2. Monetary Management

Tightening Monetary Policy in Response to the Impact of Surging Global Inflation on the Domestic Economy

(1) Raising Policy Rates Four Times

In the first half of 2022, the world economy witnessed a steep rise in inflation amid the outbreak of the Russia-Ukraine war and worsening global supply chain bottlenecks. In the second half of the year, global inflation remained at high levels and major economies such as the US continued with monetary policy tightening, with the global economy experiencing a slowdown. Meanwhile, Taiwan's economy registered slower growth owing to softened global demand, and surging import costs of energy and food pushed the CPI annual growth rate above 2%. Based on the above assessment, the Bank adopted a tight monetary policy stance in 2022 to rein in domestic inflation expectations, maintain price stability, and foster sound economic development. The Bank raised policy rates four times throughout the year by a total of 0.625 percentage points. At the end of 2022, the discount rate, the rate on refinancing of secured loans, and the rate on temporary accommodations were 1.75%, 2.125%, and 4%, respectively.

The Bank's Policy Rate Adjustments

Unit: %

Effective Date	Discount Rate	Rate on Refinancing of Secured Ioans	Rate on Temporary Accommodations
2022/ Mar.18	1.375	1.750	3.625
Jun.17	1.500	1.875	3.750
Sep.23	1.625	2.000	3.875
Dec.16	1.750	2.125	4.000

Source: Financial Statistics Monthly (February 2023), CBC.

(2) Increasing the Reserve Requirement Ratios on NT Dollar Deposits Twice

The Bank raised the reserve requirement ratios on NT dollar demand deposits (excluding passbook deposits from non-resident investors) and time (savings) deposits by 0.25 percentage points twice in a row, effective July 1 and October 1, 2022.

Adjustments to Reserve Requirement Ratios on Deposits

Unit: Percentage of deposits

Ī				Passbook Deposits from	n Nonresident Investors	Savings	Deposits	
	Effective Date	Checking Accounts	Passbook Deposits	Amount Below the Outstanding Balance Recorded on Dec. 30, 2010.	Increment Exceeding the Outstanding Balance Recorded on Dec. 30, 2010.	Passbook	Time	Time Deposits
	2022/ Jul.1	11.000	10.025	25.000	90.000	5.750	4.250	5.250
	Oct.1	11.250	10.275	25.000	90.000	6.000	4.500	5.500

Source: Financial Statistics Monthly (February 2023), CBC.

Continuing Open Market Operations to Adjust Market Liquidity

In 2022, the Bank continued to manage market funds through open market operations by issuing CDs in response to domestic economic and financial conditions, which helped to maintain market liquidity and market rates at appropriate levels.

(1) Appropriately Managing Reserve Money

The Bank continued to conduct open market operations by issuing CDs. At the end of 2022, the total outstanding amount of CDs issued by the Bank was NT\$8,601 billion. In response to banks' demand for asset allocation, from June 2022 onwards, the Bank reduced the monthly bidding amounts for 364-day and 2-year CDs from NT\$170 billion and NT\$60 billion to NT\$140 billion and NT\$25 billion, respectively.

In 2022, reserve money grew at a slower pace, with an annual growth rate of 8.91%, which was 3.18 percentage points lower than the previous year's figure. The annual average excess reserves of financial institutions in the year were NT\$71.8 billion, higher than the previous year's NT\$62.7 billion. In terms of the monthly movements of reserve money, the annual growth rates of reserve money for January and February are often more volatile because of the shift in the exact timing of the Lunar New Year holidays (e.g., the holidays occurred in mid-February in 2021, yet in late

Reserve Money (Averages of Daily Figures) Amount (LHS) NT\$billion Annual Grwoth Rate (RHS) 6.000 14 5 500 12 10 5,000 4,500 4.000 3.500 10 10 10 2021 2020 Source: Financial Statistics Monthly (February 2023), CBC.

