

Annual Report 2024

Central Bank of the Republic of China (Taiwan)

Taipei, Taiwan
Republic of China

Foreword



Chin-Long Yang, Governor

In the past year, Taiwan experienced faster growth and continued disinflation. The economic growth picked up from an annual pace of 1.12% in 2023 to 4.59% in 2024 as the rapid advancing of artificial intelligence (AI) and other emerging tech applications bolstered exports of the related supply chain, while private investment also rebounded strongly with firms stepping up production capacity. Meanwhile, domestic inflation eased further, as core commodity inflation was dampened by a downturn in imported raw material prices while inflation in services such as entertainment also saw a softening. The annual growth rate of the consumer price index (CPI) thus declined from 2.49% in 2023 to 2.18% in 2024. Excluding fruit, vegetables, and energy, the annual growth rate of the core CPI also slowed from 2.58% to 1.88%.

Against this backdrop, the Bank operated under a gradual and moderate approach to monetary tightening in order to contain domestic inflation expectations, including a March 2024 rate hike by 0.125 percentage points, the sixth in its tightening cycle that has delivered a total of 0.875 percentage point

rate hike since March 2022. The Bank's selective credit control measures, aimed at curbing excessive credit flows into the housing market, were taken a step further in the year through the sixth and seventh amendments to the relevant regulations in June and September to rein in housing loan standards, alongside quantitative management with two 0.25 percentage point hikes in the reserve requirement ratios. To reinforce the effectiveness of the credit controls, the Bank adopted moral suasion in August, asking banks to conduct prudent internal management of the aggregate amount of real estate lending for a one-year period from 2024Q4 to 2025Q4.

Meanwhile, the Bank conducted open market operations, issued certificates of deposit, and took banks' re-deposits to help keep banking system liquidity and market interest rates at their appropriated levels. While bank loans and investments recorded an average annual growth rate of 8.03% in 2024, the monetary aggregate M2 increased by 5.83% on average for the year, a level well within the Bank's reference range (2.5%-6.5%).

In 2024, Taiwan's foreign exchange market witnessed massive portfolio investment outflows by foreign institutional investors as well as other market forces shaped by international economic developments. Consequently, excess demand for the US dollar led to a weakening in the NT dollar exchange rate vis-à-vis the USD. In keeping with its mandate, the Bank stepped in the forex market to maintain the dynamic stability of the NTD exchange rate, with net forex sales amounting to US\$16.4 billion. At the end of 2024, forex reserves held by the Bank stood at US\$576.7 billion, a 1.1% increase of US\$6.1 billion year on year mainly owing to returns from reserves management. In addition, a policy change was made to significantly raise the ceilings on the annual

cumulative forex settlement allowed for domestic firms and individuals. Effective November 2024, this move was initiated to reflect the progress in Taiwan's economic, trade, and financial development and to facilitate Taiwan's future role as an Asian asset management center.

In July 2024, as part of the continuous effort to increase diverse payment channels for national treasury funds and to promote cashless payment, relevant forms and documents underwent a full revamp, which would further improve electronic payment to the national treasury and increase convenience for the public in making such payments. Elsewhere, the Bank joined the world in celebrating the Paris 2024 Olympic Games with a special online exhibition on its Virtual Money Museum, showcasing sports- and Olympics-related coins and notes worldwide as we cheered the national team on!

The Bank also recognized the need to ensure the safety and efficiency of domestic payment systems. Therefore, we continued in 2024 to instruct the Financial Information Service Co., Ltd. (FISC) to improve the infrastructure of retail payment and to reduce market fragmentation by promoting the common QR code, TWQR, for payment ease. With cross-industry and cross-border collaboration, TWQR adoption increased further in 2024, with new functions of payment for public transportation and for shopping in Japan and South Korea. On the front of the central bank digital currency (CBDC), we pushed forward with CBDC-related studies, including a joint project between the Bank and the participating banks went under way for wholesale CBDC trials on technologies involving tokenized assets.

Looking ahead, as the global economy remains shrouded in a myriad

of uncertainties, the Bank will stay attentive to domestic inflation, the US economic and trade policies, monetary policy actions by major central banks, China's economic downturn risk, geopolitical conflicts, and extreme weather. We would assess the implications of these evolving situations for Taiwan's economic and financial conditions and make timely adjustments to monetary policy as warranted to fulfill our mandate of maintaining financial and price stability, and fostering economic development.

As ever, I am thankful to my colleagues for their hard work in putting together the annual accounts for a challenging year and hope our readers find this publication helpful. Going forward, we will proceed with dedication to fulfilling the Bank's mandate and confronting the challenges ahead.

A handwritten signature in black ink, reading "Chin Long Yang". The signature is fluid and cursive, with the first and last names being more prominent.

Chin-Long Yang
Governor
April 2025

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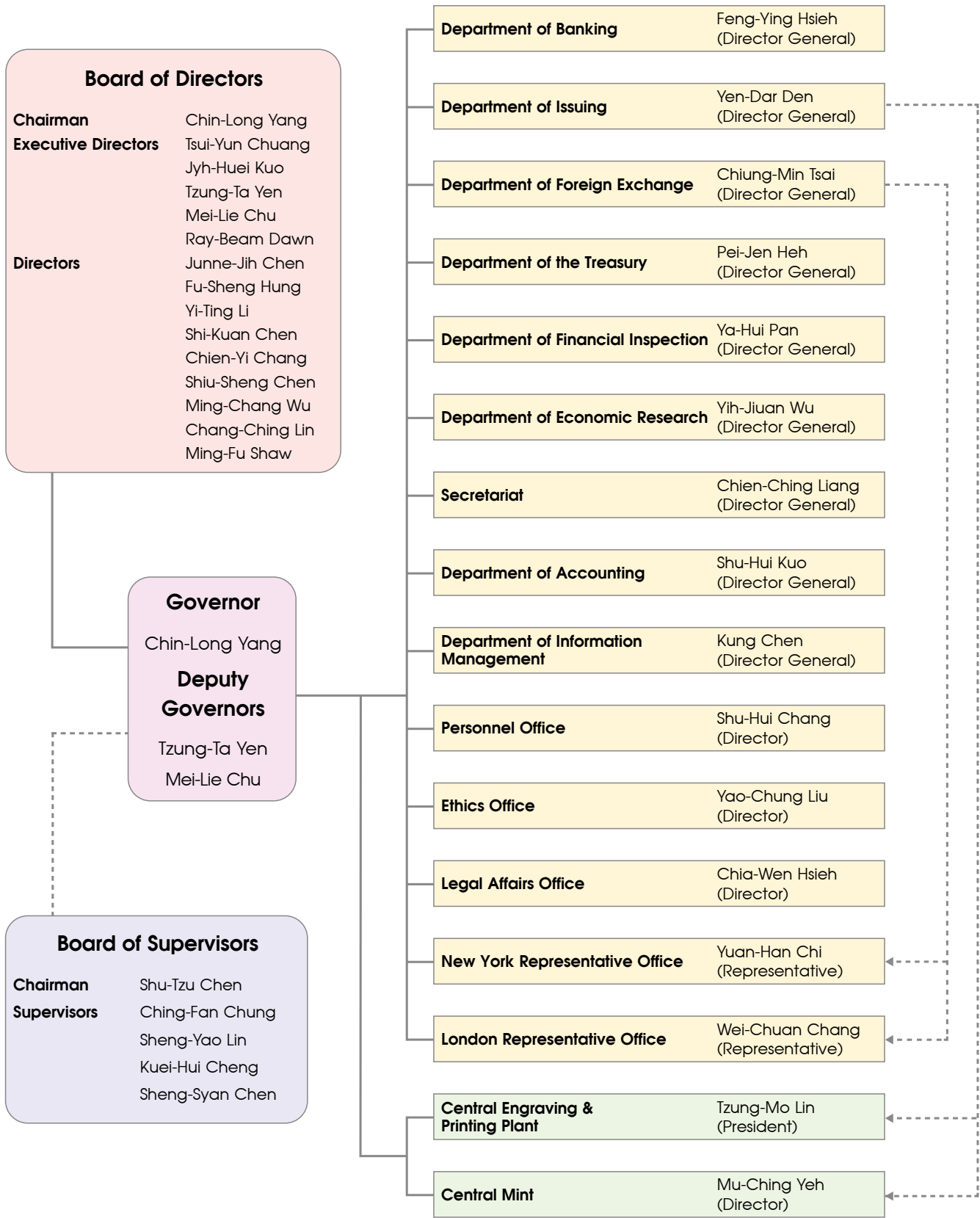
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Organization and Management of the CBC



As of February 2025



Chairman
Board of Directors
Governor
Chin-Long Yang



Executive Director
Tsui-Yun Chuang



Executive Director
Jyh-Huei Kuo



Executive Director
Deputy Governor
Tzung-Ta Yen



Executive Director
Deputy Governor
Mei-Lie Chu



Executive Director
Ray-Beam Dawn



Director
Junne-Jih Chen



Director
Fu-Sheng Hung



Director
Yi-Ting Li



Director
Shi-Kuan Chen



Director
Chien-Yi Chang



Director
Shiu-Sheng Chen



Director
Ming-Chang Wu



Director
Chang-Ching Lin



Director
Ming-Fu Shaw



Chairman
Board of Supervisors
Shu-Tzu Chen



Supervisor
Ching-Fan Chung



Supervisor
Sheng-Yao Lin



Supervisor
Kuei-Hui Cheng



Supervisor
Sheng-Syan Chen

Developments in the Real Economy



I. Developments in the Real Economy

1. Overview

Taiwan's economy expanded faster in 2024 at a pace of 4.59% in real terms because strong demand for emerging technology applications (e.g., AI, cloud computing, high-performance computing, etc.) spurred growth in ICT (information and communication technology) exports and drove a steady increase in private investment while private consumption also gained momentum from continuous wage growth. The balance of payments was healthy, recording a continued current account surplus and a net asset increase in the financial account. In respect of prices, with international commodity prices softening and domestic services inflation easing, the annual growth rate of the CPI registered 2.18% in 2024 and that of the core CPI (excluding fruit, vegetables, and energy) was 1.88%, both slower than the previous year. In the labor market, a pickup in economic growth drove the unemployment rate down from the previous year to an yearly average of 3.38% in 2024, the lowest since 2001. Nonfarm payroll real monthly earnings per worker posted a new record increase since 2019, rising by 2.16% to NT\$56,566.

Pickup in Economic Growth

In the first quarter of 2024, domestic economic growth recorded the fastest pace of the year at 6.64%, driven by upturns in exports and private consumption and a lower base effect. Thereafter, emerging technology applications continued thriving, bolstering exports and private investment, while private consumption enjoyed mild growth as the steady economic expansion buttressed labor demand and spurred corporate wage increases, along with a strengthening in consumer confidence. However, the momentum was somewhat eroded by a higher base effect, causing economic growth to decelerate quarter by quarter to 2.90% in the fourth quarter. For 2024 as a whole, the economic growth rate stood at 4.59%, rising by 3.47 percentage points from 1.12% in 2023.

By expenditure component, the 4.59% rate of economic growth was the combined result of robust exports, the ensuring steady increase in private investment, and rising private consumption amidst continued wage growth. By contribution, domestic demand accounted for 4.76 percentage points of that growth, whereas net external demand contributed -0.16 percentage points as robust exports and investment also led to an increase in import-derived demand.

Private investment gained traction because Taiwan's semiconductor firms, boasting a leading edge in related technologies, continued to increase capital expenditure and expand advanced production capacity, while firms across industries stepped up equipment investment aimed

at facilitating low-carbon emissions. As a result, the domestic investment rate (gross domestic investment to GDP) rose to 26.47% in 2024 from 24.51% in 2023. The national saving rate (gross national saving to gross national income) also went higher from 37.56% to 40.71% as national income increased amid rising economic growth. Overall, with the increase in gross national saving exceeding that in gross national investment, the difference between saving and investment as a percentage of GDP rose from 14.31% in 2023 to 15.68% in 2024.

Healthy BOP Surplus

In 2024, Taiwan continued to record a healthy balance of payments. The current account posted a surplus of US\$113,834 million, the financial account had a net asset increase of US\$94,391 million, and the Bank's reserve assets showed an increase of US\$10,880 million.

On the current account, goods imports and exports both expanded in 2024 compared to 2023. As the increase in exports exceeded that in imports, the goods trade surplus widened from US\$95,617 million in 2023 to a record-high of US\$100,699 million in 2024, remaining the largest contributor to the current account surplus.

The services account deficit widened from US\$10,090 million to US\$12,412 million mainly owing to an increase in travel expenditures. The primary income surplus widened from US\$25,295 million to US\$30,327 million, a historical high mainly because receipts rose while payments dropped. The secondary income deficit shrank from US\$4,973 million to US\$4,780 million mainly as the increase in receipts exceeded that in payments. For the year 2024 as a whole, the current account surplus amounted to US\$113,834 million, the second highest on record, with its ratio to nominal GDP reaching 14.3%.

On the financial account, portfolio investment recorded a net asset increase of US\$83,684 million. Among the components, residents' portfolio investment abroad posted a net increase of US\$66,327 million, mainly because of increases in foreign securities holdings via banks' nondiscretionary money trust business and domestic investment and trust funds. Nonresidents' inward portfolio investment posted a net decrease of US\$17,357 million, mainly because foreign investors dialed down holdings of Taiwanese stocks. Direct investment posted a record-high net increase of US\$21,053 million, of which direct investment abroad by residents and nonresidents' inward direct investment increased by net amounts of US\$31,979 million and US\$10,926 million, respectively. The account of other investment posted a net asset decrease of US\$11,269 million.

Continued Slowdown in Inflation

In 2024, the global economy experienced mild expansion and global inflation eased, while

international raw material prices were soft. However, with the NTD/USD exchange rate weaker than the previous year, the import price index in NTD terms edged up by 0.27% year on year. Meanwhile, the producer price index (PPI) rose by 1.36% from the previous year, mainly reflecting a 2.17% increase in export prices and a mere 0.99% increase in prices for domestic sales excluding imports.

In regard to consumer prices in 2024, with international commodities such as crude oil and grains posting price downtrends and domestic entertainment services prices rising at a slower pace, domestic commodity inflation eased from 2.11% in 2023 to 1.89%, and services inflation also dropped from 2.87% to 2.45%. The annual growth rate of the CPI decreased to 2.18% from 2.49% the previous year, and that of the core CPI (excluding fruit, vegetables, and energy) also fell to 1.88% from 2.58%.

Record Low Unemployment Rate Since 2001; Higher Wage Growth

In 2024, labor market conditions were stable, helped by steady economic growth. The unemployment rate only recorded uptrends in February owing to a wave of job transitions commonly seen after the Lunar New Year and in June to August owing to a surge of job-seeking graduates, both seasonal factors. In the other months, the unemployment rate showed a broad downtrend to 3.32% in December 2024 and averaged 3.38% for the year as a whole, the lowest since 2001. The average labor participation rate was 59.28%, up by 0.06 percentage points from the previous year.

The average number of employed persons in 2024 was 11,595 thousand, an increase of 67 thousand or 0.59%. Services employment increased the most by 77 thousand persons or 1.09%, followed by the industrial sector with an increase of seven thousand persons or 0.16%. Meanwhile, the agricultural sector employed 15 thousand less persons, representing a decrease of 3.00%.

In respect of wage growth, the average nonfarm (industrial and services sectors) monthly earnings per employee increased by 4.39% from the previous year to NT\$60,984 in 2024, the largest increase since 2011. Adjusted for inflation, the real earnings registered an increase of 2.16%, rising at the fastest pace since 2019 to reach NT\$56,566. With growth in production outpacing that in total hours worked, the labor productivity indices of the industrial sector and the manufacturing sector went up by 10.16% and 10.94%, respectively. Meanwhile, unit labor costs in the industrial and the manufacturing sectors decreased by 6.70% and 7.34%, respectively, reflecting smaller gains in total earnings than in production output.

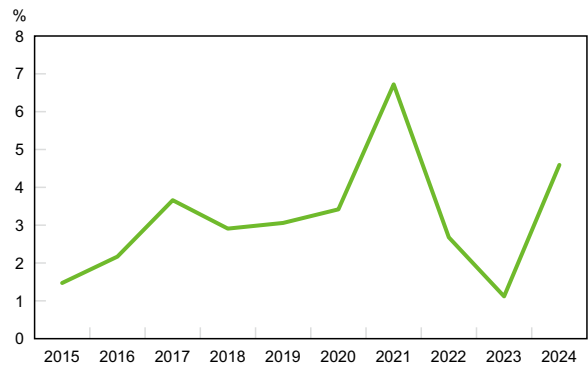
2. National Output and Income

In 2024, Taiwan's economy grew at an annual rate of 4.59%. Domestic demand, driven by steady increases in private consumption and fixed capital formation, contributed 4.76 percentage points to real GDP growth. In terms of external demand, both export- and investment-derived demand caused import growth to outweigh the growth of exports, and thus, net exports contributed -0.16 percentage points to real GDP growth. In the meantime, nominal GNI (gross national income, in US dollars) rose by 5.27%, and GNI per capita increased from US\$33,525 to US\$35,188 over the year 2024.

In the first quarter, real GDP expanded by 6.46%. Private consumption showed robust growth driven by active spending on transportation, dining, accommodation, and entertainment services, while private investment growth was held back by wary business sentiment amid global economic uncertainties. Exports grew significantly owing to higher demand for products related to information and communication technology (ICT). In the second quarter, real GDP grew by 4.89%. Export growth was fueled by improved global end-market demand and the expansion of emerging technology applications. Meanwhile, private consumption remained stable because of improvement in consumer confidence and steady employment, and private investment grew as firms increased production capacity in response to better economic conditions.

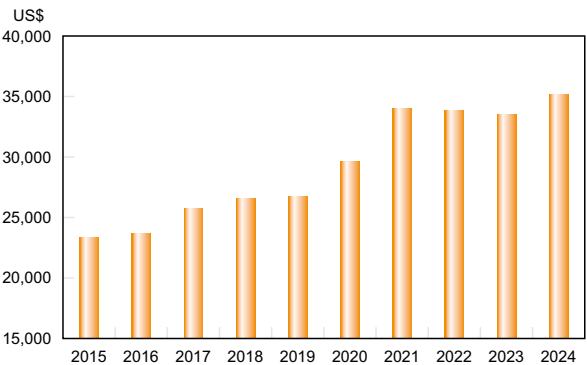
In the third quarter, real GDP growth rose to 4.21%. Exports gained further growth momentum owing to strong demand for ICT products. Against this backdrop, ICT-related supply chains increased capital expenditures, which in turn stimulated growth in private investment. Private consumption growth remained solid, supported by higher consumer confidence and wage hikes in the corporate sector. In the fourth quarter, real GDP expanded by 2.90%. Exports continued to thrive, fueled by robust growth in

Real Growth Rate of GDP



Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2025.

Per Capita GNI



Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2025.

advanced integrated circuits (ICs), servers, and related supply chain goods. Furthermore, in response to the booming demand for emerging technology applications, firms increased domestic production capacity, leading to a significant rise in private investment. Private consumption, on the other hand, saw moderate growth, driven by a continued increase in real wages.

Expenditure Components of GDP

Of all expenditure components of GDP, exports of goods and services were the primary source of economic growth and contributed 5.37 percentage points to real GDP growth for 2024. Private consumption, on the other hand, contributed 1.37 percentage points to real GDP growth. Gross fixed capital formation and government consumption contributed 1.36 percentage points and 0.34 percentage points to real GDP growth, respectively. With respect to shares of GDP, exports of goods and services continued to account for the largest share of GDP at 63.47%, followed by private consumption at 47.07% and gross fixed capital formation at 25.44%.

GDP by Expenditure

Unit: %

	2024			2023		
	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*
Private Consumption	47.07	2.81	1.37	48.66	7.90	3.62
Government Consumption	13.29	2.46	0.34	13.70	0.42	0.06
Gross Fixed Capital Formation	25.44	5.30	1.36	25.63	-7.76	-2.18
Change in Inventory	1.02	--	1.69	-1.12	--	-0.66
Exports of Goods and Services	63.47	8.71	5.37	61.61	-4.08	-2.75
(Less: Imports of Goods and Services)	50.30	11.41	5.53	48.47	-5.49	-3.03
Expenditure on GDP	100.00	4.59	4.59	100.00	1.12	1.12

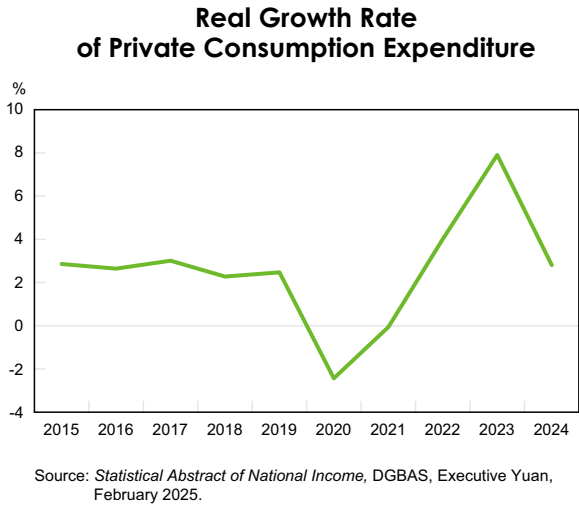
Note: * Percentage point.

Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2025.

(1) Moderate Growth in Private Consumption

The domestic economy showed signs of improvement in 2024. Increases in the minimum wage and basic living expenses per person, as well as upward salary adjustments by companies, boosted disposable income. The labor market remained stable, and consumers' willingness to spend stayed strong. As a result, private consumption grew at an annual rate of 2.81% and contributed 1.37 percentage points to real GDP growth in 2024.

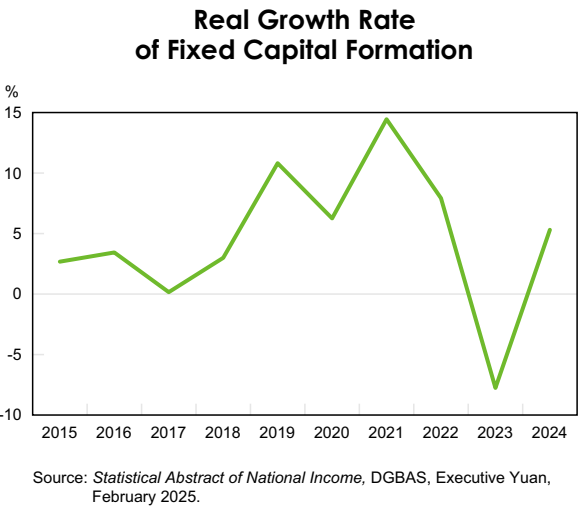
In the first quarter of 2024, rising consumer confidence spurred an increase in spending, leading to a 4.04% growth in private consumption. The second quarter saw continued economic recovery, with a buoyant stock market driving up securities transaction fees. Meanwhile, strong demand for travel and vibrant spending on dining, accommodation, and entertainment services pushed the private consumption growth rate to 2.94%. During the summer vacation period in the third quarter, both domestic consumption and outbound travel surged, contributing to a 1.84% increase in private consumption. By the fourth quarter, continued growth in real wages supported domestic spending, while sustained enthusiasm for outbound travel helped maintain a solid 2.49% growth rate in private consumption.



(2) Robust Growth in Gross Fixed Capital Formation

The expansion of advanced IC production capacity and a rise in research and development expenditures in the semiconductor industry, along with ongoing growth in green energy-related investments, resulted in a 5.30% growth rate in gross fixed capital formation, contributing 1.36 percentage points to real GDP growth in 2024.

Machinery and equipment investment fell in the first quarter owing to the weak global economic recovery, caused by persistent inflation and high interest rates. In the second quarter, both machinery and equipment investment and construction investment regained growth momentum as market demand picked up. The gross fixed capital formation growth rates for the first two quarters of the year were -3.73% and 6.90%, respectively. A favorable investment outlook for technology businesses further accelerated machinery and equipment investment growth in the second half of the year, while construction investment remained stable. As a result, gross fixed capital formation grew by 7.13% and 11.00% in the last two quarters of the year, respectively.



In terms of the type of fixed capital formation, both machinery and equipment investment and construction investment benefited from the expansion of production capacity in the semiconductor industry, increasing by 9.45% and 4.38%, respectively, in 2024. In contrast, transportation investment contracted by 4.18% owing to a higher base effect. Lastly, investment in intellectual property remained relatively stable, growing by 3.60% for the entire year.

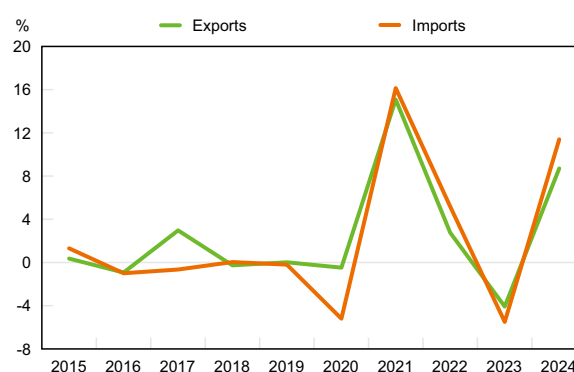
(3) Significant Increase in Real Exports

Stronger-than-expected demand for emerging technology applications led to a significant surge in exports of goods and services, which grew by 8.71%, contributing 5.37 percentage points to real GDP growth in 2024.

The pace of recovery varied across industries throughout 2024. Exports of ICT products outperformed those of traditional manufacturing goods amid strong demand for emerging technology applications. This sustained demand helped maintain export growth throughout the year. As a result, Taiwan's exports of goods and services grew by 9.44%, 7.65%, 8.88%, and 8.90% in the first through fourth quarters, respectively.

As for imports, higher export- and investment-derived demand resulted in a notable 11.41% increase in imports for the year.

Real Growth Rates of Exports and Imports

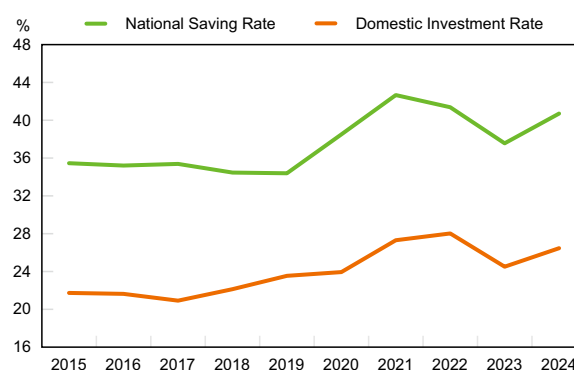


Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2025.

Substantial Gains in National Saving Rate and Domestic Investment Rate

The national saving rate (the ratio of national savings to GNI measured at current prices) rose from 37.56% in 2023 to 40.71% in 2024, reflecting higher national income amid economic expansion. Meanwhile, an upward adjustment in capital expenditures by the semiconductor industry caused the domestic investment rate (the ratio of domestic investment to GDP measured at current prices) to climb from 24.51% in 2023 to 26.47% in 2024.

National Saving Rate and Domestic Investment Rate



Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2025.

3. Balance of Payments

In 2024, Taiwan's current account registered a surplus of US\$113,834 million, which accounted for 14.3% of nominal GDP. The financial account posted a net asset increase of US\$94,391 million. Reserve assets increased by US\$10,880 million.

Balance of Payments

Unit: US\$million

	(1) 2024	(2) 2023	(1)-(2)
A. Current account	113,834	105,849	7,985
Goods: credit (exports)	417,462	383,880	33,582
Goods: debit (imports)	316,763	288,263	28,500
Balance on goods	100,699	95,617	5,082
Services: credit (exports)	58,750	53,916	4,834
Services: debit (imports)	71,162	64,006	7,156
Balance on services	-12,412	-10,090	-2,322
Primary income: credit	64,633	59,860	4,773
Primary income: debit	34,306	34,565	-259
Balance on primary income	30,327	25,295	5,032
Secondary income: credit	8,972	8,674	298
Secondary income: debit	13,752	13,647	105
Balance on secondary income	-4,780	-4,973	193
B. Capital account	-2	-38	36
C. Financial account	94,391	85,369	9,022
Direct investment: assets	31,979	24,750	7,229
Equity and investment fund shares	31,545	24,980	6,565
Debt instruments	434	-230	664
Direct investment: liabilities	10,926	6,419	4,507
Equity and investment fund shares	2,875	4,785	-1,910
Debt instruments	8,051	1,634	6,417
Portfolio investment: assets	66,327	71,920	-5,593
Equity and investment fund shares	26,983	16,656	10,327
Debt securities	39,344	55,264	-15,920
Portfolio investment: liabilities	-17,357	5,233	-22,590
Equity and investment fund shares	-18,893	5,073	-23,966
Debt securities	1,536	160	1,376
Financial derivatives: assets	-27,799	-20,215	-7,584
Financial derivatives: liabilities	-28,722	-21,265	-7,457
Other investment: assets	-2,907	-7,541	4,634
Other investment: liabilities	8,362	-6,842	15,204
D. Net errors and omissions	-8,561	-6,100	-2,461
E. Reserves and related items*	10,880	14,342	-3,462

Note: * Excluding valuation changes in exchange rates.

