Box 1. What would be the impact on Latin America of a greater slowdown in China?

Doubts over the strength of China's economic cycle and financial stability provoked a significant upsurge in financial turmoil and new corrections to commodity prices in August and September this year.

### A risk scenario for China: persistent deceleration

Even though our central scenario assumes that the authorities will continue to provide support for annual growth of at least 6%, it is still useful to examine the effect of a sharp and long-lasting deceleration in China which leads to growth that is significantly below such levels.

The touch-paper for such a low-growth scenario could be a situation of scant progress in structural reform to rebalance consumption and investment. In this setting, where there are doubts over the quality of heavy real estate investment and productive capacity, growth in China would dampen considerably in the ensuing few years. Although it would still be the case that the authorities would redouble efforts to stimulate domestic demand (probably by means of stepping up public sector investment), this would not manage to offset already shrunken private sector investment. Thus, in spite of the boost from economic policy (both fiscal and monetary), the economy would be running below its potential. At the same time, the stimulus measures would put pressure on both the CNY to depreciate and inflation to rise. This would produce a scenario of enduring stagnation where GDP growth rates would approach 4% (instead of the 6% we have in the central scenario, see Figure B.1.1), while investment would increase at under 7% YoY (Figure B.1.2) and industrial production at below 4% (Figure B.1.3), instead of the rates of 11% and 7% respectively that are envisaged under the baseline scenario.

It is important to make the point that this is a scenario that has a low, yet significant, likelihood of materialising, particularly bearing in mind that
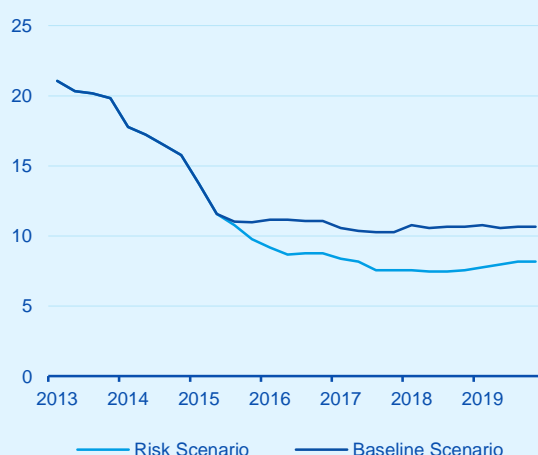
the central scenario already factors in a slowdown in growth. Even so, such a scenario would have a major impact on economies that are closely linked to China, such as those in South America.

Figure B.1.1
China: GDP growth under the baseline and risk scenarios (% YoY)
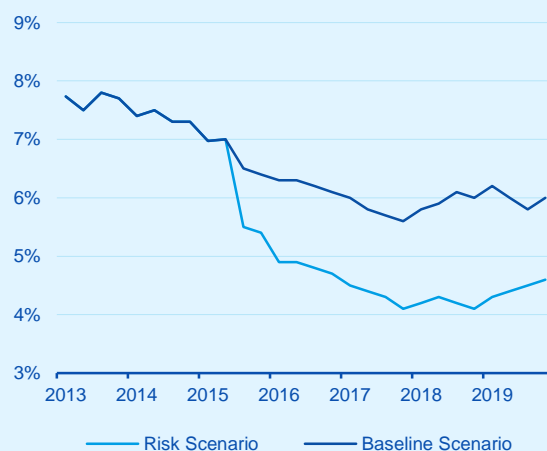
Source: BBVA Research

Figure B.1.2
China: variation in fixed asset investment (% YoY)

Source: BBVA Research

Figure B.1.3
China: variation in industrial production (% YoY)

Source: BBVA

A negative shock in relation to growth in China would hit South America especially hard, above all via lower demand and softer commodity prices

The risk scenario described above would affect Latin America mainly through two pivotal channels: i) a reduction in Latin America's external demand, though chiefly a drop in the price of key export commodities, and ii) increased global risk aversion, with the fallout being particularly harsh on the assets of emerging economies. These channels would be particularly active for the countries in South America, but less so for Mexico as it is less commodity-dependent (except as regards tax revenues) and less tied to China's cycle.

Turning to the first channel, it should be remembered that China is one of Latin America's major trading partners, especially for the South American countries. Those countries for which direct exports to China have the greatest weight out of the total are Chile, Brazil, Peru and Uruguay, which ship between 15% and 25% of their exports there. In contrast, Mexico only sends 2% of its exports to China.

Dependence on China is nonetheless not solely due to direct exports into it, but also to China's

influence on the region's key commodity export prices. Specifically, a Latin American country's dependence on China will be greater the larger is the weight of its overall exports of commodities into China, where the latter has such a predominant position (on the demand side for these) that this goes a long way to dictating their final price.

