

### 3. Money Market

For the year 2022, major economies adopted monetary policy tightening successively, and a continuous surge in international commodity prices imposed heavy imported inflation pressures on domestic prices. To rein in domestic inflation expectations so as to maintain price and financial stability, the Bank raised policy rates four times and increased the reserve requirement ratios (RRRs) on NT dollar demand deposits and time (savings) deposits twice in 2022. Consequently, the interbank overnight call loan rate and bills market rates swung up and weakened financial institutions' demand for interbank call loans. The total turnover in the interbank call loan market for the year 2022 shrank by 18.60% over the previous year, while the outstanding amount of interbank call loans at the end of the year registered a marked year-on-year decrease of 40.11%.

As for the short-term bills market, the total turnover increased by 7.86% from a year before. At the end of the year, the total issuance of short-term bills went up by 8.23% in response to corporate funding needs; however, as part of the treasury bills were repaid by the national treasury, the outstanding amount of short-term bills at the end of 2022 fell by 0.69% compared to the previous year end.

#### Slide in Interbank Call Loans

In 2022, the policy rate hikes by the US Fed and the Bank amid tightened global financial conditions combined with substantial net foreign capital outflows pushed domestic market interest rates up and lowered demand for interbank call loans. Total annual turnover of interbank call loans stood at NT\$25,790.0 billion, decreasing by NT\$5,894.1 billion or 18.60% over the previous year.

With respect to borrowers, domestic banks still made the largest contribution to total transactions with a share of 76.09%, followed by foreign and Mainland Chinese banks, bills finance companies, and Chunghwa Post, with shares of 11.75%, 9.77%, and 2.39%, respectively.

The amount borrowed by domestic banks contracted by NT\$6,205.6 billion or 24.02% from a year earlier. The decrease was primarily because the Bank's policy rate hikes and the two RRR increases combined with net foreign capital outflows which sent market interest rates higher and weakened banks' demand for interbank borrowing.

As for foreign and Mainland Chinese banks, they often carry out the custodian business for foreign investors. Nevertheless, as foreign investors sold stocks on the Taiwan Stock Exchange (TWSE) and caused capital outflows during the year, the source of funds reduced. Therefore, the amount borrowed by foreign and Mainland Chinese banks rose significantly by NT\$863.2 billion or 39.84% over the previous year.

Considering the interbank overnight call loan rate trended up, bills finance companies bridged funding gaps by conducting outright sales of bills or repo transactions, thereby reducing their demand for interbank borrowing. The amount borrowed by bills finance companies posted a year-on-year decrease of NT\$307.3 billion or 10.87%. Meanwhile, the amount borrowed by Chunghwa Post dropped by NT\$244.5 billion or 28.42% compared with a year ago.

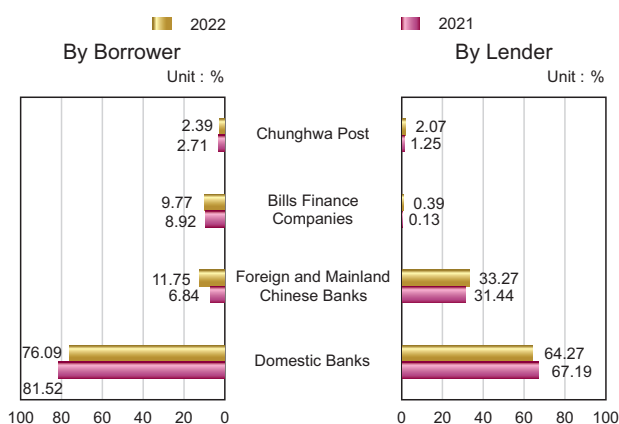
In terms of lenders, domestic banks remained the largest supplier of funds, making up 64.27% of total transactions in 2022. Foreign and Mainland Chinese banks came in second with a share of 33.27%, followed by Chunghwa Post and bills finance companies contributing 2.07% and 0.39% of total transactions, respectively.

The amount of call loans made by domestic banks slid by NT\$4,711.7 billion or 22.13% compared with the previous year, reflecting reduced interbank lending owing to the Bank's RRR increases, net foreign capital outflows, and a need to comply with the *Standards Implementing the Liquidity Coverage Ratio of Banks*.

Foreign and Mainland Chinese banks decreased their interbank lending by NT\$1,381.9 billion or 13.87% over the previous year because of less available funds at hand.

