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Fading the effects of coronavirus with monetary policy

Alain K. Malata¹ et Christian P. Pinshi²

Abstract

The Central Bank of Congo (BCC) reduced the policy rate in response to the uncertain effects of the coronavirus. The impact of the pandemic on the economy is still uncertain and depends on many factors. Using the Bayesian technique of the VAR model we notice that cutting the policy rate would not help the economy to cope with the consequences of COVID-19, we should rethink other tactics and strategies, such as a good communication strategy and / or try unconventional monetary policy measures. However, coordination with fiscal policy is a driver key in blurring the effects of the coronavirus crisis³.

Keywords : Monetary policy, coronavirus, coordination

JEL Code : C32, E32, E44, E52, E63

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1. INTRODUCTION

On March 24, the BCC announced several measures to ease liquidity conditions by: (i) reducing the key rate by 150 basis points to 7.5%; (ii) eliminating compulsory reserves on demand deposits in local currency; and (iii) creating a new long-term guaranteed funding facility for commercial banks with a maximum duration of 24 months to support the provision of credit for the importation and production of food and other commodities. . In addition, the BCC has taken steps to reduce the risk of bank note contamination and to promote the use of electronic payments.

Before the COVID-19 crisis hit the country, the economy was in full recovery following the knock-on effects of the exogenous shock of the fall in commodity prices, electoral psychological tensions, and the health shock Ebola. It was important to plan for major revisions and reforms to strengthen the resilience of the national economy and its resilience to external shocks. However, when these strategies should be implemented, the great coronavirus crisis comes. This new shock has once again precipitated the country into exceptional moments requiring the postponement of the efforts undertaken and necessitating the adoption of new extraordinary measures. In addition, even if the health aspects of the shock are likely to last no more than a year or two, its economic consequences are sure to last much longer, forcing political decision-makers to develop a real anti-COVID-19 strategy over the medium and long term, going beyond ad hoc special decisions. The virus has pushed their political conception from a decade of exceptionality to a new period of necessarily abnormal strategic attitudes.

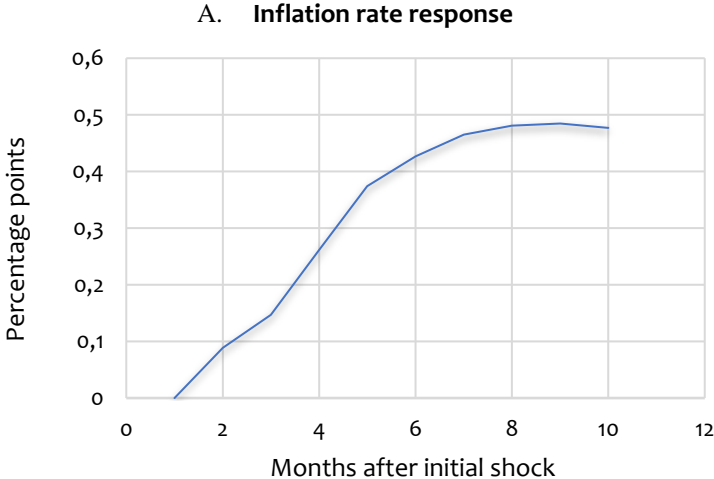
In the midst of significant uncertainty as to the line described by the pandemic and its impact on the world and Congolese economies, the data suggests that economic growth has declined considerably, reaching a negative figure of -2%, inflation has climbed to 11% and the value of the currency depreciated until 1950 Cdf / Usd. In addition, people sick from COVID-19 face mandatory shelter and social distancing policies that inevitably disrupt economic and commercial activity. These circumstances encourage households and businesses to spend less, especially on non-essential goods and services. The rapid spread of COVID-19 and the massive containment measures that policy and health officials have taken to combat it represent an unprecedented negative shock to global demand and supply (Christensen and al. 2020; Pinshi, 2020). The uncertainty effects of coronavirus shock are reducing demand enough and squeezing the economy as a whole. Upward pressure from the general price level, intensified by an acceleration of the resulting exchange rate depreciation, undermines the BCC's mandate. How do these disturbances spread through the economy and affect the exchange rate, inflation and economic growth (unemployment), and to what extent can monetary policy blur these effects?

