DEVELOPMENTS IN THE GOVERNANCE FRAMEWORK OF CENTRAL AND EASTERN EUROPEAN CENTRAL BANKS IN TERMS OF MONETARY POLICY STRATEGIES

Iulian Vasile Popescu

Abstract

This paper aims to analyze the trends of the last decade and a half of independence, transparency and democratic accountability of central banks (CBs) in Central and Eastern European (CEE) countries on the road to the euro adoption and to compare the results with those corresponding to the European Central Bank (ECB). We approached the three pillars that altogether shape the governance framework of the CBs from the perspective of monetary policy strategies they use. The main findings indicate increased independence, transparency and accountability within the time horizon for all selected monetary authorities, regardless of the monetary policy strategy used; higher average levels of the three components of the governance framework for the CEE region targeting inflation compared to those using the exchange rate as nominal anchor; the existence of both a lack of transparency and a lack of accountability, including in the ECB case and in states that apply a strategy of inflation targeting (IT) (which appears somewhat surprising).

Key words: CB governance framework, CB independence, CB accountability, CB

transparency, monetary policy strategy

JEL Code: E50, E52, E58

Introduction

The governance framework of central banks currently includes three concepts or fundamental pillars: independence, democratic accountability and transparency. The present paper follows the recent developments in the governance framework of the monetary authorities in Central and Eastern European countries under a process of convergence towards the euro area, particularly emphasizing monetary policy strategies they use. The analysis includes the Czech Republic, Poland, Romania, Hungary (states with central banks applying an independent monetary policy oriented towards inflation targeting), Bulgaria, Latvia, Lithuania (whose monetary authorities implement an exchange rate targeting strategy, leading to the loss of

monetary policy independence in the presence of capital flows free movements) and the ECB (with its distinctive monetary policy strategy).

In this respect, the three components of the CBs governance framework are calibrated by means of representative specific indicators: the degree of independence reflected by the index built by Pisha (2011), Laurens et al. (2009) index of the degree of responsibility and Eijffinger-Geraats index of the degree of transparency (2006)¹.

The present paper is structured as follows: the first part presents a brief review of the literature; the second part analyses the evolution of central banks independence and the relationship between independence and macroeconomic performance; the third section is focused on the democratic accountability of monetary authorities in the region; the fourth section is oriented to the development of the transparency level and to the connection transparency-macroeconomic performance; the fifth part concerns the relationship between the three pillars of central banks governance framework, while the sixth part includes the main findings and future research directions.

1 Literature review

Independence appears as that feature of the central banks allowing them to design and implement the monetary policy without the influence of the political class. If theoretically central bank independence is seen as the solution to the problem of monetary policy time inconsistency, from an empirical standpoint, the rationale for CBs independence is based on the extensive amount of studies that have shown such autonomy leads to multiple benefits without incurring costs, a situation called in the literature a free lunch. Thus, Arnone et al. (2006) emphasized that on average, countries with a high level of autonomy of monetary authorities were able to achieve lower levels of inflation, neutralize the impact of political cycles on economic cycles, enhance the stability of the financial system and fiscal discipline, all without real additional costs or sacrifices as regards output volatility and limited economic growth.

As a result of such advantages, the evolution towards the increase of the independence of monetary authorities appears to be obvious in Central and Eastern European countries. Cerna (2009) outlined that the application of the European model of central banks in the post-communist world was achieved mainly through reforms carried out in the region in the early and mid-1990s, whose result was the raising of CBs independence. The upward trend of

¹ Detailed evaluation of components and criteria for the three indicators in the case of selected monetary authorities may be obtained on request from the author.

central banks independence in the Central and Eastern European countries is highlighted by Cukierman et al. (2002) emphasizing a larger independence degree (during the 1990s) compared to CBs in developed states (in the 1980s). Crowe and Meade (2007) identified an increase in the independence of central banks in the region, with two-thirds of the 15 CBs rated as very independent located in the Central and Eastern Europe.

As long as the concept of CBs independence has gained more grounds in recent decades, the notion of accountability became more popular in parallel deriving from the objective need to ensure a counterpart to the monetary authorities' autonomy, a higher independence requiring similar accountability levels (Grauwe and Gros, 2008). Moreover, accountability emerges as a key defining feature of the inflation targeting strategy (Bernanke et al., 1999).

Laurens et al. (2009) emphasized that accountability can be regarded as a necessary mechanism to highlight the correctness of the central bank behavior towards its entrusted mandate. Researches on the accountability of CBs are relatively new, as the literature is still in the process of evolution. Thus, few authors have focused on the development of indicators to measure the accountability of central banks. Siklos (2002) and, more recently, Laurens et al. (2009) built instruments to calibrate CBs accountability based on what they investigated the movement of its level in the context of monetary authorities in Central and Eastern European states.

