



## The Role of the Interbank Market in Inflation Targeting Regimes: **Lessons for COMESA Central Banks**

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## Executive Summary

The interbank market exists to enable banks to address (insure against) unanticipated liquidity shocks to be able to honour their liabilities as they fall due, but also invest in relatively illiquid assets with potentially higher returns and improve risk management within the banking system. At a macro level, the interbank provides the location via which inflation targeting central banks manage aggregate liquidity to achieve their monetary policy operating target of aligning the short-term risk-free interbank interest rate with their policy interest rate—the Central Bank Rate (CBR). Changes in the interbank rates, in turn, are expected to anchor the term structure of other interest rates in the economy—thereby contributing considerably to the effectiveness of the transmission of monetary policy signals to the real economy.

Because the interbank transactions are mostly uncollateralized and despite the fact that average interbank rate at any point in time are determined by the monetary policy stance, i.e., the CBR, individual banks borrow at a spread, above or below this average rate depending on the dictates of market segmentations—limiting the potential role of the interbank market in increasing the efficiency of the banking sector. Regulators, therefore, need to steer the efficiency of the interbank market by: 1) scaling up the efforts to deepen and widen the interbank market; 2) balancing efficiency gains from deepening interbank markets with the need to mitigate contagion risks from increasingly connected bank networks in the context of a segmented market; and 3) creating space for market discipline in the interbank market by supporting the market disciplining role of interbank markets in mitigating bank riskiness and improving bank capitalization

## Introduction

World over, the core mandate of a country's central bank is the conduct of monetary policy—this itself being a demand management tool and thus the objective of price stability. Therefore, the primary objective of monetary policy is to achieve low and stable inflation, with output stabilization as secondary objective. Basic development economics text books would support this central bank primary objective choice. It is because price instability bears adverse implications for economy-wide growth outcomes. Erratic prices erode the value of incomes and savings and leads to high nominal interest rates because it increases the uncertainty about future relative prices and about the price level, and so domestic and foreign financial markets require a higher risk premium as compensation for this increased uncertainty. Moreover, it redistributes income from creditors to debtors, creates distortions in the tax system, and represents a hidden burden on savers, who are unable to safeguard the purchasing power of their incomes and savings—which, together, reduces the long-term growth potential of the economy.

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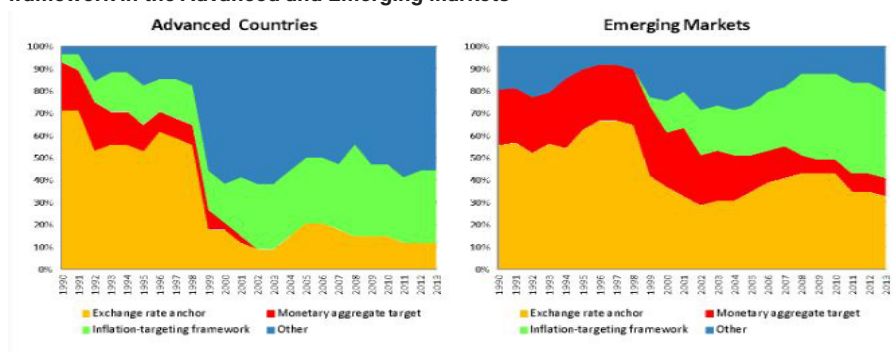
Note however that in ensuring stable prices, monetary policy recognizes both its powers and limits regarding its influence over the rest of the economy. It cannot, for example, be used to mitigate the supply-side factors, which in effect require structural policies which are long-term in nature. Indeed, over long horizons, the size of the economy and its average rate of growth are driven by developments on the supply side. Besides, the impact of monetary policy on the economy occurs with a significant lag. Cognizant of this limited scope for monetary policy, it is not feasible for a central bank to adopt other long-run targets, such as the growth rate of economic activity. Thus, it is the combination of a country's fiscal and monetary policies that direct a country's economic outcomes.

In pursuing the inflation objective above, the central bank's framework for formulating and implementing monetary policy has largely evolved, over the past two decades, to Inflation Targeting— a monetary policy regime designed to have the public expect, and the central bank actually deliver, a low and stable rate of inflation. In other words, it is a framework for conducting monetary policy in which the decisions are guided by expectations of future inflation relative to the announced target. The authority announces a target or, more typically, a target range for future inflation (Green, 1996; Agénor and Montiel, 2015). As such, it entails changes in the operating and intermediate targets to price-based targets, i.e., the policy interest rate as the operating target —the rationale of which being that aggregate demand is inversely related—in the short term—to the real interest rate and a target for inflation over the medium-term as the primary target

(Maehle, 2020).

The basic idea is that given some degree of price stickiness, a rise (fall) in the policy interest rate induces (with a lag) a fall (rise) in private expenditures, which in turn affects real output and inflation. The inflation targeting framework has the potential to serve two important functions: improving communication between policymakers and the public; and providing increased discipline and accountability for monetary authority, i.e., balancing between discretion and Rule-based monetary policy (Bernanke and Mishkin, 1997). Having started as a strategy suitable for only advanced countries—with strong fiscal and monetary institutions and developed financial markets, it has increasingly become a popular monetary policy framework of choice in emerging and developing countries—notwithstanding the relatively weak institutions and less developed financial markets. Indeed, as shown in **Figure 1**, the wave of inflation targeting monetary policy framework which started only in a handful of advanced countries—New Zealand and Sweden in particular, in the early 1990's, had by 2013 engulfed many advanced economies (**left hand-side chart**). From about the mid-1990s, the wave of adoption of inflation targeting framework reached the shores of emerging market economies, with the rate of adoption, over the last one decade, outpacing that for advanced economies (**right hand-side chart**).

