

## **INDEPENDENCE OF THE CENTRAL BANK OF CONGO (BCC), STABILIZATION OF INFLATION AND ECONOMIC PERFORMANCE : EMPIRICAL VERIFICATION**

By Franck DUNDA MATUKUMANGO; Hugues MUSAKA BABABO and Émilienne ILANGA BONGENGELE

La recherche de la stabilisation de l'inflation et de la relance de l'activité restent jusqu'alors, parmi les préoccupations majeures de tous les gouvernements du monde y compris celui de la RD.Congo. Pour y parvenir, le consensus aujourd'hui se forme autour de l'indépendance des banques centrales, considérée comme l'un des mécanisme particulièrement efficaces pour la stabilisation monétaire et la relance de l'activité. C'est ce qui justifie d'ailleurs la consécration de l'indépendance de la Banque Centrale du Congo (BCC, en sigle) depuis 2001. De ce qui précède, l'objet du présent papier a consisté à la vérification empirique de l'efficacité de la politique monétaire de la BCC après son indépendance. Après examen, il se dégage globalement que les résultats de l'indépendance de la BCC restent mitigés; et dans la plupart des cas, ce mécanisme reste inopérante en lui-même. En effet, il s'est montré efficace seulement dans les cas où il s'est fait appuyé par d'autres mécanismes en l'occurrence, les programmes et les efforts de stabilisation du cadre macroéconomique que nous encourageons d'ailleurs. Dans d'autres situations par contre, il a été inefficace.

**Mots clés: Indépendance de la Banque Centrale du Congo (BCC), Stabilisation d'inflation, performance économique et crédit net à l'Etat (CNE)**

The search for the stabilization of inflation and the revival of activity remain until now among the major concerns of all governments in the world, including that of the DR Congo. To achieve this, the consensus today is forming around the independence of central banks, considered one of the particularly effective mechanisms for monetary stabilization and the revival of activity. This is what justifies the consecration of the independence of the Central Bank of Congo (BCC, in acronym) since 2001. From the above, the object of this paper consisted of the empirical verification of the effectiveness of the monetary policy of the BCC after its independence. After examination, it appears overall that the results of the independence of the BCC remain mixed; and in most cases, this mechanism remains ineffective in itself. Indeed, it has proven effective only in cases where it was supported by other mechanisms, in this case, programs and efforts to stabilize the macroeconomic framework that we encourage. In other situations however, it was ineffective.

**Keywords: Independence of the Central Bank of Congo (BCC), stabilization of inflation, macroeconomic performance and net credit to the State (CNE).**

## Introduction

Nowadays, some believe that the independence of central banks in general and of the BCC ( Central Bank of Congo) in particular remains the only, if not the only particularly effective mechanism for stabilizing inflation, supporting and reviving futures economy; because inflation increases the cost of living and negatively impacts economic activity.

Indeed, it is established that the independence of a Central Bank contributes significantly to the reduction of monetary advances to the government and then to the stability of inflation and the revival of activity. On the other hand, the lack of independence of the Central Bank remains the main cause of inflation instability following the Government's regular recourse to monetary financing of increasingly large public deficits. This situation of domination of monetary policy by budgetary policy remains observable in developing countries such as the DRC where capital markets are almost non-existent, making monetary policy ineffective. Thus, between 1991 and 1992, the DR Congo (then Zaire) had experienced monetary advances (in billions of Zaires) respectively of the order of 22,855 and 683. 244 accompanied by hyperinflations.

To remedy this, parliament first passed law number 005/2002 of May 7, 2002 which established the independence of the BCC, then law n°18/027 of December 13, 2018 relating to the organization and functioning of the Central Bank of Congo which came to further strengthen this independence by certain provisions of articles such as for example: the prohibition of monetary advances from the Central Bank to the Government, the prohibition and sanction against any injunction from the Government to the Central Bank in terms of the design and conduct of its monetary policy as well as in terms of the appointment of its managers.

From the above, this work seeks to account for the contribution of the real independence of the Central Bank of Congo on macroeconomic performance and stability.

Thus, to better elucidate our concern, three questions will be at the center of our investigations, in particular: 21 years after the formalization of its legal independence, does the BCC enjoy real independence? How does the BCC's actual independence impact macroeconomic outcomes? and finally, what is the contribution of the real independence of the BCC to macroeconomic stability?

This being said, the gain of this work lies essentially in the proposal of additional adjustment mechanisms likely to strengthen the effectiveness of monetary policy. Thus, three presuppositions underlie this analysis: First, the independence of the Central Bank of Congo improves macroeconomic results; all things equal otherwise. Then, the reduction in monetary advances from the Central Bank of Congo has a significant impact on the stability of the general price level; all things equal otherwise. And finally, the stability of inflation significantly influences the growth of activity; all things equal otherwise.

To achieve good results and propose particularly effective public policies, analytical and comparative methods seem to be the best suited. They will be supplemented by documentary and statistical techniques (descriptive statistics), respectively for data collection and calculation of statistical values.

Apart from the introduction and conclusion, the present work is essentially subdivided into five sections including: **Section 1**: literature review; **Section 2**: indicators for measuring legal independence; **section 3**: Assessment of the real independence of the Central Bank of Congo; **section 4**: BCC independence and macroeconomic outcomes; **section 5**: independence of the BCC and macroeconomic stability.