2. INFLATION, EXCHANGE RATES AND ECONOMIC GROWTH : WHAT PASS-THROUGH EFFECT?

The pass-through of the coronavirus shock on economic growth, the exchange rate and inflation takes place through various channels, mainly through fear and uncertainty (Leduc and Liu, 2020; Baker and al. 2020; Dietrich and al. 2020; Barro and al. 2020), loss of confidence, pessimistic public expectations, great confinement, and so on.

Following previous (Leitemo and Soderstrom, 2001; Delle Chiaie, 2009; Bekaer and al. 2010; Leduc and Liu, 2012; Grigoli and al. 2015;) and very recent (Jordà and al. 2020; Leduc and Liu, 2020) ; Curdia, 2020; Baker and al. 2020), we use a Bayesian autoregressive vector econometric framework to isolate the effects of monetary policy on inflation, the output gap and the exchange rate, taking into account the uncertainty of the coronavirus⁴. We estimate the model using the monthly series from January 2012 to April 2020. From a theoretical point of view, we have argued that the uncertain effect of the coronavirus tends to lower economic growth, to increase the rate of inflation (especially in emerging markets and underdeveloped economies⁵) and to depreciate the value of the currency. In addition, the interest rate pass-through does not have a sufficient positive effect on inflation, the output gap and the exchange rate following the uncertain effects of the coronavirus pandemic.

Figure 1. Macro-variable responses to the policy rate shock taking into account the exogenous effect of uncertainty and fear of the Coronavirus



Source: Bayesian vector estimate prior to Sims-Zha (normal-Wishart)

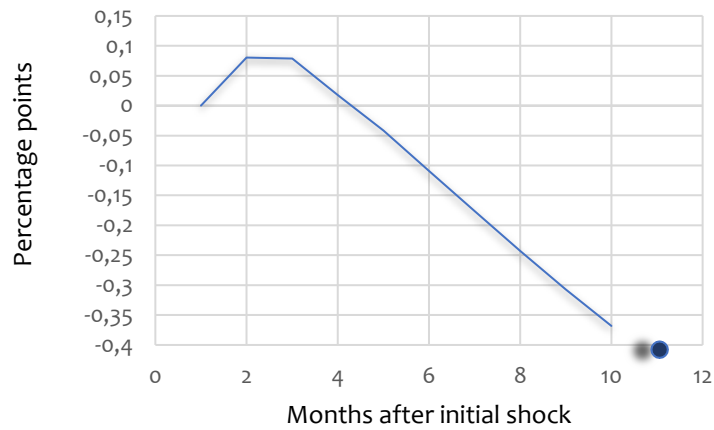
⁴ We measure the uncertainty of the coronavirus through the global pandemic uncertainty index (WPUI) and the volatility index (VIX) symbolizing fear and lack of confidence in the international market. These two indicators are taken as exogenous variables in our framework. We use the following framework:

$$\Pi_t = \sum_{j=1}^p \varphi_j \Pi_{t-j} + \delta_j Z_t + \varepsilon_t \quad \varepsilon_t \sim N(0, \Sigma)$$

Where ε_t is a reduced form residual vector at time t . The vector Π_t contains the policy rate, the consumer price index, the output gap and the nominal exchange rate. The WPUI Pandemic Uncertainty Index and the VIX Uncertainty Index Z_t are uncertainty variables constructed specifically to monitor, respectively, the evolution of the Coronavirus pandemic and the behavior of the international market, since these variables have a systemic effect on the majority of economies, including the Democratic Republic of the Congo. The behavior of these indices instills uncertainty in the dynamism of other economies. Therefore, they are assumed to be exogenous in this model.