Source: *Balance of Payments Quarterly, Republic of China (Taiwan)*, CBC, February 2025.

Wider Current Account Surplus

The current account consists of four major items, namely goods, services, primary income, and secondary income.

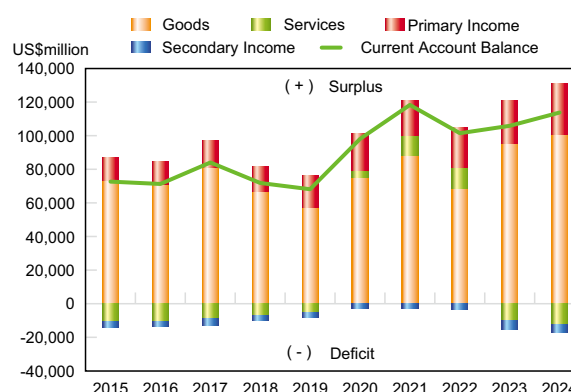
(1) Goods

Because of emerging technologies such as high-performance computing and AI applications, Taiwan's external merchandise trade grew in 2024, with the value of exports (on a BOP basis) increasing by 8.7% from 2023 to US\$417,462 million. Among its components, net exports of goods under merchanting increased by 17.7% to US\$15,739 million. The value of imports increased by 9.9% to US\$316,763 million. Overall, as the increase in exports exceeded that in imports, the trade surplus widened from US\$95,617 million to US\$100,699 million. The top five trading partners of Taiwan in 2024 were Mainland China including Hong Kong (hereafter in this chapter referred to as Mainland China), the US, ASEAN¹, Europe, and Japan.

In terms of Taiwan's trade with Mainland China, the value of exports amounted to US\$150,620 million in 2024, 1.1% lower than the previous year. Among major export products, electronic parts and components contributed the most to the decrease in Taiwan's exports to Mainland China, causing Mainland China's share of total exports to drop to 31.7%, the lowest level in 23 years but still ranking first among Taiwan's trading partners. Imports from Mainland China grew 12.4% to US\$80,623 million in 2024. The increase mainly came from base metals and articles thereof, electronic parts and components, and information and communication technology and audio-video (ICT/AV) products. The share of total imports from Mainland China remained unchanged from the previous year at 20.4%. As exports decreased and imports increased, the trade surplus with Mainland China narrowed to US\$66,997 million in 2024, still constituting the largest source of Taiwan's trade surplus.

In 2024, Taiwan's exports to the US grew 46.1% to US\$111,369 million, and its share of total exports rose to its highest level in 25 years, reaching 23.4%. The increase mainly came from growing demand for AI applications, leading to higher ICT/AV exports to the US. As for imports from the US, the amount increased by 13.7% to US\$46,488 million, with its share in total imports slightly increasing to 11.8%. The trade surplus with the US expanded to US\$64,881 million for the year, ranking second among Taiwan's surplus sources.

Current Account



Source: Balance of Payments Quarterly, Republic of China (Taiwan), CBC, February 2025.

¹ Association of Southeast Asian Nations, including Brunei Darussalam, Cambodia, Indonesia, Laos, Myanmar, Malaysia, the Philippines, Singapore, Thailand, and Vietnam.

Exports to the ASEAN economies increased by 15.1% to US\$87,785 million in 2024, with its share of total exports rising to 18.5%. The increase mainly came from ICT/AV products. Imports from the ASEAN economies increased by 20.1% to US\$49,271 million, accounting for a slightly greater share of 12.5% of total imports as imports of electronic parts and components and ICT/AV products increased. Overall, the trade surplus with the ASEAN economies rose to US\$38,514 million. Singapore, Vietnam, and Thailand were the third, fourth, and fifth largest sources of Taiwan's trade surplus, respectively.

Exports to Europe decreased by 8.6% to US\$38,643 million, with its share of total exports falling to 8.1%. The major export declines were in electronic parts and components and ICT/AV products. Imports from Europe decreased by 1.8% to US\$45,786 million and the share of total imports shrank to 11.6%, with machinery being the main source of this decrease. In all, the decrease in exports to Europe exceeded that in imports, expanding the trade deficit to US\$7,143 million.

Exports to Japan decreased by 17.8% to US\$25,842 million and its share in Taiwan's total exports decreased to 5.4%. Of all major products exported to Japan, electronic parts and components contributed the most to this decline. Imports from Japan increased by 4.8% to US\$46,452 million, with electronic parts and components being the main source of this increase; Japan's share of total imports declined further to 11.8%, though. With exports decreasing and imports increasing, the trade deficit with Japan expanded to US\$20.61 billion. However, Japan was surpassed by South Korea, becoming the second largest source of Taiwan's trade deficit.

Trade in Goods by Country

Unit: %

	2024			2023		
	Amount (US\$million)	Share	Annual Change	Amount (US\$million)	Share	Annual Change
Exports						
Mainland China (including Hong Kong)	150,620	31.7	-1.1	152,239	35.2	-18.1
US	111,369	23.4	46.1	76,234	17.6	1.6
ASEAN	87,785	18.5	15.1	76,275	17.6	-5.4
Europe	38,643	8.1	-8.6	42,283	9.8	2.9
Japan	25,842	5.4	-17.8	31,435	7.3	-6.5
Rest of the World	60,810	12.8	12.7	53,954	12.5	-14.6
Total	475,069	100.0	9.9	432,420	100.0	-9.8
Imports						
Mainland China (including Hong Kong)	80,623	20.4	12.4	71,718	20.4	-16.1
ASEAN	49,271	12.5	20.1	41,031	11.7	-23.9
US	46,488	11.8	13.7	40,882	11.6	-10.5
Japan	46,452	11.8	4.8	44,344	12.6	-18.8
Europe	45,786	11.6	-1.8	46,606	13.3	-8.7
Rest of the World	125,824	31.9	17.5	107,050	30.4	-22.0
Total	394,444	100.0	12.2	351,632	100.0	-17.9

Source: *Monthly Statistics of Exports and Imports*, Ministry of Finance, R.O.C. (Taiwan).

(2) Services

In 2024, the services deficit increased to US\$12,412 million mainly because of an increase in travel payments.

Of the various components of the services account, receipts of manufacturing services on physical inputs owned by others² increased by US\$1,319 million to US\$5,312 million in 2024. On the debit side, payments for manufacturing services rose by US\$55 million to US\$1,668 million. In total, net manufacturing receipts increased from US\$2,380 million to US\$3,644 million.

In terms of maintenance and repair services n.i.e. (not included elsewhere), which covers maintenance and repair work by residents on goods that are owned by nonresidents (and vice versa), the receipts declined by US\$317 million to US\$1,188 million owing mainly to decreased receipts from aircraft repair. On the other hand, the payments rose by US\$142 million to US\$1,612 million, owing mainly to increased payments for aircraft repair. In all, the account of maintenance and repair services n.i.e. turned from a surplus to a deficit of US\$424 million.

Transport receipts increased by US\$1,290 million to US\$12,103 million, reflecting increases in international freight proceeds. Transport payments rose by US\$697 million to US\$13,739 million as a result of an increase in passenger fares paid to foreign airlines. Overall, the transport services deficit narrowed from US\$2,229 million to US\$1,636 million.

Travel receipts increased by US\$1,004 million to US\$9,662 million. Meanwhile, travel payments increased by US\$4,544 million to US\$20,063 million. The increases in both receipts and payment were mainly due to the growth in the number of cross-border tourists. In all, the deficit on the travel account widened to a record high of US\$10,401 million.

In terms of "other services," the receipts grew by US\$1,538 million to US\$30,485 million, mainly attributable to increases in receipts from computer and information services. The payments grew by US\$1,718 million to US\$34,080 million, owing to increases in payments for construction. Overall, the deficit on the "other services" account increased to US\$3,595 million.

(3) Primary Income

Primary income consists of compensation of employees, investment income, and other primary income. In 2024, primary income receipts increased by US\$4,773 million to US\$64,633 million, mainly because of increases in residents' income from direct investment abroad. Meanwhile, primary income payments decreased by US\$259 million from the previous year to US\$34,306 million, mainly

² Manufacturing services on physical inputs owned by others include the processing, assembly, labeling, and packing undertaken by a service provider that does not own the goods, namely a resident's payment to a nonresident for providing these services for the resident who is also the owner of the goods concerned.

attributable to decreases in direct investment income paid to nonresidents. Consequently, the surplus on the primary income account increased to US\$30,327 million.

(4) Secondary Income

For the year of 2024, secondary income receipts amounted to US\$8,972 million, reflecting increases in receipts in gifts and samples and in inward work remittances and family support allowances. Secondary income payments amounted to US\$13,752 million, mainly owing to increased payments in gifts and samples. As a whole, the deficit on the secondary income account narrowed to US\$4,780 million.

Capital Account Deficit

The capital account includes capital transfers and the acquisition and disposal of non-produced, non-financial assets. In 2024, the capital account deficit decreased to US\$2 million.

Net Asset Increase in Financial Account

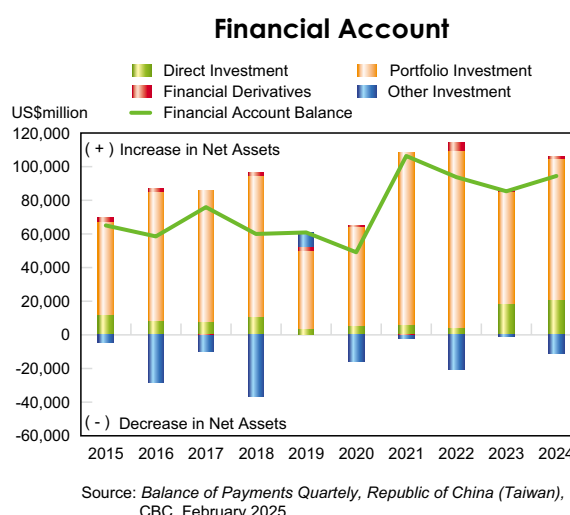
In 2024, the financial account showed an increase of US\$94,391 million in net assets. In terms of sub-categories, direct investment, portfolio investment and financial derivatives exhibited increases of US\$21,053 million, US\$83,684 million and US\$923 million in net assets, respectively. The account of other investment exhibited a decrease of US\$11,269 million in net assets.

(1) Direct Investment

Direct investment abroad by residents exhibited an increase of US\$31,979 million. Direct investment in Taiwan by nonresidents showed an increase of US\$10,926 million.

(2) Portfolio Investment

In 2024, portfolio investment abroad by residents increased by US\$66,327 million. Equity and investment fund shares grew by US\$26,983 million mainly because banks' non-discretionary money trust, onshore funds and pension funds increased holdings of foreign equity securities. Debt securities rose by US\$39,344 million mainly because onshore funds, banks and banks' non-discretionary money trusts increased holdings of foreign debt securities.



On the other hand, local portfolio investment by nonresidents decreased by US\$17,357 million. Equity and investment fund shares declined by US\$18,893 million as foreign investors decreased holdings of Taiwanese stocks, and debt securities rose by US\$1,536 million mainly because nonresidents invested in overseas corporate bonds issued by domestic enterprises.

(3) Financial Derivatives

Assets in financial derivatives decreased by US\$27,799 million, principally because of gains on transactions of financial derivatives received by other financial corporations.

Liabilities in financial derivatives decreased by US\$28,722 million, mainly because of losses on transactions of financial derivatives paid by other financial corporations.

(4) Other Investment

In 2024, other investment abroad by residents decreased by US\$2,907 million. Of the components, currency and deposits decreased by US\$14,813 million as banks withdrew deposits from overseas branches; loans decreased by US\$4,325 million because of declines in overseas interbank loans; trade credit grew by US\$2,834 million owing to an increase in trade credit extended by corporations; other accounts receivable increased by US\$13,389 million.

Other inward investment by nonresidents increased by US\$8,362 million. Of the components, currency and deposits rose by US\$7,430 million because of increased deposits from overseas branches and nonresidents; loans rose by US\$3,542 million as banks increased overseas interbank borrowings; trade credit declined by US\$3,800 million, owing to a decrease in trade credit received by corporations; other accounts payable increased by US\$1,190 million.

Increase in Foreign Exchange Reserves

The foreign exchange reserve assets held by the Bank increased by US\$10,880 million in 2024, mainly owing to returns from foreign exchange reserves management.

4. Prices

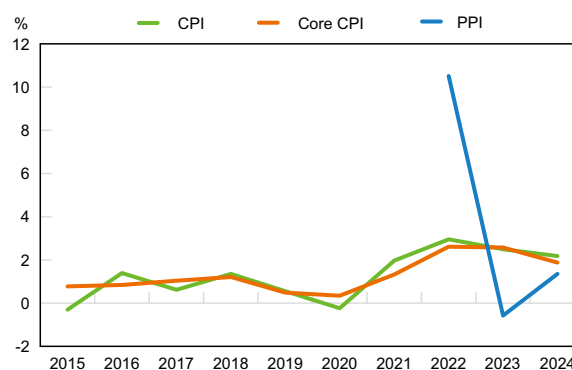
In 2024, Taiwan's producer price index (PPI) grew by 1.36% over the previous year, mainly reflecting an increase of 2.17% in export prices and a modest rise of 0.99% in prices of domestic sales excluding imports. Headline inflation, measured by the CPI, edged down to 2.18% in 2024 from 2.49% a year earlier. The CPI increase was primarily driven by rising food prices, higher residential rent, as well as price increases in personal effects, medical care services, and durable consumer goods. Excluding fruit, vegetables, and energy, the core CPI averaged 1.88%, moderating from a 2.58% increase in 2023.

Slight Increase in Producer Prices

For the year 2024, the downtrend in international raw material prices amid mild global economic expansion and easing inflation helped alleviate import cost pressures for domestic firms. Taiwan's import price index in US dollar terms declined by 2.75% for the year. Nevertheless, as the NT dollar experienced a depreciation against the US dollar compared to 2023, the import price index in NT dollar terms shifted from a 3.60% decrease in the previous year to a modest gain of 0.27%, while overall price levels remained broadly stable.

The PPI rose by 1.36% in 2024, reversing a 0.57% decline in 2023. In terms of monthly movements, from the beginning of the year, prices of the following three categories continued to rise: (1) electronic parts and components, (2) computers, electronic and optical products, and (3) chemical material, other chemical products, and pharmaceuticals. In addition, the electricity tariff hike implemented in April further contributed to upward price pressures. As a result, the annual PPI inflation rate went up month by month and reached 3.66% in July.

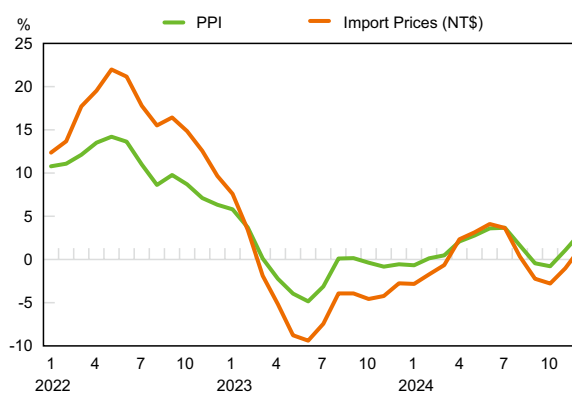
Inflation Rates



Note: As the PPI was first compiled in January 2021, the annual PPI growth rate was calculated from January 2022.

Source: Price Statistics Monthly (January 2025), DGBAS, Executive Yuan.

Annual Growth of Import Prices and PPI



Source: Price Statistics Monthly (January 2025), DGBAS, Executive Yuan.

Afterwards, as prices of food products and prepared animal feeds, petroleum and coal products, and electronic parts and components came down, the annual PPI inflation rate receded, registering a decrease of 0.80% in October. From November, the annual PPI inflation rate moved back up and stood at 3.07% in December on account of another electricity tariff hike in October and rising prices of agricultural products such as vegetables and fruit.

Among the components of the basic groups, prices of manufacturing products rose by 1.35%, contributing 1.22 percentage points to the PPI increase, mainly attributable to price rises in electrical equipment and in computers, electronic and optical products. Prices of agriculture, forestry, fishing, and animal husbandry products, prices of quarrying and mining products, and prices of water, electricity, and gas supply went up by 3.20%, 2.75%, and 0.59%, respectively.

Broken down by the two major components of the PPI, prices of domestic sales excluding imports and prices of exports increased by 0.99% and 2.17% year on year, respectively.

Although the NT dollar saw a depreciation against the US dollar in 2024 compared to the previous year, declines in prices of crude oil, grains, and other commodities helped relieve import cost pressures for domestic firms, leading to a modest 0.99% year-on-year increase in prices of domestic sales excluding imports.

In terms of prices of domestic sales excluding imports by basic group, prices of manufacturing products slightly grew by 0.83% with a contribution of 0.66 percentage points. This increase was primarily driven by higher prices in electrical equipment and in computers, electronic and optical products, as well as in chemical material, other chemical products, and pharmaceuticals. Prices of agriculture, forestry, fishing, and animal husbandry products, prices of quarrying and mining products, and prices of water, electricity, and gas supply rose by 3.48%, 2.75%, and 0.60%, respectively.

Export prices decreased by 0.89% in US dollar terms in 2024. Nevertheless, as the NT dollar depreciated against the US dollar compared with 2023, export prices in NT dollar terms turned to an annual increase of 2.17%.

Among the components of export prices in NT dollar terms, prices of raw materials went up by 1.92% with a contribution of 1.57 percentage points to the annual change in export prices. The rise primarily reflected price increases in the following categories: (1) optical, measuring, medical instruments, musical instruments, and parts thereof; (2) machinery, electrical equipment, TV Image, and parts; (3) plastics, rubber, and articles thereof. Prices of capital goods and consumer goods also increased by 2.12% and 4.60%, respectively.

Further Easing in Consumer Prices

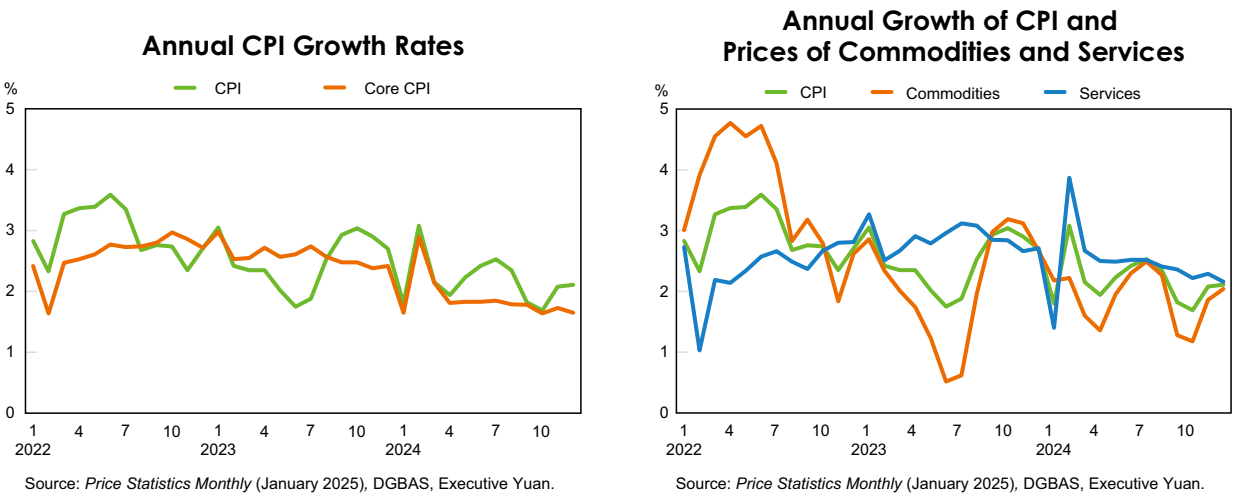
The CPI rose by 2.18% in 2024, lower than 2.49% in 2023. In the first two months of the year, the

annual CPI inflation rate experienced greater fluctuations on account of the seasonal factor of the Lunar New Year holidays. From March onwards, the annual CPI inflation rate edged down because of slower increases in prices of food and entertainment services, and dropped to 1.94% in April.

Then, weather-induced surges in the prices of fruit and vegetables led to a brief upswing in the annual CPI inflation rate and reached 2.53% in July. Afterwards, the rate trended down and posted 1.69% in October, the lowest since April 2021, mainly owing to falling fuel and lubricant fees and slower growth in food and entertainment services prices. Starting in November, as prices of vegetables and fruit soared following typhoons and heavy rainfall, the CPI annual growth rate rebounded and rose to 2.11% in December.

The core CPI grew at an average pace of 1.88% year on year in 2024, down from 2.58% of the previous year. In terms of monthly movements, from the beginning of the year, as prices of entertainment services rose at a slower pace, the annual core CPI inflation rate maintained a gradual downtrend, staying below 2.00% from April onwards and recording 1.65% in December.

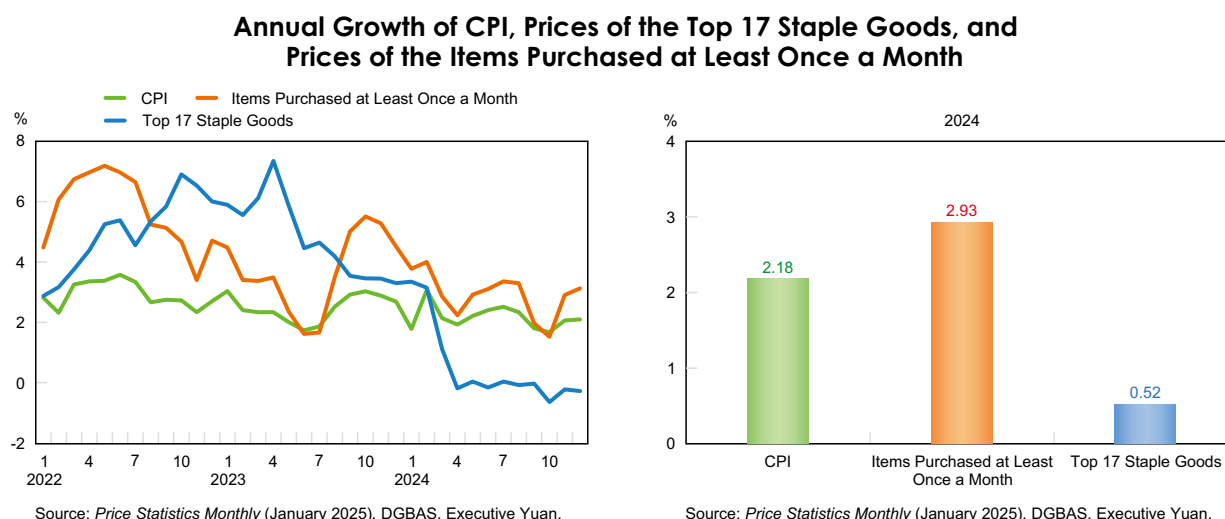
By type of items, the annual growth rate of commodity prices eased further from 2.11% in 2023 to 1.89% in 2024 as prices of international crude oil and other raw materials softened, bringing down related import prices for Taiwan. Domestic services prices came down to 2.45%, lower than 2.87% of the previous year, reflecting slower growth in prices of food away from home and entertainment services.



By frequency of purchase, the top 17 staple goods and the items purchased at least once a month both recorded slower price rises in 2024 compared to 2023.

In 2024, the annual growth rate of prices of the top 17 staple goods slipped significantly to 0.52%, down from 4.80% in 2023 and notably lower than the overall CPI inflation of 2.18%. This was mainly attributable to smaller price increases in meats, milk powder, and bread, as well as price declines in eggs, fresh milk, and household paper products such as toilet paper, facial tissue, and paper towels.

Meanwhile, the annual growth rate of prices of the items purchased at least once a month dropped back down from 3.69% in 2023 to 2.93% in 2024. Nevertheless, as the rise still exceeded the overall CPI inflation, consumers continued to feel a noticeable impact from the price uptrends.



In 2024, Taiwan's CPI grew by 2.18%. Around 79% of this increase came from rising food prices, higher residential rent, as well as price increases in personal effects, medical care services, and durable consumer goods, with a combined contribution of 1.73 percentage points in the annual CPI inflation rate.

The main factors contributing to the rise of CPI inflation in 2024 were as follows:

- (1) Prices of food went up by 3.69% and accounted for 0.99 percentage points in the annual CPI inflation rate. Among the components of the food group, with supply restrained by typhoons and torrential rain in the second half of the year, prices of fruit and vegetables moved up by 13.75% and 5.39%, contributing 0.36 and 0.07 percentage points to CPI inflation, respectively. Prices of food away from home increased by 3.14%, contributing 0.34 percentage points to CPI inflation.

Meanwhile, affected by rising feed and production costs, prices of meats and prices of cereals and cereal products rose by 2.72% and 2.35% and accounted for 0.07 and 0.04 percentage points in CPI inflation, respectively.

- (2) Reflecting the rise in housing prices, as well as higher prices of maintenance and repair of dwellings, prices of residential rent grew by 2.45%, contributing 0.37 percentage points to CPI inflation.
- (3) As elevated international gold prices brought prices of gold ornaments and jewelry higher, prices of personal effects climbed further by 6.25%, contributing 0.15 percentage points to CPI inflation.
- (4) Higher registration fees at clinics and hospitals, along with increased charges for dentures and orthodontic services, pushed prices of medical care services up by 4.70%, adding 0.11 percentage points

to CPI inflation.

- (5) In response to rising material costs, businesses raised prices of household appliances such as mattresses, sofas, and clocks and watches, resulting in a 1.04% increase in durable consumer goods prices and contributing 0.11 percentage points to CPI inflation.
- (6) Amid sustained strong domestic demand for travel and entertainment services, businesses increased prices of accommodation, group travel, and amusement park admissions, driving up entertainment services prices by 2.03% and accounting for 0.10 percentage points in CPI inflation.
- (7) Rising fees for elementary after-school care, high school tutoring, and supplementary courses such as language and computer classes led to a 2.57% increase in prices of education services, contributing 0.09 percentage points to CPI inflation.
- (8) Increased prices of vehicle parts and higher wages for vehicle maintenance workers caused prices of vehicle parts and maintenance to go up by 3.77%, accounting for 0.07 percentage points in CPI inflation.

Percentage Changes in the Major Components of the CPI in 2024

Item	Annual Rate of Change (%)	Contribution to CPI Inflation Rate (Percentage Point)
CPI	2.18	2.18
Food	3.69	0.99
Fruit	13.75	0.36
Food Away from Home	3.14	0.34
Meats	2.72	0.07
Vegetables	5.39	0.07
Cereals & Cereal Products	2.35	0.04
Eggs	-13.59	-0.06
Residential Rent	2.45	0.37
Personal Effects	6.25	0.15
Medical Care Services	4.70	0.11
Durable Consumer Goods	1.04	0.11
Entertainment Services	2.03	0.10
Education Services	2.57	0.09
Vehicle Parts & Maintenance	3.77	0.07
Tobacco & Betel Nuts	2.39	0.05
Maintenance & Repair of Dwellings	3.08	0.04
Electricity	4.02	0.04
Services for Personal Care	3.84	0.04
Total		2.16
Others		0.02

Source: Price Statistics Monthly (January 2025), DGBAS, Executive Yuan.

5. Labor Market

Increase in Employment

In 2024, the domestic economy experienced steady growth, leading to a stable labor market. The number of employed persons steadily increased from 11.59 million at the beginning of the year to 11.61 million by the end of the year. The annual average employment was 11.60 million persons, representing an increase of 67 thousand persons or 0.59% compared to the previous year.

