The Eurozone Anxiety: Preparing Emerging Markets for Different Scenarios[1]

I. Introduction

Emerging markets must prepare for short and medium term risks stemming from the crisis in Europe and the problems in other advanced economies.

The overly loose monetary policy in advanced economies and the equilibrium in the world savings-investment market imply low (negative) real interest rates. This entails risks for EM in the medium term.

First, the low cost of funding worldwide may spark unsustainable trends in leverage and expenditure in EM. Second, low real interest rates may induce the undertaking of investment projects that are not profitable in the long run (at higher real interest rates) and may distort key global prices (e.g. commodity prices) and, consequently, the appraisal of sustainable fiscal or external positions of EM.

Hence, EM must implement medium term policy frameworks that avoid the emergence of excesses. In general, mechanisms leading to the generation of sufficient savings or the prevention of untenable investment projects must be explored. For example, fiscal policy must be planned under the assumption that part of the revenue derived from commodity exports or high growth are temporary. Similarly, financial and capital flow regulation must be geared toward the deterrence of unwarranted credit, market, currency and liquidity risk taking as well as of excessive indebtedness.

In the short run, the path that the Eurozone crisis takes may affect EM different ways. These countries must then ensure the conditions to absorb the external shocks at a minimum cost. More specifically, this involves the ability to react counter-cyclically, the ex-ante mitigation of the transmission of the shock to the local financial system and the existence of adequate liquidity provision plans in both domestic and foreign currency.

For example, exchange rate flexibility and the credibility of a low inflation regime are fundamental pre-requisites for a countercyclical monetary policy response. Similarly, a sustainable public debt path is necessary for a countercyclical fiscal policy reaction. A close monitoring of the financial intermediaries' exposure to the rest of the world and prudential regulation of those risks are essential for the normal operation of the financial system after the shock and for the transmission of counter-cyclical monetary policy.

[1] *Notes prepared for the participation of Jose Dario Uribe, Governor of the Banco de la República, Colombia, at the HSBC Annual Emerging Markets Conference 2012, Session 1: "The Eurozone Anxiety: Preparing emerging markets for different scenarios", to be held in Zurich on September 11, 2012.*

Currently, liquidity provision is ample for many EM on both the local and world markets, but an external shock might severely interrupt it. Not only might foreign short term credit flowing to domestic intermediaries be abruptly curtailed, but also internal money markets could stop working properly in a crisis. This would unleash "fire-sales" of securities, hinder capital markets and complicate funding for both the government and corporations.

Thus, the existence of an adequate cushion of foreign reserves, appropriate liquidity regulation, well designed lender of last resort mechanisms for a wide array of intermediaries, and a close monitoring of the connections in the domestic money market are vital to moderate the impact of an external shock on the economy.

Interestingly, there is an overlap of the policy actions required to mitigate the abovementioned medium and short term risks. The sustainability of public debt necessary for countercyclical fiscal policy in the short run is related to ensuring that no permanent expenditures are added on the basis of temporary, medium term increases in revenue. The regulation of capital flows and financial intermediation aimed at containing undue leverage growth or misallocation of investment resources in the medium term is associated with the restriction of currency and maturity mismatches that is required to allow exchange rate flexibility and prevent financial stress after an external shock.

In the following sections the short and medium term risks facing EM are reviewed, and the policy measures and framework aimed at mitigating them are discussed on the basis of the Colombian experience.

II. Medium Term Risks

However events unfold in Europe, potential growth in the advanced world is likely to be below their pre-crisis levels. Correspondingly, the "natural" real interest rate will remain low. Along with these trends, monetary policy in these countries will try to keep real interest rates even lower in response to continued subpar growth.

It is possible that a prolonged period of low real interest rates will prompt an increase in commodity prices despite the weakness of the global economy. The combination of low real interest rates and high commodity prices may have two important implications for a commodity exporting EM like Colombia.

First, the assessment of the external and fiscal positions could be biased toward sustainability based on the mistaken assumption of higher permanent income.

Second, large FDI inflows aimed at enlarging commodity production may be wrongly viewed as a "sound" and stable source of financing of the current account deficit. If part of these flows are dependent on projects that are profitable at low interest rates and high commodity prices, this funding could vanish in more normal global conditions along with the domestic absorption (investment) that it is sustaining.

