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Central Bank Independence – The Case of the Central Bank of Montenegro

Abstract: In recent decades, there has been a trend in increasing the level of independence of central banks. The key factor that has contributed to a growing interest in this concept is grounded in economic theory that confirms the link between a lower inflation rate and a greater level of central bank independence. For this reason, in many countries, the existing regulations relating to central bank have been modified to protect its position from the absolute influence of the executive power of the state. This trend was particularly prevalent in transition countries, which was conditioned primarily by the EU accession criteria. The aim of this paper is to analyse independence of the Central Bank of Montenegro through the prism of functional, institutional, financial, and personal independence, and to assess the level of its legal independence by using appropriate indices.

Keywords: central bank independence, indices, Montenegro

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INTRODUCTION

Taking into account the role and importance of central bank in modern economies, securing a high level of independence of this institution is one of the prerequisites for macroeconomic stability, which is confirmed by results of numerous empirical studies that show a negative correlation between central bank independence and inflation. For this reason, in most countries there is a trend

of increasing central bank independence, whereby price stability is stated as the main goal of monetary policy. In order to achieve its main goal, central bank needs to be linked to government to the lowest possible extent in order to protect itself from short-term and often short-sighted political pressures related to the election cycle (Vlahović & Cerović, 2005, p.9).

Central bank independence can be defined and measured in a number of ways. However, in the broadest sense, central bank independence means a central bank's freedom to define its objectives and instruments for their implementation, without the influence of the government or another institution or individual (Fabris, 2006, p.69). Independence analyses are predominantly carried out through its four components: personal, institutional, financial and functional.

Economic theory did not attach particular importance to central bank independence until the 1970s when the blows of inflation changed the general attitude that government must have control not only over fiscal but also monetary policy. This attitude was justified by the fact that the management of such an important function cannot be entrusted to individuals who had not been through an election process, and therefore central banks largely functioned as services to ministries of finance (Cukierman, 2006, p.2). The 1970s stagflation revealed the shortcomings of such a policy, and therefore, in order to curb inflation, central banks were guaranteed independence through changes in the law, achievement of price stability and financial stability being defined as their primary responsibility.

Nowadays, the issue of central bank independence sparks considerable interest both among theoreticians and among economic policy makers and central bankers. In addition, as central bank independence is one of the requirements for the EU accession, in the countries of the region there has been a change in the legislative framework so as to regulate the institutional relationship between the government and the central bank in order to achieve a greater level of independence.

The paper is structured as follows: after the introduction, the first and second sections analyse theoretical assumptions of the concept of central bank independence, along with the presentation of key empirical studies and the most important determinants of central bank independence identified in the literature, whereas the third and fourth sections offer an analysis of the independence of the Central Bank of Montenegro and are followed by a conclusion.

1. THEORETICAL ASPECT OF CENTRAL BANK INDEPENDENCE

The level of central bank independence has not always been as high as it is today. Until the 1970s, in economic practice, the dominant attitudes were based on the view that monetary and fiscal policies must be controlled by the government, and that a function of such importance as the conduct of monetary policy should not be left to officials who had not been through an election process. Since then, monetary policy, which enjoys the status of a key instrument of macroeconomic stabilization, has been placed in the hands of independent central banks in most countries.

The trend of increasing central bank independence in the world can be explained by several factors: *the first* is the negative experience with the discretionary economic policy that led to the global stagflation in the 1970s; *the second* – evidence based on economic theory that discretionary policies lead to weak macroeconomic performance due to the time-inconsistency problem and inflationary bias; *the third* – empirical evidence of the link between a lower inflation rate and a higher level of central bank independence; *the fourth*, the collapse of the Bretton Woods system designed to ensure price stability after World War II (Bogoev & Petrevski, 2015, p.5).

Of all the above-listed factors, the one that is grounded in the economic theory which confirms the link between a lower inflation rate and a greater level of central bank independence has contributed most to a significant increase in the interest in the issue of central bank independence. For this reason, in many countries, the existing regulations relating to the central bank have been modified to protect its position from the absolute influence of the executive power of the state. This trend was particularly prevalent in developing countries, primarily in Central and Eastern European countries, resulting in a much higher level of independence of the central banks in these countries than in the developed countries of the 1980s (Arnone, Laurens & Sommer, 2007).