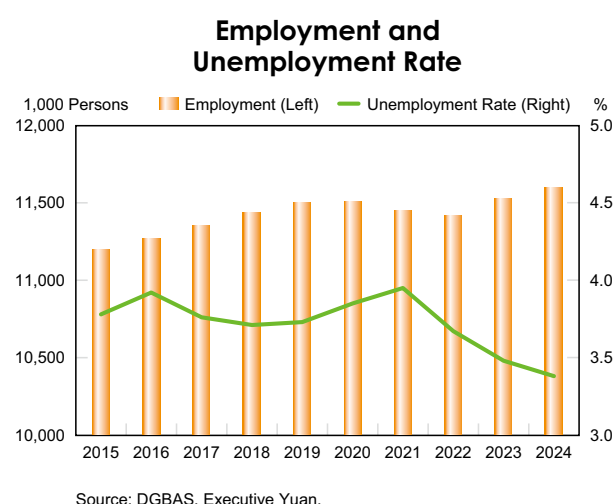
In terms of employment sector, the annual average employment in the services sector increased by 77 thousand persons or 1.09%, and that in the industrial sector increased by seven thousand persons or 0.16%, while the agricultural sector saw a decline of 15 thousand persons (3.00%). Of total employment, the services sector accounted for the highest share of employment at 60.81%, up by 0.31 percentage points from the previous year. On the other hand, the industrial and the agricultural sectors accounted for 34.94% and 4.26%, respectively, down by 0.14 and 0.16 percentage points in 2024.

By occupation, white-collar workers made up 46.84% of total employment, increasing by 84 thousand persons or 1.55%. Service and sales workers, comprising 20.08% of total employment, grew by 21 thousand persons or 0.90%. In contrast, blue-collar workers, who accounted for 33.09% of total employment, declined by 36 thousand persons or 0.94%.

Lowest Unemployment Rate Since 2001

In 2024, the unemployment rate generally trended downwards to 3.32% in December, except for seasonal fluctuations such as the post-Lunar New Year swings in February and in the summer period from June to August due to job transitions and new graduates entering the labor market. For the year as a whole, the unemployment rate was 3.38%, marking the lowest level since 2001.

Under stable employment conditions, the average unemployment duration decreased by 0.42 weeks over the previous year to 20.77 weeks. In terms of age groups, the unemployment duration of the age group 25-44 decreased the most, dropping by 0.93 weeks to 22.16 weeks, followed by 16.13 weeks for the age group 15-24 with a decrease of



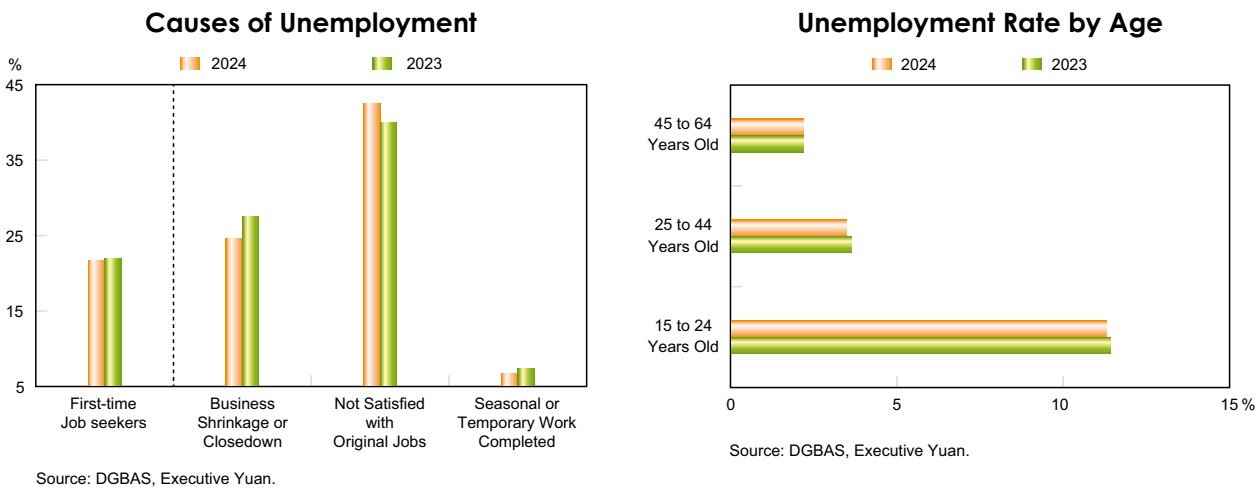
0.20 weeks. However, the unemployment duration of the age group 45-64 increased by 0.42 weeks to 22.14 weeks. Additionally, the number of the long-term unemployed³ remained unchanged at 49 thousand persons.

Total unemployment amounted to 406 thousand persons in 2024, dropping by nine thousand persons or 2.24% compared to the previous year. The drop was mainly due to a decrease in experienced job seekers, who accounted for 78.42% of total unemployment and whose number fell by six thousand persons or 1.82%.

Among the unemployed experienced job seekers, those who lost jobs because of shrinkage or closedown of business saw the largest reduction of 14 thousand persons or 12.66%, reducing its share of total unemployment from 27.48% the previous year to 24.55%. Such improvement was mainly due to continued economic growth, which led to a decline in the number of involuntary unemployment. Conversely, unemployment owing to dissatisfaction with original jobs increased by seven thousand persons or 3.98%, making it the leading cause of unemployment with a share of 42.35%. Unemployment from the conclusion of seasonal or temporary work, which accounted for 6.67%, fell by three thousand persons or 10.63%.

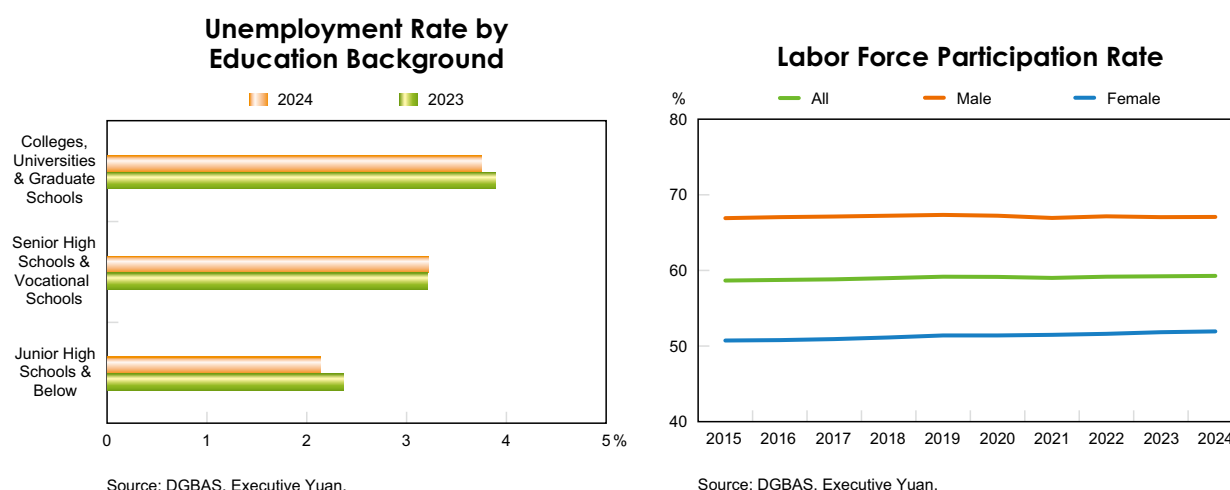
In terms of age groups, in 2024, the unemployment rates of the age groups 25-44 and 45-64 dropped by 0.14 and 0.01 percentage points from the previous year to 3.47% and 2.16%, respectively. The unemployment rate of the age group 15-24, though still the highest among all age groups, decreased by 0.12 percentage points to 11.27%.

In terms of educational background, the unemployment rates for two groups—those with a junior high school degree or below, and those with a college degree or higher—declined by



³ Referring to those who have been unemployed for one year or more.

0.23 and 0.14 percentage points to 2.13% and 3.74%, respectively, while the unemployment rate for those with a senior high school or vocational school degree edged up by 0.01 percentage points from the previous year to 3.21%.



Both Labor Force and Labor Participation Rate Increased

In 2024, the labor force (employed and unemployed combined) reached 12 million persons, an increase of 58 thousand persons or 0.49% from the previous year. Meanwhile, the non-labor force⁴ population also increased by 17 thousand persons or 0.21%, reaching 8.24 million persons. The annual average labor force participation rate increased by 0.06 percentage points over the previous year to 59.28%, the highest since 1993.

In terms of gender, the male labor force participation rate edged up by 0.03 percentage points over the previous year to 67.08%. The female labor force participation rate, which has risen steadily since 2010, increased by 0.13 percentage points to 51.95% in 2024, reflecting the government's ongoing efforts to promote gender equality, improve workplace conditions, and support women's employment.

In terms of age groups, in 2024 the labor force participation rates increased across all age brackets compared to the previous year. The labor force participation rates of the 16-24, 25-44, and 45-64 age groups increased by 0.80, 0.76, and 0.86 percentage points to 37.19%, 91.02%, and 67.21%, respectively. Although Taiwan's labor force participation rate has gradually rebounded since 2022, several structural factors, such as extended schooling and early retirement, continue to keep it

⁴ The top three reasons for non-participation in the labor force in 2024 were "old age or disability" (accounting for 37.30% of the total non-labor force), "housekeeping" (30.74%), and "attending school or preparing for entrance exam" (18.85%).

below the rates of countries such as the United States (62.6%), Japan (63.3%), South Korea (64.5%), and Singapore (68.2%). In response to an aging workforce, the government has been actively implementing related measures⁵ and these efforts are expected to yield positive results in the future.

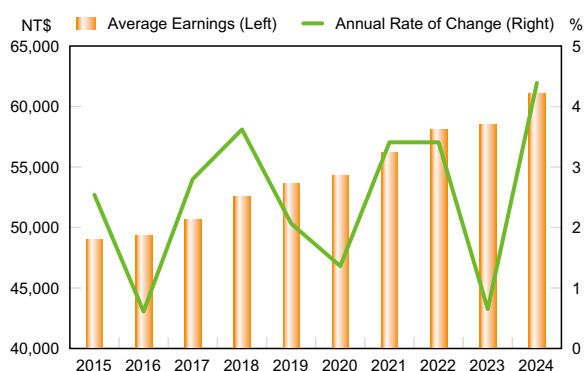
In terms of education background, the labor force participation rate of workers with a college degree or above rose by 0.17 percentage points to 67.43% in 2024, while the participation rates of workers with a junior high school degree or below and those with a senior high school or vocational degree dropped by 0.40 and 0.23 percentage points to 35.97% and 61.43%, respectively.

Stronger Wage Growth

For the year of 2024, the average monthly earnings per worker in the nonfarm sector (industrial and services sectors) reached NT\$60,984, with an annual growth rate of 4.39%, the highest increase since 2011. Accounting for inflation, the average real monthly earnings increased by 2.16% to NT\$56,566, the largest increase since 2019.

In terms of major sectors, driven by growth in labor productivity because of export recovery, wage growth in the industrial sector recorded the highest growth rate in three years. The services sector also experienced its strongest wage growth since 1998 as employers adjusted wages in response to the ongoing post-pandemic recovery and a stable domestic economy. The average monthly earnings in the industrial and services sectors were NT\$63,628 and NT\$59,176, growing by 4.60% and 4.29%, respectively, while real wages in these two sectors increased by 2.37% and 2.06%, respectively.

Amount and Rate of Change of Average Earnings of Nonfarm Workers



Source: DGBAS, Executive Yuan.

In terms of industrial classification, the finance and insurance sector had the highest average monthly earnings at NT\$107,348, and the electricity and gas supply sector ranked second at NT\$96,669. In contrast, the education sector⁶ and the accommodation and food services sector had the two lowest average monthly wages at NT\$34,121 and NT\$38,555, respectively, due to the high proportion of part-time employees in these sectors. In terms of growth rates, the finance and insurance sector registered the fastest growth at 9.27%, followed by the transportation and storage sector at 5.40%.

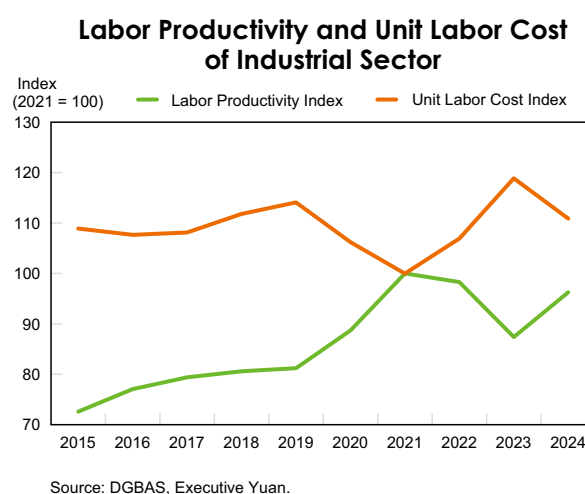
⁵ The government launched the "Middle-aged and Elderly Employment Promotion Project" in 2023 and the "55Plus Employment Promotion Measures" in 2024, offering employment incentives aimed at encouraging middle-aged and elderly individuals to re-enter the workforce.

⁶ Excluding schools at all levels within the formal education system (except preschools).

Remarkable Increase in Labor Productivity and Declining Unit Labor Cost

With production growth outpacing the increase in working hours, labor productivity in the industrial and the manufacturing sectors increased by 10.16% and 10.94%, respectively, compared with the previous year. Within the manufacturing sector, the Computers, Electronic, and Optical Products sector registered the highest increase in labor productivity with 28.31%, followed by the Electronic Parts and Components sector at 16.13%. This reflected strong demand for ICT (information and communications technology) products fueled by the wave of artificial intelligence, which has in turn driven capital investment and automation, thereby enhancing labor productivity.

Since total earnings increased at a slower pace than production output, unit labor costs in the industrial and the manufacturing sectors declined by 6.70% and 7.34% year-on-year, respectively. Among all manufacturing sectors, unit labor costs in the Computers, Electronic, and Optical Products sector saw the steepest decline, falling by 22.58%.



Financial Developments



II. Financial Developments

1. Overview

In the first half of 2024, the annual growth rate of M2 generally increased, primarily driven by faster growth in loans and investments. However, from July to September, net capital outflows led to a decline in the M2 annual growth rate, reaching 5.60% in September. Although there was a temporary rebound in October, the growth rate fell again to 5.47% in November owing to a slowdown in loan and investment growth. In December, the growth rate rebounded to 5.51% as the annual growth rates of time deposits and foreign currency deposits increased. The average annual growth rate of M2 for 2024 was 5.83%, with all monthly figures remaining within the reference range for monetary growth (2.5%–6.5%).

In terms of interest rates, between March 2022 and March 2024, the Bank raised the policy interest rates six times, with a cumulative increase of 0.875 percentage points. Additionally, the required reserve ratios were raised by 0.25 percentage points in both July and October 2024. As a result, banks' posted interest rates on deposits and loans, as well as the weighted average interest rates on deposits and loans of domestic banks, showed an upward trend. Furthermore, the weighted average overnight interbank call loan rate, bills market rates, and government bond yields also increased compared to 2023.

In regard to the exchange rate, the NT dollar broadly depreciated against the US dollar in 2024. At the end of 2024, the NT dollar depreciated by 6.2% against the US dollar compared with a year earlier; on a daily average basis, the NT dollar also depreciated by 3.0% compared with the previous year. In the stock market, with the end of the US rate hike cycle and strong AI demand, the Taiwan Stock Exchange (TWSE) Capitalization Weighted Stock Index, the TAIEX, was on the rise, and the daily average trading value increased.

Growth in Bank Loans and Investments Increased, While M2 Growth Slowed

In 2024, with the annual growth rates of housing loans and personal revolving credit rising and export growth driving up funding demand from private enterprises, the annual growth rate of bank loans and investments reached 8.24% at the end of December, higher than the 6.58% recorded at the end of the previous year. The average annual growth rate of loans and investments also rose from 5.92% in the previous year to 8.03% in 2024. Despite the growth in loans and investments, there was an increase in outbound remittances of trading gains by foreign investors compared to the previous year, leading to a slowdown in M2 growth. As a result, the average annual growth rate of M2 declined from 6.25% in 2023 to 5.83% in 2024, with all monthly figures remaining within the Bank's 2.5% to 6.5% reference range for the year.

Both Deposit and Loan Rates Increased

While domestic inflation has remained at a relatively high level since 2021, there were renewed concerns about the electricity tariff hike in April 2024 pushing up inflation expectations. To contain inflation expectations and promote price stability, the Bank raised the policy interest rates by 0.125 percentage points in March 2024. As a result, banks' posted interest rates on deposits and loans trended upward. The average posted interest rate on one-year time deposits at the five major domestic banks rose from 1.58% at the end of the previous year to 1.70%. Meanwhile, the weighted average rate on newly-extended loans (including treasury loans) increased by 0.218 percentage points to 2.103% in 2024.

The weighted average interest rates on deposits and loans at domestic banks showed a broad uptrend in 2024, reflecting the effect of the Bank's policy rate hikes. The weighted average deposit interest rate for the year was 1.08%, up by 0.14 percentage points from the previous year, while the weighted average loan interest rate increased by 0.12 percentage points to 2.45%. Consequently, the average interest rate spread between deposits and loans narrowed from 1.39 percentage points in the previous year to 1.37 percentage points in 2024.

Money Market Rates Generally Increased

Since the beginning of 2024, the weighted average overnight call loan rate has generally trended upward, mainly influenced by factors such as funding demand, the Bank's policy rate hikes, capital outflows, and seasonal effects. The weighted average rate rose from the yearly low of 0.687% in January to a peak of 0.823% in October, before slightly declining to 0.820% at the end of December. The annual average rate was 0.794%, increasing by 0.148 percentage points from the previous year.

With regard to the bills market, money market rates broadly increased in 2024, while their yearly average rates were all higher than those of the previous year owing to the Bank's rate hikes. The average 1-30 day commercial paper rate in the secondary market was 1.40% in 2024, increasing by 0.2 percentage points over the previous year.

10-Year Government Bond Yield Became Higher than Last Year

In 2024, the rise in US government bond yields and the Bank's March policy rate hike combined to push up Taiwan's government bond yields. However, owing to ample domestic liquidity, the increase in Taiwan's bond yields was relatively moderate. The average yield on Taiwan's benchmark 10-year government bond rose by 22 basis points over the previous year to 1.43%.

In terms of issuance, as the Central Government Debt Service Fund renewed maturing government bonds and increased issuance to meet budget needs, the total issuance amount of government bonds increased by about NT\$60 billion over the previous year.

NT Dollar Broadly Depreciated

In 2024, the NT dollar broadly depreciated against the US dollar. In the year through to July, the NTD/USD exchange rate generally weakened, mainly because of US dollar strength as a resilient US labor market and higher-than-expected CPI inflation continued to dampen market expectations for a Fed rate cut in the first half of the year and because of portfolio outflows from Taiwan as foreign investors net sold on the TWSE. Afterwards, with the August release of the minutes of the Federal Open Market Committee (FOMC) indicating easing upside inflation risk and heightening downside labor market risk, followed by the Fed's half-percentage-point rate cut in Mid-September, the NT dollar strengthened against the US dollar. However, in November, the re-election of Donald Trump as US President raised concerns over potential negative impacts from his trade policies and led to portfolio outflows by foreign investors, causing the NT dollar to soften against the US dollar. The NTD/USD depreciation continued in December mainly because the Fed's Chair Powell signaled for slower rate cuts despite an expected cut in Mid-December.

As of the end of 2024, the NT dollar depreciated by 6.2% against the US dollar compared with the end of the previous year. On an annual average basis, the NT dollar also depreciated by 3.0% against the US dollar.

Stock Index Rose and Trading Value Significantly Increased

From the beginning of 2024, Taiwan's stock market was driven upward by the end of the US rate hike cycle and strong demand for AI technologies. On July 11, the TAIEX reached a historic high of 24,390 points. However, factors such as weak US economic data, Middle East conflicts, and foreign investor sell-offs caused the market to drop to a low of 19,831 points on August 5.

Subsequently, with the Fed's rate cuts, a rebound in US stocks and positive earnings reported by the Taiwan Semiconductor Manufacturing Company (TSMC), the TAIEX surged to 22,035 points at the end of the year, up by 28.5% over the end of the previous year. The daily average trading value on the TWSE increased significantly by 44.3% from 2023 to NT\$381.4 billion in 2024.

2. Banking Sector

Number of Monetary Financial Institutions

At the end of 2024, the number of monetary financial institutions (defined hereafter in this chapter as excluding the central bank) was 405, the same as 2023. The numbers of all types of monetary financial institutions all stood unchanged. As for money market mutual funds, the number stayed zero after the last remaining fund was liquidated in May 2017.

In addition to monetary financial institutions, the number of financial holding companies remained 15.

Number of Monetary Financial Institutions by Type

Types of Institutions	End of 2024	End of 2023	Annual Change
Total Number of Main Offices	405	405	0
Domestic Banks	39	39	0
Foreign and Mainland Chinese Banks	31	31	0
Credit Cooperatives	23	23	0
Credit Departments of Farmers' and Fishermen's Associations	311	311	0
Chunghwa Post	1	1	0
Total Number of Branches	6,065	6,079	-14
Local Branches	5,852	5,866	-14
Overseas Branches	154	154	0
Offshore Banking Units	59	59	0

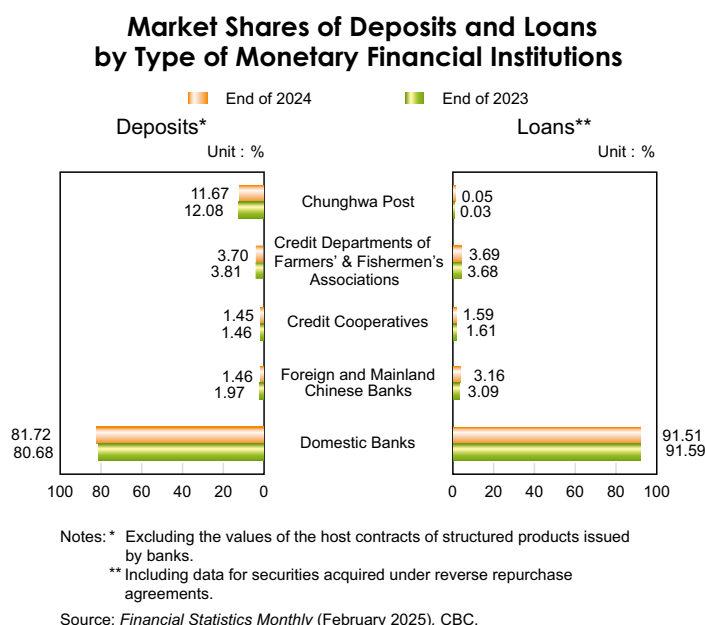
Sources: 1. *Financial Statistics Monthly* (February 2025), CBC.
2. Department of Financial Inspection, CBC.

Market Shares of Deposits and Loans

At the end of 2024, domestic banks maintained a dominant role in the deposit market, with the market share rising to 81.72%. This was primarily due to a more sizeable increase in the deposits of domestic banks, resulting from continued credit growth and ample market liquidity, as well as preferential interest rates for time deposits successively provided by some domestic banks. By contrast, the deposit market shares shrank for the other types of monetary financial institutions, with

the departments of savings and remittances of Chunghwa Post taking up a share of 11.67%, the credit departments of farmers' and fishermen's associations 3.70%, branches of foreign and Mainland Chinese banks 1.46%, and credit cooperatives 1.45%.

In terms of loans, the market share of domestic banks decreased to 91.51%, mainly because of slower annual growth in loans to private enterprises in the second half of the year. In contrast, foreign and Mainland Chinese banks' market share climbed to 3.16%, mainly because of an increase in foreign currency loans extended to private enterprises. Chunghwa Post's market share continued to rise to 0.05%, reflecting an increase in lending to bills finance companies. As for the other institution types, the market share of credit departments of farmers' and fishermen's associations edged up to 3.69%, whereas that of credit cooperatives fell to 1.59%.



Main Uses of Funds in Monetary Financial Institutions

At the end of 2024, the total amount of funds in monetary financial institutions was NT\$68,878 billion, increasing by NT\$2,603 billion compared to the end of 2023. The combined share of transaction and nontransaction deposits was around 87%. The balances of transaction deposits and nontransaction deposits posted annual growth rates of 3.52% and 5.04%, respectively.

In the case of fund uses, bank loans accounted for over 60% of total uses of funds at the end of 2024. Owing to faster growth in loans to the private sector, the annual growth rate of NT dollar loans increased from 6.02% at the end of the previous year to 9.10%. Net foreign assets accounted for a share of 9.10%, lower than the 10.45% recorded a year ago due to the decrease in investment in foreign securities.

Portfolio investments by monetary financial institutions measured on a cost basis dropped from 12.77% at the end of the previous year to 3.69%, mainly due to the substantial increase in banks' securities investment in the previous year, resulting in a higher base effect.

Main Uses of Funds in Monetary Financial Institutions¹

Unit: NT\$ billion

	End of 2024			End of 2023			Annual Change	
	Balance	Share (%)	Annual Growth Rate (%)	Balance	Share (%)	Annual Growth Rate (%)	Balance	Share (%)
Funds Balance:								
Transaction Deposits ²	24,546	35.64	3.52	23,711	35.78	3.73	835	-0.14
Nontransaction Deposits ³	35,631	51.73	5.04	33,922	51.19	9.96	1,709	0.54
NT Dollar Deposits	27,150	39.42	8.79	24,958	37.66	8.41	2,193	1.76
Foreign Currency Deposits ⁴	8,480	12.31	-5.40	8,964	13.53	14.52	-484	-1.22
Government Deposits	1,563	2.27	4.59	1,494	2.25	4.79	69	0.02
Other Items	7,138	10.36	-0.13	7,149	10.78	-0.37	-9	-0.42
Total	68,878	100.00	3.93	66,275	100.00	6.36	2,603	0.00
Uses:								
Net Foreign Assets ⁴	6,267	9.10	-9.51	6,926	10.45	22.68	-659	-1.35
Loans	41,539	60.31	9.13	38,065	57.43	5.54	3,474	2.88
NT Dollar Loans	40,840	59.29	9.10	37,433	56.48	6.02	3,407	2.81
Foreign Currency Loans ⁴	700	1.02	10.73	632	0.95	-17.01	68	0.07
Portfolio Investments ⁵	8,731	12.68	3.69	8,420	12.70	12.77	311	-0.02
Purchases of CDs Issued by CBC	7,245	10.52	-10.32	8,079	12.19	-5.44	-834	-1.67
Deposits with CBC	5,096	7.39	6.49	4,786	7.23	4.35	310	0.16

Notes: 1. Monetary Financial Institutions include domestic banks, local branches of foreign and Mainland Chinese banks, credit cooperatives, credit departments of farmers' and fishermen's associations, Chunghwa Post and money market mutual funds.
2. Including checking accounts, passbook deposits and passbook savings deposits.
3. Including time deposits, time savings deposits, foreign currency deposits, postal savings deposits, non-residents' NT dollar deposits, repurchase agreements and money market mutual funds.
4. Excluding valuation changes in the exchange rate of the NT dollar against foreign currencies.
5. Measured at original costs.
6. Figures may not add up to the total due to rounding.

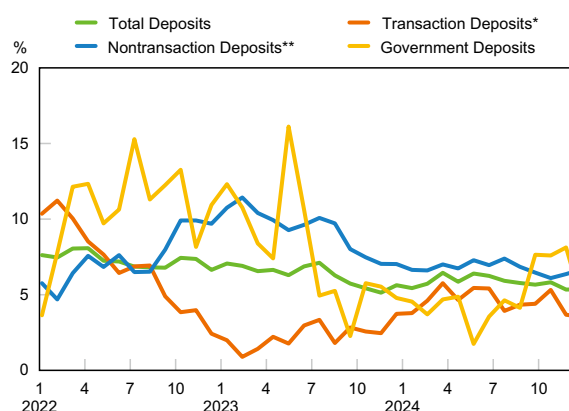
Source: *Financial Statistics Monthly* (February 2025), CBC.