**Figure 1: Historical developments in the adoption of inflation targeting monetary policy framework in the Advanced and Emerging Markets**

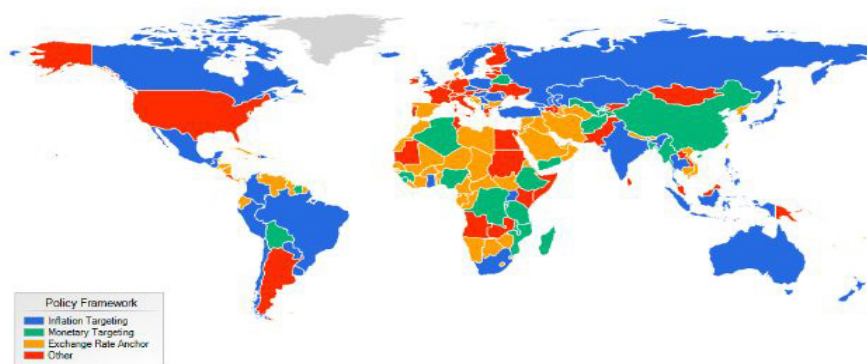


Source: IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER), 2016

Among the numerous merits of inflation targeting framework lies the fact that its adoption can be the source of strengthening of the monetary institution and the development of financial markets rather than a precondition. Given this wisdom and the rapid financial innovations and integration of financial markets globally, many countries,

including those in the COMESA region, have transitioned or are planning to transition to this framework. The preference for inflation targeting regime over other mostly old age monetary policy frameworks borders on the belief that inflation targeting framework solves the dynamic inconsistency problem which produces high average inflation, reduces inflation variability, and if “flexible” can stabilize output. Inflation targeting also locks in expectations of low inflation, which reduces the inflationary impact of macroeconomic shocks. For these reasons and many others, many economists have advocated for this framework as the right approach to monetary policymaking. Thus, many central banks globally, some in the COMESA region have since adopted inflation targeting monetary policy framework—see inflation Targeters markings in the map in Figure 2 (IMF AREAER, 2016).

**Figure 2: Inflation targeters, as at 2016**

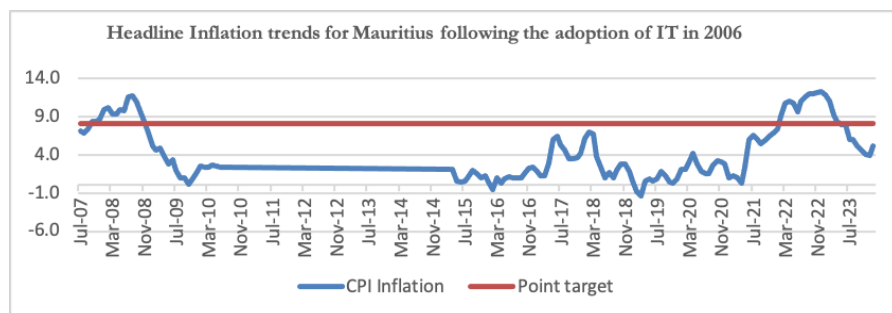


Source: IMF's Annual Report on Exchange Arrangements and Exchange Restrictions, 2016

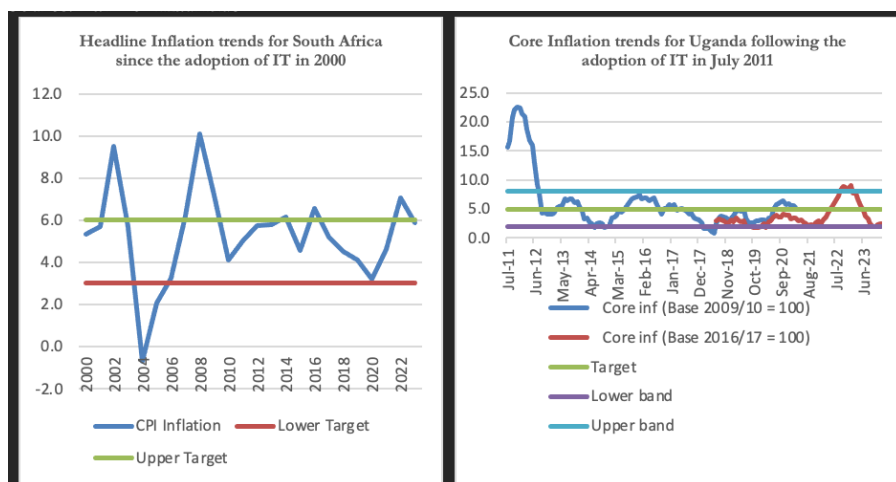
Some of these central banks are those of small industrial countries— New Zealand, Sweden, U.K., Canada, Australia, Finland, Spain, and Israel; and some middle-income developing countries— Brazil, Chile, Colombia, the Czech Republic, Hungary, Israel, Korea, Mexico, Peru, Poland, and Thailand. In sub-Saharan Africa, South Africa, Ghana, Mauritius and Uganda also adopted inflation targeting, the latter two being COMESA region member countries. Data on the target measures of inflation outcomes, shown in the charts in Figure 3, since the adoption of inflation targeting monetary policy regime in sub-Saharan Africa in general and in the COMESA region in particular: bank of Mauritius, Reserve Bank of South Africa and Bank of Uganda—reveals compelling evidence of the efficacy of the framework in locking in consumer price inflation around

their respective medium-term targets for headline and core inflation.