January in 2022). For the first two months of the year, reserve money posted an annual growth rate of 11.41%. From March onwards, the annual growth rate of reserve money showed a downtrend and dropped to an all-year low of 6.35% in October. In November, the annual growth rate of reserve money rose to 7.41% owing to net foreign capital inflows and an upswing in both trading value and volume in Taiwan's stock markets, and then fell back to 7.08% in December.

On the demand side, reserve money, measured on a daily average basis, increased by NT\$544 billion over the previous year. Of the components, net currency increased by NT\$315 billion and the annual growth rate rose to 12.40% from 11.99% the previous year; reserves held by financial institutions expanded by NT\$229 billion, with the annual growth rate down to 8.94% from 12.37% the previous year. As the low interest rates paid on bank deposits contributed to a low opportunity cost of holding currency for the private sector, net currency recorded continuous growth during the year.

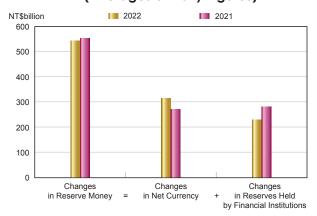
As for reserves held by financial institutions, although the Bank raised the reserve requirement ratios twice, slower growth in demand deposits resulted in reduced demand from banks to deposit reserves, leading to a smaller increase in reserves held by financial institutions compared to the previous year.

From the supply side perspective, reserve money increased by NT\$579 billion at the end of the year. According to the balance sheet of the Bank revealing the sources of changes in reserve money, increases were mostly attributable to the decrease in the outstanding balance of CDs issued by the Bank and the growth in foreign assets held by the Bank, whereas decreases were due to the Bank's reduced claims on financial institutions.

(2) Overnight Call Loan Rate Moving Up with the Bank's Policy Rate Hikes

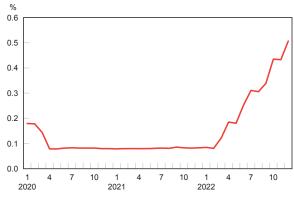
The Bank raised policy rates four times in 2022 by a total of 0.625 percentage points, bringing the overnight call loan rate up by nearly 0.5 percentage points throughout the year. As of the end of December 2022, the annual average overnight call loan rate was at 0.556%.

Changes in Reserve Money (Averages of Daily Figures)



Source: Financial Statistics Monthly (February 2023), CBC

Overnight Call Loan Rate



Source: Financial Statistics Monthly (February 2023), CBC.

(3) Conducting Regular Small-Scale Repo Operations

The Bank conducted small-scale test repo operations on CDs and government bonds in April and October 2022 to improve operational readiness and ensure resilience of the open market operations.

(4) Continuous Growth in Monetary Aggregates, Albeit with the M2 Growth Rate Gradually Sliding

For 2022, the annual growth rate of M2, measured on a daily average basis, was 7.48%, down by 1.24 percentage points from the previous year, mainly reflecting a higher base effect, net foreign capital outflows, and slower growth in bank loans and investments, yet the M2 annual growth rate of each month was still higher than the upper boundary of the reference range at 6.5%.

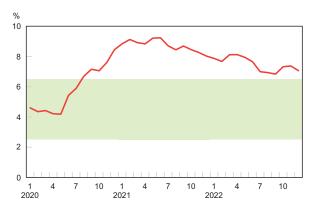
With regard to the monthly movements in 2022, a slowdown in demand deposit growth in January and weaker expansion in bank loans and investments in February combined to bring down the M2 growth rate to 7.67% in February. Later, an uptick in bank loans and investments from March to April drove up the M2 growth rate to a yearly high of 8.12% in April. In subsequent months, with net foreign capital outflows and decelerated growth in bank loans and investments, the M2 growth rate was dragged down to an all-year low of 6.83% in September.

Afterwards, M2 growth trended up to 7.37% in November. This was due to faster growth both in foreign currency deposits and in bank loans and investments during October and November, as well as net foreign capital outflows turning into net inflows in November. The M2 growth rate then slipped again to 7.06% in December on account of net foreign capital outflows and softer expansion in bank loans and investments.

