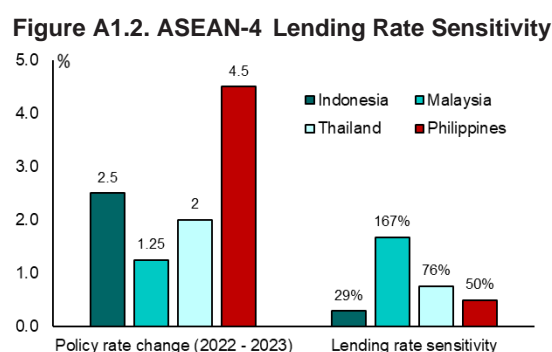
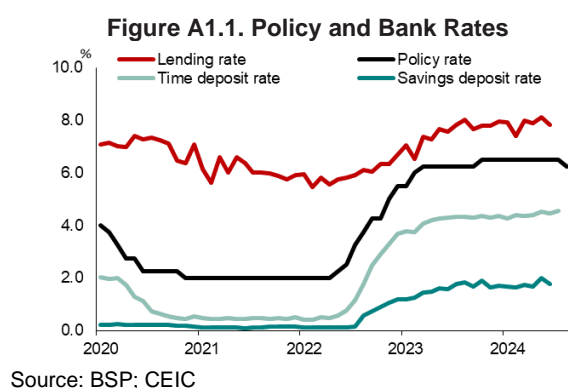


## Annexes: Selected Issues

### 1. A Closer Look at Monetary Policy Transmission to Bank Lending Rates<sup>106</sup>

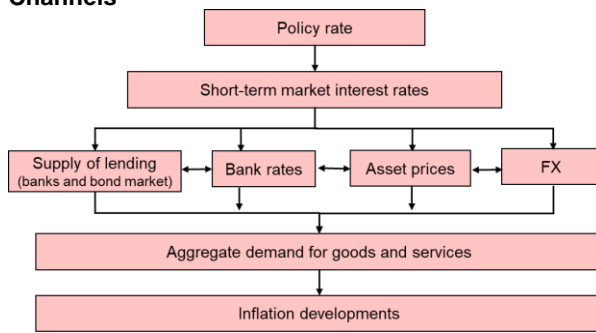
In 2022-2023, *Bangko Sentral ng Pilipinas (BSP)* tightened monetary policy forcefully by raising the policy interest rate by 450 basis points to fight off inflation. The magnitude of the increase was large compared with peer countries such as Indonesia, Malaysia and Thailand. However, only half of the total change was reflected in the actual bank lending rate (Figures A1.1, A1.2). Such a weak pass-through may hinder monetary policy effectiveness, given the bank-based nature of the Philippine financial system. This selected issue attributes the causes of such limited pass-through to an abundance of low-cost funding and the lack of consumer credit data, then discusses policy options to strengthen the pass-through.



**1. Effective monetary policy implementation requires a robust transmission of the policy rate to the interest rates in the broader economy.** When the BSP adjusts its policy rate, known as the target reverse repurchase (RRP) rate, it should lead to corresponding changes in the short-term market interest rates at which banks lend or borrow funds from one another (Figure A1.3). These market interest rates influence asset prices, such as stock indices, bond yields and exchange rates. They also feed into bank funding costs, which are the basis for the pricing of bank deposit and lending rates. The bank rates and asset prices that consumers and firms face affect their demand for goods and services, and ultimately, domestic prices. In the Philippines, since bank funding is the largest formal financing source for the private sector, the sensitivity of bank lending rates to the policy rate is central to monetary policy effectiveness. In the following sections, the strength of each link is examined one at a time.

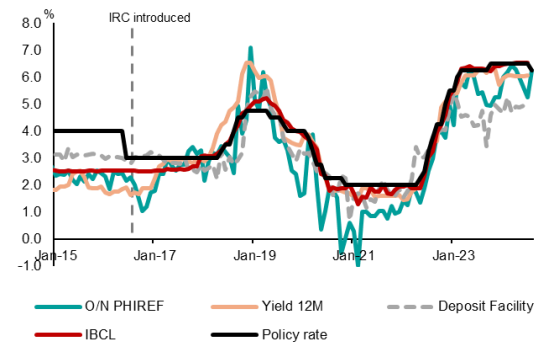
<sup>106</sup> This selected issue was prepared by Pim-orn Wacharaprapong, Economist.

**Figure A1.3. Monetary Policy Transmission Channels**



Source: AMRO illustration  
Note: The figure displays channels that are relevant to this selected issue. It omits some channels, such as the expectations channel.