**Figure 3: Inflation outcomes since the adoption of inflation targeting monetary policy framework in Mauritius, South Africa and Uganda.**



Source: Bank of Mauritius



Source: World Development Indicators

Source: Bank of Uganda

**Notes:** Mauritius and South Africa operates a point and range targets for headline inflation of 8% and 3-6%, respectively while for Uganda is  $5 \pm 3\%$  for core inflation over the medium-term.

As shown, over the period when inflation targeting regime has been in force, headline inflation in Mauritius and South Africa, and core inflation in Uganda have largely remained appropriately tamed at target or held within the tunnel of the target bands,

with temporary breaches largely due to shocks. This article draws attention to the interbank money market, the market space for central banks within which inflation targeting monetary policy framework is implemented. In the rest of the article, we delve into the role of interbank market particularly in the implementation of the inflation targeting monetary policy framework; the status of development of the interbank market in the COMESA region—drawing on case studies conducted by the COMESA Monetary Institute (CMI); and the key barriers impeding the development of the interbank market. We then draw conclusions and offer some policy options for central banks for developing the interbank market.

### The role of the interbank market

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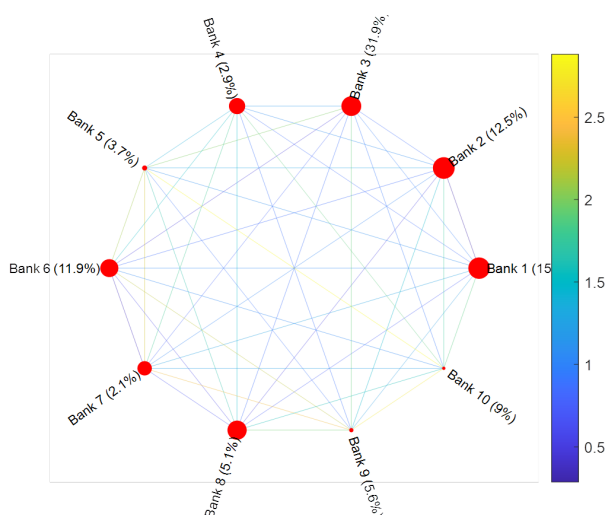
The interbank market—a market where participating banks trade liquidity among themselves exist because they are subject to unanticipated liquidity shortages and/or surpluses. This arise either from distributional shocks—such as the unanticipated withdrawal of a large deposit or from shocks that affect aggregate liquidity (Green et al., 2016). At the same time, credibility of banks depends upon their being able to honour their liabilities as they fall due. Hence, in the absence of an interbank loan market, banks would have to hold a higher volume of highly liquid assets (precautionary reserves) as an insurance against liquidity shocks, thus foregoing the potentially higher returns available through investment in illiquid assets. In this respect, the interbank market allows banks to address problems arising from distributional shocks which transfer liquidity from one bank to another. Moreover, by acting as an insurance against liquidity shocks, interbank market enables banks to invest in relatively illiquid assets (e.g., lending to businesses and firms) with potentially higher returns (Bwire et al., 2019a), and improve reserve management within the banking system (Green et al., 2016). Such a secondary market for participating banks contributes to the development of the financial architecture (Raga and Tyson, 2021).

Whilst banks needing liquidity can also borrow from the central bank—the well documented lender of last resort function of central banks, this occurs at a penal rate, i.e., the central bank charges banks which borrow from it a premium over and above the policy interest rate—and imposes quantitative limits on the amount which each bank can borrow automatically. A combination of this, by design, makes central bank borrowing only second the interbank market. The interbank market, therefore, provides an essential safety valve for banks—banks with shortages of liquidity can borrow short term funds from other banks, whilst at the same time provides an outlet for banks with

excess reserves to lend to counterparts with a shortage. This takes place in a sort of complex network of financial links that we mimic in Figure 4.

In the Figure, the colour of the legend on the right indicates the proportion of loaning and/or borrowing by a counterparty in the network. The size of the edge (connecting line) indicates the number of loan and/or borrowing transactions made between two banks, while the size of the node (big dot) is proportional to the volume of loan and/or borrowing involved. To put this perspective, consider, for example, bank 2—one of the few banks with a big sized node and with a high interbank market participation at 31.9%. This bank is a net lender, lending significant amounts to a batch of small sized banks 4, 5, 6, 7, 9 and 10. It also borrows, but majorly from a batch of big-league banks 1 and 3. On the other hand, bank 5 is a net borrower, sourcing for funds from virtually all banks in the network—big and small alike, while banks such as 4, 7, and 8 although small play more of the lending role than borrowing in the network.

