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Impact of monetary policy of the Central Bank on the inflation rate in the Democratic Republic of Congo: Instruments, implementation and results

INTRODUCTION

The willingness of the Government to translate into acts its economic decisions, the revival of confidence manifested in its internal and external partners are assets for the economic future of the DRC. In the context of the poverty reduction strategies, the maintenance and the satisfactory implementation of macroeconomic policies aimed at controlling the rate of inflation for general stability prices prove indispensable. This situation would allow the creation of conditions conducive to the revival of economic activity. The classic schema representing the law of supply and demand that Ensign MISHKIN is that when demand increases prices go up, and when she cut the prices make as much. It is this concept that is based the action of central banks. According to economic science, inflation comes from an excess of liquidity. In other words, the volume of currency in circulation is much greater than the volume of goods and services. It is that if currency in circulation increases, individuals increase their demand for goods and services. If this demand is not an increase in production by, prices rise. Then, central banks can influence the rate of inflation by changing the rate of growth of the money supply by using their instruments of monetary policy. The Central Bank of a country is an institution by the State to decide to apply the monetary policy. She played all or part of the following three roles:

- ensure the issuance of fiduciary money and contribute to the fixing of interest rates;

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- Supervise the operation of the financial markets, ensure compliance with the regulations by financial institutions;
- The role of banker as a last resort in case of systemic crisis.

The current statutes of the central banks prioritize the missions of these institutions with a mandate clearly focused on the stability of the prices rather on economic growth which was previously essential». Indeed, the instability of prices is a source of uncertainty, distorts the economic decision-making process and impedes economic growth. However, very often, this instability results from inflation which can be defined as a «persistent price generally expressed by the price index for consumption, on the understanding that this index measures the change in the cost of a basket of goods and services, including housing, electricity, food and transport increase». The Central banks may seek to achieve the objective of price stability using several instruments, which allow to vary the money supply in circulation in the country and the cost of the credits granted to individuals and businesses. The main instrument is the fixing of interest rates.

They can also use the setting of the levels of minimum reserves, the open-market (purchase and sale of Treasury bills) operations to achieve a target of interest rates in the short term or directly set the discount rate (rate at which the Central Bank lends to commercial banks). Interventions on the foreign exchange markets are also one of the instruments among others. When central banks sell (i.e. when individuals buy, for example, Treasury bills), decreases the supply of money in the economy and interest rates increase. A rising interest reduced demand (mainly of housing, goods consumer durables and capital goods) and, in principle, inflation. The amendment of the interest rate is the primary means of a Central Bank to influence the economy. In this perspective, the Central Bank of Congo plays this role in monetary terms with as background research of national prosperity. The Act No. 005/2002 07 May 2002 relative to the constitution, the Organization and the functioning of the Central Bank of the Congo clarifies and expands the mission of the Bank giving him independence and appropriate legal means. This independence is located specifically in the definition and implementation of monetary policy. It is quite limited in his duties as cashier of the State. The Central Bank of Congo has five main tasks namely: the custody of public funds, the backup and monetary stability, the definition and implementation of monetary policy, the control of all banking activity. It is the economic and financial Government Council. Backup and monetary stability are the result of monetary policy and Exchange which are the means used by the Central Bank of the Congo to preserve the value internal and external of the national currency the "Congolese Frank" (CDF). Monetary policy seeks stability in the general level of prices and the Exchange seeks to preserve the value of the national currency against foreign currencies in the context of liberalization of trade. The Central Bank of Congo mission is also to the custody of the funds of the State. Cashier of the State it serves by this fact. It receives and retains its premises funds con-

stituting the Public Treasury. In this case, its independence is quite limited because the Bank may incur an expense without a decision by the Government, under the Ministry of the budget and authorised by the Ministry of finance. For questions of transparency, Act 2002 prescribed the transmission of reports of Auditors accounts to the Government. She also directs the annual publication of the audited accounts of the Central Bank of Congo in the Official Journal. In the control of banking activities, the Bank is developing laws and instructions applicable to banks, cooperatives of savings and credit, the credit institutions, and other financial intermediaries operating on Congolese territory. It has within it a direction of surveillance of financial intermediaries for better monitoring of their banking activities. Furthermore, the law of 2002 sets up three bodies and specifies the procedure for the designation of facilitators of the latter. These organs are the Council of the Bank, the Governor and the college of the Auditors. They are appointed by the President of the Republic for a term of five years, renewable once for Governor, four years renewable once for Governor, and of three years renewable for other members. The objectives of monetary policy, to control the monetary base. This monetary emission and financial circulation are key variables in the evolution of prices and the exchange rate. The central bank of Congo (CBC) is by monitoring the amount of currency in circulation by implementing monetary policies and Exchange. Where the interest to know how the Central Bank of Congo behaved in the definition and implementation of monetary policy in recent years. What were the instruments and their impact on economic life? What was the inflation rate during these periods. At the sight of all the crises experienced by the Democratic Republic of Congo, how the central bank of Congo as the institute of emission and body of definition and implementation of monetary policy, was able to evolve and cope with this. How is this bank gets to work despite the unstable political climate in the country. So the study is divided into two points. The first point is an analysis of the legal basis of the macroeconomic framework of the central bank of Congo (CBC), and the second deals with interventions in the control of Monetary liquidity.