Deposits

Because the net capital outflow in 2024 was higher than in 2023, the annual growth rate of deposits held by monetary financial institutions decreased to 5.36% at the end of 2024 from 5.62% a year earlier. Regarding the composition of deposits, the drop in the annual growth rate was mainly due to slower growth in nontransaction deposits and transaction deposits.

In terms of nontransaction deposits, its annual growth rate decreased to 6.68% at

Annual Growth Rates of Deposits



Notes: * Including checking accounts, passbook deposits and passbook savings deposits.

** Including time deposits, time savings deposits, foreign currency deposits, postal savings deposits, nonresidents' NT dollar deposits, repurchase agreements, and money market mutual funds.

Source: *Financial Statistics Monthly* (February 2025), CBC.

the end of 2024 from 7.02% a year earlier, mainly due to slower growth in time savings deposits and foreign currency deposits. However, its annual growth rate remained higher than that of total deposits and its share in total deposits thus increased to 58.09% at the end of 2024 from 57.38% a year earlier.

The annual growth rate of time savings deposits dropped to 7.43% at the end of 2024 from 10.84% a year earlier, while its share in total deposits increased to 18.45% from 18.10%. With the stock market repeatedly reaching new highs in the first half of 2024, retail investors and social insurance and pension funds adjusted asset allocations to meet investment demand, slowing capital movement from passbook savings deposits to time savings deposits. In the second half of the year, as several banks successively provided preferential time deposit rates, some individuals and social insurance and pension funds transferred time savings deposits into time deposits.

The annual growth rate of foreign currency deposits first rose then fell in 2024. In the first half of the year, inward remittances of overseas sales revenue and increased foreign currency loan balances pushed the annual growth rate of foreign currency deposits upwards to 5.16% by the end of June from 3.35% at the end of the previous year. However, in the second half of 2024, some firms deployed foreign currency deposits for outward direct investments, and some transferred foreign currency deposits into preferential time deposits and into passbook deposits for short-term working capital. Meanwhile, some individuals and social insurance and pension funds invested in overseas long-term bonds and notes. As a result, the annual growth rate of foreign currency deposits dropped to 0.81% at the end of 2024, and its share in total deposits decreased to 14.52% from 15.17% a year earlier.

The annual growth rate of time deposits (including negotiable certificates of deposit) remained stable in the first half of 2024 but surged in the second half to 19.21% at the end of 2024 from 10.66% a year earlier, with its share in total deposits going up to 13.31% from 11.77%. This was primarily because several banks offered preferential interest rates on time deposits in the second half of the year to solicit large-amount time deposits by retail and corporate customers and social insurance and pension funds.

Regarding postal savings deposits, the annual growth rate declined to 1.77% at the end of 2024 from 3.50% a year earlier, and its share in total deposits decreased to 11.41% from 11.81%.

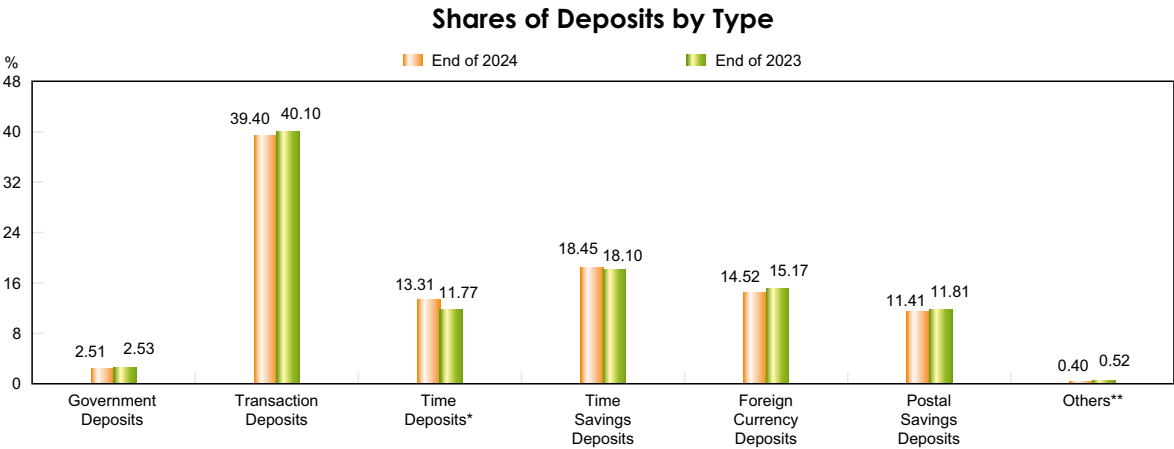
In terms of transaction deposits, its annual growth rate fell to 3.52% at the end of 2024 from 3.73% a year earlier and its share in total deposits shrank to 39.40% from 40.10%, primarily due to a decline in the annual growth rate of passbook savings deposits.

In the first half of 2024, as the stock market repeatedly reached new highs, the trading value

and balances in securities giro accounts both remained at relatively high levels. Therefore, the annual growth rate of passbook savings deposits increased from 4.26% at the end of the previous year to 5.15% by the end of May, its peak in 2024. However, later in the year, a host of depositors moved money from passbook savings deposits into time deposits to avail the higher preferential interest rates of some banks. Additionally, the cash dividends distributed by firms in the second half were lower than the same period of the previous year, and the annual growth rates of the trading value and balances in securities giro accounts also slowed down. As a result, the annual growth rate of passbook savings deposits declined to 1.73% at the end of 2024.

The annual growth rate of passbook deposits rose to 8.32% at the end of 2024 from 2.97% a year earlier. This was mainly owing to the stronger economic performance compared to the previous year, which increased demand for short-term working capital by firms. In addition, as the Fed began cutting the policy rate in September 2024, some domestic firms transferred foreign currency deposits into passbook deposits.

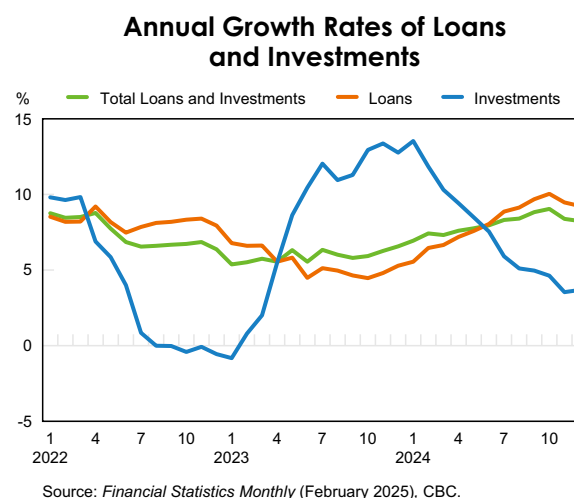
With regard to government deposits, its annual growth rate fluctuated month by month in 2024. This was mainly because the profit growth of exchange-listed and OTC-listed companies and active trading in the stock and real estate markets combined to result in an increase in the revenue of government taxes, such as securities transaction tax, individual income tax, enterprise income tax, business tax, and house and land transactions income tax. With ample tax revenue, the national treasury administration was able to repay loans ahead of time, causing the annual growth rate of government deposits to decrease to 4.59% at the end of 2024 from 4.79% a year earlier. Its share in total deposits also slightly decreased to 2.51% from 2.53%.



Notes: * Including NCDs.
** Including repurchase agreements, nonresidents' NTD deposits and money market mutual funds.
Source: *Financial Statistics Monthly* (February 2025), CBC.

Bank Loans and Investments

The annual growth rate of loans and investments of monetary financial institutions was 8.24% at the end of 2024, up from 6.58% at the end of 2023. Growth in loans increased to an annual pace of 9.25% at the end of 2024 from 5.30% at the end of the previous year, whereas growth in portfolio investment decelerated to 3.69% at the end of 2024 from 12.77% a year earlier.



Loans by Sector

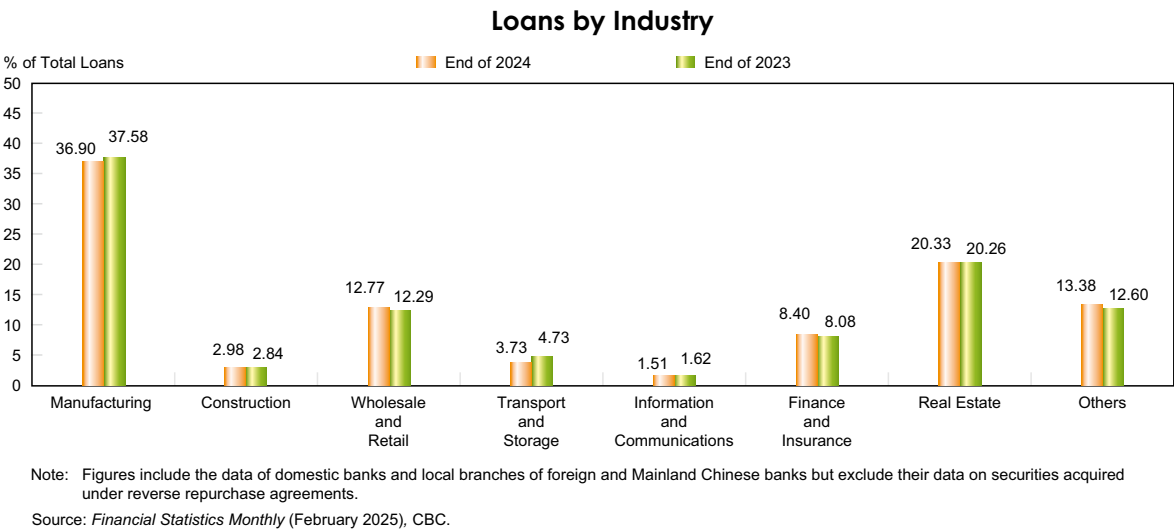
The annual growth rate of private sector loans extended by banks (defined in the following paragraphs as including domestic banks and local branches of foreign and Mainland Chinese banks) climbed to 9.80% at the end of 2024 from 5.33% a year earlier. The increase was largely due to faster annual growth in house-purchasing loans and investment loans, as well as an increase in private enterprises' demand for funds driven by steady export growth. The annual growth rate of loans to government enterprises fell into negative territory at -2.25% as of the end of 2024 from 6.98% a year earlier, owing to a larger debt repayment by the former Taiwan Railways Administration in the wake of the agency being restructured as a state-owned corporation. Meanwhile, the annual growth rate of loans to government agencies turned positive from -5.93% to 2.50% at the end of 2024 because of an increase in demand for funds by the government.

In terms of loan composition, loans extended to the private sector accounted for 94.04% of total loans at the end of 2024, higher than the 93.52% recorded at the end of 2023. Loans extended to government agencies and government enterprises accounted for 3.38% and 2.57%, respectively, at the end of 2024, lower than 3.61% and 2.87% at the end of 2023.

Loans by Industry

Broken down by industry sector, bank loans to the manufacturing sector continued to account for the largest portion, at 36.90% at the end of 2024 compared to 37.58% at the end of 2023, with its annual growth rate up from 0.93% to 4.79%. This was mainly attributable to an increase in loans extended to electronic parts and components manufacturing as export growth turned positive in 2024. Meanwhile, the share of loans extended to the construction industry continued to rise, with its annual growth rate up from 7.86% to 12.05% at the end of 2024, reflecting sustained growth in the real estate market.

The growing housing market also helped buoy the share and the annual growth rate of loans extended to the real estate industry. Meanwhile, the share and the annual growth rate of loans extended to the wholesale and retail industry both rose because of stronger export growth. As for the finance and insurance industry, the share and the annual growth rate of loans to this sector both increased because of more borrowing by securities firms and investment holding companies.



Consumer loans

The annual growth rate of consumer loans extended by banks increased from 6.37% at the end of 2023 to 9.81% at the end of 2024. Among them, house-purchasing loans increased the most by NT\$1,045.4 billion or 10.42% in 2024, a faster year-on-year increase than 7.04% in 2023. This was mainly due to support for homebuyers from the government's new Preferential Housing Loans for the Youth program, a picked up in domestic economic growth compared to the previous year, and an impressive uptrend in the stock market, along with a surge in loan applications for newly-completed pre-sale housing units in the latter half of 2024.

As for the shares of various types of consumer loans, house-purchasing loans remained the largest component, with its share increasing from 85.30% at the end of 2023 to 85.77% at the end of 2024. Car loans accounted for 1.85%, decreasing from 1.87%, mainly because the automobile market in 2024 experienced slower growth than the previous year. Meanwhile, house-repairing loans, revolving credit for credit cards, employee welfare loans, and other consumer loans accounted for 0.27%, 0.89%, 0.27%, and 10.94%, respectively.

Portfolio Investment

Owing to valuation changes, portfolio investment by monetary financial institutions, measured at fair value, recorded a year-on-year increase of NT\$362.2 billion, while the increase was smaller, at NT\$310.7 billion, when measured on a cost basis.

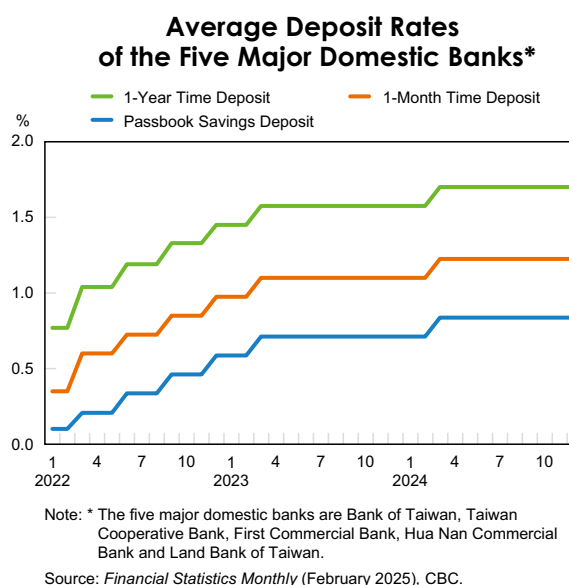
Portfolio investment by monetary financial institutions (measured on a cost basis) grew at a slower pace of 3.69% in 2024, mainly because of a higher base effect in 2023 when a significant expansion in the total balance of corporate bonds and commercial paper caused banks to increase portfolio investment.

In terms of tool types, government bonds accounted for a share of 51.31%, slightly smaller than the 51.84% recorded a year ago, reflecting slower growth in banks' investment in government bonds. At the end of 2024, commercial paper accounted for a share of 21.40%, higher than a year ago, as enterprises increasingly issued commercial paper to meet their funding needs. In addition, corporate bonds accounted for a share of 19.67%, increasing from the end of 2023.

Bank Interest Rates

The Bank raised the policy rates by 0.125 percentage points in March 2024, in order to contain domestic inflation expectations. As a result, banks' posted interest rates on deposits and loans trended upward. In the case of the five major domestic banks, the average fixed rates on one-month and one-year time deposits moved upward to 1.23% and 1.70% at the end of March from 1.10% and 1.58% at the end of February, respectively, while remaining steady for the rest of the year.

After the March hike, the Bank decided to keep the policy rates on hold in June, September and December in 2024 in view of the gradual decline in domestic inflation, downside risks facing the global economy, and mild growth expectations for the domestic economy thanks to a boost from domestic demand. Furthermore, in order to enhance the management of bank credit resources and curb real estate speculation and hoarding, the Bank adjusted the selective credit control measures and raised the reserve requirement ratios by 0.25 percentage points both in June and September. By strengthening the



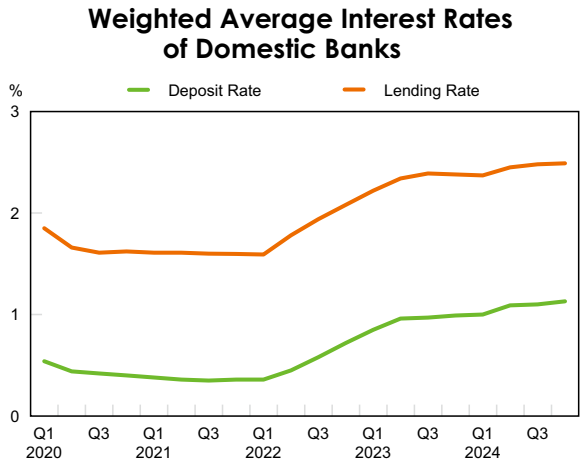
quantitative management of monetary credit, these measures would reinforce the effectiveness of the selective credit control measures and help mitigate excessive allocation of credit resources to the real estate market.

The weighted average interest rates on deposits and loans of domestic banks generally showed an upward trend in 2024. In terms of deposit interest rates, following the Bank's policy rate hike in late March 2024, banks' posted interest rates on deposits went upward. This, and the increases in both the amount of time deposits and their share in total deposits, contributed to the rise in the weighted average deposit interest rate to 1.13% in the fourth quarter of 2024 from 0.99% in the fourth quarter of the previous year. On the whole, the weighted average deposit interest rate of domestic banks was 1.08% in 2024, which was 0.14 percentage points higher than that recorded in the previous year.

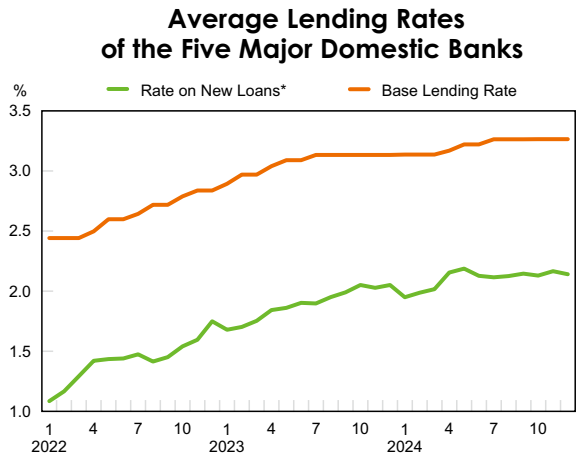
In terms of loan interest rates, after the Bank's March policy rate hike, various banks successively increased their base lending rates and the index rates on adjustable-rate mortgages. In addition, lower-rate borrowings from government enterprises also increased. As a result, the weighted average interest rate on new loans of the five major domestic banks trended upward from 1.949% in January to 2.141% in December. For the year as a whole, the rate increased from 1.885% in the previous year to 2.103%, up by 0.218 percentage points. Excluding central government loans, the weighted average interest rate on new loans increased from 1.899% in the previous year to 2.121% in 2024, up by 0.222 percentage points. Moreover, the average base lending rate increased to 3.264% at the end of 2024 from 3.133% at the previous year-end.

In the first quarter of 2024, the weighted average interest rate on total loans of domestic banks slightly declined from 2.38% in the fourth quarter of 2023 to 2.37%, owing to an increase in low-rate large-amount loans to governments and corporations and rate reductions for loans to large or prime corporate borrowers by some banks. From the second quarter on, guided by the Bank's policy rate hike in March, banks successively increased their base lending rates and the index rates on adjustable-rate mortgages. Combined with increased mortgage lending at some banks and a higher proportion of long-term loans, the weighted average interest rate on loans of domestic banks continued rising to 2.49% in the fourth quarter. For the year as a whole, the weighted average interest rate on loans of domestic banks was 2.45%, which was 0.12 percentage points higher than that recorded in the previous year.

As some banks offered preferential loan interest rate programs for prime borrowers and some other banks used better interest rates to attract deposits, the increase in the average lending rate was thus smaller than that in the average deposit rate. As a result, the average interest rate spread between deposits and loans decreased to 1.37 percentage points in 2024, which was 0.02 percentage points lower than that recorded in the previous year.



Source: *Financial Statistics Monthly* (February 2025), CBC.



Note: * Including housing loans, capital expenditure loans, current operations loans and consumer loans.

Source: *Financial Statistics Monthly* (February 2025), CBC.

3. Money Market

In 2024, supported by growth in exports and private investment, as well as the expanded operations of bills finance companies, financial institutions' demand for interbank call loans rebounded. As a result, the total turnover in the interbank call loan market increased by 2.11% compared to the previous year. However, as the exact timing of the Lunar New Year holidays shifted (e.g., the holidays occurred on February 10 in 2024, yet on January 29 in 2025), the number of days for interbank call loans with maturities beyond the year-end 2024 and before the 2025 Lunar New Year holidays decreased compared to the same period of the previous year. Consequently, the outstanding amount of interbank call loans at the end of 2024 fell by 14.41%.

In terms of the short-term bills market, the total turnover registered an increase of 17.94% from a year before, while the total issuance of short-term bills grew by 13.38% in 2024 in response to corporate funding needs. At the end of the year, the outstanding amount of short-term bills went up by 10.91% compared to the previous year end.

With regard to money market rates, as the Bank implemented a policy rate hike in late March 2024 and increased the reserve requirement ratios on NT dollar demand deposits and time (savings) deposits in July and October, short-term money market rates broadly displayed an uptrend during the year.

Rise in Interbank Call Loans

In 2024, the global economy experienced a gradual recovery, pushing up Taiwan's export growth. Private investment showed steady expansion, and the year-on-year growth in bank loans and investments accelerated. Meanwhile, bills finance companies expanded their operations. Against this backdrop, financial institutions' demand for interbank call loans strengthened, leading total annual turnover of interbank call loans to reach NT\$23,563.5 billion, an increase of NT\$486.3 billion or 2.11% over the previous year.

With respect to borrowers, domestic banks still made the largest contribution to total transactions with a share of 74.76%, followed by bills finance companies, foreign and Mainland Chinese banks, and Chunghwa Post, with shares of 14.19%, 10.11%, and 0.94%, respectively.

The amount borrowed by domestic banks grew by NT\$94.1 billion or 0.54% from a year earlier, primarily owing to a lower base effect. On the other hand, with a contraction in their asset and liability positions, foreign and Mainland Chinese banks witnessed a year-on-year decline in both interbank borrowing and lending. The amount borrowed by foreign and Mainland Chinese banks shrank by NT\$213.2 billion or 8.85% over the previous year.

The amount borrowed by bills finance companies rose significantly by NT\$713.0 billion or 27.09% compared with a year ago. The growth was mostly driven by the expansion of the bills finance business, resulting in greater funding needs. In addition, multiple typhoon-related holidays in 2024 prompted bills finance companies to increase interbank borrowing to manage short-term liquidity needs. Meanwhile, the amount borrowed by Chunghwa Post dropped by NT\$89.6 billion or 28.72% over the previous year.

In terms of lenders, domestic banks remained the largest supplier of funds, making up 63.22% of total transactions in 2024. Foreign and Mainland Chinese banks came in second with a share of 34.62%, followed by Chunghwa Post and bills finance companies contributing 2.00% and 0.16% of total transactions, respectively.

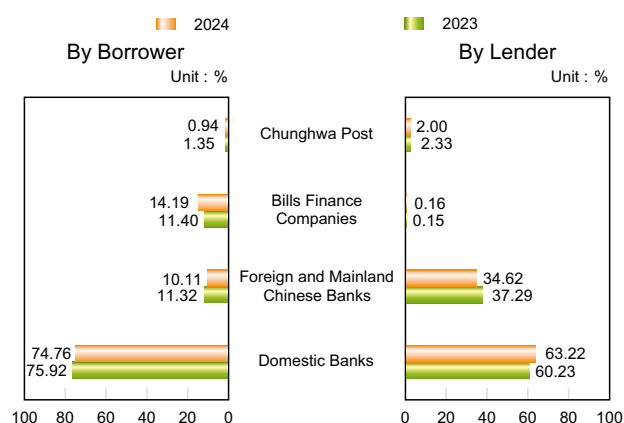
The amount of call loans made by domestic banks went up by NT\$998.6 billion or 7.18% compared with the previous year, mainly owing to an increase in lending to bills finance companies as a result of their higher funding needs.

Foreign and Mainland Chinese banks decreased their interbank lending by NT\$449.9 billion or 2.68% over the previous year. The reduction was attributable to net foreign capital outflows in 2024 and a contraction in lending as elevated money market rates, weakened counterparty demand for interbank borrowing.

On the other hand, the amount of call loans made by Chunghwa Post fell by NT\$65.5 billion or 12.20% from a year before, reflecting its reallocation of funds toward overseas asset investments, which in turn limited the funds available for interbank lending. As for bills finance companies, the amount lent by this group registered an increase of NT\$3.1 billion or 8.83% year on year.

In respect of maturity, interbank overnight call loans remained the most actively traded instrument in the market with a predominant share of 44.00%, though slipping by 1.55 percentage points from that of the previous year. The second were those with a maturity of one week, rising by 1.52 percentage points to 39.07% over the previous year, while the share of loans with a two-week maturity climbed by 1.09 percentage points to 11.22%.

Composition of Interbank Call Loan Market by Participant



Source: *Financial Statistics Monthly* (February 2025), CBC.

Growth in Short-Term Bill Transactions

For the year 2024, newly issued short-term bills stood at NT\$23,218.8 billion. Commercial paper made up a dominant 93.99% of the new issues, followed by negotiable certificates of deposit (NCDs) with a share of 4.90%.

Newly issued short-term bills posted a year-on-year increase of NT\$2,740.2 billion or 13.38% in 2024. The rise was mainly attributable to commercial paper with an increased issuance of NT\$2,431.6 billion. This reflected that sustained corporate funding needs caused the amount of issuance to exceed that of repayments despite an upswing in short-term bills market rates.

The second-largest contributor to the overall increase was NCDs, with issuance rising by NT\$320.2 billion compared to the previous year. The growth was because financial institutions such as banks and bills finance companies boosted their NCD holdings as part of their fund allocation strategies. In contrast, the issuance of treasury bills slid by NT\$10.0 billion from a year before as the Ministry of Finance reduced issuance of treasury bills in view of ample tax revenues.

Overall, with the total amount of short-term bill issuance exceeding that of repayments, the outstanding of short-term bills stood at NT\$3,713.3 billion as of the end of 2024, representing an increase of NT\$365.3 billion or 10.91% from that of the previous year end.

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
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
2023	20,478.6	3,348.0	260.0	30.0	-	-	19,390.6	3,000.9	11.1	2.3	816.9	314.8
2024	23,218.8	3,713.3	250.0	30.0	-	-	21,822.2	3,272.5	9.5	1.9	1,137.0	408.9

Source: *Financial Statistics Monthly* (February 2025), CBC.

The total turnover of short-term bills in 2024 went up by NT\$9,939.3 billion or 17.94% to NT\$65,355.5 billion. Of the total transactions, commercial paper still made up the lion's share of

94.48%, while NCDs came in with the second largest share of 5.09%.

In terms of market participants, private enterprises were still the largest player in the market with a dominant share of 47.32%, followed by banks and bills finance companies with shares of 26.90% and 15.68%, respectively.

Broad Uptrend in Money Market Rates

The weighted average interbank overnight call loan rate in 2024 displayed a broad uptrend. Funding needs increased in January 2024 in the lead-up to the Lunar New Year and remained elevated in February amid the holiday period. Thereafter, the Bank raised the policy rates in late March. In April, the lagged effect of the policy rate hike, along with net selling of TWSE stocks by foreign investors and the resulting outward remittances of principal and earnings, contributed to a continued rise in short-term market rates.

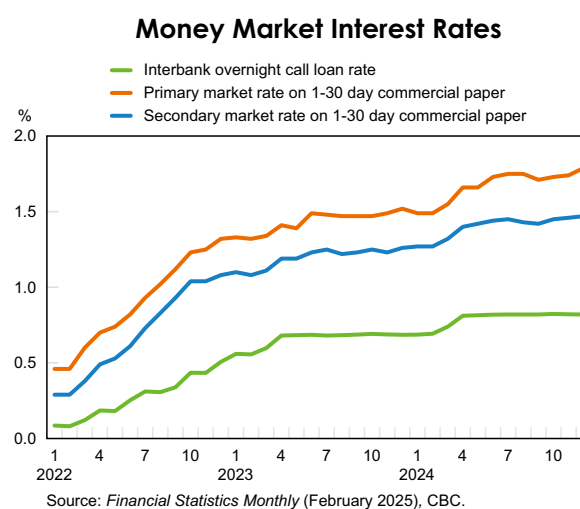
Later in the year, several factors led to a steady uptrend in the interbank overnight call loan rate. These included liquidity tightening resulting from profit-seeking enterprise income tax collections in May, three consecutive months of net foreign capital outflows beginning in June, and the Bank's policy hike on reserve requirement ratios taking effect in October, which increased the required reserves held by banks. Consequently, the interbank overnight call loan rate rose steadily from 0.686% in December 2023 to 0.823% in October 2024.

