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Output and the real exchange rate in developing countries: an application to Mexico

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Abstract

Since Mexico's devaluation in 1994, some observers have called for policies designed to keep the real exchange rate highly competitive in order to promote exports and output growth. However, over the past few decades, devaluations have been associated nearly exclusively with economic contraction, while real appreciations have been followed by expansions. We attempt to disentangle the possible factors underlying this correlation — (1) reverse causation from output to the real exchange rate, (2) spurious correlation with third factors such as capital account shocks, and (3) temporary contractionary effects of devaluation — and determine whether a positive long-run effect of real depreciation on output is in the data. Based on the results of several VAR models, we conclude that even after sources of spurious correlation and reverse causation are controlled for, real devaluation has led to high inflation and economic contraction in Mexico. While changes in Mexico's economic structure and financial situation may qualify the future applicability of this conclusion, our findings point to substantial risks to targeting the exchange rate at too competitive a level. © 2000 Elsevier Science B.V. All rights reserved.

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1. Introduction

The economic crisis that followed Mexico's 1994 devaluation strengthened scepticism concerning the benefits of exchange rate-based stabilization. Prior to the devaluation, supporters of Mexico's exchange rate strategy had argued that real appreciation, and the associated widening of current account deficits, had been signs of economic health, reflecting rising productivity and improved prospects for the Mexican economy. Concerns that real appreciation was restraining growth, as raised in Dornbusch and Werner (1994), were largely brushed aside. In the aftermath to Mexico's devaluation crisis, however, the use of the exchange rate as a nominal anchor has been discredited to some degree, while the view of Dornbusch–Werner has gained greater prominence.

Some observers were optimistic that the sharp real depreciation of the peso after December 1994 would launch Mexico on a path of sustainable, export-led growth. However, much of this adjustment subsequently was reversed as Mexican inflation continued to exceed foreign levels while the nominal exchange rate — after its initial devaluation — remained more stable. Dornbusch argued that further real appreciation had to be prevented — and implicitly, that further real devaluation would be useful — if Mexico was to achieve its growth potential:

> By conventional purchasing-power parity measures, Mexico's competitiveness today is only about 20% better than in 1993. Over the past year and a half, its competitiveness has been shrinking rapidly. Indeed, it is barely enough to keep the economy expanding. It definitely is not sufficient to spark high growth and job creation. (Business Week, November 25, 1996)

Dornbusch's view is consistent with the conventional wisdom that depreciations of the real exchange rate are expansionary. According to the textbook model, real depreciations encourage exports and a substitution from imports to domestic goods, thereby boosting aggregate demand. Moreover, real depreciation, by expanding the export sector and hence the openness of the economy, may place a country on a developmental path with greater potential for sustained growth. Finally, a more depreciated exchange rate will likely prevent destabilizing financial crises such as Mexico experienced in 1982 and 1995.

While the usefulness of real devaluation in stimulating growth may seem self-evident, this view is not uniformly supported either by prior theoretical research or actual historical experience. First, there is virtual consensus among economists that the real exchange rate cannot be viably targeted on a sustained basis. [1] Both theoretical considerations and empirical evidence suggest that keep-

[1] See comments by Edwards and Bruno on Dornbusch et al. (1995).