THE LEGAL BASIS OF MACROECONOMIC FRAMEWORK: SKILLS OF THE CBC

The Bank is responsible to define and implement the monetary policy of the country whose main objective is to ensure stability in the general level of prices. It acts independently in the achievement of this goal by supporting the Government's economic policy. To do this, the central bank of Congo (CBC) uses various instruments whose purpose is to ensure a level of sufficient liquidity in the national economy. These instruments are short-term and long-term refinancing procedures. Moreover, CBC limits the power of money creation by commercial

banks by imposing a reasonable level of minimum reserves. By implementing these monetary policy operations, the CCO acts as a suction pump and air blower in the words of PATAT. Monetary policy operations are thus intended either to put at the disposal of the economy of liquidity that it needs, or to absorb an additional liquidity, source of inflation. Examine the powers of the Central Bank monetary policy (1) and the Exchange (2). There are two types of monetary policy operation. This is one side of the operations aimed at refinancing of the national economy and, on the other side, those designed to drain liquidity. The refinancing operations are governed by the provisions of instruction n° 4 to May 27, 2009 banks enacted by the central bank of Congo (CBC). This text establishes counterparties, eligible assets as collateral and the terms of refinancing. It follows from the provisions of articles 10 and 14 of the statement above mentioned that counterparties eligible to the refinancing operations are only commercial banks. In accordance with the provisions of article 8 of the law No. 005/2002 may 07, 2002, CBC requires guarantees to banks that occur at its counters. Article 2 of instruction n° 4 provides that the refinancing of banks to the Central Bank is conditional on the pledge of the effects of the Government securities or private of good quality [Kalumvueziko Ngimbi, 2013, pp.181-189]. This quality is attested by several elements. If in securities issued by the Treasury signatory suffit¹³, private tracks quality must meet certain requirements. It is planned two terms of refinancing of banks, namely: short-term loans which consist in operations for the temporary transfer of Congolese francs by the Central bank of Congo to commercial banks with a maturity of seven days maximum, renewable at the discretion of the Central Bank of Congo and standing facilities allocated to commercial banks to cover notably their debtor position at the end of day at the clearing house [Kudinga Benoît, 2006, pp. 71-73]. This is an assignment of intra-journalese liquidity: money is lent on the day agenda for greater than 24 hours maturity taking into account the non-working days. The interest rate of these two operations are not identical. Operations at the counter of short-term loan will occur at the rate of CBC. While operations at the counter of standing facilities at the premium rate. Furthermore, the interests relating to short-term loan operations are discounted and interest relating to standing facilities operations are collected in arrears [Van Reybrouck David, 2012, pp. 701-703]. The interest of distinction between the two schemes is as follows: the standing facilities are intended to provide liquidity to the day the day indicate the general orientation of monetary policy and supervise the market on the day rates the day. On the other hand, temporary transfers play a role in steering interest rates, managing the liquidity and to indicate the orientation of monetary policy. To control the level of liquidity, the Central Bank of Congo uses cash tickets or reserve requirements. The cash ticket (BTR) is governed by instruction n° 20 banks from September 12, 2008. He defines himself as "a title of short-term debt issued by the Central Bank and negotiable OTC on the secondary market. It is an instru-

ment used by the Central Bank of Congo to its refinancing in case of decrease or increase the volume of the monetary base. It consists of operations of loans or deposits granted to banks under liquidity. The amount of the subscription is the amount transferred by Central Bank of Congo, for its own account or on behalf of third parties. The amount fixed by the Central Bank of Congo is the minimum to which commercial banks and other financial intermediaries must subscribe [Faustin K., 2008, pp.76-77]. The interest rate is one that is retained on each submission. This rate is annual, basis of 360 days, to two decimal places and applies to the maturity of subscription. After calculation, the amount of the interest rate must stop at two digits after the decimal point. The amount of reimbursement is the value of the Plus subscription of interest. The maturity of the BTR is 7, 14 or 28 days from the date of the subscription. Banks and other agents who subscribe to notices of invitations to tender launched by the Central Bank of Congo have the option to repay in the 7, 14 and 28 days following their subscriptions and it is in this period that the Bank can focus on results. The interest generated by subscribing to the BTR are exempt from taxes. Withdrawals of liquidity through the BTR are normally carried out by way of calls for tender [Carare A., Stone M., 2004, pp. 74-75]. Calls for tender procedures have six operational steps: the announcement of the tender, the preparation and submission of tenders by the against parties, collection of tenders, tender and announcement of the results, the notification of the individual results of the invitation to tender and the settlement of transactions. The Central Bank of Congo distinguishes between two different types of tender procedures: standard tenders and quick tenders. The two procedures are identical except with regard to their chronology and field parties against. For standard tenders, a maximum of 24 hours elapses between the announcement of the call for tenders and the notification of the outcome of the invitation to tender (the period of time between the time limit for the submission and the announcement of the result is approximately two hours for quick tenders). Instruction n° 10 October 26, 2009 banks fixed coefficient of minimum reserves. According to this text, the banks are required to establish mandatory reserves in the books of the Central Bank of Congo [Van Reybrouck David, 2012, pp.684-686]. The base and the compulsory reserve coefficient is as follows: the compulsory reserve consists of assets in local currency of banks in unavailable account with the Central Bank of Congo. Banks that do not meet the requirement of a constitution of mandatory reserve are sanctioned a penalty equal to the interest rates on the standing facilities increased by half sitting on the amount of the insufficiency of the mandatory reserve for the corresponding period [Moutot Philippe, 2008, pp.71 - 72]. By monetary policy, the Central Bank of Congo ensures stability in the general level of prices, the safeguarding of the internal value of the currency. It balances the demand and supply of the currency by controlling liquidity, source of inflation. But this is not enough for monetary stability. We must also control the level of transactions

