Box Article 2:

The Impact of Monetary Policy on Bank Lending Activity in the Philippines[1]

The transmission of monetary policy is important yet a complex subject in monetary economics. It is crucial because, even if monetary policy is well-designed, it holds little value if it fails to reach the broader economy. However, this process is complex due to the multiple transmission channels involved and the incomplete understanding of how these policies affect real economic outcomes (Farinha & Marques, 2001). Additionally, global trends suggest that monetary policy now appears to be less effective than in the past, though the reasons for this decline remain unclear (Kuttner & Mosser, 2002).

Monetary policy affects the economy through several channels, including interest rates, bank lending, exchange rates, and asset prices. The bank lending channel, which is the focus of this article, plays a key role in transmitting monetary policy by influencing supply of bank loans. This occurs when (1) banks cannot fully offset changes in reserves with alternative funding due to limited substitutability of deposits (Kashyap & Stein, 2000; Stein, 1988), and (2) certain borrowers, like households and small and medium enterprises, rely on bank loans, as capital markets are not possible alternatives for them.

It is essential to note that the relationship between monetary policy and bank lending depends on the degree to which different sources of credit are substitutable. The strength of the bank lending channel is therefore crucial for understanding how monetary policy impacts the economy. Consequently, determining how banks respond to policy changes is important for policymakers (Kahn, 1991).

This box article examines the existence and strength of the bank lending channel in the Philippines. The article focuses on asymmetric effects during accommodative and restrictive monetary policy periods and on the types of banking activities. Building on the Kashyap and Stein (2000) model, a two-step least squares regression model was applied to data from 34 universal and commercial banks (UKBs) from Q1 2008–Q2 2023. Banks were categorized by asset size to assess differential impacts. The analysis was segmented into restrictive and accommodative monetary policy periods.

There are three main hypotheses: (1) bank lending in the Philippines increases (decreases) as the monetary policy of the Bangko Sentral eases (tightens), with the effect being strongest for small banks; (2) the impact of monetary policy may be asymmetric, being significant only during restrictive periods and not during accommodative periods, or vice versa; and (3) the effect may be more pronounced for UKBs, which focus more on lending activities.

Results suggest that monetary policy has an asymmetric effect on lending activity

Table 1 presents regression results for bank lending sensitivity to the reverse repurchase (RRP) rate or policy rate across different bank asset sizes during a specified period as well as during accommodative and tightening periods. Using a 95-percent confidence level, ϕ, which is the coefficient that measures the responsiveness of lending to changes in the RRP rate, was analyzed across different bank size categories to understand how each group adjusts its lending behavior in response to fluctuations in the RRP rate.

Table 1. Results of Two-Step Least Squares Regression Test

Φ*	B ≥ ₱350 billion	*t-stat*	₱150 billion ≤ B < ₱350 billion	*t-stat*	₱70 billion ≤ B < ₱150 billion	*t-stat*	₱35 billion ≤ B < ₱70 billion	*t-stat*	B < ₱35 billion	*t-stat*
All monetary policy periods										
	-0.002	*-0.167*	0.010	*0.259*	0.028	*0.726*	0.030	*0.589*	-0.077	*-0.929*
Accommodative period										
	0.014	*0.332*	0.036	*0.249*	0.159	*1.099*	0.008	*0.076*	0.110	*0.300*
Tightening period										
	-0.020	*-0.707*	-0.063	*-1.092*	-0.034	*-0.663*	0.216	*1.937*	-0.144	*-2.457*

**Coefficient of monetary policy that measures the responsiveness of lending to changes in the reverse repurchase (RRP) rate or policy rate*
Sources: Bangko Sentral ng Pilipinas data and authors' computations

The findings indicate that monetary policy has an asymmetric effect on lending activity. Restrictive monetary policy reduces lending, particularly for smaller banks, while accommodative policy does not lead to a corresponding increase in lending.

During easing period, none of the bank size categories show a statistically significant response to RRP rate cuts. This reveals the limitations of the bank lending channel in transmitting accommodative monetary policy to stimulate lending. Larger banks are buffered by diversified funding, while smaller banks maintain a cautious lending stance, both of which contribute to a muted response across the sector.

Meanwhile, during tightening periods, results show a pattern of mixed sensitivity across bank size categories, with only the smallest banks displaying statistically significant responsiveness to RRP rate changes at the 95-percent confidence level. This suggests that smallest banks reduce lending in response to higher policy rates.

