THE POLICY RESPONSE TO TAPERING IN LATIN AMERICA

By

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1. Background

I was asked to make a presentation on the policy response to tapering in Latin American countries. But before I get into the details of how different countries in the region are reacting to the policy challenges presented by the expectation or reality of short term capital outflows, I think it would be useful to take a step back and focus on a broader view of how the world has changed economically and financially in recent decades, and how this has affected more traditional approaches to policy-making at central banks in emerging markets.

There are three major differences between the current situation and past episodes of global economic and financial uncertainty, especially with respect to the obligatory reference point provided by the Great Depression of the 1930's. These are the freedom of capital flows, the consequent globalization of the financial industry and the adoption of quantitative easing as the policy response of central banks in advanced economies.

We are definitely in a new world, sailing uncharted seas. Not only are the advanced countries engaging in quantitative easing on an unprecedented scale – supposedly as the only alternative to prevent the Great Recession from entering a downward spiral – but emerging economies are having to cope with large destabilizing inflows and outflows of short term capital which for the first time in financial history are not of their own making.

Had an economist fresh out of grad school in recent decades - upon returning to his or her developing country - advised the national authorities that they should prepare for the intractable problem of having too many dollars, chances were they would have not landed a job in government. That was simply not the world we lived in. For as long as could be remembered, foreign exchange was scarce. It was needed for imports, for debt service, for travel and was always in short supply. Foreign exchange crises had been the order of the day for generations. Or what amounted to the same thing, debt crises when developing countries had been allowed unrestricted access to international financial markets.

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Economic theory taught us that exchange rates were determined by the current account of the balance of payments – mostly trade – and that the virtue of post Bretton Woods floating exchange rates lay in the automatic adjustment of production and consumption patterns, both internally and externally, in response to prolonged imbalances. Capital inflows consisted mainly of FDI, for the most part welcomed for their impact on production, employment and exports.

But things began changing in the late 90’s. In emerging markets, following the various crises, macroeconomic policy began to improve and fiscal dominance began to weaken. Central banks acquired a strengthened institutionality and weaned themselves off the exchange rate as an anti-inflationary instrument as they gradually began to adopt an inflation-targeting policy. In advanced countries, low interest rates increased the appetite for overseas investment risk as emerging economy securities evolved into respectable asset classes. International liquidity was abundant long before QE came into the picture, feeding the new short-term portfolio capital flows – which gradually came to surpass trade flows by a substantial margin – as they poured into emerging bonds, stocks and currencies.

Now there does seem something intuitively wrong about a situation where a key price such as the exchange rate – affecting the consumption, production, livelihood and savings of vast segments of the population – can be heavily influenced by the sentiments of a highly leveraged international investment community. Especially when capital flows face no barriers, while trade in output is still subject to numerous restrictions. In exchange markets, the sheer firepower of the financial world can outgun – even if inadvertently – the slow machinery of the real economy. The advantages of floating exchange rates and the freedom of capital flows are tangible. They are the best check to poor macroeconomic policies and allow countries to implement an independent monetary policy suited to their domestic needs. But the world should be able to come up with a better system than just letting financial markets set the tune to which the real economy must dance, regardless of productivity or monetary policy.

2. The Response to Capital Inflows

Since tapering implies an increased probability of capital outflows, a first approach to the topic at hand should emphasize that the policy response to capital outflows should bear some symmetry to the handling of capital inflows. After all, the latter are a prerequisite to the former. This takes us to the basic question of how countries respond to the increased volatility in short term international capital flows.
After several years of portfolio capital inflows the stylized dynamics are pretty clear:

1) Money flows into the foreign economy in search of stocks, bonds and carry-trade, seeking a higher yield than that available in the country of origin.
2) This puts upward pressure on the local currency, causing a loss in competitiveness.
3) While this can be tolerated within certain margins, if local currency appreciation threatens to get out of hand, the central bank will begin buying foreign currency in order to keep its price from declining further.
4) In doing so it injects local currency into the market, which must then be sterilized by issuing local currency bonds in order to avoid creating inflationary pressures.
5) This pushes local interest rates up, which attracts further capital inflows.
6) The central bank balance sheet accumulates low-yielding foreign currency reserve assets and an equivalent amount of high-yielding domestic currency liabilities. There is a quasi-fiscal loss to be assumed either by the central bank or Treasury.