In November and December, frequent trading of TWSE stocks by foreign investors, accompanied by capital outflows, resulted in slight imbalances in interbank fund allocation. As a result, short-term market rates experienced mild fluctuations, with the interbank overnight call loan rate recording 0.821% in November and 0.820% in December.

The primary market rate on commercial paper with a maturity of 1-30 days moved upwards from 1.49% in January to 1.79% in December. Meanwhile, the secondary market rate on commercial paper with a maturity of 1-30 days also rose from 1.27% in January to 1.47% in December.

Increase in Money Market Funds

Following several policy rate hikes by the Bank in recent years, fund yields gradually increased, attracting investor subscriptions.



Moreover, as most banks reduced their acceptance of long-term deposits, funds shifted into money market mutual funds.

Meanwhile, uncertainties related to geopolitical risks, global economic growth momentum, and inflation trends remained in international markets. Furthermore, with the re-elected US President Donald Trump set to take office in January 2025, markets anticipated that potential shifts in trade and economic policies could trigger heightened volatility in stock and bond markets. Against this backdrop, investors showed a stronger tendency to temporarily park capital in domestic money market funds.

At the end of 2024, there were a total of 36 money market funds in Taiwan, and the total assets stood at NT\$879.4 billion with an increase of NT\$15.9 billion or 1.84% from the previous year end.

With regard to portfolio composition, the largest use of funds was short-term bills with a share of 52.73% at the end of the year. Following short-term bills were bank deposits and repurchase agreements, accounting for 39.83% and 7.12% 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 (%)
2022	781.4	208.4	26.67	474.4	60.71	95.0	12.16	3.6	0.46
2023	863.5	344.5	39.89	427.2	49.47	86.5	10.02	5.4	0.62
2024	879.4	350.3	39.83	463.7	52.73	62.6	7.12	2.8	0.32
2024/ 1	902.6	379.5	42.05	425.0	47.09	92.8	10.28	5.3	0.58
2	911.2	394.3	43.27	427.5	46.92	84.3	9.25	5.2	0.56
3	889.9	394.7	44.35	428.3	48.13	61.2	6.88	5.7	0.64
4	928.6	396.9	42.74	445.9	48.02	80.1	8.63	5.6	0.61
5	883.6	380.7	43.09	433.5	49.06	64.1	7.25	5.4	0.60
6	884.0	350.8	39.68	458.4	51.86	70.1	7.93	4.7	0.53
7	894.6	332.7	37.19	475.5	53.15	80.6	9.01	5.7	0.65
8	906.2	330.1	36.43	487.4	53.79	84.0	9.27	4.8	0.51
9	904.1	350.1	38.72	481.5	53.26	67.7	7.49	4.8	0.53
10	921.6	357.2	38.76	487.6	52.91	73.4	7.96	3.4	0.37
11	916.3	359.1	39.19	481.1	52.50	72.9	7.96	3.2	0.35
12	879.4	350.3	39.83	463.7	52.73	62.6	7.12	2.8	0.32

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

4. Foreign Exchange Market

The NT Dollar Exchange Rate

In 2024, on a daily average basis, the NT dollar appreciated against the Japanese yen and the Korean won but depreciated against the euro, the US dollar and the renminbi (RMB). The trade-weighted nominal effective exchange rate index of the NT dollar decreased by 1.13% on a daily average basis. The exchange rate movements of the NT dollar vis-à-vis each of the above foreign currencies are as follows.

During the course of the year, the NT dollar depreciated broadly against the US dollar. In the first half of the year, the US dollar strengthened as signs of US labor market resilience and higher-than-anticipated CPI inflation repeatedly delay market expectations of a Fed rate cut. Combined with a capital outflow in July as foreign investors cut their equities holdings in Taiwan, the NT dollar generally weakened against the US dollar in the first seven months of the year. Later, the US dollar softened as the August-release of FOMC meeting minutes showed that the upside risk to inflation had diminished while downside risks to the labor market had increased, and the Federal Reserve cut its policy rate by 0.50 percentage points in mid-September; consequently, the NT dollar appreciated against the US dollar. By November, though, the NT dollar weakened again as foreign investors became net sellers in the Taiwan stock market and resulted in a portfolio outflow amidst market concerns about the potential adverse impact of Trump's trade policies after he was re-elected as US President. The local currency weakness continued as the US dollar rebounded on Fed Chair Powell's remarks signaling slower rate cuts despite the expected mid-December cut by 0.25 percentage points. At the end of 2024, the NT dollar depreciated by 6.2% against the US dollar compared with the end of the previous year. On a daily average basis, the NT dollar depreciated against the US dollar by 3.0% in 2024.

In 2024, the NT dollar first depreciated against the euro and then appreciated, mainly tracking the monetary policy actions of the European Central Bank (ECB). In the first few months of the year, the ECB first kept its policy rate unchanged with headline inflation moderating but core inflation still higher than expected. Then, although core inflation in the euro area was consistent with previous expectations and most economic data were positive as of late May, which supported a 0.25 percentage point rate cut in early June, the ECB raised its inflation forecast on concerns about persisting inflationary pressures. Against this backdrop, the NT dollar broadly depreciated against the euro in the first half of the year. Later, despite ECB's mid-July rate hold and market expectations of a September rate cut that led to a weakening of the euro against the US dollar, the NT dollar depreciated against the euro owing to net

foreign capital outflows. Thereafter, as expected, the ECB delivered three 0.25 percentage point rate cuts in September, October and December, while its dovish tone in the December rate decision also prompted market expectations of further monetary easing, all of which helped drive the appreciation of the NT dollar against the euro. Overall, compared with the end of the previous year, the NT dollar depreciated against the euro by 0.4% at the end of 2024. On a daily average basis, the NT dollar depreciated against the euro by 3.1%.

In the first half of 2024, the NT dollar appreciated against the Japanese yen; however, it weakened in the third quarter before consolidating and rebounding thereafter. At the beginning of the year, the yen weakened on the continuous accommodative stance of the Bank of Japan (BoJ) as inflation moderated, leading to an appreciation of the NT dollar against the yen. In March, as the market had expected and reacted in advance to the BoJ's discontinuation of negative interest rate and yield curve control (YCC) policies, coupled with a considerable US-Japan interest rate spread, the yen weakened instead of strengthening against the US dollar and the NT dollar vis-à-vis the yen fluctuated within a range. In the following quarter, the NT dollar strengthened against the yen as the market viewed the BoJ's rate holds in April and June as dovish. However, the NT dollar then weakened against the yen in the third quarter, which mainly reflected market sentiment for yen strength amid more hawkish BoJ actions, including: In July, alongside market anticipation of a narrowing US-Japan interest rate spread owing to their monetary policy divergence, the BoJ delivered a rate hike on July 31; in September, Shigeru Ishiba, who was generally viewed as supporting the BoJ's monetary tightening, was elected as president of the ruling party and on the way to becoming the next prime minister. Afterwards, the yen depreciated again, as comments from the incoming Prime Minister Ishiba and BoJ Governor Kazuo Ueda both lowered the possibility of further interest rate hikes and, with the October 27 parliamentary election giving no party majority, the ensuing political uncertainty led to market expectation for slower BoJ hikes. This yen weakness then caused the NT dollar to appreciate against the yen. In late November, with Japan's higher-than-expected inflation boosting market expectation for a December BoJ rate hike, which strengthened the yen, the NT dollar thus depreciated against the yen. However, the BoJ later maintained, not raised, its policy rate, prompting the NT dollar to appreciate against the yen. Compared to the end of 2023, the NT dollar appreciated by 3.6% against the yen by the end of 2024. In terms of average exchange rates, the NT dollar appreciated by 4.5% against the yen compared to the previous year.

In 2024, the NT dollar fluctuated within a certain range against the RMB. The NT dollar started the year with a general downtrend vis-à-vis the RMB. This was mainly because China's deflation risk prompted the People's Bank of China (PBoC) to first lower the reserve requirement ratio for financial institutions by 0.50 percentage points on February 5 and then cut the 5-year loan prime

rate (LPR) by 0.25 percentage points on February 20 to stimulate the economy, which resulted in a depreciation of the NT dollar against the RMB. Subsequently, as China's sluggish property market dampened its economic performance, coupled with weak investment and consumer confidence and ongoing deflationary risks, the PBoC conducted multiple reverse repo operations to inject liquidity into the market, leading to a rebound in the NT dollar exchange rate against the RMB. In the third quarter, July's release of June export growth exceeded expectations, boosting the RMB and weakening the NT dollar against the RMB. The PBoC's rate cut in late July amid continued weak demand and persistent overcapacity caused the NT dollar to appreciate against the RMB. In September, though, the NTD-RMB softened again as market expectation of a shift toward the Fed's policy easing prompted an unwinding of RMB carry trades. In the last quarter of the year, the RMB softened and the NTD firmed up, mainly because October's signal of new fiscal stimulus measures, announced later in November, fell short of market expectations, and concerns over heightened US-China trade friction under Trump's administration further weighed on the RMB. The weakness of China's currency continued in December as the PBoC's hold on the LPR was met with the claim from its *China Financial Stability Report* to implement "moderately accommodative" monetary policy and a range of policy tools to maintain ample liquidity. Consequently, the NTD-RMB exchange rate rebounded. Compared to the end of 2023, the NT dollar depreciated by 3.5% against the RMB by the end of 2024. In terms of average exchange rates, the NT dollar depreciated by 1.4% against the RMB compared to the previous year.

In 2024, the NT dollar fluctuated within a certain range against the won in the first three quarters of 2024, before appreciating in the final quarter. The Bank of Korea (BoK) maintained its policy

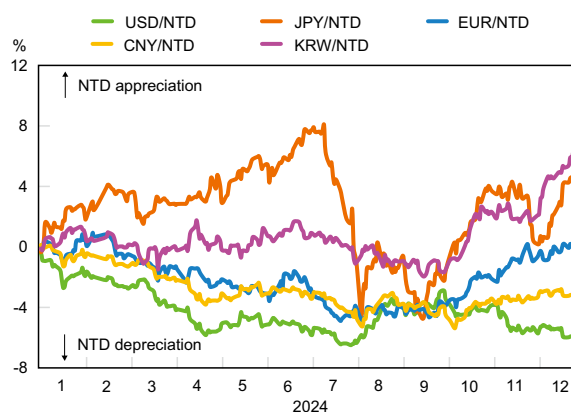
Annual Changes of NTD Exchange Rate Against Major Currencies

	NTD/USD	NTD/EUR	NTD/JPY	NTD/CNY	NTD/KRW
Exchange Rate (2024/12/31)	32.781	34.132	0.2098	4.4913	0.0223
Exchange Rate (2023/12/29)	30.735	34.011	0.2173	4.3338	0.0237
Annual Change	-6.2%	-0.4%	3.6%	-3.5%	6.5%
Average Exchange Rate (2024)	32.108	34.753	0.2121	4.4610	0.0236
Average Exchange Rate (2023)	31.150	33.682	0.2217	4.3973	0.0239
Annual Change	-3.0%	-3.1%	4.5%	-1.4%	1.3%

Source: Department of Economic Research, CBC.

rate to wait for further assessment on the progress in disinflation and the still-elevated uncertainties surrounding the monetary policies of major economies and geopolitical factors. Consequently, the NT dollar moved within a narrow range against the won during this period. In the second half of the year, the BoK's rate hold in August caused a range-bound downtrend in the NTD-won exchange rate, followed by won depreciation as the BoK implemented two consecutive rate cuts in October and November alongside a slowdown in export growth. Then, Korea's December 3 martial law incident and the following presidential impeachment added to political uncertainty and further weakened the won, leading to NT dollar appreciation against the won. At the end of 2024, the NT dollar appreciated by 6.5% against the Korean won compared to the end of 2023. On a daily average basis, the NT dollar appreciated by 1.3% against the won in 2024.

**Percentage Changes of NT Dollar
Against Major Currencies
(Compared with End-2023)**



Source: Department of Economic Research, CBC.

Foreign Exchange Trading

Trading in the Taipei foreign exchange market increased in 2024. Total net trading volume for the year was US\$10,923.6 billion, representing a 16.9% year-on-year increase. The daily average turnover was US\$44.59 billion in 2024.

In terms of trading partners, transactions between banks and nonbank customers accounted for 30.5% of the total turnover, while interbank transactions made up 69.5%, including 19.9% for transactions among local banks and 49.6% for those between local banks and overseas banks.

As far as traded currencies were concerned, NT dollar trading against foreign currencies accounted for 43.6% of the total trading volume, of which trading against the US dollar made up a dominant 42.1%. Transactions in third currencies contributed to 56.4% of the total trading volume, with trading in currency pairs of USD-RMB, USD-yen, and USD-euro accounting for respective shares of 18.8%, 9.7%, and 6.7%. Compared with 2023, the volume of NT dollar trading against foreign currencies increased by 13.1% while that of transactions in third currencies increased by 20.1%.

With respect to types of transactions, the major types were foreign exchange swaps and spots, accounting for 51.8% and 38.0% of total turnover, respectively. Compared with 2023, the trading volume in all categories increased, including foreign exchange swaps, spot transactions, forward transactions, options, cross currency swaps, and margin trading.

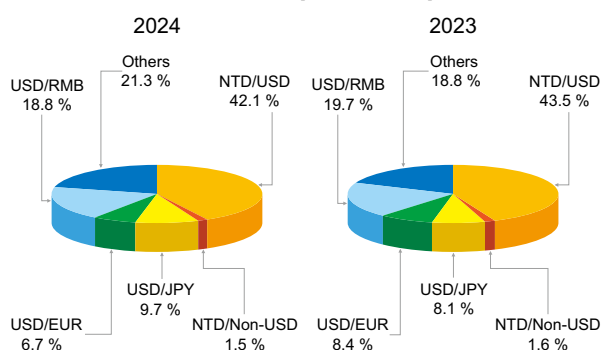
Turnover of Major Products in the Taipei Foreign Exchange Market

Unit: US\$billion

Year	Spots	Forwards	Forex Swaps	Margin Trading	Options	Cross Currency Swaps	Total
2020	3,408.8	503.7	4,110.9	7.3	206.0	34.5	8,271.0
2021	3,584.5	507.6	3,839.4	4.7	222.7	29.1	8,188.1
2022	3,658.9	522.1	4,174.0	6.6	206.0	14.9	8,582.6
2023	3,608.3	681.0	4,773.8	4.2	258.3	15.6	9,341.0
2024	4,145.6	761.7	5,657.3	4.6	333.6	20.9	10,923.6
2023-2024 Annual Growth Rate (%)	14.9	11.9	18.5	11.1	29.2	34.1	16.9

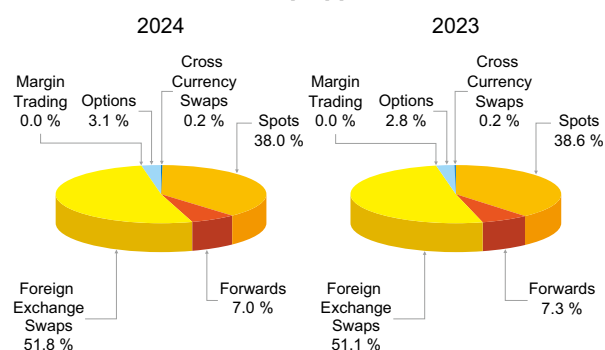
Source: Department of Foreign Exchange, CBC.

Composition of Foreign Exchange Transactions by Currency Pair



Source: Department of Foreign Exchange, CBC.

Composition of Foreign Exchange Transactions by Type of Product



Source: Department of Foreign Exchange, CBC.

For other foreign currency derivatives, including forwards, swaps, and options based on foreign currency interest rates, stock price indices, commodity prices, and credit derivatives, their combined

Turnover of Other Products in the Taipei Foreign Exchange Market

Unit: US\$billion

Year	Interest Rate-Related Products				Commodity-Related Products	Stock Index Options	Credit Derivatives	Total
	Interest Rate Swaps	Interest Rate Options	Foreign Currency Interest Rate Futures	Subtotal	Commodity Options			
2020	52.1	9.6	34.9	96.6	3.1	0.1	0.4	100.2
2021	79.0	10.7	104.3	194.0	4.1	0.4	0.6	199.2
2022	90.4	14.7	202.6	307.6	2.9	0.3	0.8	311.7
2023	79.8	8.6	168.3	256.6	1.8	1.9	0.5	260.8
2024	92.7	6.4	188.6	287.7	2.6	2.4	0.8	293.5
2023-2024 Annual Growth Rate (%)	16.2	-25.5	12.1	12.1	44.4	27.2	66.3	12.5

Note: "Forward Rate Agreements" is excluded from the table because the turnover has been 0 since 2017.

Source: Department of Foreign Exchange, CBC.

turnover was US\$293.5 billion. Of this amount, interest rate-related derivatives accounted for the lion's share at 98.0% with US\$287.7 billion, rising by 12.1% from the previous year owing mainly to the increase in interest rate futures turnover.

Renminbi Business

Renminbi investment tools became even more diversified during 2024. By the end of 2024, there were 65 domestic banking units (DBUs) and 56 offshore banking units (OBUs) engaging in renminbi business. The balance of renminbi deposits amounted to RMB119.1 billion; renminbi remittances totaled RMB2,871.7 billion in 2024; renminbi settlement through the Taipei Branch of the Bank of China totaled RMB5,998.5 billion.

Renminbi Business Conducted by Financial Institutions

Unit: RMB Billions

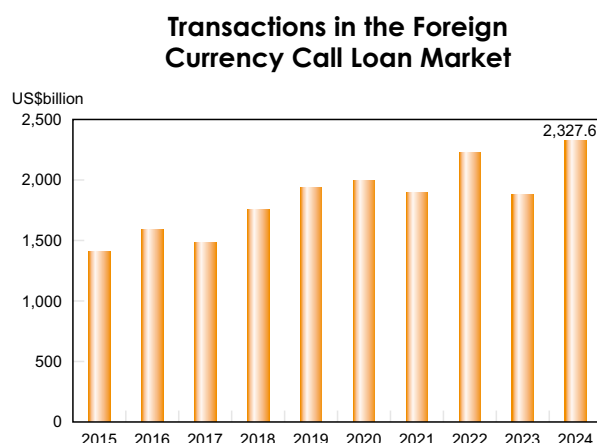
Business Items	Amount
Deposit balance (including NCDs, end of 2024)	119.1
Total remittances (February 2013 to December 2024)	22,336.9
Total settlement through the Taipei Branch of the Bank of China (February 2013 to December 2024)	55,202.5
Total value of 206 RMB-denominated bonds issued (as of the end of 2024)	135.9
Accumulated premium receipts from RMB-denominated investment-linked insurance business (February 2013 to December 2024)	21.9
Accumulated premium receipts from RMB-denominated traditional insurance business (April 2014 to December 2024)	10.1

Source: Department of Foreign Exchange, CBC.

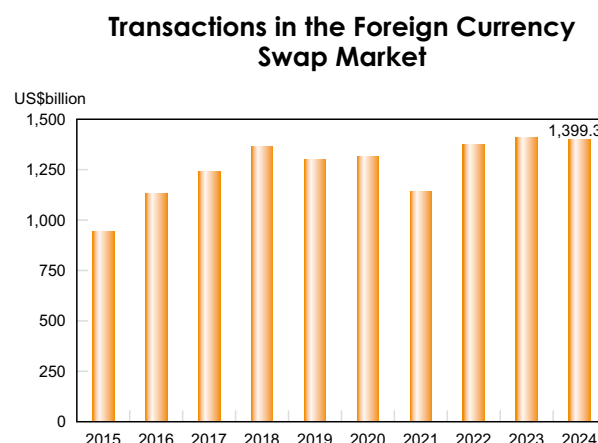
Foreign Currency Call Loan & Swap Markets

The transaction volume in the foreign currency call loan market in 2024 was US\$2,327.6 billion, an increase of 23.9% over the previous year. Of the total, US dollar transactions accounted for a dominant share of 81.6% with US\$1,899.8 billion, increasing by 9.5% from 2023. Renminbi transactions decreased by 10% year on year to RMB626.7 billion in 2024, making up a share of 3.7% of the total. Japanese yen transactions reached ¥45,761.5 billion in 2024, representing a share of 12.8% of the total with a year-on-year increase of 2,803.0% in volume. The amount of euro transactions was around €15.4 billion, with a modest share of 0.7%. Other currencies accounted for a combined 1.2% of the total transaction volume. Meanwhile, the balance of foreign currency call loan transactions stood at US\$49.3 billion at the end of 2024.

The volume of foreign currency-NTD swap transactions reached US\$1,399.3 billion, 0.7% less than 2023, while the balance was US\$253.5 billion at the end of 2024.



Source: Department of Foreign Exchange, CBC.



Source: Department of Foreign Exchange, CBC.

OBU Assets

There were 59 OBUs at the end of 2024, with 35 of them operated by domestic banks and the other 24 by foreign banks. The total assets of all OBUs decreased to US\$276.6 billion at the end of the year, down by US\$0.7 billion or 0.2% from the previous year end owing to a decrease in claims on financial institutions. Domestic banks' OBUs made up 90.1% of these combined assets with an amount of US\$249.3 billion, and the OBUs of foreign banks accounted for 9.9% of the total with US\$27.4 billion.

In terms of the uses of funds, portfolio investments represented the majority share of 47.1% of total OBU assets with an amount of US\$130.3 billion. Loans to nonfinancial institutions and claims on financial institutions came in second and third place, respectively, accounting for 26.7% and 22.8% of total OBU assets. In terms of the destinations for funds, Asia accounted for the majority with a share of 42.1%, followed by America at 34.3%.

The OBUs' main source of funds came from due to financial institutions, making up 48.8% of total liabilities and equity. Deposits of nonfinancial institutions accounted for 42.6% of the total. The main funding origin of OBUs was Asia, accounting for 64.8%, followed by America with a share of 25.3%.

Forex trading turnover of all OBUs increased by 23.1% to US\$1,462.6 billion, of which US\$524.2 billion went for spot transactions, US\$238.1 billion for forward transactions, and US\$700.3 billion for forex swap transactions. Compared with the previous year, the growth rates of trading of spots, forwards, and forex swaps were -14.1%, 29.3%, and 78.0%, respectively.

For OBUs, total turnover of other derivatives products increased by 52.5% to US\$661.7 billion over the previous year. Of this amount, interest rate swaps registered the highest turnover of US\$255.6 billion, making up 38.6% of the total.

Balance Sheet of OBUs in the Banking System

Unit: US\$billion

Year / Month (End of month)	Loans to Non-financial Institutions	Portfolio Investment	Claims on Financial Institutions	Other Assets	Total Assets= Total Liabilities & Equity	Deposits of Non-financial Institutions	Due to Financial Institutions	Securities Issued	Other Liabilities & Equity
2020/12	79.0	86.0	61.9	12.5	239.5	91.1	124.9	0.0	23.5
2021/12	78.5	93.7	68.2	9.5	249.9	104.5	125.1	0.0	20.3
2022/12	76.0	108.2	75.7	6.2	266.1	117.7	128.0	0.0	20.5
2023/12	70.2	122.0	78.3	6.7	277.3	113.3	138.8	0.0	25.2
2024/12	73.7	130.3	63.1	9.5	276.6	117.9	134.9	0.0	23.8
2023/12-2024/12 Growth Rate (%)	5.0	6.8	-19.4	40.9	-0.2	4.1	-2.8	0.0	-5.8

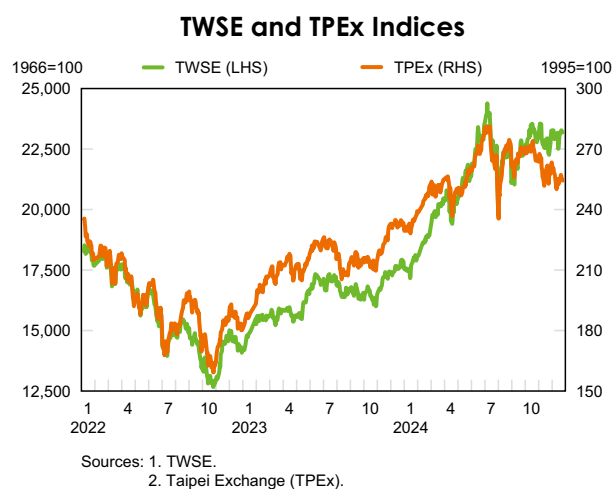
Sources: *Financial Statistics Monthly*, CBC; Department of Foreign Exchange, CBC.

5. Stock Markets

In the first half of 2024, Taiwan's stock markets generally trended upwards, with the TAIEX reaching a historical high in July. The domestic market upswings mainly tracked the US tech stock rallies, reflecting the end of the US Fed's rate-hiking cycle and strong demand for AI and other emerging technology applications. However, what followed was a slump in the TAIEX through to early August owing to several adverse impacts including weak US economic indicators, escalation in the Middle East geopolitical conflicts, stock crashes in major markets around the world, and massive foreign investor selloffs of TWSE shares. Thereafter, buoyed by stellar earnings from TWSE-listed companies and rate cuts by the Fed, the TAIEX rebounded, mirroring the recovery in US stocks. In the fourth quarter, though, investors became concerned about inflationary consequences of the US President-elect Trump's economic and trade policies and the resultant delay or halt of the Fed's rate cuts. Against this backdrop, coupled with foreign investor net-sales, the TAIEX zigzagged sideways to close the year at 23,035 points, up by 28.5% over a year ago.

Most TWSE stock groups trended down in 2024. However, Electronics shares, which accounted for more than 70% of TWSE market capitalization, surged by 43.2% on a continued AI boom and US tech stock rallies, driving the TAIEX vigorously higher. Recording the second large increase were Shipping & Transportation shares, which rose by 30.8% owing not only to global shipping rate upturns but also to a spike in demand for services of major ocean freight carriers as importers rushed to front-load shipments ahead of Trump's new tariffs. Also rising significantly were Electric Machinery shares, with prices going up by 30.1% amid booming AI and green energy demand. Overall, the daily average trading value on the TWSE increased by 44.3% year on year to NT\$381.4 billion in 2024, mainly driven by bullish TAIEX trends and strong domestic investor interest in ETFs.

On the Taipei Exchange (TPEx), the over-the-counter market's mainboard index, referred to as the TPEx Index or TPEX, rose by 9.3% year on year at the end of 2024, with most categories posting share price gains. The best performer was Cultural/Creative Industries, whose shares surged by 86.2% as the global gaming industry continued thriving and the domestic cultural/creative industries benefited from strong government support measures. Building Material & Construction



shares came in second with a 22.7% price gain, reflecting heated housing market transactions as housing prices climbed further. Electric Machinery and Electronics stock groups were both buttressed by the continued AI demand boom and US tech stock rallies, rising by 15.1% and 11.0%, respectively. Over all, the daily average trading value on the Taipei Exchange amounted to NT\$96.1 billion, up by 36.3% from the previous year.

The TWSE Market

Listings Increased and Capitalization Rose to Record High

At the end of 2024, the number of TWSE listings increased by 34 over the previous year to a total of 1,031. The par value of total shares rose by 2.4% year on year to NT\$7.8 trillion, and total market capitalization grew significantly by 30.0% to a historical record of NT\$73.9 trillion amid the domestic stock market bull runs. Meanwhile, the total number of Taiwan depositary receipts (TDRs) remained 10 as of the end of the year.