- The smallest banks (B < ₱35 billion) exhibit a statistically significant negative ϕ value, indicating a meaningful reduction in lending in response to RRP rate increases. This result underscores the vulnerability of smaller banks to policy rate hikes, as they are more reliant on deposits and may lack alternative funding sources. Higher policy rates likely translate to a direct impact on their liquidity and credit supply, resulting in a contraction in lending.

- The largest, large, and mid-sized banks (B ≥ ₱35 billion) do not significantly adjust their lending in response to tightening policy. These institutions likely have

diversified funding strategies and strong liquidity management practices, allowing them to maintain lending stability regardless of RRP rate increases.

These findings suggest that the bank lending channel of monetary policy is relatively weaker for larger banks but more pronounced for the smallest banks. The limited responsiveness of larger institutions may dilute the effectiveness of monetary policy in influencing aggregate lending. However, the sensitivity of the smallest banks indicates that policy rate increases could still have a contractionary effect on credit supply, particularly for borrowers who depend on smaller financial institutions.

Policy tightening has stronger impact on credit supply in smaller Philippine banks

Monetary policy affects the lending activity of UKBs in the Philippines, but its impact is asymmetric. Transmission occurs during restrictive periods but is weak during accommodative ones.

This asymmetry aligns with Blyth's (2012) "pushing on a string" analogy—while higher interest rates tighten credit conditions and restrain activity, lower rates do not always stimulate lending. Banks may limit lending due to risk concerns, and borrowers may hesitate amid economic uncertainty.

Barnichon et al. (2017) suggest three reasons for this asymmetry: (1) behavior of lender and borrower—when a central bank hikes policy rate, banks generally pass on rate hikes but may restrict lending to borrowers (i.e., credit rationing) rather than risk of having defaults. Meanwhile lower policy rates do not necessarily result in increased borrowing if there is no demand for additional credit given economic conditions; (2) sticky prices—firms reduce output under tight policy but adjust prices instead during expansion; and (3) consumer outlook—economic downturns trigger stronger pessimism on consumers and firms than optimism during booms.

In the Philippines, policy tightening impacts credit supply mainly in smaller institutions, while larger banks remain less affected. To influence aggregate credit growth, the BSP may need to employ complementary tools targeting smaller banks to enhance monetary policy transmission, especially if the goal is to curb lending across the entire banking sector.

ENDNOTE

1/ This article was written by Ms. Carolina Austria Escranda, Ph.D. is a Principal Researcher at the Bangko Sentral ng Pilipinas (BSP) Research Academy and Ms. Bernadette Marie Bondoc-Quiban is a Bank Officer V at the Department of Economic Research. A full version of this study is published in the 2024 BSP Discussion Paper Series. https://www.bsp.gov.ph/Sites/researchsite/Publications/BSP-Discussion-Papers/DP202424.pdf

REFERENCES

Barnichon, R., Matthes, C., & Sablik, T. (2017). *Are the effects of monetary policy asymmetric?* [Federal Reserve Bank of Richmond Economic Brief No. EB17-03]. https://www.richmondfed.org/publications/research/economic_brief/2017/eb_17-03

Blyth, M. (2012). The last days of pushing on a string. *Harvard Business Review, International Business.* https://hbr.org/2012/08/the-last-days-of-pushing-on-a

Farinha, L. & Marques, C. R. (2001). *The bank lending channel of monetary policy: Identification and estimation using Portuguese micro bank data* [European Central Bank Working Paper Series No. 102]. https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp102.pdf

Kahn, G. A. (1991). Does more money mean more bank loans? *Federal Reserve Bank of Kansas City Economic Review*, 21–29. https://www.kansascityfed.org/documents/525/1991-DoesMoreMoneyMean MoreBankLoans.pdf

Kashyap, A. K. & Stein, J. C. (2000). What do a million observations on banks say about the transmission of monetary policy? *American Economic Review, 90*(3), 407–428. https://doi.org/10.1257/aer.90.3.407

Kuttner, K. N. & Mosser, P. C. (2002). The monetary transmission mechanism: Some answers and further questions. *Federal Reserve Bank of New York Economic Policy Review*, 15–26. https://www.newyorkfed.org/medialibrary/media/research/epr/02v08n1/0205kutt.pdf

Stein, J. C. (1998). An adverse selection model of bank asset and liability management with implications for the transmission of monetary policy. The Rand Journal of Economics, 29(3), 466–486. https://www.jstor.org/stable/2556100