
Title: Currency Crises in Turkey: An Empirical Assessment

Authors: Ali Ari, Raif Cergibozan

PII: S0275-5319(18)30266-6
DOI: https://doi.org/10.1016/j.ribaf.2018.04.001
Reference: RIBAF 904

To appear in: *Research in International Business and Finance*

Received date: 21-3-2018
Accepted date: 2-4-2018

Please cite this article as: Ari, Ali, Cergibozan, Raif, Currency Crises in Turkey: An Empirical Assessment.Research in International Business and Finance https://doi.org/10.1016/j.ribaf.2018.04.001

**Currency Crises in Turkey: An Empirical Assessment**

Ali Ari, Department of Political Science and Public Administration, Marmara University, Turkey, E-mail: ali.ari@marmara.edu.tr

Raif Cergibozan, Department of Economics, Kirklareli University, Turkey

E-mail: raif.cergibozan@klu.edu.tr

**Abstract**

Contrary to many previous empirical studies on currency crises, this paper aims to test the relevance of different methodologies and crisis definitions in estimating crisis determinants and predicting crisis episodes in the case of Turkey over the period of 1990-2014. Empirical results first show that the inflation rate, portfolio investments, and the ratio of bank foreign deposits to total deposits are found to be the leading determinants of Turkish currency crises in different model estimations. Secondly, empirical findings clearly indicate the superiority of the Markov approach in predicting crisis episodes in Turkey when compared to the logit model.

**Keywords:** Currency crises; Early warning systems; Logit; Markov-switching; Turkey

**JEL Codes:** C53, C58, G01

## 1. Introduction

A large number of empirical studies, frequently called early warning systems (EWS), have been conducted to understand crises, find their determinants, and predict their occurrence, but the results are far from convergent. This is mainly due to the fact that studies focus on different country samples, work with different time periods, run different estimation techniques, and use different crisis definitions. For instance, Edison (2003) and Lestano and Jacobs (2007) found that the use of different crisis indicators leads to discrepancies in the detected dates of currency crises, while De Vicerte et al. (2008) showed that it may change the significance of explanatory variables in model estimations. On the other hand, Berg and Patillo (1999) indicated that employing different methods affects models' forecasting power and alters the significance of the explanatory variables. In other words, most findings on currency crises seem to crucially depend on how EWS are designed. However, in the literature there are only a limited number of empirical papers that have tried to test the relevance of different methods and/or crisis indicators in predicting crises and determining leading crisis variables. Hence, this paper aims to fulfill this shortage by comparing the predictive power of two different methods –namely logit and Markov regime switching (Markov hereafter)– estimated with six endogenous crisis indicators in the case of the recent Turkish financial crises over the period from 1990 to 2014. Although most empirical studies on crises use panel analysis, the peculiar dates of Turkish