The question of the impact of central bank independence on economic performance has captured the attention of researchers since the 1970s, both from theoretical and empirical points of view. The debate was initiated by the works of Kydland and Prescott (1977) and Barro and Gordon (1983), which raised the question of how to eliminate inflationary bias, i.e. the time-inconsistency problem created by discretionary monetary policy. A greater focus placed on the credibility of central bank and its commitment to the conduct of a particular monetary policy was identified as a potential solution to this problem. However, a concrete solution was offered a few years later. Rogoff (1985) proposed a model

of a conservative central banker who has an aversion to inflation, and hence the idea of his model is quite simple: in a country which has an independent central bank headed by a person who sets price stability as the main goal of monetary policy, the expected inflation rate will be relatively low. Therefore, his research implies the existence of a negative link between the rate of inflation and central bank independence.

These studies have encouraged researchers to construct different indices of independence in order to empirically confirm or disprove the above-mentioned theoretical arguments, i.e. to examine the influence of central bank independence on the inflation rate in the cases of various countries. The first central bank independence index was constructed by Bade and Parkin (1982) and it measured only political independence of central bank, defined as the ability of the central bank to implement monetary policy without the influence of the executive power. A more complex index, which besides the political independence measures also economic independence of central bank (the ability to use monetary instruments without restrictions), was constructed by Grilli, Masciandaro and Tabellini (1991). The most comprehensive index of central bank independence is the one constructed by Cukierman, Webb and Neyapti (CWN). This index distinguishes three sub-indices of central bank independence (Cukierman, Webb, Neyapti, 1992, p. 358-359.):

- (1) the index of legal central bank independence which shows that a legal measure of independence is an important determinant of low inflation in developed countries, but not in developing countries;
- (2) rate of turnover of the central bank governor, which shows that the rate of turnover of the central bank governor is closely linked to low inflation in developing countries, and
- (3) the questionnaire-based index.

Eijffinger and De Haan (1996) carried out a test of central bank independence using three different indices. Although all three indices are fundamentally similar, there are differences in the results that primarily derive from different ways of interpreting relevant central bank laws, as well as from the fact that each of these indices is based on different aspects of central bank independence.

The results of a large number of studies carried out for different countries and in different periods of time indeed show that a higher level of central bank independence lowers inflation and reduces its variations (Cukierman 1992; Cukierman, Miller and Neyapti 2002; Cukierman, Webb and Neyapti 1992; Eijffinger and de Haan 1996; Eijffinger and Schaling 1998; Persson and Tabellini 1993;

Alesina and Summers 1993; de Haan and Kooi 2000). Although most of the studies deal with the relationship between inflation and central bank independence, there are also studies that examine the impact of central bank independence on other macroeconomic performances, such as economic growth, unemployment, exchange rate, etc. Some of these studies examined the relationship between the level of central bank independence and the average rate of economic growth (Alesina and Summers, 1993), as well as the link between the rate of turnover of the central bank governor and the average GDP growth per capita, budget deficit and investment (de Haan and Kooi, 2000). Nevertheless, these studies show that the relationship between central bank independence and the given macroeconomic variables is very weak, while in some cases it does not even exist.

The trend of growing central bank independence was present in transition economies during the second half of the 1990s. There are two main reasons for this: *the first* is the fact that IMF and World Bank loans are conditioned by an increase in central bank independence, and *the second* is approaching the EU, which required that the central bank's structure is similar to that of the European Central Bank (Fabris, 2006, p.74). Simultaneously with such developments, studies appeared that examined the impact of central bank independence on the economic performance of transition economies (Loungani and Sheets, 1997; Maliszewski, 2000; Cukierman, Miller, Neyapti, 2002; Eijffinger, Stadhouders, 2003; Dumiter, 2011; Maslowska, 2011, and Bogoev, Petrevski, Sergi, 2012). Maliszewski (2000) examined the relationship between the inflation rate and the level of central bank independence in transition economies and confirmed the existence of a negative correlation between them, which is particularly evident in high levels of economic liberalization. Bogoev (2007) analyzed central banks in Central and Eastern European countries, measuring their independence by applying the Grilli-Masciandaro-Tabellini (GMT) index. It is shown that all analysed countries have a relatively high level of central bank independence, even higher than that recorded in the previously conducted studies, which points to the fact that the legislative framework of the central bank in these countries has been improved in order to strengthen institutional independence.

