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Currency crises: Are they all the same?☆

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Abstract

The plethora of currency crises around the world has fueled many theories on the causes of speculative attacks. The first-generation models focus on fiscal problems while the second-generation models emphasize countercyclical policies and self-fulfilling crises. In the 1990s, models pinpoint to financial excesses. With the crisis of Argentina in 2001, models of sovereign default have become popular again. While the theoretical literature has emphasized variety, the empirical literature has supported the "one size fits all" models. This paper contributes to the empirical literature by assessing whether the crises of the last 30 years are of different varieties.

JEL classification: F30; F31; F32; F34; F36; F41

Keywords: Currency crises; Current account problems; Over-borrowing syndrome; Sovereign debt crises; Sudden stops; Self-fulfilling crises; Early warnings of crises

1. Introduction

The plethora of financial crises that have ravaged emerging markets and mature economies since the 1970s has triggered a variety of theories on the causes of speculative attacks.

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Models are even catalogued into three generations. The first-generation models focus on the fiscal and monetary causes of crises. These models were mostly developed to explain the crises in Latin America in the 1960s and 1970s. The second-generation models aim at explaining the EMS crises of the early 1990s. Here the focus is mostly on the effects of countercyclical policies in mature economies and on self-fulfilling crises, with rumors unrelated to market fundamentals at the core of the crises. The next wave of currency crises, the Tequila crisis in 1994 and the so-called Asian Flu in 1997, fueled a new variety of models – also known as third-generation models, which focus on moral hazard and imperfect information. The emphasis here has been on "excessive" booms and busts in international lending and asset price bubbles. With the crisis in Argentina in 2001, academics and economists at international institutions are now dusting off the articles of the 1980s modeling crises of default.

The abundance of theoretical models has failed to generate the same variety of empirical models. Most of the previous empirical research groups together indicators capturing fiscal and monetary imbalances, economic slowdown, and the so-called over-borrowing syndrome to predict crises.[1] While this research has certainly helped to capture the economic fragility at the onset of crises and therefore to predict balance-of-payment problems, it has failed to identify the changing nature of crises and to predict those crises that do not fit a particular mold. This paper contributes to this literature by assessing whether the crises of the last 30 years are of different varieties. As a by-product, this paper contributes to the early warning literature by providing new forecasts of the onset of financial crises.

To identify the various classes of crises, I examine crisis episodes for 20 industrial and developing countries. The former include: Denmark, Finland, Norway, Spain, and Sweden. The latter focus on: Argentina, Bolivia, Brazil, Chile, Colombia, Indonesia, Israel, Malaysia, Mexico, Peru, the Philippines, Thailand, Turkey, Uruguay, and Venezuela. The period covered starts in January 1970 and includes crises up to February 2002, with a total of 96 currency crises. To gauge whether crises are all of the same nature or whether groups of crises show unique features, I use a variety of macroeconomic and financial indicators suggested by the previous literature – totaling 18 variables – and a multiple-regime variant of the signals approach, which allows to endogenously identify the existence of various classes of crises.[2] Once crises are classified, I examine whether the nature of crises varies across emerging and mature economies and tally the degree of severity of each type of crisis.

The key finding is that, in fact, crises have not been created equal. Crises are found to be of six varieties. Four of those varieties are associated with domestic economic fragility, with vulnerabilities related to current account deterioration, fiscal imbalances, financial excesses, or foreign debt unsustainability. But crises can also be provoked by just adverse world market conditions, such as the reversal of international capital flows. The so-called sudden-stop phenomenon identifies the fifth variety of crises. Finally, as emphasized by the second-generation models, crises also happen in economies with immaculate fundamentals. Thus, the last variety of crises is labeled self-fulfilling crises.

The second finding is that crises in emerging markets are of a different nature than those in mature markets. Crises triggered exclusively by adverse shocks in international capital markets

[1] See, for example, Berg and Patillo (1999), Eichengreen et al. (1995), Frankel and Rose (1996), Kaminsky (1998), and Sachs et al. (1996).

[2] See Kaminsky (1998) and Kaminsky and Reinhart (1999) for an application of the one-regime signals approach to forecasting crises.