Tight credit policy versus currency depreciation: Simulations from a trade and inflation model of India☆

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Abstract

Using a small macroeconometric model that examines the determinants of India's trade and inflation, this paper addresses the effects of a reform policy package similar to those implemented in 1991. Policy simulations using dynamic simulation method compare the responses to devaluation with the responses to tight credit policy. It is shown that the trade balance effects of tight credit policy are more enduring than that of devaluation, conditional on inflation being modelled in an open economy context. The simulations demonstrate that the devaluation actually worsens trade balance and hence devaluation cannot be an option in response to a negative trade shock, whereas the reduction in domestic credit reflecting demand contraction can produce a desirable improvement in the trade balance.
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1. Introduction

The macroeconomic scenario in the Indian economy in the summer of 1991 was characterised by severe fiscal and external imbalances, contributing to the balance of payments (BOP) crisis.[1] The crisis was mainly due to a shortage of external liquidity rather than an insolvency problem. To get over the BOP difficulty, in July 1991, the government of India accepted the IMF credit, conditional on a set of policies, that is, by announcing a significant devaluation and monetary squeeze, aimed to reduce fiscal- and current-account deficits. The two standard policy instruments – namely reducing the central bank (henceforth RBI) credit to the government (a key source of financing fiscal deficit), and devaluing the currency – were adopted, which are broadly considered as a recipe for developing economies (DEs) when they encounter BOP crises. Despite doing so, India's combined fiscal deficit in 1990s remained at 7.8% of GDP, barely changed from 8.1% of GDP in 1980s (same is the case for the central government deficit alone, which just declined to 5.9% from 6.8% of GDP, respectively). But the rate of growth of net RBI credit to the central government that creates monetized deficit has substantially slowed down from 20% on average in 1980s to 7.1% in 1990s, while the growth of other banks' credit to the government has increased from an annual average rate of 19.2% in 1980s to 21.2% in 1990s, reflecting the government's increased market borrowing to finance its deficit. Thus on the fiscal front, imprudence remains the government's biggest problem, while on the monetary side, tighter prudential norms following liberalisation have tightened credit standards,[2] weakening small businesses' access to the credit market.

In this paper controlling aggregate domestic credit as a stabilisation strategy, is examined in line with the standard monetary approach to the BOP, which remains the mainstay of the IMF-supported stabilisation packages. Regarding the exchange rate, the value of the rupee has depreciated by 63.6% to INR45.68/$ in 2000–2001 (which happens to coincide with the current level in 2004 on the back of US dollar weakness) compared to 1989–1990, amounting to an average depreciation of 8.4% a year. This suggests that the RBI prefers to accommodate rupee depreciation, while aggressively preventing appreciation, as part of the RBI's intervention strategy by sterilizing major part of the capital inflows so as to target a stable real exchange rate (see Baig, Narasimhan, & Ramachandran, 2003, and Kohli, 2003). Such significant rupee depreciation partly explains why annual average inflation (based on the benchmark wholesale price index) remains so high at 8% in both 1980s and 1990s. The average broad money (M3) growth remained stable at 17.2% in both 1980s and 1990s. But in the second half of 1990s the average inflation rate being 5.3% can be in part explained by credit squeeze, as the rate of growth of domestic credit slowed to an average of 14.4% in 1990s from 18.1% in 1980s. Naastepad (2003) finds that whenever fiscal reform leads to a squeeze on available working capital credit, deficit reduction will lead to only a limited decline in inflation and a modest BOP improvement.

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[1] The typical explanation for the India's 1991 BOP crisis has been to attribute it either to current account deficits or currency overvaluation (see for example Cerra & Saxena, 2002).

[2] Credit standard, developed in Basu (2002), reflects some form of collateral by the lender as an alternative means to recoup the loan in addition to the interest rate charged, should the borrowers' projects fail.