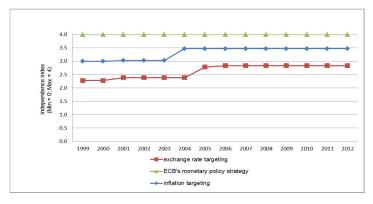
In turn, the central bank transparency appears as an indispensable attribute accompanying CBs accountability (Ortiz, 2009). In addition, enhanced transparency generates a number of obvious benefits in economic terms, *inter alia* reduced inflation, the anchoring of inflationary expectations, increase of credibility, reputation and predictability of central banks (Minegishi and Cournede, 2009). Especially important for the measuring of CBs transparency is the Geraats (2002) - Eijfinger and Geraats (2006) - Dincer and Eichengreen (2009) - Siklos (2010) sequence of works as it provides a specific multidimensional index, a comprehensive database and a common analysis methodology.

Geraats (2002) highlighted the central bank transparency components, Eijffinger and Geraats (2006) provided systematic evidence of increased central bank transparency, Dincer and Eichengreen (2009) offered the most comprehensive set of data on banks' transparency emphasizing the upward transparency trend at a global level, while Siklos (2010) reached an important conclusion for the present approach, showing that unlike other regions, the CBs in Central and Eastern European countries reveal during the considered time span a higher increase in the transparency degree.

2 Evolution of central banks independence: the relationship independence-macroeconomic performance

The analysis of the degree of independence of central banks in CEE countries on the road to euro adoption within the considered timeframe, illustrated by Figure 1, emphasizes its growth both for states who follow a strategy of inflation targeting as and for those who use the exchange rate as a nominal anchor in conducting monetary policy.

Fig. 1: Evolution of selected central banks independence degree depending on the monetary policy strategy applied during 1999-2012



Source: authorial calculations

This development is determined by changes in the organizing and functioning laws of selected central banks during 2004 - 2005 as a result of the need to harmonize with the provisions set out in the EU Treaty in the field and by the willingness to implement a series of non-compulsory provisions included in the ECB Statute. A second result that can be identified reveals a high degree of independence of central banks oriented toward inflation targeting compared to those using a strategy of exchange rate targeting.

The relationship between central banks independence degree in selected countries and the level of certain macroeconomic variables is mirrored by Figure 2.

From the perspective of this connection, central banks using the exchange rate as a nominal anchor appear to have low inflation and a limited degree of independence. Central banks that apply an inflation targeting strategy reveal diminished inflation and enjoy enhanced independence (within this group, Romania's case is special as the country has high levels of inflation particularly in the first period under analysis). The ECB, with its distinctive monetary policy strategy appears to be characterized by the lowest level of inflation and the greatest degree of autonomy.

1999-2012) 4.5 ни 👢 С 14 12 log GDP per capita 1.5 HII LT 0.5 0.00 0.50 2.00 4.00 0.00 0.50 1.00 1.50 2.00 2.50 3.00 3.50 4.00 average independence index (1999-2012) average independence index (1999-2012) ■ inflation targeting
 ▲ ECB's monetary policy strategy ▲ ECB's monetary policy strategy exchange rate tsrgeting inflation targeting

Fig. 2: The relationship between central banks independence, inflation and GDP per capita between 1999 and 2012

Source: authorial calculations

The focus on the relationship between the independence level of monetary authorities and business development in selected CEE states, expressed as GDP per capita, shows that countries with central banks using a strategy of targeting the exchange rate seem to display lower levels of monetary authority independence and lower GDP per capita. By comparison, CBs that apply an inflation targeting strategy generally reveal higher levels of independence and economic development. In the euro area we note the highest independence degree associated with the ECB's monetary policy strategy, accompanied by the strongest pace of economic development.

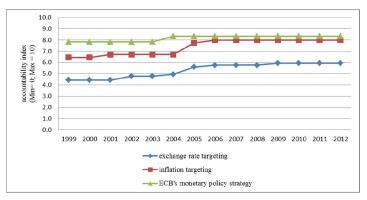
3 Evolution of democratic accountability of central banks

The analysis of monetary authorities accountability degree in selected states over the last decade and a half graphically traced in Figure 3, allows in the first place for the identification of an upward trend, both for states using an IT strategy and for those targeting the exchange rate derived from the need to harmonize organizing and functioning laws as a pre-condition for the EU membership.

A second result reflect the net superior degree of accountability of central banks that apply an inflation targeting strategy compared to those using the exchange rate as a nominal anchor. This finding appears to be consistent with the literature, some monetary policy strategy explicitly favoring a greater degree of accountability.

