Available online at www.sciencedirect.com
ScienceDirect
Emerging Markets Review 8 (2007) 50–66
EMERGING MARKETS REVIEW
www.elsevier.com/locate/emr

Credibility of CIS exchange rate policies — A technical trader's view

Christian Bauer *, Bernhard Herz

University of Bayreuth, Germany

Received 10 July 2006; received in revised form 14 September 2006; accepted 29 September 2006
Available online 23 January 2007

Abstract

Stabilizing the exchange rate is a major monetary policy goal in a number of CIS countries. We present a technical traders–fundamentalists model of the foreign exchange market that allows us to classify de facto exchange rate management and derive a market based measure of the credibility of these exchange rate regimes. In our empirical analysis we compare the exchange rate policies of Belarus, Kazakhstan, Russia and Ukraine with the benchmark of three candidates for EU accession, namely Bulgaria, Romania and Turkey. Our results indicate that markets assign a relatively high degree of credibility to the exchange rate management of the CIS countries. The paths to credibility, however, were quite different.

JEL classification: D84; E42; F31

Keywords: Monetary policy; Exchange rate policy; Credibility; CIS; Eastern Europe; Technical trading

1. Introduction

Stabilizing the exchange rate is a major monetary policy goal in several members of the Commonwealth of Independent States (CIS).[1] By pegging their exchange rate governments typically want to promote trade and/or improve the credibility of their monetary policy. Thus

* Corresponding author. Rechts- und Wirtschaftswissenschaftliche Fakultät Lehrstuhl VWL I, Universität Bayreuth, D-95440 Bayreuth, Germany. Tel.: +49 921 552913; fax: +49 921 552949.
E-mail address: Christian.Bauer@uni-bayreuth.de (C. Bauer).

[1] The Commonwealth of Independent States (CIS) is the international organization, or alliance, consisting of 11 former Soviet Republics: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Ukraine, and Uzbekistan. Turkmenistan discontinued permanent membership as of August 26, 2005 and is now an associate member. The four countries in our sample are the economically strongest members and represent 95% of the entire CIS GDP.

1566-0141/$ - see front matter
doi:10.1016/j.ememar.2006.09.009

exchange rate management does not only imply the stabilization of the external price of the currency, but is also considered to be a means of stabilizing the internal price level. Pegging the domestic currency to a stable nominal anchor is seen to be a straightforward way to improve the transparency and accountability of monetary policy as the exchange rate is a simple, easily understandable and measurable target variable.

After the contagion effects of the 1998 Russian Ruble crisis had bottomed out, the CIS countries chose different paths to regain monetary stability (see Keller and Richardson, 2003 for an overview). Belarus, Kazakhstan, Russia, and Ukraine have reduced inflation considerably by managing their (US Dollar) exchange rates. However, the crawling band of the Belarus Ruble to the US Dollar and/or the Russian Ruble is still accompanied by high two digit inflation rates, while the Kazakhstan, Russia, and Ukraine followed policies of de facto exchange rate management and lowered inflation below 12%. In 2002 Ukraine even experienced a slight deflation. The main objective of the monetary policy in the CIS is price stability, accompanied by exchange rate stability (Belarus and Ukraine) or prevention/limitation of a real appreciation (Kazakhstan and Russia). The central banks in Russia and Ukraine have de facto operational independence. The central banks in Belarus and Kazakhstan, on the other hand, are neither de jure nor de facto independent.

Having experienced the 1998 Russian Ruble crisis and the 2001 crisis of the neighboring Turkish Lira, investors as well as long term trade contractors are particularly wary in their assessments of the economic situation and policies of the CIS. Therefore, markets' assessments of the CIS monetary policy might serve as a valuable indicator of the (future) economic stability in the region.

We analyze the exchange rate behavior and the credibility of the exchange policy in a microstructure model of the foreign exchange market. This approach is based on market sentiments and has the major advantage that the empirical analysis relies on exchange rate data only. In particular, it does not need any macroeconomic data nor any data on the market microstructure, both potential sources of data problems.[2] Our approach is based on Jeanne and Rose (2002), which we extend by taking into account the macroeconomic environment. The market microstructure is based on the interplay of fundamental and technical traders. As in De Long et al. (1990) technical traders react to trend signals and create excess volatility through their actions (see also De Grauwe et al., 1993; Frenkel, 1997; and Hung, 1997). Strong signals, e.g. steep or rampant trends, induce technical traders to enter the market thereby increasing the exchange rate volatility. This yields a U-shaped relation between the observed exchange rate trend and volatility, i.e., observed exchange rate volatility "smiles".

Monetary policy influences the volatility of the exchange rate via two channels, fundamentals affecting base exchange rate volatility and credibility influencing excess volatility. In the case of a managed exchange rate, the conditional volatility of the exchange rate is low either due to currency market interventions and/or an exchange rate orientated interest rate policy. In contrast, exchange rate volatility is high in the case of a floating rate regime. If the exchange rate management is credible, excess volatility is low as technical traders will react more reluctantly to trend signals, since they expect trend breaking interventions. Obviously excess volatility is high, if the credibility of the exchange rate regime is low.

Combining these results we can identify four sectors corresponding to four types of exchange rate regimes in the fundamental volatility — excess volatility plane:

1) credibly managed exchange rate regimes with low base and low excess volatility,
2) non-credibly managed exchange rate regimes with low base and high excess volatility,

[2] See Keller and Richardson (2003) for the severe problems of obtaining consistent economic data for several CIS countries.