Bearing in mind China's weight of this kind in the market of each export commodity, Figure B.1.4 shows a summary of the dependence index[2] for each of Latin America's principal countries with respect to China in 2008 and 2014. On the one hand, it highlights the rise in dependence on China among most of the countries over recent years (except for Argentina, owing to the fall in soybean and oil exports to China). On the other hand, it brings out the dichotomy between the high dependence of the countries in South America and Mexico's low reliance, as we have discussed earlier.

Figure B.1.4
**Index (0-1) of export dependence on China***
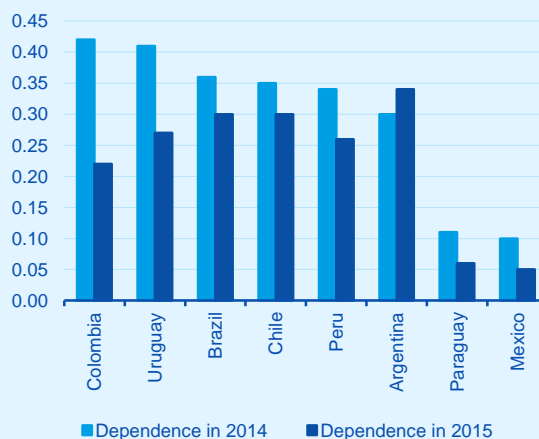
* A higher index means greater dependence on China.
Source: BBVA Research

Moreover, the impact on the prices of key export commodities will, to a large extent, depend on the strength of the demand for each type of commodity, which is created by investment in China (the GDP component that is most affected in this risk scenario). Figure B.1.5 shows the

2: For further details on how the index of dependence on China is constructed, see the BBVA Research 15/26 Working Paper "Measuring Latin America's export dependency on China" of August 2015.

elasticities of the prices of the major industrial commodities in relation to a drop in investment.

Figure B.1.5
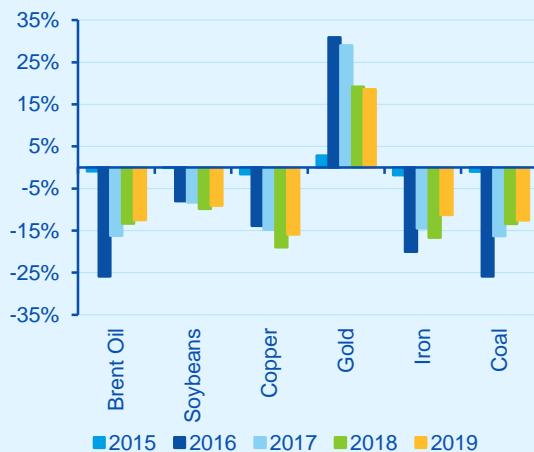**Elasticity* of commodity prices with respect to investment in China**
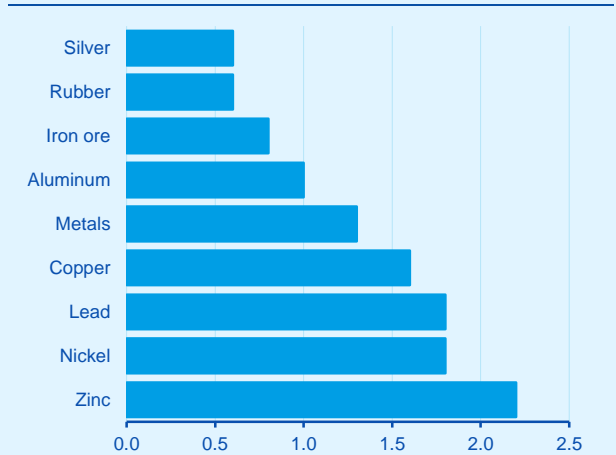
* Percentage impact on commodity prices one year after a 1pp decrease in fixed asset investment growth in China.

Source: IMF and BBVA Research

Taking into account these elasticities and the impact which we estimate for consumption and investment in China under the risk scenario, as well as the expected rise in global risk aversion (see details below) and the current glut in certain commodity markets (the most notable being the oil market), Figure B.1.6 shows the estimated impact on the prices of the region's key export commodities in relation to the baseline forecast scenario.

Particularly notable here is the strongly negative effect which this risk scenario would have on the prices of the key industrial metals (copper, iron ore), especially owing to the drop in industrial demand and for real estate investment. Prices of energy commodities would be hard-hit too, especially oil and initially even more so than metals, since the shock of lower demand would come on top of lingering doubts over the capacity to soak up current excess supply. On the other hand, food prices would not suffer such a heavy fall, since they are more closely associated with consumption, which is less affected by this kind of shock.

