

CONCLUSION AND BIBLIOGRAPHY OF  
REAL EXCHANGE RATES, DEVALUATION AND ADJUSTMENT:  
EXCHANGE RATE POLICY IN DEVELOPING COUNTRIES

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CHAPTER 9

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## ABSTRACT

This paper corresponds to Chapter 9 of the forthcoming book Real Exchange Rates, Devaluation and Adjustment: Exchange Rate Policy in Developing Countries. This work investigates several aspects related to exchange rates in developing nations. Theoretical models of equilibrium and disequilibrium exchange rates are developed; the behavior of real exchange rates is investigated for a large cross section of countries; and the effectiveness of devaluation is assessed for a group of 39 developing nations.

## CHAPTER 9

## Conclusions

In Chapter 1 we asked two basic questions regarding exchange rates in the developing nations: (1) how can we account for the large swings observed in real exchange rates in these countries; and (2) are devaluations an effective component of adjustment processes that help restore macroeconomic equilibrium in these countries? In the previous chapters we have tackled these questions both from theoretical and empirical perspectives. In this last chapter the main points made in the book are briefly summarized and the more important conclusions obtained are presented.

Real Exchange Rate Determination

According to the theoretical framework constructed in Chapters 2 and 3, real exchange rate movements are the result of both real and monetary disturbances. While changes in real variables or "fundamentals" will predominantly result in changes in the equilibrium real exchange rate, monetary disturbances will usually generate departures of the actual from the equilibrium real exchange rate, or real exchange rate misalignment. If inconsistent macroeconomic policies are followed and not corrected in time, real exchange rate overvaluation will become unsustainable, until a balance of payments crisis will result.

The empirical analysis of Chapters 4 and 5 provided ample support for the theory of real exchange rate determination developed in Chapters 2 and 3. First, using a large cross country data set it was found that real exchange rates -- measured either using official or parallel market nominal exchange rates -- did not behave according to the Purchasing Power Parity theory. Second, using a data set for 12 developing nations, it was found

that real and monetary factors have indeed affected RERs in the way predicted by the theory. In particular these results show that with other things given "excessively" expansive macroeconomic policies will result in real exchange rate overvaluation. These results also provide strong support to the view that equilibrium real exchange rates respond to real disturbances such as terms of trade shocks, and can exhibit significant movement through time. Moreover, these regression results indicate that for most fundamentals it is important to make a distinction between temporary and permanent disturbances. Also, the results reported in Chapter 5 suggest that domestic macroeconomic instability has been the main source behind the wide swings exhibited by actual real exchange rates.

#### Devaluations and Adjustment

The cross country empirical investigation presented in this book very strongly indicates that, if properly implemented, devaluations are a powerful and effective macroeconomic tool; they can greatly help troubled countries to regain external equilibrium, reducing the costs of adjustment. This finding supports the theory of devaluations developed in Chapter 3. According to that theory, although nominal devaluations are neutral in the long run, they can be very useful in countries that face the need to embark on an adjustment process. In particular, if wages or nontradable prices are inflexible nominal devaluations will speed up the adjustment, reducing unemployment and related costs during the transition.

However, not all devaluations are "properly implemented"; the data show that historically stabilization packages that include devaluations as one of their major components have not always "worked". There have been many instances -- especially in Latin America -- where soon after devaluing, the external sector variables revert to their pre-devaluation levels.

The empirical analysis undertaken in this book convincingly shows that those devaluations that have been "unsuccessful" have been the result of the inability to regain macroeconomic, and especially fiscal, discipline. On the other hand, those countries that have been able to implement corrective macroeconomic policies alongside the devaluations have generally succeeded in realigning their real exchange rate and generating important improvements in their external position.

The empirical results reported in this book have also shown that historically devaluations have been closely related to changes in the degree of exchange and trade controls. In the majority of cases analyzed devaluations have been accompanied by some type of liberalization measures. However, in many episodes these liberalizations have been short lived, being reversed after a few months. This has typically been the case in those countries that, due to fiscal indiscipline, have been unable to sustain a real exchange rate depreciation. Our analysis strongly suggests the existence of a link between inconsistent monetary and fiscal policies, expectations of real exchange rate overvaluation and liberalization reversals. Interestingly enough, this link, which will mainly operate through the loss of credibility in the sustainability of the liberalization reforms has not been analyzed rigorously in the literature on trade liberalization. Our empirical analysis, however, indicates that this is an important and promising area for future research on the economics of reform in developing nations.