currency for a backup of the external value of the currency. Under a floating exchange regime, the national currency circulates concomitantly with foreign currencies. Prevention consists for the Central Bank of Congo to gather the maximum information possible on foreign exchange transactions. When foreign exchange rates are a significant fluctuation upwards, the Central Bank of Congo should intervene on the foreign exchange market to correct the balance. Look firstly at the supervision of foreign exchange transactions (1) and, secondly, interventions of the Central Bank of Congo on the foreign exchange market (2). Since May 27, 2001, Strengthen the Interim Program (SIP) and the economic program of the Government helped stabilize the Congolese franc by removing the fixed exchange rate to adopt floating exchange rate. There was a reduction in the gap between the (official) indicative rate and the parallel rate. Foreign exchange transactions are transactions between residents and non-residents involving the use of foreign currency as transaction currency or unit of account [Luwansangu Paul, 2005, p.53]. Pursuant to the provisions of the regulation of exchange of the Central Bank of Congo, these operations are subject to prior statements. The system applied by it is decentralized so that economic operators are making their statement from commercial banks. Then, these banks validate exchange documents and shall, where appropriate, to the repatriation of revenues in foreign currency by the operator. The main role of the exchange rate policy is to prevent or fight against transitory shocks by ceasing the fluctuations of the exchange rate and in preserving the appropriate level of international reserves. There are however transactions subject to a prior authorization or to the approval of the Central Bank of Congo. It is the export or import of banknotes denominated in foreign currencies and the opening of bureaux de change. The Forex market is organized in the Democratic Republic of Congo by an agreement between commercial banks and the Central Bank of Congo [Bayard J., 2006, pp. 113-114]. It should however have a broad acceptance of the Exchange as being the supply and demand of currencies at any given time. This offer and demand influence the course of exchange of foreign currencies against the national currency and sum the Central Bank of Congo (CBC) to intervene when fluctuations are important. To do this CBC conducts the award of foreign currencies. It launches calls for tender on purchases or sales of currencies to balance the demand and supply of the national currency alongside foreign currencies. At this point, exchange rate policy aims to minimize the gaps between the indicative exchange rate and the parallel exchange rate. To enable the Central Bank of Congo to intervene on the foreign exchange market, the State has put its disposal of foreign currency reserves that the institution must grow [Kabuya Kalala F. and Matata Ponyo M., 2002, p.73]. When these reserves are insufficient, the Congolese State can exercise its right of drawing on the International Monetary Fund or solicit financial support from this institution. This situation is often recurrent in the DRC given the weakness of foreign exchange reserves estimated

at a million U.S. dollars and the frequency of the exchange rate fluctuation in the balance of payments crises. At this level, it is important to consider the intervention of the Central Bank of Congo through its various instruments in the Congolese economy and see their effectiveness. Otherwise, consider some possible solutions for better growth and economic stability. The Bank of Issue has two operational objectives: the rate of the interbank market and the monetary base. These are the objectives that the monetary authorities to effectively control the money supply. Having determined or set a number of goals (ultimate, intermediate and operational), the monetary authorities (Central Bank and Treasury) proceed by establishing the means that enable them to achieve the objectives. These are the ways we describe as an instrument of monetary policy. Thus, we will attempt to examine the various instruments of monetary policy in the following points. The Open Market transactions are transactions of sale and purchase of securities in the money market by the monetary authorities [Van Reybrouck David, 2012, pp. 711-712]. They act on both the amount of liquidity in circulation and the amount of securities held in the portfolio of the Central Bank. By rediscounting, banks borrow cash directly to the Central Bank through private securities they have in the portfolio. These securities are representative of credit to the economy. The refinancing rate of these securities is fixed in advance. The refinancing rate of commercial banks with the Central Bank in the euro area constitutes the main rate is - to - say, the main rates set by the ECB (European Central Bank) that will guide all rates market. In general, this instrument is characterized by the use of two instruments, namely, the selectivity of credit and credit restrictions. The credit selectivity seeks to control not the quantity, but the orientation of bank loans in the direction desired by the State through against credit control is the limitation determined by regulation of credit outstanding growth rates distributed by banks, taking the previous year as base [Ngimbi Kalumvueziko, 2013, pp.188-189]. 8 This is the volume of credits granted is capped.