**Figure 4: Bank labels and corresponding activity levels, i.e., %**



Source: Adopted from CMI training on banking interconnectedness

Worth pointing out upfront is that transactions in interbank market are mostly uncollateralized (IMF 2017). This in itself makes the credit risk of a counterparty an essential aspect of the interbank market, and is largely consistent with Pillar III of the Basel II accord which allots a role to the interbank market to monitor and discipline risk taking by banks. This notion is supported by the collective evidence in Raga and Tyson

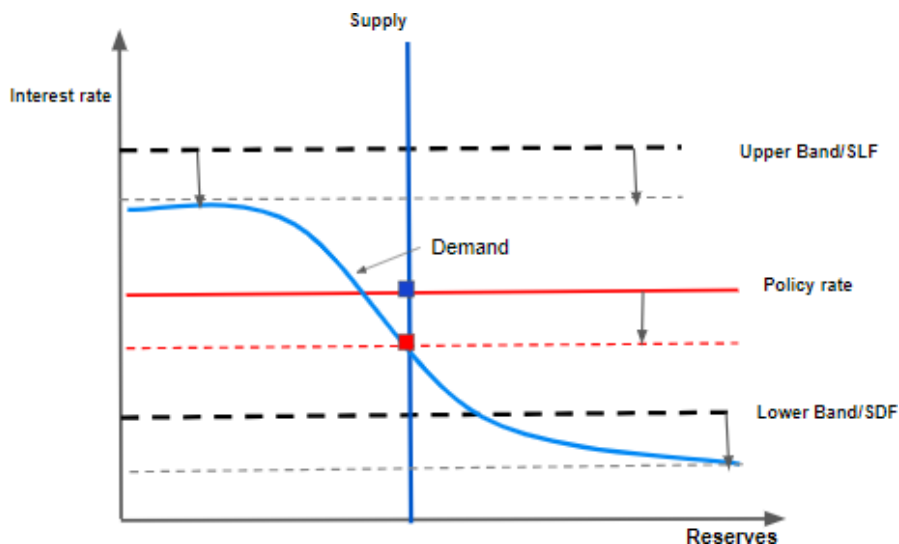
(2021), Bwire et al., (2019b) and CMI commissioned studies in 2022. Thus, the price paid by individual banks on the interbank market to borrow provides market risk information input into central banks' macro- financial surveillance.

At a macro level, the interbank market provides the location for the inflation targeting practicing central banks to implement their monetary policies. It is here that the central banks manage liquidity at the aggregate level to achieve their monetary policy operating target, i.e., aligning the interbank interest rate with their policy interest rate—the Central Bank Rate (CBR) —the operational target. And since short-term interbank interest rates act as an anchor for the term structure of other interest rates in the economy, such as deposit and lending rates, transactions in the interbank market that lead to a lower risk premium can potentially spill over to lower lending costs charged by banks (Dinger and von Hagen, 2009; Chipili et al., 2019; and Raga and Tyson, 2021). Thus, the interbank markets are a conduit of monetary policy transmission.

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To be precise, once the monetary policy stance is set, the central bank then implements it using its policy tools to ensure that the short-term risk-free interest rate stays stable within the band set on the CBR. the short-term risk-free interest rate—usually the overnight interbank rate is determined by market forces of demand and supply for reserve balances at the central bank by commercial banks. It is a volume-weighted average of rates at which banks lend to each other in the interbank market as shown in **Figure 4** above. The central bank implements monetary policy in such a way that the operating target stay close to the policy rate most of the time if not all the time. To do exactly so, the central bank seeks to ensure predictability of the interest rates in the money market and thus other markets by ensuring that banks can have access to liquidity in times of shortages and place surplus liquidity with the central bank in cases of liquidity glut through its instruments at its disposal— discount rate, standing lending facility, repurchase agreements (Repos), deposit facilities and open market operations (OMOs), whichever is appropriate, in what we call liquidity Management.

The central bank can change the total amount of reserves available to the banking system through open market operations or its lending programs. Since the central bank controls the supply of reserves and the amount that it supplies is independent of the interest rate, the supply of reserves is illustrated as a vertical line in the stylized supply and demand curves shown in **Figure 5**.

**Figure 5: Demand and supply of reserves in the money market**

Source: CMI training material on monetary policy formulation and implementation in an era of Inflation Targeting regime, April 2024.

The demand curve for reserves above has three segments: 1) the top portion which is capped by the discount rate that the central bank sets; 2) the middle of the curve is downward sloping, like most demand curves showing that the higher the interest rate or cost to borrow, the lower the quantity of reserves demanded; 3) the bottom portion, which is nearly flat because, at some point, banks do not find much benefit from holding additional reserves other than earning the interest on reserve balances (which we technically call standing deposit facility- SDF) rate from the central bank. In other words, banks prefer to earn money by making loans to consumers and businesses or purchasing securities only if doing so generates a higher return.