However, in spite of the positive effects of central bank independence, the level of independence varies considerably from country to country, whether it be developed or developing countries, and this begs the question of what factors lead to these differences and determine the degree of independence of central bank in a country.

2. DETERMINANTS OF CENTRAL BANK INDEPENDENCE

According to Cukierman (1994), what determines the optimal level of central bank independence is a balance between flexibility in creating monetary policy and its credibility. In line with such theoretical considerations, several economic and political determinants of central bank independence have been formulated. (Eijffinger & de Haan, 1996, p.41-54).

The first determinant in the literature is inflationary bias, which can be approximated by the equilibrium or natural rate of unemployment. According to Eijffinger (1996) and Cukierman (1994), a higher natural rate of unemployment means a higher level of independence of central bank, which is explained by the fact that a higher rate of natural unemployment leads to a higher time-consistent inflation rate which leads to an increase in social credibility problem. With an unchanged relative significance attributed to stabilizing inflation as compared to the stabilization of unemployment, the commitment of monetary authorities to fighting inflation will be at too low a level to be effective.

Another potential determinant of central bank independence may be the level of public debt. The higher the amount a state wants to borrow in the capital market, the lower inflationary expectations and, therefore, lower the nominal interest rates. The benefits of applying unexpected inflation as a way of reducing the real value of government debt in this case cannot exceed the costs of permanently higher interest payments that result from lost credibility. According to Cukierman (1994), the greater the debt, the higher the likelihood that the central bank will be allowed greater independence.

Supervision of financial institutions has been recognized as a political-economic determinant of the level of independence of the central bank. Empirical studies dealing with the relationship between supervision and the independence of the central bank show that supervisory data are the most important source that indicates a possible occurrence of financial instability, and as such are extremely important for the conduct of monetary policy. According to Heller' study (1991), central banks that do not have supervisory authority generate the lowest inflation rate while those that are fully responsible for supervision generate high inflation rates. With regard to transition economies, most authors find it better to keep supervision under the authority of the central bank, as this means that supervision will be carried out better, financed in an adequate way and less vulnerable to external influences.

Another determinant of the independence of the central bank is mentioned in Posen's study (1995) where the author discusses the ability of the financial system to resist inflation, i.e. financial opposition to inflation. According to Posen, the causal relationship between the central bank's independence and low inflation is illusory and the central bank's independence does not affect the differences in inflation rates between different countries, but there is a third factor that explains the negative correlation between central bank independence and inflation. In his study, Posen argues that monetary policy is essentially driven by political interests in society because the central bank is ready to pursue a strong anti-inflationary policy only when there is a coalition of interests that are politically strong enough to protect the conduct of such a policy.

A study conducted by Cukierman in the 1980s showed that countries with well-developed financial markets, such as the US, France, and the United Kingdom, have relatively independent central banks, while those with underdeveloped financial markets, mainly developing countries, have relatively dependent central banks. This result leads to the conclusion that a high level of central bank independence and low inflation represent a favorable environment for the development of financial markets.

We can conclude that the achievement of the goal of price stability, that is, a high level of central bank independence largely depends on society's support and the willingness and commitment of the government to achieve this concept.

3. INDEPENDENCE OF THE CENTRAL BANK OF MONTENEGRO

Independence of the Central Bank of Montenegro (CBCG) is defined by the Law on the Central Bank of Montenegro (CBCG Law). The first CBCG Law had been passed in 2000, while in 2010 under the new Constitution of Montenegro the Central Bank of Montenegro became a constitutional category and a new Law on the Central Bank of Montenegro was adopted. In the CBCG Law of July 2010, the principle of independence of the Central Bank of Montenegro was applied to a significant extent, and the Law Amending the Law on the Central Bank of Montenegro, adopted by the Parliament of Montenegro on October 16, 2017, the principle of CBCG independence was improved and harmonized with the recommendations of the European Commission (Central Bank of Montenegro, www.cb-cg.org).

Central bank independence, as a basic precondition for a successful implementation of monetary policy, can be analysed through the prism of four components: functional, institutional, personal and financial.

