

III. Financial system assessment

3.1 Financial markets

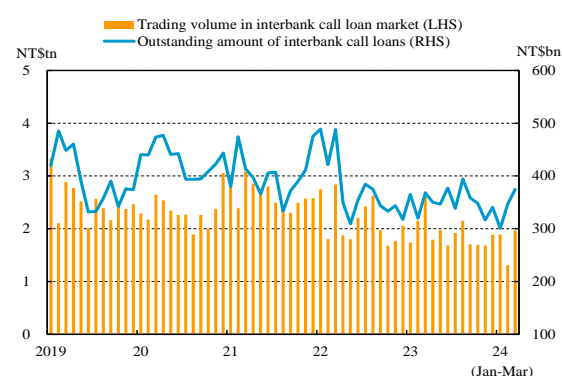
In 2023, the outstanding amount and trading volume of interbank call loans both continued to decline, while the markets remained stable. The outstanding amount of bill issuance increased, driven mainly by a substantial rise in the issuance of CP. However, the bill trading volume in the secondary market kept growing, with CP constituting the largest share, as it played a role of facilitating short-term financing for businesses. Meanwhile, the outstanding amount of bond issuance continued to expand, with corporate bonds increasing the most, though the trading volume in the secondary market remained relatively constant. Moreover, in 2023, bolstered by the global stock market recovery and significant foreign capital inflows, the domestic stock market continued to hit record highs. The NT dollar turned to depreciate after appreciating against the US dollar, while its volatility remained relatively stable. Overall, domestic financial markets have remained stable; however, international circumstances such as the monetary policy directions of major central banks, geopolitical risks, and spillover effects from the economic downturn in Mainland China could impact Taiwan's financial markets and their developments and implications are worthy of close attention.

3.1.1 Money and bond markets

Both the outstanding amount and trading volume of interbank call loans kept declining

In 2023, the average daily outstanding amount of interbank call loans was NT\$352.0 billion, and dropped by 6.30% year on year, primarily owing to significant decreases in interbank borrowing and lending.³⁰ Consequently, the trading volume of interbank call loans

Chart 3.1 Interbank call loan market



Note: Outstanding amount is the monthly average of daily data.
Source: CBC.

³⁰ In 2023, the average daily outstanding amount of interbank lending from domestic banks decreased by 10.72% year on year, while the average daily outstanding amount of interbank borrowing decreased by 15.01% year on year.

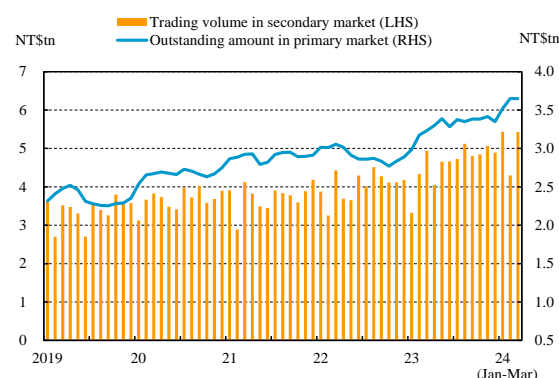
decreased by 10.52% year on year in 2023, as the proportion of interbank overnight call loans in the market decreased and financial institutions reduced the frequency with which they rolled over their interbank borrowings because of the extended maturity of these interbank call loans.³¹ In 2024 Q1, the average daily outstanding amount and trading volume of interbank call loans both decreased year on year (Chart 3.1).

Both outstanding amount of bill issuance and the bill trading volume in the secondary market expanded year on year

The outstanding amount of bill issuance in the primary market reached NT\$3.35 trillion by the end of 2023, marking a rise of NT\$456.9 billion or 15.81% year on year. The main reason for this increase was higher corporate funding needs, bringing about a substantial increase of NT\$416.1 billion in the outstanding amount of CP issuance. Moreover, NCDs issued by banks rose by NT\$41.3 billion, while treasury bills remained flat. In 2024 Q1, the outstanding amount of bill issuance began to climb year on year as the issuance of CP increased (Chart 3.2).

