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The determination of capital controls: Which role do exchange rate regimes play?

Jürgen von Hagen [a,b,c,*], Jizhong Zhou [a,d]

[a] *Center for European Integration Studies (ZEI), University of Bonn, Walter-Flex-Strasse 3, D-53113 Bonn, Germany*
[b] *Indiana University, Bloomington, IN, USA*
[c] *CEPR, London, UK*
[d] *Shanghai University of Finance and Economics, Shanghai, China*

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Abstract

This paper investigates the role of exchange rate regime choices in the determination of capital controls in transition economies. We first use a simultaneous equations model to allow direct interactions between decisions on capital controls and on exchange rate regimes. We find that exchange rate regime choices strongly influence the imposition or removal of capital controls, but the feed-back effect is weak. We further estimate a single equation model for capital controls with exchange rate regime choices as independent variables, and we find that there is a hump-shaped relationship between exchange rate regime flexibility and capital control intensity.

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* Corresponding author. Tel.: +49 228 739199; fax: +49 228 731809.
E-mail address: vonhagen@uni-bonn.de (J. von Hagen).

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1. Introduction

The turbulence in the international financial markets and the reoccurrence of currency crises in the 1990s have once again sparked a debate over the merits of increased international capital mobility. The fact that international capital movements played an important role in recent financial and currency crises has lead many academic researchers and policy advisors to reassess the implications of capital mobility, especially for the viability of various exchange rate regimes. Some authors argue for a "bi-polar" solution for the choice of exchange rate regimes and recommend adjustment of exchange arrangements to the new environment of heightened capital mobility (Eichengreen, 1994; Fischer, 2001). Other authors warn against the excessive volatility in the financial markets associated with free capital movements and advocate imposing capital controls to limit capital mobility. With capital movements under check, intermediate exchange arrangements such as conventional pegs, crawling pegs or bands, and target zones remain a viable and attractive option for many countries (Wyplosz, 2001; Williamson, 2000).

These two strands of research both rely on the proposition that exchange rate stability and monetary policy autonomy are not jointly achievable under free capital mobility, the so-called impossible trinity, but they look at it from different angles. The "bi-polar" view emphasizes the trade-off between exchange rate stability and monetary autonomy given free capital mobility and questions the viability of intermediate exchange rate regimes without the support of capital controls. An implication of this view is a possible hump-shaped relationship between the flexibility of exchange rate regimes and the intensity of capital controls. While fixed and flexible regimes can live with high capital mobility, intermediate regimes are expected to be associated with higher intensity of capital controls. The views favoring capital controls challenge the desirability of unrestricted international capital movements in the first place. They argue that restrictions on capital mobility may be required to achieve second-best solutions in the face of capital market distortions, and that the choice of the exchange rate regime should take existing restrictions into account.

The empirical literature has so far neglected the interdependence between the choice of exchange rate regimes and restrictions on capital mobility as well as the possibility of a non-monotonic relationship between the two. In this paper we attempt to fill this blank in an analysis of the determination of capital controls in transition economies during the 1990s. [1] In order to integrate the analysis of the two topics, we construct a simultaneous equations model to describe the joint determination of capital controls and the choices of exchange rate regimes. After establishing the recursive structure of that model empirically, we estimate a single equation model for capital controls that explicitly allows for a non-monotonic effect of the rigidity of exchange rate regimes on the intensity of capital controls.

[1] The transition economies under investigation are Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgystan, Latvia, Lithuania, Macedonia, Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.