Of particular interest here is how the inflation targeting central bank aligns the short-term interbank rate with the CBR, which they implement through regular interventions in the money market, mainly through an offer to the commercial banks for either a repo or a reverse repo—a short-term agreement to sell securities and repurchase them later at a slightly higher repo rate. Accordingly, a repo injects liquidity into the money market because the central bank provides cash to banks in exchange for securities. A reverse repo on the other hand drains liquidity from the money market as the central bank absorbs cash from the system by selling securities to banks.

To put this in perspective, let us borrow from the actual practice at the Bank of Uganda—one of the inflation targeting practicing central banks. The repos/reverse repos are transacted at the CBR, with the central bank accepting all offers from the banks which are consistent with the CBR, i.e., the central bank fixes the price of liquidity (the upper and lower bands in the demand curve above) and allows the market to determine the quantity (Brownbridge and Kasekende, 2018). Effectively, the central bank offers to pay the CBR on surplus bank reserves (consistent with the nearly flat bottom portion of the demand curve above). This, unlike the alternative of auctioning a fixed quantity of repos or reverse repos and thus implicitly allowing the market to determine the price, offers two advantages. First, it ensures that the repo/reverse repo rate matches the CBR at every issue and second, it obviates the need for the central bank to make precise liquidity forecasts before issuing a repo or reverse repo (Bwire, 2023). All that is needed is to know whether the banks will either need to offload liquidity to the central bank or borrow from the central bank to prevent the interbank rate from deviating from the CBR (*ibid*). Moreover, because short-term interbank market rates act as an anchor for the term structure of other interest rates in the economy, transactions in the interbank market that lead to a lower risk premium can potentially spill over to lower lending costs charged by banks in the economy (Dinger and von Hagen, 2009; Chipili et al., 2019).

A well-functioning interbank market should facilitate redistribution of funds and potentially lower the costs of acquiring liquidity for participants, and by extension shrink the interest rate spreads. Whilst average interbank rate at any point in time are determined by the monetary policy stance, i.e., the CBR, available country evidence suggests that individual banks borrow at a spread, above or below this average rate depending on their own idiosyncratic characteristics (Bwire et al., 2019b). This suggests that interbank markets are marred with imperfections, masked in market segmentations—market power of typically “too big to fail” and internationally affiliated banks, association of high risks with smaller banks, and opaque credit limit policies operated by the internationally affiliated banks (Odour et al., 2014; Murinde et al., 2018; Bwire et al., 2019b; Chipili et al., 2019)—the consequence of which is higher market retail rates. It is not surprising, therefore, that the high interest spread in the region persists. Opaque credit limits policies in particular amplify interbank access and pricing distortions and complicates regulation of the true level of liquidity in the financial system (Bwire et al., 2019b)—this further impedes the effectiveness of central bank intervention and monetary policy transmission. Enhancing developments of the interbank market and its efficient operations, therefore, would contribute to quickening the trickle-down effect of monetary policy and if lose enough, could contribute considerably to lower retail rates in the economy, *ceteris paribus*.

Through peer monitoring, interbank markets also play a critical role in improving banks' risk management. As alluded to above, Pillar III of the Basel II capital Accord (never mind the world is now in Basel IV) allots a role for the interbank market to monitor and discipline risk taking by banks, and a suitable channel through which this can occur is the price which participating banks pay to borrow interbank loans—the interbank market being by far the most developed segment of wholesale fund market. Banks, are as such, expected to have a good understanding of the financial position of their counterparts in the interbank market so are well placed to price the risk entailed in interbank lending. To this end, the interbank loan market should provide incentives for more prudent management by banks, as this conceptually, would be reflected in lower costs of interbank borrowing by a more financially sound bank and higher rates by banks with higher default risks, including finding it difficult to secure interbank funding. Indeed, there is overwhelming evidence to suggest that interbank markets exert a degree of prudential discipline among participating banks, although not exactly so for banks perceived to be systemically important (Murinde et al., 2018; Tiriongo and Kanyumbu, 2019; Bwire et al., 2019b; Kanyumbu, 2019; and Chipili et al., 2019).

Some caution however, is in order. Raga and Tyson (2021) note that Murinde et al. (2018) highlight that the impact of interbank on peer monitoring is overturned into contagion risks if banks' interbank activity exceeds a certain threshold. The bank size also matters as the interbank activity grows for banks that become bigger, but beyond a certain size, bank riskiness increases rather than decreases, suggesting that the systemically important banks lie outside the peer monitoring process, potentially due to implicit government insurance to prevent bank runs (*ibid*). In addition, the element of 'price stickiness' in the interbank market is also prevalent—wherein the price a bank paid previously in the interbank market has a strong bearing on what it is likely to pay in the current period (Bwire et al., 2019b). This, then suggests that large and foreign banks that are perceived to benefit from systemically important status and parent bank support enjoy lower rates, while small banks that are perceived to be risky are charged higher rates, irrespective of short-term changes in these banks' actual financial conditions.

