LATIN AMERICA

# Repercussions of Fed rate hikes for capital inflows to Latin America

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The withdrawal of monetary stimuli by the Fed will have major implications for capital inflows to the region, given their significance in shaping global financial conditions. Fed monetary normalisation will enhance the relative appeal of US to LatAm assets, thereby reducing inflows in subsequent years. These dynamics could also lead to adjustments to the current accounts of countries in the region and currency volatility, with repercussions for growth and inflation.

Recent episodes involving US rate hikes in 1994 and 2004 are not much use when it comes to estimating the potential impact on flows into the region. Both of these found Latin America in a very different situation as regards fundamentals and financial vulnerability. In the early 90s, major imbalances persisted which, for example, led to the financial crisis in Argentina and the balance of payments predicament in Mexico. Coming into the first decade this century, however, the region was already enjoying far greater stability, with an approach incorporating inflation targets, flexible exchange policy and more prudent fiscal policies that left it better-placed to weather the rate hikes in 2004.

In circumstances where increasing levels of financial integration and depth call for a global rather than a regional analysis, we model the effects which monetary policy in the United States and the Eurozone would have on capital flows in emerging economies[1]. Additionally, account must be taken of the expected divergence between the monetary policies of the Fed, which is preparing to start withdrawing monetary stimuli around midway through this year, and the ECB, which has announced an ambitious stimulatory programme that will involve buying up sovereign bonds.

The results of the analysis suggest that the withdrawal of monetary stimuli will almost certainly lead to lower capital inflows to the emerging economies, among which Latin America stands to be the most affected. The scale will depend on market anticipation and how much risk aversion increases. Despite the ECB's historic announcement, in global terms the effect of the Fed's withdrawal of stimuli will predominate. The ECB's response will garner positive results among Europe's emerging nations, where it could to some extent counteract Fed moves, but this will not be as true in other regions such as Latin America. The outflow of capital in the scenarios where the Fed raises rates in line with expectations, or even more aggressively, should be in the range of 3.0-3.7% of cumulative GDP over three years up to 2017.

## Modelling strategy

The model uses a sample from 1Q05 to 3Q14 for some 40 countries with developed and emerging nations equally represented, and the effect is measured on cumulative portfolio flows as a proportion of total assets under management. The model combines dynamic factors (DFM) with factor-augmented vector autoregressive (FAVAR) methodology to link transmission channels for flows (global, by region and idiosyncratic) with macroeconomic variables.

The model is two-stage: the initial stage (involving the Dynamic Factor Model or "DFM") is based on the hypothesis that portfolio flows have an unobservable structure of five underlying dynamic factors, viz. global, emerging, developed, safe-haven asset and idiosyncratic factors. In a second stage of estimation, these

1: This economic watch is based on the article: Monetary Policy in the North and portfolio flows in the South, Gonzalo de Cadenas Santiago, Alicia García Herrero, Alvaro Ortiz Vidal Abarca.

underlying factors are related to macroeconomic variables using a FAVAR, thus enabling timing dynamics between flows and the macro environment. Estimating reveals a significant relationship between factors, and measurements for global risk aversion and emerging markets (VIX and EMBI), besides a link between these and macro variables.

This model is used to analyse scenarios which propose the most likely combinations of Fed and ECB moves[2]. The scenarios considered are combinations of Fed and ECB policies and risk aversion measurements; from a gradual removal of stimuli in the United States that would involve raising the reference rate from the middle of 2015 to a scenario in which the Fed decides to put off and limit the normalisation process. The table below shows the assumptions in the scenarios; the most likely of these (central scenario) is scenario 1, where the Fed pursues an exit strategy that will mean raising the Federal Funds Rate to a level of 2% at the end of 2016 and the ECB pro-actively applies quantitative easing.

Table B.2.1
**Details of simulation scenarios**

| | Scenario | FED | ECB | Global risk aversion |
|---|---|---|---|---|
| 1 | Fed exit and QE by the ECB | 10y + 50bp in 2014 + 50bp in 2015 | 10Y -20bp per quarter between 4Q14 and 2Q15 | Return to long-term average |
| 2 | Over-reaction to Fed exit and QE by the ECB | 10y + 150bp in two quarters | 10Y -20bp per quarter between 4Q14 and l 2Q15 | Spike, as with the euro crisis, which fades away one quarter later |
| 3 | Over-reaction to Fed exit and greater QE by the ECB | 10y + 150bp in two quarters | 10Y -50bp in two quarters | Spike as with the euro crisis, which fades away one quarter later |
| 4 | Delay in Fed exit and QE by the ECB | Half of scenario (1) | 10Y -50bp in two quarters | No increase in the appetite for risk |