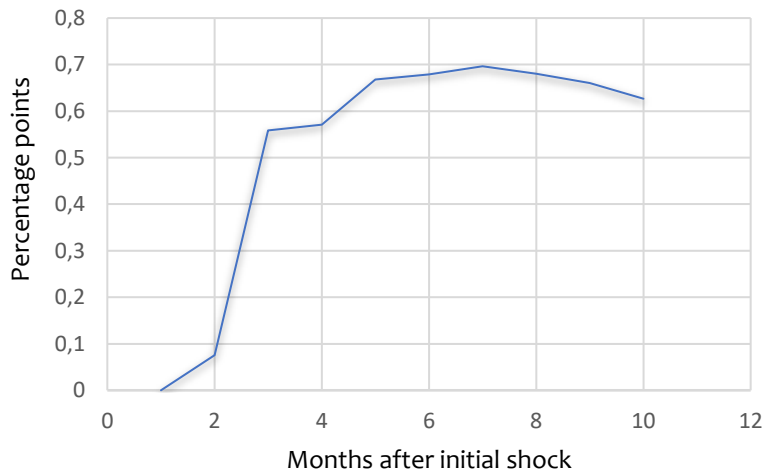
⁵ The effect is reversed in developed countries, where they are experiencing deflationary pressures.

B. Output gap response



Source: Bayesian vector estimate prior to Sims-Zha (normal-Wishart)

C. Exchange rate response



Source: Bayesian vector estimate prior to Sims-Zha (normal-Wishart)

These theoretical predictions are supported by empirical evidence. Figure 1 plots the effects of a policy rate shock on the three macroeconomic interest variables. Each plot displays the average as a solid line, with an average certainty of 95%. Following the monetary policy shock via the policy rate taking into account the uncertain effect of the coronavirus, the inflation rate shown in Figure A increases more and more over time, reaching a peak about 8 months after the impact. Likewise, Figure B shows that the output gap decreases persistently for approximately 7. This reflects a decline in growth and an increase in the persistent unemployment rate. The exchange rate shown in Figure C is increasing rapidly, reflecting increased currency depreciation following pessimistic expectations fueled by uncertainty from the coronavirus shock. This shock puts in difficulty the formulation of monetary policy to blur these harmful effects on macroeconomic stability.

3. MONETARY POLICY: WHAT STRATEGIES AND TACTICS ADOPTED?

The unprecedented conditions created by the spread of the coronavirus call for exceptional strategies and tactics from the BCC. In addition to traditional tactics such as lowering the policy rate, the bank should try to devise unconventional measures to avoid the permanent consequences of a temporary, but potentially serious, shock to domestic production. The development of new tools could help businesses and households' weather the storm. Not only is the central bank in a different situation than before the previous shocks, but this one is also of a different nature. The front line in addressing the challenges of COVID-19 should include the extraordinary efforts of INRB health professionals, caregivers and volunteers across the DRC, but as the virus and the interventions needed to reduce its spread have also having important effects on macroeconomic stability, monetary policy should seek to minimize the resulting disruption for households and businesses. The effect of the coronavirus rages fear, heightens uncertainty and breaks confidence, the objective would therefore be to allow the economy to recover its potential before the coronavirus crisis once the risks to public health are mitigated.

To reduce the recessionary gap due to the shock of the coronavirus, which is shaking the Congolese economy, the tactics of the BCC could turn to monetary easing policies with the massive purchases of treasury bonds. The expansion of the latter could gradually revive the economy and flatten the mortality curve for small and medium-sized businesses. In addition, support to banks could help ease financial conditions and allow credit recovery to the private sector. The uncertainty of the coronavirus could be reflected in the strains on the financial system. The impact could be severe, price instability and currency depreciation (including capital inflows) have had repercussions on the financial system (Ma and al. 2020). Financial stability is like a puzzle piece to monetary policy. Its development automatically affects monetary policy. Banks should continue to provide credit to keep the economy at a significant level from the depths of the recession. The introduction of a reduction in lending interest rates would be beneficial for the economy and especially for small and medium-sized enterprises for a term financing scheme with additional incentives. These decisions should contribute to the broader objectives of economic policy in various ways. First, a reduction in the cost of credit will increase cash flow for many borrowers, which, combined with other unconventional central bank programs to offer loans and maintain income, should support households and help businesses avoid wasting capital and laying off or going bankrupt. This latter characteristic reflects the rarely used role of the central bank as a stabilizer of the financial system. This should be coordinated by its intent and scale, and in line with the financial stability mandate.