Colombia is a commodity exporter. More than three quarters of our exports are commodities, including oil, coal, nickel, coffee and gold, but the previous arguments are especially relevant in the case of oil, which is expected to reach a peak in production and export in 2019 and then gradually decline. Oil represents roughly 50% of our exports and oil-related government revenue accounts for 10% of total revenue. This percentage is expected to climb to 18% by 2013. About 39% of total FDI flowing into the country is related to oil exploration and exploitation and total FDI covers 133% of a current account deficit of 3% of GDP. Part of the new investment in oil is linked to the exploitation of wells that is economically feasible under low interest rates and high international prices.

Given the temporary nature of oil-related income due to both quantity and price and the uncertainty surrounding these variables, it seems prudent to save a significant chunk of it. In Colombia, this is being done through a constitutional reform of the regional royalties regime and a fiscal rule (still in process of implementation). However, still remains the issue of whether the amounts saved are enough to sustain a permanently larger government.

The macroeconomic effects of this decision cannot be downplayed. The relative size of the oil-connected flows and their long-lasting yet temporary nature may give rise to Dutch Disease symptoms. The Colombian currency has experienced a sharp, real appreciation in recent years. Although part of this has to do with relatively low and falling degrees of risk aversion toward EM in general, oil flows may be playing an important role in this process.

Hence, both fiscal and macroeconomic considerations point to the need for greater savings. In the short run, this can be achieved by means of larger fiscal surpluses (in a non-Ricardian economy) and limits on excessive private sector leverage.

In addition, a second medium term risk EM face is non-sustainable capital inflows resulting from low interest rates in advanced economies. They could jeopardize financial stability by inducing untenable indebtedness and by exacerbating currency or maturity mismatches on the residents' balance sheets. In addition, they could cause a temporary appreciation of the currency with adverse effects on the competitiveness of tradable sectors.

Therefore, measures to contain those flows or their consequences may be necessary. The first and most important of these measures is exchange rate flexibility. By avoiding a defense of a specific level of the nominal exchange rate and the pro-cyclical creation of money, the amount of capital flows is reduced and credit growth is restrained. On some occasions, nonetheless, exchange rate flexibility must be complemented with other "macro-prudential" actions. Such actions typically work by repressing financial activity and intermediation. Thus, they must be applied only when a high probability of imbalances is perceived. Otherwise, they could end up inefficiently constraining financial deepening, or, even worse, shifting financial risk toward insufficiently monitored segments of the market.

In short, "macro-prudential" measures may be useful and necessary, but they have limits and costs and should only be applied when clear net benefits are identified.

Based on these criteria, a substantial degree of exchange rate flexibility is allowed in Colombia. Given the flexible exchange rate regime, the reduction in external interest rates has not directly led to large capital flows being monetized and intermediated by Colombian banks. However, the demand for money has risen along with the increased appetite for all Colombian assets and, since the central bank stabilizes the short term interest rate, there has been an accommodation of the money supply. In addition, low risk premiums may have induced high asset prices and, consequently, an expansion of credit supply at the expense of other bank assets with, possibly, smaller money multiplying effects, like government bonds.

In these circumstances, credit has grown rapidly (by multiples of nominal GDP growth), so temporary reserve and provisioning requirements had to be used to curb the buildup of private sector (especially household) leverage in 2007 and 2011. Between 2007 and 2008 these measures were complemented with transitory capital controls in the form of unremunerated reserve requirements on foreign debt and portfolio investment flows. The temporary nature of these instruments is a result of the transitory character of the capital flows they are intended to control and the perceived high costs of leaving them in place for a prolonged period of time.

As a consequence of painful past experiences, a significant concern in EM is that non-sustainable capital flows not only bring about large increases in indebtedness, but also maturity and currency mismatches on the balance sheets of the private and public sectors. When external conditions change, these mismatches worsen the decline in aggregate demand and output and complicate the pursuit of a counter-cyclical policy reaction as will be discussed below. Again, to deal with this problem, the first and most important tool is exchange rate flexibility. By forcing agents to internalize currency risk, mismatches are limited.

However, exchange rate flexibility must be complemented by other measures that restrict currency and FX liquidity risks in systemic segments of the financial markets, for the cost of not doing so may be huge. In Colombia, permanent regulation limits these risks for banks and other financial intermediaries.

III. Short Term Risks

It is difficult to describe the possible outcomes of different scenarios in the Eurozone. For each one of the alternatives considered, debt monetization, break-up of the currency area or a muddling through scenario, it is possible to think of different results and ways in which EM could be affected.