In actual practice, of course, things are never so clear-cut:

1) While monetary policy could engineer an interest rate cut from the outset to dissuade foreign capital from entering, this in turn could exacerbate domestic inflationary pressures. If inflation is above target, domestic currency appreciation could in fact be a welcome anti-inflationary instrument inasmuch as imported inflation is concerned. Much depends on where the economy is situated in the business cycle and where inflation stands relative to its target (Taylor rule output and inflation gaps).
2) An appreciating currency tends to produce a current account deficit as imports rise and exports lose competitiveness. At some point the inflation target may be displaced by an exchange rate target as monetary policy becomes accommodating. How much appreciation can be accepted before this occurs depends on where the economy is situated in its real exchange rate cycle, i.e. how much margin there is to fall before the export lobby begins pressuring. In other cases the central bank may intervene simply to dampen spikes (deter "undershooting") rather than to influence the trend.
3) The terms of trade are also extremely important in determining how long the overvaluation cycle can last. High prices for commodity exporters can sustain longer local currency appreciation phases.
4) The central bank may take advantage of capital inflows and opt for a balance sheet policy of accumulating reserves as self-insurance against a reversal in the cycle, accepting the fiscal cost as an "insurance premium".
3. The Run-up Years to Tapering

In examining the annual data for the run-up years to the financial crisis, quantitative easing and eventually tapering, we shall rely mainly on data from the five largest inflation-targeting economies in the region, namely Brazil, Chile, Colombia, Peru and Mexico. Other large economies such as Argentina and Venezuela are for the most part excluded since their unorthodox policies are not representative of the general trend in the Latin American region. Uruguay on the other hand – although having adopted an inflation target range in 2007 – has more recently dropped the interest rate and reverted to the growth rate of monetary aggregates as the main instrument for monetary policy. The inclusion of the latter three countries in some charts is mostly for purposes of reference rather than illustration.

The first chart provides a macroeconomic perspective of real economic activity in the region by showing annual GDP growth since 2000:

**Chart 1: Annual Regional GDP Growth Since 2000**

Were it not for the hiccup represented by the repercussions of the financial crisis in 2009, this would have represented the longest growth cycle on record for the region, with average growth rates exceeding 5%; perhaps not impressive by Asian standards, but nevertheless unprecedented for Latin America in recent decades. Following a quick recovery to pre-crisis levels, however, growth began to moderate and declined more sharply into the 1%-2% range towards the end of the period, but nevertheless remained positive except in the case of Brazil that entered technical recession during the first half of 2014. The only country that was deeply affected by the
crisis was Mexico, given its dependence on manufactured exports to the USA. And the only country still exhibiting high GDP growth rates is Colombia.

The main driver of the cycle was the rise in commodity export prices, stemming from the increased global demand as the result of the full-scale emergence of Asian economies on world markets, especially China and India. The subsequent falling-off in growth has for the most part reflected adjustment to the subdued levels of demand in advanced economies following the crisis. The next chart shows the current account balance as a percentage of GDP for the same group of Latin American countries.

**Chart 2: Current Account Balance as Percentage of GDP**

It can be seen that current account results tend to shadow GDP growth. They improve starting in 2003, fall sharply as a result of the financial crisis but rapidly recover partially, only to initiate a new downward trend. Today they are all back in deficit territory. It should be kept in mind, however, that the current account deficits do not only represent “consumption overspending” driven by appreciated currencies, since the latter period continues to see strong foreign direct investment financed by capital inflows.

