Journal of International Economics 61 (2003) 41–72
Journal of INTERNATIONAL ECONOMICS
www.elsevier.com/locate/econbase

Banking crises and exchange rate regimes: is there a link?

Ilker Domaç[a], Maria Soledad Martinez Peria[b,*]

[a]Central Bank of Turkey, Istikal Cad. No: 10, Ulus, Ankara 06100 Turkey
[b]The World Bank, 1818 H St. N.W., MSN MC 3-300, Washington, DC 20433, USA

Received 30 October 2000; received in revised form 23 August 2002; accepted 27 August 2002

Abstract

This paper investigates the linkages between banking crises and exchange rate regimes, using a comprehensive cross-country dataset for the last two decades. The paper examines whether the choice of exchange rate regime affects the likelihood, cost, and duration of banking crises. Empirical results seem to indicate that adopting a fixed exchange rate diminishes the likelihood of banking crises among developing countries. However, once crises occur, the real costs associated with them appear to be larger in countries with fixed exchange rates. The duration of crises does not seem to be robustly affected by the exchange rate policy.

Keywords: Banking crises and exchange rate regimes

JEL classification: E52; F31; G21

1. Introduction

Following the recent financial crises in Asia, Brazil, and Russia, the debate over the appropriate exchange rate regime has once again taken center stage. Since the work of Mundell (1961), an extensive literature has developed examining the links

*Corresponding author. Tel.: +1-202-458-7341; fax: +1-202-522-1155.
E-mail addresses: ilker.domac@tcmb.gov.tr (I. Domaç), mmartinezperia@worldbank.org (M.S. Martinez Peria).

0022-1996/02/$ – see front matter
doi:10.1016/S0022-1996(02)00081-8

between the exchange rate regime and macroeconomic performance.[1] However, until recently, this literature had largely ignored the implications of the exchange rate regime for financial stability. Similarly, most studies on the determinants of banking crises have focused primarily on the role of the macroeconomic, external, and regulatory environments.[2]

Recently, a number of studies (see Chang and Velasco, 1998; Eichengreen and Hausmann, 1999; Eichengreen and Rose, 1998; Hausmann et al., 1999; Velasco and Cespedes, 1999) have begun to discuss—primarily at the theoretical level—the potential links between the exchange rate regime and financial stability. With the exception of Eichengreen and Arteta (2000) and Eichengreen and Rose (1998), this issue remains largely unexplored at the empirical level.[3] Furthermore, the existing empirical papers focus exclusively on developing countries and ignore indirect channels through which the exchange rate regime may affect the likelihood of banking crises, beyond the impact of external shocks. Also, these studies are silent on the question of how, if at all, exchange rate regimes affect the cost and duration of crises.

This paper attempts to fill some of the gaps in the empirical literature on the links between exchange rate policies and banking crises. Using a comprehensive data set including developed and developing countries for the period 1980–1997, we examine whether the choice of exchange rate regime affects the likelihood, cost, and duration of banking crises.

Regarding the likelihood of crises, we test the validity of some of the indirect channels recently discussed in the literature linking the exchange rate regime to the probability of banking crises. In particular, we examine (a) whether unhedged liabilities increase the likelihood of banking crises under fixed exchange rate regimes, (b) whether the extent to which broad money is backed by reserves affects the likelihood of banking crises caused by runs under pegged regimes; (c) whether the liquidity of the banking system reduces the negative repercussions of the lack of a lender of last resort under fixed exchange rate regimes; and finally (d) whether the impact of external shocks on the probability of banking crises varies under different exchange rate regimes. Also, we extend the existing empirical work in a number of ways. Firstly, we consider a larger number of banking crises that affected not only developing, but also developed countries. Secondly, we

---

[1] See Ghosh et al. (1997), IMF (1997), and Edwards and Savastano (1999) for a review of the literature on exchange rate regimes and macroeconomic performance.

[2] See Demirgüç-Kunt and Detragiache (1998), Eichengreen and Rose (1998), Glick and Hutchison (1999), and Kaminsky and Reinhart (1998) for a thorough literature review.

[3] Using a panel of developing countries over the period 1975–1992, Eichengreen and Rose (1998) focus primarily on the role of external factors in precipitating banking crises. Eichengreen and Arteta (2000) examine the impact of the exchange rate regime, financial liberalization, and deposit insurance on the likelihood of banking crises in a panel of developing countries over the period 1975–1997. Both of these studies conclude that the exchange rate regime does not have a robust impact on the likelihood of banking crises.