For example, a disorderly break-up of the currency union in Europe or debt monetization without a credible fiscal adjustment may end up causing a serious drop in output or growth in Europe and the world. As a result, commodity prices and demand for EM products could fall. Also, global risk aversion may be heightened for some time. As in the Lehman crisis, these phenomena would generate both a depreciation of EM currencies and a contraction of local growth. Moreover, depending on the international financial connections of the banks and the productive sector of the country, some domestic financial markets (or the FX market) may be disrupted.

However, it could be argued that a policy framework in EM with the following features would minimize the cost of adverse shocks stemming from a wide array of events in Europe:

a. **<u>Counter-cyclical policy responses</u>**: To confront the economic slowdown caused by the external shock, a counter-cyclical reaction of monetary, fiscal and "macro-prudential" policy can be useful. However, such a response is feasible only if the respective policy frameworks are credible and sustainable.

   In the case of monetary policy, a counter-cyclical reaction will be effective if (i) the monetary authority has control of the interest rate (or the monetary base) and (ii) inflation expectations are anchored (around the target).

   The first condition involves a high degree of exchange rate flexibility, which, in addition to allowing control of local interest rates by the central bank, enables the operation of the nominal exchange rate as a buffer against the external shock.

   The second condition ensures that the counter-cyclical reduction of interest rates and the depreciation of the currency do not trigger an increase in inflation that would limit the ability of the central bank to support the economy.

   These conditions, in turn, depend on deeper, structural factors that the policymakers should strive to achieve and maintain. The absence of large currency mismatches is one of them. The experience of different EM in several previous episodes shows that "liability dollarization" severely constrains the extent to which the exchange rate can adjust to absorb an adverse external shock and forces policy makers to follow a pro-cyclical policy as interest rates must be raised to prevent the financial dislocations caused by a sharp depreciation of the currency.

   In Colombia, financial dollarization is not permitted by law and the currency risk of financial intermediaries is limited by regulation. To check non-financial sector currency mismatches, the best instrument is the flexible exchange rate regime itself, for it causes agents to internalize currency risk in their financing decisions.

   A second factor is the credibility of the inflation target. This is achieved by fulfilling the inflation objective and building a reputation and requires that monetary policy be counter-cyclical both in good and bad times. Exchange rate flexibility is also helpful, since exchange rate pass-through is weakened when the currency exhibits some volatility. As before, though, causality runs both ways, as credibility itself decreases exchange rate pass-through.

Counter-cyclical fiscal and "macro-prudential" financial policies also help ameliorate the response of the economy to an adverse external shock. As in the case of monetary policy, both are feasible in bad times as long as they have been applied in good times. This means avoiding the excessive accumulation of public debt when conditions are favorable, or containing the buildup of financial imbalances when capital flows in and the cost of funding is low.

In Colombia, after a series of structural fiscal reforms public debt declined from 40% of GDP in 2000 to 22.4% of GDP in 2007[2], so automatic stabilizers could be safely used after the Lehman crisis. Between 2007 and 2008 domestic marginal reserve requirements, unremunerated reserve requirements on external debt and portfolio flows and stricter provisioning requirements were used to restrain the leverage of households and firms. Those requirements were lifted or loosened after the Lehman crisis to grant adequate liquidity and support credit supply.

b. **<u>Ex-ante mitigation of the transmission of external shocks to the local financial system</u>**: The size and duration of the effects of an adverse external shock on EM crucially depend on the behavior of the domestic financial system. A large disturbance in bank liquidity, solvency and credit supply amplifies and propagates the shock, as has been recognized in a large body of literature (e.g. Brunnemeier and Sannikov, 2012).[3] Thus, efforts to alleviate the contagion of external disturbances ex-ante through the financial system are central.

   As shown by Forbes (2012),[4] limiting the leverage of financial intermediaries is related to lesser effects of adverse external events. Further, Brunnermeier and Sannikov (2012) argue that the path taken by an economy after a shock depends on the leverage of both bank and non-financial agents.

   In Colombia, these lessons were painfully learned after a financial crisis at the end of the XX century that was associated mostly with the mortgage and public banking sectors. As a result, bank capital buffers were rebuilt and have been carefully monitored since then.

   In addition, a policy was implemented to enhance provision coverage by directly restraining bank leverage and indirectly reducing the incentives for borrowers to use leverage (as the cost of credit was raised). Also, a 70% LTV limit was imposed on mortgage loans to lessen the financial vulnerability of banks and

[2] *Net debt of the Non – Financial Public Sector.*

[3] *"Redistributive Monetary Policy," prepared for the 2012 Jackson Hole Symposium hosted by the Federal Reserve Bank of Kansas City, August 2012.*

[4] *"The Big "C" Identifying and Mitigating Contagion," prepared for the 2012 Jackson Hole Symposium hosted by the Federal Reserve Bank of Kansas City, August 2012.*

households[5]. More recently, the definition of bank capital has been reformed to adapt it to the standard of Basel III and a similar revamping of the solvency ratios will follow.

