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CENTER DISCUSSION PAPER NO. 430

DEVALUATION: A CRITICAL APPRAISAL OF IMF'S POLICY PRESCRIPTIONS

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1. Introduction

It is by now well understood that the use of the extended facility of the fund (EFF) or approval for stand-by loans involve the undertaking of comprehensive programs of adjustment that "include policies required to correct structural imbalances ...". Even after the Funds' internal review of its guidelines on conditionality in March 1979, approval of stand-by agreements almost always requires severe tightening of expenditures through contractionary fiscal and monetary policy measures such as the imposition of ceilings on net government borrowing and/or net domestic assets of the central bank, or an upward adjustment of nominal interest rates in those cases where rates are fixed by the government. Approval also involves an "understanding" with the Fund on exchange rate policy and exchange rate arrangements. The "understanding" usually includes a substantial devaluation of the currency. Devaluation thus becomes part of a restrictive policy package which aims at improving the balance of payments of the country and its foreign exchange reserve position.

The advocacy of the same short-run demand oriented policy package in different countries at different times has created the belief that underlying the policy prescriptions there exists a uniform IMF line of thought and more importantly for our purposes here a consistent and uniform analytical model. A cursory review of recent documents and mission reports however reveals that often the same policy prescriptions are based on different analytical arguments, some justified and some not, that cast some doubt on the widespread acceptance within the IMF of a particular theoretical

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structure as a guideline for policy. Thus by 1982, as theoretical advances in macroeconomics and international finance have cast substantial doubt on the empirical if not theoretical validity of a simplistic monetary approach to the balance of payments, the analytical arguments that are used to sustain the traditional policy line have become by necessity murkier and more cumbersome.

This is nowhere more clear than in the analysis of exchange rate policy which is the focus of this short paper. The use of exchange rate adjustment as an active policy tool is critically analysed in the following two sections in terms of its effectiveness as a stabilization policy tool and a substitute for tax or redistribution policy. The role of exchange rate policy in development is briefly discussed in the last section.

2. Targets for Exchange Rate Policy and Macroeconomic Adjustment

One of the fundamental propositions of the macroeconomic literature pertaining to assignment of policy tools to targets of policy is that, in the absence of uncertainty, tools should be assigned to the target which they relatively affect the most. Thus for example, in the traditional analysis monetary policy is assigned to the attainment of external balance and fiscal policy to that of internal balance.

The use and assignment of exchange rate policy revolves around the question of its relative effectiveness as a tool to improve the balance of payments as against a tool that simply translates the foreign exchange price of traded goods to domestic prices or vice versa. This realization serves to highlight the fundamental distinction between using the nominal

exchange rate as an active instrument of external balance versus a tool that insulates the domestic economy from external goods-market disturbances. It is by now widely accepted that the assignment of the exchange rate to one of these targets depends on the structural characteristics of the economy in question.

Whether or not nominal exchange rate devaluation improves the current account depends on two channels through which it might have an effect: devaluation of the real exchange rate or a direct effect on domestic absorption.

The traditional Polak model (1957) and more recently the exposition in IMF (1977) and Khan and Knight (1981) that sketch the so-called IMF model depend on the latter channel. In this class of models (a) all goods and assets are assumed to be perfect substitutes so that there is in essence one composite good whose price is given, (b) the country is a price taker in both goods and asset markets, and (c) all wages and prices are flexible so that output is fixed at its full-employment level.

Given these assumptions a devaluation works solely through a real-balance effect. The increase in the price of foreign exchange, reduces real balances. Since the demand for money, the only asset available, is exogenously determined the excess demand for money is translated into a reduction in absorption and a balance of payments surplus which is the vehicle by which "money balances are replenished. Thus in this model "exchange-rate policy is really policy to manipulate the level of reserves, not the current account balance" (Branson, 1982).

There is no room in this one-good model for changes in relative prices, improvement of trade competitiveness or any related considerations. If anything, in this traditional monetary model the exchange rate affects the domestic price level while the level of real money balances affects the external balance.

Even if one stays within this broad framework, added considerations might mitigate the positive effects of the exchange-rate change on the level of reserves at least in the short-run. If prices are flexible and the economy very open a devaluation can give rise to inflationary expectations that lead to an increase in consumption and imports especially of durables or an accumulation of inventories (Dornbusch 1982). Thus absorption might not be reduced as expected in the short run. More importantly in terms of its usefulness as a policy tool in the case of countries which have serious balance of payments problems, devaluation in terms of this analytical framework is at best a tool that validates past monetary expansion. If the nominal money stock could be restricted to its past level through tight policy, then devaluation would become unnecessary.