On the other hand, with the interbank overnight call loan rate going up, Chunghwa Post increased interbank lending to enhance profits. As a result, the amount of call loans made by Chunghwa Post expanded by NT\$140.2 billion or 35.51% from a year before. As for bills finance companies, the amount lent by this group grew by NT\$59.2 billion or 146.59% over the previous year owing to a lower base effect.

### Composition of Interbank Call Loan Market by Participant



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

In terms of maturity, interbank overnight call loans remained the most actively traded instrument in the market with a predominant share of 46.21%, down by 5.61 percentage points from that of the previous year. The second were those with a maturity of one week, rising by 2.91 percentage points to 36.89% over the previous year, while the share of loans with a two-week maturity also increased by 1.23 percentage points to 11.46%.

## Growth in Short-Term Bill Transactions

For the year 2022, newly issued short-term bills reached NT\$18,674.8 billion. Commercial paper made up a dominant 92.62% of the new issues, followed by negotiable certificates of deposit (NCDs) with a share of 6.06%.

Newly issued short-term bills registered a year-on-year increase of NT\$1,420.7 billion or 8.23% in 2022. The growth was mainly attributable to commercial paper with an increased issuance of NT\$1,189.5 billion to meet enterprises' funding needs despite an uptick in short-term bills market rates. The second largest contributor were NCDs with a rise of NT\$323.2 billion over the previous year as enterprises expanded holdings of NCDs in support of their demand for fund allocation.

On the contrary, issuance of treasury bills shrank by NT\$90.0 billion from the previous year. This was primarily because the government collected more tax revenues during the year, leading to reduced issuance of treasury bills by the Ministry of Finance. Meanwhile, the amount of banker's acceptances contracted by NT\$1.9 billion from a year before.

Overall, the amount of the total issuance of short-term bills was smaller than that of the total repayments for short-term bills. Consequently, the outstanding of short-term bills stood at NT\$2,891.0 billion as of the end of 2022, representing a decrease of NT\$20.2 billion or 0.69% from that of the previous year end.

The total turnover of short-term bills in 2022 went up by NT\$3,527.7 billion or 7.86% to NT\$48,399.9 billion. Of the total transactions, commercial paper still made up the lion's share of

## Short-Term Bills Market

Unit: NT\$billion

Year	Total		Treasury Bills		City Treasury Bills		Commercial Paper		Banker's Acceptances		Negotiable Certificates of Deposit	
	Issues	Year-End Outstanding	Issues	Year-End Outstanding	Issues	Year-End Outstanding	Issues	Year-End Outstanding	Issues	Year-End Outstanding	Issues	Year-End Outstanding
2013	9,809.0	1,650.2	324.6	214.6	-	-	8,827.4	1,199.2	23.5	4.2	633.5	232.3
2014	10,840.6	1,641.2	244.9	130.0	10.0	0.0	9,919.5	1,306.8	24.1	4.3	642.2	200.2
2015	11,512.8	1,677.7	233.7	90.0	-	-	10,426.0	1,346.6	20.8	3.5	832.3	237.6
2016	12,778.5	1,873.5	217.3	90.0	-	-	11,371.3	1,480.1	18.3	4.1	1,171.6	299.4
2017	14,878.5	2,154.5	220.0	25.0	-	-	13,077.8	1,709.0	19.4	4.2	1,561.3	416.4
2018	14,971.9	2,223.1	160.0	30.0	-	-	12,965.0	1,760.6	18.5	4.0	1,828.5	428.5
2019	14,927.3	2,353.2	314.0	65.0	-	-	13,613.6	2,034.1	14.0	2.6	985.7	251.5
2020	16,005.2	2,747.2	336.6	125.0	-	-	14,824.7	2,344.3	13.0	2.8	830.9	275.1
2021	17,254.0	2,911.2	320.0	115.0	-	-	16,107.5	2,560.1	17.8	4.5	808.7	231.6
2022	18,674.8	2,891.0	230.0	30.0	-	-	17,296.9	2,584.8	15.9	2.7	1,131.9	273.5