Figure B.1.6
Effect on the price of major commodities under the risk scenario in China (% price difference vs. the baseline scenario)

* Percentage impact on commodity prices one year after a 1pp decrease in fixed asset investment growth in China.
Source: BBVA Research

The second channel for an impact on the region would be an increase in global risk aversion

A severe slowdown in China would be highly likely to bring with it a rise in global risk aversion as doubts intensify over the ability to sustain world growth, the chances of financial turbulence in China, and asset quality, both there and among the emerging economies most closely linked to it. In China's case, there could be a rise in risk premiums beyond even those seen immediately following the Lehman Brothers failure, and the impact on Latin America would be substantial, with risk premiums approaching those observed in 2009. The increase in risk aversion would unleash a flight to the safety offered by assets of developed economies and put asset prices in Latin America under pressure, as well as exchange rates. Precisely such a flight to safer assets would underpin a rise in the gold price to over the level forecast in the baseline scenario (Figure B.1.6)

The potency of these two channels would be amplified by the adverse impact on household and business confidence, as well as the lack of available options for counter-cyclical policies, except on the fiscal front in Peru and Chile

The two spillover channels would be augmented by the adverse impact on family and business confidence in the region. In fact, following the 2008 Lehman Brothers collapse, one of the main channels of transmission to Latin America was the sharp fall in confidence among both types of economic agents, which led to a very pronounced and sudden contraction of domestic demand. Given China's importance to South America, it is highly likely that confidence would crumble again, although this would be aggravated by the fact that the confidence indicators are already languishing at very depressed levels (they are actually at a lower ebb than in 2009 in the case of Brazil, for example). Specifically, we assume that the negative effect on family and business confidence would be of a degree akin to what was observed in the wake of the Lehman Brothers bankruptcy, and last for 4-6 quarters.

It should also be recalled that, unlike in 2009, the region has far less room to manoeuvre in terms of counter-cyclical economic policies that could deaden the impact of the shock. On the monetary side, the rise in inflation and the risk of unanchoring of expectations (except in Mexico) makes monetary easing highly unlikely (it would not be required in Mexico). On the other hand, fiscal scope has been used up in certain countries, such as Brazil and Argentina (and has been much reduced in the others) on account of the impact on the public finances of the drop in key commodity prices. The only exception would be Peru and Chile, where a lower base in their fiscal deficits and government borrowing in 2015 would give them some (but not too much) leeway, so as not too jeopardise their sovereign ratings. Thus policies in most countries would be clearly pro-cyclical and would leave exchange rate depreciation to absorb most of the shock.

A scenario of sustained investment deceleration in China would have a substantial negative impact on South America, which would be best tolerated by Argentina, Chile and Peru

Faced with a scenario of slowdown in China such as that described above, domestic demand in South America would be battered by the falls in both consumption and investment deriving from the drop in family and business confidence. Even though the countries with scope for counter-cyclical economic policies (chiefly Chile and Peru) would implement some sort of initial fiscal stimulus, domestic demand would still be harmed, albeit less than in other countries where such margin does not exist. Figure B.1.7 shows that specifically Brazil and Colombia would be among the worst-hit countries owing to their high exposure to China; in Colombia's case, due to suffering from the impact of the oil price collapse (which fell more dramatically than the price of other commodities), and in Brazil's case, due to having to face the shock with very badly weakened fundamentals and a need to continue with its fiscal correction.

Figure B.1.7
Impact on growth of the risk scenario in China (difference in pp vs. the baseline scenario)
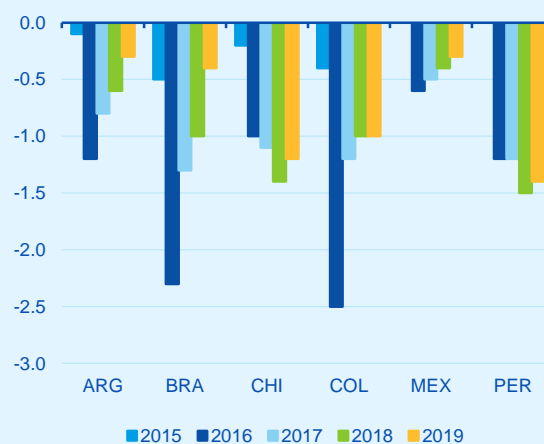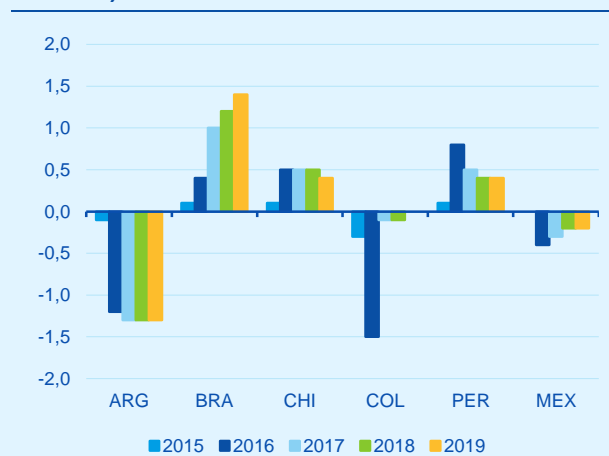