## 1. Literature review

### 1.1. Theoretical review

The independence of central banks remains one of the themes in monetary economics where research is constantly evolving. Among the theoretical works that revolutionized this field of research, the theoretical works of authors such as Rogoff (1985), Kydland and Prescott (1977) and Barro and Gordon (1983) are often cited, who are considered the pioneers of independence of central banks. Indeed, they each tried in their own way to provide the solution to the problem of temporal inconsistency from which monetary policy would suffer following the lack of credibility of monetary policy caused by the expectations of private agents and thus leading to inflationary bias. To this, Rogoff showed that the “delegation” of monetary policy to an independent central banker resulted in a reduction in the inflationary bias. In other words, the independence of the central bank can be interpreted as a gain in credibility among private agents for the issuing institution.

However, this thesis has been the subject of widespread debate. McCallum first pointed out that the problem of temporal inconsistency did not disappear with the appointment of a central banker different from the government, but was then transferred to the effective independence of the chosen central banker. On the other hand, some studies have shown that Rogoff's result, for example, depended on assumptions regarding information or decision-making processes.

It should be noted that the independence of banks also remains crucial within the framework of a federal system because it protects the monetary policy decision-making process from the dangers of interference from member states. In particular, it limits positions taken solely by national interests or free rider behavior.

### 1.2. Empirical review

Concurrently with theoretical debates concerning the independence of central banks, several studies relating to their degree of autonomy were published in the early 1990s. The main difficulty encountered in these studies comes from the multidimensional nature of the notion of independence, due to the complexity of institutions and the legal rules governing their decision-making process. The difficulty of quantifying the characteristics of the Central Bank in its relationship with the government has pushed researchers in the field to base themselves in most cases on legal independence, that is to say that which the legislator provides for. to regularize relations between the Central Bank and the government. This index is based on political independence which is defined as the ability of the central bank to choose its policies without influence from the government.

Grilli, Masciandro and Tabellini (1991), for example, developed more comprehensive indices for central bank independence. They selected 15 variables reflecting political and economic independence and applied this to the central banks of OECD countries between 1950 and 1989.

Similarly, Cukierman, Webb and Neyapti (1992) developed a legal index of central bank independence. The latter reflects the degree of independence that the legislator

confers on the central bank. Their investigation was essentially based on the legal texts concerning the organization of the activities of the Central Bank. However, Loungani and Sheets (1995) note that this index has two main limitations. First, legal texts are sometimes incomplete and cannot explicitly specify the limits of power between the central bank and political authorities. Second, even if the law is explicit, actual behavior may reveal deviations. Hence, the need to introduce indices that capture independence on a practical level. The authors then developed two other indicators, namely: the governor turnover index (TOR) and an index measuring the political vulnerability of the latter.

Empirically, the work of Cukierman, Webb and Neyapti (1992) and Loungani and Sheets (1995) indicates that there is a negative relationship between central bank independence and inflation. Specifically, they found that the legal independence index is significant for industrialized countries and non-significant for developing countries, while the TOR is significant for developing countries.

Following the work of Cukierman et al., Campillo and Miron (1996), Cottarelli, Griffiths and Moghadam (1998) introduced other explanatory variables into their specification, in addition to the independence index. They produced opposite results. For Campillo and Miron, taking into account relevant explanatory factors, other than the legal index of Cukierman et al., leads to rejecting the idea according to which having an autonomous central bank makes it possible to reduce the level of inflation. While for Cottarelli, Griffiths and Moghadam, the variable capturing the independence index is statistically significant.

Furthermore, Fry (1998) showed that the size of the public deficit and its financing methods took precedence over legal independence. In other words, *de jure* independence is not sufficient to cut the links between the public deficit and monetary financing as well as its inflationary consequences in countries that are insufficiently rigorous in fiscal matters.

Jácome (2001) analyzed the problem of the link between the legal independence of the central bank and inflation during the period 1999-2001 on a sample of 14 Latin American countries. His analysis indicates the existence of a moderate negative relationship between the two indicators. By disaggregating the overall independence index, the analysis suggests that economic independence is the key component observed in the negative relationship between central bank independence and inflation.

King (2001) identified, out of a total of 21 empirical studies, a majority of studies obtaining a significant negative relationship between independence and inflation. The correlation between legal autonomy and falling inflation is weaker in developing countries than in developed countries.

Guitierrez (2003) tested the relationship between inflation performance and the degree of independence of the central bank recognized by the Constitution, as opposed to that of right enshrined in their statutes and their structural organization. The results reveal that Latin American countries, where central bank independence is enshrined in the Constitution, have lower inflation, independent of the effect of other factors.

Jácome and Vázquez (2005) analyzed the existence of a negative relationship between central bank independence and inflation during the 1990s, taking into consideration the exchange rate regime and public deficits. They used a panel data regression model for 24 Latin American and Caribbean countries. Their results were found to be robust to including indicators of structural reforms having an impact on the law governing the central bank. However, the analysis does not find a causal relationship going from the independence indicator to inflation.

In the same vein, the IMF (2007) broadened the scope of investigation of previous work to a sample of 163 central banks, including a significant number of sub-Saharan African countries. The data collected thus makes it possible to have, for 2003, a battery of indicators of the *de jure* autonomy of 29 central banks in sub-Saharan Africa. In addition, for ten of these central banks, the data makes it possible to present the evolution of these indicators since the end of the 1980s. The authors use the GMT and Cukierman indices to assess the level of political and economic autonomy of the central banks in the sample. The findings of this study confirm that central banks in industrialized countries remain more independent, both politically and economically, compared to those in other regions, such as sub-Saharan Africa.