This is borne out by the sustained accumulation of international reserve assets at the central banks of these countries during the same period as shown in the next set of tables:
The charts show that strong reserve accumulation was a constant feature throughout this period, except in the case of Argentina which began facing problems of a more idiosyncratic nature that deterred the inflow of investment and portfolio capital. All the other countries to date maintain record high levels of reserves, even taking into account the outflows of portfolio capital since mid-2013.
The principal conclusion that can be reached in reconciling strong reserve growth during years of significant current account deficits is that capital inflows to the region must have been extremely large in historical terms.

Whether reserve growth was the result of a deliberate balance sheet policy of self-insurance, or simply reflected the monetary accommodation of an exchange rate policy aimed at preventing an excessive loss of competitiveness, is probably a matter of degree that varies with the individual countries and their circumstances. But the fact that the rate of reserve accumulation appears to accelerate in the latter years of the period is probably indicative of stepped-up efforts by countries to slow the rate of currency appreciation as the margin of competitiveness narrowed. The impact of capital inflows on nominal exchange rates is brought out very clearly in the following chart, where currency units per dollar are indexed to their value at the end of 2000:

**Chart 4: Nominal Exchange Rates for Selected LATAM Countries, 2000-13**
(Index of currency units per US dollar, 2000 = 100)

It can be seen that – except for the Peruvian sol – all currencies were depreciating quite rapidly at the outset of the period (Brazil and Uruguay had experienced large devaluations). As from 2003, however, capital inflows reversed the trend and all currencies (save for the Mexican peso) began appreciating against the dollar. There was a sharp – although transitory – depreciation during the 2009 recession, after which stabilization appeared to be the norm until a modest depreciation trend began towards the end of this period.
The effect on competitiveness of the capital inflows can be approximated by their impact on the real exchange rate. For Latin American countries a reasonable proxy for the RER is provided by comparing the purchasing power of the dollar in these countries with its purchasing power in the USA. If countries become “expensive” relative to the USA, it is likely that manufactured exports will price themselves out of export markets while commodity exports will see their profitability gradually eroded as the dollar cost of domestic production rises. The following charts show the evolution of comparative dollar purchasing power in during these years, indexed to its average level during the period 1950-73.

Chart 5: Comparative Dollar Purchasing Power in Selected LATAM Countries, 2000-13

In most cases, following initial gains in competitiveness due to devaluations early in the decade, there is a clear decline in competitiveness throughout the period, starting long before the financial crisis and the so-called “currency wars” attributed to the initiation of QE in the United States. Mexico instead shows a slight upward trend within a much narrower range than the others, attributable to its close integration with the U.S. under the NAFTA agreement (where over 90% of Mexican exports are directed).
The charts suggest that QE merely came to aggravate an existing trend by adding to the excess liquidity swirling around in international financial and commodity markets. It should be noted that although the post-crisis recovery in commodity prices allowed emerging countries to maintain higher growth rates than the recession-stricken advanced world, it also contributed to inflationary pressures.

But the fact that the currency appreciation cycle lasted for ten years in Latin America (with a slight interruption due to the 2008 financial crisis) is indicative of two things: first, there was sufficient headroom at the outset to allow for a gradual “whittling away” of competitiveness and, second, inflationary pressures during the period were tolerable enough to avoid having to hike interest rates sharply (except in the case of Brazil). The evolution of inflation is shown in the chart below.

**Chart 6: Annual Inflation in Selected LATAM Countries, 2000-14 (eop)**

Latin America has had a long and troubled relationship with inflation (and still does in some countries). Nevertheless, it can be seen from the chart that inflation targeting has – for the most part – worked well. Save for the spike passing through from the transitory depreciation of currencies in 2008, the trend is downward. Four of the five inflation targeters have brought their rates below 5% and the rest of the region (save for Argentina and Venezuela) is also in single digit territory. By historical standards this is a unique situation, due to improvements in both fiscal policy and central bank institutionality.
Inflationary pressures during the 2003-08 period of rapid growth came from two sources: imported inflation from high commodity prices and wage-cost push on the closing output gap. They were kept in check, however, by the combination of an appreciating domestic currency and increases in the central bank policy rate (as seen in the following chart):