Table 1. Summary of objectives and instruments of monetary policy

Instruments	operational objectives	intermediate objectives	final Objectives
Open Market Policy	Interbank market rates	Rate of short-term interest	Price
rediscounting	Exogenous monetary base	Rate of long-term interest	Activity Level
reserve requirements	–	Credit aggregates	Employment
Credit controls	–	Monetary aggregate (M_1, M_2, M_3)	External balance.
Direct control of interest rates	–	Exchange rate	–
Exchange control	–	–	–

Source: Consumer price index of the IRES and annual reports for the 1998 to 2009 BCC.

When the market does not spontaneously balances the voltage coming fast enough government to control the foreign exchange operations. This control can be up to submit to the administrative authorization for any purchase or sale of foreign currency. The monetary policy through instruments intermediate objectives that achieve the final objectives. The table below n°1 summarizes these categories.

INTERVENTIONS OF THE BCC IN THE CONTROL OF THE MONETARY BASE

To avoid inflation, the Central Bank of Congo shall ensure the monetary base which consists of currency in circulation (main component approximately 65% of the money supply), commercial bank deposits and other deposits (deposits in non-bank financial institutions). It also monitors the evolution of the supply of the national currency against foreign currencies [Van Reybrouck David, 2012, pp. 711-712]. It acts by injecting or reducing the liquidity of the currency on the foreign exchange market. Thus the study of the action of the Central Bank of Congo (CBC) in relation to the control of inflation-related instruments will be based on cash tickets (BTR) award and the preservation of purchasing power (1) on the one hand, and the management of liquidity and prospects on the other hand (2). The review covers the period from 2007 to 2010. In addition, an evaluation of the interventions of the Central Bank of Congo demonstrates the rate and the level of inflation, and the level of withdrawals made on liquidity through the sale of commercial paper for a better outcome, and to consider solutions to the preservation of the purchasing power of the national currency [Bayard J., 2006, pp. 111-112]. Among the three instruments in the provision of a Central Bank of Congo, the cash ticket (BTR) allows to regulate liquidity in the very short term and respond particularly to permanent shocks on bank liquidity. It is for this reason that there are interested in this study. It is an instrument that the Central Bank of Congo often used over others because it has the advantage of short and long term. It facilitates the fight against one-off shocks. It was during these years that the Central Bank of Congo has heavily used this instrument. A comparison is made between the evolution of the monetary base and the volume of the stock of the BTR. Which leads to examine fluctuations in the rate of inflation to bring out the effects of the monetary policy conducted by the Central Bank of Congo by the BTR award which is the sale of the Bills to commercial banks to increase or decrease the volume of the monetary base. The monetary base, formed mainly from the currency, must not be insufficient to consumption. It means that the consumer of the currency should have enough to procure goods and services that it needs. In the case of decrease in the monetary base, domestic prices will tend to increase [Bakandeja wa Mesa, 2002, pp. 2-3 Which would be a source of inflation. In this case, the consumer will lose confidence in the cur-

rency (national currency). Exchange rate policy that the Central Bank of Congo is assigned has two main objectives: smooth fluctuations of exchange rates and improve the level of international reserves. This is to safeguard the purchasing power of the national currency, framing his behaviour against other foreign currencies by injecting or puncturing on liquidity. In 2007, monetary policy implementation was prudent and restrictive due to the maintenance of real interest rates (interest rate). These rates are payable when they are used to remunerate the BTR. The Central Bank of Congo has changed these rates four times this year. This rate increased from 40 to 50% in February; He came back to 40% in April from 30% in May to finally settle at 22.5 per cent in July. This rate has remained unchanged until the end of the year. The BTR subscriptions amounted to CDF 461 billion at December 31. The liquidity of the instrument puncture was 151.1%. He went from CDF 388.4 billion in January to reach 461.1 in December. The annual inflation rate of 9.9%, it has undergone five phases of inflation which the stronger in January and February (respectively), and August (10.0), which also remained so until the end of the year. Inflationary periods resulting from the increase in the price of fuel and food products resulting in an increase of the price of transport. The national currency it will be strongly depreciated at the beginning of the year. A situation that draws its sources in preference of economic agents to hold currencies against the national currency [Malingumu Syosyo, 2008, pp. 67-68]. The strategy of the Central Bank of Congo was to extend and deepen foreign exchange markets by the acceptance of the CDF to payment by mine operators, taxes and fees. The intervention of the Central Bank of Congo on the market is 5.6% after currency purchases, carried out by it, amounting to us \$ 66.9 million. It was also the only intervention of the year. The following year, 2008, CBC has not changed the objectives and instruments of monetary policy. This year has experienced four stages of inflation. Of monetary origin, the rate of inflation from January to March went increasing. This boost is rooted in the Monetary financing of budget deficit by the end of 2007 and the resumption of hostilities in the East of the country. The Central Bank of Congo as cashier of the State and responsible for the implementation of monetary policy, had to act to avoid an increase in the formation of domestic prices [Malingumu Syosyo, January 22, 2008, pp. 131-132]. The food and fuel crisis has caused overheating of prices for finished products during the months of March to July. On the international market, the price of a barrel rose from 147 USD in July for 65.3 USD in October, thus inducing a reduction in petroleum products downward. From October to December, a loosening in monetary and budgetary policy caused by security costs following the resumption of armed conflict in the East of the country, a resurfaces inflationary pressures where currency depreciation marked by a strong dollarization of the market in 2008. The key rate will thus undergo 3 adjustments [Munsala Buakasa, January 28, 2008, pp. 34-35]. In January (24.6%), June (30%) and December (40%). The annual

