# Martín Redrado: Globalization and the determinants of domestic inflation

Remarks by Mr Martín Redrado, Governor of the Central Bank of Argentina, at the International Symposium on "Globalisation, Inflation and Monetary Policy", organised by the Bank of France, Paris, 7 March 2008.

*   *   *

Globalization has grown as a natural evolution of our era, not only incorporating more countries into the process, but also increasing their mutual interdependence. there are reasons to believe that this phenomenon is not harmless for domestic prices; therefore, the critical question to discuss is: to what extent does globalization affect domestic prices and what are the channels through which they are affected? This session – enriched, undoubtedly, by Bill's paper[1] – aims, at least, to make headway in some aspects of this question.

My comments are divided in three parts. First, let me introduce some general remarks on the paper. Second, I bring up some specific and constructive comments with the view of complementing the approach of the study. And, before concluding, I focus on the prospects for inflation in the light of current financial turbulences. I put special emphasis on the impact of key factors for emerging market economies such as food inflation and commodity prices.

Bill's appealing work presents a detailed overview of the main potential and not necessarily excluding explanations for the dramatic and persistent diminishing of inflation over the last 20 years. It also poses challenging policy dilemmas that arise from these trends and from the recent developments in the world economy. As he correctly stresses, domestic and global factors seem to have complemented to explain the decline of inflation worldwide.

The paper's central message is that the different mechanisms that have been proposed to explain the alleged impact of globalization on domestic inflation should be seen as working together rather than be perceived as alternative hypothesis.

And, we can hardly argue against this view. In fact, I notice a trend, mainly in this type of seminars, to try to find a single preeminent explanation for each economic phenomenon under study. But it will not be a fruitful approach in this case, given the complexity of the issue and the special historical context in which it takes place, which makes it more difficult to find a single ultimate explanatory factor. Indeed, all the offered explanations are plausible, even though the empirical evidence is often mixed.

The author reviews the literature and underlines the limitations faced by each hypothesis to confront the so-called "puzzles". The concept is that, even though each of the explanations is individually unsatisfactory, the aggregate effect of all of them fits the facts and removes all the puzzles.

It may be so, but it is difficult not to feel that this "combined" explanation lacks some sort of quantitative support. As the author correctly points out, "the character of the shocks hitting the global economy has changed over time and some forces affecting inflation have been more important at some times than others", which clearly makes it a complex task to advance into modeling the study.

Perhaps, as the author says in the introduction, macroeconomics is not really a science, although even that is debatable as science are mostly considered so for their analytical models rather than solely for their ability to forecast.

---

[1] Forthcoming BIS Working Paper No 250 "*Globalisation and the determinants of domestic inflation*" by Mr William White.

Nevertheless, based upon Bill's thoughtful piece of analysis, any attempt of further research to quantify the magnitude of the impact of each factor in diminishing inflation will be very much welcomed. It will definitely provide additional light on this issue, empowering the author's work.

Let me turn now to the more specific points I find worth bringing up about this work.

- The author seems to agree that, to assess the relative power of the different explanations, it is sensible not to put much faith in output-gap measures or Phillips curve estimations (domestic gaps are difficult to estimate and global ones even more so, disregarding the fact that it is not obvious that they can be meaningfully defined). Indeed, the robustness of the findings in the literature is too low not to attempt a different approach.

In my view, the definition of output gap may vary when we refer to economies that are normally relatively close to their production frontier. Countries where incipient restructuring processes are under way may allow them to grow above the average for a few years. Those processes would be underestimating productive capacity and, therefore, the growth of supply will happen without any overheating. If we add economies of scale into the equation, it is likely that prices will not increase when output is above its empirical potential (or its potential as estimated against a historical trend).

Furthermore, in emerging countries with somewhat informal sectors, it is already hard to determine the effective output level, before even beginning to consider potential output. I always recall the provocative work of Robert Hall (2005), where it is argued that we, monetary policy makers, should not pay any attention whatsoever to neutral values for real variables (such as the output gap). In my view we should look at output gap but do not consider them as the "bible".

- While pointing to evidence of a decline in the devaluation pass-through in emerging market economies, White writes that it is remarkable that inflation stayed so muted after the Brazilian and Argentine devaluations.

Regarding the latter episode, it must be emphasized that this was mainly due to massive unemployment before and during the crisis, after three and a half years of a continuous decline in output. The significant excess supply of labor was by far the main factor explaining the low pass through. Yet, during the following 12 months, inflation exceeded 40 percent, mainly as a result of realignment in the relative prices of tradable goods. When unemployment began to be reabsorbed, inflation pressures resumed their upward trend.