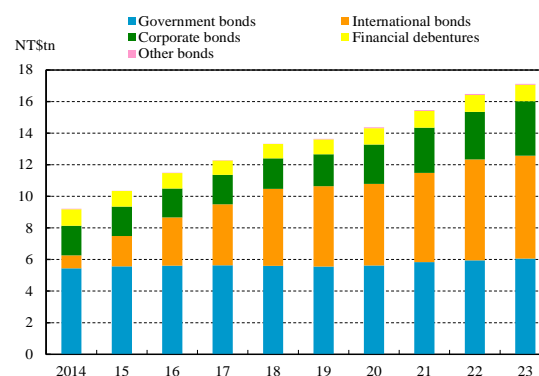
In 2023, as the outstanding amount of bill issuance edged up, the trading volume in the secondary market increased by 14.50% year on year to NT\$55.42 trillion. Among them, CP continued to constitute the largest share of 96.73%, slightly decreasing from a year earlier. In 2024 Q1, the bill trading volume continued its upward trend over the same period of the previous year (Chart 3.2).

Chart 3.2 Primary and secondary bill markets



Source: CBC.

Chart 3.3 Bonds outstanding in the primary market



Note: Other bonds include beneficiary securities and foreign bonds.

Source: FSC.

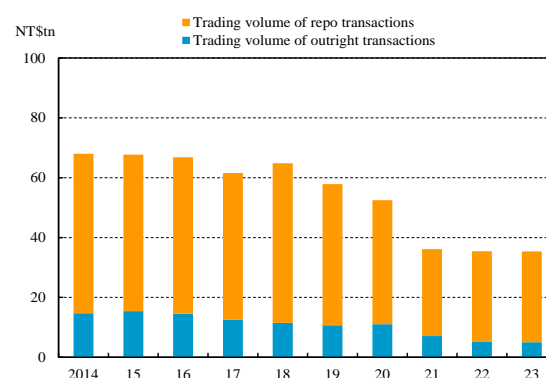
³¹ In 2023, the proportion of overnight interbank call loans decreased from 46.21% last year to 45.55%, with these loans' maturities extended.

Outstanding amount of bond issuance continued to expand, while the trading volume remained roughly unchanged; however, the turnover rate of outright bond transactions continued to drop to a record low

The outstanding amount of bond issuance reached a new high of NT\$17.11 trillion at the end of 2023 and increased by 3.87% over the end of the previous year. This increase was primarily attributed to a 14.59% rise in corporate bond issuance, as state-owned enterprises such as Taiwan Power Company and Chinese Petroleum Corporation increased bond issuance for the purpose of supplementing operating funds. At the end of 2023, the outstanding amount of international bond and government bond ³² issuance increased by 1.91% and 1.85%, respectively, compared to the end of the previous year (Chart 3.3).

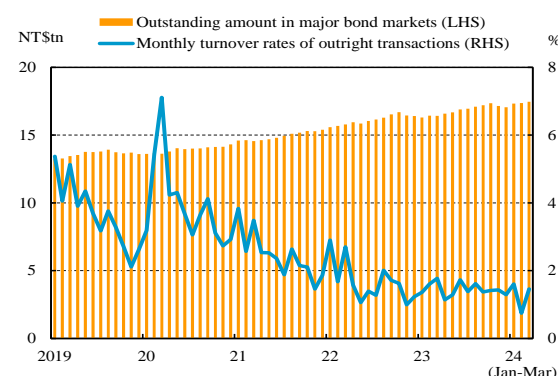
On the other hand, the trading volume in the secondary bond market registered NT\$35.41 trillion in 2023, roughly unchanged year on year (Chart 3.4). Analyzed by trading type, outright transaction volume shrunk by 3.26% year on year, while repo transaction volume slightly increased by 0.56% year on year. Nevertheless, the overall trading volume remained at a relatively low level in recent years. As a result, the average monthly outright turnover rate of major bonds decreased continually in December 2023 to 1.45% and declined further to a record low of 1.27% in 2024 Q1 (Chart 3.5).