**Figure A1.4. Policy and Short-term Market Rates**



Source: BSP; Bloomberg; Haver Analytics; AMRO calculations

### ***A Fair Transmission from the Policy Rate to Money Market Rates***

**2. The first link in the transmission – from the policy rate to short-term market rates – worked well in some markets.** Movements of the interbank call loan rate (IBCL), which is the overnight unsecured borrowing rate, and the short-term government bond yields have been well anchored to the policy rate since the establishment of the Interest Rate Corridor (IRC) in 2016.<sup>107</sup> Before the IRC, insufficient liquidity absorption led IBCL and one-year yields to trade significantly below the policy rate (Figure A1.4). However, after the IRC was put in place, the BSP introduced new liquidity absorption tools such as the term deposit facility and the issuance of BSP securities, and these short-term market rates began moving more in line with the policy rate. Correlations between the policy rate and the IBCL rose from 63 percent during 2010-2016 to 99 percent during 2017-2024. Similarly, correlations between the policy rate and the one-year yield improved from 38 percent to 94 percent.

**3. However, the interest rate in the foreign exchange swap market is more volatile and often trades below the policy rate.** Banks use FX swaps to borrow or lend peso liquidity using the U.S. dollar as collateral. Therefore, the implied peso interest rate derived from FX swaps, called the Philippine Interbank Reference Rate (PHIREF),<sup>108</sup> depends on not only domestic interest rate conditions but also U.S. dollar funding conditions. This is why the PHIREF trades on average 64 bps lower than the policy rate<sup>109</sup> and experience higher volatilities compared with the IBCL (Figure A1.4). Between April 2022 and October 2023, the PHIREF climbed 322 bps compared with 450 bps in the policy rate. The PHIREF's volatilities and deviations from the policy rate can dilute monetary policy signals, given that FX swaps remain the most active interbank market in the Philippines<sup>110</sup> due to higher liquidity and more familiarity among participants compared with the repo market.

<sup>107</sup> See BSP Press Release: BSP Implements Interest Rate Corridor (IRC) System in Q2 2016 at <https://www.bsp.gov.ph/SitePages/MediaAndResearch/MediaDisp.aspx?ItemId=3991>

<sup>108</sup> The Philippine Interbank Reference Rate (PHIREF) is the implied peso rate derived from FX swap transactions using USD LIBOR or USD SOFR.

<sup>109</sup> Data from 2017 to 2024.

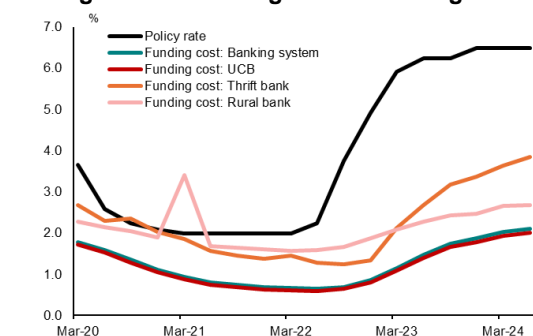
<sup>110</sup> BSP data shows that average daily volumes of transactions in 2024, as of August 15, are as follows: FX swaps PHP37.7 billion, IBCL PHP10.4 billion, repo PHP1.4 billion.

### Disconnect Between Market Rates and Bank Funding Costs

**4. Short-term market rates are only partially reflected in bank funding costs.** Following the 450 bps increase in the policy rate and the comparable changes in many short-term market rates, the average funding costs of the banking system rose by less than 30 percent of that amount<sup>111</sup> (Figure A1.5). The changes were most muted at universal and commercial banks (UKBs), the key players in the system.