### Status of the interbank market development in the COMESA region

That said, the development of the interbank markets in the COMESA region is still in the nascent stages, having emerged only from around the mid-1990s and in relatively few Jurisdictions (Raga and Tyson, 2021). Over the last decade, interbank market activity in these jurisdictions for which data is available is about 30% of GDP (Raga

and Tyson, 2021) on mostly uncollateralised transactions (IMF, 2017; Raga and Tyson, 2021), which are either overnight or for 7-days, although the overnight market is by far the most dominant in terms of the magnitude of funds borrowed and lent—because banks try as much as possible to limit their risk exposure within the shortest period. The interbank transactions maturing overnight comprised 100% of interbank trades in Kenya (Murinde et al., 2018; Bai et al., 2019), 95% in Malawi (Kanyambu, 2019) and 90% in Uganda (Bwire et al., 2019a). Also noted is that the interbank market is heterogeneous, with banks differentiated based on ownership and size—depending on the country of origin of majority shareholder (local or foreign) —and on asset size.

The COMESA Monetary Institute surveillances reveal that Bank of Mauritius and Bank of Uganda (both COMESA region member central banks) officially adopted inflation targeting-Lite in December 2006 and June 2011, respectively. The central bank of Kenya began transitioning to the inflation targeting framework in 2012, but aborted the process in 2015 to concentrate on financial stability following the collapse of three commercial banks which had exacerbated market segmentation. Nonetheless, the transition to the IT framework at the central bank of Kenya, just like many other COMESA jurisdictions, including, among others, the central banks of Burundi, Tunisia, Rwanda, Malawi, Zambia, Egypt, Ethiopia, Madagascar, Seychelles, Zimbabwe, among others is fast getting traction. As shown above, the framework typically aligns the interbank rates with the CBR (the central banks' operating target) such that it sets a benchmark for other interest rates in the economy. However, central banks in the region are persistently challenged by the small size of the interbank market or market concentration due to information asymmetries on market participants, inefficiency of segmented interbank markets and financial stability risks concerns associated with systemically important banks being the hubs of interbank development (Oduor et al, 2014; Bwire et al. 2019b; Raga and Tyson, 2021; Bwire, 2023).

Given the role the interbank market plays in the economy, particularly in providing the crucial avenue for the implementation of inflation targeting monetary policy framework and the state of play of the interbank markets in the region, a fundamental concern to reflect on are the barriers impeding further development of this this crucial segment of whole sale funds.

### **Barriers impeding interbank market development in the COMESA region**

Available evidence suggests, by and large, that money and interbank markets are poorly

developed in low-income countries (LICs). More importantly, the fact interbank markets are typically uncollateralised, the information required to assess counterparty credit risk remains largely limited in these markets, with the consequence of either an absence of interbank markets or market segmentation.

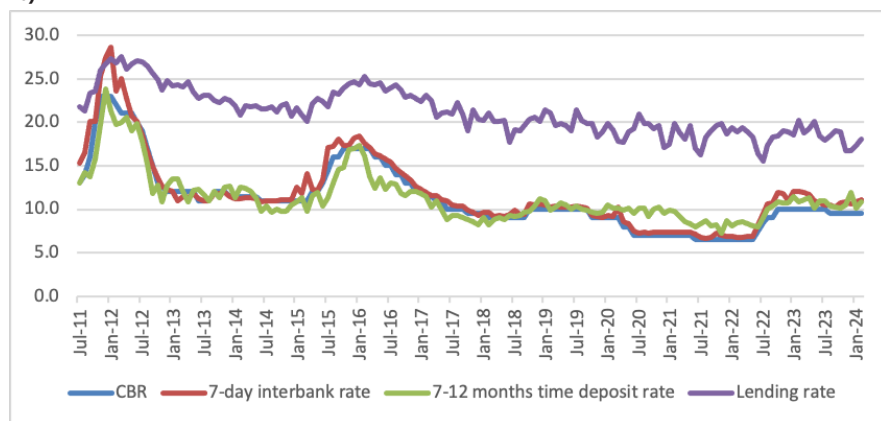
The single most impediment to effective functioning of interbank market is the market itself is small and highly concentrated—which devoids the market of sufficient liquidity. The interbank market is deemed effective if banks are able to borrow or lend an unlimited amount of funds at the prevailing market interest rates. However, as discussed above, available data in the COMESA jurisdictions suggests that the interbank transactions are relatively small—comprising, for example, in Uganda, just 1.2 percent and 1.6 percent of the liabilities and assets of commercial banks, respectively and that banks typically rely on customer deposits for funds and on private sector loans—over 80 percent of liabilities and—about 38 percent of commercial bank assets (Bwire et al 2019a). In terms of concentration, the market is dominated by a small number of dominant players which act as a ‘hub’ for interbank markets (Odour et al., 2004). It is established that foreign and large banks that typically have the biggest deposit base usually only conduct interbank trading among each other—which does not allow all borrowers to have a perfectly elastic supply curve for interbank funds (Bwire et al., 2019b). To the extent that an increase in demand for interbank liquidity by an individual bank might be large enough to increase the interbank interest rate (ibid.) defeats the very purpose of plugging liquidity shortages at lower cost via the interbank market (Raga and Tyson, 2021). There is however a caution that if a bank increases its interbank position up to a certain threshold, bank risks increase due to a possible contagion effect (Murinde et al., 2018).

