Interest Rate Policies and Their Impact on Banking Profitability

Introduction

Understanding the link between interest rates and bank profitability is important for assessing the impact of the monetary policy stance on the soundness of the financial sector. Even though the monetary policy is not the only influence on the interest rate structure, it has a significant impact on it. Central banks set short-term interests rates and influence long-term interest rates by buying and selling securities in the open market. Low interest rate policy for a prolonged period has negative effect on banks profitability. Profitability of banks are important because retained earnings has effects on banks' ability to create funds internally in order to provide credit to the economy. Therefore, bank profitability contributes to bank soundness and financial stability. In many countries monetary policy after a financial crisis follows a low interest rate phase which was the case after 2008 great financial crisis followed the banckruptcy of Lehman Brothers.

Heterogeneous Affects of Monetary Policy on Banks Profitability

A research prepared by Carlo. A, Miguel B. And Jose-Luis P. publiched in Oxford University Press, investigated the effects of monetary policy in a low interest rate environment that lasted for a long period of time. Low interest rate policy (1) provides abundant access to central bank liquidity and (2) lowers the cost of debt hence, increases the bank capital and (3) reduces non-performing loans (NPL) and loan loss provisionings. In the studies conducted in 2015 has demonstrated that there is a positive correlation between interest rates and bank profit margin. [1]

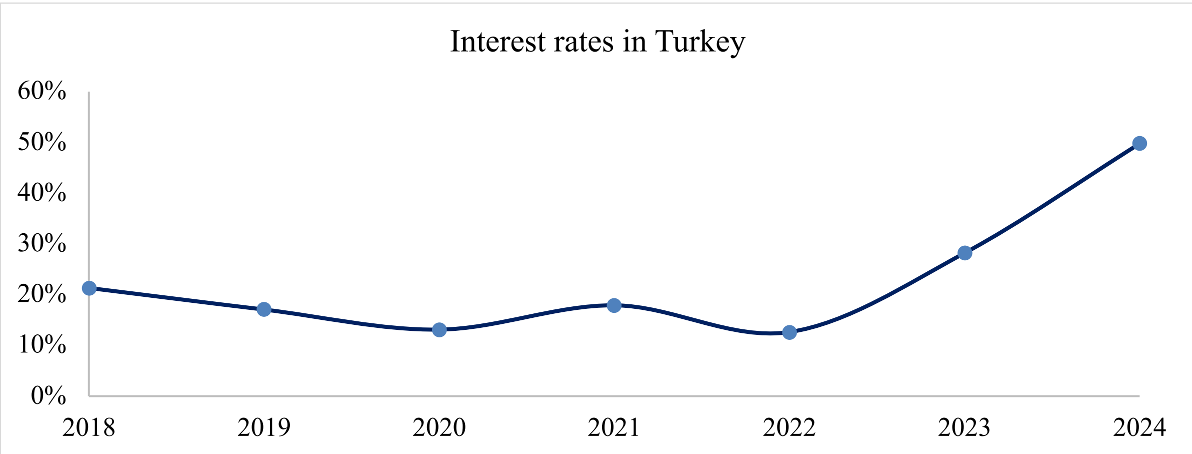
In their studies Altavilla, Boucinha and Peydro found that it is important to consider not only the actual effects of economic acitivities but also expected economic activities resulting from quantitative easing. [2] It is also evident from the paper that balance sheet composition of banks has a major impact on banks profitability.

1 Alessandri, Piergiorgio and Nelson, Benjamin D. (2015), "Simple Banking: Profitability and the Yield Curve", Journal of Money, Credit and Banking, Blackwell Publishing, Vol. 47, Issue 1, pp. 143- 175, 02.

2 Altavilla, C., Boucinha, M. and Peydró, J.-L. (2018) 'Monetary policy and bank profitability in a low interest rate environment', Economic Policy [Preprint]. doi:10.1093/epolic/eiy013.