Chart 3.4 Outright and repo transactions in the bond market



Source: CBC.

Chart 3.5 Outstanding amount in major bond markets and monthly turnover rates of outright transactions



Notes: 1. Major bonds include government bonds, corporate bonds, financial bonds, and international bonds.
 2. The monthly turnover rate for outright transactions = total value of outright transactions in the month / average outstanding issuance, where the average outstanding issuance = (the outstanding issuance at the end of the current month + the outstanding issuance at the end of the previous month) / 2.

Source: FSC.

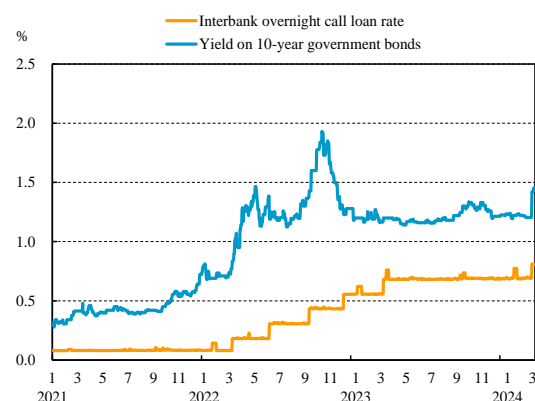
³² Including central and local government bonds.

Long-term and short-term market rates rose

In terms of short-term market rates, after the Bank raised the policy interest rates and the interest rates on the Bank's CDs in March 2023 and March 2024 to curb domestic inflation expectations, the interbank overnight call loan rate trended upwards, stabilizing at around 0.81% from March 22, 2024 onwards (Chart 3.6). Still, market liquidity remained ample.

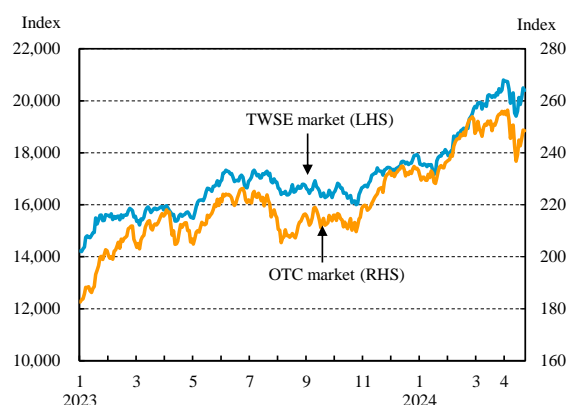
As for long-term market rates, owing to market expectations that the cycle of rate hikes by major central banks was nearing its end, coupled with ample domestic liquidity, domestic 10-year government bond yields gradually trended downwards during the first three quarters of 2023. Afterwards, following the Fed's cautious stance on future rate cuts, the market adjusted its expectations, reducing the anticipated extent of rate cuts and causing US government bond yields to rise. Consequently, domestic 10-year government bond yields gradually increased, reaching 1.34% on October 19 before declining (Chart 3.6). From mid-March 2024 onwards, influenced by the Bank's policy rate hike and the rebound in US government bond yields, domestic 10-year government bond yields rose again, reaching a recent high of 1.71% on April 17. Considering higher inflation driven by both the uncertain future trajectory of monetary policy of major central banks and disruptions in supply chains on account of escalating geopolitical risks, together with the upward pressure on bond yields globally, the domestic 10-year government bond yields are likely to be affected. Therefore, the interest rate risks of bond investments of domestic financial institutions are worthy of close attention.

Chart 3.6 Interbank overnight rate and 10-year government bond yield



Source: Bloomberg.