inflation rate was 27.5 per cent. The award of the BTR amounted 1.444,0 billion of CDF. An increase of 165% because that needed a deal to offset the budgetary shock effects and inflation by the costs due to the rise in prices on the map international.²⁷ following the resumption of armed conflict in the East of the country, situation that require availability of the financial means, CBC could not intervene on exchange rate fluctuations to try to influence the liquidity. The foreign exchange market moderated only by banks and bureaux de change. The exceedances of the budgetary targets in 2008 led to a monetary situation marked by tensions in relation to liquidity in 2009. Monetary policy has been restrictive to deal with pressures on liquidity and the general level of prices. Rate has been increased from 40 to 55 and 65% in January, for a last reform in the month of October. The regulation of liquidity carried out in February, mainly by the BTR (CDF 2.395,7 billion) tender operations has maintained stable rates until July. In response to the expansion of bank liquidity, to inflationary pressures, induced by the deterioration of the financial situation of the public sector, and also and above all to the international financial crisis, CBC made a further tightening of its policy to fix the rate of inflation to 53.4% and the rate to 70% towards the end of the year[Bakandeja wa Mpungu, 2002, pp. 3-5]. To strengthen monetary policy action, the Central Bank of Congo resorted to the Exchange via transfers of currency policy. The lagged effects of the budgetary deficit and the financial crisis have caused a strong depreciation of the national currency in the first quarter. The Central Bank of Congo intervened by sales of currency to improve the rate of Exchange on the market. About 48 million USD sold in the second quarter. Another sale by tender intervened in June without preventing a depreciation due to the reappearance of budget deficits. 2008 budget overruns caused by excessive government spending to try to tackle conflicts in the East of the country, have influenced the economy[Munsala Buakasa, 2008, p. 102]. The Central Bank of Congo was unable to control the inflationary shocks despite all its interventions. The formation of domestic prices went growing throughout the year. One last puncture in December will lead to a slowdown in the pace of expansion of liquidity. The year 2010 is still characterized by a deflationary trend. The rate was gradually readjusted to 22% at the end of December. The rate of inflation is located at 9.8% on a monetary basis growing by 29.6%. The volume of the BTR reached 3.512,1 billion of CDF. On purchases of \$ 1.159,8 million and sales of 1.053,9 million USD, the Central Bank of Congo intervened by an assignment of 10.0 million USD in January and \$ 157.0 million between March and August purchases to combat tensions on the market after the year-end festivities. The beginning and the end of the year have experienced depreciation while the year was stable. Then he raises the question of why the Central Bank of Congo comes t - not cope with shocks, endogenous and exogenous which are the source of inflation. The Central Bank of Congo has a cockpit frame that allows it to have time useful indications on the evolution of its essential benchmarks for the con-

duct of monetary policy and the regular monitoring of the situation [Faustin K., March 8, 2008, p. 49]. It aims to increase awareness of the channels of monetary policy transmission, the nature of the shocks and their impact on the different objectives as well as adjustments in the handling of the appropriate instruments to locate and preserve the stability of prices. There is an undeniable relationship between the currency, price and interest. The supply and demand of the currency jointly determine the level of the price changes reflected by the rate of inflation, which in turn influence the normal interest rate. During the period under review, the achievements of the monetary base were scalable, even the behaviour of monetary and fiscal policy instruments. Inflation rates are highly variable in their sources to endogenous and exogenous shocks. The known fluctuations are remarkable in January and September. The major causes were the lagged effects of the budget deficit, armed conflict, the financial crisis and international economic, the increase in international prices. As if to say the same causes always produce the same effects [Ballie R. et McMahon P., 1997, p.19]. The intervention of the central bank of Congo through its instruments is considered low and sometimes non-existent (2008). With its cockpit framework, the Central Bank of Congo may well to study the causes of the shocks received on the liquidity and act on prevention, rather than suffer the effects of known causes and which are capable of correction for better efficiency of monetary policies conducted by it. The role of monetary factors including the stock of the BTR has been overlooked at the beginning of its launch (2007), but after experimenting with the advantages on the regulation of liquidity, the Central Bank of Congo a raise economic agents, especially banks, in the use of this instrument. Purchases and sales of currencies must act in prevention and not correction. Prevention is better. It is to intervene before feeling the effects of the increase in demand [Ngimbi Kalumvueziko, 2013, p.167-169]. The congolese economic policy had to deal with permanent liquidity shocks related to the deficit of the public sector. This situation has returned during the entire period in study, and the differences between September and November, to join the year-end festivities that cause a constant inflation. The budget deficits caused by the Government's spending cause a decrease in the amount of currency in circulation. The Central Bank of Congo, discharging the functions of the State cashier, spends more than it collects. This situation creates shocks which resulted in excess of the means of payment in the economy and disruptions in key markets. In this context, the Central Bank of Congo hardens its monetary policy with the rate increase and the maintenance of the coefficient of minimum reserves to mitigate the expansion of the monetary base [MANGANO G., pp. 43-44]. The exchange rate policy softens more without having the effect of safeguard the purchasing power of the national currency. Economic agents and residents prefer to tie their currency transactions in local currency that depreciates out of sight. Savings and cash are settled in foreign currencies despite the Central Bank of Congo strategies to