Chart 7: Central Bank Policy Rates for the LATAM 5, 2000-14

The rising trend in policy rates continued until the financial crisis, when the sharp fall in output during 2009 forced central banks to reverse course and lower their policy rates to unprecedented levels. However, once it became clear that the worst effects of the crisis were over, and that domestic commercial banks had not been severely affected and output was beginning to recover, policy rates were again increased and stabilized in the 3% – 5% range. In the case of Brazil, policy rates followed a different pattern by gradually falling from extremely high levels (25%) required at the outset of the period to tame the 2-digit rate of inflation. After the crisis, Brazil followed the common regional pattern, albeit at a significantly higher level. Following a relapse in inflation, Brazil has again had to tighten policy.

In summary, it would appear that throughout this period of strong capital inflows most countries were attempting to find a “comfort zone” in the tradeoff between inflation and competitiveness. Higher rates could quell inflationary pressures at the risk of provoking further capital inflows and loss of competitiveness. Lower rates aimed at deterring inflows could stir inflation up again. Gradual tactical withdrawal on both fronts resulted in more inflation and less competitiveness than would have been desirable, but the upside was a large increase in reserve assets (albeit at a substantial quasi-fiscal cost).
This strategy was made possible by the existence of margin for maneuver: if and when the limits of tolerable inflation or competitiveness were reached, more proactive policies could be called for (as in the case of Brazil). These measures included barriers to the inflow of portfolio investment through taxes or administrative restrictions such as reserve requirements, imposed by Brazil, Chile, Colombia, Peru and Uruguay, although their effectiveness was unclear.

4. The Impact of Tapering

What exactly does tapering mean? It doesn’t mean the FED will be withdrawing liquidity from the market; for the time being, it is simply increasing liquidity at a slower rate. Once new asset purchases halt, however, net liquidity will begin to decline due to the impact of maturing bonds the FED has already bought. So at some point near the end of 2014 – if the US economy does not noticeably weaken – the FED’s balance sheet will begin to shrink from its current USD 4 trillion (having quadrupled in size since the onset of the crisis). The natural corollary should be an increase in interest rates.

When Gov. Bernanke insinuated in mid-2013 that this process could begin, financial markets went into a fit (the “tapering tantrum”). Just the idea that all this cheap money would not be around forever threw investors into a panic (especially those who invest with borrowed money, such as hedge funds). Since a lot of this money has been invested in financial markets worldwide, there was a sudden global sell-off of stocks and bonds while the going was good, in the expectation that prices may fall further in the future as investment funds are withdrawn. Emerging markets were especially hard hit, and of course their currencies depreciated as investors sought to get back into dollars to repatriate their funds.

Chart 8: Representative Stock Market Price Variations for Emerging Markets 2013-14
After a few months investors decided that they may have acted too hastily – especially since there was still some uncertainty as to when tapering would actually begin – and emerging financial markets and currencies began to recover some of the losses. But in the meantime, emerging economies came under increasing scrutiny of their macroeconomic policies and it appeared that not all of them had been doing their homework. Some, it appears, had been favoring excessive consumption while neglecting to take advantage of the bonanza years to invest in infrastructure or address structural weaknesses in their fiscal policies. Thus the “fragile five” (Brazil, India, Indonesia, South Africa and Turkey), and others were duly singled out as vulnerable in view of their growing inflation, weakening growth and widening current account deficits.

When a definite timetable was announced for the start of tapering towards the end of 2013, there was a new round of selling where in some cases (Latin America and emerging Europe) asset markets reached new lows. But again, in February 2014 money began flowing back into emerging markets and financial asset prices began rising again, although only Asia was able to return to its pre-selloff highs. Finally, in October the sell-off resumed in view of the imminent end of new FED asset purchases and the presumption of the onset of a rise in interest rates, compounded by several additional factors such as the less-than-expected magnitude of BCE quantitative easing, the perceived weakening in the Chinese economy and the outcome of presidential elections in Brazil.

