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The impact of macro news and central bank communication on emerging European forex markets

Balázs Égert [a,b,c,d], Evžen Kočenda [b,d,e,f,g,*]

[a] *OECD, Economics Department, France*
[b] *CESifo, Munich, Germany*
[c] *EconomiX at the University of Paris X-Nanterre, France*
[d] *The William Davidson Institute, MI, United States*
[e] *CERGE-EI, Charles University and the Academy of Sciences, Prague, Czech Republic*
[f] *Anglo-American University, Prague, Czech Republic*
[g] *IOS, Regensburg, Germany*

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A B S T R A C T

We employ a two-stage empirical strategy to analyze the impact of macroeconomic news and central bank communication on the exchange rates of three Central and Eastern European (CEE) currencies against the euro. First we estimate the nominal equilibrium exchange rate based on a monetary model. Second, we employ a high-frequency GARCH model to estimate the effects of the news and communication along with the estimated exchange rate misalignment on the exchange rate as well as its volatility. The analysis is performed during the pre-crisis (2004–2007) and crisis (2008–2009) periods. CEE currencies react to macroeconomic news during both periods in an intuitive manner that corresponds to exchange rate-related theories. However, the responsiveness of the currencies to central bank verbal interventions becomes important only during the crisis period.

* Corresponding author at: CERGE-EI, Charles University and the Academy of Sciences, Prague, Czech Republic. Tel.: +420 224 005 149.

E-mail addresses: balazs.egert@oecd.org (B. Égert), evzen.kocenda@cerge-ei.cz (E. Kočenda).

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1. Introduction and motivation

Whether and how financial markets react to the various types of information flowing into them has long been a subject of intense research. Blinder et al. (2008) document the clear influence of central bank communication on financial markets in developed countries. Andersen et al. (2007) produce similar evidence with respect to macroeconomic announcements. Empirical evidence on the effects of these two types of news has also been provided specifically for exchange rates (Andersen et al., 2003; Barndorff-Nielsen and Shephard, 2006; Ehrmann and Fratzscher, 2007; Evans and Lyons, 2008). Most of the research focuses on developed countries, however. We contribute to the literature by focusing on European emerging markets and show that their currencies are responsive to both macro news and central bank communications in general but their responsiveness differs in the periods before and during the crisis.

Exchange rates, similar to other financial market instruments, are quite responsive to developments in the real economy that are channeled to the market via macroeconomic news releases. Cavusoglu (2010) surveys the relevant literature and provides extensive evidence that developments in macroeconomic fundamentals are important for exchange rate movements. Similar to stocks, negative news have a larger impact than positive news of the same magnitude (Andersen et al., 2003; Galati and Ho, 2003; Laakkonen, 2007). These effects change over time (Galati and Ho, 2003) and differ with the specific type of macroeconomic news (Edison Hali, 1997; Ehrmann and Fratzscher, 2007). Evans and Lyons (2008) and Laakkonen (2007) argue that a large part of the effects of macroeconomic news should be attributed to order flows and Fratzscher (2006) and Laakkonen (2007) show that macroeconomic news releases have produced about 15% of the exchange rate variation.

From the mid-1990s monetary authorities, especially in the US and the Eurozone, began to favor verbal interventions on account of foreign exchange sales and purchases (Fratzscher, 2006). Further, since the beginning of the financial crisis in 2008 it has become evident that for numerous central banks their communication has become an important tool for policymaking as well as expectations management. The impact of central bank verbal communications has become highly relevant during the recent period of turmoil with zero bound interest rates limiting traditional monetary policy steps and verbal interventions might represent one of the important policy channels.

Central bank communication became more important in influencing the exchange rate via the coordination channel (Cavusoglu, 2010). Official statements of the ECB about the euro-dollar exchange rate were shown by Fratzscher (2004, 2006) to have both short- and long-run effects on the exchange rate, plus they were effective even without being accompanied by actual interventions. Even rumors about actual interventions were shown by Dominguez and Panthaki (2007) to cause exchange rates to move. On the other hand, (Jansen and De Haan, 2005) showed that the effect of verbal statements by national central banks in the Eurozone was small and short-lived, in particular if combined with the release of macroeconomic news. Similarly, Siklos and Bohl (2008) find that actual interest rate moves had a larger impact on the exchange rate than verbal interventions, a feature hinting at deeds being more important than words. They point out that the estimation techniques used have a bearing on the conclusions and that the way central bank statements are coded in empirical works also matters. Still, verbal interventions by central banks tend to reduce exchange rate volatility in a number of developed as well as emerging economies (Fratzscher, 2004; Fišer and Horváth, 2010; Lahaye et al., 2007; Goyal and Arora, 2012).[2]

What is the empirical evidence for the CEE region? Exchange rates are known to be volatile in emerging markets (Bleaney and Francisco, 2007), including those in the CEE region (Kočenda and Valachy, 2006). However, they are much less explored than those of the developed markets and one of the main reasons for this is the lack of data (Cavusoglu, 2010). So far, we know very little

[2] We do not examine the determinants of the forex interventions as this is done in the literature providing opposite insights to our analysis. From the perspective of the CEE countries, Horváth (2007) finds that inflation targeting adopted in the Czech Republic worked as a binding constraint on the occurrence of the forex interventions.