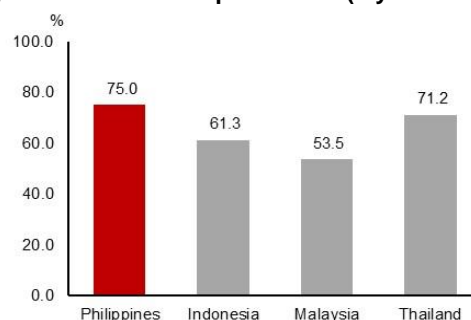
**5. The muted changes in bank funding costs are a result of the large low-cost deposit funding in the banking system.** Demand & negotiable order of withdrawal (NOW) and savings deposits in the Philippines constitute on average 75 percent of the deposit base, higher than current and savings (CASA) deposits in Malaysia’s 53 percent, Indonesia’s 61 percent and Thailand’s 71 percent (Figure A1.6). Notably, when the policy rate rose to a 17-year high, the average NOW and savings deposit ratio fell by 6.9 percent between 2022 and the first half of 2024,<sup>112</sup> suggesting some stickiness in the deposit base. Because NOW and savings deposits are held for transactional purposes, they pay lower interest rates than term deposits (Figure A1.1), and thus help keep banks’ funding costs low. The savings deposit rate is also less sensitive to policy rate changes. During the latest policy rate hiking cycle, the savings deposit rate rose by only 34 percent of the policy rate hike, compared with 83 percent in the term deposit rate.<sup>113</sup> To be sure, from a bank’s perspective, a high NOW and savings ratio supports profitability. However, from a monetary policy perspective, it limits the degree of policy transmission to bank rates and then to the economy overall.

**Figure A1.5. Average Bank Funding Costs**



Source: BSP; CEIC

**Figure A1.6. CASA Deposit Ratio (5-year Average)**



Source: Central banks; CEIC; AMRO calculations

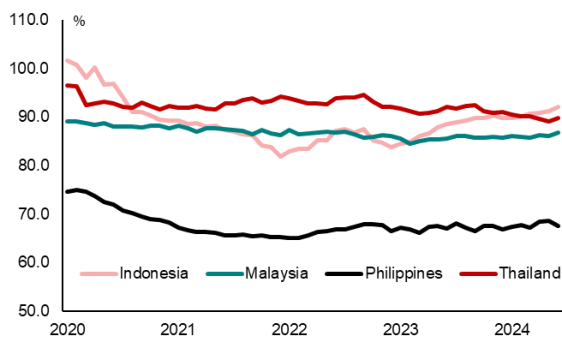
Note: Average for the periods of Jan 2020 – Jun 2024. For the Philippines, the figure refers to the demand and negotiable order of withdrawal (NOW) and savings deposits.

<sup>111</sup> The change in average bank funding costs between the first policy rate hike to three months after the last rate hike, to allow for lagged effects.

<sup>112</sup> CASA ratio averaged at 81 percent in 2022, and 76 percent in H1 2024.

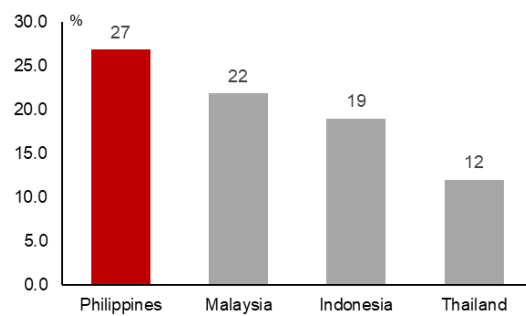
<sup>113</sup> Deposit rate sensitivity is measured as the change in average deposit rates divided by the change in the policy rate between the first rate hike and three months after the last rate hike, to account for transmission lags.

**Figure A1.7. Loan-to-Deposit Ratios**



Source: Central banks; CEIC; AMRO calculations  
Note: The loan-to-deposit ratios in this chart are defined as loans and receivable - others, net of amortization divided by deposit liabilities, to provide a consistent comparison of loan-to-deposit ratios among peer countries.

**Figure A1.8. Proportion of Bank Securities Holding to Total Assets**



Source: IFS; CEIC; AMRO calculations

**6. The large surplus liquidity in the banking system also limits the rise in bank funding costs.** The Philippine banking system has ample liquidity. The series of Reserve Requirement Ratios (RRR) cuts also released more liquidity into the banking system and lowered banks' costs of funds. Excess liquidity is also reflected by the loan-to-deposit (L/D) ratio, which is markedly lower than in ASEAN-4 peers (Figure A1.7). The low L/D ratio shows that most banks have a sizable buffer of idle liquidity, and hence have no need to compete for deposits by using more attractive rates. This is particularly true for UKBs, which are big banks with larger deposit bases.<sup>114</sup> This is why UKBs have kept their funding costs lower than rural and thrift banks. The low L/D ratio may reflect some combination of a lack of profitable lending opportunities and low-risk appetite among banks. Indeed, Philippine banks hold more government securities as a share of total assets compared with their counterparts in other ASEAN-4 countries (Figure A1.8).