Finally as noted by Branson (1982) if a country faces exogenous fluctuations in interest rates or real output, monetary policy should be assigned to the maintenance of domestic price stability by offsetting the induced changes in the demand for real money balances. If disturbances originate in the foreign-goods markets then domestic price stability could be achieved through an offsetting move of the nominal exchange rate either via the market if the rate is floating or through direct policy intervention. Thus, in the context of the simple monetary version of the IMF model the optimal exchange rate adjustment depends on the source of the disturbance both in terms of markets and location.

This is of course a well known result from the literature but one which is often disregarded in actual policy prescriptions especially in the context of LDC's which face external disturbances in goods markets.

An altogether different channel by which exchange rate adjustment influences the current account is through its influence on a relative price often called the real exchange rate. The real exchange rate is equivalent either to the terms of trade in the context of a simple trade model with two countries that completely specialize in production, or to the relative price of traded to non-traded goods in the case of a small country two-good model. It has been shown that there are substantial differences both in the theoretical and empirical properties of the two indices (Katseli, 1982b).

Increased competitiveness is associated either with a deterioration in the terms of trade which increases the export share of the country in the world market and reduces the quantity imported or with an increase in the price of ^{the} traded good sector. The story gets more complicated in the more realistic case of a country which is not a price taker in both or either markets but which also produces non-traded goods (Katseli, 1982b).

In most IMF reports it is automatically assumed that a nominal devaluation will increase competitiveness by affecting the real exchange rate. It is evident that substantial effort has been recently devoted to proper measurements of the real exchange rate especially in countries with diversified trade leading to the presentation of alternative indices of real overvaluation of the currency. The appropriate choice of base period, of weights (import, export, total trade or some combination of MERM weights) and of the domestic

and foreign price index to be used (wholesale price indices, unit labor costs etc) became the object of much discussion and guarded analysis in appendices of mission reports. The choice of the relevant countries also becomes critical with a growing preference towards inclusion of countries which compete with the host country in third markets rather than of the bilateral trading partners. Both the choice of countries and weights depends on the question that is being posed.

Technical questions apart, what is rarely seriously discussed in negotiations or in written reports is the potential effectiveness of the nominal exchange rate on the real exchange rate. This is so at a time when the theoretical literature abounds with examples of cases where the structure of the economy is such that the real exchange rate is not affected by nominal exchange rate movements and a devaluation is thought to have negative effects on both output and the price level. (Cooper, 1971, Krugman and Taylor, 1978, Taylor, 1979, Katseli, 1982a).

Two extreme examples might be sufficient to demonstrate how the structure of the economy might be such that a nominal devaluation will have no effects on the real rate. Suppose that we consider a less developed country that imports intermediate goods to be used in domestic production under fixed coefficients and exports agricultural goods or raw materials whose supply is inelastic in the short run. This simplification might be pertinent for a country like Madagascar, the Sudan or even Kenya all of which have negotiated stand-by agreements with the IMF. Thus in this case both the supply elasticity for exports and demand elasticity for imports approach zero.

A devaluation will not affect the terms of trade and the effect on the balance of trade will depend on the initial trade balance. Given a large initial deficit the exchange rate adjustment will magnify it. The quantity exported might even be reduced if intermediate imports are used in the export sector leading to even more perverse effects. The increase in the cost of production of non-traded goods might also prevent the expected increase in the relative price of traded to non-traded goods and lead to internal stagflation depending on the relative elasticities (Katseli, (1982)). Thus in the presence of intermediate imports the argument that devaluation is a useful tool for promoting competitiveness becomes at best uncertain as profitability is impaired through the increase in the cost of production while the terms of trade are not seriously affected. These considerations are especially important for some of the smaller LDC's which do not have large import competing sectors and have structures of trade which are not much different from those in the example above.

Even in the absence of intermediate goods full nominal wage indexation is sufficient to prevent a change in the relative price of traded to non-traded goods. This is a well-known case in the literature developed among other authors recently by Bruno (1978), Sachs (1980) and Marston (1982). If nominal wages are tied to the consumer price index, then a devaluation will increase nominal wages and the price of non traded goods by the full amount of the devaluation. The recent emphasis on the supply side has thus shifted the focus of discussion of the implications of exchange rate adjustment from demand towards the cost of production. The shift in emphasis has prompted a serious questioning of the effectiveness of nominal

exchange rate adjustment on the current account and its role in macro-economic adjustment. This theoretical questioning is still open to empirical testing but it fair to say that its powerful and controversial messages have not yet been adequately incorporated into IMF thinking.

