Distorting the Micro to Embellish the Macro:
The Case of Argentina

Domingo Cavallo and Joaquín Cottani

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Contents

Abbreviations and Acronyms

BW2	Bretton Woods II
CPI	Consumer Price Index
EDN	Excess Demand for Nontradables
ESN	Excess Supply of Nontradables
FDI	Foreign Direct Investment
FX	Foreign Exchange
GDP	Gross Domestic Product
IT	Inflation Targeting
NEER	Effective Nominal Exchange Rate
PT	Price of Tradables
Q	Quarter
q/q	Quarter over Quarter
RER	Real Exchange Rate
RERT	Real Exchange Rate Targeting
TAD	Trade Account Deficit
TAS	Trade Account Surplus
WPI	Wholesale Price Index

Introduction

For an emerging market country that fully recovered from a currency crisis three years ago, Argentina is a rare bird. Other emerging market countries in Latin America, Eurasia, and East Asia, which also underwent currency crises in the 1990s and 2000s, have enjoyed prolonged periods of monetary and price stability since then. Argentina, by contrast, is fighting inflation, an economic disease many of us thought had all but disappeared in the last decade.

One important difference between Argentina and those other emerging market countries is that while the latter adopted inflation targeting (IT) in the aftermaths of their respective crises, Argentina experimented with "real exchange rate targeting" (RERT), a heterodox mix of policies whose aim is to manage the real exchange rate (RER) at a low ("competitive") level, presumably to promote exports and reduce the vulnerability of the economy against future crises.

The basic idea behind RERT is that one can manage not just the nominal but also the real exchange rate through a combination of sterilized intervention and capital controls. Sterilized intervention, in turn, is the sum of foreign exchange (FX) intervention (to avoid nominal appreciation) and monetary sterilization, including, if possible, the generation of a fiscal surplus (to control domestic inflation). Aside from the policy inconsistency that arises if capital controls are not effective—known in the macroeconomic literature as the "impossible trinity" of exchange controls, monetary controls, and capital mobility—in Argentina, RERT had other, more obvious, implementation problems.

For starters, except for a relatively short period (2003–2004), the monetary/fiscal policy mix was not tight enough to deliver a sustainably low RER, for doing this would have required a much less accommodative stance, an alternative that did not sit well with the Néstor Kirchner administration (2003–2007). Thus, to sustain real depreciation in defiance of market forces, which dictated an appreciation, the government repressed domestic inflation through market intervention, that is, by restricting exports, freezing public utility tariffs, and negotiating wage and price increases with labor unions and corporations. Moreover, to compensate for the negative effect of these interventions on producer incentives, the government distributed subsidies discretionally among some of the affected sectors, hence undermining its own RERT policy, which required strengthening the fiscal surplus. More important, the myriad market distortions introduced to keep the RER from appreciating affected economic incentives to the point of creating microeconomic imbalances everywhere.

Notwithstanding the gravity of these problems, RERT gave considerable political dividends to the Kirchner administration for it allowed the economy to grow faster than otherwise, triggering important increases in real wages and employment. In addition, export taxes and price controls buffered the double whammy of real depreciation and higher commodity prices on domestic living costs. Finally, the government benefited from an unprecedented increase in public revenues, which was used to fund a rapid growth in public expenditures. The sum of these effects resulted in high rates of approval for Mr. Kirchner, paving the way for the sweeping victory of his wife, Cristina, in the October 2007 presidential election.

In recent months, however, the popularity of the government has been waning. At issue is the fact that (not surprisingly) inflation was repressed but never subdued. Notwithstanding a clumsy attempt by the government to manage inflationary expectations by adulterating the consumer price index (CPI), actual inflation has been creeping up, and currently hovers around 25 to 30 percent per year (up from virtually zero in 1996–2001). Meanwhile, shortages of basic consumption items, such as meat, milk, gas, and electricity are widespread. In March of this year, the government reacted to these problems by further raising export taxes, particularly on soy products, while renewing quantitative export restrictions on beef and dairy products, but this prompted a strong reaction from farmers, who boycotted the policies by launching an extensive lockout. At last, the policy of distorting the micro to embellish the macro appears to be reaching a limit.

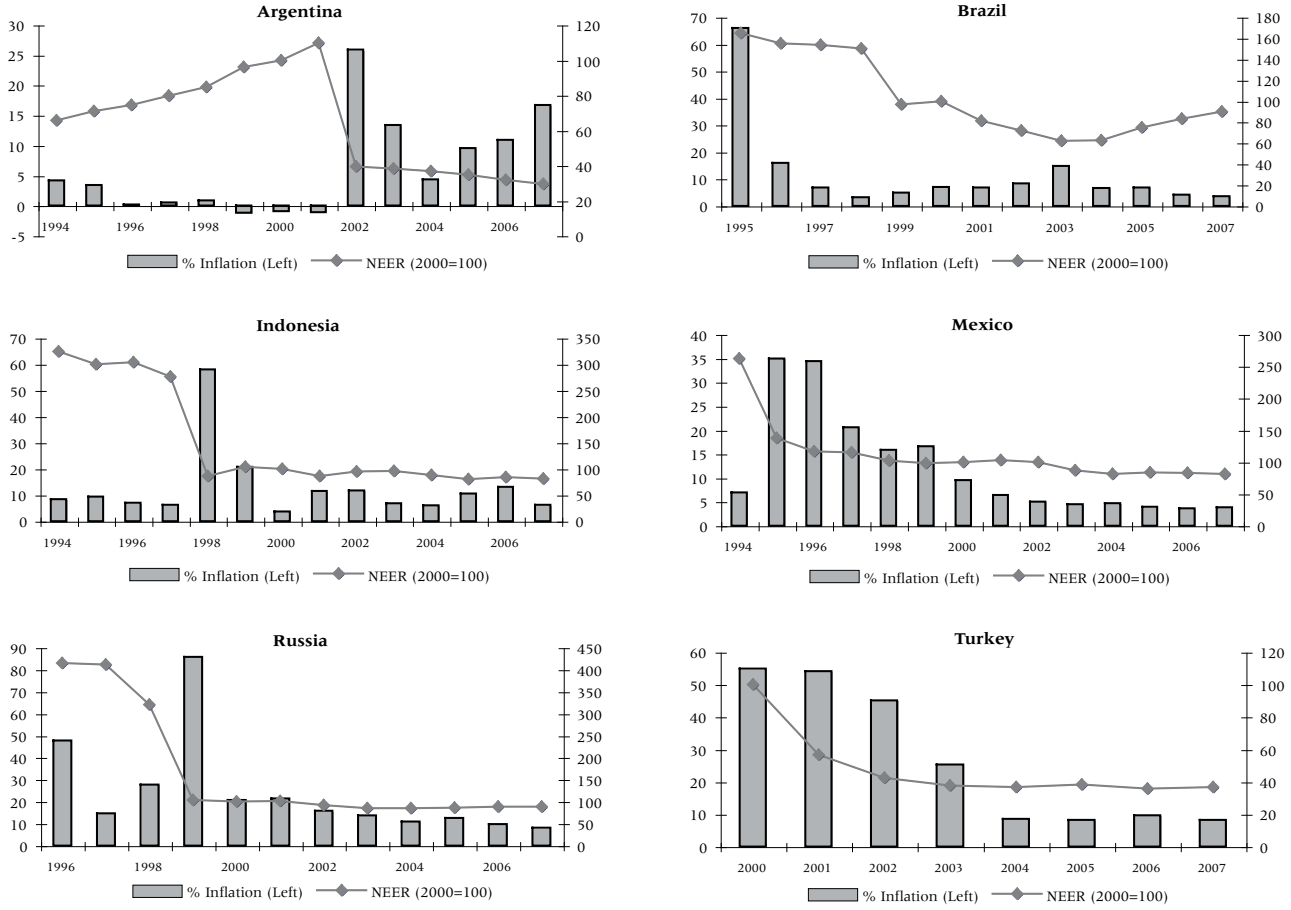
This paper discusses the fallibility of Argentina's "New Economic Paradigm" and the reasons for its surprising longevity. The matter would be just a historical footnote (another bump in Argentina's accidental road to development), were it not for the fact that the model so closely resembles that followed by China and other successful East Asian exporters, and known in academic and policy circles as Bretton Woods II (BW2). This similarity poses a number of interesting questions. For example, is BW2 an idiosyncratic model, that is, not easily adaptable to other countries or regions? Did Argentina fail to implement it correctly? (If so, what should have been done instead?) Or is BW2 simply not the panacea its advocates claim it to be?

This paper is organized as follows. Section I examines the evolution of inflation and the RER in Argentina and five other emerging market economies that underwent currency crises in the 1990s and 2000s. In all except Argentina, annual inflation converged to one-digit figures while the RER appreciated to levels not too different from the ones prevailing before the respective crises. Section II discusses whether it is possible to manage the RER to "make it competitive" without significantly undervaluing it. The answer is yes, but only if the government is willing to tighten monetary and fiscal policies and/or liberalize imports. This can change the composition of output between tradables and nontradables and help prevent "Dutch disease." Whether it can also improve long-term growth performance at all times and in all circumstances is less clear. We then talk about Argentina, and what actually happened there (Section III). In Section IV, we ask how undervalued Argentina's currency is at present. Using the results of a current account econometric model, we find that, relative to a situation in which markets operate freely, the RER is 55 percent undervalued. Finally, in Section V, we discuss the differences and similarities between Argentina, on the one hand, and China and the other BW2 countries, on the other.

I. Post-crisis Evolution of Inflation and the Real Exchange Rate in Emerging Markets

Figure 1 shows annual data on effective (that is, trade-weighted) nominal exchange rates (NEERs) and inflation for six emerging market economies that underwent currency crises at some point during the last 25 years. Devaluation episodes can be easily spotted in the charts by looking at the years when NEERs fall discretely. These episodes are: Mexico (1994–95), Indonesia (1997–98), Russia (1998–99), Brazil (1998–99 and 2001–03), Turkey (2000–01), and Argentina (2001–02).[2] In all cases except Argentina, inflation falls to a one-digit figure in 2007 after peaking at the time of the crisis. In Argentina, on the other hand, inflation falls from 25.9 percent in 2002 to 4.4 percent in 2004, but then rises again to 16.7 percent in 2007.[3]

FIGURE 1
Nominal Effective Exchange Rates and Inflation in Six Emerging Market Countries



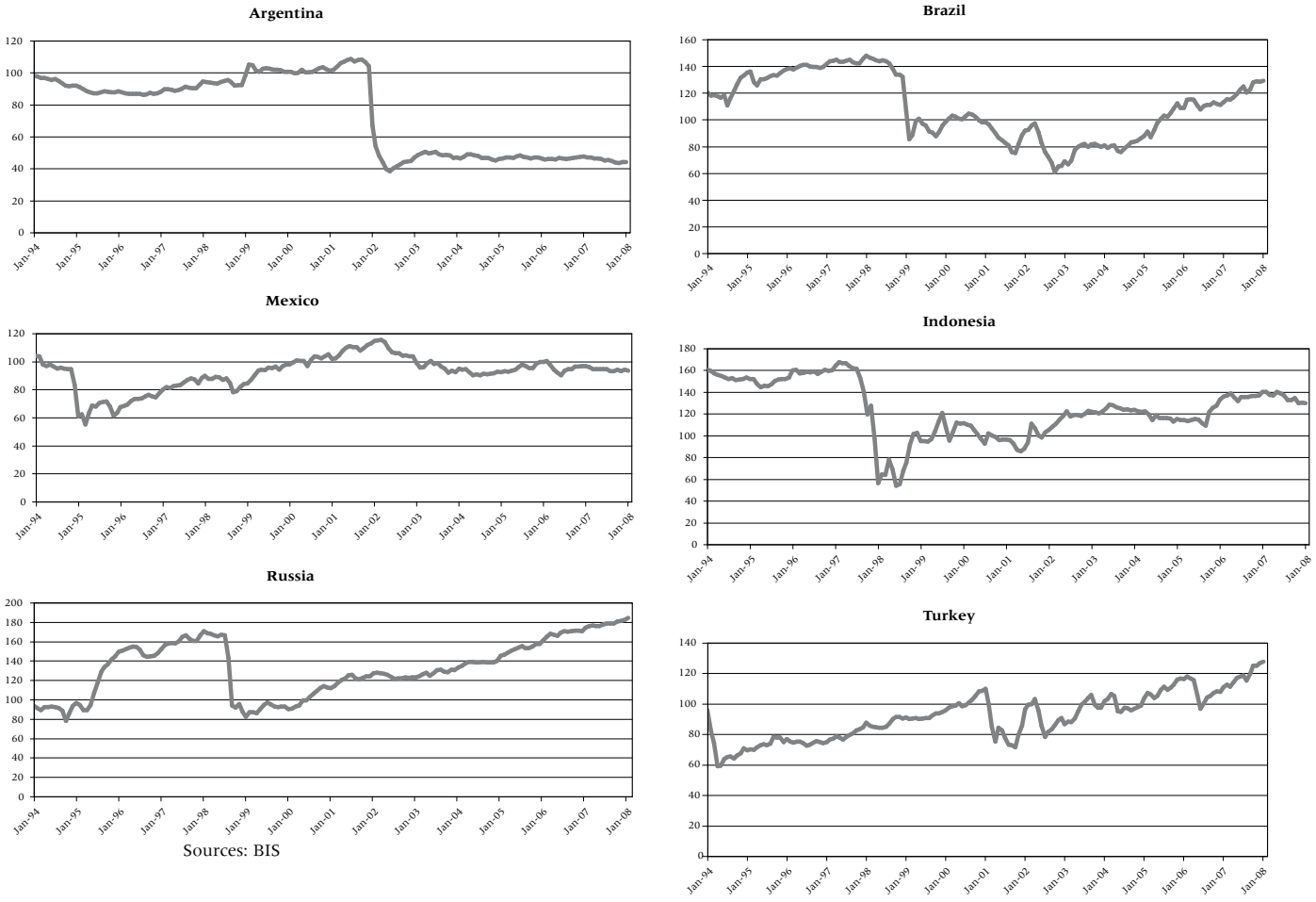
Sources: IMF for inflation and BIS for exchange rates.

2 NEERs are yearly averages of BIS monthly data; annual inflation is calculated from GDP deflators.
3 The 2007 figure is our own estimation due to the unreliability of official price statistics during that year.

Another interesting contrast between Argentina and the other countries in the sample arises in relation to the behavior of the real effective exchange rate (REER). As shown in Figure 2, in all but Argentina, once the REER hits bottom it gradually appreciates to a level not too different from the pre-devaluation one. This pattern is consistent with:

- The adoption of flexible exchange rates and inflation targeting.
- A generalized improvement in external conditions, that is, terms of trade or, in the case of Turkey (2000–01), the expectation of annexation to the European Union.
- The fall of the US dollar vis-à-vis the Euro and other world reserve currencies.
- A strengthening, albeit largely endogenous, in fiscal and debt fundamentals.

FIGURE 2
Real Effective Exchange Rates in Six Emerging Market Countries
(2000=100)

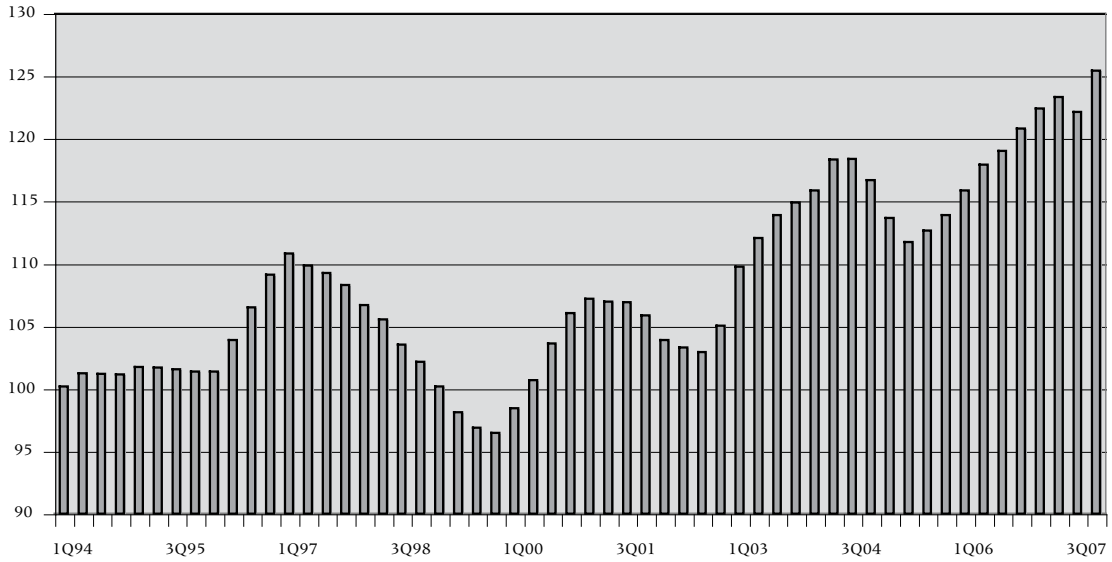


Sources: BIS

That the currencies of Brazil, Mexico, Indonesia, Russia, and Turkey are nearly as strong today as in the months preceding the devaluations suggests that their equilibrium REER appreciated after the crisis.[4] So, what makes Argentina different than the rest? Is it that external conditions did not improve noticeably? As Figure 3 shows, this was not the case.

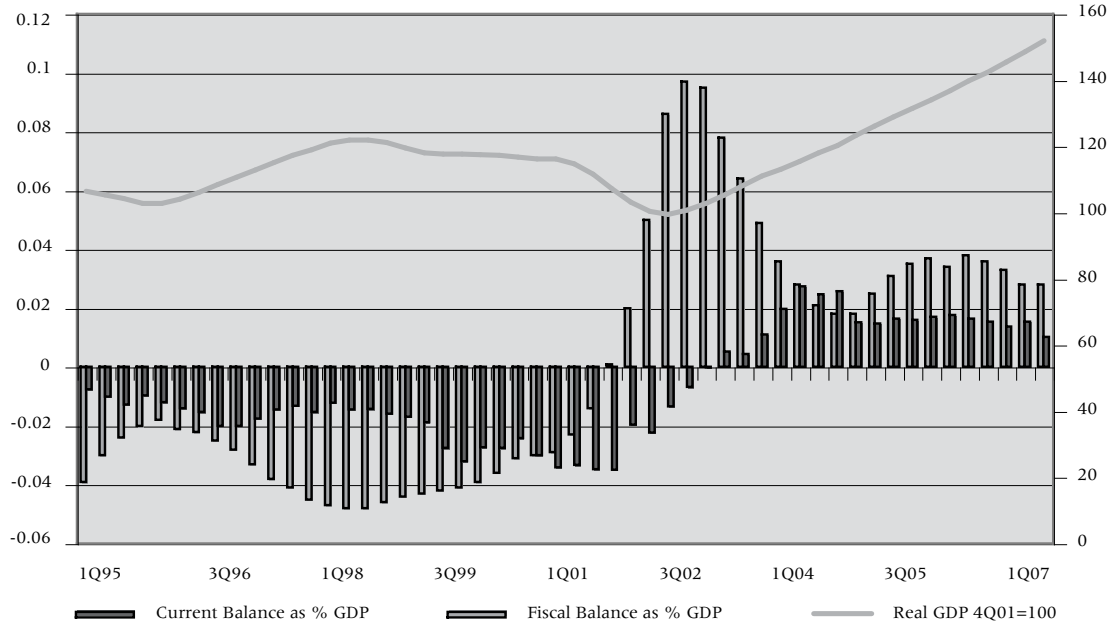
4 Notice that despite the recent turmoil in global financial markets, no one is saying that those currencies are overvalued.

FIGURE 3
Argentina: International Terms of Trade
(4q-moving average, 1993=100)



Is it because, despite the improvement in external conditions, the economy remained sluggish and/or vulnerable to external and fiscal shocks? Once again, the answer is negative (see Figure 4).

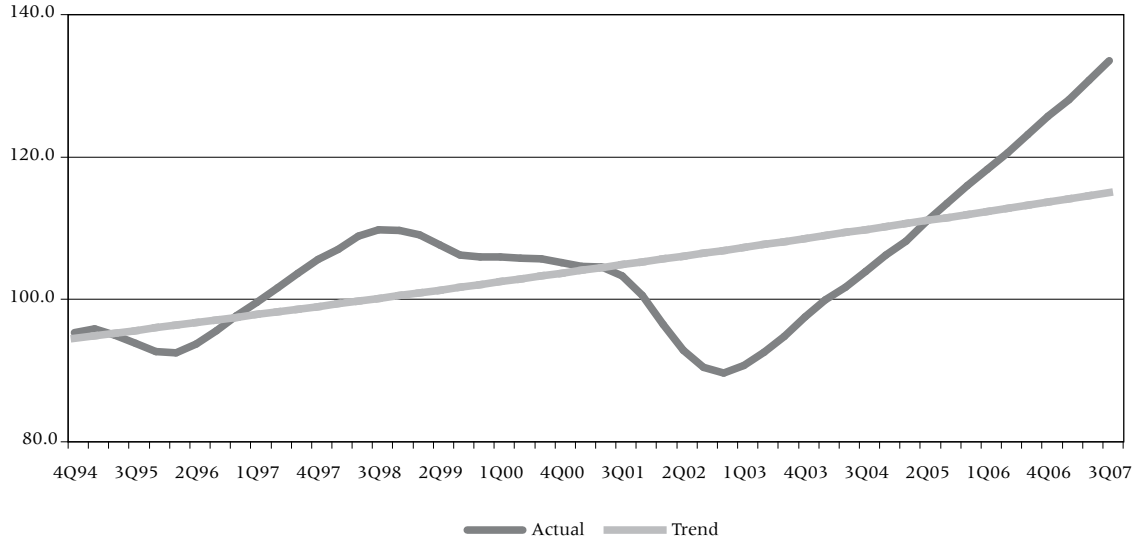
FIGURE 4
Argentina: Macro Fundamentals



Or is it just that the REER was so overvalued before the crisis that the lower level observed today reflects equilibrium rather than disequilibrium? Here, our opinion is that, however overvalued the REER was in 2001, today it is definitely undervalued. For starters, as the previous graph

showed, there is a significant (2.8 percent of gross domestic product [GDP]) surplus in the current account. Moreover, as indicated in the Figure 5, the output gap is negative and also significant (actual GDP is 16 percent above potential). Just as the combination of a sluggish economy and large current account deficit is a classic case of REER overvaluation, the opposite is a classic case of undervaluation.[5]

FIGURE 5
Argentina: Real GDP Relative to Trend
4Q01=100



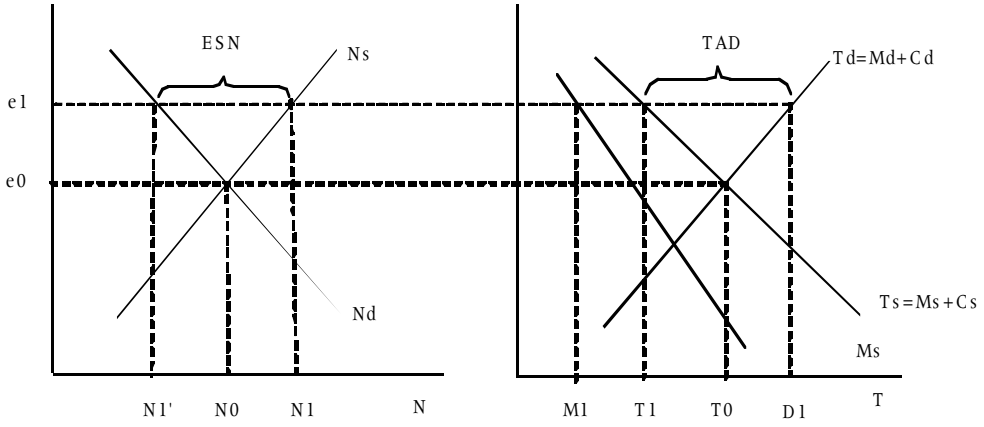
Thus, the question is not *if* the REER is undervalued, but *how* undervalued. In Section IV, we attempt to answer this question. Before doing so, let us review the basic theoretical underpinnings of RERT.

5 See, for example, James Meade, *The Balance of Payments*, Oxford University Press, London, 1951.

II. Can the Real Exchange Rate Be Targeted?

What is at issue in Argentina is the sustainability of a model that bases economic growth on the targeting of the REER at an artificially low level. This, however, does not necessarily mean that REER fundamentals cannot be managed through an appropriate use of monetary, fiscal, and trade policies. To clarify this point, allow us to use a simple analytical framework in the form of a Swan diagram (as in T. W. Swan, the Australian economist who, along with W. Salter and M. Corden, popularized the celebrated tradables-nontradables small-open economy model). The application of the Swan-Salter-Corden model to Argentina requires some adaptation. For this, consider Figure 6.

FIGURE 6
REER Overvaluation



The panel on the left represents the market for nontradables (N), and the one on the right, the market for tradables (T). The domestic demand and supply curves are drawn as functions of the relative price of N with respect of T, denoted as *e*. The supply of T has two components, which, for simplicity, we call commodities (C) and manufactures (M). We assume that all commodities are exportable and all manufactures are tradable (that is, exportable or/and importable). Commodity exports and manufacture imports are taxed. Manufacture exports, on the other hand, are subsidized at the same rate as the tax on imports. International prices and domestic protection levels are constant for M and variable for C. However, in the case of C—where domestic protection levels are negative since exports are taxed—the government stabilizes domestic prices by raising export taxes every time international prices increase, and vice versa. Thus, at any given point in time, the relative price between M and C (the two tradables) is given and e represents the REER.

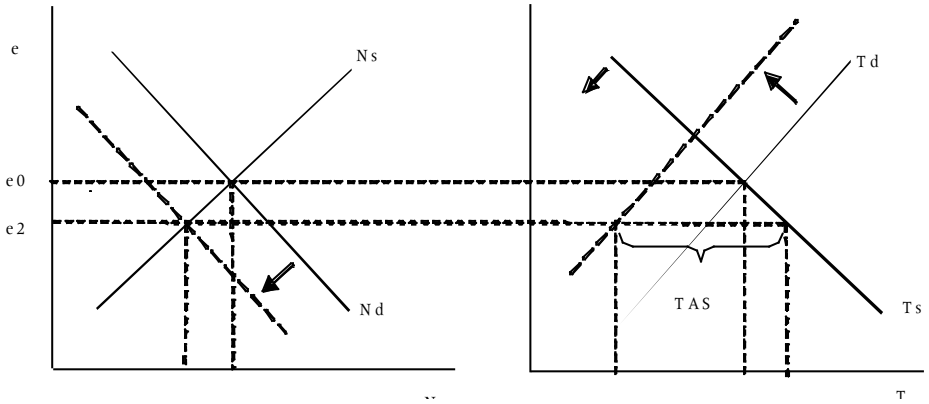
At *e=e1*, the economy is in disequilibrium, both internal and external. While "notional" GDP is *e1N1+T1*, actual GDP is *e1N1'+T1* (since N production is demand determined). The difference (*N1N1'*) represents excess supply of nontradables (*ESN*). This is the equivalent of the "output gap" in a typical one-good, Keynesian, closed-economy macroeconomic model. The fact that *e* is overvalued implies that there is also a trade account deficit (*TAD*).

It is possible to correct both imbalances, *ESN* and *TAD*, by devaluing the nominal exchange

rate. The only reason nominal devaluation is effective in this case is that there is unemployment. This reduces the passthrough effect of devaluation, thereby resulting in real depreciation. Once the economy reaches equilibrium, however, nominal devaluation ceases to be effective. At *e0*, the N market clears and the current account is in balance. The economy produces *N0* units of N, *M0* units of M, and *M0T0* units of C. Any attempt by the government to increase competitiveness by devaluing and nothing else would simply cause the nominal prices of T and N to rise proportionately without affecting *e*. The transmission mechanism is well known: nominal depreciation induces the public to sell dollars to the central bank causing the money supply to expand. But, since the economy is in full employment, more money simply means more inflation, hence no changes in real money balances, real interest rates, or *e*. In other words, nominal devaluation (tantamount to expansionary monetary policy in this case) is neutral.

But, what would happen if, starting from a position of equilibrium, the government sterilized the excess supply of money induced by the devaluation? This would cause the real supply of money to fall since nominal prices would rise, particularly for tradables, while the nominal money supply would remain constant. As shown in Figure 7, the ensuing monetary contraction would shift the demand for N and T to the left, hence reducing *e* and generating a trade surplus (*TAS*). Notice, however, that while there is a change in output composition (the economy produces less N and more T), real GDP does not change. The same would happen if nominal devaluation was accompanied by fiscal contraction: an increase in taxes or a reduction in government spending would shift *Nd* and *Td* to the left with identical results.

FIGURE 7
Equilibrium REER Depreciation



The effectiveness of sterilized intervention is not assured, however, particularly if the capital account is wide open. The "impossible trinity" of exchange rate management, monetary control, and financial openness has received much attention in the economic literature, the idea being that monetary contraction will undo itself if higher interest rates attract capital inflows. What is less emphasized is that the same principle applies to fiscal policy. An improvement in budgetary conditions reduces credit risk, which also attracts capital inflows. Thus, the success of sterilized intervention depends on the feasibility of controlling capital mobility.

Another way of indirectly managing the REER is through trade policy. For example, if the objective is to lower the REER to make certain industries (for example, nontraditional exportables, tourism, and so forth) more competitive, a compensated devaluation may do the trick.

By "compensated devaluation," we mean a combination of nominal devaluation, higher taxes on exports, and lower tariffs on imports. Naturally, if this was done across the board and in the same proportions for all tradable goods, there would be no effect on relative prices. Thus, the key is to tax (liberalize) some exports (imports) more than others. For example, export taxes could be levied on commodities, and import tariffs reduced for capital goods. This would raise effective protection in the sectors the government is trying to subsidize. Economists of different ideological persuasions would differ on whether this is a good or a bad policy, but this is another matter.

Export taxes can also act as REER stabilizers in economies subject to high export price volatility. In many emerging markets, the production and exportation of commodities such as oil and gas, basic metals, and minerals is controlled by the government. These countries are generally advised to create "rainy day" funds to better manage the windfalls so as to avoid boom-bust cycles and reduce the likelihood of Dutch disease.[6] However, in countries where commodities are produced and exported by the private sector, the only way to create a fund like this is through taxation. In a perfect world, a progressive income tax system, acting as an automatic stabilizer, would take care of this problem. In the real world, tax administrators may be unable (or unwilling) to capture rents derived from an export price bonanza through income taxation alone. If so, they may resort to simpler means, such as taxing exports.

The problem with export taxes is that they are highly distortionary. As we know from second-best trade theory, if the non-economic objective of the government is to help M producers to cope with real appreciation, the optimal policy is not to restrict exports of C, but rather to subsidize production of M. By the same token, if the non-economic objective is to soften the impact of the higher commodity prices on domestic prices, the best instrument is to subsidize C consumption. In both cases, the subsidies should be financed with general rather than export taxes.

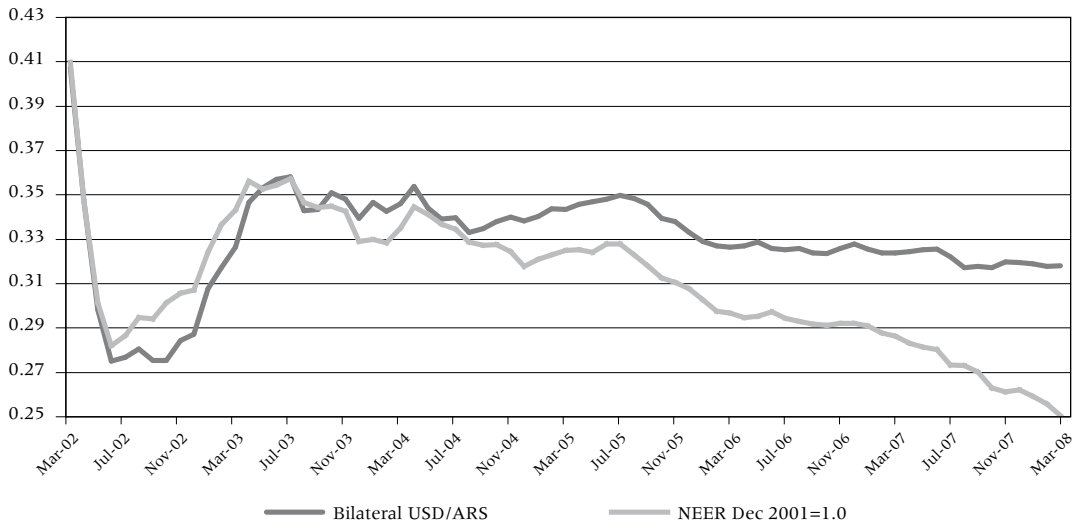
6 Dutch disease occurs when, as a result of a commodity boom, there is too much foreign exchange chasing a limited supply of nontradables, resulting in major real appreciation, which squeezes profitability out of other tradable industries to the point of making some of these industries disappear.

III. What Did Argentina Actually Do?

The policies that comprise what has essentially become Argentina's "New Economic Paradigm," were never announced as parts of an integrated plan, probably because there never was one. Measures such as the derogation of the Convertibility Law and the forcible pesification of bank deposits and other domestic financial instruments, which resulted in the maxi-devaluation of the peso; the reintroduction of export taxes after 11 years of absence; the freezing of public utility tariffs; and the default on the public debt were hastily taken in response to the December 2001 crisis. By the time Néstor Kirchner took office (May 2003), the undervalued REER was a given. All Mr. Kirchner did was maintain the status quo, as it was functional to his political needs.

There were, however, two distinct periods in Mr. Kirchner's presidency. From the third quarter of 2003 to the second quarter of 2005, the administration kept monetary and fiscal policies on a relatively tight leash and let the nominal exchange rate float, albeit within certain limits. Notwithstanding the strong devaluation of the peso (65 percent between December 2001 and June 2005), inflation remained under control, partly because of high unemployment and low capacity utilization, partly because of the 2002 freezing of public utility tariffs, but also, in great part, because of the restraining effect of monetary and fiscal policies on domestic absorption (see Figure 8).

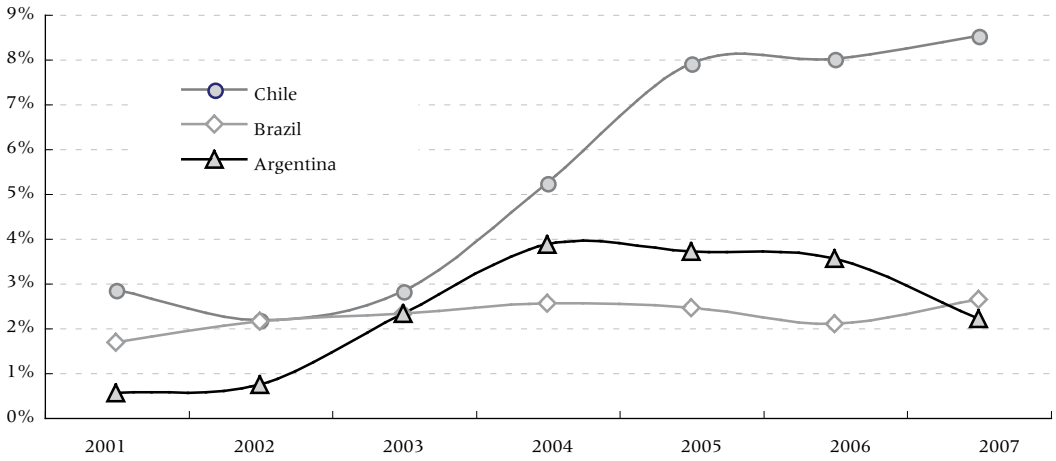
FIGURE 8
Argentina: Nominal Exchange Rate



Beginning in the third quarter of 2005, the government began to push the peso down by actively intervening in the FX market, which resulted in a more expansionary monetary policy. Regrettably, this occurred at a time when the economy had reached full capacity utilization (Figure 8) and the fiscal surplus had started to decline (Figure 9). Not surprisingly, inflationary pressures began to accumulate. If the REER did not appreciate more during this period, it was because the Kirchner administration:

- Virtually pegged the peso to a weakening US dollar.
- Aggressively used export taxes and quantitative export restrictions to offset the inflationary effect of commodity price increases.
- Upped the ante in terms of price controls by requiring labor unions, producers, and retailers to negotiate wage and price increases directly with the administration.
- Adulterated the Consumer Price Index (CPI).

FIGURE 9
Fiscal Savings: Argentina, Brazil and Chile
(in % of GDP; Brazil includes Social Security System)



THE ROLE OF INCOMES POLICY

From the outset, the government sought to ameliorate the impact of real depreciation and international price increases on domestic inflation by intervening in local markets for goods and services. Some of the interventions, such as the introduction of taxes and quantitative restrictions on exports, placed a wedge between international and domestic prices of tradable goods. Others muzzled inflation, particularly in the nontradables sector, via wage and price controls. In both cases, government subsidies helped producers to play ball for a while without getting too hurt.

To be sure, the main objective of export taxes/restrictions and price controls was the subsidization of wage goods.[7] For if these are subsidized it is much easier for the government to negotiate with the labor unions. And once wages are under control, a depreciated REER can be sustained for a longer while. Export taxes help by reducing the prices of exportable goods paid by domestic consumers. In Argentina, these taxes are particularly high for wheat, corn, vegetable oils, beef, powdered milk, and gasoline, which together represent an important share of the CPI. However, in some areas (for example, beef and milk), taxes alone were not enough,

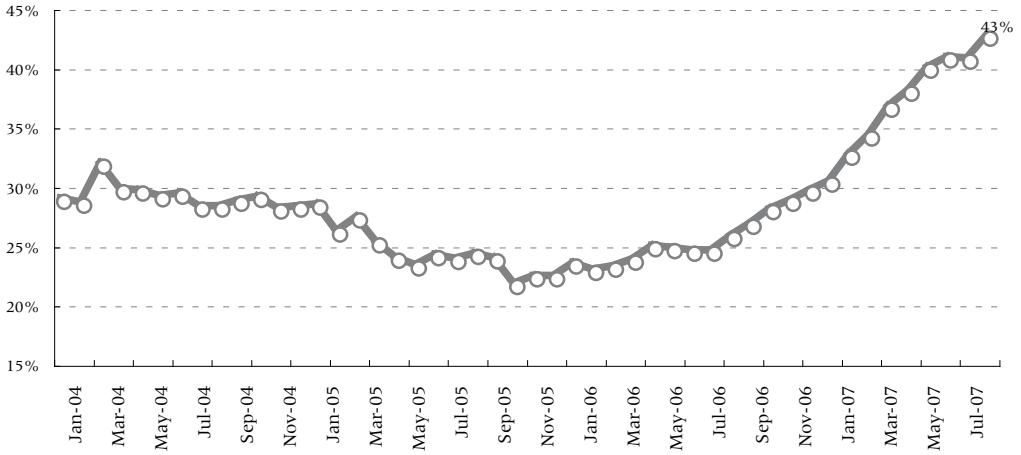
7 By wage goods we mean basic consumption goods, the kind that workers take primarily into account to form inflationary expectations, hence demand wage adjustments.

and the government had to place additional trade restrictions, such as export bans and quotas, to keep inflation low (see Box 1 on page 17 for specific examples).

In Argentina, the main traditional export commodity is soybeans.[8] Since domestic consumption is relatively low, changes in the international price of soybeans are not as important, in terms of the CPI, as changes in the international price of, say, beef or milk. Yet, export taxes on soy products are, typically, higher than for other products. While the main reason in this case is fiscal, soy export taxes play a significant role in the incomes policy scheme designed by the government, as they provide much of the revenues the government needs to subsidize other consumption.

Essentially, there is a public transfer mechanism in place that operates like this. The government collects taxes on exports on soy and other agriculture and agribusiness products, gas, and petroleum, and allocates the proceeds to (a) compensate transportation companies and distributors of electricity and natural gas, whose tariffs are frozen; (b) invest in these sectors, thereby relieving private operators from having to do so, as this would be impossible given their low tariffs; and (c) import what is in short supply—notably, fuel oil, natural gas, and electricity—because of the government's misguided policy interventions. In short, the government hands out the subsidies, but the ones that really pay them are the producers of exportable commodities. This transfer mechanism has resulted in a rapid acceleration in public spending, as shown in Figure 10.

FIGURE 10
Primary Spending FedGov
(% year-over-year variation; moving average 6 months)



BACK TO THE BASICS

In terms of the figures presented in Section II, what the government of Argentina has been doing is to set *e* below the free market equilibrium level by taxing exports every time international prices rise and limiting the upward flexibility of nontradable prices, including public utility tariffs.[9] Actual GDP at the distorted REER *e3* is represented by *e3N3'+T3*. Notional supply, on

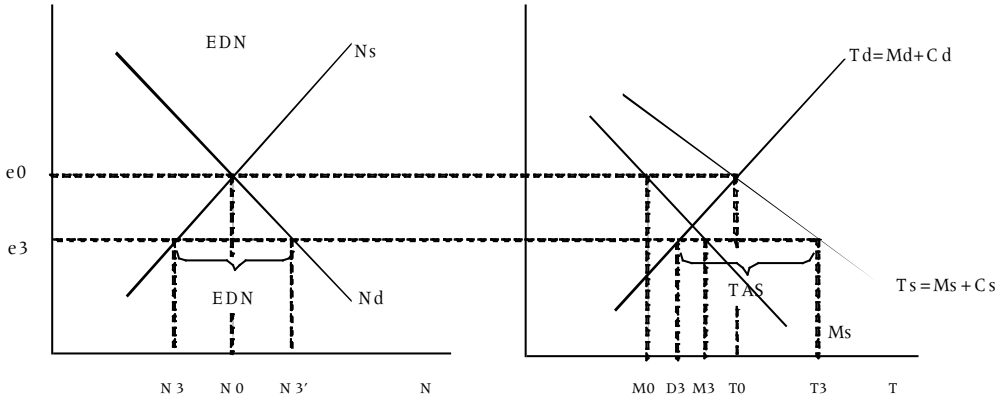
8 This includes processed soy products and derivatives such as oil and pellets.

9 By free market equilibrium level, we mean the level that would have existed in the absence of FX intervention, monetary sterilization, export taxes, government subsidies, frozen tariffs, and wage and price controls.

the other hand, is *e3N3+T3*. The difference (N3N3') represents excess demand for nontradables (*EDN*). Since output in the N sector is demand determined, this also represents a negative output gap.

The real objective of undervaluing *e* is not to create excess demand for N, but to increase the supply of M. This is shown by the move from *M0* to *M3*. In this sense, the difference between *e0* and *e3* amounts to a subsidy to M paid by N. Since overvaluing *e* also helps to increase the supply of C and reduce the demand for both M and C, the result is a trade surplus (*TAS*). In Argentina, this surplus was high enough to also yield a positive current account balance.

FIGURE 11
REER Undervaluation



BOX 1. ARGENTINA: MICROECONOMIC DISTORTIONS ACROSS SECTORS

Energy (gas and electricity): Consumer tariffs have been frozen at the levels prevailing before the 2002 devaluation. Wholesale tariffs have been adjusted, but they are still below the long-term marginal cost of production. Since, at these low tariff levels, the private sector cannot undertake new investments, but merely maintain the existing ones, public investment is needed to expand domestic capacity.

Fuel (particularly, diesel oil): Several layers of intervention exist in this sector, including export taxes, export prohibitions, and domestic price controls.

Urban and long-distance transportation: Prices of train, bus, and subway services are set by the government at extremely subsidized levels. Private suppliers are partially compensated from the budget, but not enough to ensure good service, let alone invest more.

Meat and dairy products: Under normal conditions, these sectors would be booming thanks to high international prices and demand. In Argentina, however, their markets are distorted by three layers of intervention that render the activities barely profitable to unprofitable. These layers are export taxes, quantitative export restrictions, and domestic price controls that set local prices under the international ones net of export taxes.

Grains (cereal and oilseeds): These commodities are subject to high and variable export taxes. And while they still maintain reasonable profit margins thanks to international prices and domestic productivity, growing export taxes have eroded producer revenues to a considerable extent. While it remains to be seen whether export taxes will fall if and when international prices decline, we think this is highly unlikely given the negative effect that such reduction would have on the fiscal accounts.

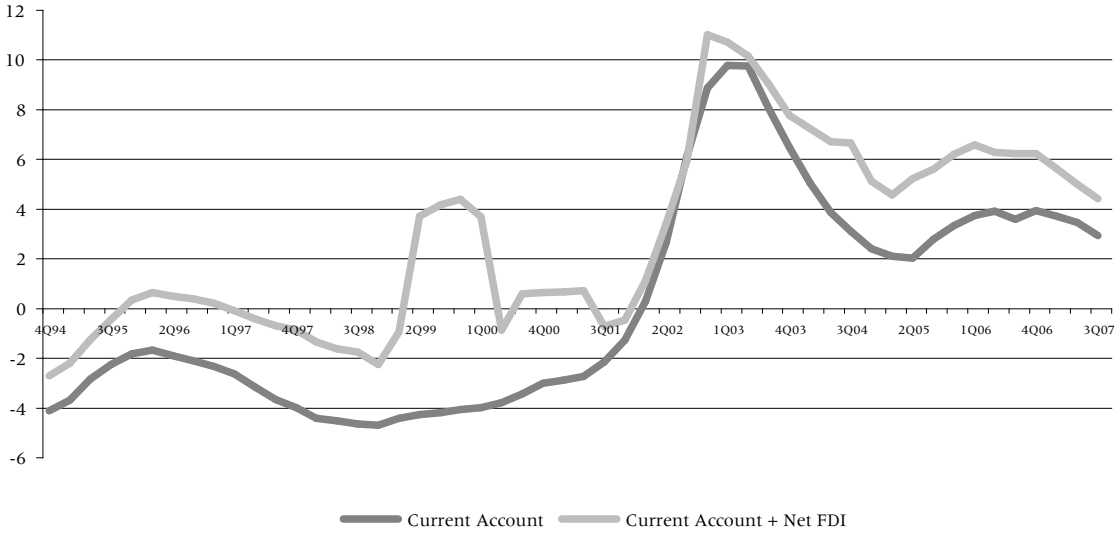
IV. Assessing REER Undervaluation and the Inflation Overhang in Argentina

How undervalued is Argentina's REER? To be able to determine this with some degree of accuracy, we ran an econometric model of the current account using quarterly data from 4Q94 to 3Q07, and found that the current account balance critically depends on two variables: real GDP and the REER.[10] In particular, we found that:

- Every 1 percent growth of GDP above its trend causes the current account balance to deteriorate by 0.25 percentage points of GDP.
- A 10 percent depreciation of the REER improves the current account by 0.57 percentage points of GDP.

Armed with these empirical results, we then asked ourselves what the REER would be now if instead of a current account surplus of 2.8 percent of GDP, Argentina had a deficit of 2 percent of GDP—that is, commensurate with the amount of net foreign direct investment it receives from the rest of the world (see Figure 12).

FIGURE 12
Argentina: Current Account Balance and Net FDI
% of GDP

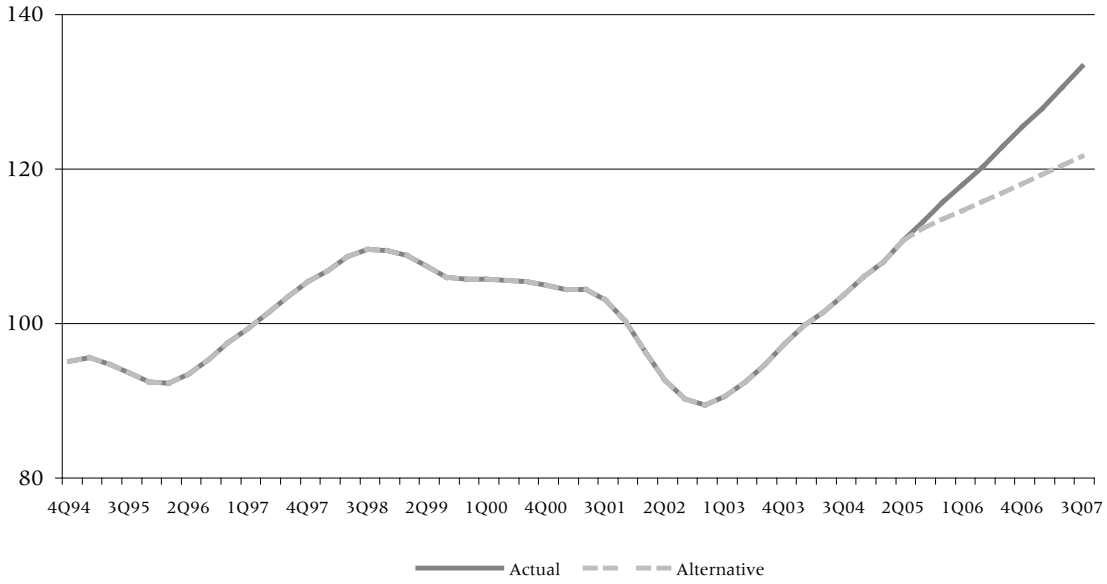


The average ratio of net FDI to GDP during the sample period was 2.7 percent. Excluding the one-off 1999 acquisition of YPF by Repsol, which accounts for the hump in the pink line, the ratio falls to 2.2 percent. So, it is fair to assume that a "normal" FDI figure for Argentina is 2 percent of GDP. Given our estimated REER elasticity of 0.057, the appreciation needed to turn the 2.8 percent current account surplus into a 2 percent deficit is 84 percent. This, however, is a conservative figure since it does not take into account the indirect effect of real appreciation on the current account via growth. So, suppose that nothing had prevented a move of the REER to

10 The econometric results are available upon request.

equilibrium. Most likely, GDP growth would have been lower than the rate actually observed (2 percent q/q), although probably not as low as the historical trend rate of 0.4 percent q/q. Perhaps, it would have 1 percent q/q, in line with the potential expansion of GDP. If so the cumulative effect on output would have been an 8.7 percent reduction, as illustrated by the gap between the full and dotted lines in Figure 13.

FIGURE 13
Argentina: Alternative GDP Path
4Q01=100



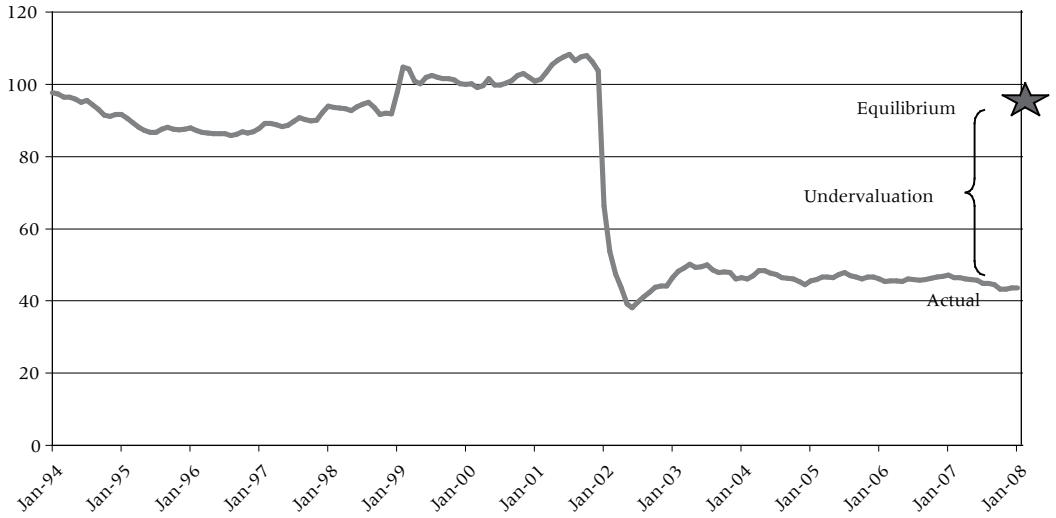
The switch to a lower rate of growth would have caused the current account surplus to be higher. Given that the output-elasticity is 0.25, the increase in the current account balance would have been 2.2 percentage points of GDP meaning that, for the same REER, the surplus would have risen from 2.8 percent of GDP to 5 percent. Turning this surplus into a 2 percent deficit would have required a 122 percent real appreciation. Since, in 4Q07, the REER was 43.2 (down from a base index number of 100 in 4Q01),[11] increasing it by 122 percent would have lifted it to 96, just 4 percent below the REER level observed in 4Q01!

In conclusion, our empirical analysis suggests that, relative to a situation in which markets operate freely, the REER is 55 percent undervalued. This is graphically shown in Figure 14.

11 Our REER series is a 4q-moving average of BIS's quarterly REER data.

FIGURE 14

Argentina: Real Effective Exchange Rate

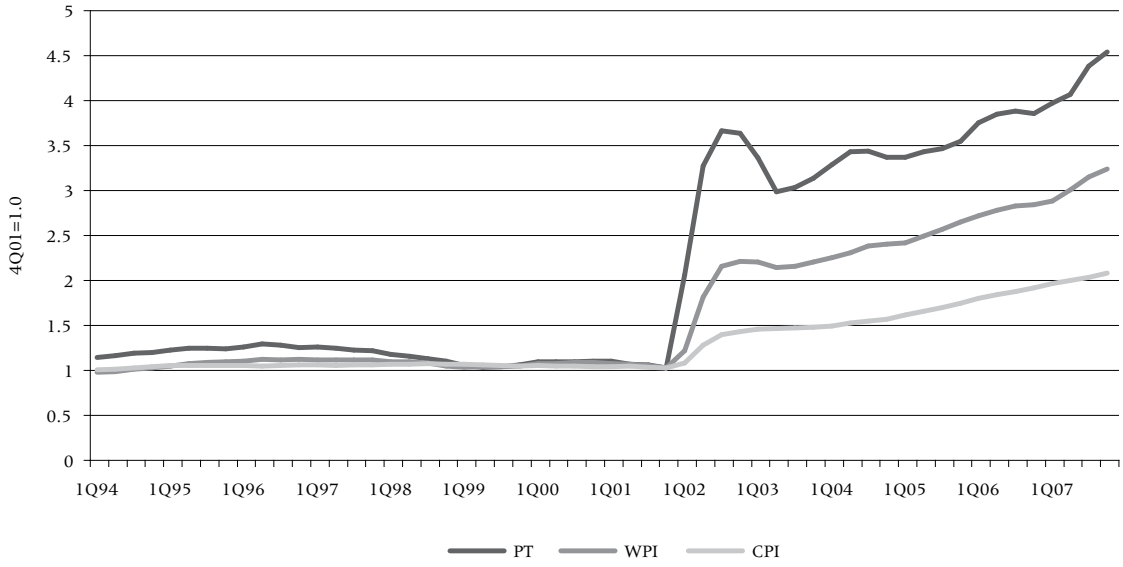


HOW ABOUT THE INFLATION OVERHANG?

Having determined that, in the absence of market intervention, the purchasing power of the Argentine peso would be as high today as it was in 2001, the next question is whether we can quantify the relative importance of the different interventions used to secure the undervalued REER. A corollary of this analysis is an estimate of how much "repressed" inflation exists in the economy.

Figure 15 shows three alternative price indexes. Since they are all based on official information, no distortion resulting from the government's manipulation of price statistics is considered. PT represents the international price of tradables in peso terms. The series is built by taking the average of dollar export and import prices and converting it to pesos using the bilateral exchange rate of the dollar. This measure captures the effect of dollar depreciation (or appreciation) vis-à-vis other currencies since the latter is embedded in the evolution of foreign dollar prices. The other two variables are WPI or wholesale price index, a proxy for domestic (as opposed to international) tradable prices, and CPI or consumer price index, a general price index with a commanding weight of nontradables in its calculation.

FIGURE 15
Repressing Inflation the Old-Fashioned Way



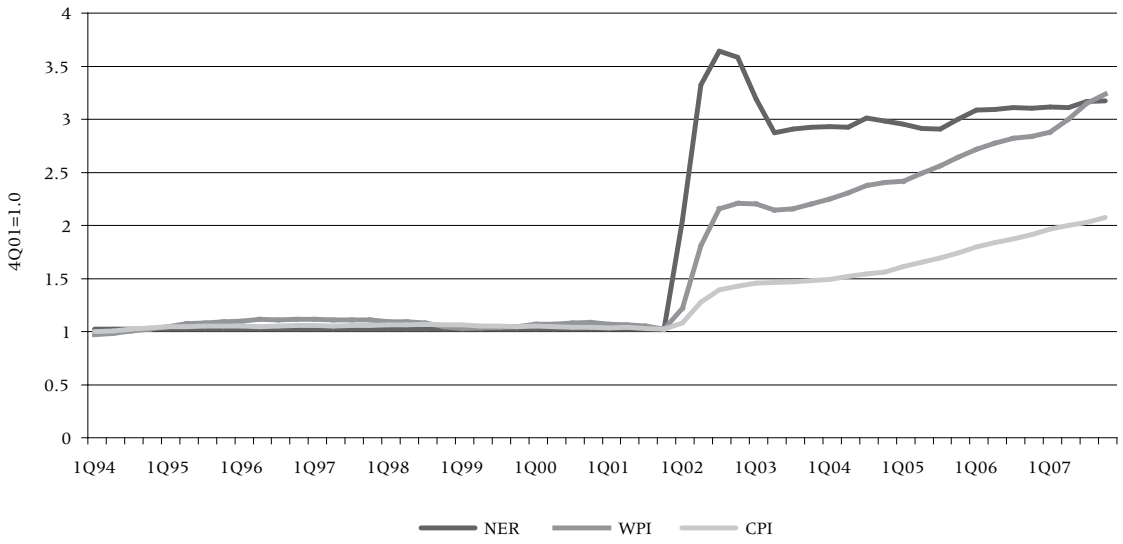
Two main conclusions emerge from this analysis. First, if as we indicated earlier, the level of today's equilibrium real exchange rate is not too different from the (arguably overvalued) level observed in 4Q01, in the absence of government intervention (including no export taxes), the policy of pegging the exchange rate to the US dollar and having a relatively accommodating monetary policy to match would have resulted in 350 percent inflation accumulated since the beginning of 2002. Instead, the CPI rose only 105 percent. How was the government able to shave 250 percentage points off CPI inflation? As the previous figure indicates, half of the deed was done by introducing a growing wedge between international and domestic tradable prices (between PT and WPI) via export taxes and prohibitions, and the other half by freezing tariffs, regulating wages and prices, and compensating producers via budget subsidies (which accounts for the difference between WPI and CPI). Of course, nothing like this would have been possible under less favorable international conditions.

But unless we think that these conditions are not going to reverse, the amount of repressed inflation in the economy is in a range of 56 percent (assuming that only the second type of intervention is removed) to 125 percent (assuming both types of intervention are removed).[12]

Second, as shown in Figure 16, the increase in the WPI between 4Q01 and 3Q07 was about the same as the increase in the nominal exchange rate of the US dollar in terms of pesos. This implies that, through export taxes and other trade restrictions, the government was able to "confiscate" practically all of the increase in revenues resulting from the improvement in international prices leaving producers (particularly of export commodities) the increase due to the nominal depreciation of the peso. But, since the latter was 215 percent and CPI inflation was 105 percent, exporters were better off in real terms on average, which explains why they had not protested government intervention in their markets, except in the cases where, due to export prohibitions and domestic price controls, their relative prices actually fell (for example, meat, dairy products, fuel oil, and natural gas).

12 These figures are calculated by dividing the 4Q07 index numbers (4Q01=1) of WPI (3.210) and PT (4.511) with respect to the CPI (2.053), respectively.

FIGURE 16
Sharing the International Price Bonaza with Big Brother



WHAT TO EXPECT

Maintaining the Argentine peso at its current value in real effective terms (or reducing it further, as the government has suggested), without drastically changing the fiscal/monetary trade/incomes policy mix will exacerbate distortions and, ultimately, become unsustainable. This is assuming the international environment remains favorable. If, on the other hand, it becomes unfavorable, Argentina's twin surpluses (external and fiscal) will vanish and the RER will probably have to depreciate rather than appreciate. The risk is that, in this context, the government will lose control of inflation. If this happens, the economy will, most likely, stagnate. Consider the following two alternative scenarios.

First, suppose, optimistically, that the world can avoid a global recession. To ensure adequate economic performance in the long run, Argentina's growth model must undergo fundamental changes. For starters, domestic prices must be liberalized. This includes the realignment of tariffs in the energy and public services areas and the elimination of price controls on basic consumption items. These policies would inevitably produce inflation acceleration and a decline in the RER. The government could limit these effects by implementing a tighter fiscal policy accompanied by trade (particularly, import) liberalization. But, this is moving in the opposite direction Argentina has moved in the last three years.

Now, let us imagine there is a global recession. Once again, Argentina is not well prepared to cope with it. Unlike Brazil, which let the real exchange rate appreciate and the overall fiscal deficit contract during the expansionary phase of the cycle, Argentina applied the opposite recipe: it let the real exchange rate depreciate until the latter became grossly undervalued, and allowed the fiscal surplus to fall in spite of record-high growth in tax collection (see Box 2). By implementing this highly pro-cyclical mix of policies, Argentina did exactly the opposite of what the doctor ordered. So, now, when rational policymaking would dictate that the currency be let to depreciate in response to weaker external fundamentals and the fiscal surplus to fall in response to an endogenous reduction in tax collection, there is little room for both.

BOX 2. RER UNDERVALUATION AND EXPORT-LED GROWTH

EXPORT-LED GROWTH—the idea that preserving the profitability of the export sector helps improve growth performance—has many adherents not only among professional economists, but also among politicians. Yet, not every advocate of export-led growth really knows what he/she is talking about. For some, it is merely a question of avoiding the "foreign exchange gap," whatever that means. For others, it is the fact that productivity is higher in the exportables sector.

The problem with these linear interpretations is that they can be used to justify undervaluing the domestic currency as a way to jumpstart a growth process. Consider, for example, the argument that, because labor productivity grows faster in the tradables sector, the government should keep the RER as high as possible during takeoffs. This is tantamount to turning the "Balassa-Samuelson effect" on its head. What Balassa and Samuelson showed was that the difference in labor productivity growth observed in the tradables and nontradables sectors explains why the RER appreciates more in fast-growing countries than in slow-growing ones. If there is causality, it goes from growth to the RER rather than the other way around. Moreover, the correlation is negative rather than positive!

While it is commonplace to invoke the role of a depreciated RER in the takeoffs of successful East-Asian exporters—Japan in the 1950s, Korea in the 1960s and 1970s, and China in the 1980s, 1990s, and even today—the link between both was more sophisticated than RER activists typically assume. In those countries, income growth was reinforced by a phenomenal increase in saving and investment rates. Typically, saving rose more than investment, causing large trade surpluses and RER depreciation. Notice, however, that the likely cause of growth was not the high RER itself, but the fact that, to get to it, countries had to increase national income faster than consumption.

V. What Does This Have to Do with China?

The fact that Argentina has been growing very fast over the past five years while making an effort to avoid nominal and real appreciation has led some observers to suggest that, perhaps, it is following the same model as China. In this section, we argue that even if this was true, it would not necessarily be a good thing.

The opinions of economists this side of the hemisphere about the Chinese model are divided. Some think the model is both good and sustainable (for example, proponents of the BW2 hypothesis). Others think that it may be good for China, but not for the global economy, not to mention *globally* unsustainable. And then there is a third group to which we adhere, who think that regardless of the sustainability or lack thereof of the Chinese growth model it is not good for anyone, not even China.

By "Chinese model" we mean the policy of attempting high growth rates by preventing exchange rate appreciation. Proponents of the BW2 model rationalize this strategy by saying that it helps emerging markets like China to accumulate foreign reserves, which are then used as collateral to attract foreign investment.[13] This is not needed to close the gap between total investment and domestic saving, which in Asian countries is typically negative, but to incorporate technological (and managerial) progress, thereby enhancing total factor productivity.

The story sounds interesting except that, to persistently accumulate foreign reserves, a country not only needs to prevent nominal appreciation, but also real appreciation. If so, the fact that the Chinese have historically pegged their nominal exchange rate to the US dollar and sterilize part of the growth in money demand is necessary but not sufficient to deliver an undervalued RER, as we argued in Section II. More important than the formal exchange rate system and the monetary policy are the two other ways in which China interferes with global macroeconomic rebalancing. These are: capital controls, particularly on outflows, and price controls, particularly on food and public services. It is in these areas of policy where China flunks the "market economy" test by a long shot.

For, consider what would happen if the capital account was open and the prices of wage goods and nontradables were determined by the market rather than by the government via administrative controls and massive subsidization from the budget. Part of the excess supply of money caused by the monetization of the current and FDI account surpluses would be eliminated via portfolio outflows and the other part by domestic inflation. In the first case, the international allocation of Chinese assets would be done by the private sector rather than by the central bank of China. In the second case, the RER would appreciate, facilitating macroeconomic adjustment via a reduction in the current account surplus. More important, there would be less microeconomic distortions, hence guaranteeing more efficiency in the allocation of resources. In such a world, the national and subnational governments of China would be able to redirect public resources from subsidizing wage goods to increasing social spending in areas such as health care, education, and social security, hence improving welfare.

China would probably not grow faster as a result of these policy changes, but it will certainly grow better. Right now, the Chinese economy must invest about 40 percent of its GDP (net of depreciation) to grow by 10 to 11 percent per year. This implies that the incremental output-capital ratio is 0.25, substantial, but well below China's potential. Raise it to 0.35, by improving

13 See Michael P. Dooley, David Folkerts-Landau, and Peter Garber, "An Essay on the Revived Bretton Woods System," National Bureau of Economic Research, Working Paper 9971, 2003.

investment efficiency, and it will be possible to increase consumption by 12 percentage points of GDP without reducing growth.

Like China, Argentina has been able to manipulate (albeit only for the past three years) the real exchange rate. Unlike China, however, Argentina has a low saving ratio (less than 25 percent of GDP, which makes wasting resources in bad investment projects more intertemporally onerous), binding supply constraints (due to a lack of investment in key sectors such as energy), a tight labor supply (as formal workers are nearly fully employed), and an inflationary history that renders capital and price controls quite ineffective. So, if the growth model of accumulating reserves by introducing wage and price distortions is not good for China, it must be worse for Argentina, where early signs of exhaustion are evident from the acceleration of inflation since 2005, an acceleration that market distortions and the tampering with CPI statistics cannot disguise.

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