encourage the use of the currency national and his timely intervention on the foreign exchange market, considered also as ineffective intervention. It can be concluded that from 2001, a reversal of the trend occurred in the evolution of the money supply growth rate; this change has led to control the inflation rate which increased from four to three, and two-digit figure; therefore the Congolese economy to find the path of stability as information below. Table 2: GDP growth (in%), inflation and money supply from 1998 to 2009. Apart from the negative trend of the year's 1998, 1999, 2000 and 2001, as a GDP is rising continuously from 1.7% in 1998 to 5.7% in 2003, 6.6% in 2004, 7.8% in 2005, 6.3% in 2007, 6.2% in 2008 and 2.8% in 2009. In the same table we see that the money supply after the implementation of Strengthen the Interim Program (SIP) and has PEG not follow the path as it was the case of the period before these programs. As for inflation, in view of this table we see that the Democratic Republic of Congo, the inflation rate rose from its phase of hyperinflation slow inflation. Indeed, in 1998 and 1999 the inflation rate was 134.8% and 483.1%, respectively and 26% and 53% for 2008 and 2009. Therefore, we can say that the Congolese economy has recorded many against performance during the study period, any time, the change in regard to changes in the inflation rate since 2000 until 2004 has brought positive results.

Table 2. Evolution of the money supply, the official exchange rate and price indices consumption 1998-2009

Years	Money supply in thousands of CDF	Official exchange rate	General index of consumer prices
1998	845,1	1,45%	5.153,6
1999	3.915,3	15%	12.135,2
2000	23.558,3	21,82%	78.899,2
2001	71.143,7	206,62%	360.791,83
2002	98.832,9	346,48%	451.980,94
2003	130.118,7	405,00%	509.231,61
2004	222.118,7	398,30%	538.952,25
2005	277.111,5	476,78%	645.072,50
2006	439.911,1	468,05%	888.422,83
2007	658,8	508,63%	851.110,72
2008	1.041,4	639,3%	1.003.197,50
2009	1.543,1	900%	1.466.886,86

Source: Consumer price index of the IRES and annual reports for the 1998 to 2009 CBC.

The sample size in terms of year is small, we use monthly data were extracted from the annual reports of the 2004-2009 Central Bank of Congo (CBC) as well as the various issues of the digest of the Central Bank of Congo (CBC) statistical information. these data leave from June 2004 to June 2009. The empirical analysis shows that after tackle and deal with general theories and practical

aspects of monetary policy on the general price level in the DRC; it was useful to verify empirically our most basic assumptions for the years 1998 to 2009 that is to say, after the fall of the Mobutu regime. The processing of data in the table above says that the variables considered in this study are: the official exchange rate, since this rate reflects the reality of the Congolese economy; the money supply and the indices of consumer prices. Thus, the listing to uncertainty has been selected for the official exchange rate, resulting in the number of Congolese franc unit for currency unit. Regarding inflation is the general price index on the market was considered since it is the average price. As for the money, we will focus on the money supply in the broad sense is to say M2. The application of the causality tests for checking the direction of the relationship between the money supply, price index and exchange rate shows that the theoretical level, "the identification of causal relationships between economic variables provided auspicious thoughts for a better understanding of economic phenomena "[Benedict Kudinga, 2005, p.276]. In practice, the causal relationship is necessary for the best formulation of economic policy. To this end, we will use the test as casual Granger since it allows the addition of any correlation between economic variables (money supply, price index and exchange rates); whether or not monetary policy had influenced the price index and the exchange rate. So causality Granger (1969) proposed the concept of causality to show how the money supply variable can influence prices and exchange rates; that is to say the money supply is the cause of prices and exchange rates; or we can say that the money supply significantly explains the varying prices and exchange rates [Bakandeja wa Mpungu, 2009, pp.76-77].

In practice, the Fisher test is used to check Granger causality, and this test is as follows:

- 1^{er} cas : H_0 : the money supply does not explain the price
 H_1 : money supply explains the price
- 2^{ieme} cas : H_0 : the money supply does not explain the exchange rate
 H_1 : the money supply explains the exchange rate

To admit that a variable cause (explained) another, he fucks the calculated Fisher variable (F_c) is greater than the value of the Fisher table (F_t); or the value of the probability was less than 0.05, or 5%, that is to say $F_c > F_t$ and in this case the null hypothesis (H_0) is rejected. And otherwise, it is to say $F_c < F_t$, we reject the hypothesis H_1 . The specification of the econometric model says to better demonstrate the relationship between the three variables, the sequence was divided into two parts: Money-price mass-monetary exchange rate mass. For the first model is specified as follows:

$$LIPC = a_0 + a_1 LM2 + \hat{a}_i$$

where:

LIPC : general index of consumer prices;

LM2 : money mass

a_0 et a_1 : the parameters; and

\hat{a}_i : error term or random variable.