Source: BBVA Research

Meanwhile, Peru and Chile are highly exposed to a shock from China, but have something of a shock-absorber in the shape of scope for counter-cyclical fiscal policies (at least initially) which would soften the initial impact. In Argentina, the impact would be smaller, largely because the shock affects the prices of food (its chief type of export good) far less than metals, while the fall in the price of imported oil actually counteracts part of the negative effect on its external accounts. Finally, the effect on Mexico would be only marginal, on account of its low exposure to China, although its public finances would suffer from the impact of a lower oil price.

Thus, under the risk scenario, Brazil would face a withering recession in 2016 (deeper than that already built into our baseline scenario) and stagnation in 2017, while growth in Argentina and Colombia would be practically nil in 2016, although with a recovery at rates of closer to 2.5% in 2017. Growth in Peru and Chile would be reduced to only around 1.5% in 2016, thereafter picking up to a pace of between 2.5% and 3% in subsequent years. It is interesting to note that, much as occurred in 2008, the sharp reduction in domestic demand would more than make up for the deterioration in external demand and the terms of trade, which would mean that the external deficits in the case of Peru, Chile and Brazil improve on the situation in the baseline scenario (Figure B.1.8).

The results of this simulation exercise therefore show that certain countries in the region, such as Mexico, Peru and Chile, can withstand a shock from China relatively better, although their weak macroeconomic starting point means that for most countries, with the exception of Mexico, the effects are potentially quite pronounced. At the same time, the exercise underscores the importance of having some margin for counter-cyclical policies, while the stock of such scope has still not been replenished after being successfully used up to soften the impact of the 2008-09 global crisis.

Figure B.1.8
Impact on the current account (% GDP) of the risk scenario in China (difference in pp vs. the baseline scenario)

Source: BBVA Research

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This report has been produced by the Latam Coordination

Chief Economist for Latam Coordination
Juan Ruiz
juan.ruiz@bbva.com

Enestor Dos Santos
enestor.dossantos@bbva.com

Cecilia Posadas
c.posadas@bbva.com

Marina Conesa
marina.conesa@bbva.com

Argentina
Gloria Sorensen
gsorensen@bbva.com

Chile
Jorge Selaive
jselaive@bbva.com

Colombia
Juana Téllez
juana.tellez@bbva.com

Mexico
Carlos Serrano
carlos.serranoh@bbva.com

Peru
Hugo Perea
hperea@bbva.com

Venezuela
Julio Pineda
juliocesar.pineda@bbva.com

With the contribution:

Economic Scenarios
Julián Cubero
juan.cubero@bbva.com

Asia
Le Xia
le.xia@bbva.com

BBVA Research

Group Chief Economist
Jorge Sicilia Serrano

Developed Economies Area
Rafael Doménech
r.domenech@bbva.com

Spain
Miguel Cardoso
miguel.cardoso@bbva.com

Europe
Miguel Jiménez
mjimenezg@bbva.com

US
Nathaniel Karp
Nathaniel.Karp@bbva.com

Emerging Markets Area

Cross-Country Emerging Markets Analysis
Alvaro Ortiz
alvaro.ortiz@bbva.com

Asia
Le Xia
le.xia@bbva.com

Mexico
Carlos Serrano
carlos.serranoh@bbva.com

Turkey
Alvaro Ortiz
alvaro.ortiz@bbva.com

LATAM Coordination
Juan Manuel Ruiz
juan.ruiz@bbva.com

  Argentina
  Gloria Sorensen
  gsorensen@bbva.com

  Chile
  Jorge Selaive
  jselaive@bbva.com

  Colombia
  Juana Téllez
  juana.tellez@bbva.com

  Peru
  Hugo Perea
  hperea@bbva.com

  Venezuela
  Julio Pineda
  juliocesar.pineda@bbva.com

Financial Systems and Regulation Area
Santiago Fernández de Lis
sfernandezdelis@bbva.com

Financial Systems
Ana Rubio
arubiog@bbva.com

Financial Inclusion
David Tuesta
david.tuesta@bbva.com

Regulation and Public Policy
María Abascal
maria.abascal@bbva.com

Digital Regulation
Álvaro Martín
alvaro.martin@bbva.com

Global Areas

Economic Scenarios
Julián Cubero
juan.cubero@bbva.com

Financial Scenarios
Sonsoles Castillo
s.castillo@bbva.com

Innovation & Processes
Oscar de las Peñas
oscar.delaspenas@bbva.com

Contact details: