INTRODUCTORY NOTE

The three sections of this paper attempt to summarize remarks made in several distinct sessions of the Conference to which this volume is dedicated. I have tried to weave the presentations around the common thread of currency devaluations, but readers should be aware that my original remarks had no unifying theme set in advance. It is safer, then, for readers to take each topic on its own merits, rather than trouble themselves by looking for links among them.

1. Devaluation Can Sometimes Be “Predictably Fruitless”

Sometimes a country will enter into a Dutch Disease phase. Dutch Disease got its name from the situation that arose in The Netherlands as a consequence of the discovery of North Sea petroleum and natural gas deposits. A huge burst of export revenues from these sources led to a dramatic appreciation of the real exchange rate -- i.e., the dollar became very cheap in real terms. As a consequence, the country’s traditional export industries were hard hit -- they could no longer prosper
while the dollar was so cheap.

Ever since this experience of The Netherlands, the term Dutch Disease has been used to
describe a situation in which an export boom in one product or sector puts other exports of the country
in peril -- via its effect on the real exchange rate. The term can equally well apply to cases in which the
abundance of dollars comes from some other source -- say a huge inflow of capital, or a large influx of
foreign aid money, or a burgeoning of emigrant remittances.

What is typical in all these cases is that the affected exporters do not really understand what is
happening. They do not see the problem as a real exchange rate phenomenon. Instead, they level their
sights on the government for not devaluing the currency. To them, it is totally obvious that if the price of
the dollar were only raised by fifty or one hundred percent, they (the traditional exporters) would be in
paradise. Instead, because of what they see as the insensitivity and obstinacy of the government in
failing to recognize these “obvious” facts, they are experiencing the fires of hell.

It is very hard to convince those traditional exporters that it is they, not the government, who are
wrong. They are wrong because they are “thinking nominal” instead of “thinking real”. In these
situations the equilibrium real price of the dollar is low because of an abundant supply of dollars.
Devaluing the currency will do nothing to change this fact -- indeed, over a transition period it will make
dollars even more abundant, as traditional and all other exports experience a transitory boost from the
devaluation.

But the natural end result of a devaluation in such circumstances is simply to restore the previous
“Dutch Disease” real equilibrium at a higher price level. The big lesson here is that if one devalues,
starting from a situation of equilibrium in the real economy, the natural predictable consequence is the
restoration of the same real equilibrium, but at a higher price level. The nominal exchange rate is here
simply serving as the numeraire of the economy -- determining the nominal level of the general price
index. In the transition to a new higher price level, the Central Bank accumulates international reserves,
issuing base money in return. A multiple expansion (via the money multiplier) raises monetary
aggregates like \( M1 \) and \( M2 \), and the general price level goes up with them. As long as the Central
Bank is committed to buy foreign currency at the new (post-devaluation) price of the dollar, they will
keep accumulating reserves until the general price level has risen high enough to produce an equilibrium
between the supply and demand for foreign currency, without any need for Central Bank purchases.
Lesson: it is fruitless to devalue, starting from a situation of true, real equilibrium.

2. Devaluation Can be a Fruitful Response to a Genuine Disequilibrium in a Country's Trade and
Payments

Like any other economic variable, the real exchange rate has an equilibrium level that changes
through time. Under a flexible exchange rate system, the nominal exchange rate moves up or down to
track this equilibrium. Under a fixed exchange rate the adjustment is much more sluggish, for it is the
general price level that has to do the adjusting. The world has a great deal of experience with real
exchange rate adjustment under fixed exchange rates, and the lessons from this experience are quite
clear. Fixed exchange rate countries adapt quite easily when the needed adjustment is a rise in the
internal price level. They even manage reasonably well when there is mild deflationary pressure. But
they have great difficulty in accomplishing the move to a new equilibrium when this requires major
reductions in the nominal level of prices and wages.

The characteristic evolution under strong deflationary pressures is that, instead of price and
wages neatly adjusting downward “as they should”, there are strong frictions and resistances to such
adjustment and the end result is reduced real output and employment. I am fond of citing the case of
Chile at the time of the Latin American debt crisis. While capital was still massively flowing into the
country (in June, 1981), its unemployment rate was around 8%. Then the capital inflow abruptly
stopped, and within just twelve months the rate of unemployment ballooned to over 28%. All this time,
the authorities stubbornly resisted devaluation, but finally (in June, 1982) they had to give in.

I like to cite this example because it helps explain why we have so few examples of the full real
costs of adjustment via a major deflation. The answer is that when countries start down this road, the
costs show up quite quickly, and the countries end up devaluing rather than continuing with the process
of deflation.

We are right now (August, 2001) witnessing another dramatic episode of adjustment via
deflation. This is the case of Argentina, where unemployment has hovered around 15% ever since early
1995. The government is committed to one-to-one convertibility between the peso and the dollar, and
there are many special circumstances that help to explain its resistance to the idea of devaluing its
currency. My purpose here is not to delve into these reasons, but simply to point to the extremely
heavy costs that the Argentine economy has borne over the past five years, and is still bearing today.
An added cost, which I have not yet mentioned, is represented by the huge real interest rate that the
authorities have had to accept as the price for preventing a major run on the currency. At this writing
the interest rates on Argentine government dollar obligations are hovering in the range of 15 to 18
percent per year, with inflation close to zero.

These elements -- a high rate of unemployment and a high real interest rate throughout the
economy -- are sure signs of disequilibrium. They may sometimes be present even when the real
exchange rate is not out of line, but certainly in the case of Chile in 1982 and of Argentina today all the
ancillary evidence points to a disequilibrium real exchange rate. These are the occasions when a
nominal devaluation usually provides a quicker and smoother transition to the new equilibrium than a prolonged and grinding process of deflation. Lesson: before thinking of devaluing, look for serious evidence of real exchange rate disequilibrium.

3. “Parking the Deficit” -- The Uncertain Link Between Fiscal Deficits and Inflation-Cum-Devaluation

It is my firm conclusion, after observing major inflationary episodes all around the world for close to 50 years, that nearly all of these episodes were caused by large fiscal deficits financed by government borrowing from the banking system. This generalization has filtered through to a wide economically-literate public. But it has come through the filter with an unfortunate twist -- the public thinks there is a tight link between fiscal deficits and inflation, whereas my experience suggests a much more subtle and certainly more uncertain link.

To put my story in a more positive frame, countries can often avoid the torments of inflation, even after quite a spate of fiscal deficits. This is because there are a number of avenues through which fiscal deficits can be financed in non-inflationary ways. There is no strict hierarchy of these non-inflationary havens, but I will list them in what appears to me to be a natural order, going from easiest to hardest.

a) Foreign Aid. Donor countries commonly designate their foreign aid money as loans rather than grants -- but the loans are at low interest rates and for long periods, so they contain what we call a large “grant component”. As long as donor-imposed restrictions on the uses of these loans are not too great, they are the borrowers’ first choice as a “parking place” for deficits.

---

1The grant component is usually defined by using a free-market interest rate to get the present value of contractual loan payments (PVLP) and then measuring the grant percentage as (ILA-PVLP)/ILA, where ILA is the initial loan amount.
b) **Borrowing From Multilateral Agencies on Preferential Terms.** Loans from the World Bank, the regional development banks, and the IMF often also contain a grant component.

c) **Multilateral Loans on “Commercial” Terms.** Here the preference for multilateral agencies comes from the fact that they may be more lenient than strictly commercial lenders in accepting rollovers and renegotiations, especially in times of crisis and emergency.

d) **Borrowing on the “Foreign Market”.** Such borrowing is sometimes from the major international banks, sometimes from the sale of bonds on the international market. Loans are typically denominated in dollars or some other major currency. When the borrowing country’s credit is good, the interest rate can be quite low -- say, 1, 2, or 3 points above LIBOR.

e) **Selling Bonds to the Country’s Own Social Security System.** Once a developing country starts to have its own social security system, there typically follows an extended period (while the system is “young”) during which contributors greatly outnumber retirees. The system is thus a sort of “cash cow” that can be easily milked by the government. Governments often find ways of using this system as a parking place for government bonds that bear interest at less-than-commercial rates.

f) **Forcing Bonds Down the Throat of the Commercial Banking System.** This is different from simply placing on the open market bond issues that the banks can then acquire on their own volition, and in the amounts that they want. It is when governments deem such an option to be too costly that they look for cheaper ways to borrow. One such way is simply to require that commercial banks hold a specified fraction of their assets in the form of certain special issues of government bonds -- issues that are distinguished by their carrying lower-than-market rates of interest. Sometimes this strategy is implemented by first raising the standard reserve requirements that banks have to meet, and then giving the banks the “opportunity” to earn interest on a certain
fraction of their required reserves (through “investing” this fraction in the above-mentioned special bond issues).

g) **Reducing the Financial Support Given to Public Enterprises and State and Local Governments.**
This looks like simply shifting the location of the deficit from the central government to these entities, but they may respond by eliminating or reducing their deficits and if they still borrow, they will most likely do so in non-inflationary ways.

h) **Floating Bonds in the Local Financial Marketplace.** This is what most advanced countries do as a matter of course. If the Central Bank pursues a responsible policy, deficits financed in this way can be non-inflationary. Without a doubt, however, this policy comes at the cost of crowding out private sector borrowing.

Once one realizes that all these “parking places” are at least potentially available to governments seeking to cover their deficits in non-inflationary ways, one begins to see why in actual fact we find relatively poor correlations between the fiscal deficit/GDP and the rate of inflation. Of course, some governments are more responsible than others, and some are not strong enough in political terms to make use of some of the parking places. So we do not in fact see a systematic resort to all the noninflationary parking places before the inflationary tap is turned on. But we do observe a quite clearcut disjointness between fiscal deficits on the one hand and the rate of inflation on the other.

The disjointness is even more striking between fiscal deficits and the rate of devaluation. Here the Central American countries provide interesting case studies. All these countries except Costa Rica had long histories of fixed exchange rates with the dollar. Not surprisingly, these histories were supported by traditionally conservative fiscal and monetary policies. Somehow, this triad of conservative policies became unglued somewhere between 1975 and 19855, with fiscal policy leading
the way. Table 1 shows how El Salvador, Guatemala and Honduras all started out with fiscal deficits of less than one percent of GDP. But one by one they broke through this barrier -- Guatemala and Honduras in the early 1970s, El Salvador a decade later. Honduras’s deficit crossed 5% of GDP in the late 1970s, El Salvador’s in the early 1980s, as Guatemala’s also came close to the 5% mark.

Yet all through the mentioned periods, all three of these countries managed to maintain their longstanding fixed exchange rates with the dollar. How did they do so? By “parking” their deficits in noninflationary parking lots, of course. The Table shows that foreign borrowing (i.e., parking lots a) through d) was the preferred source of funds, but borrowing from the domestic banking system also grew through time, probably as a result of the foreign parking lots gradually filling up (i.e., foreign lines of credit being used to the limit).

In any case, increased government borrowing from the local banking system can only work itself out through three escape valves: -- i) squeezing private sector credit, ii) expanding the broad (M2) money supply and iii) reduction in net foreign assets (typically through a fall in the Central Bank’s international reserves). Central Banks can hold the line on monetary expansion by mechanism i), but its unpopularity increases with each successive squeeze. Moreover, it sooner or later has a depressive effect on the real economy. The combination of political pressure from the affected borrowers and the recessive forces that are felt economywide in the end tends to induce the Central Bank not to try to offset further increases in M2 caused by incremental government borrowing. This is when M2 starts to expand beyond what is needed to accommodate the normal growth of the economy, i.e., escape valve ii). But when people have more monetary balances than they really want to hold, they tend to spend the excess. And part of this induced spending surely goes to buy tradable goods and services. This part will normally end up draining the international reserve holdings of the Central Bank (i.e., escape valve
iii). The Central Bank can try to stop this loss of reserves by reverting to a squeeze on private credit. But when use of that escape valve has been carried to the point where the political and economic costs of further squeezes are judged to be simply too high, the authorities have little alternative but to let M2 rise to reflect the increased government borrowing.

This is when a serious drain on the country’s international reserves begins -- a drain that ultimately leads to a foreign exchange crisis and a big devaluation. In the cases treated in Table 1, one can see that there was a “long and variable lag” between the first signs of a fiscal deficit problem and the final surrender of the authorities in the form of a major devaluation. In Guatemala and Honduras, the fiscal deficit crossed 1% percent of GDP in the early 1970s, yet Guatemala did not devalue until 1986, Honduras not until 1991. El Salvador, in contrast held the fiscal line longer, not reaching the 1% point until the early 1980s. But when they caved in, they did so in grand style, as they moved right away to deficits averaging 5% of GDP in 1980-84, and had their major devaluation in 1986.

I should not close without mentioning another set of devices that help postpone devaluations in scenarios like those we have examined. These devices are ad hoc restrictions on imports, which are all too often employed by countries when they are desperately seeking to stem a drain on their international reserves. There is a whole panoply of tricks -- surcharges (beyond the normal tariffs) on some or all imports, lists of prohibited imports, lists of permitted imports (with all others prohibited), restrictions on buying imports on credit, schemes of importation only under prior license, etc., etc. These devices typically succeed in stemming imports, but at a cost of introducing huge uncertainties and distortions into the whole fabric of a country’s international trade. These are the kinds of restrictions that give rise to smuggling, to black markets, to massive over-invoicing of imports and under-invoicing of exports, and in the end to major flights of capital. Often the actual devaluation is precipitated by a general speculative
“run on the currency” that represents the end of the trail.

What are the lessons to be drawn here? In the first place, there is a somewhat beneficent lesson -- one can have fiscal deficits for a long time without their generating the huge monetary and fiscal disequilibria that lead to major devaluations. Hence one has lots of opportunity to correct dangerous habits before it gets too late. The second lesson is that along the path of continuing deficits, one should take pains to avoid policies that introduce major new distortions into the economy -- the path of import surcharges, licensing, prohibitions, and the like has far more costs than benefits. My third and final lesson is drawn with a particular eye to contemporary India. Unquestionably there have been enormous deficits over a significant period of years. Yet the authorities appear to have little sense of alarm concerning these deficits. Does this represent a myopic and irresponsible stance, aimed at surviving the moment while passing an ever greater burden on to future governments and later generations? Or does it mean that the authorities have studied the problem well, and that today’s deficits are being placed in convenient parking lots that still have plenty of unused capacity? These are questions that can be answered only on the basis of a thorough understanding of the facts. So what we need right now is a program of serious study of India’s fiscal deficits. Where are they being parked? At what cost? And how much vacant parking space remains to be occupied before major problems emerge? These are important questions for India’s policymakers, but they are also important for all of us who want to reach as accurate as possible a diagnosis of India’s problems. They should therefore have a high place on the research agenda for those who are interested in India’s economic policy and performance.
TABLE 1
Government Deficits and Their Financing

<table>
<thead>
<tr>
<th>Fiscal Deficit/ GDP</th>
<th>Foreign Borrowing/ GDP</th>
<th>Borrowing From Banking System/GDP</th>
</tr>
</thead>
</table>

El Salvador (devalued from 2.5 to 5.0 colones per dollar in 1986)

<table>
<thead>
<tr>
<th>Year</th>
<th>Fiscal Deficit/GDP</th>
<th>Foreign Borrowing/GDP</th>
<th>Borrowing From Banking System/GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965-69</td>
<td>.008</td>
<td>.009</td>
<td>.005</td>
</tr>
<tr>
<td>1970-74</td>
<td>.008</td>
<td>.016</td>
<td>.005</td>
</tr>
<tr>
<td>1975-79</td>
<td>.004</td>
<td>.012</td>
<td>.010</td>
</tr>
<tr>
<td>1980-84</td>
<td>.050</td>
<td>.038</td>
<td>.019</td>
</tr>
</tbody>
</table>

Guatemala (devalued from 1.0 to 2.5 quetzales per dollar in 1986)

<table>
<thead>
<tr>
<th>Year</th>
<th>Fiscal Deficit/GDP</th>
<th>Foreign Borrowing/GDP</th>
<th>Borrowing From Banking System/GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965-69</td>
<td>.009</td>
<td>.008</td>
<td>.001</td>
</tr>
<tr>
<td>1970-74</td>
<td>.017</td>
<td>.012</td>
<td>.008</td>
</tr>
<tr>
<td>1975-79</td>
<td>.015</td>
<td>.006</td>
<td>--</td>
</tr>
<tr>
<td>1980-84</td>
<td>.045</td>
<td>.006</td>
<td>.033</td>
</tr>
</tbody>
</table>

Honduras (devalued from 2.0 to 5.4 tempiras per dollar in 1991)

<table>
<thead>
<tr>
<th>Year</th>
<th>Fiscal Deficit/GDP</th>
<th>Foreign Borrowing/GDP</th>
<th>Borrowing From Banking System/GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965-69</td>
<td>.007</td>
<td>.008</td>
<td>--</td>
</tr>
<tr>
<td>1970-74</td>
<td>.018</td>
<td>.019</td>
<td>.007</td>
</tr>
<tr>
<td>1975-84</td>
<td>.066</td>
<td>.049</td>
<td>.022</td>
</tr>
<tr>
<td>1985-89</td>
<td>.050</td>
<td>.037</td>
<td>.017</td>
</tr>
</tbody>
</table>