Major Statistics of the TWSE Market

Year/Month	Stock Price Index (end of period)	Daily Average Trading Value (NT\$billion)	Turnover Rate (%)	Market Capitalization (NT\$billion)	Net Buying Positions (NT\$billion)		
					Foreign Investors Net Buy/Sell	Securities Investment Trust Companies Net Buy/Sell	Securities Dealers Net Buy/Sell
2022	14,137.7	228.0	115.4	44,266.0	-1,232.7	284.2	-293.8
2023	17,930.8	264.3	121.2	56,842.1	275.4	237.3	-262.0
2024	23,035.1	381.4	135.4	73,898.7	-695.1	832.1	-823.8
2024/ 1	17,889.6	280.8	10.9	56,865.5	-1.7	32.8	-48.5
2	18,966.8	363.9	7.9	60,273.0	116.2	-17.7	25.4
3	20,294.5	441.2	14.4	64,512.8	22.7	202.0	-37.4
4	20,396.6	416.3	12.8	64,864.4	-149.5	54.8	-64.1
5	21,174.2	435.8	14.2	67,390.3	81.8	51.8	-2.6
6	23,032.3	458.4	11.9	73,397.5	3.6	60.1	-48.6
7	22,199.4	470.1	13.9	70,824.7	-350.3	119.1	-165.6
8	22,268.1	372.2	11.5	71,086.0	-134.8	123.2	-199.9
9	22,224.5	316.3	8.9	70,978.4	-95.1	81.3	-84.9
10	22,820.4	338.3	8.8	73,067.9	39.1	40.4	-48.3
11	22,262.5	350.2	10.3	71,369.0	-272.9	85.0	-116.8
12	23,035.1	332.9	9.9	73,898.7	45.7	-0.7	-32.5

Source: Securities and Futures Bureau, FSC.

TAIEX Surged amid High Volatility

After entering 2024, the TAIEX trended upwards on the back of the conclusion of the Fed's rate-hiking cycle and robust demand for AI and other emerging tech applications. The rallies, along with US stock market uptrends, took the TAIEX to the historical high of 24,390 on July 11.

However, the index was later dragged down by US economic data softening, Middle-East geopolitical conflicts escalating, global major stock markets plunging, and foreign investors shedding TWSE share holdings. By August 5, the TAIEX slumped to 19,831 points.

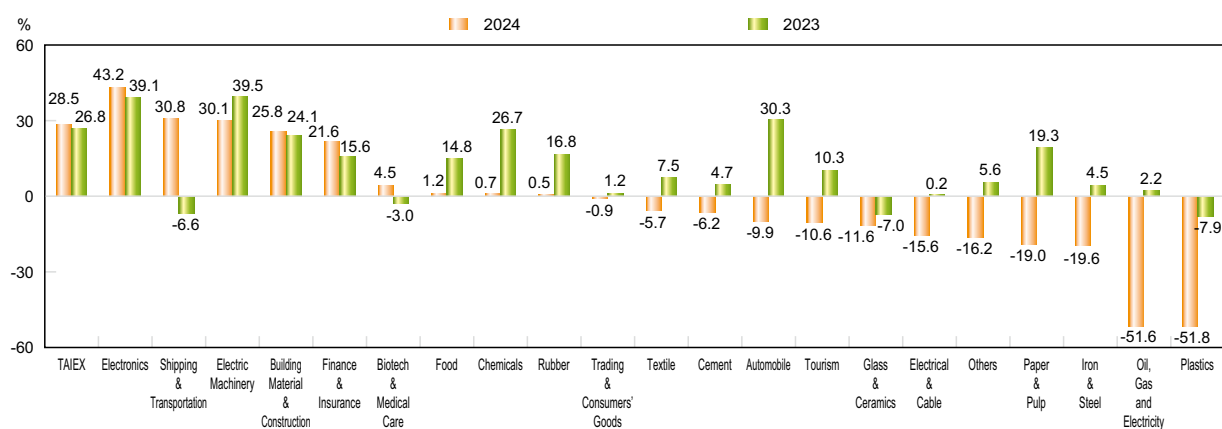
Afterwards, the TAIEX was able to rebound to 22,371 on August 28 owing to US stock rallies and domestic listed companies reporting strong earnings. However, the index retreated to 21,031 by September 11 due to market concerns over a US economic recession and foreign investor net sales. Thereafter, the TAIEX recovered lost ground as the Fed reduced the policy rate, the US stock market rebounded, and the major chipmaker TSMC's earnings call pointed to good profits and outlook, which combined to take the index upwards to 23,554 points on November 8.

The uptrend was, though, losing steam as investors feared that Trump's future policies such as tariffs and tax cuts would push up inflation and consequently cause the Fed to slow or stop the rate reductions. Coupled with foreign investors' net sales, the range-bound TAIEX fluctuations took the index to 23,035 points at the end of 2024, still up by 28.5% from 17,931 at the end of 2023.

Broken down by subcategory, most stock groups posted year-on-year price decreases, but the 43.2% surge in Electronics shares, which accounted for more than 70% of market capitalization, on the back of the continued AI boom and US tech bull runs led the TAIEX to take off in 2024. The second best performing group was Shipping & Transportation, rising by 30.8% on higher shipping rates and major orders from importers frontloading shipments ahead of Trump's potential tariff measures. Electric Machinery shares came in third with a 30.1% increase on AI and green energy booms. Building Material & Construction stocks gained by 25.8% as high housing prices spurred housing transactions in the first half of the year. Finance & Insurance also posted a 21.6% price increase, reflecting prospective merger deals and financial holdings companies reaping higher profits.

Among the categories posting price decreases, Plastics shares were the worst performer with a 51.8% drop because of slow demand for plastic chemicals as well as declining profits owing to overcapacity in China. The category of Oil, Gas & Electricity had a similarly heavy fall of 51.6% as shares were weighed down by weak international oil prices. Iron & Steel share prices decreased by 19.6% on China's overcapacity and a global supply-demand imbalance. Paper & Pulp dropped by 19.0%, reflecting escalated pulp costs and softer demand as paperback books were increasingly replaced by e-books amid rising environmental protection concerns.

TWSE Stock Price Changes by Industrial Group



Source: TWSE.

Market Turnover Increased

Driven by the TAIEX upswings and resident investors' zeal for ETF trades, the TWSE trading value expanded to a daily average of NT\$381.4 billion in 2024, surging by 44.3% from NT\$264.3 billion in 2023. The turnover rate thus climbed from 121.2% in 2023 to 135.4%.

Net Buying by Investment Trust Companies Hit New High

In 2024, as investment trust companies actively ramped up their issuance and offering of TWSE stock/index-linked ETFs, leading to a historical net-buying amount of NT\$832.1 billion. Meanwhile, foreign institutional investors (FINIs) and local securities dealers posted net sales of NT\$695.1 billion and NT\$823.8 billion, respectively.

The FINIs trading activity in 2024 are summarized below:

- (1) January: A modest net sale, as the FINIs adjusted share holdings.
- (2) February to March: Net buying, driven by tech stock rallies on account of market expectations of the Fed ending its rate-hiking cycle and stronger demand for AI and related technologies.
- (3) April: Net selling owing to Middle-East conflicts-induced global stock market crashes.
- (4) May to June: Net buying on the back of record-breaking US stock market rallies as well as an ongoing AI boom.
- (5) July to September: A series of net sales as the FINIs, amid caution over unimpressive US economic performance and US stock slumps, dialed back local share holdings to lock in profits of the rallying TWSE stocks.

- (6) October: Net buying, boosted by better-than-expected earnings reported by TSMC and the US tech rally.
- (7) November: Net sale, reflecting US treasury yield rises and investor concerns about Trump waging a new round of trade war.
- (8) December: Net buying, supported by an expected consumption boom in the holiday season.

In respect of local securities investment trust companies, they were mostly net buyers, except for February and December when they net sold to meet fund redemption demand or to lock in gains from the rallying stocks. In particular, they considerably stepped up stock positions in preparation for new ETF offers in March, July, and August, taking the total net buying amount in 2024 to a historical high.

With respect to local securities dealers, who are inclined to conduct short swing trades to buy the rallies and sell the dips, they only net bought in February, while in the rest of the year they net sold for portfolio adjustments or profit-taking.

The TPEX Market

Listings and Capitalization Both Increased

At the end of 2024, the number of TPEX listings increased by 22 from the year before to 838 in total, with the total par value rising by 5.0% to NT\$795.5 billion. The TPEX market capitalization rose on the back of share price gains, reaching NT\$6.54 trillion after a 12.8% increase from the end of 2023.

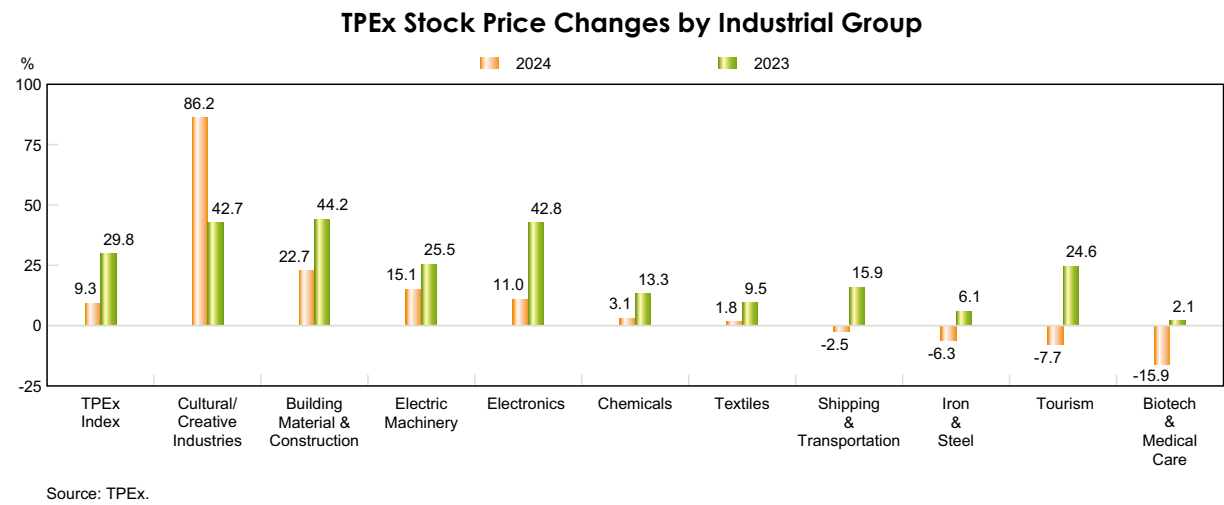
TPEX Index First Rose Then Fell; Trading Value Increased

In 2024, alongside the bullish TAIEX, the TPEX Index opened the year at the yearly low to swing up successively to an all-time high of 281.3 points on July 11. Thereafter, though, affected by international stock market corrections, the TPEX Index swung downwards towards 255.8 points at the end of the year, albeit still 9.3% higher than the 234.0 points at the end of 2023.

By stock category, there was a broad uptrend across the TPEX market. Cultural/Creative Industries surged by 86.2%, the greatest gain among the stock groups as globally the gaming industry was on the rise and domestically the government buoyed up cultural/creative industries with robust support measures. Building Material & Construction came in second with a 22.7% increase as the first half of 2024 saw housing prices rising and the real estate market thriving. The categories of Electric Machinery and Electronics gained by 15.1% and 11.0%, respectively, owing to AI demand continuously expanding and US tech stock prices rising.

By type of institutional investor, local securities dealers net sold TPEX equities worth NT\$596.7 billion, whereas local securities investment trust companies and FINIs both posted net buying, with the respective amounts of NT\$72.8 billion and NT\$90.7 billion.

Propelled by high-level fluctuations and increased local investor enthusiasm, the TPEX market recorded a daily average trading value of NT\$96.1 billion, up by 36.3% compared to NT\$70.5 billion the previous year.



Key Measures for the Stock Markets

Key measures for Taiwan's stock markets in 2024 included the following:

- (1) January 1: Stocks listed on the TWSE's Taiwan Innovation Board would be allowed for margin trading (i.e., margin purchase, short sale, and securities borrowing), provided that (1) the stock has already been listed for more than six months, (2) its book value per share is above the stock's par value, and (3) it is judged to be free of excessive price volatility, over-concentration of equity, and aberrant trading volume.
- (2) May 10: Pursuant to the amendment to Paragraph 1, Article 43-1 of the *Securities and Exchange Act*, the disclosure threshold for major shareholding acquisition was lowered from 10% to 5% of the total issued shares of a public company, effectively immediately.
- (3) December 2: To promote market efficiency, the matching interval of intraday odd lot trades would be shortened from one minute to five seconds.
- (4) December 31: The Parliament passed the partial amendments to the *Securities Transaction Tax Act*, extending the measure of halving the day trading transaction tax to 1.5‰ for another three years to the end of 2027.

6. Bond Market

In 2024, the total volume of bond issuance reached NT\$1,679.5 billion, showing an increase of NT\$99.6 billion compared to the previous year. At the end of 2024, the total outstanding bonds amounted to NT\$17,354.3 billion, up by NT\$402.1 billion or 2.37% from the end of 2023.

Central government bond issuance for 2024 stood at NT\$538.0 billion, an increase of NT\$60.0 billion from a year ago. The issuance was primarily to support debt refinancing operations of the Central Government Debt Service Fund and to raise funds for the general and special budgets of the central government.

Issuance of corporate bonds in the year reached NT\$693.8 billion, decreasing by NT\$79.5 billion from a year before, mainly because rising market interest rates led corporations to reduce bond issuance.

Bank debenture issuance totaled NT\$98.1 billion, an increase of NT\$35.5 billion compared to the previous year. The rise was largely due to banks issuing more subordinated bank debentures to strengthen their capital bases and improve their capital adequacy ratios.

NT dollar-denominated foreign bonds issued in Taiwan by foreign institutions amounted to NT\$7.3 billion, up by NT\$3.3 billion from 2023. Meanwhile, foreign currency-denominated international bonds issued in Taiwan by foreign institutions rose by NT\$72.7 billion over the previous year to NT\$315.1 billion.

In the secondary market, following a rise in US bond yields in 2024, Taiwan's 10-year government bond yield also moved higher, averaging 1.43% for the year, an increase of 22 basis points from the previous year.

Furthermore, annual transactions reached NT\$38,136.5 billion, increasing by NT\$2,730.1 billion compared to the previous year. The growth was mainly attributable to rising government bond yields, which widened the yield spread of bond holdings and boosted demand for bonds.

Rise in Government Bond Issuance

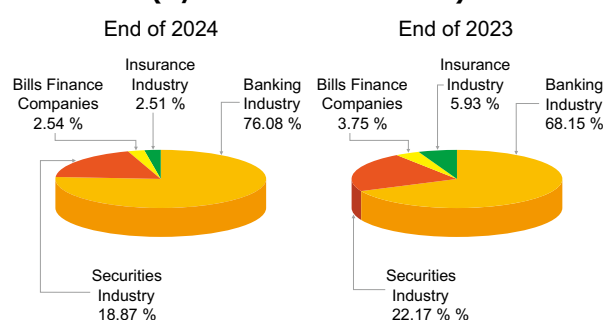
In order to support debt refinancing operations of the Central Government Debt Service Fund and to raise funds for the general and special budgets of the central government, central government bond issuance amounted to NT\$538.0 billion in 2024, up by NT\$60.0 billion from a year ago. Government bonds were available with various maturity periods from 2 years, 5 years, 10 years, 20 years, to 30 years.

Broken down by institutional investor, bonds held by the banking industry made up the lion's share at 76.08%. The securities industry came in second with a share of 18.87%, followed by bills finance companies with a share of 2.54%.

As of the end of 2024, the total outstanding amount of central government bond issuance stood at NT\$6,034.1 billion, representing an increase of NT\$121.6 billion or 2.06% compared to 2023.

Moreover, new bonds issued by the governments of all special municipalities in 2024 amounted to NT\$27.2 billion. At the end of the year, the outstanding amount of bonds issued by the governments of all special municipalities reached NT\$140.2 billion, a decrease of NT\$7.4 billion or 5.01% from the previous year end.

Shares of Government Bond Holdings (by Institutional Investor)



Source: Department of the Treasury, CBC.

Issues and Outstanding Values in Bond Market by Category

Unit: NT\$billion

Year/ Month	Total		Central Government Bonds		Local Government Bonds*		Corporate Bonds		Bank Debentures		Beneficiary Securities**		Foreign Bonds		Int'l Bonds	
	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding
2022	1,652.7	16,319.1	520.1	5,799.5	-	150.7	473.1	3,125.2	148.9	1,255.4	5.9	11.2	10.9	55.1	493.9	5,921.9
2023	1,580.0	16,952.2	478.0	5,912.5	19.7	147.6	773.3	3,564.4	62.7	1,221.5	-	5.9	3.9	50.0	242.4	6,050.2
2024	1,679.5	17,354.3	538.0	6,034.1	27.2	140.2	693.8	3,836.9	98.1	1,160.9	-	5.9	7.3	45.9	315.1	6,130.4
2024/ 1	221.0	17,099.0	90.0	5,957.5	4.5	149.7	66.1	3,607.9	1.4	1,221.9	-	5.9	-	49.3	59.1	6,106.8
2	57.5	17,085.0	35.0	5,932.5	-	149.7	-	3,601.7	2.5	1,221.0	-	5.9	-	49.2	20.0	6,124.9
3	176.3	17,094.1	55.0	5,861.1	17.6	167.3	72.0	3,652.3	5.4	1,215.0	-	5.9	0.3	49.3	26.0	6,143.2
4	207.7	17,221.0	65.0	5,926.1	-	155.8	89.2	3,703.2	8.3	1,212.4	-	5.9	-	49.2	45.2	6,168.4
5	102.3	17,222.9	33.0	5,959.1	-	155.8	58.7	3,713.9	5.9	1,189.0	-	5.9	1.6	49.2	3.1	6,150.0
6	154.8	17,255.6	35.0	5,994.1	-	147.6	78.1	3,739.3	10.5	1,169.6	-	5.9	-	49.1	31.2	6,150.0
7	136.7	17,248.1	30.0	5,979.1	-	147.6	33.7	3,713.7	0.3	1,162.9	-	5.9	0.7	49.5	71.9	6,189.4
8	75.9	17,244.1	30.0	6,009.1	-	147.6	43.4	3,714.7	1.1	1,156.8	-	5.9	1.1	50.4	0.2	6,159.5
9	139.3	17,205.9	50.0	5,954.1	-	147.6	56.9	3,732.6	20.6	1,150.1	-	5.9	0.3	50.2	11.5	6,165.3
10	191.5	17,247.7	35.0	5,989.1	-	135.1	108.7	3,810.6	11.5	1,094.7	-	5.9	2.0	51.5	34.3	6,160.8
11	99.5	17,319.4	45.0	5,999.1	-	135.1	36.2	3,827.1	5.2	1,159.7	-	5.9	1.3	52.2	11.8	6,140.2
12	117.1	17,354.3	35.0	6,034.1	5.1	140.2	50.7	3,836.9	25.3	1,160.9	-	5.9	-	45.9	1.0	6,130.4

Notes: * Referring to bonds issued by governments of special municipalities.

** Including those purchased back by originators for credit enhancement.

Sources: 1. Financial Statistics Monthly (February 2025), CBC.

2. Banking Bureau, Financial Supervisory Commission.

3. Department of Foreign Exchange, CBC.

Decrease in Corporate Bond Issuance

Corporate bonds refer to NT dollar- or foreign currency-denominated bonds issued in Taiwan by domestic corporations. In 2024, the issuing amount of corporate bonds totaled NT\$693.8 billion, shrinking by NT\$79.5 billion from a year before, reflecting a reduction in corporate bond issuance amid rising market interest rates.

In terms of bond maturities, 5-year corporate bonds accounted for a dominant share of the issuance at 42.02%, followed by 10-year bonds with a share of 31.07%. At the end of 2024, the outstanding amount of corporate bonds rose by NT\$272.5 billion or 7.64% to NT\$3,836.9 billion over the previous year.

Growth in Bank Debenture Issuance

In 2024, domestic banks issued bank debentures with an amount of NT\$98.1 billion, up by NT\$35.5 billion compared to a year ago, primarily because banks increased the issuance of subordinated bank debentures to strengthen their capital bases and improve their capital adequacy ratios.

In respect of the maturity of new issues, 10-year debentures made up the largest share of total issuance at 46.83%, while 5-year bonds came in second with a share of 26.30%. At the end of the year, the outstanding amount of bank debentures stood at NT\$1,160.9 billion, a decrease of NT\$60.6 billion or 4.96% from a year before.

No Change in Asset Securitization Products

New issues of asset securitization products were nil in 2024 and no principal was repaid for existing asset securitization products. The outstanding amount of asset securitization remained at NT\$5.9 billion, same as the previous year end.

Uptick in Foreign Bond Issuance

Foreign bonds are defined as NT dollar-denominated corporate bonds issued in Taiwan by foreign institutions. The foreign bonds currently in circulation are mostly corporate bonds issued by offshore companies listed on the TWSE or the TPEX (the over-the-counter market).

For the year 2024, foreign bond issuance went up by NT\$3.3 billion from a year before to NT\$7.3 billion. At the end of the year, the outstanding amount of foreign bonds reached NT\$45.9 billion, dropping by NT\$4.1 billion or 8.15% over the previous year end.

Growth in International Bond Issuance

International bonds currently refer to foreign currency-denominated corporate bonds issued in

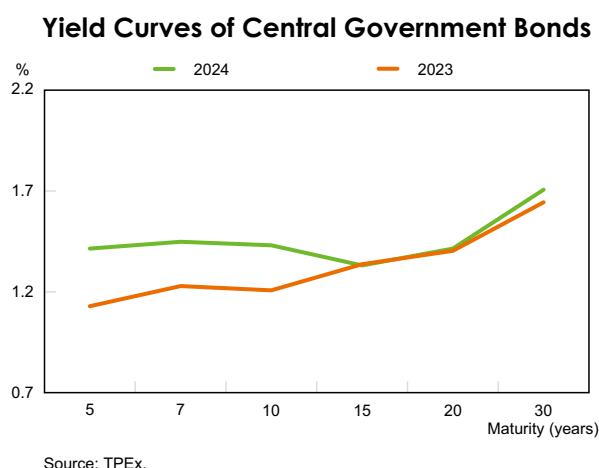
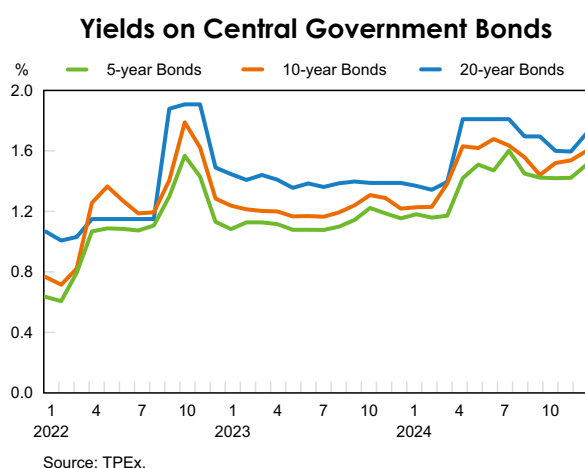
Taiwan by foreign institutions. During 2024, issuance of international bonds climbed by NT\$72.7 billion from a year before to NT\$315.1 billion. The rise reflected that foreign institutions increased international bond issuance on account of a downswing in US dollar-denominated interest rates.

With regard to currency composition, the majority of total international bond issuance went for US dollar-denominated bonds with a share of 99.17%, followed by Australian dollar-denominated bonds at 0.45%. At the end of the year, the outstanding amount of international bonds stood at NT\$6,130.4 billion, representing a year-on-year increase of NT\$80.1 billion or 1.32%.

Uptrend in Average Government Bond Yields and Slight Increase in Transactions

With US bond yields rising and the Bank raising the policy rates in the first quarter of 2024, yields on Taiwan government bonds also trended upward. However, owing to ample domestic liquidity, Taiwan government bond yields recorded a smaller increase than US bond yields. The average 10-year bond yield rose to 1.43% in 2024, 22 basis points higher than the 1.21% registered in the previous year.

Among government bonds of the other maturity ranges, average yields on 5-year, 20-year, and 30-year bonds went up by 28, 1, and 7 basis points, respectively, over the previous year.



In respect of transaction volume, annual transactions rose by NT\$2,730.1 billion or 7.71% to NT\$38,136.5 billion. The growth was mainly attributable to rising government bond yields, which widened the yield spread of bond holdings and boosted demand for bonds.

Of the components, outright transactions of government bonds fell by NT\$908.4 billion or 18.27%, whereas repurchase agreement (repo) transactions of government bonds increased by NT\$3,638.5 billion or 11.96% from a year before.

By type of bonds, the majority of total bond transactions went for corporate bonds with a share of 62.00% and an annual trading volume of NT\$23,645.0 billion. The second most actively traded were government bonds, contributing to 31.77% of total transactions with an annual trading volume of NT\$12,115.3 billion. Bank debentures ranked third, accounting for a share of 3.14% with an annual trading volume of NT\$1,197.1 billion.

Meanwhile, international bonds, foreign bonds, and asset securitization products made up marginal shares of 1.80%, 1.28%, and 0.01% in total transactions, with their respective annual trading registering NT\$687.6 billion, NT\$486.8 billion, and NT\$4.7 billion.

Turnover in Bond Market by Category

Unit: NT\$billion

Year/ Month	Total	Government Bonds	Corporate Bonds		Bank Debentures	Beneficiary Securities	Foreign Bonds	Int'l Bonds
			Nonconvertible	Convertible				
2022	35,404.9	13,137.8	17,473.1	1,502.5	1,980.0	26.7	537.3	747.5
2023	35,406.4	12,916.4	18,011.0	2,014.3	1,312.3	5.5	578.5	568.3
2024	38,136.5	12,115.3	21,057.8	2,587.2	1,197.1	4.7	486.8	687.6
2024/ 1	3,443.6	1,173.1	1,856.7	195.3	98.9	-	54.9	64.7
2	2,368.7	816.1	1,261.2	143.0	67.3	-	40.2	40.9
3	3,447.9	1,217.1	1,795.2	227.3	91.7	-	62.0	54.6
4	3,095.7	913.4	1,793.1	186.6	83.5	-	60.1	59.0
5	3,199.6	960.3	1,807.9	219.5	105.4	-	53.8	52.6
6	2,987.1	903.8	1,676.9	198.2	114.0	0.5	39.2	54.5
7	3,107.0	869.1	1,810.0	238.9	88.8	3.5	33.8	62.9
8	3,295.4	1,109.0	1,762.9	256.9	95.2	-	31.7	39.7
9	3,287.2	1,103.9	1,775.0	218.0	107.0	-	23.9	59.5
10	3,344.1	976.5	1,938.5	215.2	114.7	0.5	31.2	67.5
11	3,267.4	1,037.8	1,769.5	241.5	108.9	0.1	34.5	75.1
12	3,292.9	1,035.3	1,811.0	246.8	121.8	-	21.4	56.5

Source: TPEx.

Central Bank Operations



III. Central Bank Operations

1. Overview

In order to contain domestic inflation expectations against a background where inflation has stayed relatively high since 2021 and an electricity tariff hike was scheduled to take effect in April 2024, the Bank decided to raise the discount rate, the rate on refinancing of secured loans, and the rate on temporary accommodations by 0.125 percentage points to 2%, 2.375%, and 4.25%, respectively, effective March 22, 2024.

Later in the year, domestic inflation broadly maintained a gradual downtrend and was expected to ease further to below 2% in 2025. In addition, although downside risks were looming for the global economy, Taiwan's economy was expected to experience mild growth momentum in 2025 on the back of domestic demand. Meanwhile, the output gap was estimated to be slightly negative for both 2024 and 2025. Against this background, the Bank maintained policy rates unchanged in the remaining three quarters of the year so as to help sustain sound economic and financial development on the whole.

To implement the directive of "efficient allocation and proper use of credit resources" under the government's Healthy Real Estate Market Plan and to prevent excessive bank credit resources from gushing into the real estate market, the Bank has made rolling adjustments to its selective credit control measures since December 2020, which have helped reinforce banks' risk management associated with real estate lending.

In June and September 2024, the Bank made the sixth and seventh amendments to the selective credit controls, with the aim of further strengthening management of banks' credit resources and containing housing market speculation and property hoarding, while prioritizing the channeling of credit resources towards non-homeowners seeking owner-occupied housing.

In addition, in August 2024, through moral suasion, the Bank requested banks to enhance internal control of the aggregate amount of real estate lending from the fourth quarter of 2024 to the fourth quarter of 2025. These actions helped rectify the over-concentration of credit resources on real estate lending and improve the effectiveness of the Bank's selective credit control measures.

Since these policies took effect, housing market transactions have been decreasing, public expectation for housing price rises has softened, and housing loans to non-homeowner borrowers as a share of total housing loans in domestic banks have risen. These developments indicate that the Bank's selective credit control measures have gradually shown results.

