



Bank-level Analysis of the Determinants of Lending Rate Stickiness in Uganda

Dorothy Nampewo

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Abstract

This study determines the existence and drivers of the asymmetrical response of lending rates to policy rate changes in Uganda's banking sector. Uganda's banking system seems to be faced with sticky adjustments of lending rates following changes in policy rates. Whereas interbank money-market rates have tended to track the evolution of the policy rate, bank lending rates have been stickier, only responding partially to changes in the policy rate, with lags. These lag periods appear to be longer when the policy rate is reduced than when it is raised, which has created challenges for monetary policy implementation. The analysis is based on bank-level data covering 17 commercial banks for the period

2009–2017. The econometric approach is based on panel error-correction methods. Results show that downward stickiness exists in bank-level lending rates. The factors identified as causing the asymmetrical response of interest rates to policy rates include: risk, cost, bank capability, banking sector concentration and government borrowing. These results provide new insights necessary for the design of appropriate policy measures to reduce high and sticky lending rates to, among other things, reduce the cost of finance and ensure effective implementation of monetary policy. In particular, the study recommends policies that improve cost efficiency, reduce government borrowing and support mostly small and indigenous banks to compete and penetrate the market, as well as measures towards minimizing credit risks that could help to achieve symmetric adjustment.

Introduction

The size and speed of bank lending rate adjustment to changes in policy rates has attracted much debate and has been an important subject for the evaluation of monetary policy transmission mechanisms (Borio and Fritz, 1995). This is because monetary policy effectiveness relies on a well-functioning transmission mechanism where changes in monetary policy rates are fully transmitted to interest rates throughout financial markets (Mishkin, 1996; Grigoli and Mota, 2017). Bank lending rates are an important component of the marginal cost of financing and thus affect incentives for consumer and investment spending. As such, interest rates are a potentially important channel of monetary policy transmission (Lowe and Rohling, 1992; Borio and Fritz, 1995).

The theory of monetary policy transmission mechanism stipulates that changes to the policy rate are expected to influence the domestic market interest rates and later the real economy through their effects on the flow of credit and on incentives for the optimal intertemporal allocation of expenditure (Mishkin, 1996). However, this transmission mechanism requires an effective price adjustment mechanism where the reaction of market interest rates is symmetrical to changes in policy rates. Otherwise, asymmetrical price adjustments may cause an incomplete pass-through of monetary policy.

As in many countries, Uganda's banking system is characterized by an asymmetrical response of lending rates to changes in policy rates. Since the onset of the inflation targeting framework in 2011, the interbank money-market rates have tended to track the evolution of the policy rate. However, recent trends suggest that the response of bank lending rates to changes in the policy rate is asymmetrical, with interest rates reacting faster when policy rates are rising, and slower when they are falling (Bank of Uganda, 2014).

The factors responsible for the sticky behaviour of interest rates have not been determined conclusively. The available literature has mainly focused on the drivers of lending rate spreads without necessarily focusing on investigating the drivers of asymmetrical responses of lending rates to policy rates (Nampewo, 2012; Beck and Hesse, 2006). This paper attempts to fill this gap in the literature. First, the paper investigates the existence of downward stickiness in lending rates in Uganda's banking sector. Second, the study investigates the drivers of the asymmetrical adjustment of lending rates to changes in policy rates.

The results support the existence of downward stickiness in bank-level lending rates. Moreover, the asymmetrical response of lending rates to policy rates is associated with risk, cost, bank capability, concentration, and government borrowing as the major causes of sticky lending rates.

Status of Uganda's banking sector

Uganda's banking institutions are classified into four tiers. Tier 1 includes commercial banks that are authorized to hold chequing, savings and time-deposit accounts for individuals and institutions in local as well as international currencies. Commercial banks are also authorized to buy and sell foreign exchange, issue letters of credit and extend loans to depositors and non-depositors. Tier 2 includes credit and finance companies that are not authorized to establish chequing accounts or trade in foreign currency. However, they are authorized to accept customer deposits, manage savings accounts, and extend collateralized and non-collateralized loans to savings and non-savings customers. Tier 3 includes microfinance deposit-taking institutions (MDIs). Tier 4 institutions include savings credit and cooperative organizations (SACCOS). These institutions, save for those in Tier 4, are regulated by the Bank of Uganda under the Financial Institutions Act of 2004, which provides for the regulation, control and discipline of financial institutions by the central bank, and the Bank of Uganda Act of 1993 that streamlines the formulation and implementation of monetary policy by the central bank. This study focuses on Tier 1 banking institutions.