Indeed, the analysis of the institutional frameworks of the ten central banks of sub-Saharan Africa, for which data are available from 1980 to 2003, revealed that their overall independence index has progressed. It went from 0.33 to 0.53, improving at a rate comparable to that of developing countries whose central bank independence index stands at 0.57 compared to 0.35 (this index was at twenty-three previously). This progression is the result of both an improvement in political independence and an increase in their economic independence index. The central banks under scrutiny are generally no longer forced to systematically grant advances to the State, as was the case in the early 1990s.

Ghrissi (2011) analyzed the degree of independence of the Central Bank of Tunisia (BCT) using the indices of Cukierman et al. (1992) and that of Jácome (2001). Its results indicate that the BCT has experienced, through the latest reform of its legal framework, an improvement in its degree of independence. However, it should be noted that the results obtained failed to show with certainty the existence of a causal relationship between independence. Its results indicate that the BCT has experienced, through the latest reform of its legal framework, an improvement in its degree of independence. However, it should be noted that the results obtained failed to show with certainty the existence of a causal relationship between the independence of the BCT and the reduction in the inflation rate.

Looking into the issue of the effects of independence, Aguir (2013) used the TOR as a measure of real independence for 54 developing countries, classified according to their income level over the period 1991-2011. His results suggest that the TOR only becomes significant in countries that experience high inflation rates. This result proves that the condition of the independence of the central bank can only be necessary.

From the above, it appears that there is a consensus among economists around the independence of Central Banks because it is supposed to strengthen the credibility of

monetary policy. And as a result, it contributes to the strengthening of the overall governance of macroeconomic policies and has the effects of: anchoring the expectations of economic agents and improving the results of countries in terms of inflation.

## **2. Indicators for measuring the independence of the central bank**

Without ignoring the contribution of empirical work, this section essentially explores the different measures of independence of a Central Bank that we naturally encounter: The legal and real independence of Central Banks. It should be noted that the relevance of the use of these indicators may depend on whether we are in developed economies or in developing countries. Indeed, in the first group of countries, the political-institutional structures are generally stable while in the second group of countries,

the political-institutional environment is marked by recurring episodes of instability. However, the nature and duration of shocks that affect political-institutional frameworks is a determining factor in the degree of freedom that a central bank can have to achieve the objectives assigned to it, mainly price stability.

### **2.1. Indicators for measuring legal independence**

The legal independence of a central bank can be assessed through two main indices: the Grilli, Masciandaro, Tabellini index (GMT, 1991) and the Cukierman index (1992). Each of these indices measures the degree of independence of central banks using a numerical index calculated from the laws governing central banks. This index is therefore based on measuring the degree of legal independence of Central Banks.

Concerning the GMT index, it is composed of two sub-indexes, namely: the political independence index and that of the economic independence of the Central Bank. According to the designers of this index, the index of political independence of a central bank includes three fundamental elements in particular: the procedures for appointing the leaders of the central bank, the relations between the board of directors and the government as well as the responsibilities officials assigned to the central bank. Regarding the economic independence index, it is assessed through seven sub-indexes which include the question of financing the state budget as well as the nature of monetary instruments. The overall index is obtained by simply adding the scores obtained for the political independence index and the economic independence index.

The Cukierman index (1992) includes sixteen sub-indexes which make it possible to assess the legal independence of the central bank. These sub-indexes are grouped according to four main themes. The first covers variables relating to the status of the governor or executive director (duration of mandate, appointment and resignation procedures and incompatibility clauses). The second theme concerns all the variables relating to the formulation of monetary policies. The last two relate respectively to the objectives of the central bank and to regulations concerning borrowing limitations.

The measuring instruments proposed by Grilli, Masciandaro, Tabellini as well as Cukierman provide valuable information on the room for maneuver available to a

central bank in the conduct of monetary policy. However, these measures suffer from certain inadequacies. According to Mangano (1998), the value of these indices depends on (i) the criteria contained in the index; (ii) the interpretation and evaluation of the law related to each individual criterion; and (iii) how the evaluations are aggregated and weighted to obtain the overall score.

Furthermore, some economists consider that legal independence can be contingent. To do this, it is essential to consider real independence to truly judge the degree of freedom available to a Central Bank. These considerations have prompted some economists to create indicators that try to assess the real independence of Central Banks.

## **2.2. Indicators for measuring actual independence**

According to economists, the evaluation of the real independence of a Central Bank remains understood by a few specific indicators in particular: the rate of rotation of the Governor, the political vulnerability index of the Governor of a Central Bank as well as monetary financing public deficits by the Central Bank. These indicators demonstrate the effectiveness of the exercise of the independence granted to the Central Bank.

### **2.2.1. The Governor's Turnover Rate (TOR or Turn Over Rate)**

To assess the real independence of central banks, Cukierman, Webb and Neyapti (1992) proposed an indicator based on the rate of change of central bank governors. They calculated this indicator over the period 1950-1989 by considering several central banks. They assumed that a more frequent change of central bank governor in a country reflects weaker central bank independence. According to them, a long mandate does not systematically mean more independence, but terms of office that are shorter than the electoral cycle could mean weaker independence.