Chart 3.7 Taiwan's stock market indices



Sources: TWSE and TPEx.

3.1.2 Equity markets

Stock indices fluctuated with an uptrend and reached historical highs

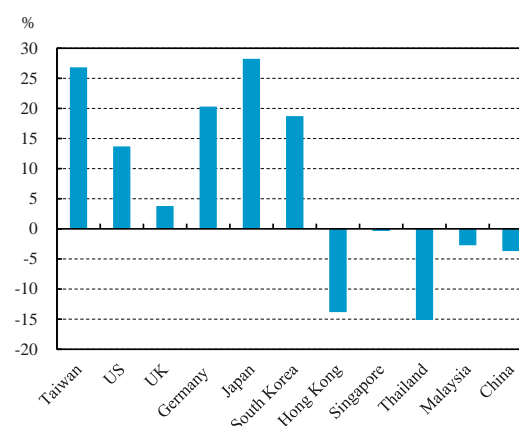
In 2023, benefiting from international stock markets rising and inflows of foreign capital to invest in domestic stock markets, the TAIEX of the TWSE market went up to 17,931 at year end from 14,224 at the beginning of the year (Chart 3.7), posting an increase of 26.83% year on year and surging higher than the major indices in Germany, Korea, the US, and other international stock markets, except for Japan (Chart 3.8). The Taipei Exchange Capitalization Weighted Stock Index (TPEX) of the OTC market closely tracked the movements of the TAIEX, registering 234 at year end and posting an increase of 29.76% year on year.

From January to April 2024, driven by market expectations that the major central banks will ease monetary policy and a rise in technology stocks driven by applications of AI, the TAIEX went up steadily and kept reaching historical highs. The TPEX also followed the same trend (Chart 3.7).

Volatility in the stock markets rose after falling, while annual turnover rates remained stable

Affected by the rise of domestic stock prices and investor optimism in 2023, the volatility in the TWSE and the OTC markets dropped to 10.78% and 12.12% at the end of the year from 19.17% and 20.48%, respectively, at the beginning of the year. However, since February 2024, the volatility of the TWSE and the OTC markets have surged again owing to the combined effects of various positive and negative factors emerging in both domestic and international markets (Chart 3.9).

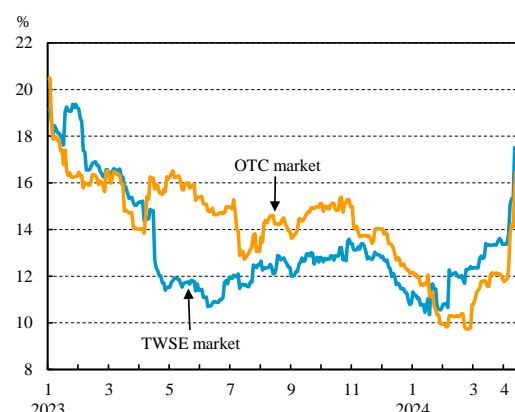
Chart 3.8 Major stock market performance



Notes: 1. Changes are figures at the end of 2023 compared to those at the end of 2022.
2. Market performance is based on TWSE Weighted Index for Taiwan, DJIA Index for the US, FTSE-100 Index for the UK, DAX Index for Germany, NK-225 Index for Japan, KOSPI Index for South Korea, Hang Seng Index for Hong Kong, Straits Times Index for Singapore, SET Index for Thailand, Kuala Lumpur Composite Index for Malaysia, and SSE Composite Index for China.

Source: TWSE.

Chart 3.9 Stock price volatility in Taiwan's markets



Note: Volatility refers to the annualized standard deviation of 60-day daily index returns.

Sources: TWSE, TPEX, and CBC.