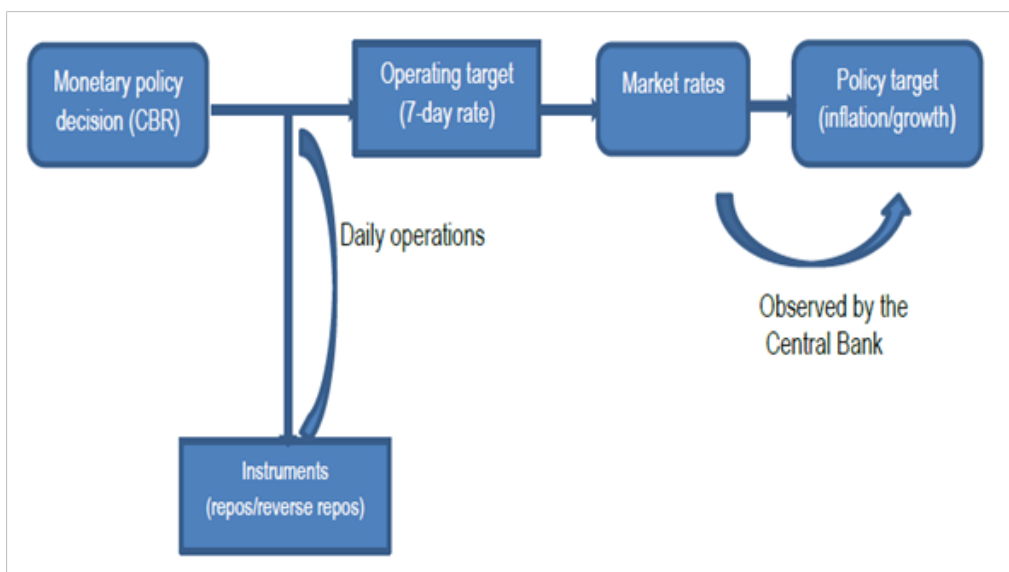
Uganda's banking sector was fully liberalized in 2005 to, among other things, improve efficiency, capitalization, and competition. At the time, it was envisaged that this would deepen financial sector development and inclusive finance. The number of banks has since increased from 15 operating 131 branches, to 24 operating more than 550 branches in 2016 (Bank of Uganda, 2016). However, the sector continues to be affected by inefficiencies that have been caused mainly by high levels of concentration and increasing overhead costs over the past decade. These have resulted in high spreads averaging about 22 per cent, and high net interest margins averaging about 11 per cent (Nampewo, 2012; Beck and Hesse, 2006).

Despite the establishment of a credit reference bureau in 2010 that is aimed at, among other things, improving the transparency of credit information of borrowers, the banking sector is still challenged by high credit risk and high evaluation, monitoring, and enforcement costs. Moreover, bank asset quality has continued to deteriorate, with increasing levels of non-performing loans (World Bank, 2017). Subsequently, non-performing assets increased from 2 per cent in 2005 to about 6.5 per cent in 2017. In addition, the sector remains relatively small, contributing around 2.7 per cent of the GDP, making it difficult to exploit economies of scale and scope. The high cost of financial service provision is further reflected in low ratios of loans to GDP, estimated at about 13 per cent at the end of 2017.

Evolution of interest rates and monetary policy transmission

During the period following the liberalisation of the banking sector, the treasury bill market changed to a market-based auction system through which interest rates were determined from a pre-determined rate. This was followed by the introduction of the treasury bonds market and the commencement of a new interest rate management regime that used monetary policy instruments with the treasury bill interest rate as the anchor (Nampewo, 2012). These developments led to a reduction in the level of nominal interest rates from a high of 40 percent in 1992 to an average of 20 percent in 2017 and the subsequent extension of the yield curve (Nampewo, 2012). The central bank rate (CBR) was then introduced in 2011 following the implementation of the inflation targeting framework. Under this framework, the Bank of Uganda sets the CBR consistent with the desired monetary policy stance for the month and supplies and/or constrains liquidity conditions in the interbank money market to ensure that the operating target and all the other rates are consistent with the CBR during that period (Opolot, Nampewo, Nyanzi, and Ntumwa, 2013). Figure 1 shows the flow chart that summarizes the transmission mechanism of the policy rate to the policy target.