The indicator for measuring independence, called TOR (Turn Over Rate), is between 0 and 1. When it is close to 0, it reflects a low governor turnover rate, therefore less frequent change. In other words, a TOR close to 0 is equivalent to a situation where the Central Bank is more independent. On the other hand, when the TOR approaches 1, it reflects a greater dependence of the Central Bank on the political authority.

### **2.2.2 The political vulnerability index of the central bank governor**

The political vulnerability index is an extension of the central bank governor turnover index. This indicator states that the political vulnerability of the governor can be measured through the degree of correlation between the change of political authorities and the change of the central bank governor. It is calculated from a ratio which links the number of each change of executive authority and the change of the governor of the central bank in the six months – maximum – which follow. According to this concept, political vulnerability is an indicator of political influence on the central bank. It follows that a high ratio refers to significant government influence over the central bank.



## 2.2.3 Monetary financing of budget deficits by the central bank

This indicator is measured by the evolution of net credit to the State. It makes it possible to verify the financial independence of the Central Bank (which consists of prohibiting the State from using credits from the central bank to cover its budget deficits). This rule is equivalent to the prohibition of a positive variation in net credit to the State in the central bank's balance sheet.

## 3. Assessment of the real independence of the BCC

### 3.1. Organic independence and the turnover rate of Governors

Organic independence includes both the conditions for appointing managers and those for exercising their functions. The fact that it is the political power which has, in almost all cases, with the exception of a few countries, the power of appointment is not a determining criterion. Although it is likely to push towards a certain form of subordination, the designation by elected authorities (or higher in the hierarchy of the State), has the advantage of conferring on the governing bodies of the Central Banks an authority and greater radiation.

The existence of a fixed, long mandate (thus going beyond political contingencies and electoral deadlines), non-revocable and non-renewable, undoubtedly constitutes the most complete and perfect condition for guaranteeing the legal security of the governing bodies. With a mode of progressive renewal of Council members also leading to greater impermeability to political hazards. On the other hand, the mode of operation of the Council, while it favors the principle of collegiality, gives a guarantee of pluralism to decisions, which can, for example, result in the Governor or the President being outvoted.

The participation of public authorities in decision-making bodies is also a revealing sign of the relationship between the State and the Issuing Institute. All of these criteria are naturally not fully implemented in central banks. Just like, each of them does not have the same scope depending on the country.

Since its accession to political independence to date, DR Congo has had 12 governors at the head of its issuing institute. To calculate the governor turnover rate, we divide this long period into two sub-periods. The first period is from 1961 to May 1997, and the second is from May 1997 to the present.

$$\text{TOR} = \frac{\text{Number of changes of governor}}{\text{Effective length of governor's term}}$$

The governor's turnover rate and his political vulnerability used by Cukierman (1992) remain the indicators for measuring the good conduct of a Central Bank. In the case of the DRC, the governor of the Central Bank is appointed for a period of 5 years. Also, the average governor turnover rate is 0.2 (one change per 5 years).

**Table n°1: Governor turnover rate for the period 1961 to 1997**

Governor	Governor turnover rate	Average turnover rate for the period
Albert Ndele Mbamu From February 24, 1961 to September 15, 1970	0,11	
Jules-Fontaine Sambwa Pida N'bagui From September 15, 1970 to August 10, 1977	0,14	
Charles Bofossa W'ambea Nkoso From August 19, 1977 to 06 Mars, 1979	0,5	
Jules-Croy Emony Mondanga From mars 06, 1979 to August, 1980	1	
Jules-Fontaine Sambwa Pida N'bagui From August 27, 1980 to April 12, 1985	0,2	0,22
Pierre Pay Pay Wa Syakassighe From April 12, 1985 to March 30, 1991	0,16	
Jean-Gualbert Nyembo Shabani From March 30, 1991 to April 02, 1993	0,5	
Joseph Buhendwa Bwa Mushaba From April 02, 1993 to February 01, 1994	1	
Godefroid Ndiang Kabul From February 01, 1994 to November 25, 1994	1	
Patrice Djambleka Loma Okitongono	0,5	

From January, 1995 to March 17, 1997		
--------------------------------------	--	--

*Source: Authors' calculation.*

The period from October 3, 1960 to February 24, 1961, was that of the dissolution and liquidation of the Central Bank of Congo-Belgium and Ruanda-Urundi, acronym BCCBRU. The decree-law of October 3, 1960 created the Monetary Council of the Republic, due to the lack of executives and political unrest in the country.

This institution had the following responsibilities: the liquidation of the BCCBRU, the preparation of the advent of the National Bank of Congo, acronym BNC. She was responsible for carrying out studies and making proposals for the establishment of the BNC.

It was in 1960 that the liquidation of the BCCBRU was effective and the Congo's share returned to the Monetary Council of the Democratic Republic of Congo. And it was on February 23, 1961 that the BNC was created by decree-law.

During the period from June 27, 1997 to August 8, 1997, following the seizure of state power by the AFDL, which removed the senior management of the Bank which was in place on May 17, 1997, it was a Committee of Management who was placed at the head of the BCC, directed by a college of 3 members designated by a ministerial decree.

The turnover rate of the BCC governor during the first period is 0.22. It should be noted that between 1961 and 1997, the turnover rate of the governor of the Central Bank in his position showed clear volatility.

