Good Bye Undervaluation, Hello Stagflation

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EXEC SUMMARY

Argentina started its free fall descent into a likely recession in the last quarter of 2007. At that time, the most important thing that protected it from a hard landing was the strength of the global economy. But, with a worsening international outlook and declining commodity prices, this "parachute" of sorts has become less reliable. Moreover, the load under it has become heavier thanks to an unprecedented increase in public spending and the erosion of external competitiveness due to growing domestic inflation. The combination of a higher and appreciating real exchange rate and a lower and depreciating equilibrium one means that we can no longer affirm that the real exchange rate is undervalued. Thus, letting the nominal exchange rate appreciate as a way to ease the cost, in terms of inflation, of eliminating relative price distortions is no longer possible. In essence, by refusing to act when it should have, the government has made it harder to eliminate market distortions that limit potential growth. Not only would the prices of controlled goods and services jump in proportion to excess demand in their markets upon liberalization, but the RER would become instantly overvalued raising expectations of devaluation, hence inflation.

Holes in the Parachute

Argentina started its free fall descent into a likely economic recession in the last quarter of 2007. At that time, the most important thing that protected it from a hard landing was the strength of the global economy. But, with a worsening international outlook and declining commodity prices, this "parachute" of sorts has become less reliable. Moreover, the load under it has become heavier thanks to an unprecedented increase in public spending and the erosion of external competitiveness due to growing domestic inflation.

At issue is the fact that the "low and stable" real exchange rate (RER) that, for many years, has been the cornerstone of Argentina's V-shaped economic recovery is no longer low or stable. At an annual rate of 25-35% (depending on how we measure it), domestic inflation has been quickly eroding external competitiveness, particularly as the peso stopped depreciating vis-à-vis the dollar (it has actually appreciated by 5-6% since the end of April) and the dollar strengthened relative to other world currencies.

Moreover, due to an increase in political and economic instability, Argentina now lacks access to international capital markets and is facing capital flight. Under these adverse

conditions, it is quite possible that the *equilibrium* real exchange rate (ERER) has fallen significantly over the past three quarters. The combination of a higher and appreciating RER and a lower and depreciating ERER means that we can no longer affirm that the real exchange rate is undervalued.[1]

The fact that RER undervaluation is probably defunct has important implications for inflation going forward. For starters, letting the nominal exchange rate appreciate as a way to ease the cost, in terms of inflation, of eliminating relative price distortions is no longer feasible. Back in the "good old days," it would have been possible for the government to liberalize domestic prices (i.e., unfreeze public utility tariffs, eliminate the controls imposed by government organizations such as the Department of Commerce and ONCCA, and even reduce export taxes) while, simultaneously, letting the exchange rate float. Since, at that time, both the current and the capital account were in surplus, the result would have been nominal appreciation, therefore reducing the overall impact of price liberalization on inflation. Naturally, RER undervaluation would have been eliminated. But, in return, there would be no repressed inflation, clearing the way for a genuine reduction in current and future inflation via the implementation of inflation targeting or any other credible monetary rule.

Today, this is not an option. For, even if the Central Bank stops intervening in the FX market, chances are the nominal exchange rate will not appreciate. Actually, much of the interventions performed in recent months were to prevent nominal depreciation rather than appreciation.

The perception that the RER is no longer undervalued has triggered expectations that, soon, it will be overvalued. As long as domestic costs continue to grow at current rates, the government will need a strong devaluation in order to restore competitiveness and reduce real spending. This belief makes fighting inflation all the more difficult for it reduces money demand, hence increasing the inflationary impact of a given increase in the money supply.

People's concerns are compounded by the fact that, due to the existence of a low or even negative output gap, devaluation is not going to be as effective this time as it was in 2002. Since the pass-through effect from devaluation to inflation would be significantly higher, several iterations will be needed to produce a meaningful impact on the RER, hence on real output, during which inflation may rise disproportionately. If this is the case, the only way to improve the primary surplus will be by keeping a tight grip on nominal spending so as to let it erode in real terms. Nothing indicates that the current government is capable (let alone willing) to do such a thing.

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[1] The role of RER undervaluation in enhancing Argentina's 2003-07 recovery at the expense of sustainable economic growth, was the focus of several past reports, including "The Economics of Currency Undervaluation" (6 February 2006) and 'The Economics of Undervaluation II" (1 May 2007).

liberalization, but the RER would become instantly overvalued raising expectations of devaluation, hence inflation.

