Inflation, growth and exchange rate regimes in small open economies*

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Summary. This paper compares the merits of alternative exchange rate regimes in small open economies where financial intermediaries perform a real allocative function, there are multiple reserve requirements, and credit market frictions may or may not cause credit rationing. Under floating exchange rates, raising domestic inflation can increase production if credit is rationed. However, there exist inflation thresholds: increasing inflation beyond the threshold level will reduce domestic output.

Endogenously arising volatility may arise independently of the exchange rate regime. Private information – with high rates of domestic inflation – increases the scope for indeterminacy and economic fluctuations.

1 Introduction

One of the most basic issues in monetary economics concerns the relative merits of different methods for achieving stability of the price level. In an open economy context, a consideration of this issue necessarily involves a comparison of fixed versus flexible exchange rate regimes. Standard quantity theoretic policy prescriptions imply that domestic price level stability can be achieved with a floating exchange rate simply by fixing a low and constant rate of growth for the money supply. However, in countries confronted with high rates of inflation, this is rarely the proposal made for stabilizing the price level. Instead, it is often argued (see Vegh [15], p. 42 for

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example) that such economies should fix their rate of exchange against the currency of a country with relatively stable price level -for instance the U.S.

Concerns about the stability of the price level loom particularly large in view of two empirical results. First, it is well-established that there is a strong link between the health of an economy's financial system and its long-run real performance (see, for instance, King and Levine [10, 11], Levine and Zervos [12], and Levine, Loayza and Beck [13].) Second, the level of financial development in an economy is very adversely affected by inflation (see Boyd, Levine and Smith [3] and Khan, Senhadji, and Smith [8].) These results together suggest that excessively high rates of inflation can have very negative implications for real performance, both in the short and long-run. And, indeed, Bullard and Keating [5], Drukker, Gomis-Porqueras and Hernandez-Verme [6] and Khan and Senhadji [8] find that, at low initial rates of inflation, modest increases in inflation can be associated with higher (long-run) levels of real activity. However, above some threshold, further increases in the rate of inflation have adverse effects on short and long-run activity.

This paper investigates the relative merits of different exchange rate regimes in small open economies with severe frictions in financial markets. I focus on economies that share several characteristics of Latin American countries. Issues about alternative exchange rate regimes have taken on particular prominence in a Latin American context, where there are long histories of high rates of inflation. Here, I focus my attention on the relative merits of two different policies that have been implemented as part of inflation stabilizations in Latin America and, particularly, in Argentina and Perú.

Perú and Argentina are small open economies that experienced episodes of severe hyperinflation in the late 1980s and early 1990s. Both stabilization programs were successful in reducing inflation rates. In addition, these programs had some common aspects with respect to fiscal policies. However, the main difference, and the one I focus on in this paper, is the choice of exchange rate regime. On the one hand, Argentina implemented a currency board, more consistent with a traditional view of what a stabilization program should be: an exchange rate is fixed to an “anchor currency” and automatic convertibility is ensured. In Perú, on the other hand, the exchange rate was left to float freely, under the supervision of the Central Bank. The success of the Peruvian stabilization is extremely interesting in view of the commonly accepted point of view that Latin American countries cannot or will not pursue successful stabilizations based on floating exchange rates.

With these facts in mind, I model a small open economy that reproduces several aspects of the Peruvian and Argentinean economies subsequent to their stabilizations. In each economy, financial intermediaries perform a real allocative function in the presence of obvious credit market frictions that may or may not cause credit to be rationed. As shown by Azariadis and Smith [1] or Boyd and Smith [4] in a closed economy context, when credit is rationed changes in the rate of inflation can

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1 Credit rationing is often argued to be a very important aspect of funds allocation in developing economies.