The annual growth rate of the monetary aggregate M1B, measured on a daily average basis, went down by 8.48 percentage points to 7.81% in 2022. The decrease in M1B growth was primarily attributable to a higher base effect, net foreign capital outflows, and weaker growth in demand deposits amid declines in the TAIEX and in trading volume on the TWSE compared to the previous year.

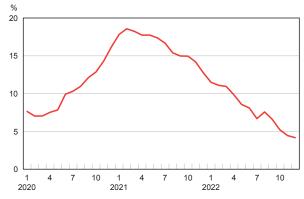
As for the monthly movements, the annual growth rate of M1B recorded a yearly high of 11.49% in January because of greater demand for funds prior to the Lunar New Year holidays and an increase in currency issuance.

Annual Growth Rate of M2



Note: Green ares is the referance range for M2 growth (2.5 % to 6.5 %). Source: Financial Statistics Monthly (February 2023), CBC.

Annual Growth Rate of M1B



Source: Financial Statistics Monthly (February 2023), CBC.

From February onwards, except for August when the M1B growth rate rebounded owing to an increase in passbook savings deposits as a result of cash dividend payments by enterprises, the annual growth rate of M1B for the rest of the months exhibited a broad downtrend and fell to an all-vear low of 4.14% in December.

Continuing the Special Accommodation Facility to Support Bank Credit to SMEs and Conducting Exit Plans

As the pandemic situation was broadly stable at home, the need for such funding assistance waned. Although the Facility's deadline for banks to accept new SME loan applications was set at the end of 2021, SME loans granted by banks under the Facility would continue to enjoy the preferential interest rates until June 30, 2022 in order to continue easing corporate funding burdens. The Bank also designed and implemented proper exit strategies, including repeatedly reminding SMEs to make appropriate financial planning in advance to avoid the impact of interest rate hikes on capital deployment, and urging banks and the Small and Medium Enterprise Credit Guarantee Fund of Taiwan (Taiwan SMEG) to provide continuous assistance.

Under the Facility, financial institutions had approved 307 thousand applications with the disbursement totaling NT\$503.6 billion. The Facility not only helped sustain business operations of SMEs, maintain financial stability, and foster robust economic growth, but also helped balance regional development, achieve the goal of financial inclusion, and facilitate banks' expansion in other financial business.

Continuing the Selective Credit Control Measures and Adopting Supporting Measures to Strengthen Their Effectiveness

To facilitate effective allocation and reasonable utilization of credit resources as outlined in the government's Healthy Real Estate Market Plan and to prevent bank credit from flowing towards property and land hoarding, the Bank continued to implement the selective credit control measures. In addition, to strengthen the effectiveness of the control measures, the Bank adopted the following supporting measures in 2022 to enhance financial institutions' real estate-related credit risk management so as to promote financial stability and sound banking operations.

- (1) Urging financial institutions to comply with regulations and implement credit risk-based interest rate pricing principles.
 - A. January 2022: The Bank held the meeting on "Reinforcing Management of Risks Associated with Land Loans" with 36 domestic banks and the National Federation of Credit Cooperatives, R.O.C. (NFCC), and urged banks to set up internal rules to ensure that land loan borrowers begin construction within the promised time frame.
 - B. July 2022: The Bank called on the NFCC and the Agricultural Bank of Taiwan to require all credit cooperatives and credit departments of farmers' and fishermen's associations to review and improve deficiencies in real estate mortgage loans, to establish internal control and auditing systems, and to strengthen personnel education and training in this regard.
 - C. November 2022: The Bank held a "Seminar on the Extension of Real Estate Loans," and invited