In other important respects, as mentioned before, strong limits to liability dollarization, control of financial system net FX positions, and a flexible exchange rate regime are key elements of a strategy aimed at curbing large currency mismatches and minimizing the vulnerability that arises from them.

Another area of concern is the exposure of the local financial intermediaries to the international financial markets and, thereby, to contagion from problems abroad. Traditionally, the issue for EM has been the impact of international bank trouble on the liquidity, solvency, and credit flows of domestic intermediaries. To deal with these risks, the policy arrangement in Colombia and other EM included the requirement that all international banks be set up as fully incorporated firms under the regulation and safety net of the host country. It also provided for the liquidity facilities that will be discussed below. This arrangement tempered the impact of external financial shocks.

Nowadays, however, Colombia and other EM are facing new challenges related to the increasing presence of domestic banks abroad. This opens a new connection between EM economies and the rest of the world, and implies stronger requirements regarding information, analysis and regulation for which the authorities in our countries must be prepared.

For example, an understanding of the markets in which local intermediaries are expanding, and knowledge of their regulatory and financial safety net frameworks, are of the essence. Liquidity shocks abroad may now directly impinge on domestic FX and monetary markets. Currency exposures, which have been adequately monitored and controlled so far, may be easily changed by shifts in the make-up of asset and liabilities of branches of domestic banks overseas. More specifically, at least in Colombia, progress must be made in the supervision/regulation of financial conglomerates and in coordination with financial authorities in the host markets.

A final important issue regarding the resilience of the domestic financial system is the role of monetary policy. In Colombia, monetary policy is deemed to have a macro-prudential function. Hence, so called "risk channel" considerations[6] are seriously acknowledged and prolonged periods of low interest rates are avoided. Furthermore, the behavior of credit and asset prices is an important factor behind the central bank's decision on interest rates.

[5] *For the so called "social interest housing" loans the LTV limit is 80%.*
[6] *E.g. Gambacorta, L (2009): "Monetary policy and the risk-taking channel," BIS Quarterly Review, pp 43–53, December.*

c. **<u>Adequate liquidity provision</u>:** Although this belongs to the set of measures intended to mitigate the propagation of shocks through the financial system, safeguarding liquidity in financial markets and intermediaries deserves a special chapter, since it is central to preventing bad equilibrium in the short run after an adverse external shock. It involves having mechanisms in place to provide liquidity in both domestic and foreign currency.

   Besides the traditional deposit insurance and lender of last resort facilities designed to handle large, unexpected withdrawals and prevent bank runs, policy discussion in Colombia has focused on liquidity shocks and liquidity provision to non-bank financial agents and capital markets. Some of these intermediaries may be considered "systemic" due to their size or interconnectedness, and their importance in the bond markets is high. A shock hampering these agents could seriously compromise the possibility of domestic financing of the government at a time of closed or restricted international capital markets. It could also trigger disorderly fire-sales of assets with severe effects on wealth and the value of collateral, and, thereby, on aggregate expenditure and financial stability.

   Some non-bank financial intermediaries (e.g. broker-dealers) do not have access to the lender of last resort facilities. As a result, there may be a vacuum in the process for dealing with an adverse liquidity shock which could even increase the vulnerability of these agents ex-ante (bad equilibrium again). In Colombia, they have access to central bank liquidity through regular repo operations and through intraday repos that may become overnight. However, as has been pointed out in the literature, this may create a moral hazard. Regular repos are limited to the intermediary's net worth and intraday/overnight repos are unlimited, but charged at a punitive interest rate. Nevertheless, the moral hazard inducement issue still remains and some sort of liquidity requirement for these agents could be explored.

   The provision of liquidity in foreign currency is equally critical. Colombia did not experience a sharp foreign currency liquidity shock during the Lehman crisis due to the existing regulation constraining the FX maturity mismatches of Colombian banks. However, the expansion of Colombian banks abroad may change this situation. Hence, having instruments in place to deal with this type of shocks has become urgent. Holding an adequately large stock of international reserves and the Flexible Credit Line obtained from the IMF are useful steps to prevent and deal with FX liquidity events. In addition, a wide array of mechanisms to provide liquidity in foreign currency must be considered. The experience of other EM in this regard may be a helpful guide.