At the second, the model is specified as follows:

$$LT_x = a_0 + a_1 LM_2 + \hat{a}_i$$

Where :

LT_x : exchange rate;

LM_2 : money mass

a_0 et a_1 : the parameters; and

\hat{a}_i : or random error term variable

The results of the price monetary – mass model after applying the ordinary least squares, the results obtained with Eviews (see Appendices Table 2) is as follows:

$$LIPC = 2,062746 + 1,049462 LM_2$$

$$t(3,647491) (32,93743)$$

$$R^2 = 0,837416 \quad DW = 1,2375536 \quad F = 673,8423$$

While the model results monetary-mass exchange rate after application of the <5% ordinary least squares, the results obtained with Eviews is as follows:

$$LT_x = 1,251893 + 0,251359 LM_2$$

$$t(3,647491) (32,93743)$$

$$R^2 = 0,762366 \quad DW = 1,779755 \quad F = 189,2811$$

The interpretation of the first relationship (money - prize) shows that we get a good overall model overall ($F > 5\%$), all the coefficients are significant (Prob Fischer calculated statistic is greater than that of the table ($673.8423 > 0.05$); the coefficient of determination $R^2 = 0.837416$ is acceptable and the DW statistic is around 2, which explains the absence of errors of autocorrelation. Regarding relationship variables, analysis of the results shows that the correlation money-price is positive, or 83% of the rise in the general price level is explained by the change in the money supply. The interpretation of the first relationship (money - prize) shows that we get a good overall model overall ($F > 5\%$), all the coefficients are significant (Prob <5%). Fischer calculated statistic is greater than that of the table ($189.2811 > 0.05$); the coefficient of determination $R^2 = 0.762366$ is acceptable and the DW statistic is around 2, which explains the absence of errors of autocorrelation. Regarding relationship variables, analysis of the results shows that the correlation money-Exchange rate is positive, the change in the exchange rate is 76% explained by the change in the money supply. The interpretation of the first relationship (money-prize) shows that we get a good overall model overall ($F > 5\%$), all the coefficients are significant (Prob <5%). Fischer calculated statistic is greater than that of the table ($673.8423 > 0.05$); the coefficient of determination $R^2 = 0.837416$ is acceptable and the DW statistic is around 2, which explains the absence of errors of autocorrelation. Regarding relationship variables, analysis of the results shows that the correlation money-

price is positive, or 83% of the rise in the general price level is explained by the change in the money supply. So we established the relationship of cause and effect between the monetary policy of the Central Bank of Congo and other economic variables; namely the general price index and the exchange rate. Indeed, after the calculation we find that the monetary policy of the Central Bank of Congo (CBC) has not achieved its goal of stabilizing the price, or 83% of the increase general price level is explained by poor monetary policy during the Central Bank of Congo (CBC) study period.

CONCLUSION

The Central Bank of Congo (CBC) interventions have a remarkable advanced but their effects on the different areas of action are not visible. Exchange rates fluctuate according to usual transitory shocks, who reinforce the convictions of economic operators on the confidence granted to the national currency. This causes a national currency liquidity involving an increase in the demand for currencies which causes inflation. A lack of restrictive fiscal policy stifles the effects of a good monetary policy. The advantage of ensuring its independence not subordinating its action to the reaction of fiscal policy to act as prevention against shocks that can come of it. It also has the advantage of giving signals to markets by reassuring economic agents on the ability and willingness of the Monetary Authority to remedy the situation. It allows also to establish responsibility by separating those budgetary monetary initiatives. Consequently, monetary policy can be implemented, at least in the short term, in any budgetary slip-page from the time that the Monetary Authority has the free choice of its instruments. Our work has focused on "the impact of monetary policy on the general level of prices in the Democratic Republic of the Congo from 1998 to 2009". He had for objective the study of the relationship between the monetary policy of the Central Bank of Congo and the general level of prices which is regarded as the priority of the authorities monetary (Central Bank and Treasury) to achieve our problem of research focused on the following questions:

- What was the impact of the monetary policy of the Central Bank of Congo on the general level of prices?
- The inoperability of monetary policy of CBC on the general level of prices follows he of the bad layout of the direct and indirect instruments of the inelasticity of supply of goods and services or the poor allocation of monetary resources?

Thus, we proposed the assumptions above - after:

- The monetary policy of the Central Bank of Congo is inefficiently on the general level of prices.

The inoperability of monetary policy on the general level of prices in the Democratic Republic of the Congo stems from the poor layout of the direct and indirect instruments (framework credits bad policy, lack of open market policy) to test these hypotheses, we have recourse to the functional and analytical methods. Both methods have been supplemented by the documentary technique; leading divided our work into three major chapters:

- in the first chapter we have reviewed different theoretical considerations on monetary policy and the general level of prices;
- in the second chapter we have made an overview on the monetary policy and the general level of prices in Democratic Republic of Congo, from 1998 to 2009; and
- the third chapter was devoted to the empirical analysis: testing of hypotheses of the bases.