In response to economic and financial conditions, the Bank continued with open market operations by issuing CDs to manage market liquidity and reserve money so as to maintain liquidity in the banking system and keep market rates at appropriate levels. In 2024, reserve money registered an annual growth rate (on an adjusted basis) of 5.58%, while the monetary aggregate M2 rose by 5.83% year on year, remaining within the Bank's M2 growth reference range of 2.5% to 6.5%.

As for the foreign exchange (FX) market, during the first half of 2024, market expectations for the timing of Fed rate cuts were repeatedly deferred, which supported the strength of the US dollar. In tandem, Taiwan's equity markets rose alongside gains in US tech stocks. As Taiwan's stock markets hovered at elevated levels, foreign investors adjusted their holdings and repatriated the gains abroad, resulting in NT dollar depreciation against the US dollar.

In the second half of the year, signs of cooling in the US labor market strengthened market expectations for Fed rate cuts, leading to a weaker US dollar and a rebound of the NT dollar exchange rate against the US dollar. Thereafter, following Donald Trump's re-election as US President, market concerns over the uncertainties surrounding his trade and economic policies prompted foreign investors to net sell Taiwanese stocks and remit funds abroad, causing the NT dollar to reverse course and depreciate against the US dollar.

Throughout the year, the NT dollar exchange rate experienced significant fluctuations, reflecting substantial foreign investor net sales and purchases of Taiwanese stocks as well as international economic impacts. Consequently, the Bank, in line with its statutory mandates, continued to conduct two-way smoothing operations in the forex market as warranted to maintain dynamic stability of the NT dollar, with a net selling of US\$16.4 billion for the entire year. Compared with other major currencies such as the SGD, EUR, KRW, and JPY, the NT dollar experienced lower volatility in its exchange rate vis-à-vis the US dollar in 2024.

Meanwhile, in addition to approving more bank branches as authorized FX banks, the Bank reviewed the laws and regulations governing FX business as seen fit so as to facilitate authorized FX banks' competitiveness and service quality. In light of Taiwan's economic, trade, and financial conditions, and in support of the policy goal to develop Taiwan into an asset management hub in Asia, the Bank raised the annual aggregate FX settlement amount limits for institutions and individuals and for companies and business entities, respectively, starting in November 2024.

In order to ensure the security and efficiency of the functioning of Taiwan's payment and settlement systems, the Bank continued to supervise clearing institutions in enhancing measures for sustaining core business operations under disaster scenarios and carrying out drills for system backup and manual backup procedures under extreme conditions.

Moreover, the Bank continuously urged the Financial Information Service Co., Ltd. (FISC) to

reinforce the retail payment infrastructure and encouraged electronic payment institutions to participate in the "Common Platform for Electronic Payment Institutions" and to provide services including funds transfer, tax e-payment, bill e-payment, and shopping e-payment via this platform.

In the meantime, the Bank instructed the FISC, in collaboration with financial institutions and electronic payment institutions, to continue promoting the adoption of TWQR, a common QR code payment specification, with the aim of gradually mitigating the fragmentation of Taiwan's retail payment market. Furthermore, efforts have been made to broaden TWQR application scenarios, including the development of a TWQR-based transit QR code for use in the transportation sector and the launch of a TWQR-based cross-border shopping e-payment service in Japan and South Korea, thereby fostering a more robust domestic payment ecosystem.

In response to digital developments, the central bank digital currency (CBDC) has become a focus of international research in recent years. The Bank also conducted relevant studies and experiments such as completing the "wholesale CBDC technical feasibility study" in 2020 and the "retail CBDC technology experimentation" in 2022, and established the "CBDC prototype platform." On the other hand, the Bank is currently undertaking three key tasks to reinforce CBDC-related research and preparations: continuing extensive communication, strengthening platform technology, and deliberating on the legal framework. Only upon completion of these tasks will the Bank evaluate the feasibility of launching a pilot program.

2. Monetary Management

Tightening Monetary Policy to Contain Domestic Inflation Expectations

(1) Raising the Policy Rates Once to Foster Price Stability

In March 2024, considering that domestic inflation had remained at a relatively high level since 2021 and that the public expected an electricity rate hike in April, the Bank raised the policy interest rates by 0.125 percentage points to curb domestic inflation expectations. Therefore, the discount rate, the rate on refinancing of secured loans, and the rate on temporary accommodations were raised to 2%, 2.375%, and 4.25%, respectively.

Subsequently, the domestic inflation rate broadly maintained a gradual downtrend and was expected to come down to around 2% in 2025. Meanwhile, the domestic economy was projected to expand at a moderate pace for both 2024 and 2025, with a modestly negative output gap for both years. Against this background, the Bank kept the policy rates unchanged in June, September, and December 2024, to help foster sound economic and financial development on the whole.

(2) Increasing the Reserve Requirement Ratios on NT Dollar Deposits Twice to Reinforce the Effectiveness of the Selective Credit Controls

In order to strengthen the effectiveness of the selective credit controls and to further contain excessive credit flows into the real estate market, the Bank raised the reserve requirement ratios on NT dollar passbook and time (savings) deposits (excluding passbook deposits from nonresident investors) by 0.25 percentage points twice in a row, effective July 1 and October 1, 2024, equivalent to reducing market liquidity by approximately NT\$250 billion.

Adjustments to the Reserve Requirement Ratios on NT Dollar Deposits

Unit: Percentage of deposits						
Effective Date	Checking Accounts	Passbook Deposits	Savings Deposits		Time Deposits	Principal (in NT Dollars) Received by Banks from the Sale of Structured Products
			Passbook	Time		
2024/07/01	11.500	10.525	6.250	4.750	5.750	5.750
2024/10/01	11.750	10.775	6.500	5.000	6.000	6.000

Source: *Financial Statistics Monthly* (February 2025), CBC.

Continuing Open Market Operations to Adjust Market Liquidity

In 2024, the Bank continued to affect money supply through open market operations by issuing CDs in response to domestic economic and financial conditions, which helped to maintain banking system liquidity and market interest rates at appropriate levels.

(1) Appropriately Managing Reserve Money

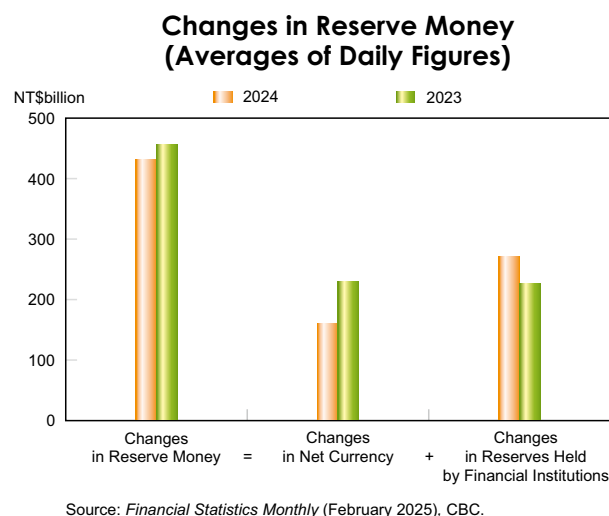
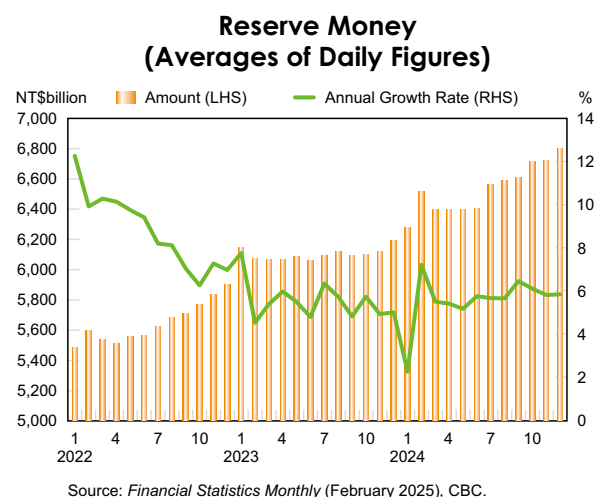
The Bank continued to conduct open market operations by issuing CDs. At the end of 2024, the total outstanding amount of CDs issued by the Bank was NT\$7,332 billion.

In 2024, reserve money grew by 5.58% year on year, 0.03 percentage points higher than the previous year's figure. The annual average excess reserves of financial institutions were NT\$48.2 billion, lower than the previous year's NT\$59.8 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 late January in 2023, yet in the middle of February in 2024). For the first two months of 2024, reserve money posted an annual growth rate of 4.74%. From March onwards, the annual growth rates of reserve money were relatively stable.

On the demand side, reserve money, measured on a daily average basis, increased by NT\$431.3 billion over the previous year. Of the components, net currency rose by NT\$160.5 billion and the annual growth rate fell to 5.21% from 8.07% the previous year; reserves held by financial institutions expanded by NT\$270.9 billion, with the annual growth rate rising to 8.97% from 8.08% the previous year.

As higher interest rates paid on bank deposits raised the private sector's opportunity cost of holding currency, net currency



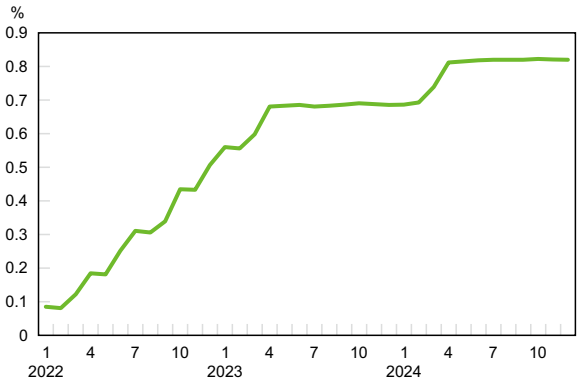
recorded slower growth than a year earlier. In respect of reserves held by financial institutions, with sustained growth in deposits, banks' required reserves rose accordingly, leading to a larger increase in reserves held by financial institutions compared to the previous year.

From the supply side perspective, reserve money rose by NT\$628.7 billion at the end of 2024. According to the balance sheet of the Bank revealing the sources of changes in reserve money, increases were mostly attributable to the reduction in the outstanding balance of CDs issued by the Bank and the growth in foreign assets held by the Bank, whereas decreases were mainly due to increased government deposits.

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

The Bank's 0.125 percentage point rate increase in March 2024 drove up the overnight call loan rate by nearly 0.125 percentage points for the year. As of the end of December 2024, the annual average overnight call loan rate was at 0.821%.

Overnight Call Loan Rate



Source: Financial Statistics Monthly (February 2025), 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 2024 to improve operational readiness and ensure resilience of open market operations. In addition, in December 2024, the Bank conducted a small-scale test repo operation on sustainable bonds issued by banks to help promote the development of sustainable finance.

(4) M2 Rising Before Trending Down, All Within Reference Range

Measured on a daily basis, the annual growth rate of M2 fell by 0.42 percentage points from the previous year to 5.83% in 2024. The slowdown mainly reflected a higher base effect and net outflows of foreign capital.

With regard to the monthly movements in 2024, sustained annual growth in housing loans, together with a rebound in exports and a booming stock market, boosted funding demand of enterprises and individuals. As a result, the M2 annual growth rate rose from a yearly low of 5.44% in January to a yearly high of 6.25% in June.

Afterwards, owing to net capital outflows, the M2 annual growth rate continued to decline and

registered 5.60% in September. In October, with a continuous rise in bank loans and investments, the M2 annual growth rate rebounded to 5.83%. In November, net capital outflows and decelerated growth in bank loans and investments brought the M2 annual growth rate down to 5.47%. Later, faster growth in both time deposits and foreign currency deposits led the M2 annual growth rate to edge up to 5.51% in December.

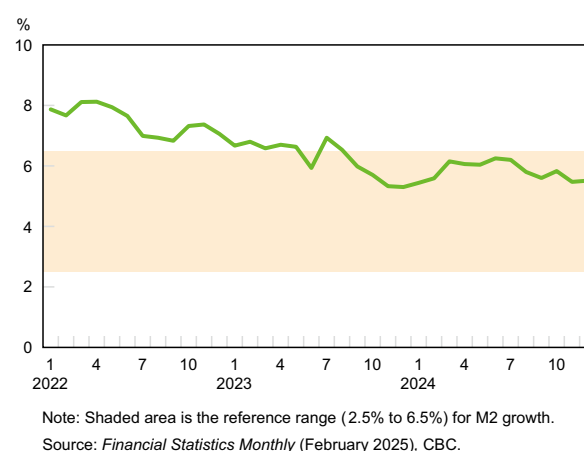
The annual growth rate of the monetary aggregate M1B, measured on a daily average basis, went up by 1.79 percentage points to 4.61% in 2024, mainly owing to a larger increase in demand deposits resulting from a lower base effect and stronger growth in bank loans and investments.

As for the monthly movements in 2024, with a higher annual growth rate of bank loans and investments, along with a lower base effect, both contributing to faster growth in demand deposits, the M1B annual growth rate exhibited an uptrend at the start of the year, rising from an all-year low of 3.56% in January to an all-year high of 5.38% in March.

In April, the M1B annual growth rate declined to 4.94% owing to net capital outflows. In subsequent months, a smaller scale of net resident capital outflows in May, coupled with a pickup in the annual growth rates of bank loans and investments in June and July, led the M1B annual growth rate to rebound to 5.22% in July. Nevertheless, the rate dropped to 4.05% in August as net capital outflows recorded stronger expansion.

In September, the M1B annual growth rate edged up to 4.07% on the back of faster growth in demand deposits. In October, it continued to rise to 4.91%, driven by a sustained increase in bank loans and investments. Thereafter, as both bank loans and investments and demand savings deposits posted slower growth, the M1B annual growth rate fell again to 4.00% in December.

Annual Growth Rate of M2



Annual Growth Rate of M1B



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

To promote financial stability and sound banking operations, to carry on with the Bank's policy efforts under the government's Healthy Real Estate Market Plan, and to prevent bank credit from excessively flowing towards property and land hoarding, the Bank continued to implement the selective credit control measures in 2024, as follows.

(1) Adjusting the credit control measures twice in June and September 2024

- A. June 2024: The Bank lowered the loan-to-value (LTV) ratio cap on natural persons' second outstanding home loans for housing in the designated "specific areas" to 60%.
- B. September 2024: The Bank made the following amendments:
 - (a) Granting no grace period to a natural person's first outstanding home loan when the borrower already owns building(s) to his/her name.
 - (b) Lowering the cap on the LTV ratio, from 60% to 50%, of natural persons' second outstanding home loans and widening the applicable scope (from housing in the "specific areas") to housing nationwide.
 - (c) Lowering the LTV ratio caps on corporate entities' housing loans, natural persons' high-value housing loans, natural persons' third (or more) outstanding home loans, and unsold housing unit loans from 40% to 30%.

(2) Adopting moral suasion in August 2024, requesting banks to self-regulate management of outstanding real estate loan balances

To encourage banks to allocate credit resources appropriately and avoid excessive credit flows into the real estate market, the Bank requested banks to enhance internal control of the aggregate amount of real estate lending from the fourth quarter of 2024 to the fourth quarter of 2025, and to submit quarterly reports on the implementation progress of these controls.

(3) Introducing supporting measures in October 2024 for natural persons who have acquired housing properties with outstanding home loans through inheritance or who have demonstrated a genuine need for home replacement

- A. For a natural person who has acquired houses with outstanding home loans through inheritance, such inherited properties and home loans are not counted toward the number of houses or home loans under the borrower's name. In other words, if a natural person owns only inherited properties, a newly applied home loan (for purchasing a non-high-value house) may be exempted from the restrictions under the Bank's selective credit controls.

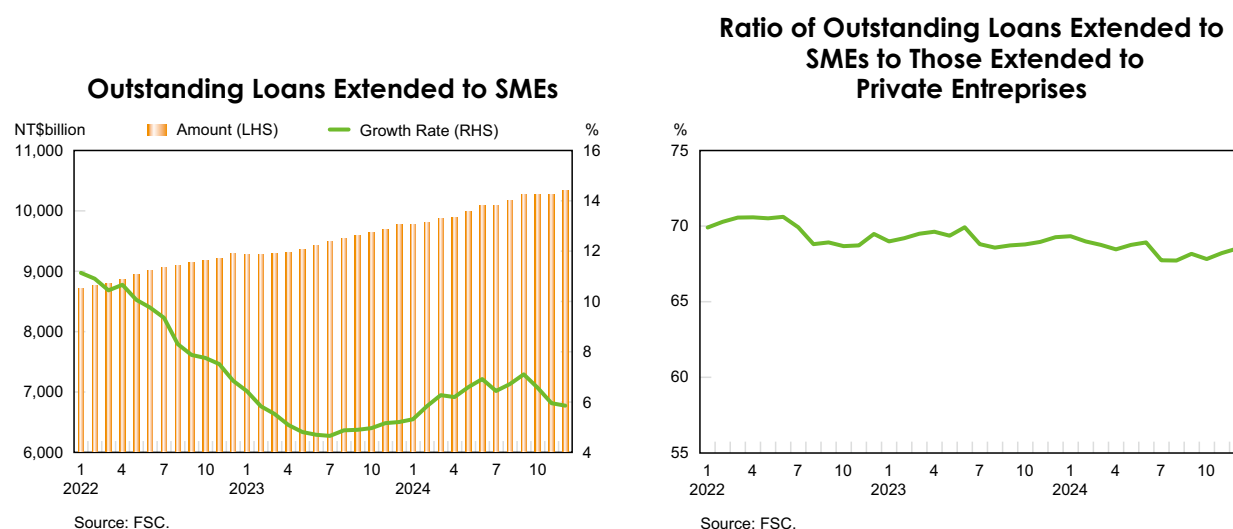
- B. For a natural person with a genuine need for home replacement, who commits to selling the original property within one year after the disbursement of a newly approved home loan, the application for a first or second home loan (for purchasing a non-high-value house) may be exempted from the restrictions under the Bank's selective credit controls.

Since the Bank's selective credit controls took effect, real estate lending growth has seen a downtrend, which has helped enhance banks' risk management associated with real estate lending, and banks' real estate loans have maintained good credit quality as indicated by the continuously low non-performing loan ratio of this loan bracket. The Bank has continued to review the effectiveness of the selective credit control measures, closely monitor the potential impacts of real estate-related policies on the housing market, and make timely adjustments as needed in order to promote financial stability and sound banking operations.

Facilitating SME Funding

To assist small and medium enterprises (SMEs) in obtaining necessary funds for their operations, the Bank has regularly tracked banks' lending to SMEs and participated in the "Forward-Looking SME Financial Services Coordination Platform Meeting," jointly hosted by the Financial Supervisory Commission (FSC) and the Ministry of Economic Affairs to urge banks to enhance their lending to SMEs.

At the end of 2024, the outstanding loans extended to SMEs by domestic banks amounted to NT\$10,338 billion, an increase of NT\$571.6 billion from the end of the previous year to a level that exceeded the annual lending growth target of NT\$420 billion set by the FSC for 2024 under the "Program to Encourage Lending by Domestic Banks to SMEs." At the end of 2024, the ratio of SME loans to loans extended to all private enterprises reached 68.52%, slightly lower than the 69.26% recorded at the previous year end.



Raising the Remuneration Rates on Financial Institutions' B Reserve Accounts

The Bank raised the policy rates in March 2024, and the remuneration rates on financial institutions' B reserve accounts held with the Bank increased accordingly. Effective March 29, 2024, reserves from demand deposits and time deposits would receive interest at 0.771% and 1.459% per annum, respectively.

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 2024, the outstanding redeposits of Chunghwa Post stayed broadly unchanged at NT\$1,623.7 billion, while the outstanding redeposits of the Agricultural Bank of Taiwan and of commercial banks were NT\$88 billion and NT\$235.8 billion, respectively.

Box

The Bank's Adjustments to Selective Credit Control Measures and Its Request for Internal Management by Domestic Banks over Real Estate Loans

To implement the directive of "efficient allocation and proper use of credit resources" under the government's Healthy Real Estate Market Plan and to prevent excessive bank credit resources from gushing into the real estate market, the Bank continued to carry out selective credit control measures. In June and September 2024, the Bank made the sixth and seventh amendments to the relevant regulations. In addition, in August 2024, through moral suasion, the Bank requested banks to enhance internal control of the aggregate amount of real estate lending from the fourth quarter of 2024 to the fourth quarter of 2025. These actions helped enhance the effectiveness of the Bank's selective credit control measures.

I. The Bank made the sixth and seventh adjustments to selective credit control measures in 2024

1. In June and September 2024, the Bank made the sixth and seventh adjustments to the selective credit control measures through relevant regulatory amendments. Moreover, in August 2024, the Bank, through moral suasion, asked banks to enhance internal control of the aggregate amount of real estate lending from the fourth quarter of 2024 to the fourth quarter of 2025. These measures include three primary aims: (1) cooling public expectations of a housing price uptrend; (2) freeing up loanable funds otherwise tapped by speculators and channeling such funds towards priority use for home loans to non-homeowners; and (3) rectifying the over-concentration of credit resources on real estate lending.

2. Key changes for the aforesaid adjustments to selective credit control measures are as follows.

(1) June 2024:

Lowering the cap on the LTV ratio to 60% for a natural person's second home loan for housing in specific areas.

(2) September 2024:

- A. Granting no grace period to a natural person's first outstanding home loan when the borrower already owns building(s) to his/her name.
- B. Lowering the cap on the LTV ratio, from 60% to 50%, for natural persons' second outstanding home loans and widening the applicable scope to housing nationwide.
- C. Lowering the LTV ratio caps on corporate entities' housing loans, natural persons' high-value housing loans, natural persons' third (or more) outstanding home loans, and unsold housing unit loans from 40% to 30%.

3. To fulfill the objectives of the Bank's selective credit controls while also accommodating the public's need for financial planning related to owner-occupied housing, the Bank announced relevant support measures on October 9, 2024. Under these measures, housing loans (excluding high-value housing loans) applied for by natural persons may be exempted from the Bank's selective credit controls if the applicant falls into any of the following categories:

(1) those who have acquired the property through inheritance; (2) those with a genuine need for home replacement; or (3) those who, at the time of applying for a home loan, have already signed a home purchase agreement (including for completed or pre-sale homes) with the case qualifying as inheritance or genuine home replacement.

II. The Bank requested domestic banks to implement internal management of the outstanding balance of real estate loans

1. From the second half of 2023 onwards, housing market transactions increased and housing prices surged, driving up the annual growth rate of banks' housing loans. As of the end of June 2024, the ratio of real estate lending to total lending of all banks (a measure of concentration of real estate lending) rose to 37.61%, indicating that the concentration of bank credit resources in real estate loans remained in need of further improvement.

2. In August 2024, the Bank successively met with the general managers of 34 domestic banks and the National Federation of Credit Co-operatives, urging these institutions to fulfill their social responsibilities and to avoid excessive credit flows into real estate lending. The Bank requested that, without adversely affecting the funding needs of non-homeowners applying for owner-occupied housing loans or of real estate sector entities looking to finance their projects of urban renewal and reconstruction of old and unsafe buildings, banks should, in light of their respective business conditions, gradually adjust the aggregate amount of real estate lending from the fourth quarter of 2024 to the fourth quarter of 2025 so as to improve the over-concentration of credit resources in real estate lending.

III. Results and effectiveness of the Bank's selective credit control measures

Following the above-mentioned efforts, housing market transactions declined and public expectations of housing price rises eased in the second half of 2024. Meanwhile, domestic banks recorded a rising share of housing loans taken out by non-homeowners as a percentage of total home loans, and the concentration of real estate lending decreased. These developments indicated that the Bank's selective credit control measures in 2024 had gradually shown results.

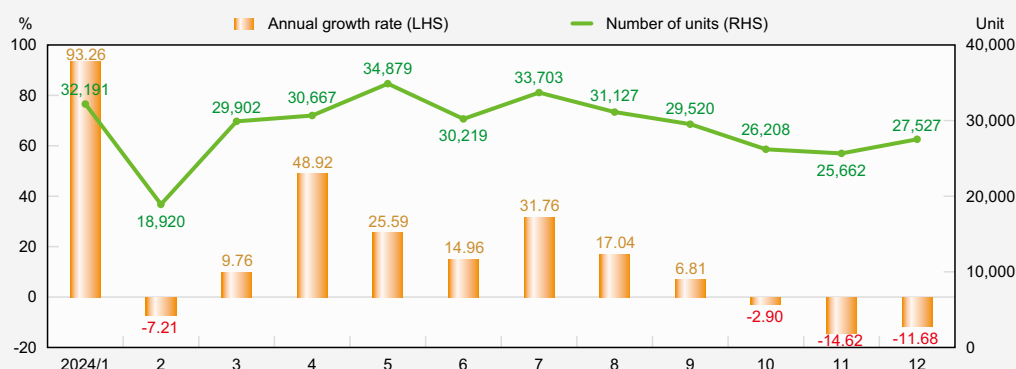
1. Reduction in housing market transactions

In October 2024, the annual growth rate of the total number of building ownership transfers nationwide turned negative, registering -2.90%, followed by -14.62% in November and -11.68% in December.

2. Easing of public expectations of housing price increases

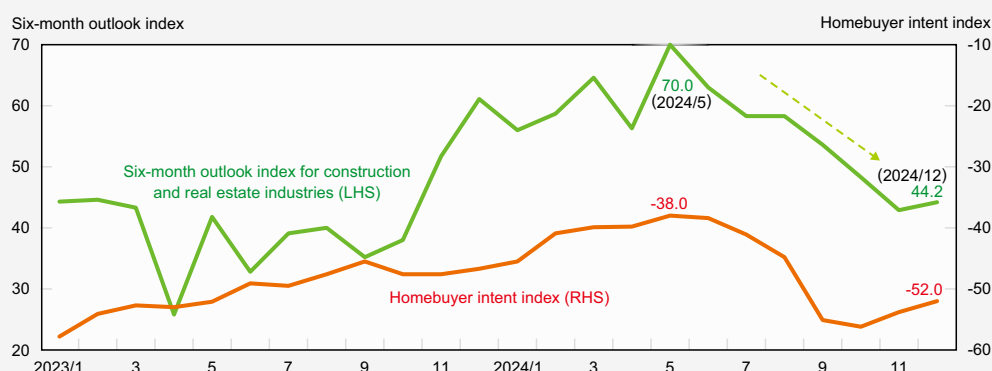
As public expectations of housing price rises eased, the homebuyer intent index, compiled by the Cathay Financial Holdings based on its "national economic confidence survey," declined from -38 in May 2024 to -52 in December 2024. Meanwhile, the six-month outlook index for the construction and real estate industries, published by the Chung-Hua Institution for Economic Research (CIER), also fell from 70% in May 2024 to 44.2% in December 2024.

Number and Annual Growth Rate of Building Ownership Transfers



Source: Ministry of the Interior, R.O.C. (Taiwan).

Homebuyer Intent Index & Six-Month Outlook Index for Construction and Real Estate Industries



Notes: 1. The homebuyer intent index by the Cathay Financial Holdings is calculated based on survey respondents' views regarding the timing of buying or selling a house (= Yes - No).

2. The six-month outlook index for the construction and real estate industries by the CIER: A reading below 50 indicates contraction.

Sources: 1. Cathay Financial Holdings.

2. Press releases on Purchasing Managers' Index, National Development Council.

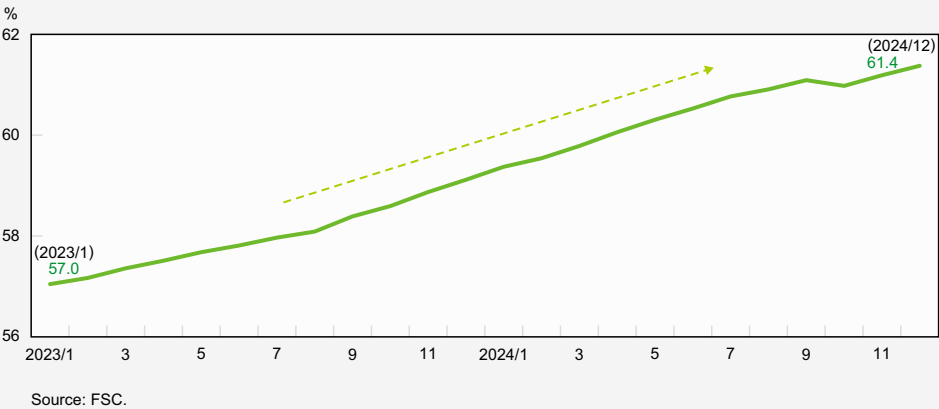
3. Rise in the share of housing loans extended to non-homeowners by domestic banks as a percentage of total home loans

The share of housing loans extended to non-homeowners as a percentage of total home loans rose from 57.0% at the end of January 2023 to 61.4% at the end of December 2024, indicating that non-homeowners were prioritized to receive bank credit.

