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Behavior of output during currency crises ☆

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Abstract

This paper documents the behavior of output and its association with other macroeconomic variables in 195 episodes of currency crises in developing countries during 1970–2000. We find that about 60% of the crises are contractionary, while the rest are expansionary. Crises are one and a half times more likely to be contractionary in emerging markets than in other developing economies. The number of contractionary crises or their severity does not increase in the 1990s. Economies which experience capital inflows in the years prior to the crisis or an increase in external debt burden during the crisis are more likely to slow down during crises, while those with restrictions on capital flows prior to the crisis or are more open to international trade are less likely to do so. The results are robust to different ways of measuring changes in output during crises.

Keywords: Currency crises; Emerging markets; Developing countries; Output growth; Financial crises

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1. Introduction

Currency crises in the past decade have been associated with substantial declines in output. For example, during the East Asian currency crisis in 1997, the Indonesian and Thai economies contracted by 13% and 10%, respectively, and in the Argentine crisis in 2002, output fell by 11%. At other times, economies in crises have exhibited a very different pattern—the currency crises in Colombia in 1985, China in 1994, Venezuela in 1984 and 1987, and Hungary in 1993 were associated with an expansion of output.

There are several ways in which a currency crisis could affect output. The literature through the 1980s emphasized the beneficial effects of the large depreciation of the domestic currency that characterizes such crises. Depreciation, by correcting an overvalued currency or by making the exchange rate more competitive, was expected to spur growth by the expansion of the traded good sector.[1] More recent literature focuses on the negative effects: a sudden stop or reversal of capital inflows during a crisis can slow down growth; a rise in external debt burden from devaluation in the presence of liability dollarization can also result in smaller investment activity. The slowdown may be worse if the currency crisis is accompanied by a banking crisis or by competitive devaluation in other countries. Moreover, the stance of fiscal and monetary policies pursued during crises and the prevailing global or external economic environment are also likely to have a bearing on the behavior of output.

While the literature on currency crises is quite extensive, the focus has mostly been on emerging markets. This paper attempts to extend the coverage to a much larger sample of countries by including smaller, as well as, lower income developing countries.[2] Existing papers in the literature mostly document the "contraction" during currency crises and not the "mixed outcome" that we find in this study. Thus, establishing stylized facts using the broadest possible sample is one novelty of this paper.

Using a sample of 91 developing countries from 1970 to 2000, this paper establishes stylized facts on the behavior of output during the 195 currency crises that were identified during this period. The paper finds that growth decelerates in nearly 60% of the crisis episodes, while it rises in the remaining ones. Analyzing the output dynamics of crises further, we do not find that their severity rises over time. Specifically, crises in the 1990s do not seem to be more contractionary than the crises in the earlier decades. We also find that the experience differs substantially between emerging markets and other developing countries. In emerging market countries, a currency crisis was one and a half times more contractionary than in other developing countries. Finally, even among the sub-group of emerging markets the severity of the crises does not rise over time.

Exploring the factors that are associated with the short-run dynamics of output during currency crises, we find that economies which receive substantial capital flows in the years prior to the crisis are more likely to experience a contraction during the crises. However, the contraction was much less if countries had restrictions on the capital account prior to the crisis. An increase in external debt burden during the crisis is associated with an adverse output outcome. These results indicate the importance of "sudden stop" of capital and "liability dollarization" in determining the severity of the crises. We also find that more developed economies, proxied by their per capita income, have a sharper slowdown during the currency crises. On the other hand, countries which trade more with the rest of the world experience a smaller deceleration, likely due to an increase in competitiveness following the large devaluations.

[1] See Connolly (1983), Edwards (1986), Edwards (2004), Morley (1992) and Kamin and Klau (1998).

[2] Exceptions include Edwards (1986), Milesi-Ferretti and Razin (1998), Frankel and Rose (1996).