Indeed, Charles Bofossa W'ambea Nkoso, Jules-Croy Emony Mondanga, Jean-Gualbert Nyembo Shabani, Joseph Buhendwa Bwa Mushaba, Godefroid Ndiang Kabul and Patrice Djamboleka Loma Okitongono have not completed their mandates, while Albert Ndele Mbamu, Jules-Fontaine Sambwa Pida N'bagui and Pierre Pay Pay Wa Syakassighe have passed the 5-year mark. During this period, only Jules-Fontaine Sambwa Pida N'bagui, during his second term, remained in his position for 5 years. This led to a rate very close to the average turnover rate of the BCC.

period from October 3, 1960 to February 24, 1961, was that of the dissolution and liquidation of the Central Bank of Congo-Belgium and Ruanda-Urundi, acronym BCCBRU. The decree-law of October 3, 1960 created the Monetary Council of the Republic, due to the lack of executives and political unrest in the country.

This institution had the following responsibilities: the liquidation of the BCCBRU, the preparation of the advent of the National Bank of Congo, acronym BNC. She was responsible for carrying out studies and making proposals for the establishment of the BNC.

It was in 1960 that the liquidation of the BCCBRU was effective and the Congo's share returned to the Monetary Council of the Democratic Republic of Congo. And it was on February 23, 1961 that the BNC was created by decree-law.

During the period from June 27, 1997 to August 8, 1997, following the seizure of state power by the AFDL, which removed the senior management of the Bank which was in place on May 17, 1997, it was a Committee of Management who was placed at the head of the BCC, directed by a college of 3 members designated by a ministerial decree.

The turnover rate of the BCC governor during the first period is 0.22. It should be noted that between 1961 and 1997, the turnover rate of the governor of the Central Bank in his position showed clear volatility.

Indeed, Charles Bofossa W'ambea Nkoso, Jules-Croy Emony Mondanga, Jean-Gualbert Nyembo Shabani, Joseph Buhendwa Bwa Mushaba, Godefroid Ndiang Kabul and Patrice Djambleka Loma Okitongono have not completed their mandates, while Albert Ndele Mbamu, Jules-Fontaine Sambwa Pida N'bagui and Pierre Pay Pay Wa Syakassighe have passed the 5-year mark. During this period, only Jules-Fontaine Sambwa Pida N'bagui, during his second term, remained in his position for 5 years. This led to a rate very close to the average turnover rate of the BCC.

**Table n°2 : Governor turnover rate for the period 1997 to 2023**

Governor	Governor turnover rate	Average turnover rate
Jean-Claude Masangu Mulongo From August 08, 1997 to March, 2003 (6 years)	0,16	
Jean-Claude Masangu Mulongo From March, 2003 to March, 2008 (5 years)	0,2	
Jean-Claude Masangu Mulongo From March, 2008 to March, 2013 (5 years)	0,2	
Mutombo Mwana Nyembo From March 14, 2013 to March 13, 2018 (5 years)	0,2	0,08
Mutombo Mwana Nyembo From March 15, 2018 to July 06, 2021 (3 years)	0,33	
Malangu Kabedi Mbuyi From July 06 nowadays	Is still in his post as Governor of the BCC	

Source : Author's calculation

During the second period (1997 to 2022) the rotation index of the governor of the Central Bank shows a significant decline and reaches 0.08 indicating a considerable distance from independence which is therefore very weak. It should be noted, however, that in this case, the fact that there were only two governors does not necessarily mean that the BC is not independent. Indeed, Governor Jean-Claude Masangu Mulongo already assumed the role of Governor in 2002 when the Congolese Central Bank became independent.

He was simply reappointed to his post in 2003 in compliance with the new legislation in force, and reappointed in 2008. Because, the law of May 7, 2002 states in its article 21, that: "the mandate of the Governor is five years renewable once". There was therefore no violation of the law in this particular context.

However, regarding the penultimate governor, Mr. Déogratias Mutombo Mwana Nyembo, who was appointed in 2013, and reappointed for a second term in 2018, we can see that he has not reached the end of his second term. mandate.

He was dismissed from his position without valid reasons. Because no serious misconduct has been reported against him. This is a violation of organic independence through non-compliance with the law which stipulates that the Governor and the Vice-Governor can be relieved of their functions "if they no longer meet the conditions necessary for the exercise of their duties." functions or if they have seriously failed to fulfill the obligations of their office."

But, it is also a breach of article 102 of the fifth title on the transitional provisions (repealing and final, of organic law n°18/027 of December 13, 2018 relating to the organization and functioning of the Central Bank of Congo); which stipulates that: "The members of the Bank's bodies currently in place assume their functions until the end of their mandates."

It should be noted that the turnover rate relating to the last governor, Ms. Malangu Kabedi Mbuyi, is not included in our calculations since she is still in her post.

### **3.2. Financial independence**

The financial independence of a CB is generally the result of a set of statutory provisions, clearly stipulating that the Bank is recognized as being in charge of monetary stability and, within the framework of this mission, does not receive directives from the authorities. Monetary stability depends in part on monetary policy, which, to be credible, must be sustained over time.

However, with budgetary policy in the hands of the State, the CBs' room for maneuver remains limited. Because the State can place the BC in a position of subordination, which could easily force it to finance the deficits of the Public Treasury.