Undervaluation Is So 2007

We define RER undervaluation as the difference between the equilibrium and actual RERs, where the former is the relative price of **nontradables** to **tradables** that guarantees internal and external macroeconomic equilibrium. By internal equilibrium we understand a relatively small output gap and by external equilibrium, the possibility of generating a current account surplus large enough to offset, on average, the capital account deficit projected into the future.[2]

In a previous report,[3] we estimated that, as of 3Q07, the RER was 55% undervalued, hence requiring a more than 100% appreciation to reach its equilibrium level. To arrive to this conclusion, we ran an econometric model of the current account using quarterly data from 4Q94 to 3Q07, and found that the current account balance critically depended on two variables: real GDP and the RER. In particular, we found that:

1. Every one percent growth of GDP above its trend caused the current account balance to deteriorate by 0.25 percentage points of GDP.

2. A 10% depreciation of the RER improved the current account by 0.57 percentage points of GDP.

Armed with these empirical results, we determined what the RER would have been if, instead of running a current account surplus of near 3% of GDP in 3Q07, Argentina had run a deficit of 2%, commensurate with the amount of FDI it was receiving from the rest of the world at that time. The result was an index number of 0.96 (4Q01=100), which was way above the actual level (0.43). We interpreted 0.96 to be the equilibrium real exchange rate (ERER) under the then prevailing macroeconomic conditions since: (a) it was consistent with our definition of external balance; and (b) a substantial real appreciation was necessary to eliminate overheating, hence restore the internal balance.

Then we asked ourselves: suppose that the nominal exchange rate policy had been exactly the same as in the period 4Q01-3Q07, but other policies had been radically different. By "radically different other policies" we meant no price controls of any kind and no taxes or other restrictions on exports. In such an unfettered market environment, the RER would have appreciated from an average of 0.40 in 2002, the year when the last big devaluation took place, to our ERER level of 0.96. Since this was not materially different from the pre-devaluation level observed in 4Q01, any inflation accumulated from that date to the third quarter of 2007 would have had to be practically the same for nontradables and tradables under the counterfactual scenario.

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[2] If, on the other hand, the economy receives net capital inflows, the current account deficit should not exceed the part of them that is sustainable over a long period of time.
[3] See "Quantifying the Inflation Overhang," 26 March 2008.

Combining the average of international import and export prices traded by Argentina and the nominal exchange rate of the US dollar, we produced an index of undistorted tradables prices in pesos, which showed an increase of 350% for the period. On this basis, we concluded that, in the absence of distortions, the CPI (a proxy for nontradables prices) would have increased in about the same proportion. The fact that it only rose by 105% exposed a difference of 120 percentage points of inflation,[4] which we attributed to the following factors:

1. 40 percentage points, to the existence of taxes and other restrictions on exports, as evidenced by the gap between the PT and WPI indexes, where PT is the undistorted tradables index to which we referred above and WPI is the wholesale price index.

2. 43 percentage points, to the existence of price controls including on public utilities, as evidenced from the gap between the WPI and the "real" (i.e., unadulterated) CPI index.

3. 10 percentage points, to the underestimation of the CPI by INDEC.[5]

Our interpretation of these results was that 120% represented the amount of repressed inflation or "inflation overhang" accumulated over the sample period owing to the aforementioned policies. For, suppose we were back in 3Q07 and the government decided to: fix the nominal exchange rate at the level prevailing in that quarter,[6] eliminate export taxes, liberalize domestic prices, and clean its act in relation to INDEC. Assuming that the ERER was unaffected by these policies, nontradables prices would have had to rise approximately 120% in order to produce the real appreciation that was required. If, on the other hand, the change in policy regime had resulted in a higher ERER—a more realistic assumption given the stimulus afforded exporters by the elimination of export taxes—the 120% increase in the official CPI would have been a lower bound. At any rate, given the magnitude of the required adjustment in the CPI, the government would have been well advised to let the nominal exchange rate appreciate rather than keep it fixed.

A year has elapsed since the third quarter of 2007 during which the CPI has grown by about 30%. But, this is not all that happened. In addition, there have been negative developments on both the domestic and international fronts. Domestically, the protracted conflict with the farmers that began in March of this year has had a detrimental impact on the fiscal and external accounts and on the stance of the government, which now has a lower political margin of maneuver. Internationally, the subprime mortgage crisis spread into other areas of the global financial system causing a sharp deceleration in growth that could very well end in a world recession. Meanwhile, the easing of monetary conditions

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[4] The calculation is as follows: $[(1+3.50) / (1+1.05)] - 1 = 1.20$ or 120%.
[5] To arrive at the total gap, we must aggregate the three individual components in a multiplicative fashion, namely, $[(1+0.40) (1+0.43) (1+0.10)] - 1 = 1.20$.
[6] That level was ARS3.1/USD and ARS3.9/USD in bilateral and multilateral terms, respectively.