Functional independence implies that the main goal of the central bank is to maintain price stability. The CBCG Law of 2000 did not have a clearly defined goal of the central bank, but the definition of the Central Bank's responsibilities determined also its goal— a healthy banking system and efficient payment operations. The new CBCG Law (Article 4) states encouraging and preserving the stability of the financial system as the main goal, including encouraging and maintaining a healthy banking system and secure and efficient payment transactions, as well as achieving and maintaining price stability. The Law Amending the Law on the Central Bank of Montenegro of 2017 explicitly established that maintaining price stability will be the main goal of the Central Bank from the date of Montenegro's accession to the European Union (Central Bank of Montenegro, www.cb-cg.org), which is how the condition will be met for achieving functional independence.

The next aspect of central bank independence related to *institutional independence* implies banning the central bank from seeking or accepting instructions from other institutions or individuals outside the central bank, as well as banning political institutions from giving instructions to the central bank. The first CBCG Law of 2000 did not define its institutional independence and there were no articles banning the central bank from seeking and accepting instructions from third parties, while on the other hand, the central bank was given the possibility to consult third parties in advance. In addition, Government representatives could be members of the Council. A higher level of institutional independence was achieved with the new 2010 Law, and in particular the 2017 Amended Law. Thus, Article 7 of the CBCG Law stipulates that the Central Bank of Montenegro shall be independent in pursuing the objectives and exercising the functions established under this law. This article also contains a general prohibition of third parties giving any instructions to members of decision-making bodies in the Central Bank of Montenegro. It also prohibits the Central Bank of Montenegro, members of its bodies and employees from receiving or seeking any instruction from the government and other bodies and organisations or any other entities. This principle is further strengthened in the Amended Law (Article 7) with the introduction of provision stipulating that other bodies and organizations, except for courts, shall not approve, cancel, annul or in any other way affect any decision within the Central Bank's authority (Central Bank of Montenegro, www.cb-cg.org). In addition, Article 8 specifies that the Central Bank may cooperate with the Government and other government bodies and organisations for

the purpose of pursuing the established objectives and without prejudice to its autonomy and independence.

Personal independence refers to the selection of central bank bodies, including the governor, as well as to the procedures for making the most important decisions. The principle of personal independence is defined by the appropriate Articles of the Law on the Central Bank of Montenegro. The Central Bank is managed by the Council, which has 8 members: the Governor, three Vice Governors, and four members who are not employees of the Central Bank.¹ According to Article 49, the Governor is appointed by the Parliament, at a proposal to be put forward by the President of Montenegro for the period of six years and may be appointed to serve not more than two consecutive terms of office, which also applies to other members of the Council (Article 50). In order to avoid a potential conflict of interest, the Law introduces certain conditions that must be met in order for an individual to be a member of the Council. First of all, a member of the Council cannot be a member of a political organisation, a member of the Parliament, or a member of a body, an employee or holder of shares or a stake in a credit institution and any other legal person subject to the Central Bank supervision (Article 51). In addition, a member of the Council shall be relieved from office before the expiry of his/her term of office if he/she no longer fulfils the conditions necessary for exercising the function or if he/she has been guilty of serious misconduct in the performance of his/her duty.

In financial terms, central bank independence implies a complete separation of the monetary policy of the central bank from the fiscal policy conducted by the government, i.e. *financial independence* implies banning monetary financing and autonomy in budgeting. However, the existence of a certain relationship between the Government and the Central Bank of Montenegro is necessary since, according to the Law, the Central Bank of Montenegro has the role of the depositor and banker of state bodies (Article 41) and their fiscal agent (Article 42), and it also participates in the procedure of drafting laws (Article 40). According to Article 43, the Central Bank of Montenegro may not, either directly or indirectly, grant any loans to the Government, other government bodies and organisations, local self-government units or any other entities owned by or in the majority ownership of the state or

¹ According to the CBCG Law of 2000, the Central Bank was managed by the Council of seven members consisting of: the President of the Council, the Director General, and two Deputy Directors General who were also the Executive Officers of the CBCB. Executive officers were nominated by a working body of the Parliament of Montenegro in charge of election and appointments, and the three members who were not Central Bank employees were nominated by the Government of Montenegro, and the Parliament of Montenegro appointed the Council of the Central Bank.