Fig. 3: Evolution of accountability degree of central banks in selected states depending on the monetary policy strategy between 1999 and 2012

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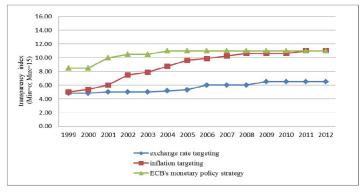
Source: authorial calculations

While under a direct IT strategy, the reference (represented by the target) against which central banks performance is assessed is known; this is not the case for a strategy of exchange rate targeting, the evaluation of central banks in relation to the ultimate objective being difficult.

4 Evolution of central banks transparency degree; the relation transparency-macroeconomic performance

The investigation of central banks in CEE countries on the road to the euro adoption in relation to applied monetary policy strategies is summarized in Figure 4.

Fig. 4: Evolution of central banks transparency degree in selected states depending on the monetary policy strategy applied between 1999 and 2012

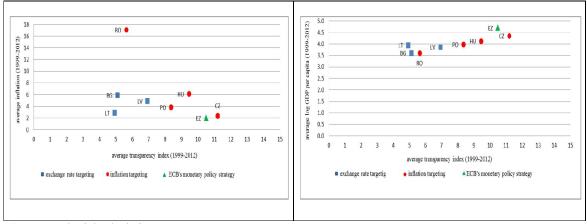


Source: authorial calculations

The analysis results indicated a strong upward trend of monetary policy transparency in selected CEE countries, far exceeding the global average of CBs transparency levels. Monetary authorities in Central and Eastern European countries using a strategy of inflation targeting have a similar degree of transparency to the ECB, while those targeting the

exchange rate display a much lower level of transparency. The differences between the two monetary policy strategies appear to be consistent with the literature, central banks using a strategy of targeting the exchange rate, as a consequence of monetary policy independence loss in the context of capital flows free movement, and explain to a lesser extent monetary policy actions. Inflation targeting presents an additional challenge as long as the objective is imperfectly controlled, with an extended and variable lag, thus requiring a higher degree of transparency. Relations between the transparency and inflation on the one hand and the level of transparency and real economic activity are highlighted in Figure 5.

Fig. 5: Relation between central banks transparency, inflation and GDP per capita during 1999-2012



Source: authorial calculations

Central banks applying exchange rate targeting strategies tend to have low levels of transparency and diminished inflation. Their commitment towards maintaining a fixed exchange rate allows for reduced inflation rates and diluted transparency. By contrast, central banks that use an inflation targeting strategy enjoy in most cases a high level of transparency corresponding to a low inflation. The ECB also reveals a high degree of transparency corresponding to depressed inflation. On the other hand, countries where the CB uses a strategy of exchange rate targeting present only limited transparency of the monetary authority and of the GDP per capita. In comparison, CEE states with CBs geared towards inflation targeting have a stronger economic development and transparency of central banks.

5 Relations between the three pillars of central bank governance

With regards to the relationship between the components of the central bank governance framework, the general consensus in the literature relates to the need for a positive correlation between the three variables. This is because accountability emerges as independence mandatory counterpart, and higher independence levels require increased accountability; transparency, in turn, must be positively correlated with the degree of responsibility as long as the accountability mechanism asks for substantial transparency.

For the central banks of CEE countries acceding to the euro area, the link between the level of independence and responsibility or that of the level of accountability and transparency are presented in Table 1. The correlations between the three components of the governance framework appear to be significant, direct and powerful. However, we note that this relationship does not provide indications about causality (the meaning of the link between variables), being simultaneously impacted by a number of common factors included in the determination of the three indicators and by the small sample size.

Tab. 1: Correlations between the three pillars of selected central banks governance framework analyzed in 2012

	Independence	Accountability	Transparency
Independence	-	0.831**	0,732*
Accountability	0.831**	-	0.680*
Transparency	0,732*	0.680*	-

Source: authorial calculations

Note: Pearson correlation coefficients. Asterisks indicate a significant correlation at * 10% ** 5% *** 1%. Sample: 7 central banks in the Central and Eastern European countries on the path of joining the euro area in 2012.

In addition to the direct nature of the relations between the three pillars of the governance framework, such links must also be balanced. It is obvious that the accountability should not fall behind; increased independence of central banks must be accompanied by a direct and proportional development of their accountability to the public and parliament. Accountability is a prerequisite for CBs to be credible and to be accepted by the public. At the same time, the level of accountability should not exceed the level of independence for monetary authorities not to be held responsible for actions that are not the result of their decision-making process. This may undermine the credibility of central banks, leading to the diminishing of benefits of a high level of independence. On the other hand, transparency and accountability must follow an evolution in tandem from the perspective of the proportionality of the relationship, especially if we consider the negative effects led by going beyond an

optimal intermediate level of transparency. To determine the balance of the connection between the three components of CBs governance framework we consider the existence of an accountability shortage if the accountability index value exceeds the value of the independence index and of an accountability surplus in the reverse situation.

