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The effect of nominal exchange rate volatility on real macroeconomic performance in the CEE countries

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ABSTRACT

This paper analyzes the relation between nominal exchange rate volatility and several macroeconomic variables, namely real output growth, *excess* credit, foreign direct investment (FDI) and the current account balance, in the Central and Eastern European EU member states. Using panel estimations for the period between 1995 and 2008, we find that lower exchange rate volatility is associated with higher growth, higher stocks of FDI, higher current account deficits, and higher *excess* credit. At the same time, the recent evidence seems to suggest that following the global financial crisis, "hard peg" countries may have experienced a more severe adjustment process than "floaters". The results are economically and statistically significant and robust.

1. Introduction

Monetary policy strategies in the Central and Eastern European EU Member States (hereafter CEE) differ considerably, from completely fixed exchange rate arrangements to pure floaters. At the beginning of the transition process, most of these countries relied on pegging their exchange rate to a highly stable currency, such as the US dollar or the Deutsche Mark, as a way (i) to achieve

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macroeconomic stabilization by means of a rapid disinflation process ("hard pegs" as an external nominal anchor), and (ii) to facilitate the transition process from centrally planned to market economies in the absence of fully developed markets and institutions ("hard pegs" as an institutional device). However, by the beginning of this century, once macroeconomic stability was broadly achieved, a number of CEE countries gradually softened their pegs and moved towards more monetary policy autonomy. "Hard pegs" made a significant contribution to restoring market confidence during the early period of transition.

More recently, the particular policy challenges facing the CEE countries that operate "hard pegs" have come to the forefront. Following a strong increase in the internal and external imbalances in the period up until 2008, these countries are now experiencing a very rapid economic adjustment period with deep recessions. Latvia even had to take recourse to an international financial support package led by the IMF in 2008.

From a theoretical point of view, there is no clear consensus on which exchange rate regime is more favorable to macroeconomic performance. Proponents of fixed exchange rate regimes argue that exchange rate stability promotes economic performance through higher trade and enhanced macroeconomic stability, which could favor foreign investment and growth, also affecting investment and saving decisions (and therefore the current account balance) and financial development. In contrast, proponents of flexible exchange rate regimes emphasize the advantage of exchange rate flexibility to correct for domestic and external disequilibria in the face of real asymmetric shocks.

Therefore, the effect of exchange rate volatility on macroeconomic performance is ultimately an empirical issue. This paper contributes to this topic by analyzing the relation between exchange rate volatility and several macroeconomic variables – namely real output growth, *excess* credit, the stock of inward foreign direct investment (FDI) and the current account balance – in the CEE countries. Using panel estimations for the period between 1995 and 2008, we find that lower exchange rate volatility is associated with higher growth, higher stocks of FDI, higher current account deficits, and, in general, higher *excess* credit. The results are economically and statistically significant and robust.

The paper is organized as follows. The next section presents some stylized facts regarding the exchange rate strategies and macroeconomic performance for the CEE countries. Section 3 discusses the theoretical arguments for the relation between exchange rate volatility and the selected macroeconomic variables, and tests these relations in the CEE countries. Section 4 summarizes the main findings.

2. Exchange rate regimes and real convergence in the CEE countries – stylized facts

Exchange rate strategies in the CEE differ considerably, from fixed exchange rates to pure floaters. At the beginning of the transition process, most CEE countries relied on pegging the exchange rate to a highly stable currency, such as the US dollar or the Deutsche Mark, as a way to import credibility from abroad and to reduce inflation from high levels. In the course of the 1990s, however, a number of countries gradually softened their peg and moved towards more monetary policy autonomy, and several countries adopted inflation targeting as a monetary policy framework. In what follows, countries are subdivided into those with "hard peg" regimes (i.e. Bulgaria, Estonia, Latvia and Lithuania) and those with inflation targeting regimes combined with flexible exchange rates or relatively "soft pegs" ("floaters"), i.e. the Czech Republic, Hungary, Poland, Romania and Slovakia.[1]

Looking first at real GDP growth, while both groups show a clear upward trend until the 'crisis year' 2008, the "hard peg" countries performed better than the "floaters" in most years (Fig. 1). More precisely, it seems that countries with fixed exchange rates have experienced higher economic growth under normal economic conditions, but higher output losses during times of crises.[2]

[1] Most CEE countries, particularly the "floaters", have revised their exchange rate regime on several occasions over the period under study. This, however, does not change the classification of the countries under study between the two groups over the period 1995–2008. The only exception is Bulgaria, which only introduced a currency board to the Deutsche Mark (euro since 1999) on 1 July 1997. Slovakia adopted the euro as of 1 January 2009.

[2] These findings can be explained by the fact that during financial turmoil, countries with flexible exchange rate arrangements dispose of one additional policy instrument to attenuate the impact of the crisis. For further explaination, see, for example, Cerra and Saxena (2008), Furceri and Zdzienicka (2010).