designed to prevent a full-fledged recession at a global scale is raising international inflation to levels thought improbable only a few months ago. It is therefore not surprising that, in this context, Argentina—and, in particular, the federal government—has minimal access to international capital markets and local investors are looking for investment opportunities abroad. This has resulted in a dramatic shift from a positive to negative capital flows as shown in the figure below.
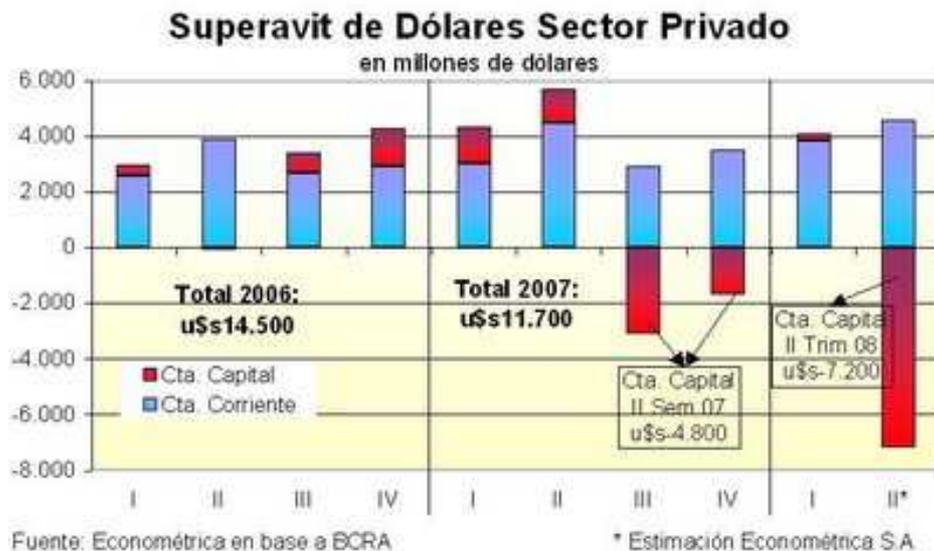
It is therefore pretty clear that ERER=96 is no longer a suitable assumption. Not only FDI is at its lowest level since 2002 but, beginning next year, the government will face a daring problem rolling over its maturing debt. All this indicates that, to avoid losing reserves, Argentina will have to continue delivering twin surpluses in the foreseeable future. For this to happen, a combination of a non-appreciating RER, lower growth, and fiscal adjustment is required. If there is no fiscal adjustment and the RER continues to appreciate, the only way to equilibrate the balance of payments will be via a strong recession.

How about the Inflation Overhang?

The fact that there is no margin for real appreciation if the objective is to avoid a further deterioration in the macroeconomic outlook implies that, at a minimum, the RER is no longer undervalued. It would be tempting to extrapolate from our previous analysis linking RER undervaluation and inflation overhang and conclude that the end of undervaluation also means the end of the inflation overhang. But, unfortunately, nothing would be farther from the truth. For even if the RER is not undervalued anymore, many other relative prices still are. These notably include the price of electricity, natural gas, fuel, beef, milk and other dairy products, and cereals and oilseeds. Should the government allowed these prices to rise as needed to eliminate excess demand in their markets (including by lowering export taxes), the RER would become instantly

overvalued and real wages and pensions would suffer a sharp reduction. Adjusting the nominal exchange rate, wages, and pensions in response to the increase in local prices would lead to an inflation spiral, which would feed itself via a decline in the demand for real money balances. Those prices that, in the past, grew more than the average because they were not subject to regulations would now grow less than the average, but they would certainly not decline in absolute terms, hence creating an inflationary bias proportional to the mean adjustment experienced by the laggards.

Over the past few years, the conventional wisdom has been that inflation could not accelerate too much or too quickly because of the fiscal surplus. But, even if the government found a way to maintain such surplus (for example, by tightening government spending in nominal terms while inflation reduces it in real terms), there is also the question of how the government will rollover debt payments at a time when the foreign and domestic demand for sovereign bonds has plummeted. The answer is simple: by printing more money or using foreign reserves (a third alternative is default, but let us assume this does not happen).

Thus, even if the government manages to maintain fiscal discipline (a big if), it may not be able to avoid expanding the money supply in a manner that ends up accommodating the inflationary spiral triggered by price and trade liberalization. If so, the rate of inflation could be indeterminate. For this reason, it is practically impossible for us, now that the days of undervaluation are over, to come up with an updated figure of the inflation overhang. It, really, can be anything depending on how accommodating or less accommodating monetary policy is. What is more clear is that, if monetary policy is not accommodating, a necessary condition for reducing inflation in the long run, credibility becomes very important. Only if the government is strongly and credibly committed to reduce inflation, the cost in terms of lost output of reducing inflation could be minimized, albeit not eliminated.