These unconventional monetary policy measures are aimed exclusively at preserving economic and financial stability and do not constitute monetization of the debt itself. With this in mind, the objective would be to ease financial conditions, ease financial turmoil and gradually pull the economy out of recession. Pessimistic expectations from the market and the general public exacerbate monetary instability which affects price developments. This impact is due to the uncertainty of the coronavirus and the lack of confidence that it amplifies. The best strategy for the bank would be to adopt good communication to guide these expectations and rebuild perfect confidence with the market and the general public.

In fact, communication is the strategy and the instrument of the situation to restore macroeconomic stability.

4. SET THE PERIMETER

There are lines that should not be crossed or be very vigilant for the central bank. Firstly, the non-respect of its mandate, secondly the fear of the loss of its independence.

Given the nature of the shock, which is different from all the previous ones, the bank could take urgent measures mentioned above. In doing so, it could and would prevent any lasting reduction in overall supply capacity and help offset any lingering negative effect on aggregate demand. These measures will help support households and businesses during the crisis. However, the main objective defined in the BCC's mandate is to maintain price stability. Low, stable and predictable inflation is an essential prerequisite for long-term economic prosperity. It allows individuals to make informed decisions about savings and spending. And it allows households, businesses and governments to finance their spending without introducing inflation risk premiums to their borrowing costs. Despite all these measures, the BCC should ensure price stability and its priority policy should comply with its mandate. Hence there must be an optimization between respect for the mandate and stabilization of the output gap towards the restoration of economic growth.

The accumulation of the budget deficit further feeds public debt and deteriorates fiscal sustainability. Excessive massive purchases of treasury bonds could cause the independence of the BCC to be lost, as disgusting monetary funding will follow. This would reduce the credibility of the BCC and undermine the institutional independence of the BCC. In addition, the natural boundaries between fiscal and monetary policy will need to be fully restored to preserve the credibility of the BCC.

5. TOWARDS COORDINATION

Monetary policy is only a small part of the overall economic policy response. Covid-19's economic disruption and containment affects many industries and businesses much more than others. Monetary policy, which affects the economy as a whole, cannot solve these difficulties alone. This is why the BCC must coordinate its actions with those of other committees. There have been a wide range of government programs (the multisectoral emergency mitigation program for COVID-19 in the DRC (PMUAIC-19)) launched to address different aspects of the coronavirus crisis. Policy coordination is the key to an effective response and the option to limit the negative impact of the effects of the coronavirus.

The optimal combination of fiscal and monetary policies can mitigate the negative economic effects of the COVID-19 pandemic. With a large part of the economy confined, such coordination would be essential to compensate for drastic disruptions in normal income, credit and spending habits of businesses and households. The effectiveness of policy support will depend on the credibility of the measures and the extent of pre-existing vulnerabilities such as high debt levels and large financing needs and structural problems. In addition, fiscal multipliers are generally lower in high-debt economies (Lzetzki, 2010;

Huidrom and al. 2019). The effectiveness of fiscal policy will also critically depend on the social security system, which could be complicated by high levels of informality. Easing monetary policy may also be less effective due to the large informal sector and low financial inclusion. Despite these weaknesses in the structure of the Congolese economy, coordination is a good strategy for blurring the effects of the coronavirus.

6. CONCLUSION AND IMPLICATIONS

The coronavirus epidemic is exacerbating the heavy negative toll of the Congolese economy, which has resulted in a recession, price instability and a depreciated exchange rate. This paper examines the role that the BCC could have in mitigating the economic effects of the coronavirus epidemic. While it is difficult to capture all the complexities of the economy in one model, this paper suggests that conventional monetary policy is not big enough to contain this crisis. Because of this limitation, we suggest including a wide menu of policies to mitigate the effects of the health crisis. A good communication strategy and the testing of unconventional monetary policy measures are major factors in blurring the effects of the coronavirus crisis.