Similarly, we identify insufficient transparency in the case of a transparency index value below the accountability index and above excessive accountability in the inverse context. The proportionality of the relationship between independence, transparency and democratic accountability of central banks in CEE countries on the road to the euro adoption is captured by Figure 6.

1.00 1.00 0.90 0.90 surplus of 0.80 0.80 ▲ EZ 0.70 0.70 0.60 0.60 0.50 0.50 0.40 0.30 0.30 0.20 0.20 0.10 0.10 0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.90 0.10 0.20 0.30 0.40 0.50 0.00 0.60 0.70 0.80 0.90 accountability independence exchange rate targeting inflation targeting exchange rate targeting inflation targeting ECB's monetary policy strategy ECB's monetary policy strategy

Fig. 6: Surplus/deficit in selected central banks accountability and transparency in 2012

Source: authorial calculations

Note: to allow for comparison, independence, transparency and accountability indexes have been standardized to a maximum value of 1.

For CEE countries where monetary authorities are geared towards inflation targeting, the levels of independence and accountability are higher compared to those of the monetary authorities using the exchange rate as nominal anchor. The greater accountability of central banks that apply inflation targeting strategies corresponds to the higher level of their independence. After extending the comparison to the ECB, the study presents a second surprising conclusion. Although the ECB enjoys enhanced independence, it corresponds to an average level of accountability similar to CEE central banks using IT strategies. This is how the concept of accountability deficit emerges, substantial in the case of monetary authority in the euro area compared to the average of the indicator in selected states grouped by monetary policy strategy used. Thus, while central banks targeting inflation and the exchange rate record on average, accountability deficits of 0.07 and 0.12 respectively, the ECB appears to be characterized by a lack of accountability of 0.17. Therefore, the expected result on a

proportional increase in accountability against independence can only be found in the case of selected central banks geared to direct inflation targeting, where accountability deficit occurs on average as marginal. The Central Bank of Hungary appears to be the only monetary authority with no accountability deficit.

The focus, this time on the transparency-accountability relationship, of analyzed central banks allows for the statement that, on average, monetary authorities implementing an IT strategy record high levels of the two components in the governance framework compared to those that use the exchange rate as nominal anchor. The ECB displays a comparable level of transparency and accountability with the average of central banks in the region targeting inflation.

Except for the Czech Republic, for which we have identified excessive transparency, all other central banks face a deficit of transparency, including the ECB. Thus, the latter, in addition to the previously identified accountability gap, experiences a lack of transparency. On average, the transparency deficit of central banks that use the exchange rate as a nominal anchor is 0.16, the ECB's is 0.10, while the monetary authorities that apply an IT strategy is 0.07. If we exclude the Czech Republic from the latter group, the average deficit of transparency is much higher (0.13), mainly because of the value obtained in the case of Romania (0,30).

Conclusion

Analysis of recent trends in the three components of the governance framework of the central banks in Central and Eastern European countries on the road to euro adoption with emphasis on the types of strategies monetary policy uses has provided five important conclusions: first, increased independence, transparency and accountability of all selected monetary authorities regardless of the monetary policy strategy; second, the existence of higher levels of the three pillars of the governance framework in case of monetary authorities targeting inflation compared to CBs using the exchange rate as nominal anchor; third, enhanced independence and accountability, and a similar degree of transparency of ECB when compared to monetary authorities directly targeting inflation; fourth, the extended manifestation of a deficit of transparency and the lack of accountability in the case of the ECB and other banks in the region that apply an IT strategy; fifth, the existence of a high degree of independence and transparency, low inflation and a strong economic development altogether in countries where CB is geared towards inflation targeting compared to countries where monetary authorities uses the exchange rate as nominal anchor.

Given the severe impact of the recent financial both on central banks independence (e.g. massive purchases of public and private financial assets may cause dependence on governments to restore capital, the need for democratic control over fiscal operations promoting the idea of legislative control) and on transparency and accountability (for instance, between de jure and de facto ordering of central bank objectives may occur, leading to a significant decrease in their levels), we propose as future research direction to investigate the potential implications of the crisis on central banks governance. Although such problems are particular to developed countries, it is now obvious that this may become a critical issue for emerging countries too.

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Contact

Iulian Vasile Popescu
"Al. I. Cuza" University of Iasi
Bd. Carol I no. 22, Iasi, 700505 Romania
ipopescu1974@yahoo.com