While the role of the exchange rate in macro-adjustment is debated three additional roles for exchange rate policy have emerged. These include its substitute role as tax policy especially in the context of LDC's, its role in income redistribution and finally its role in investment promotion and development in general.

3. Alternative Roles for Exchange Rate Policy

For a nominal devaluation to improve the current account through reduction in absorption and/or a change in relative prices, the domestic price of traded goods and the general price level must increase. If domestic prices are fixed by the government this channel of adjustment is blocked. In that case, as the government sells goods at a world market price which is higher than the producer price it pays, exchange rate policy becomes a substitute for tax policy. A devaluation of the currency simply increases export proceeds and serves the function of an export tax. Alternatively, a policy to raise domestic producer prices to the world market level and to devalue by the same amount increases the export tax in absolute value (depending on the supply elasticity) and provides incentives for export production. This was in fact the analytical basis of the IMF's proposal for devaluation in the context of negotiations with some Eastern African countries and this reasoning once again had little to do with competitiveness considerations. The objective here was to increase the

quantity exported but maintain budget revenues as far as possible. This use of exchange rate policy as tax policy becomes especially relevant for countries which export few agricultural commodities or raw materials that are traded by the central government and which lack the tax base for an effective income tax policy. Devaluation is thus linked to price liberalization and efforts to mitigate the unwarranted effects resulting from the correction of domestic relative price distortions.

There are problems however with this approach as well.

Given the fact that devaluation affects import prices and specifically the prices of imported inputs, the effectiveness of the policy package critically depends on the profitability of the export sector. As it was discussed earlier, it is the effective protection rather than nominal protection that matters and taxation of inputs reduces profitability; so does the increase in labor costs that arises in an indexed economy.

It should be pointed out that a devaluation also increases the home currency value of interest payments on public external debt, making unclear the net effect on government expenditures.

More importantly the existence of a marketing board usually gives a country some market power that is not attainable if trade is undertaken by many small competitive producers. If that is the case then the country is "semi-small" and a devaluation that is proportional to the increase in domestic producer prices will deteriorate the terms of trade and might lead to a possible reduction in tax revenue and net export receipts.

Exchange rate devaluation has also been thought of as a stimulus to private saving due to the expected redistributive effect from wages to profits ie to a sector which is assumed to be characterized by a higher marginal propensity to save. This line of argument which is implicit in some of the earlier IMF documents has been criticized on many different grounds. (Diaz Alejandro, 1963). Putting aside the fact that the marginal propensity to save among profit earners is not necessarily higher than among wage earners, an increase in the profitability of the traded good sector critically depends on the ensuing increase in the cost of raw materials and labor as well as on the country's relative degree of market power (Ahluwalia and Lysy, 1981).

In terms of the earlier discussion on macroeconomic adjustment a necessary condition for redistribution is that the relative price of traded to non-traded goods changes. In that case a devaluation will benefit those factors of production that are intensively used in the production of traded goods and the consumers of non traded goods. In the case of a country which produces and exports primary products as is the case of many LDC's, the main beneficiaries of the devaluation will probably be the export crop-growers in so far as domestic export prices are allowed to increase.

These considerations highlight the role of exchange rate policy in the context of an overall development strategy. It can be argued that if the objective is to promote investment and industrialization the possible short run benefits on the balance of payments brought about by exchange rate devaluation should be weighed against possible longer-run costs. Given the importance of imported capital goods at initial stages of development there might be a role for maintaining a slightly overvalued currency

for some periods of time, especially if the internal tax and transfer system is not adequately developed. This strategy was adopted at some early phases in the development of Japan and some of the newly industrialized countries and its merits should be judged in light of the structural characteristics of the economy in question.

More importantly stabilization policy should not be viewed as a substitute to development policy. It is often the case that constraints in development, such as foreign exchange availability or insufficient domestic saving, are perceived by international credit organizations as the targets of policy. It is not clear why a developing country should thrive to reduce the deficit in its current account or what the criteria should be for doing so. It is clear however that there should be a long-run steady-state path that policy should be aiming for depending on a country's level of development, but such considerations have not yet been seriously addressed by the IMF. In a development context the focus should shift from the current account to the basic balance where the required net long-term capital inflow for development requires a current account deficit, that is supported by an appropriate real exchange rate. In that framework the equilibrium real exchange rate is determined by long-run growth and investment prospects and nominal exchange rate policy is adjusted accordingly. It is thus imperative not only to reconsider the short-run effectiveness of macro-adjustment policy in light of new theoretical and empirical knowledge but also to place stabilization policy in a dynamic context.

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