### **Constrained Linkage from Bank Funding Costs to Lending Rates**

**7. The pass-through to bank lending rates was constrained and differs across loan types.** After the policy rate was raised by 450 bps, the average effective lending rate rose by 224 bps, a pass-through of 50 percent. However, behind this average number, the degree of pass-through varies across loan types. It is strongest for corporate loans, at 64 percent, followed by SME loans at 32 percent, and household loans at 20 percent (Figure A1.9). Furthermore, among household loan types, the pass-through differs markedly, from positive for credit card<sup>115</sup> and housing loans, to negative for salary and motor vehicle loans. At the outset, it may appear counterintuitive that corporates that generally have lower credit risks experience a sharper rise in their borrowing costs than SMEs or households. AMRO's interviews with banks shed some light on this puzzle.

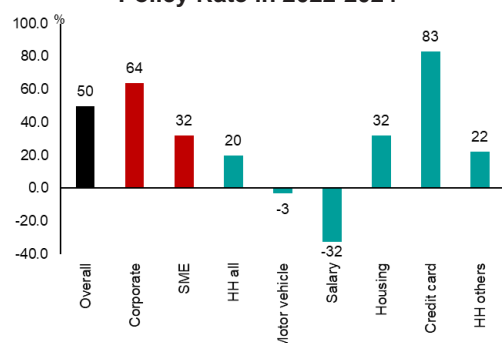
**8. Household loan rates are less sensitive to the policy rate because they are dominated by credit risk premiums.** In simple terms, bank loan rates comprise bank funding costs plus the risk premium of the borrowers and the bank's profit margins. Based on AMRO's interviews with banks, the credit risk component in household loan rates tends to be large, dwarfing any changes in funding costs that can be influenced by the policy rate. This is why

<sup>114</sup> The average L/D ratio during 2022-2024 for UKBs, thrift banks and rural banks are 66.2 percent, 83.2 percent and 79.0 percent, respectively. Moreover, 65 percent of bank deposits are concentrated in the five largest banks, which are all UKBs.

<sup>115</sup> The larger increase in the credit card loan rate was in part a result of the lifting of the credit card interest rate ceiling in January 2023 from 24 percent to 36 percent.

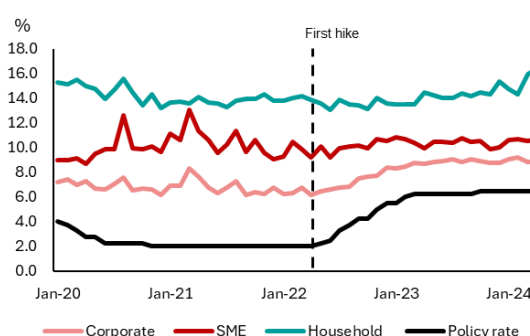
household rates were elevated and kept steady through the policy rate cutting and hiking cycles (Figure A1.10).

**Figure A1.9. Sensitivity of Bank Lending Rates to Policy Rate in 2022-2024**



Source: BSP; Haver Analytics; AMRO calculations  
Note: The rates shown are the average between effective high rates and effective low rates. The changes are between Apr 22 and Jan 24, between the first hike and three months after the last rate hike. HH denotes households.

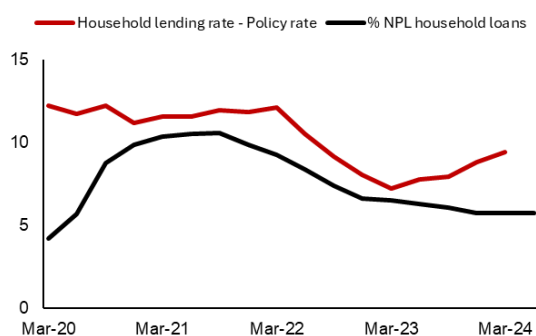
**Figure A1.10. Effective Lending Rates**



Source: BSP; Haver Analytics; AMRO calculations  
Note: The effective rates shown are the average between effective high rates and effective low rates.