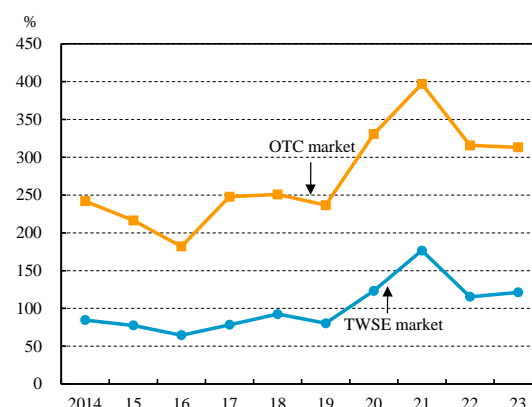
Benefiting from the booming trading volume of Taiwan's stock markets, the monthly average trading value in both the TWSE and the OTC markets increased to NT\$5.26 trillion and NT\$1.4 trillion in 2023 respectively, posting increases of 12.64% and 13.23% year on year. As a consequence, the annual turnover rate in terms of trading value also elevated to 121.19% in the TWSE market (Chart 3.10), which was higher than those in most major international stock markets (Chart 3.11). The annual turnover rate in terms of trading value in the OTC market slightly declined to 313.08%, but still stayed at a high level, indicating that trading in Taiwan's stock markets was quite active and liquidity remained ample.

Domestic stock markets are highly correlated with international stock markets. Considering that rising geopolitical risks and uncertain monetary policy stances by major central banks may affect the global economy and international stock markets and, in turn, impact the performance of domestic stock markets, it is necessary to pay close attention to these developments.

Domestic ETF market has grown rapidly

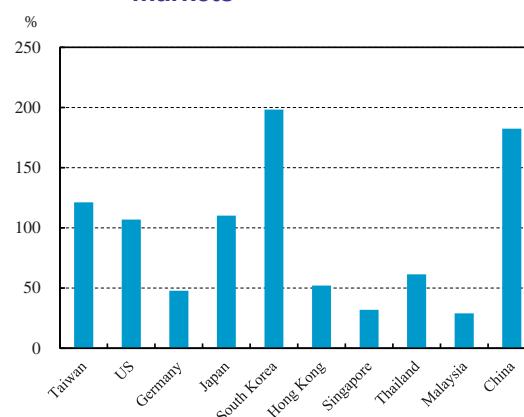
In the past two years, affected by the excellent performance of domestic stock markets, market expectations for the Fed's policy rate cuts, and the incentive of high dividends, the domestic ETF market has grown rapidly. The number of funds and aggregated fund size of ETFs went up to 234 and NT\$4.75 trillion, respectively, as of the end of April 2024 (Chart 3.12), accounting for 60.96% of total onshore mutual funds worth NT\$7.8 trillion. The aggregated fund size of ETFs increased by NT\$2.02 trillion, a rise of 73.65% year on year. In addition, ETF beneficiaries rose to 11.62 million and reached a historical high.

Chart 3.10 Annual turnover rates in Taiwan's stock markets



Sources: TWSE and TPEx.

Chart 3.11 Turnover rates in major stock markets



Note: Figures refer to accumulated turnover rates in 2023.
Source: TWSE.

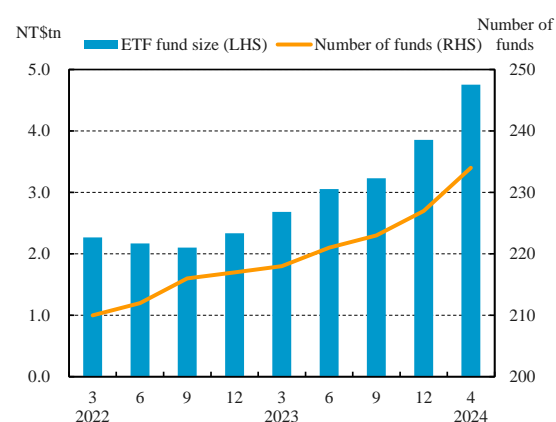
ETF investments have many advantages, but investors also face multiple risks such as price risks, tracking error risks, and liquidation risks. When trading volume of ETFs surges sharply, it may lead to stock price co-movement, which is worth paying more attention to.³³ Furthermore, recently there have been several incidents such as abuse of income equalization, trading frequently for high dividend distribution, and improper marketing by internet celebrities in the domestic equity ETF market. Therefore, the FSC has successively implemented relevant regulatory measures to address these issues.³⁴