#### Stepwise Devaluation or Crawling Peg?

A superficial look at the evidence presented in the preceding chapters would suggest that devaluations followed by the adoption of a crawling peg have outperformed stepwise devaluations. This proposition, however, does

not stand closer scrutiny. Naturally, by the own nature of crawling peg regimes, countries that adopt them are able to maintain a depreciated real exchange rate; all they have to do is devalue at a faster rate than the ongoing rate of inflation. Of course, a problem with this strategy is that it can lead to a new equilibrium with a very high level of inflation. This means that when evaluating the effectiveness of a crawling peg regime, its inflationary consequences have to be taken into account. Once this is done the notion that historically crawling peg regimes have generally done better than stepwise devaluations does not seem so clear.

Broadly speaking our findings regarding crawlers are consistent with those for stepwise devaluers, and once again point out towards the importance of maintaining fiscal and monetary discipline. If macroeconomic consistency is maintained a crawling peg regime can indeed be very useful to help countries accommodate major disturbances affecting the equilibrium level of the real exchange rate, at the same time as maintaining the rate of inflation at manageable levels.<sup>1</sup> Moreover, a crawling peg regime can be particularly beneficial under the current international monetary arrangement where the major currencies float against each other, introducing major movements in multilateral exchange rates.<sup>2</sup>

#### Devaluations, Output and the Costs of Disequilibrium

One of the most important empirical findings in this book (Chapter 8) is that the (growing) disequilibrium situations that usually precede devaluations have had severe negative effects on output and growth. In particular, our regression analysis has shown that the imposition of exchange controls have had important negative effects on real growth. Although this finding will not surprise most economists, this is the first time that this proposition that has been part of economists beliefs for so

many years is tested using regression analysis. The most typical scenario found in our empirical inquiry is one where overly expansive macroeconomic policies generate real exchange rate overvaluation, loss of reserves and high inflation. The authorities usually tackle this situation by imposing (or hiking) exchange and trade controls in the hope that the international reserves drainage is stopped. These controls usually introduce severe inefficiencies and distortions that greatly affect the economies performance. These are the costs of not adjusting. It is against these costs of not adjusting that the real effects of devaluations on output and real wages have to be compared. In fact a serious, and yet common, mistake made in the adjustment literature is to ignore the fact that not adjusting usually implies that there are costs. What this research has shown is that these costs can indeed be substantial, and that at the light of these important considerations, devaluations appear to be, in most cases, a highly effective alternative.

#### Fiscal and Monetary Discipline: What is Behind?

Answering why some countries can exert fiscal disciplines and others cannot is beyond the scope of this book. This is, however, one of the most important unresolved questions in this study. Its answer, however, should not be sought exclusively in the narrowly defined domain of economics. In fact, we will only be able to make progress in understanding this issue if we broaden our inquiry to take into account the political ramifications of adjustment policies. Here, questions pertaining to social pressures and income distribution will be the most important ones.<sup>3</sup> The analysis of real wage behavior and of labor shares of GDP in Chapter 8 of this book has provided some initial information regarding these issues. These data show that in the majority of the episodes devaluations are preceded by rapid real wage



increases and followed by real wage rate declines. On the other hand, the data on labor shares of GDP provided inconclusive evidence regarding the income distribution effects of devaluations.

Footnotes to Chapter 9

<sup>1</sup>Notice the emphasis on "major" disturbances. We are not advocating "fine tuning"; it is not only impractical but also highly ineffective.

<sup>2</sup>See Edwards (1988b) for a discussion on the current international monetary system, exchange rate volatility and economic performance in the developing countries.

<sup>3</sup>Some recent efforts to understand the political economy of stabilization programs can be found in Haggard and Kaufman (1988).

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