From now on, in Western countries, this limitation no longer comes from the direct financing of the Public Treasury by the Central Banks for two reasons: on the one hand, they are no longer subject to the obligation to acquire unabsorbed public securities by the market; and on the other hand, advances from Central Banks to the

State are strictly limited by law. In the case of DR. Congo, the law prohibits monetary advances from the BCC to the Government.

Thus, to better assess the financial independence of the BCC, the table below presents the situation of the evolution of net claims on the State from 1992 to 2021. À sa à

**Table n°3: Variation in net claims on the BCC balance sheet from 1992 to 2022 ( in millions of CDF)**

Year	Net credit to the State
1992	0,0024
1993	0,0414
1994	1, 3776
1995	3, 0225
1996	45, 6004
1997	271, 8482
1998	534, 7988
1999	3 143, 593
2000	14 019, 7149
2001	-92 231, 329
2002	13 089,0
2003	5 751,0
2004	-11 843,0
2005	38 943,0
2006	163 131,0
2007	198 728,0
2008	272 446,0
2009	200 253,0
2010	-335 989,0
2011	-77 136,0
2012	-377 651,0
2013	-312 898,0
2014	-297 956,0
2015	-103 649,0
2016	406 967,0
2017	360 174,0
2018	593 183,0
2019	1 151 959,0
2020	1 555 190,0
2021	1 528 165,0
2022	1 151 481,0

Source: BCC Annual Reports 2001, 2011 and 2020

It should be noted that three situations can arise in the evolution of net claims on the State. Its evolution can be positive (+ sign), negative (- sign), or even zero (0). When the net claim on the State is positive, this means that there has been a monetary advance from the Central Bank to the Government. When it is negative, this means

that the State has accumulated reserves or deposits in terms of current revenue with the Central Bank (This also means that the State has cleared its debts and has accumulated reserves). Finally, when it is zero this means that there has been no monetary advance from the Central Bank to the Government and even less the accumulation of State reserves with the latter.

Thus, from the analysis of table no. 3 above, the following findings emerge:

- From 1992 to 2001, during this period following the independence of the BCC, its monetary advances to the Government experienced a clear evolution following the Government's legal ban on monetary financing.
- From 2002 to 2009, a net change in net credit to the State despite legal provisions prohibiting monetary advances from the BCC to the Government. Indeed, it is through the published law number 005/2002 of May 7, 2002 that the independence of the BCC was enshrined. This law prohibits, for example, any monetary advance from the BCC to the Government, except for a period of one year from the entry into force of the law where the law authorizes direct advances to the State in order to meet the fluctuations in its ordinary income. But with a total amount of advances which must not exceed at any time 15% of average tax revenues calculated on the basis of the last three financial years. And these direct advances cannot, during the same financial year of the Bank, be granted for more than 300 days in total, consecutive or not.
- From 2010 to 2015, a negative evolution of net credit to the State. This situation of contraction of net credit to the State which can be interpreted as follows: State deposits or current State revenues are greater than credits to the State. So the State has cleared its debts. No monetary advance was granted to the Government during this period following the application of the zero monetary financing rule between 2012 and 2015. We can say that the BCC truly enjoyed real independence during this period.
- From 2016 to 2020, a clear change in monetary advances despite the strengthening of the independence of the BCC by the promulgation of Law No. 18/027 of December 13, 2018 relating to the organization and operation of the Central Bank of Congo.

Overall, we can conclude that throughout the period under examination, the independence of the BCC remained only de jure, therefore theoretical. Except from 2010 to 2015 when net credit to the State experienced a negative evolution following the strengthening of the legal mechanisms of the independence of the BCC by other extra-legal mechanisms such as the application of the rule of zero monetary financing materialized by the Macroeconomic Framework Stabilization Pact which have shown their effectiveness in significantly reducing credits to the State.

#### **4. Independence of the BCC and macroeconomic results**

In this section, we endeavor to evaluate the contribution of the independence of the

issuing institute on macroeconomic results (growth of activity and inflation rate) in the DR. Congo. To do this, we carry out a comparative approach between the two periods, namely: the period before independence and that after independence.

**Table n°4. Independence of the BCC and macroeconomic results (in %)**

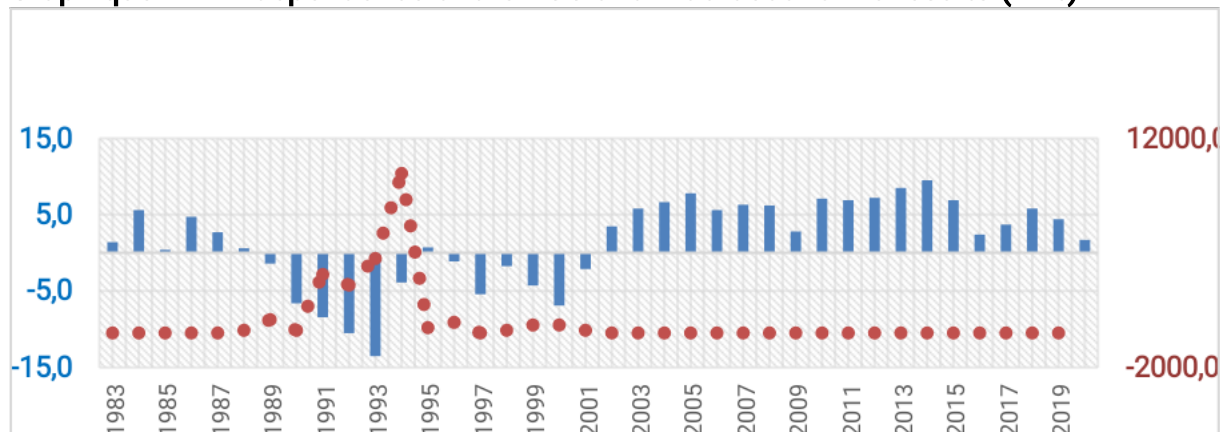
Macroéconomic Indicators		Inflation Rate(in %)			Growth Rate of Real Gross domestic product(in %)		
		Minimum Inflation	Maximum Inflation	Average Annual Inflation of the period	Minimum GDP Growth	Maximum GDP Growth	Average Annual GDP Growth Over the period
I.	Before independence (1983 - 2001)	-0,4	9796,6	897,7	-13,5	5,6	1,1
II.	After independence (2002 - 2020)	0,8	54,1	12,3	1,7	9,5	5,6