**Chart 9: Stock Market Indexes Emerging Markets (MSCI Jan 2013 = 100)**

Fuente: Haver Analytics y BBVA Research
So what do we have here? The obvious answer is a lot of uncertainty and a big increase in volatility, as can be seen in the above two charts prepared by BBVA, a Spanish bank. It is interesting to see that while stock markets have proven more resilient in Asia than in Latin America, in sovereign debt markets the spread vis-à-vis the U.S. Treasury has risen relatively less for Latin America than for Asia. But whether these ups and downs are just volatility in the presence of uncertainty, or whether they really represent a turning point in the long-running rally in emerging financial markets, still remains to be seen. The truth is that there are not many attractive investment alternatives in advanced economy markets and the appetite for risk is still high. There may be an increased focus on fundamentals, but a generalized retreat does not seem likely. While subject to greater selectivity, emerging markets are an asset class that is clearly here to stay.

However, if tapering is but the prelude to a major and sustained outflow of portfolio investment funds from emerging markets, the reaction of countries during these recent bouts of volatility may shed some light on what will or should be their policy response. For this purpose we take a look at higher-frequency data for the period to see what has actually taken place during the period since January 2012, starting with quarterly GDP growth:
The Pacific economies (Chile, Colombia and Peru) still experienced high growth levels, although with a declining trend, throughout 2013. The falloff in the rate of growth in Mexico and Brazil was much sharper, fluctuating in a significantly lower range (1% - 3%). By mid-2014 the rate of growth was falling in all five countries.

Next, in turning our attention to the current account balance (in millions of current US dollars), it may be seen in the following chart that all five countries have been in external deficit since the beginning of 2012. In most cases the deficit appears to be stabilized, the exception being Brazil where the deficit continues to grow.
Upon closer inspection, though, except for Mexico and Chile, stabilization of the current account deficit has occurred at a troublesomely high level relative to the size of the economy (for countries that don’t issue a global reserve currency). The next chart shows the sum of the current account balance for the four quarters ending June 2014 as a percentage of 2013 GDP. This is perhaps the aspect causing most concern to Latin American economies, resulting from a steady erosion of the real exchange rate throughout a decade and making reserve levels more vulnerable to a sudden reversal in capital flows.

**Chart 13: LATAM 5: Current Account as Percent of 2013 GDP**

(Four quarters ending June 2014)
Yet if we look to see who is actually losing reserves, the high-frequency data for recent months shows a picture that is not consistent with the current account story. Among inflation targeters, there have been no significant reserve losses during the months centered on the tapering issue. Brazil has seen some fluctuation, but within a narrow range and has finished with a net gain. Peru has had a steady but low-intensity drain.

Chart 14: Reserve Assets, Selected Latin American Countries, Jan 2013-Sep 2014
(USD Billions)
Argentina began incurring in heavy reserve losses towards mid-2013, but for reasons more related to internal macroeconomic mismanagement than to trends in international capital flows. Chile, Colombia, Mexico and Uruguay continue to experience reserve growth, reflecting that capital outflows have been only temporary and that the net inflow for the period continues to be positive.

Nominal exchange rates, as would be expected from a price variable, appear to be the most sensitive to capital outflows. In all countries the currency has depreciated with respect to its January 2013 level, in several of them by more than 10%. Although nominal exchange rates have declined slightly from their early 2014 peaks, they show no signs of falling back to their early 2013 levels.

**Chart 15: Nominal Exchange Rates for Selected LATAM Countries, Jan 2013-Sep 2014**

(Index of currency units per US dollar, Jan 2013 = 100)

Consumer price inflation also appears to edging up in recent months, most likely as a result of the pass-through from exchange rates. The exception is Mexico, where both the exchange rate and inflation have remained relatively more stable.
The final chart shows the movements in central bank policy rates during these months, where two quite different trends can be seen. Brazil, with an inflation rate above 6%, embarked on an aggressive tightening cycle to bring prices under control. Three other inflation targeters (fluctuating in a 2.5% - 4.5% range) continued loosening monetary policy throughout 2014 to stimulate sagging growth, while Colombia - where inflation has risen from 1% to over 4% during the last twelve months – began hiking the policy rate in May 2014.
5. **Conclusions**