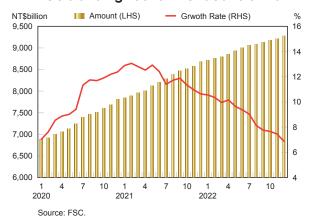
- 6 banks with higher outstanding real estate loans to understand current practices of the regulated real estate loans extended by banks as policymaking reference.
- (2) Conducting on-site financial examinations: The Bank ran on-site examinations to ensure banks' compliance with relevant regulations and to enhance the effectiveness of the Bank's selective credit control measures. A total of 69 targeted examinations were conducted in 2022.
- (3) Strengthening the supervision of construction commencement and accelerating land development and utilization.
 - A. January 2022: The Bank asked financial institutions to stipulate rules that require land loan borrowers to commit themselves to begin construction within a specific time frame in these institutions' internal rules. This was to strengthen the efforts to urge borrowers to accelerate construction commencement so as to prevent bank credit from flowing towards multiple land hoarding or letting land sitting idle.
 - B. May 2022: The Bank requested the Joint Credit Information Center to incorporate information on land loans into its information query system. The setup of the function has been completed and become available in January 2023 for financial institutions to search relevant information. This would help prevent borrowers from circumventing the requirement of commencing construction within a specific time frame through transferring loans to another lender.
- (4) The Bank suggested the FSC enhance control over financial institutions' real estate guarantee business, and such recommendations were adopted by the FSC in December 2021. In addition, in February 2022, the FSC raised risk weights on the regulated mortgage loans extended by banks and reinforced the implementation of targeted examinations toward the regulated mortgage loans, both of which helped prevent excessive inflows of credit to the real estate market.
- (5) Compiling statistics: Statistics of the regulated real estate loans granted by banks were regularly released on the Bank's website.

Facilitating SME Funding

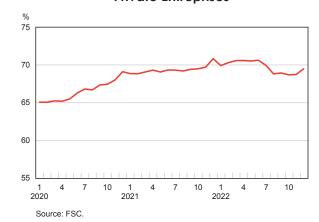
To assist SMEs in obtaining necessary funds for their operations, the Bank regularly tracked banks' lending to SMEs and participated in the formulation of the annual lending growth target under the FSC's "Program to Encourage Lending by Domestic Banks to SMEs" to urge banks to enhance their lending to SMEs.

At the end of 2022, the outstanding loans extended to SMEs by domestic banks amounted to NT\$9,283 billion, a year-on-year increase of NT\$594.5 billion that exceeded the annual lending growth target of NT\$350 billion set by the FSC for 2022 under the "Program to Encourage Lending by Domestic Banks to SMEs." However, owing to a higher base effect, the annual growth rate displayed

Outstanding Loans Extended to SMEs



Ratio of Outstanding Loans Extended to SMEs to Those Extended to Private Entreprises



a downtrend. At the end of 2022, the ratio of SME loans to loans extended to all private enterprises reached 69.48%, slightly lower than the 70.83% recorded at the previous year end.

Raising the Remuneration Rates on Financial Institutions' B Reserve Accounts Four Times

The Bank raised policy rates four times in 2022, and the remuneration rates on financial institutions' B reserve accounts held with the Bank also increased accordingly. Effective December 23, 2022, reserves from demand deposits and time deposits would receive interest at 0.521% and 1.208% per annum, respectively.

Adjustments to the Remuneration Rates on B Reserve Accounts

Unit: %

Effective Date	Demand Deposits	Time Deposits
2022/ Mar.25	0.144	0.820
Jun.24	0.271	0.955
Sep.30	0.396	1.083
Dec.23	0.521	1.208

Note: From January 2011, a zero remuneration rate has been applied to reserves originating from demand deposits from nonresident investors in financial institutions' B reserve accounts held with the Bank.

Source: Department of Banking, CBC.

Accepting Redeposits from Financial Institutions

Accepting redeposits from Chunghwa Post, the Agricultural Bank of Taiwan, and commercial banks is another instrument for the Bank to influence banks' reserve positions in order to promote financial stability. At the end of 2022, the outstanding redeposits of Chunghwa Post stayed broadly unchanged at NT\$1,624 billion, while the outstanding redeposits of the Agricultural Bank of Taiwan and of commercial banks were NT\$132 billion and NT\$236 billion, respectively.