3.1.3 FX market

The NT dollar broadly depreciated against the US dollar, while the trading volume of the FX market increased

At the beginning of 2023, owing to the Fed slowing its pace of interest rate hikes and inflows of foreign capital to invest in domestic stock markets, the NT dollar exchange rate against the US dollar appreciated to below 30 in February. In the second half of 2023, the strong US dollar led to the NT dollar reversing and sharply depreciating against the US dollar. Subsequently, as the US government bond yields and the US dollar declined from November, the NT dollar exchange rate rebounded to 30.735 against the US dollar at the end of 2023 (Chart 3.13), depreciating by 0.09% from the end of the previous year. At the beginning of 2024, considering the decrease in US inflation was slower than expected, the Fed continued its tight monetary policies. This, coupled with escalating geopolitical risks, led to a stronger US dollar. Therefore, the NT dollar turned to depreciate and stood at 32.542 against the US dollar at the end of April 2024 (Chart 3.13), depreciating by 5.55% compared to the end of 2023.

Chart 3.12 ETF fund size and number of funds in Taiwan



Note: Offshore ETFs, futures ETFs and leveraged/inverse futures ETFs were not included.

Source: SITCA.

Chart 3.13 NTD/USD exchange rate



Source: CBC.

³³ For the advantages and risks of ETF investments, please see CBC (2021), Box 2, *Financial Stability Report*.

³⁴ See the "Measures undertaken by the FSC to maintain financial stability" in the *Financial Stability Report*, May 2024.

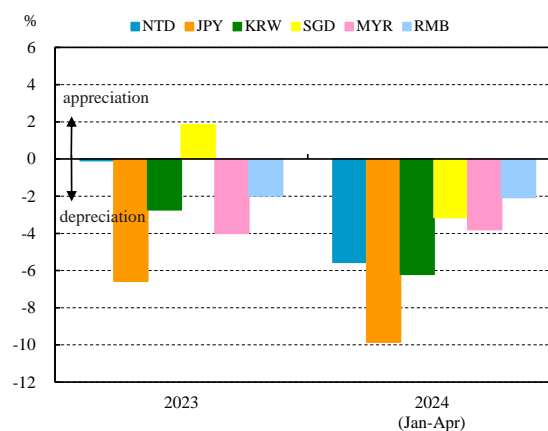
In 2023, most major Asian currencies depreciated against the strong US dollar except for the SGD. The extent of the NT dollar depreciation against the US dollar was lower than other major Asian currencies. As the US dollar kept strengthening from January to April 2024, most major Asian currencies continued to depreciate against the US dollar (Chart 3.14).

The average daily trading volume in Taiwan's FX market amounted to US\$37.8 billion in 2023, rising by 9.72% compared to a year earlier primarily because of an increase in interbank transactions (Chart 3.15). The daily trading volume in March 2024 amounted to US\$46 billion and increased by 19.48% over the same period of the previous year.

NT dollar exchange rate volatility remained relatively stable

The volatility of the NT dollar exchange rate against the US dollar fluctuated between 1.72% and 6.83% in 2023 and registered an annual average of 3.6%, which was relatively low compared to those of other major currencies. From January to April 2024, the volatility of the NT dollar exchange rate registered between 2.27% and 5.74%, which was lower than those of the Japanese yen, the euro, and the Korean won, but slightly higher than the Singapore dollar (Chart 3.16).