Related to the above, is the second impediment, about market segmentation which influences access to, volume and price of liquidity on the interbank market. This segmentation largely reflects the market power of the “too big to fail” and internationally affiliated banks, association of high risks with smaller banks, information asymmetry and opaque credit limit policies operated by the internationally affiliated banks and relationships at bank ownership level (Odour et al., 2014; Murinde et al., 2018; Bwire et al., 2019b; Chipili et al., 2019). Reflecting this, large and foreign banks that are perceived to benefit from systemically important status and parent bank support enjoy lower rates, while small banks that are perceived to be risky are charged higher rates, irrespective of short-term changes in these banks’ actual financial conditions (Bwire et al., 2019b; Kanyumbu, 2019)—by for example, as much as 2 percentage points, in some jurisdictions, over and above what is charged on their large counterparts on the interbank market

(Bwire et al., 2019b). These interbank market imperfections undermine the effectiveness of monetary policy, particularly in the context of inflation targeting as they reduce the transmission of monetary policy signals to the economy. They create considerable credit and contagion risks and lower liquidity in the financial system (Calice and Zhou, 2018; Bai et al., 2019; Bwire et al., 2019a; 2019b), to which banks respond by increasing the margins on lending and hoarding liquidity as a safeguard to their balance sheets (Angbazo, 1997; Mishra et al., 2010; Ahokpossi, 2013; Bwire et al., 2019a, b).

Therefore, it is not surprising that in some countries, available evidence reveals that while the short-term risk-free interbank market rate has been close to the CBR—firmly establishing, in effect, the first stage in the interest rate transmission mechanism, the second stage involving changes in the interbank rate to longer term interest rates is evidently asymmetric (Kanyumbu, 2020; Palamuleni et al., 2022; Bwire, 2023). Figure 4, based on Ugandan data—one of the typical inflation Targeters, speaks to this.

**Figure 6: CBR, 7-day interbank rate, 7-12-month time deposit rate and lending rate (average, %)**



Source: Bank of Uganda

The average time deposit rates have been slightly more volatile than the 7-day interbank rates, but they have tracked the CBR quite closely since the onboarding of inflation targeting monetary policy regime in July 2011. There is, however, less success in influencing the bank lending rates, which are stickier than deposit rates. Similarly, a disconnect between monetary policy rates and interbank market rates in the short-term in Kenya, particularly in periods of liquidity shocks is reported (Odur et al., 2014), while

in Zambia, the interbank market rate has been above the central bank's policy rate for around 80 percent of the time since 2012, despite high liquidity in the system (IMF, 2017).

## Conclusion and the central banks' policy options for developing the interbank markets

The interbank market exists to enable banks to address (call it insurance against) unanticipated liquidity shocks to be able to honour their liabilities as they fall due, but also invest in relatively illiquid assets with potentially higher returns and improve risk management within the banking system. Operating in a complex network of financial links and mostly uncollateralized transactions, the interbank market provides, at a macro level, the location via which inflation targeting central banks manage liquidity at the aggregate level to achieve their monetary policy operating target, i.e., aligning the interbank interest rate with their policy interest rate—the Central Bank Rate (CBR). Changes in the interbank rates, in turn, are expected to anchor the term structure of other interest rates in the economy—thereby contributing considerably to the effectiveness of the transmission of monetary policy signals to the real economy.

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However, while average interbank rate at any point in time are determined by the monetary policy stance, i.e., the CBR, individual banks borrow at a spread, above or below this average rate depending on the dictates of market segmentations which limits the potential role of the interbank market in increasing the efficiency of the banking sector. To this end and in line with Raga and Tyson (2021), we draw three main policy options for developing the interbank market in the COMESA region.

The need to deepen and widen the interbank market—regulators in the region, just like elsewhere, need to scale up the efforts to foster competition and widen participation (from banks and non-bank financial institutions) in the interbank market. Regulators can achieve this by enhancing transparency and frequency of information disclosure, improving market infrastructure, developing collateral markets and interbank trading instruments of different tenors, encouraging market-driven guarantee schemes, and tailoring central bank policy tools such as liquidity facilities, reserve requirements and interest rates in a manner that can directly influence the volume of interbank transactions.

The need to manage contagion risks in a segmented interbank market—regulators also need to balance efficiency gains from deepening interbank markets with the need to

mitigate contagion risks from increasingly connected bank networks in the context of a segmented market. To this end, central banks need to enhance macro-financial surveillance efforts and micro-prudential supervision of interbank market participants. Moreover, in the context of power wielded by banks of systemic importance, it is prudent for regulators to assign relatively higher capital and liquidity buffers to such banks in proportion to their systemic importance in the financial sector. Also, the likelihood of volatile behaviour of the unsecured markets in times of liquidity crunch is a strong candidate in support of developing the collateralized markets to provide relatively higher resilience to the financial system during shock episodes.

Finally, regulators should create space for market discipline in the interbank market by supporting the market disciplining role of interbank markets in mitigating bank riskiness and improving bank capitalization. Central banks can support this mechanism by, in part, promoting more frequent and a wider scope of information disclosure on banks' interbank positions, financial conditions, and liquidity and risk management. Even more, enhancing a competitive environment that can foster innovation on accessibility of information on counterparty risks may also curb incentives for interbank players' excessive risk-taking activities.

