECB and the Bank of England (given that our estimates are partial and the other channels mentioned would need to be added).

Global implications of a slowdown in China

Regardless of what shape the slowdown of the Asian giant takes, the global economy will feel its effects through multiple contagion channels, and these will act with different intensities depending on the nature of the shock. Furthermore, there are two additional difficulties in precisely estimating the magnitude of the global impact: on the one hand, the monetary and fiscal policy response to a slowdown in the Chinese economy, both from China and among trading partners, is unpredictable. On the other hand, if this really is a «new era» for China, then the rest of the world will also be sailing in uncharted waters.

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5. According to OECD data, 18% of the value added in European exports originates abroad. The relative weight of exports in GDP in the euro area is 47%.