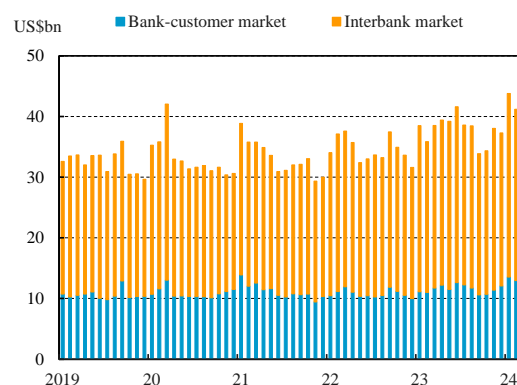
Chart 3.14 Exchange rate changes of major Asian currencies against the US dollar



Note: Changes in 2023 are figures at the end of the year compared to those at the end of 2022; changes in the period of Jan-Apr 2024 are figures at the end of April 2024 compared to those at the end of 2023.

Source: CBC.

Chart 3.15 FX market trading volume



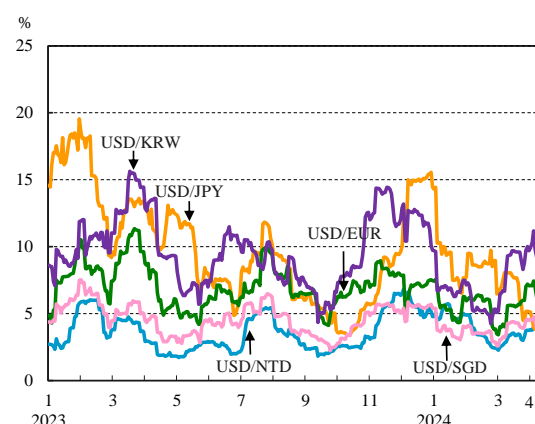
Notes: 1. Trading volume is the monthly average of daily data.
2. The latest data for trading volume are as of March 2024.

Source: CBC.

The nominal and real effective exchange rate indices of the NT dollar fluctuated within a narrow range

In 2023, as the applications of AI promoted the growth of related supply chain demand and, in turn, made exports rebound, coupled with inflows of foreign capital to invest in domestic stock markets, the NEER index of the NT dollar increased slightly and registered 103.05 at year end, an increase of 2.15% compared to 100.88 registered at the end of 2022. The NEER of the NT dollar fluctuated within a narrow range and remained relatively stable compared to other major Asian currencies. However, because of the strong US dollar, the NEER of the NT dollar dropped to 100.4 at the end of April 2024, a slight decrease of 2.57% compared to the end of 2023 (Chart 3.17). During the same period, the real effective exchange rate (REER) index of the NT dollar also fluctuated within a limited range and stood at 99.42 in December 2023, an increase of 0.24% compared to 99.18 registered in December 2022. The volatility of the NT dollar's REER remained relatively stable compared to other major Asian currencies. In April 2024, the NT dollar's REER declined to 97.95, a decrease of 1.48% compared to December 2023.

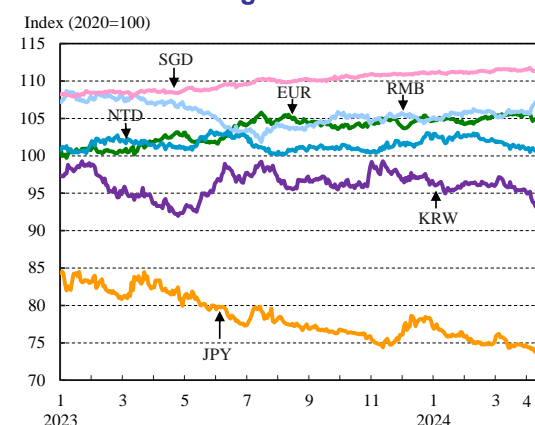
Chart 3.16 Exchange rate volatility of various currencies versus the US dollar



Note: Volatility refers to the annualized standard deviation of 20-day daily returns.

Source: CBC.

Chart 3.17 NT dollar nominal effective exchange rate index



Source: BIS.