## Selected References

- Agénor, P.-R., and Montiel, P. J. (2015). *Development Macroeconomics* (4<sup>th</sup> ed.). Princeton University Press.
- Ahokposi, C. (2013), Determinants of bank interest margins in sub-Saharan Africa, IMF working paper 13/34
- Angbazo, L. (1997), Commercial bank net interest margins, default risk, interest-rate risk, and off-balance sheet banking, *Journal of Banking and Finance* 21(1) 55-87
- Bai, Y., Weiss, P., Murinde, V., and Green, C.J. (2019), Kenya interbank market: a network analysis, *School of Oriental and African Studies (SOAS) Center for Global Finance Conference Paper* No. 12.
- Bernanke, B. s., and Mishkin, F. S. (1997, Spring). Inflation Targeting: A new Framework for Monetary Policy? *Journal of Economic Perspectives*, 11(2), 97-116.
- Brownbridge, M., and Kasekende, L. (2018), “Inflation Targeting in Uganda: What lessons can we learn from five years of experience?” in *Monetary Policy in sub-Saharan Africa* (eds Andrew Berg and Rafael Portillo), Oxford University Press.
- Bwire, T. (2023), Operational issues for the implementation of Inflation Targeting Monetary Policy Framework, *Common Market for Eastern and Southern Africa (COMESA), Special Report*.
- Bwire, T, Brownbridge, M., Rubatsimbira, D. K. & Tinyinondi, G. A., (2019a), Institutional Environment and the Microstructure of the Interbank Market in Uganda, *School of Oriental and African Studies (SOAS) Centre for Global Finance WP No. 15/2019, University of London, London*.
- \_\_\_\_\_. (2019b), Do Interbank Interest Rates in Uganda reflect the financial soundness of borrowing Banks? *School of Oriental and African Studies (SOAS) Centre for Global Finance WP No. 14/2019, University of London, London*
- Calice, P. and Zhou, N. (2018), Benchmarking costs of financial intermediation around the world, *Policy Research Working paper no. 8478, Washington D.C: The World Bank Group*
- Chipili, J., Mbaao, F., Lungu, A., Sikaona, S., Bwalya, A. and Chanda, C. (2019), Segmentation of the interbank money market in Zambia, *School of Oriental and African Studies (SOAS) Centre for Global Finance WP No. 16, University of London, London*.
- COMESA Monetary Institute trainings on “Monetary Policy formulation and implementation in an era of Inflation Targeting regime”, April 2024.
- COMESA Monetary Institute studies on “Interbank Markets and Effectiveness of Monetary Policy” conducted by member countries in 2021, undergoing review for publication in CMI WPS
- Dinger, V. and von Hagen, J. (2009) ‘Does interbank borrowing reduce bank risk?’ *Journal of Money, Credit and Banking* 41(2/3) 491-506.
- Green, J. H. (1996, December). Inflation Targeting: Theory and Policy Implications. *IMF Staff papers*, 43(4), 779-795.
- Green, C. J., Bai, Y., Murinde, V., Ngoka, K., Maana, I. and Tiriongo, S. (2016) ‘Overnight interbank markets and the determination of the interbank rate: A selective survey’ *International Review of Financial Analysis*.

- IMF (2016), Country Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) databases
- \_\_\_\_\_. (2017), Zambia selected issues, IMF Country Report No.17/328, Washington, D.C.
- \_\_\_\_\_. (2015), Evolving Monetary Policy Frameworks in Low-Income and Other Developing Countries—Background Paper—Country Experiences, IMF Policy Papers, Washington, D.C.
- Kanyumbu, E. K. (2020), Interbank markets and effectiveness of monetary policy in Malawi, unpublished.
- \_\_\_\_\_. (2019), The network structure of the Malawi interbank market: implications for liquidity distribution and contagion around the banking system, School of Oriental and African Studies (SOAS) Centre for Global Finance WP No. 09, University of London, London
- Maehle, Nils (2020), Monetary Policy Implementation: Operational Issues for Countries with Evolving Monetary Policy Frameworks, IMF working paper, WP/20/26, Washington, D.C.
- Mishra, Prachi, Montiel, Peter J. Spilembergo, Antonio (2010), “Monetary transmission in low-income countries”, Working paper WP/10/223, International Monetary Fund.
- Murinde, V., Bai, Y., Green, C. J., Maana, I., Tiriongo, S., and Ngoka, K. (2018) Peer monitoring role of interbank market and implications for bank regulation: Evidence from Kenya. SOAS Centre for Global Finance Working Paper Series No. 14
- Odur, J., Sichei, M. M., Tiriongo, S. and Shimba, C. (2014), Segmentation and efficiency of the interbank market and their implication for the conduct of monetary policy, AfDB WP No. 202.
- Palamuleni, A., Chipungu, G., Kavalo, M., Banda, Moffat M. S., Chauma. T., and Mfuni, H. (2022), Interbank markets and effectiveness of monetary policy in Malawi, in COMESA Monetary Institute studies conducted by member countries in 2021, undergoing review for publication in CMI WPS
- Raga, S. and Tyson, J., (2021), Sub-Saharan Africa’s interbank markets: progress, barriers and policy implications, [degrp.odi.org](https://degrp.odi.org)
- Tiriongo, S. and Kanyumbu, E. (2019), Interbank market discipline and its effectiveness: Lessons from developing markets, Research Paper 367, African Economic Research Consortium (AERC).



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