- A widespread hypothesis holds that lower headline inflation is due to lower imported prices or larger imports of cheaper goods, as a result of lower production costs arising from higher competition in the face of production factor globalization. However, this essentially microeconomic explanation of such an essentially macroeconomic phenomenon is suspicious. Let me borrow a term coined by Cecchetti, who calls this the "accounting" theory of inflation. The problem arise because prices affected by trade are "relative" prices. The import of a foreign product that is cheaper than the domestic one produces a change between this price and the other prices in the economy, while inflation is actually the aggregate change in general nominal prices. what is fallacious is to take these two notions the same way. This is better appreciated when taking into account that, by definition, when the relative price of a certain good falls, there should be a rise in the price of the other goods against which it is compared.
- The authors points out as a "puzzle" that inflation should have dropped so dramatically in many countries with very different institutional arrangements, different monetary policy and, above all, different exchange rate regimes. In

particular, he stresses that, during much of the period under review, many of these countries had fixed exchange rate regimes.[2]

However, calling it a puzzle seems exaggerated. Lower inflation in my opinion is the consequence of a more “responsible” management of fiscal, monetary and wages policies, which might be a result of a growing awareness of the costs of inflation. These policies can be put into effect by diverse means and through different institutional setups. There isn’t a one-size-fits-all sort of recipe for implementing a more responsible economic policy.

In the paper, the role played by monetary, fiscal and wage policies seems to be rather underestimated. In my view, the contribution of better and sounder policies to explain the trend of domestic inflation in both industrial countries (ICs) and emerging markets economies (EMEs) over the last 20 years has been crucial. The empirical literature has provided vast evidence, particularly for the united sates, that changes in policy objectives and management have been important to explain the decline of inflation since mid 80’s.

In developing countries, where fiscal imbalances were a main source of monetary instability and inflation, improvements in tax and expenditure policies contributed significantly to explain the decline of inflation since the early 90’s.

- Bill also mentions that it is strange for inflation to remain so low given that monetary conditions seem to have been particularly lax for a rather long period of time. This is a true puzzle. However, considering the recent trend in certain variables related to the opportunity cost of keeping money, as well as the high global growth in the past years.

We cannot rule out that, in real terms, the demand for money has genuinely increased. Conclusive evidence to make this point is hard to find yet. Further research on the subject should add some light on this issue.

- White remarks the low cost of buying protection against corporate bankruptcies until the outbreak of the August crisis. he compares the cost as of mid July 2007 with the cost in the recessions of 1981 and 1991. However, the comparison is not totally valid because the depth and liquidity of the cds market in 2007 was enormously higher than in 1981 and 1991.
- Let me emphasize though, that financial integration should be given a larger role in the discussion between globalization and inflation. In particular, when assessing the effectiveness, credibility and commitment of monetary policy in emerging market to deal with inflation and inflation expectations. In my opinion, the depth of the financial system and its integration with capital markets has a powerful disciplinary effect on monetary policy as it reduces incentives to pursue expansionary policies as foreign capital would flow out to other markets with more predictable returns.

Also, financial development allows agents to substitute assets in local currency to protect themselves against inflation, restraining again the discretionary use of monetary policy. Moreover, financial integration allows financing current accounts deficits, weakening the link between domestic output and demand. Then, an increase in domestic demand would translate into larger imports and not necessarily into higher prices.

My opinion is that “financial integration” measure (like the sum of foreign assets and liabilities over GDP) seem to be better indicators of globalization as a “price container” than “real economy” measures (such as the trade to GDP ratio).

---

[2] Actually, another way of looking at the phenomenon is that it does nothing but providing an additional reason to understand why lower inflation was so widespread. In fact, since countries that peg their currencies to another, in this case the US dollar, actually lack an independent monetary policy and borrow it from the Fed. As the Fed has pursued relatively prudent policies, in a forty-year term it can be expected that all countries with currencies pegged to the US dollar will have a lower inflation.

- White mentions the possible re-emergence of inflation as one of the two main problems going forward (the other being an unwinding of the various “imbalances”). But he does not discuss one very interesting aspect of this development: the recent pick up in inflation at the international level is to a great extent, a consequence of the process of catching up of billions of people in the developing countries to levels of consumption closer to those in developed countries, including changes in dietary patterns. Let me hypothesize that we are approaching a true law of one price, with developed countries converging top-down and emerging countries bottom-up.
- There is a risk that the insolvency that lies at the base of the current crisis (although manifested until now largely in a lack of liquidity) may impart an inflationary bias to the system and that the unwinding of the imbalances leads to more inflation. The hypothesis that states that globalization may reduce policymakers’ ability (and, consequently, incentives) to temporarily stimulate output was perhaps never heeded by policymakers. Certainly, they do not seem to be acting in accordance to it now.
- Also, we should not forget that there is an additional “insolvency” looming in the horizon: the unfunded liabilities of social security systems in developed countries. There be a temptation to inflate that burden away. Thus, there are both short-term and long-term reasons to expect a higher inflation rate in the future than during the “great moderation” period.