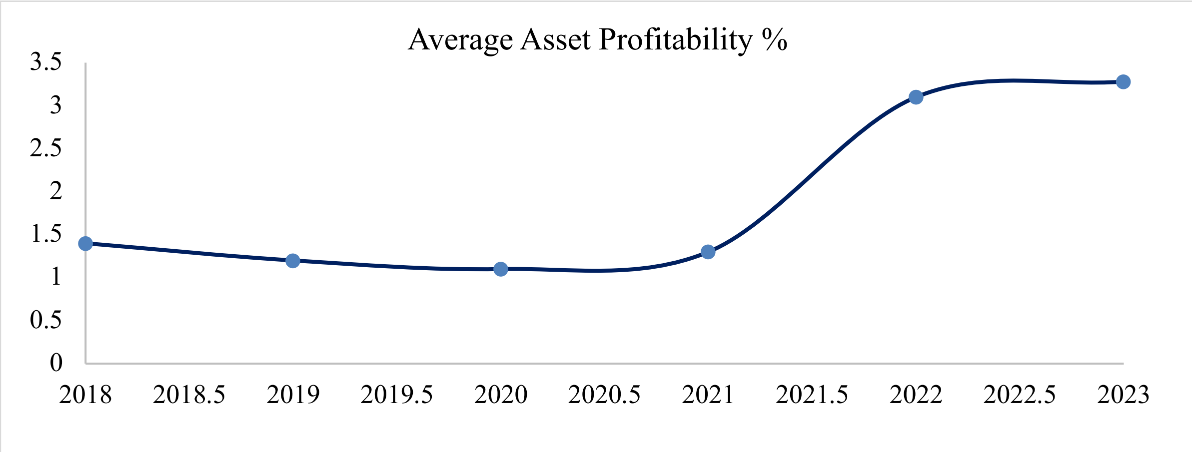
The main components of bank profitability are net interest income, non-interest income and loan loss provisions. These components have opposite effects on bank profitability, during a quantitative easing while loan loss provisions and non-interest income have positive impact, net interest income has negative impact on bank profitability performance. Another important findings of the research is heterogeneity of bank balance sheet features matters for the transmission of monetary policy to bank profitability. Results indicate that accomodative monetary policy is relatively more beneficial for banks with higher operational efficiency and banks with bad assets. Finally, even though monetary easing does not shirnk the profitability of bank per se, a protrected period can place stress on bank profitability. However, results from the study model show that the positive impact of monetary policy easing on real economic activity (and hence on banks) counterbalances the negative effects of low interest rates on net interest income.

An example of Turkish banks' performance provide evidence for the findings of the research. Interest rate policy of Central Bank of Turkey (CBRT) between 2018 and 2022 is given in the graph below.



Graph 1.1 Interest rates in Turkey
Source: Central Bank of the Republic of Turkey, 2024

The effects of this monetary policy conducted in Turkey significantly affects the banks' profitability during this period. Another graph taken from Banking Union of Turkey shows pozitive correlation between monetary policy and banks profitability.



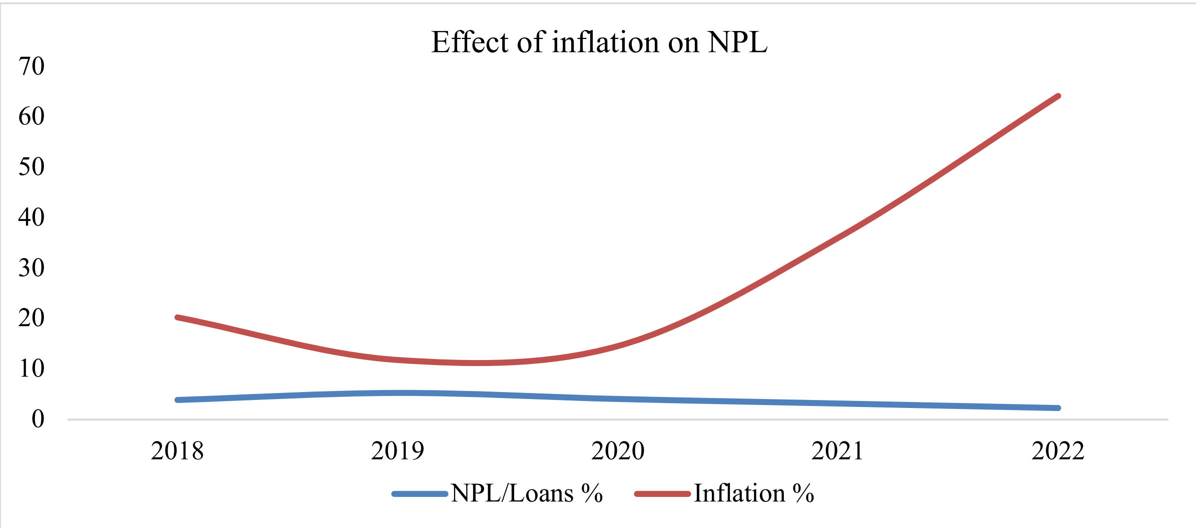
Graph 1.2 Average Asset Profitability
Source: Banking Regulation and Supervision Agency, 2024