local self-government units. In addition, the same article provides that the Central Bank may not purchase debt securities issued by the Government, although it is allowed to purchase it on the secondary market, which, still, indirectly finances the Government. According to Article 71, the Central Bank of Montenegro independently plans its income and expenses in a financial plan, which after its adoption, is submitted to the Government and the Parliament for information purposes, while its capital is the state property and may be increased by amounts to be determined by the Council of the Central Bank (Article 12). According to Article 70, The Central Bank covers potential losses from general reserves and if they cannot be covered in such a way, the Central Bank requests the Government to cover the deficit from the budget of Montenegro, whereby the Government transfers the lacking amount to the Central Bank in currency or in readily marketable debt instruments with a specified maturity whose issuer is not Montenegro.

4. MEASUREMENT OF INDEPENDENCE OF THE CENTRAL BANK OF MONTENEGRO

Legal central bank independence is considered a necessary and sufficient factor in establishing price stability, as evidenced by the large number of empirical studies that indicate the inverse relationship between the inflation rate and the level of independence of the central bank. Although this view is widely accepted by the OECD and the IMF, which underline the importance of achieving legal independence both in developed and developing countries, there is a significant difference between legal (*de jure*) and actual (*de facto*) independence. *De facto* independence does not only depend on the law, but also on various formal and informal institutional arrangements, such as the exchange rate regime, the ability of the bank to effectively engage in open market operations, the position of fiscal policy, and the existence of explicit institutional arrangements (Cukierman, 2006, p. 2). Since these factors are sometimes difficult to assess impartially, independence analyses in most cases focus on legal independence.

Independence measurements are based on the construction of various indices developed by Bade and Parkin, Grilli, Masciandaro and Tabellini (GMT), Cukierman, Webb and Nayapti (CWN), Bofinger, Thorarinn etc. To measure the CBCG's independence in this paper, the CWN index will be used, as one of the most frequently used independence indices, as well as the Thorarinn criterion for central bank independence.

The *CWN index* includes 16 variables grouped in 4 categories (central bank's CEO, monetary policy formulation, central bank objectives, and limitations on

lending to the government), which are coded from 0 (lowest level of independence) to 1 (highest level of independence).

Table 1: Index of central bank legal independence according to Cukierman, Webb & Nayapti

| Variable number | Weight | Numerical coding |
|----------------------------------------------------------------------------------|--------|------------------|
| 1. CENTRAL BANK'S CEO | 0,20 | 0,77 |
| a) Term of office | | 0,75 |
| b) Who appoints CEO? | | 0,5 |
| c) Dismissal | | 0,83 |
| d) May the CEO hold other offices in the government | | 1,00 |
| 2. POLICY FORMULATION | 0,15 | 1,00 |
| a) Who formulates monetary policy | 0,25 | 1,00 |
| b) Who has final say in resolution of conflict | 0,5 | 1,00 |
| c) Role in the government's budgetary process | 0,25 | 1,00 |
| 3. OBJECTIVES | 0,15 | 0,6 |
| 4. LIMITATIONS ON LENDING TO THE GOVERNMENT | 0,5 | 1,00 |
| a) Advances (limitation on non securitized lending) | 0,15 | 1,00 |
| b) Securitized lending | 0,10 | 1,00 |
| c) Terms of lending (interest rates, maturity) | 0,10 | 1,00 |
| d) Potential borrowers from the CBCG | 0,05 | 1,00 |
| e) Limitation on lending defined in | 0,025 | 1,00 |
| f) Maturity of loans | 0,025 | 1,00 |
| g) Interest rate of loans | 0,025 | 1,00 |
| h) CB prohibited from buying/selling government securities in the primary market | 0,025 | 1,00 |
| TOTAL | | 0,88 |

Source: Author's calculations

The Central Bank of Montenegro does not give loans, but coding should also be assigned to issues related to the maturity of loans, creditors, methods of loan limitation, interest rate, which cannot be done and, therefore, these have been assigned the maximum coding (Kilibarda, 2015, p.152).

According to the measurements of the CWN index of legal central bank independence, the level of the CBCG's independence is high – 0.88 on the scale from 0 to 1. Prior to the introduction of the Law Amending the Law on the Central Bank of Montenegro of 2017, the CBCG's independence was 0.8665 (Kilibarda, 2015, p. 212), which means that the reform of the legislative framework was successful and that it contributed to a higher level of independence of the CBCG.