Let me turn now to my last comments.

Regarding commodity prices and their impact on inflation, the increasing trend is largely due to its own fundamentals, including above all the major growth in emerging countries over the past few years, biofuel development and structural changes in livestock feeding.

Nevertheless, seasonal factors are also influential; among them, it is worth mentioning supply shocks from climate hazard and geopolitical conflicts, and the increase in speculative demand to protect against us dollar depreciation and financial asset loss, and inflation.

Agricultural commodities in my view are more resilient to a recessionary outlook by their lower income elasticity and the relative strong fundamentals of emerging economies, where demand increased substantially.

Soft commodities accumulate increases ranging from 100% to 150% since the beginning of the century with an acceleration in 2007-2008 that is leading to historically low stock to consumption ratios.

In the cases of soy and corn, where Argentina is a world-class producer, demand is consistently outpacing supply due to a hike in demand for food in the emerging world and a growing demand for biofuels in the industrial countries. While supply stays in historically high levels it cannot keep up with the demand forces. Just to give you an example, corn inventories are 30% below the average of the last ten years. The outlook of financial volatility will continue to be a source of speculative demand for commodities as hedge for inflation. In addition, the continuity of monetary policies aimed at reducing reference rates would likewise aid speculative demand for commodities.

As the paper points out, food and energy impacted on the acceleration of consumer prices, especially in emerging countries, where foodstuffs have a significant weight in the consumption basket. However, the prices of other goods and services remained relatively contained. insofar as structural factors prevail over temporary ones, food and energy prices would more likely have second-round effects on other goods and services through cost pressures. While by the end of 2007 headline inflation accelerated in close connection with the behavior of core price indices, these second round effects have not materialized yet.

Food prices can potentially lead to wage demands which, given the stickiness of this component of the cost structure of the private sector, would result in subsequent increases in general level. However the risk is more evident in emerging countries than in developed ones. For example, the average wage in China increased by 26.9 percent year-over-year in the third quarter of 2007, significantly above the average of the past five years (16.8 percent) and well above the consumer price index increase. So, there might be some evidence that the downward pressures in consumer goods that come from china are reaching an end.

To sum up, we central bankers around the globe face significant dilemmas and challenges. In spite of the opposing forces on inflation prospects, I expect that the slowdown in global economy will ease excess demand pressures and at the same time it will contribute to moderate marginally the increases in commodity prices.

However, due to the structural factors in the agri-bussiness sector worldwide, I do not expect this scenario to change significantly.

Emerging markets economies seem to be better prepared to face this new scenario and the slight acceleration in prices. This is mainly due to sound macroeconomic policies and a favorable international context with commodity prices facing a long favorable cycle. And, in my view, policy makers in emerging markets are well prepared to face some social tensions that could come as a result of the higher commodities prices.

In a nutshell, the challenges that globalization poses due to its impact on domestic prices are significant. But, now policy makers around the globe seem to understand that recipes vary from one case to the other in this complex scenario. This progress is, obviously, welcomed. Especially for us, emerging markets' policy makers, as we have to catch up with growth and macroeconomic stability, deal with the tensions derived from buoyant economies and, most importantly, build credible institutions.

In fact, it is more a synchronic than a sequential two-fold challenge: advancing towards the development of our economies and constructing solid institutions simultaneously. To implement these policies effectively, the only possible way is to be firm in the implementation of consistent (I mean consistent with the history and idiosyncrasies of each economy), flexible and gradualist approach that has guided us in recent years.

## References


- Ball, Laurence (2006), "Has globalization changed inflation?, NBER working paper no. 12687, November.

- Hall, Robert (2005) "Separating the business cycle from other economic fluctuations, in the Greenspan era: lessons for the future", Federal Reserve Bank of Kansas City, pp. 133-179, August 2005.

- Ihrig, Jane, Steven B. Kamin, Deborah Lindner and Jaime Marquez (2007), "Some simple tests of the globalization and inflation hypothesis", Board of Governors of the Federal Reserve, International Finance discussion papers, number 891, April.

- International Monetary Fund (2006), "How has globalization affected inflation?", World Economic Outlook, chapter iii, April.

- International Monetary Fund (2005), "Globalization and external imbalances", World Economic Outlook, chapter iii, April.

- Kroszner, Randall S. (2007), "Globalization and capital markets: implications for inflation and the yield curve", speech at the Center for Financial Stability (CEF), Buenos Aires, Argentina, May.

- Wynee, Mark A. and Erasmus K. Kersting (2007), "Openness and inflation", Federal Reserve Bank of Dallas, staff papers, no. 2, April.