The operating target is the 7 – day interbank rate given its influence on other interest rates in the economy and is less volatile compared to the overnight money market rate. To ensure that the operating target is in line with the monetary policy stance, a set of monetary policy instruments such as; open market operations, and issuance of repurchase agreements (REPOs) and/reverse REPOs are used by the central bank (BoU,2012). It is then expected that the 7-day interbank money market rate would influence the other market rates and eventually the policy targets which are in this case inflation and growth. Thus, despite its supervisory role, the central bank does not influence the price setting behaviours of other market rates.

Figure 1: Transmission mechanism from policy rate to policy target

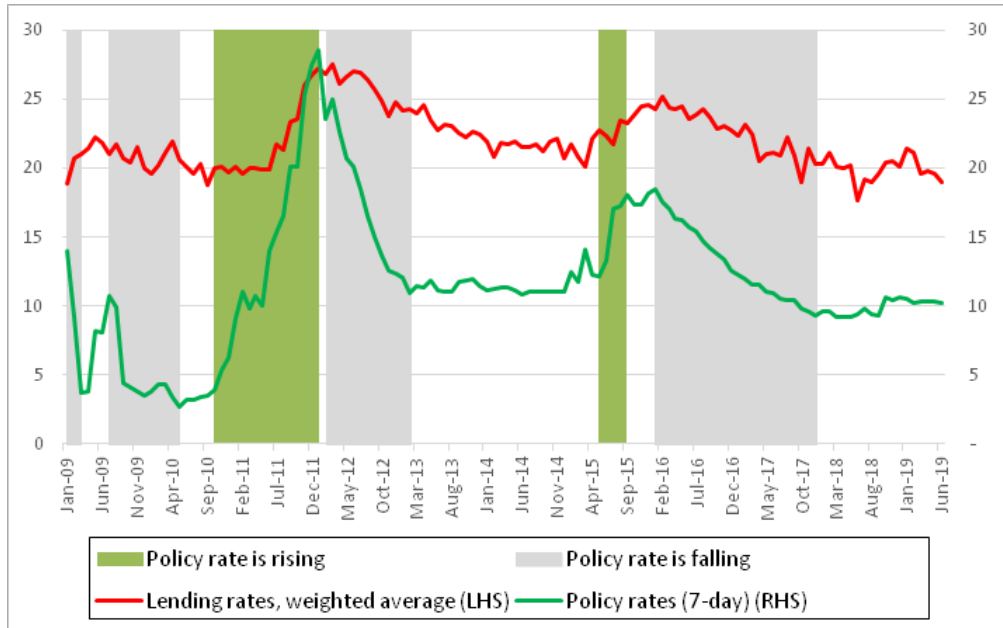
Since the onset of the inflation targeting lite (ITL) framework, the interbank money market rates have tended to track the evolution of the CBR and the other market rates. However, the lending rates depict downward asymmetric behaviours with the policy rate, reflecting asymmetry of the monetary policy transmission mechanism, lagged response to monetary policy impulses, structural rigidities in the financial sector and higher risk aversion by commercial banks (BoU, 2014). As shown in figure 2, the weighted average lending rate tends to respond faster when the policy rate is rising than when the policy rate is falling.

This pose challenges for monetary policy implementation, access to credit, and the entire business environment. Indeed, the persistently high and sticky lending rates continue to stifle business growth (Mawejje and Sebudde, 2019) and have resulted into feelings of discontent among various players in the business sector and civil society (Kuteesa and Mawejje, 2016). Consequently, there have been calls upon government to intervene by enacting legislation providing for the capping of interest rates, following Kenya's example (CSBAG, 2016). However, the central bank is committed to maintaining market-determined interest rates (Bank of Uganda, 2017); and hence capping interest rates may not be the solution to the sticky interest rates.

A further structural assessment at the bank-level reveals that the market share of the banking industry is dominated by a few big banks that are mainly foreign-owned with about 50 per cent of their total assets and capital controlled by the foreign sector. Besides, about 80 per cent of the commercial banks are classified as small when using metrics such as the proportion of capital and assets in the overall banking system.

This implies that the banking industry is still relatively concentrated with a few big banks controlling about 70 per cent of the market share (Opolot, Nampewo, Nyanzi, and Ntumwa, 2013).