After analysis and interpretation of results, it was observed that our hypotheses have been confirmed. In fact, we left the assumption that the monetary policy of the CBC is inefficiently on the general level of prices; the results of a calculation to Reviews shows that the monetary policy of the Central Bank of Congo has a negative impact on the general level of prices, or 83% of the cover of the general level of prices is explained by the monetary policy wrong of the Central Bank of Congo during the period under study. Therefore the failure of monetary policy in the Democratic Republic of Congo to stabilize prices creates the controversy over the question of his Manager. One can say that the true head of the failure of monetary policy rests with the Monetary Authority which is the Central Bank of Congo under section 1 articles of Central Bank which enshrines his autonomy; others however attributed this failure to the public power in is referring to article two of the statutes of the Central Bank which requires monetary policy to register as part of the Government's economic policy. With regard to the clarification above, it appears that the ineffectiveness of monetary policy in the Democratic Republic of Congo responsibility for both the Government and the Monetary Authority (CBC) given its inability attested to resist pressure from the Government on the grant of advances for the budget deficit which is for the majority of cases, source of the widespread cover prices i.e. inflation. We have established the relation of cause and effect between the monetary policy of the CBC and other economic variables; namely the general price index and the exchange rate. Indeed, after the calculation we find that the monetary policy of the CBC has not achieved its goal of stabilizing the price, or 83% of the increase general price level is explained by poor monetary policy during the CBC study period.

Suggestions for the government of the DRC

We suggest that the government of the Democratic Republic of Congo, a fiscal discipline in the management of public finances to avoid any recourses (uses) to financing of the budget deficit by the advances of the BCC and the monetary

authority of the country which is the Central Bank of Congo (CBC), consistency and rationality in managing the instruments of monetary policy to fully achieve its final objective of price stability in the economy.

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Summary

The Democratic Republic of Congo, as mentioned here, covers an area of 345 2,410 square miles, has a population of 72 million men and women, sharing borders with nine other countries, and has huge natural resources which place it among the countries most potentially rich of the planet. At the time of the change of regime policy of 1997, the Congolese monetary system was tested by many failures, among them the multiplicity of monetary areas and exchange rates, the loss of confidence in the national currency due to the persistent values internal and external instability, excessive economy dollarization and the shortage of money in the banking system symbols. To deal with these shortcomings, the new Government of the Democratic Republic of Congo had decided from May 1997 onwards, to entrust the Central Bank mission to conduct a monetary reform including the change of the currency unit. This work examines the difficulties of monetary policy of the Democratic Republic of the Congo in the context of dollarization of the banking system and institutional weakness. An empirical analysis confirms that the Central Bank of the Congo is hardly able to curb inflation, despite a rapid responsiveness to inflationary shocks. In this context, monetary policy role is to provide the real sector the amount of currency required for the expansion of economic activities without causing inflationary or deflationary skid. However, in the context Congolese, the search for well-being through monetary policy poses problem having regard on the one hand, to the objectives assigned formally to the monetary policy to ensure the financing of the country's economic development and promote the stability of domestic prices as well as the maintenance of the balance of external payments, and on the other hand to the deterioration of the socio-economic situation of the Democratic Republic of Congo in recent years. Indeed, the results of monetary policy in terms of rate of inflation attest the inefficiency of the mechanisms of transmission of monetary policy on the real variables of the Congolese economy, notably the stability of prices.

Keywords: monetary policy, central bank of Congo, inflation rate, DRC, macroeconomics

Wpływ polityki pieniężnej banku centralnego na poziom inflacji w Demokratycznej Republice Konga: instrumenty, realizacja i wyniki

Streszczenie

Demokratyczna Republika Konga, o której mowa jest w artykule, zajmuje powierzchnię 2 345 410 kilometrów kwadratowych i obecnie zamieszkuje ją ponad 72 mln mieszkańców. Graniczy ona z dziewięcioma innymi krajami i posiada ogromne zasoby naturalne, które pozwalają na sklasyfikowanie jej wśród krajów potencjalnie najbardziej bogatych. W związku z powyższym nowy rząd Demokratycznej Republiki Konga postanowił od maja 1997 r. powierzyć misję reformy monetarnej, w tym zmiany jednostki walutowej bankowi centralnemu. Niniejsze opracowanie ma

na celu przeprowadzenie analizy problematycznych aspektów polityki pieniężnej Demokratycznej Republiki Konga w kontekście dolaryzacji systemu bankowego i słabości instytucjonalnych. Analiza empiryczna potwierdza, że Bank Centralny Kongo pomimo szybkiej reakcji na inflacyjne szoki w słabym stopniu ogranicza inflację. W tym kontekście rolą polityki pieniężnej jest zapewnienie realnej ilości waluty w sektorze wymaganej do rozwoju działalności gospodarczej bez powodowania miniinflacji czy też deflacji. Jednak w warunkach kongijskich, mając na względzie cele przypisane formalnie do polityki pieniężnej w celu zapewnienia finansowania rozwoju gospodarczego kraju i promowania stabilności cen krajowych, jak również utrzymanie równowagi płatniczej, podjęte działania w żaden sposób nie doprowadziły do poprawy sytuacji gospodarczej w kraju, wręcz przeciwnie nastąpiło pogłębienie kryzysu. Rzeczywiście wyniki polityki pieniężnej pod względem stopy inflacji potwierdzają nieefektywność mechanizmu transmisji polityki pieniężnej i brak stabilności cen.

Słowa kluczowe: polityka pieniężna, Bank Centralny DRK, stopa inflacji, DRK, makroekonomia

JEL: E44, H63, O23, O55