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

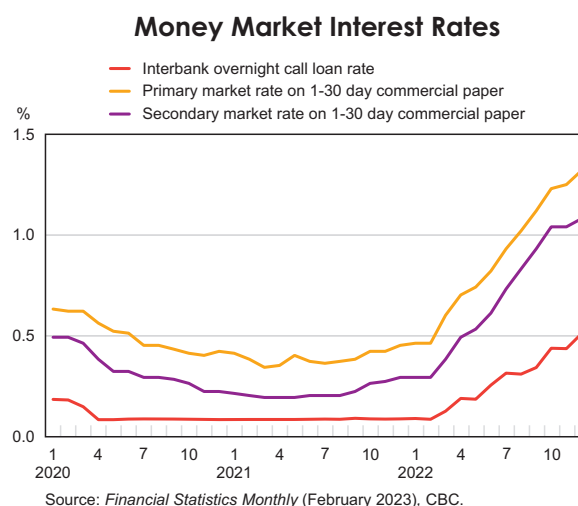
96.81%, 1.0 percentage point higher than the previous year. NCDs came in second with a share of 2.78%, down by 0.73 percentage points from a year earlier.

In respect of market participants, private enterprises were still the largest player in the market with a dominant share of 50.48%, followed by banks and bills finance companies with shares of 24.16% and 13.03%, respectively.

### Broad Uptrend in Money Market Rates

During the year, the US Fed and the Bank implemented policy rate hikes successively, and the Russian invasion of Ukraine roiled international financial markets further. Foreign investors net sold TWSE stocks, and thus turned net foreign capital inflows to net outflows, resulting in tighter short-term funding conditions. Therefore, the weighted average interbank overnight call loan rate exhibited a broad uptrend in 2022. The rate swung up from a yearly low of 0.081% in February to an all-year high of 0.507% in December, and averaged 0.263% for the year as a whole, increasing by 0.182 percentage points from a year before.

The primary market rate on commercial paper with a maturity of 1-30 days moved upwards from 0.46% in January to 1.32% in December. Meanwhile, the secondary market rate on commercial paper with a maturity of 1-30 days also rose from 0.29% in January to 1.08% in December.



### Reduction in Money Market Funds

For the past two years, the size of money market funds expanded substantially amid ample market liquidity, reaching a record high of over NT\$1.0 trillion in 2020. Later in 2022, although major economies began an aggressive monetary tightening cycle, sending market rates higher, the average yields of domestic money market funds were lower than those of the other similar short-term investment instruments, leading money market funds, where institutional investors used to park short-term capital, to record a smaller size compared with the previous two years.

At the end of 2022, there were a total of 36 money market funds in Taiwan and the total assets stood at NT\$781.4 billion with a decrease of NT\$70.0 billion or 8.22% from the previous year end.

With regard to portfolio composition, the largest use of funds was short-term bills with a share of 60.71% at the end of the year. Following short-term bills were bank deposits and repurchase agreements, accounting for 26.67% and 12.16% of the total money market funds, respectively.

### Portfolio Composition of Money Market Funds

Unit: NT\$billion

Year/Month End	Total	Bank Deposits		Short-Term Bills		Repurchase Agreements		Bonds	
		Amount	Share (%)	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
2020	1,021.0	556.1	54.47	346.4	33.93	117.1	11.47	1.4	0.14
2021	851.4	437.2	51.35	327.8	38.50	86.1	10.11	0.4	0.04
2022	781.4	208.4	26.67	474.4	60.71	95.0	12.16	3.6	0.46
2022/ 1	857.1	424.2	49.50	346.1	40.38	86.4	10.08	0.4	0.05
2	850.6	413.4	48.61	343.6	40.40	93.0	10.94	0.5	0.06
3	811.0	393.8	48.56	341.9	42.16	72.9	8.99	2.3	0.29
4	792.9	371.1	46.80	348.4	43.94	70.9	8.94	2.6	0.33
5	815.9	344.9	42.27	381.0	46.69	87.1	10.67	2.9	0.36
6	794.7	320.6	40.34	401.0	50.46	70.6	8.88	2.5	0.31
7	778.9	289.3	37.14	414.3	53.18	73.4	9.43	2.0	0.25
8	756.5	251.4	33.23	430.8	56.94	72.3	9.55	2.1	0.28
9	766.6	214.5	27.98	466.8	60.89	83.2	10.85	2.2	0.29
10	764.9	196.0	25.62	478.2	62.51	87.1	11.39	3.7	0.48
11	756.4	184.9	24.44	483.0	63.86	84.7	11.19	3.8	0.51
12	781.4	208.4	26.67	474.4	60.71	95.0	12.16	3.6	0.46

Source: Securities Investment Trust &amp; Consulting Association of the R.O.C.