Source: Author's calculation.

It appears from table no. 3 and graph no. 1 that the independence of the issuing institute has significantly improved macroeconomic results in the DR. Congo. Indeed, the rates of inflation and growth of activity have seen notable improvements between the two periods of analysis. After independence, the average annual inflation rate was 15.7% compared to 1,311.3% in the period before independence.

Furthermore, before independence, the peak inflation rate reached was 9,796.7% compared to almost 55% inflation after independence.

**Graphique n°1. Independence of the BCC and macroeconomic results (in %)**



Source: Authors' calculation based on BCC data



Regarding the growth of economic activity, it appears from **table n°3** and **graph 1** that the rate of economic growth improved considerably during the post-independence period compared to the period before independence. Indeed, before independence, the average growth rate of real GDP was -2.6% (indicator of a prolonged recession) compared to 5.7% after independence.

It should be noted that the achievement of better results during the period after independence remains not only attributable to the effectiveness of monetary policy. In addition to monetary policy, it is important to also mention the contribution of other factors such as external and internal support and structural policies carried out by the Government.

It is important to note that despite the better economic results caused by the independence of the issuing institute, the inflation rate can remain volatile. Note that macroeconomic stability is very important to the extent that it is a guarantee of strong economic growth. This is the subject of the following section.

### 5. Independence of the Central Bank of Congo and macroeconomic stability

After having concluded on the better macroeconomic results induced by the independence of the Central Bank of Congo, the object of this section consists of empirically verifying through statistical analysis, macroeconomic stability to the extent that macroeconomic stability constitutes the foundation for strong, long-term and inclusive economic growth.

**Table n°5. Variation in net credit to the State and inflation in the DR. Congo from 2002 to 2021**

<i>Year</i>	<i>Net credit to the State (in millions of CDF)</i>	<i>Inflation rate (in %)</i>
2002	13 089.0	15.8
2003	5 751.0	4.4
2004	-11 843.0	9.2
2005	38 943.0	21.3
2006	163 131.0	18.2
2007	198 728.0	10.0
2008	272 446.0	27.6
2009	200 253.0	53.4
2010	-335 989.0	9.84
2011	-77 136.0	17
2012	-377 651.0	2.72

2013	-312 898.0	1.08
2014	-297 956.0	1.04
2015	-103 649.0	0.8
2016	406 967.0	23.6
2017	360 174.0	54.1
2018	593 189.0	7.2
2019	1 151 959.0	4.59
2020	1 555 190.0	15.76

Source: BCC annual reports from 2002 to 2020

### Empirical analysis of the results

The following observations emerge from the table above:

- From 2002 to 2009, an instability of inflation (that is to say, high and irregular inflation rates during the period) associated with an increasing evolution of monetary financing, i.e. an average annual inflation rate of 19.9875%.
- From 2010 to 2015, stability of inflation (that is to say, low and regular inflation rates during the period) associated with a contraction of monetary advances to the State, i.e. an average annual rate of inflation of 6.4960%.
- From 2016 to 2020, instability in inflation associated with an increase in net claims on the State, i.e. an average annual inflation rate of 26.3125%.

**Table n°6. Change in GDP growth (in %) and inflation rate (in %) from 2002 to 2020**

<i>Year</i>	<i>Inflation rate (in %)</i>	<i>Real GDP growth rate (in %)</i>
2002	15.8	3.5
2003	4.4	5.8
2004	9.2	6.6
2005	21.3	7.8
2006	18.2	5.6
2007	10.0	6.3
2008	27.6	6.2
2009	53.5	2.8

2010	9.87	7.1
2011	17	6.9
2012	2.72	7.2
2013	1.08	8.5
2014	1.04	9.5
2015	0.8	6.9
2016	23.6	2.4
2017	54.1	3.7
2018	7.2	5.8
2019	4.59	4.4
2020	15.76	1.7

*Source: BCC annual rapports from 2002 to 2020*

### **Empirical analysis of statistics**

The following information emerges from table no. 3 above:

From 2002 to 2009, the average real GDP (Gross Domestic Product) rate remained around 5.575% against an average inflation rate of 22.8428%.

From 2010 to 2015, the average real GDP rate was around 8% compared to 6.496% of the average inflation rate.

And finally, the average increase in economic activity remained around 3% compared to 26.3125% of the average inflation rate from 2016 to 2020.