The Bank's Special Accommodation Facility to Help SMEs

As the COVID-19 pandemic quickly spread worldwide at the start of 2020, Taiwan, like many other economies, was hit by the resultant economic and financial impacts. In a bid to help the affected SMEs stay on track, the Bank launched the Special Accommodation Facility to Support Bank Credit to SMEs (hereinafter "the Facility"), under which banks could obtain additional funds to offer concessional loans to those SMEs in distress because of the pandemic.

I. Introduction to the Facility

The Bank's Facility provided banks with accommodations at low interest rates so that banks would in turn support SMEs by offering concessional loans guaranteed by the government's Small and Medium Enterprise Credit Guarantee Fund of Taiwan (Taiwan SMEG). In addition, different programs were designed featuring various credit lines and rate ranges for firms of different sizes. To better support SME credit needs during the pandemic, the Bank has made 15 adjustments to

SME Relief Lending Under the Bank's Special Accommodation Facility

Loan type	Secured loans to the SMEs affected by the COVID-19 pandemic as assessed by banks receivin applications				
Loan purpose	To meet funding needs of the affected SMEs in order to continue business operations				
	Program	А	В	С	
	Borrower	SME*	SME*	Small-scale business entity**	
Eligible	Guarantee/ Collateral	At least 90% of guarantees covered by Taiwan SMEG	Other collateral (including at least 80% of guarantees covered by Taiwan SMEG)	100% of guarantees covered by Taiwan SMEG	
borrowers	Credit line	Up to NT\$4 million	Up to NT\$16 million	Up to NT\$1 million	
and loan terms	Interest rate	Capped at 1%	Capped at 1.5%	Capped at 1%	
ionnic	Application schedule	2020.4.1 – 2021.12.31		2020.4.20 - 2021.12.31	
	 SME: A domestic business entity with proper company registration, business registration, limiter partnership registration, or taxation registration, and whose paid-in capital is no more tha NT\$100 million or which hires fewer than 200 regular employees may apply for loans under Program A or B. ** Small-scale business entity: A business entity with proper taxation registration and whose monthly sales amount (in any month since January 2020) does not reach the threshold for using uniform invoices may apply for loans under Program A, B or C. 				
Applicable time frame	April 1, 2020 to June 30, 2022 (*preferential interest rates would be applicable during this period)				
Others	SMEs which take out loans under this Facility could also apply for other credit support measures implemented by the government.				

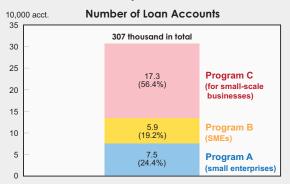
the Facility, including increasing the total amount, lowering the interest rates on accommodations, raising the ceiling for available loans, and extending the Facility's implementation duration.¹

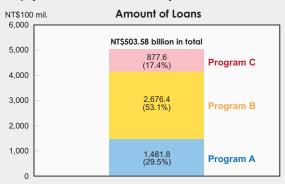
II. Implementation of the Facility

In sum, bank credit extended under the Facility reached 307 thousand loan accounts with a total amount of NT\$503.58 billion.

- 1. In terms of approved cases, Program C, which had a lower approval threshold, recorded the highest number with 173 thousand loan cases approved (making up 56.4% of the total).
- 2. In terms of loan amount, Program B had the highest accumulated amount with NT\$267.64 billion (53.1%) given that borrowers under this Program were mostly mid-sized enterprises and thus eligible for larger loans.

Implementation Results of the Facility (2020.4.1 - 2022.6.30)





Source: Department of Banking CBC.