An important point in the graps needs to be clearified is the banking profitability in 2022, even though Central Bank decreased the interest rates, the banking profitability has increased. This was because Exchange Rate Protected Deposit Scheme has been introduced to banking system as a monetary policy devise by the Central Bank in order to protect Turkish Lira (TL) against foreign currency appreciations on 20 December of 2020. The reason to implement such an unorthodox monetary policy was to prevent dolarization in Turkish economy, where interest rates were low, inflation high (real interest rates were negative) as a result depositors who want to protect the purchasing power of their savings switched to foreign curreny, and this colossal shift put a pressure on TL and decraesed the valu of the local currency. Government at early hours of the 20 Dec. 2020 annuounced that they were going to put into action this devise to protect currency by lessening the stress on TL via giving either interest or foreign curreny corresponding amount of the deposited money, whichever is greater at the maturity date. In this period the interset rates were significantly low, on the other hand currency rates increased a lot and the pozitive difference between interest rate and currency increases were promised by the Turkish Treasury. That devise was incredibly profitabile for banks because, interset rates were low, inflation was high as a result funding costs of banking were very low, thanks to the exchange rate protected deposit scheme which subsidized any currency increase costs.

On the one hand, the flattening of the yield curve typically associated with this type of policy may reduce the returns from maturity transformation activities and thus compress banks' net interest margins (e.g. Alessandri and Nelson, 2015; Altavilla, Canova and Ciccarelli, 2016). On the other hand, QE may improve bank profitability by boosting demand for credit, as the policy is transmitted to the real economy. The effect of the policy on real economic activity might also improve the capacity of borrowers to honour their commitments, increasing the quality of the assets held in banks' portfolios and hence allowing for savings in costs associated with loan loss provisions. How exactly bank profitability is affected by interest rate changes depends on the relative effects on its main componenets: net interest income, non-interest income, and provisions.

Also, in the study it is discovered that expected future inflation is an important variable in banks profitability because, rise in an expected inflation will result a decrease in default rates as it becomes easier for borrowers to honour their liabilities stemming from credit agrements.

Empirical evidence from Turkish banking system indicates that the linear relationship between inflation and bank profitability holds true. The diagram below points out that when inflation rate decreases the ratio of NPL/Total loans increases but, conversely when inlation rate increases the ratio of NPL/Total loans decreases, because it becomes easier for borrowers to pay back their debts.



Graph 1.3 Effect of inflation on NPL (non performing loan), Banking Sector Report
Source: Central Bank of the Republic of Turkey, 2022

The results of the study indicate that changes in short-term rates do not significantly influence bank profitability, but there might be adverse effects on bank profitability if interest rates remain low for a long period of time. Indeed, following a decrease in interest rates, net interest margins are at first shielded due to the typically faster repricing of the outstanding amount of liabilities as compared to assets. Since assets tend to be longer term, changes in the interest rates applied on new business take longer to be reflected in the outstanding amount of loans. A protrected low interest rate environment could therefore be expected to be more detrimental for banks.

Conclusion

First, monetary policy easing summarised as a decrease in short term interest rates, is only associated with lower bank profits if there are no appropriate controls for the endogeneity of monetary policy to bank financial health-especially during the crisis period.

Second the research suggests that following a monetary policy shock, the various components of bank profitability react asymetrically. To be more specific, since the impact on loan loss provisions largely offsets the one on net interest income, the overall effects of monetary policy on bank profitability are muted. Importantly, this analysis suggests that keeping interest rate low for a long time might have negative consequences for bank profitability. However, the research results suggests that it takes a long period of time for monetary policy to exert a subtantial adverse effect on bank profitability as a result of looser policies, as accomodative monetary conditions support real economic activity which in turn, has a positive impact on bank profitability, thereby offsetting the adverse impact. Moreover, policy easing tends to be more beneficial in terms for more efficient banks and for banks with lower asset quality.

Finally, research evidence suggests that both bank debtholders and shareholders tend to be better of when the central bank announces new, accomodative monetry policy. This is important not only for financial stability but also for the possible distributional consequences of that these policies may have on bank shareholders and debtholders, including depositors. Though these results show that monetary policy easing does not hamper bank profitability, shareholder and bond-holder values, there could be distortionary effects related to excessive bank risk-taking.

The results in Turkish banking system also supports the results that has been reached by the researhers in this article. Quantitative easing in monetary policy has increased the profitability of banking sector via its effect net interest income. Furthermore, rising inflation rates had a significant impact on banking profitability by improving payment capability of borrowers and hence decreased non performing loans consequently loan loss provisions. The only contradicting results of the survey with the Turkish banking sector’s profitability was due to exchange rate protected deposit scheme which increased banking profitability by reducing banks funding cost that subsidised by Turkish government.