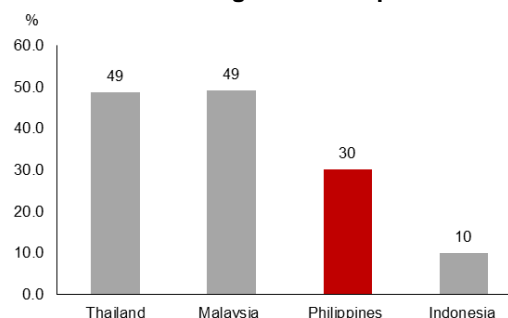
**9. Banks cited insufficient household credit data as the reason for the large and persistent credit risk premium.** The Credit Information Corporation (CIC) is responsible for collecting the credit data of all borrowers from both bank and non-bank lenders. However, the data is not fully usable or reliable due to problems with quality and coverage. For example, borrowing records are often incomplete, sometimes because different types of identity documents were used for different loans. Entries from different lenders could also be submitted in different formats. The absence of comprehensive and reliable credit information hinders lenders' ability to accurately assess and price the credit risk of household borrowers. The assessment is even more challenging for new borrowers who do not have any prior records. Only a quarter of individuals have access to formal credit,<sup>116</sup> presenting a significant challenge to lenders. As a result, banks tend to attach a large credit risk premium to household lending rates to ensure an adequate buffer. Indeed, the lending rate sometimes deviates from the actual credit risk trend, as measured by the non-performing ratio of household loans (Figure A1.11).

**Figure A1.11. Household Credit Risk Premium and NPLs**



Source: BSP; CEIC; Haver Analytics; AMRO calculations  
Note: Household lending rate is the average effective rate.

**Figure A1.12. Share of Investment Funds Outstanding to Total Deposits**



Source: AIMC; SC Malaysia; OJK; BSP; AMRO calculations  
Note: Investment funds outstanding include unit trust funds, mutual funds and private provident funds. Data for the Philippines is estimated from the liabilities of trust funds by banks and non-bank institutions.

<sup>116</sup> Statistics as of 2021 based on the BSP's 2022 Annual Report National Strategy for Financial Inclusion.

## Policy Discussions

Given these findings, three policy priorities can be identified to strengthen the linkage between the policy rate and bank lending rates, and to advance financial development overall.

**10. First, the BSP should continue to develop a liquid repo market to serve as the core interbank funding market with a stronger link to the domestic policy rate.** The repo market offers an alternative for secured interbank borrowing with more stable pricing, in place of FX swaps. To strengthen the repo market, once the BSP establishes a standard GMRA contract and adopts deliverable repos in its RRP window,<sup>117</sup> it should strongly encourage market participants to follow suit. Next, the authorities should establish standard pricing conventions for collateral securities that market participants can also adopt. Furthermore, the BSP can consider limiting RRP access to a subset of market makers to promote interbank repo activities, at least in the short term. Finally, the BSP's plan to develop an overnight reference rate based on overnight RRP rates as a replacement of the PHIREF is also welcome.

**11. Second, although stable bank funding is important for banking system resilience, the deposit market has room for more competition to enhance sensitivity to the policy rate.** The BSP can start, as part of promoting financial inclusion and literacy, by increasing awareness and availability of savings alternatives to CASA, including higher-yielding term deposits and capital market investments, such as unit investment trust funds. At present, outstanding investment funds amount to only 30 percent of bank deposits in the Philippines, compared with 50 percent in Malaysia and Thailand (Figure A1.12). To promote more investment, tax incentives for the Personal Equity Retirement Account (PERA) can be expanded beyond retirement savings to cater for other investment goals.<sup>118</sup> Finally, although private entities are already offering investment products, a government-run alternative similar to Malaysia's PNB<sup>119</sup> can take the lead in offering products to underserved groups. The increase in investment in the capital market will not only benefit monetary policy transmission, but also boost household savings and deepen the domestic capital market.

**12. Finally, the quality and availability of household credit data must be strengthened.** The existing system of household credit data needs improvements to allow lenders to better assess credit risks and price loans. First, the data should be more complete, encompassing all financial footprints at bank and non-bank lenders. Second, the accuracy of the data must be improved. Third, alternative data such as payments to utility companies or online shopping platforms can be added to the credit profile, subject to appropriate data privacy and protection standards. Such improvements in the credit data will not only benefit policy rate transmission, but also provide opportunities to households with a good credit history to access finance at more reasonable costs.

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<sup>117</sup> A reverse repurchase (RRP) operation is one of the BSP's monetary policy instruments, in which the central bank sells government securities to banks with a commitment to buy them back at a future date. Currently, securities are not actually transferred due to operational constraints, but the BSP plans to deliver securities by the end of 2024.

<sup>118</sup> PERA is a voluntary retirement savings program that offers investors income tax credit of 5 percent of their annual PERA contributions. The maximum annual contribution eligible for the tax credit is PHP100,000. PERA contributions can be withdrawn upon reaching the age of 55 or in the event of death.

<sup>119</sup> Permodalan Nasional Berhad (PNB) is a government-linked investment company in Malaysia.