Another way of measuring the independence of the central bank by the application of the *Thorarinn CBI criterion*. This index evaluates central bank independ-

ence against 5 criteria, which are weighted depending on the relative importance each of them has in achieving independence of the central bank. The CBCG analysis results are presented in the following table:

Table 2: CBCG independence according to Thorarinn criterion

| Criterion | Weight | Points | Total |
|---------------------------------------------------------------------------------------------------------|--------|--------|--------------|
| The extent to which statutory objectives provide the central bank with a clear focus on price stability | 1 | 7.5 | 7.5 |
| The extent to which the central bank determines the setting of policy targets | 1 | 10 | 10 |
| The extent to which the central bank determines the adjustment of monetary policy instruments | 2 | 10 | 20 |
| The extent to which treasury funding through the central bank is prohibited | 2 | 10 | 20 |
| The length of the governor's term of office | 0.5 | 7.1 | 3.55 |
| TOTAL | | | 61.05 |

Source: Author's calculations

According to the above criteria, the independence of the central bank is assessed on a scale of 0.7 to 65, so the independence of 61.05 can be considered very high. All criteria except for the first and last were assigned maximum points, with the first criterion not getting maximum points because in the Law on the Central Bank of Montenegro, the price stability had not yet been stated as the main goal. In addition, according to the last criterion, maximum points are awarded if the governor's term of office is 8 years or more, which is not the case in Montenegro.

The legislation of a large number of developing countries, Montenegro included, is being harmonized with the practices of developed countries. However, problems can arise in the application of legal solutions, and there occurs discrepancies between legal regulation and the actual situation. As one of the indicators showing the actual situation, *the rate of turnover of the governor* is used in order to avoid low rating of independence of the central bank obtained only on the basis of the index that measures legal independence. This index is used as an indicator of de facto independence of the central bank and is defined as the average duration of the office of the central bank governor. It is calculated as the ratio of the number of governors in the observed period and the length of the observed period, so if in one country in the period of 12 years, there were three governors, the rate of turnover of the governor is $3/12 = 0.25$. In Montenegro, for the period from March 2001 to May 2018, the CBCG had four governors, which means that the rate of turnover of the governor for the given period was 0.23. According to Cukierman, the upper limit for the rate of turnover of the governor is between 0.2 and 0.24, which means that with regard to this criterion Montenegro is within the defined (preferred) interval.

CONCLUSION

Over the past 40 years, the issue of central bank independence has attracted the attention of a large number of authors focusing on the determinants of independence, construction of indices against which it will be measured, as well as the examination of the link between independence and macroeconomic variables (primarily inflation). Evidence from empirical studies supports the assumption that the macroeconomic situation improves if central banks are independent, that is, a higher level of central bank independence implies low inflation.

It is actually due to the emphasis on importance of the concept of independence that a modification of the institutional relationship between the government and the central bank has been evident in recent years in most countries, especially developing countries. It is widely accepted that relieving government of responsibility for conducting monetary policy creates favourable conditions for achieving price stability, and countries resort to modify their central bank legislation in order to create preconditions for a greater level of their independence.

In order to measure central bank independence, different indices have been constructed, which are mainly based on the assessment of legal provisions defining the desired level of independence. However, in measuring independence, it is important to distinguish between factual and legal independence of the central bank. Measuring independence based on legal provisions ensures transparency since this allows for assessing the desired level of independence by applying the relevant provisions, while, on the other hand, the enforcement of the law in practice creates many difficulties.

Special attention is paid to the analysis of the CBCG's independence components (institutional, personal, political, and financial independence), whereby the final conclusion is that the achieved level of independence is very high, which is confirmed by the measurement carried out using the following three methods: the CWN index, the Thorarinn criterion, and the rate of turnover of the governor. The results of the measurements show that the Central Bank of Montenegro has a high level of independence in the conduct of monetary policy. Although when observed through the legislation, the independence of the central bank may be high, it is necessary that there are no significant deviations in practice, which in the case of the Central Bank of Montenegro is also confirmed by the value of factual independence indicator, such as the rate of turnover of the governor.

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