Chapter 12
Dating Banking and Currency Crises in Turkey, 1990–2014

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ABSTRACT

The last two decades characterized by financial crisis episodes have seen a proliferation of empirical studies. These early warning system models allowed researchers to distinguish certain key determinants of financial crises, and helped predicting and preventing the occurrence of some crises. However, crises continue to arise as recently illustrated by the onset of the global financial crisis. This clarifies that there are still a lot to learn about financial crises. In this sense, this paper aimed to compare the performance of several currency and banking crisis indicators within the Turkish economy which underwent severe financial crises in the last twenty years. Different currency crisis indicators performed well by detecting the 1994, 2001 and 2008 currency crises, while banking crisis indicators had significant inconsistencies. However, two banking crisis indicators we developed stand for valuable efforts in dating banking crises by constructing aggregate indexes, and contribute significantly to the empirical crisis literature.

INTRODUCTION

After relative stability in the post-World War II period, the world economy became once again familiar with recurrent crisis episodes following the collapse of the Bretton Woods system in 1971. After the Latin American economies in the early 1980s, financial crises hit some European countries in 1992-1993, Mexico in 1994, South-East Asia in 1997-1998, Russia in 1998, Brazil in 1999, and Argentina in 2001. Besides, the last global financial crisis has been affecting the world economy since late 2008. This global economic and financial instability also touched Turkey which underwent severe financial crises in his recent economic history.
These repeated crisis episodes that caused high economic and social costs for the public sector as well as for private investors stimulated a large discussion on the theoretical specification of crisis models and the empirical analyses that aim at identifying crisis determinants in order to predict future crisis episodes. In this regard, these empirical studies are frequently called early warning systems (EWS), as they are likely to inform policymakers and investors about the occurrence of a crisis in the near future. The EWS models use fundamental economic and financial determinants as predictor variables and various statistic and econometric techniques. Whatever the techniques and the set of variables used to generate EWS forecasts, identifying crisis episodes plays a key role, since these identified crisis episodes by crisis indicators enter into EWS models as dependent variables.

In this paper, we aim to construct different currency and banking crises indicators for the Turkish economy, which suffered several financial crises through the last three decades, and to assess the performance of these indicators in identifying the Turkish crisis episodes. In this sense, this paper has some common points with the study of Lestano and Jacobs (2004, 2007) and Perez (2005). To the best of our knowledge, Ari (2010, 2012) are the only papers that compare the performance of different currency crisis indicators for the Turkish economy. However, this paper goes beyond Ari (2010, 2012) as it also assesses the performance of banking crisis indicators. Furthermore, this study covers the entire post-liberalization era (1990-2014) by using monthly data gathered from the International Financial Statistics (IFS) of the IMF and the Central Bank of Republic of Turkey (CBRT).

BACKGROUND

A Brief History of the Turkish Economy (1980-2014)

Following the severe balance-of-payments and debt crises in the late 1970s, Turkey reoriented its development strategy, based on import substitution on the real side and on negative real interest rates on the financial side, by adopting a radical structural adjustment program in January 1980. This program, largely supported by the IMF and the World Bank, aimed to implement a market-based mode of regulation in order to restore economic growth by improving economic and financial efficiency, increasing domestic savings and attracting foreign capitals.

The early phase of the program (1980-1984) was mostly characterized by the trade liberalization process, which consisted of export promotion and gradual import liberalization accompanied by regulated capital movements (Boratav and Yeldan, 2006). As for the second phase (1985-1989), it was characterized by the financial liberalization process, which mainly consisted of ending interest rate controls and the liberalization of capital movements.

This large structural reform program obtained an initial success by reducing the triple-digit inflation rates to an average of 30%, increasing export earnings at an annual rate of 10% and ensuring an average economic growth rate of 5.5% in the period 1982-1989. With an out-looking economy and a liberalized financial system in the early 1990s, the Turkish economy was an example of a ‘success story’ for other developing countries.

However, this early success was first shadowed by the occurrence of a small-scale currency crisis in 1991 mostly related to an external shock: the