## Conclusion

In this study, it was a question of analyzing from an economic and statistical point of view, the contribution of the real independence of the Central Bank of Congo on macroeconomic results and stability. As a result, three major questions were at the heart of our investigations, in particular: 21 years after the formalization of its legal independence, does the BCC enjoy real independence? How does the BCC's actual independence impact macroeconomic outcomes? and finally, what is the contribution of the real independence of the BCC to macroeconomic stability?

After examining the problem using analytical and comparative methods supported by documentary and statistical techniques, it is observed that the real independence of the BCC still remains questionable. Indeed, we note a clear increase in monetary advances from the Central Bank to the State from 1992 to 2001, the period before independence. The same for the period after independence (from 2002 to 2021), except for the period from 2010 to 2015 where we note a negative evolution of net claims on the State which is synonymous with the non-recourse to monetary financing by the Government and the accumulation of its reserves with the BCC. These results remain essentially dependent on the efforts to stabilize the macroeconomic framework undertaken during this period through the application of the zero monetary financing rule.

In response to the second concern, it emerges from the figures in the second table that the evolution of net claims to the State, a reliable indicator of the real independence of the issuing institute, has an influence on macroeconomic outcomes, namely: inflation and business growth. Indeed, the average annual inflation rate before and after the independence of the issuing institute was respectively 15.7% compared to 1,311.3%. Likewise, the average annual rate of growth of activity before and after independence was respectively - 2.6% compared to 5.7%. It therefore appears from these figures that the independence of the BCC has contributed significantly to the improvement of economic results. However, despite these improved results, the inflation rate remained volatile overall; except between 2010 and 2015 when the inflation rate remained stable following the application of the zero monetary financing rule by the government.

Remember that inflation instability seriously compromises the achievement of the objective of strong, sustainable and inclusive growth in DR Congo. In fact, we note the existence of a counter-cyclical relationship between the evolution of inflation and that of economic activity. The figures show that in periods of inflation instability (high and irregular inflation) growth in activity remains low; however, it is strong in periods of stability (low and regular inflation). Thus, it follows from table no. 3 that from 2002 to 2009 the average rates of inflation and economic growth were respectively 19.9875% and 5.575%. Likewise, they were respectively of the order of 21.05% and 3% between 2016 and 2020 compared to 5.413% and 8% respectively between 2010 and 2015.

From the above, the establishment of legal mechanisms to prohibit monetary advances from the BCC to the Government, remain ineffective and ineffective in the

absence of other mechanisms such as programs and efforts to stabilize the macroeconomic framework materialized under -form of stabilization pact of the macroeconomic framework which until now seems to be particularly effective in stabilizing inflation.

## Bibliographical References

1. Albert M., central banks, <https://academiesciencesmoralesetpolitiques.fr/wpcontent/uploads/2019/01/albert.pdf>
2. Arnone (M.), Laurens (B.J.), Segalotto (J.-F.) and Sommer (M.) (2007), "Central bank autonomy lessons from global trends", IMF Working Paper, 07/088
3. Banque de France (2020), Monetary policy, [https://www.banquefrance.fr/politique\\_monetaire/presentation\\_de\\_la\\_politique\\_monetaire/definition\\_de\\_la\\_politique\\_monetaire](https://www.banquefrance.fr/politique_monetaire/presentation_de_la_politique_monetaire/definition_de_la_politique_monetaire).
4. Bcc.cd
5. Blancheton B. (2020), The autonomy of the central bank in economic sciences, pp.152153.
6. Desquilbet J.B., Villieu P. (1998), can the independence of the central bank be counterproductive?, *Economic Review*, vol. 49, n°6, pp.14151434, <https://www.cairn.info/revue-economique-1998-6-p-1415.htm>
7. Farvaque E. (2007), constitutional foundations of the independence of central banks, *Revue d'économie financier*, n°87, pp. 225-239, <https://www.jstor.org/stable/42904418>
8. Gerdesmeier D. (2009), Why is price stability important to you?, European Central Bank.
9. Hubert KEMPF and Marc LANTERI, The governance of central banks in emerging and developing countries: the case of sub-Saharan Africa, *Bulletin of the Banque de France*, No. 171, March 2008.
10. Official Journal of the Democratic Republic of Congo (2018), Organic Law No. 18/027 relating to the organization and operation of the Central Bank of Congo (December 13, 2018).
11. Official Journal of the Democratic Republic of Congo (2002), Article 3 of Law No. 005/2002 relating to the constitution, organization and functioning of the Central Bank of Congo (May 7, 2002)
12. Larcheveque F., Testenoire J.P. (2005), the challenges of the independence of central banks, *economics and management*, n°114, pp.3647.
13. McCallum (B. T.) (1996), "Two fallacies concerning Central bank independence", *American Economic Review, Papers and Proceedings*, vol. 85, p. 207211.

14. Noyer C. (1992), the independence of central banks, *Revue d' économique financier*, n°22, pp. 1318, <https://www.jstor.org/stable/42903013>
15. Patat J.P. (1992), Some remarks on the question of the independence of the central bank, in *journal of financial economics*, n°22, pp. 56.
16. Patat J.P. (1992), Content and criteria for the independence of central banks, in *Revue d' économique financier*, n°22, pp.19-30
17. Rogoff, K., (1985) "The optimal degree of commitment to an intermediate monetary target", *Quarterly Journal of Economics*, vol. 100, November.
18. Annual reports of the Central Bank of Congo from 2002 to 2020.

© GSJ