The general policy approach in Latin America during the years of strong capital inflows and quantitative easing can be summarized in the following observations:

- The monetary policy interest rate was employed in a manner consistent with inflation targeting. While the loss in competitiveness due to local currency appreciation was doubtless a concern, central banks gave priority to the interest rate as an instrument to keep inflation within the target range. Lowering the policy rate to deter inflows would only have exacerbated inflation. Only when the level of economic activity declined markedly during the crisis years was the policy rate cut.

- The issue of competitiveness was addressed through the purchase of foreign currency and concomitant sterilization measures. While these did not prevent domestic currencies from appreciating, the trend was dampened to remain within acceptable limits. Currency appreciation helped keep inflation within a "comfort zone". This margin for maneuver was aided by high commodity export prices.

- The policy mix allowed central banks to accumulate an unprecedented level of foreign reserves, albeit at a substantial quasi-fiscal cost. This was not an unwanted outcome in view of the self-insurance element of a reserve cushion to be deployed in adverse scenarios such as capital flight.

The current situation of Latin American economies in the more recent months coinciding with the "tapering" issue can be characterized by:

- Slowing GDP growth.
- Significant current account deficits, in some cases increasing.
- Reserves still at historically high levels, with minor losses in some cases.
- Modest domestic currency depreciation.
- Inflation edging up, but still under control.

At the same time these economies are being exposed to wide swings in sentiment on international financial markets with regard to the portfolio capital they received in recent years, impacting equity prices, bond spreads and exchange rates.

Under these conditions, we have seen how central bank monetary policy rates are still being employed as the major policy instrument among inflation targeters, either to stimulate the level of activity in a controlled inflation environment (Mexico and Chile), or to control the rate of inflation where it is threatening to get out of hand (Brazil and Colombia).
The standard model would suggest the following dynamics when the system goes into reverse (capital outflows):

1) Whether due to loss of confidence or simply the need to obtain liquidity, money flows out of the target economy as domestic financial assets are liquidated and the proceeds seek to convert to dollars for repatriation.

2) This puts downward pressure on the local currency, providing a boost to competitiveness.

3) However, if local currency depreciation is excessive and threatens to pass through to the inflation rate, the central bank will begin selling reserves in order to delay or arrest the process.

4) In doing so it withdraws local currency from the market, which in itself would reduce inflationary pressures but could impact the level of activity. However, if the proceeds from reserve sales are used to redeem the local currency liabilities issued in sterilization operations during the capital inflow phase, their impact should be lessened.

5) The central bank balance sheet downsizes as low-yielding reserve assets and high-yielding domestic currency liabilities are shed. The quasi-fiscal losses from the negative spread are diminished.

From what we have seen so far, as in the case of capital inflows central banks are likely to give priority to their inflation targets over competitiveness considerations as far as the policy rate is concerned. In this scenario, competitiveness would be recovered gradually via a market-enabled rate of nominal currency depreciation that exceeded the difference between domestic and foreign inflation.

Should the market rate of depreciation accelerate and risk aggravating inflation, the central banks could respond by trying to control the process through intervention in the exchange market. By selling reserves they would slow down depreciation and withdraw domestic currency liquidity which could help stem the pass-through process and deter capital outflows.

Emerging market central banks managed the long phase of capital inflows with a combination of monetary, exchange rate and balance sheet policies. It is likely they can manage a prolonged capital outflow phase with the same tools. The key is to avoid a trickle turning into a rout. In today’s more discriminating investment markets the more adverse scenario would apply only to countries where economic fundamentals came under severe question. Emerging economies with a sound macroeconomic policy mix – especially fiscal continence – should expect to face the same element of gradualism with outflows as with inflows. There is a big difference between a strategic portfolio asset reallocation and the decision to flee a destabilizing market.