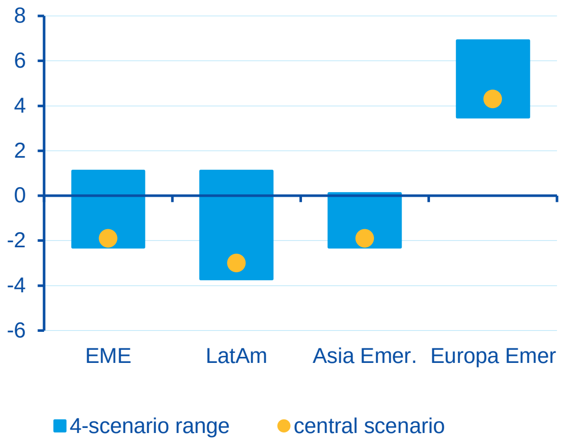
Source: BBVA Research

## Results

In all of the scenarios except for where the Fed delays making its move (scenario 4), the results point to a withdrawal of funds in emerging economies, which would range between 1.9% of cumulative GDP over three years up to 2017 and 2.3% of GDP in the worst-case situation. In those scenarios where the ECB adopts a pro-active role using quantitative easing, the negative effects on flows are partly offset, although such an impact is only detectable in Emerging Europe. On a regional level, LatAm is the most affected: in the central scenario flows would shrink by around 3.0% of GDP in cumulative terms up to 2017 (figure B.2.1].

2: En el artículo original (agosto 2014) se planteaban seis posibles escenarios, en los dos primeros el BCE seguía mantenía una postura reactiva ante movimientos de la Fed. Para este recuadro se exponen solo los escenarios en los cuales el BCE toma un papel activo.

Figure 1.1
**Cumulative effect on flows as a % of GDP, 2015-17**




Source: BBVA Research

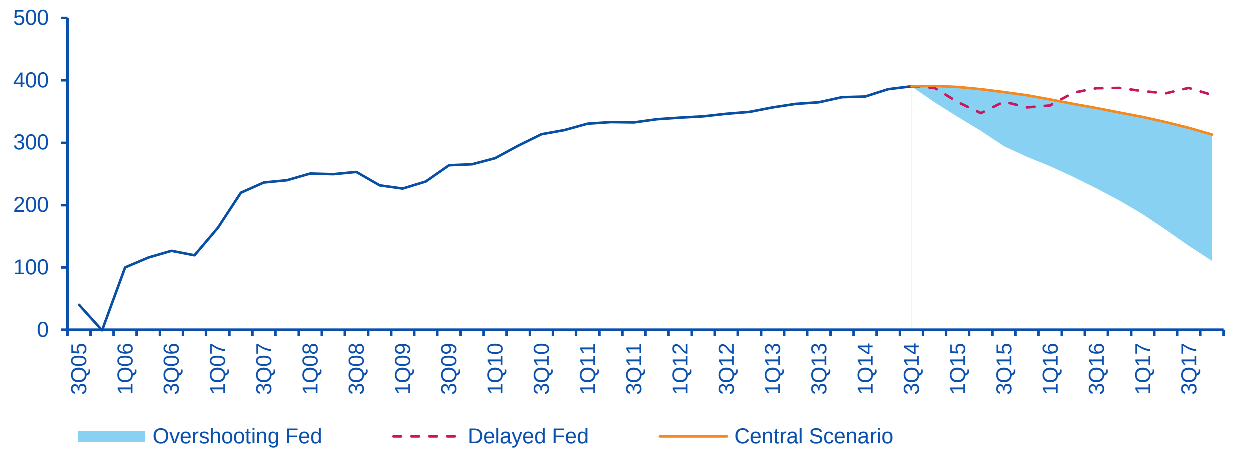
Table 1.1
**Capital flows to emerging economies, simulated scenarios. Cumulative response as a % of GDP**

| | EME | LatAm | Emerging Asia | Emerging Europe |
|---|---|---|---|---|
| 1 | -1.9 | -3.0 | -1.9 | 4.3 |
| 2 | -2.3 | -3.7 | -2.3 | 3.5 |
| 3 | -2.1 | -3.4 | -2.1 | 5.9 |
| 4 | 1.1 | 1.1 | 0.1 | 6.9 |

Source: BBVA Research

The unevenness in the region is striking, with some countries such as Brazil and Mexico enjoying substantial portfolio attraction; Brazil moreover is highly dependent on indexed funds, which adds in volatility and a major pro-cyclical factor. Overall, the cumulative outflow of funds from Latin America could be in the range of 3.0-3.7% of GDP although, in the scenario where the Fed delays rate hikes, there would still be a cumulative inflow equal to 1.1% of GDP (Table B.2.1 and figure B.2.2) over the next two years. The outflow would lead to weakening of the region's currencies, which would in turn place pressure on exchange rate policy management. Those countries most closely integrated with the US market and with delicate borrowing structures will be the hardest hit.

Figure 1.2
**Scenarios for capital flows to LatAm (cumulative figures since 2005, USD bn)**




Source: BBVA Research

## Conclusions

Monetary normalisation by the Fed will have major implications for Latin America, which should experience capital outflows of around 3.0% of GDP in the next two years.

Despite the outflows expected for the region, it should be recalled that, although to highly varying degrees, most countries are equipped with far sounder fundamentals than in the past to contend with them. The region has built up international reserves which have made it possible to absorb external shocks adequately, while the system of inflation targets and exchange rate flexibility will help to cushion the effects on growth. All in all, this analysis shows the extent to which the region will lose out on one of the tailwinds which has helped it along in recent years, and highlights the need to relaunch internal drivers for growth via structural reforms.

**DISCLAIMER**