Figure 2: Trend of weighted average market interest rates and policy rate



Source: Bank of Uganda, (2009-2015)

In the domestic interbank money market, segmentation and liquidity re-allocation continue to pose challenges for monetary policy transmission. This mainly arises from the adverse selection problem and asymmetric information about the risk profiles of counterpart banks. This, coupled with lack of clear structure of the operations in the interbank market, may breed liquidity re-allocation challenges in the market and may aggravate the lending rate stickiness problem. Besides, interbank transaction volumes are rationed based on bank size, where the lending rates of bigger banks seem to be less volatile compared to those for smaller banks (Bank of Uganda, 2016). These factors may result in liquidity hoarding especially for the big banks which control most of the liquidity in the market and charge higher interest rates to the smaller banks and hence result in high lending rates.

Conclusion and policy implications

Despite the progress made over the past two decades, Uganda's banking sector is still characterized by high and sticky lending interest rates. The central bank introduced the central bank rate in 2011 to among others implement the inflation targeting framework and improve the credit and interest rate channel of monetary policy

transmission. While the other market rates have trended well with the CBR (policy rate), the lending rates remain sticky downwards which poses challenges to monetary policy implementation.

Exploiting the error correction techniques used within dynamic panel estimates, this paper investigates the factors that might explain the lending rate stickiness and the asymmetrical response of lending rates to changes in the policy rates in Uganda's banking sector over the period 2009 to 2017.

Results indicate that the determinants of the downward interest rate stickiness are multifaceted. In general, a combination of bank, industry, and macroeconomic level factors explain interest rate stickiness. Specifically, risk is an important driver of sticky interest rates. Non-performing assets have persistently increased since 2005. These drive the interest rates as banks make provisions for writing off bad loans. In the same line, government borrowing has also been identified as an important factor that causes downward stickiness in the lending rates. This implies that banks prefer to invest in less risky and more profitable government securities, instead of issuing out risky loans. The result is less responsiveness of lending rates to changes in the policy rate.

Other factors include cost efficiency and bank concentration. These results suggest that improving competition in the banking sector while encouraging banks to be more cost efficient will drive down interest rates in line with changes in the central bank rate. In addition, well-capitalised banks are associated with less sensitivity to changes in the policy rates this suggests that these banks can draw on foreign capital to finance their domestic operations without necessarily relying on borrowing from the central bank.

In conclusion, the relatively sticky interest rates in Uganda remain a subject of debate and continue to pose challenges, particularly in the transmission of monetary policy and ensuring that economic agents access affordable credit. Although banks are continuously innovating to improve their cost-income positions, there is still more that needs to be done, especially in terms of ensuring efficiency. The on-going debate on the introduction of branchless banking, including agency banking and other related provisions will likely go a long way in improving the cost efficiency in the banking sector. Other interventions include a mix of strategies that could range from diversification of products to invest in cost-saving and efficient forms of technology. Although the banking sector was liberalized and opened to competition, the sector is still highly concentrated and more can be done, especially in terms of breaking market concentration. Within this realm, supporting mostly the small and indigenous banks to compete and penetrate the market as well as measures towards minimizing credit risks. That said, the on-going debate on capping interest rates may not be the best solution for reducing the downward stickiness in the lending rates of commercial banks but the emphasis should be put on ensuring that these factors are addressed.

Policy implications

Continuous innovations by banks, including the ongoing debate on the introduction of branchless banking, including agency banking, and other related provisions such as a mix of strategies ranging from diversification of products to investing in cost-saving and efficient technology, will likely go a long way in improving cost-efficiency in the banking sector and thus reduce lending rate stickiness.

Although the banking sector was liberalized and opened to competition, the sector is still highly concentrated and more can be done, especially in terms of breaking up market concentration. Within this realm, supporting mostly small and indigenous banks to compete and penetrate the market could improve bank competition and banking efficiency. This, coupled with measures towards minimizing credit risk such as enhancing the effectiveness of the credit reference bureau, would help the lending rate stickiness problem.

Measures to improve domestic revenue mobilization could be instrumental in reducing the pressure on domestic government borrowing and the increasing appetite of banks to invest in government securities and the resultant crowding-out effect of private-sector lending due to lending rate stickiness in the loans sectors. That said, the ongoing debate on capping interest rates may not be the best solution for reducing downward stickiness in the lending rates of commercial banks. The emphasis should rather be on ensuring that these factors are addressed.

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