III. Effectiveness of the Facility

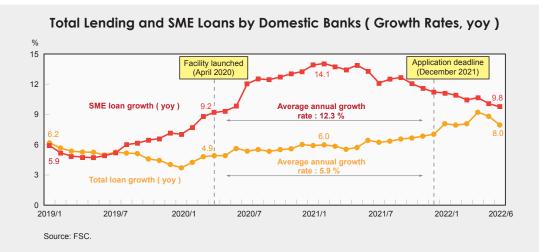
1. SME lending expanded markedly, which was seen to have helped the affected SMEs through the pandemic, thereby buttressing employment and economic growth

Over the course since the launch of the Facility, SME lending by domestic banks has risen markedly. The combined effect from not only the Bank's Facility but also the government's credit support measures and relief loans initiated by banks themselves helped Taiwan's banking sector to well serve its role of financial intermediation. In addition, by providing the SMEs with funds to stay afloat, the Facility contributed to stabilizing the labor market² and the financial system, as well as keeping the economy on its growth path.³

¹ The total accommodation amount was increased from NT\$200 billion to NT\$400 billion; the Facility's interest rate was cut from 0.25% to 0.1%; and the maximum loan amount allowed per borrower under Programs A, B, and C was raised from NT\$2 million, NT\$6 million, and NT\$0.5 million to NT\$4 million, NT\$16 million, and NT\$1 million, respectively.

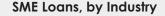
 $^{^2}$ Taiwan's unemployment rate decreased steadily from a peak of 4.8% in June 2021 to 3.61% in January 2022.

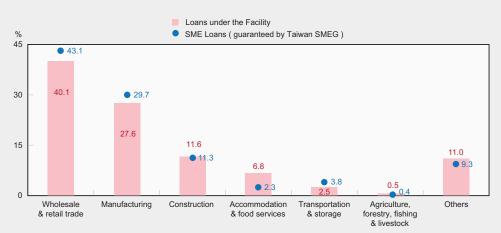
³ With an annual GDP growth rate of 3.39% in 2020, Taiwan ranked among the few economies to record positive economic growth that year. Furthermore, the economy expanded remarkably at an 11-year record pace of 6.53% in 2021 and continued to post healthy growth of 3.41% in the first half of 2022.



2. With credit support tailored to the needs of the affected industries, the Facility was able to help local SMEs obtain crucial financial resources, thereby bridging the rural-urban development divide and promoting financial inclusion

The Facility was aimed at facilitating loans to micro-sized firms or small-scale businesses. As the Facility streamlined underwriting processes such as credit verification and loan approval, banks were more willing to lend, thus fulfilling their role as financial intermediaries while financing the affected industries⁴ for business continuity. In addition, a regional breakdown analysis of domestic banks' SME lending showed that, in central and southern Taiwan and in Hualien, Taitung, and offshore islands, the Facility's SME credit support made up a larger share compared to total SME credit to these areas. This reflected the Facility's effect on such areas, which helped balance credit resource allocation across regions and foster financial inclusion.

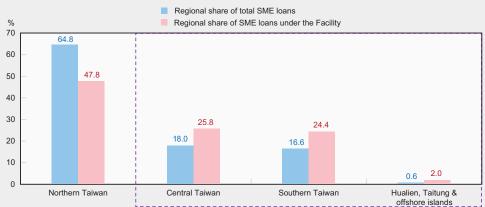




Note: SME loans refer to those underwritten by financial institutions and covered by Taiwan SMEG guarantees. Source: Taiwan SMEG, respective lenders, and Department of Banking, CBC.

⁴ Industries hit hardest by the pandemic included wholesale and retail trade, accommodation and food services, and transportation and storage.





Note: Shares of total SME loans by domestic banks are calculated using FSC statistics as of end-June 2022; shares of the Facility's SME loans are calculated using the accumulated amount of the Facility since implementation. Source: Respective lenders, FSC, and Department of banking, CBC.

IV. Conclusion

After implementation, the Facility effectively boosted banks' willingness to underwrite SME loans as it provided banks with additional funds at very low interest rates, while also bolstering SME credit worthiness via the guarantee mechanism of Taiwan SMEG. Furthermore, the Bank conducted a rolling review to make timely adjustments as warranted and incorporated community financial institutions as part of the lenders, so as to reflect the actual lending practice and answer the needs of the pandemic-hit SMEs. Overall, the Facility brought about satisfactory outcomes, including helping SMEs ride out the storm of the pandemic, and, as a result, sustaining stable employment, fostering steady economic growth, balancing regional development, and promoting financial inclusion.