Beyond the conduct of short-term monetary policy to deal with the uncertainty of the coronavirus, the likely long-term implications of the epidemic also underscore the need to lay the foundations for long-term sustainable growth. In addition, for political decision-makers to be able to finance the health system and support domestic demand through the possible recovery, it would be worthwhile to credibly undertake a coordination of budgetary and monetary policies aimed at promoting health care programs. comprehensive reforms to improve institutions and frameworks that can ensure a possible return to robust growth while preparing the ground for strengthening long-term prospects. This would require a credible fiscal framework guaranteeing the restoration of fiscal sustainability, and would also require a credible monetary policy framework ensuring preservation of price stability as well as maintenance of confidence.

7. REFERENCES

- Baker, S., Bloom, N., Davis, S., J., and Terry, S., J. 2020. COVID-Induced Economic Uncertainty. April.
- Baker, S. R., Farrokhina, R. A., Meyer, S., Pagel, M., and Yannelis, C. 2020. How does household spending respond to an epidemic? Consumption during the 2020 COVID-19 pandemic. *National Bureau of Economic Research, NBER Working Paper* 26949.
- Barro, R., Ursua, J., and Weng, J. 2020. The coronavirus and the great in pandemic influenza. lessons from the “Spanish Flu” for the coronavirus’s potential effects on mortality and economic activity. *National Bureau of Economic Research, NBER Working Paper* 26866, April.
- Bekaert, G., Hoerova, M., and Lo Duca, M. 2010. Risk, uncertainty and monetary policy. *National Bureau of Economic Research, NBER Working Paper* 16397, September.
- Christensen, J. H., Gamble, J. M., and Zhu, S. 2020. Coronavirus and risk of deflation. *FRBSF Economic Letter*, May.
- Cúrdia, V. 2020 Mitigating COVID-19 Effects with Conventional Monetary Policy. *FRBSF Economic Letter* 2020-09, April.
- Delle Chiaie, S. 2009. Monetary policy and potential output uncertainty a quantitative assessment. 2009. *Working Paper Series* no 1130, December.
- Dietrich, A. M., Kuester, K., Müller, G. J., and Raphael, S. S. 2020. News and uncertainty about COVID-19 : Survey evidence and short-run economic impact. Federal Reserve Bank of Cleveland, *Working Paper* No. 20-12. <https://doi.org/10.26509/frbc-wp-202012>.
- Grigoli, F., Herman, A., Swiston, A., and Di Bella, G. .2015. Output gap uncertainty and real-time monetary policy. *Russian Journal of Economics*, vol.1, pp.329-358.
- Huidrom, R., Kose, M. A., Lim, J. J., and Ohnsorge, F. L. 2019. Why do Fiscal Multipliers Depend on Fiscal Positions? World Bank Group, *Policy Research Working Paper* 8784, March.
- Jordà, O., Singh, S. R., and Taylor, A. M. 2020. Longer-Run Economic Consequences of Pandemics. *Federal Reserve Bank of San Francisco Working Paper* 2020-09, mars.
- Leduc, S., and Liu, Z. 2012. Uncertainty, unemployment, and inflation. *FRBSF Economic Letter* 2012-28, September.
- 2020. The Uncertainty Channel of the Coronavirus. *FRBSF Economic Letter* 2020-07, March.
- Leitemo, K., and Soderstrom, U. 2001. Simple monetary policy rules and exchange rate uncertainty. *Sveriges Riksbank Working Paper Series* no. 122, February.

Lzetzki, E., Mendoza, E. G., and Végh, A. C. 2010. How big (small?) are fiscal multipliers ? University of Maryland and NBER, November.

Ma, C., Rogers, J., and Zhou, S. 2020. Global economic and financial effects of 21st Century pandemics and epidemics. *Covid Economics*, vol.5, pp.6-74.

Pinshi, C. P. 2020. What impact does COVID-19 have on the Congolese economy and international trade? *Economic analysis summary note*, no 6, H8 think tank EASN6, hal-02864308, June.