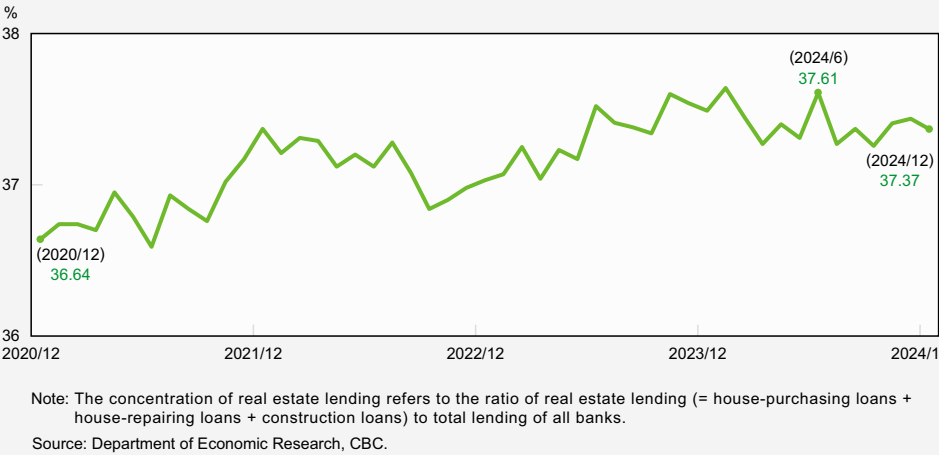
4. Decrease in the concentration of real estate lending

The concentration of real estate lending in total bank lending declined from 37.61% at the end of June 2024 to 37.37% at the end of December 2024, indicating a gradual improvement in the over-concentration of credit resources in real estate lending.

Housing Loans to Non-Homeowner Borrowers as A Share of Total Home Loans in Domestic Banks



Concentration of Real Estate Lending by All Banks



IV. Conclusion

To reduce the over-concentration of credit resources in loans to the real estate sector, the Bank continued to implement selective credit control measures and requested domestic banks to enhance internal control of the aggregate amount of real estate lending. Regarding moral suasion, the Bank will keep track, on a quarterly basis, of the progress of banks' internal improvement plans on real estate lending management and urge them to ensure robust implementation.

In the future, the Bank will continue reviewing the status of banks' real estate lending and the effectiveness of the Bank's credit control measures, closely monitor potential impacts of real estate sector-related policies on the housing market, and adjust the measures as needed in order to promote financial stability and sound banking operations.

3. Foreign Exchange Management

Promoting the Sound Development of the Foreign Exchange Market

(1) Flexible foreign exchange rate management to maintain dynamic stability of the NT dollar exchange rate

As Taiwan is a small open economy with high dependence on foreign trade, the Bank suitably adopts a managed float exchange rate regime to contain sharp exchange rate fluctuations. Under this regime, the NT dollar exchange rate is in principle determined by market forces. However, in the event of disorderly movements (such as mass inflows and outflows of short-term capital) and seasonal factors, the Bank would, in line with its statutory duties, conduct appropriate smoothing operations to stave off adverse effects for economic and financial stability and to maintain an orderly foreign exchange market.

In recent years, massive and frequent international short-term capital flows have become the main driving force of exchange rate changes. To mitigate excessive exchange rate volatility and to improve market efficiency, the Bank has adopted "leaning against the wind" operations to prevent erratic flows from disrupting the foreign exchange market. The dynamic stability of the NT dollar exchange rate is viewed as conducive to long-term economic stability and sound development.

In 2024, the Bank continued to conduct two-way smoothing operations in the forex market, in response to significant NTD exchange rate fluctuations driven mainly by foreign portfolio investment flows as well as international economic developments. The first half of 2024 witnessed NTD depreciation, partly due to USD strength on market expectations of the Fed delaying rate cuts and partly reflecting FINIs' profit-taking trades amid Taiwan stock rallies on the AI boom. Entering the second half of 2024, the NTD rebounded as the USD was weakened by stronger expectations for Fed rate cuts. However, the NTD turned lower later in the year, reflecting foreign portfolio investment outflows amid global market concerns about trade uncertainties from the new US administration's policies. Overall, NTD volatility in the year prompted the Bank to step in the forex market to maintain the dynamic stability of the NTD exchange rate, with net sales by the Bank amounting to US\$16.4 billion.

(2) Maintaining an orderly forex market and promoting sound market development

A. Implementing the Real-Time Reporting System for Large-Amount Foreign Exchange Transactions.

B. Strengthening off-site monitoring management to ensure that forward transactions were based on

real transactions to curb foreign exchange speculation.

- C. Urging authorized banks to enhance their exchange rate risk management in order to reduce market exposure of individual banks and to contain systemic risks.
- D. Strengthening targeted examinations on foreign exchange business to help ensure a sound foreign exchange market.

Foreign Currency Call Loan and Swap Market Management

- (1) The Bank continued to ensure sufficient foreign currency liquidity in the financial system to meet funding needs, with the seed capital of US\$20 billion, €1 billion and ¥80 billion that it provides to the Taipei Foreign Currency Call Loan Market to help corporations venture into overseas markets.
- (2) The Bank continued to provide foreign currency liquidity to domestic banks through foreign currency call loans and swaps, thereby helping to meet corporate funding needs for operations and overseas investments.

Foreign Exchange Reserve Management and Foreign Currency Liquidity of the Bank

The Bank manages its foreign exchange reserves based on the considerations of liquidity, safety, and profitability. The Bank keeps a close watch on the global economic and financial situation and adjusts the portfolio of foreign exchange reserves accordingly. Currently, financial assets denominated in US dollars make up a larger share in Taiwan's foreign exchange reserves than the COFER (Currency Composition of Official Foreign Exchange Reserves) average published by the IMF. As of the end of 2024, Taiwan's total foreign exchange reserves stood at US\$576.7 billion, an increase of US\$6.1 billion or 1.1% compared to the end of 2023, mainly attributable to returns from forex reserve investments. Combining the reserves held in gold valued at US\$4.7 billion, the Bank's reserve assets totaled US\$581.4 billion at the end of 2024.

Foreign exchange reserves are the Bank's foreign currency claims on nonresidents. On the other hand, foreign currency claims on residents consist of US dollars held under swap agreements and foreign currency deposits with and loans to domestic banks, which amounted to US\$77.1 billion, US\$24.2 billion, and US\$7.7 billion, respectively, at the end of 2024.

In terms of foreign currency liquidity, the total amount (including foreign currency claims and gold) reached US\$694.2 billion at the end of 2024.

Capital Flow Management

In line with the efforts to promote financial liberalization and internationalization, the Bank's

foreign exchange management has mainly been focusing on maintaining the market mechanism, and financial capital can, in principle, flow freely in and out of Taiwan. Financial capital flows not involving NT dollar conversion have been able to flow freely. Additionally, there are no restrictions on financial flows involving NT dollar conversion for goods and service trade, nor for direct and securities investments approved by the competent authorities.

Regulation only exists for short-term remittances. The amount of accumulated annual remittances for an individual resident within US\$10 million and for a juridical person within US\$100 million can be settled by banks directly, while annual remittances above the aforementioned amounts require the approval of the Bank. For a nonresident, each transaction within US\$0.1 million can be settled by banks directly, whereas any transaction amount above that threshold requires the approval of the Bank.

(1) Measures with regard to the management of capital flows in 2024 included:

- A. The amendments to the *Directions for Banking Enterprises while Assisting Customers to Declare Foreign Exchange Receipts and Disbursements or Transactions* and the *Directions for Domestic Security Firm Approved to Conduct Foreign Exchange Business While Assisting Customers in Declaring Foreign Exchange Receipts and Disbursements or Transactions* took effect on July 4, 2024.
- B. On October 31, the Bank issued an official directive to raise the ceilings on the annual aggregate foreign exchange settlement amount for domestic residents. The amount ceiling for an association or an individual was raised from US\$5 million to US\$10 million, while that for a company or a firm was raised from US\$50 million to US\$100 million, effective from November 1, 2024.
- C. On December 24, the Bank, following the FSC's recommendation, agreed to relax the regulations related to foreign currency nondiscretionary money trusts, allowing trustors to use their beneficial rights in such trusts investing in foreign currency-denominated securities as pledge for NTD loans, so as to facilitate this business and increase funding flexibility. Accordingly, the Bank amended Subparagraph 4, Paragraph 1, Point 10 of the *Directions Governing Banking Enterprises for Operating Foreign Exchange Business* on January 15, 2025 effective on the same day.
- D. On December 27, the Bank requested four associations, including the Securities Investment Trust & Consulting Association of the R.O.C., to inform their members of the following policy change: Starting 2025, the annual limit of US\$50 million for foreign currency discretionary investment business in foreign securities would be lifted.

(2) Promoting the Internationalization of Taiwan's Capital Market

Cases of fund-raising by domestic and foreign institutions through securities issuance, approved by or filed for record to the Bank in 2024, are shown in the following table.

Institution	Fund-Raising Method	Number	Amount
Foreign companies	IPO on TWSE & TPEx and registration on the Emerging Stock Board	23	NTD 19.69 billion
	NTD-denominated bonds	13	NTD 11.75 billion
	Foreign currency-denominated bonds	54	USD 9.73 billion
		1	AUD 0.02 billion
		1	NZD 0.01 billion
		2	RMB 0.33 billion
		1	ZAR 0.3 billion
Domestic companies (and domestic branches)	Foreign currency-denominated bonds	52	USD 0.13 billion
	Overseas depositary receipts	7	USD 3.17 billion
	Overseas convertible bonds	7	USD 3.35 billion

Note: TWSE stands for the Taiwan Stock Exchange; TPEx stands for the Taipei Exchange.
Source: Department of Foreign Exchange, CBC.

(3) Approving Residents' Investments in Foreign Securities

Institution	Method/Instrument	Amount
Securities investment trust companies (SITEs)	151 domestic SITE funds (including 45 NTD-foreign multi-currency SITE funds)	NTD 3,052.7 billion (including 829 billion in multi-currency funds)
Life insurance companies	Nondiscretionary money trusts managed by financial institutions	USD 0.36 billion
	Investment in their own accounts	USD 0.48 billion
Five major government pension funds and employment insurance funds	Investment in their own accounts	USD 6.41 billion

Source: Department of Foreign Exchange, CBC.

Management of Foreign Exchange Business of Financial Institutions

(1) Authorized Foreign Exchange Banks

Under *The Central Bank of the Republic of China (Taiwan) Act* and the *Foreign Exchange Regulation Act*, the Bank reviews, authorizes, and supervises banks to conduct foreign exchange business accordingly. In 2024, the Bank continued to approve bank branches as authorized foreign exchange banks and review relevant regulations as needed to facilitate authorized foreign exchange banks' competitiveness and service quality.

At the end of 2024, there were 3,459 authorized foreign exchange banks in total, which included

38 head offices and 3,381 branches of domestic banks, 37 branches of foreign banks, three branches of Mainland Chinese banks, as well as 4,586 authorized money exchangers, post offices, and financial institutions authorized for the dealing of foreign currency cash and traveler's checks.

(2) Insurance Companies

As of the end of 2024, the numbers of insurance companies allowed to engage in traditional and in investment-linked foreign currency insurance business were both 21. The foreign currency premium revenue increased by US\$2.83 billion, or 12.43%, from the previous year to US\$25.55 billion in 2024.

(3) Securities Firms

The approved cases for securities firms to conduct foreign exchange business in 2024 are listed in the following table.

Institutions	Foreign Exchange Business	Number
Securities firms	Underwriting of international bonds denominated in foreign currency	2
	Proprietary foreign securities trading neither belonging to investment with their funds nor for hedging needs	2
	NTD and foreign currency spot exchange rate	1
	Structured products	1
	Participating dealer of domestically issued foreign currency denominated ETFs	1

Source: Department of Foreign Exchange, CBC.

(4) Investment Trust/Consulting Firms

The approved cases granted by the Bank for investment trust and investment consulting firms to conduct foreign exchange business as of 2024 are shown in the following table.

Institutions	Foreign Exchange Business	Number
Investment trust and investment consulting firms	Serving as mandated institutions of private offshore funds	3
	Foreign currency discretionary investment business	1

Source: Department of Foreign Exchange, CBC.

Foreign Currency Clearing Platform

(1) Taiwan's foreign currency clearing platform was consigned by the Bank and established by the Financial Information Service Co. The platform offers services for domestic and cross-border (including

cross-strait) remittances of the Chinese renminbi and the Japanese yen, and domestic remittances of the US dollar, the euro, and the Australian dollar. The platform adopts a payment-versus-payment (PVP) mechanism among banks, a liquidity-saving mechanism for foreign currency remittances, and a delivery-versus-payment (DVP) mechanism for foreign currency bonds and bills.

(2) Domestic Development of Foreign Currency Settlement Business in 2024

Currency	Domestic Participating Units	Settlements in 2024	
		Number of Transactions	Amount
US dollar	72	1,461,559	USD 2,094.8 billion
Renminbi	59	320,721	RMB 748 billion
Yen	37	62,435	JPY 1,823 billion
Euro	38	21,416	EUR 9.2 billion
Australian dollar	30	31,752	AUD 2 billion

Source: Department of Foreign Exchange, CBC.

Offshore Banking

(1) Regulatory amendments

In line with the amendment of relevant insurance regulations and to achieve supervision consistency, the Bank collaborated with the FSC to amend the *Regulations Governing Offshore Insurance Branches*. The amendment was effective July 10, 2024.

(2) Financial Status

A. Offshore Banking Units (OBUs)

At the end of 2024, the number of OBUs came to 59, and total OBU assets decreased by US\$0.67 billion, or 0.2%, over the previous year to US\$276.61 billion. The net income after tax of all OBUs amounted to US\$1.8 billion, almost the same as the year before.

B. Offshore Securities Units (OSUs)

At the end of 2024, the number of OSUs stood at 18, and total OSU assets increased by US\$0.81 billion, or 12.8%, over the previous year to US\$7.09 billion. The net income after tax of all OSUs continued with a net loss of US\$14.6 million, increasing by US\$23.6 million from a year before.

C. Offshore Insurance Units (OIUs)

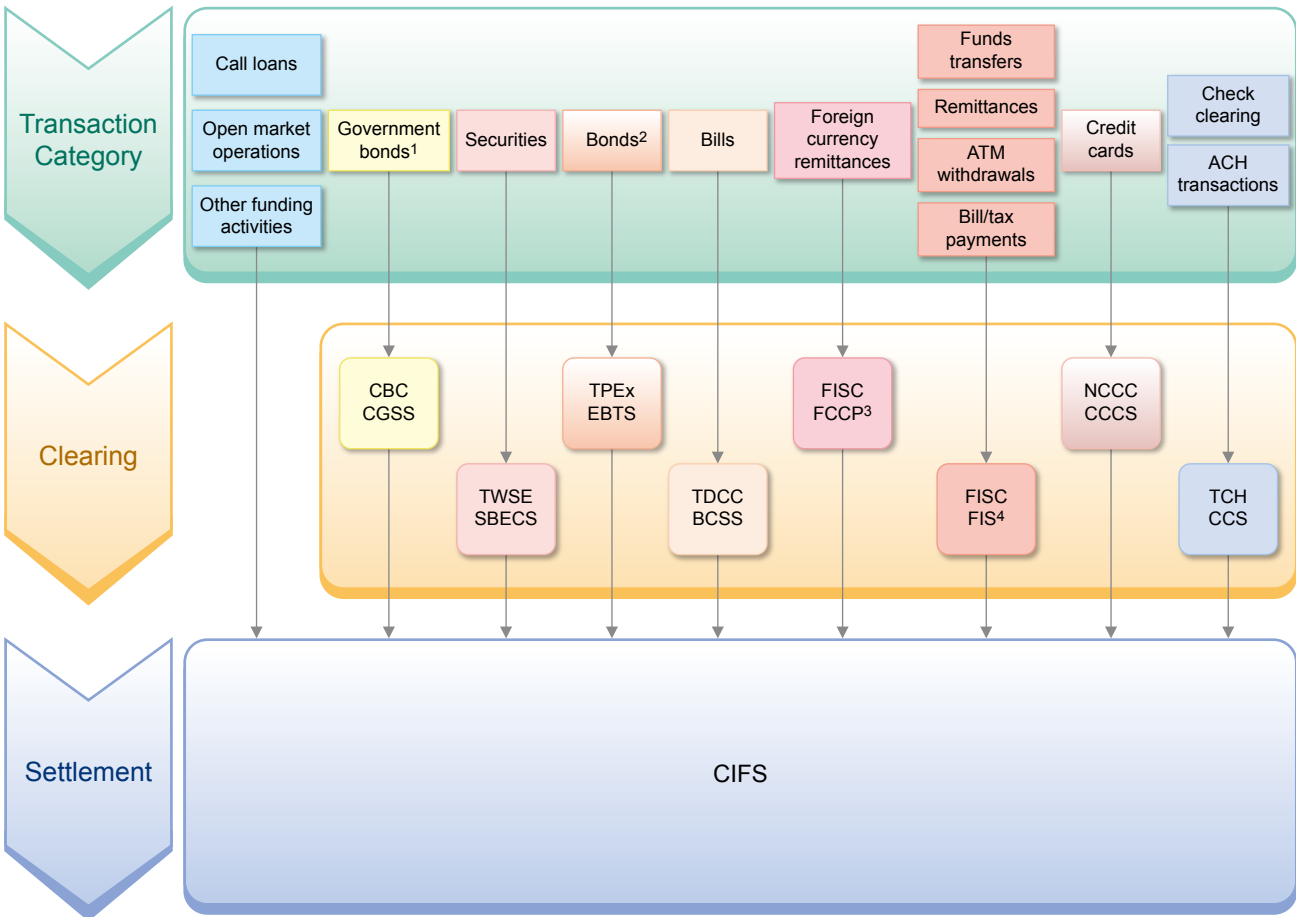
As of the end of 2024, the number of OIUs was 20, with a total amount of assets of US\$0.85 billion, which was US\$0.04 billion, or 4.4%, less than the previous year end. The net income after tax of all OIUs added up to US\$21.3 million, increasing by US\$15.3 million or 256.2% from the previous year.

4. Payment and Settlement Systems

The Bank plays a crucial role in the functioning of Taiwan's payment and settlement systems, and operates the CBC Interbank Funds Transfer System (CIFS) and the Central Government Securities Settlement System (CGSS).

The CIFS serves as the hub of Taiwan's payment and settlement systems, linking the interbank clearing systems operated by the FISC, the Taiwan Clearing House (TCH), the National Credit Card Center of R.O.C. (NCCC), the Taiwan Depository and Clearing Corporation (TDCC), the TPEX, and the TWSE, as well as the CGSS, together to construct a comprehensive system.

Payment System Infrastructure



Notes: 1. Including DVP settlements for interbank transactions of central government bonds and treasury bills.
2. Including netting settlements for outright trades of government bonds, corporate bonds, and bank debentures.
3. The CIFS is responsible for settlements involving NT dollars, while settlements involving foreign currencies are performed by designated commercial banks.
4. The FISC's Financial Information System (FIS) has successively provided fast payment services on a 24/7/365 basis since 1991.
Source: Department of Banking, CBC.

Among Taiwan's payment and settlement systems, the Financial Information System (FIS), operated by the FISC, serves as Taiwan's retail fast payment system. Through the CIFS, financial institutions may pre-allocate funds from their A reserve accounts held with the Bank to the Interbank Funds Transfer Guarantee Special Account,⁷ providing a guarantee for the real-time, transaction-by-transaction clearing and settlement of interbank payment transactions processed via the FIS.

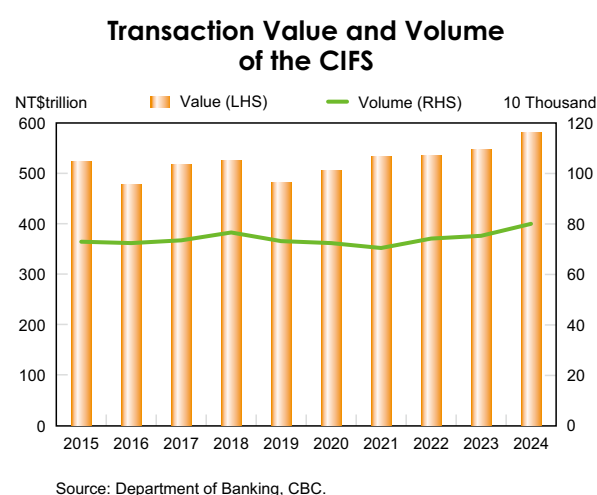
In addition, the Bank monitors major payment systems based on the *Principles for Financial Market Infrastructures* released by the Bank for International Settlements (BIS) to ensure sound operation of these systems and to promote stability of the financial system.

Operation of Payment and Settlement Systems

(1) Funds Transfers via the CIFS

As a large-value electronic funds transfer system, the CIFS not only deals with interbank funding, open market operations, and funds settlements in financial markets, but also provides interbank final settlement services for each clearing institution.

At the end of 2024, there were 85 participants of the CIFS, which included 70 banks, eight bills finance companies, Chunghwa Post, and six clearing institutions, namely the FISC, the TCH, the TDCC, the TWSE, the TPEX, and the NCCC. In 2024, the number of transactions via the CIFS was 803,008, and the amount of funds transferred totaled NT\$582 trillion. Meanwhile, the daily average number of transactions via the CIFS was 3,278, increasing by 7.51% over the previous year, and the daily average amount of funds transferred was around NT\$2.4 trillion, rising by 7.28% from a year before.



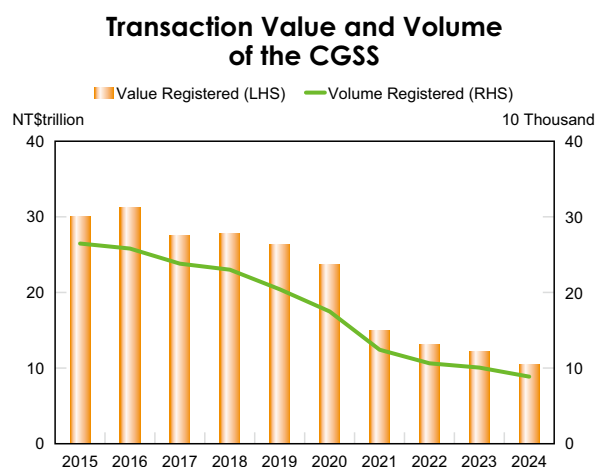
(2) Transactions via the CGSS

Established in September 1997, the CGSS is a system for issuance, transfer, redemption, and interest payment of book-entry central government securities. Since its inception, central government bonds have been issued in book-entry form. Treasury bills were included in this system in October 2001 and have been issued in book-entry form ever since.

⁷ To deal with the clearing and settlement of retail interbank payment transactions, the Bank agrees that all banks shall jointly open an Interbank Funds Transfer Guarantee Special Account at the Bank. It is a collective account consisting of individual sub-accounts designated for each participating bank.

Since April 2008, when the CGSS linked up with the CIFS, fund settlements, principal redemptions, and interest payments have been handled through the CIFS using a DVP mode. The DVP mode, promoted by the BIS, is an arrangement in a securities settlement system to ensure that securities delivery occurs at the same time as the funds transfer, effectively eliminating potential principal risk during the transaction process.

As of the end of 2024, there were 20 clearing banks with 1,666 branches that handled the registration of central government securities transfers. Transaction value and volume of the CGSS in 2024 were NT\$10.3 trillion and 89 thousand transfers, respectively.



Oversight of Payment and Settlement Systems

To ensure sound operation of domestic payment and settlement systems, the Bank conducted the following oversight activities in 2024:

(1) Monitoring the Operation of the Large-Value Payment Systems

The Bank continued to monitor the operation of the large-value payment systems in 2024, and required improvement by those participating institutions which applied for the CIFS operation time extensions because of system malfunctions or other contingencies.

(2) Requiring Payment Institutions to Submit Information on Payment Business

Payment system operators and electronic payment institutions were required by the Bank to submit information about their operations and activities on a regular basis. The Bank also kept close watch on the progress of innovative services in the payment industry, and assisted in providing sound retail payment infrastructure.

(3) Supervising Contingency Drills Performed by Clearing Institutions

To ensure business continuity of payment and settlement systems, the Bank supervised clearing institutions enhancing measures for sustaining core business operations under disaster scenarios, including implementing manual backup mechanisms when system malfunctions occur. Furthermore, the Bank, together with participants of the CIFS, conducted drills for maintaining clearing and

settlement operations in the event of network disruptions, ensuring that the backup systems would be activated promptly and that relevant personnel are familiar with contingency procedures.

(4) Performing Backup Drills with Clearing Banks

Since 2019, the Bank has supervised all clearing banks performing backup drills in the event of malfunction or line interruption of a CGSS participant's mainframe system. In October 2024, this drill was conducted successfully with all clearing banks.

(5) Urging Bills Market Participants to Develop Contingency Mechanisms

The Bank urged participating institutions in the bills market to establish contingency mechanisms for disaster scenarios and enhance their capacity to cope with surges in short-term bill transactions resulting from unscheduled holidays, such as typhoon days off. In addition, the Bank instructed the TDCC and the R.O.C. Bills Finance Association to explore and implement institutional improvements, including promoting the automation of certain processes such as the registration of commercial paper for financing purposes (often referred to as CP2), contract note revisions, and deferred transaction processing, in order to improve settlement efficiency.

(6) Organizing Conferences to Enhance Payment System Operation

The Bank invites the FSC and clearing institutions to jointly hold two conferences on "Promoting Sound Operation of the Payment Systems" every year. The conferences are convened separately by type of clearing institution. In 2024, the May conference was held for securities clearing institutions such as the TDCC, the TPEX, and the TWSE, while the one in November was attended by payment clearing institutions including the FISC, the TCH, and the NCCC. During the conferences, the Bank urged clearing institutions to continuously reinforce the resilience of payment systems, conduct drills for manual backup procedures under extreme scenarios, and actively fulfill their role as financial market infrastructure by working with financial institutions to promote sustainable finance.

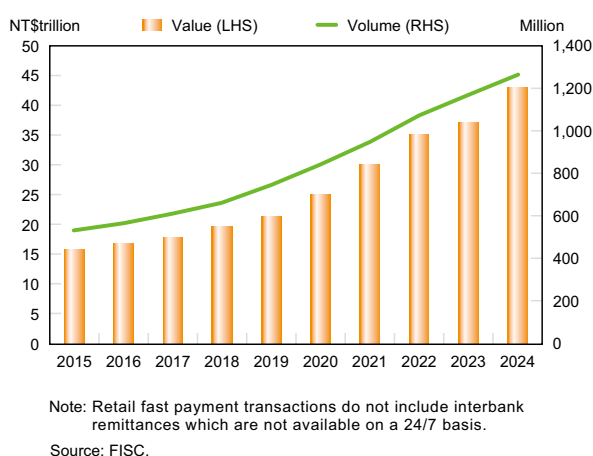
Urging FISC to Strengthen Retail Payment Infrastructure and Collaborate with Payment Service Providers in Promoting New Service Adoption

(1) Taiwan's retail payment system provides services such as interbank remittances, ATM withdrawals and transfers (including internet and mobile banking), shopping payments, and tax and bill payments. Except for the interbank remittance service, most of these services are available 24/7 through fast payment channels. With the widespread use of mobile phones and the internet, demand for instant payments continued to rise, resulting in steady year-on-year growth in

both the value and volume of retail fast payment transactions.

- (2) To enhance information transmission and to facilitate transfer of funds between electronic payment institutions, as well as between electronic payment institutions and financial institutions, the Bank urged the FISC to continue promoting the participation of electronic payment institutions in the "Common Inter-Institutional Electronic Payment Platform." The platform currently provides services in four areas including funds transfer, tax e-payment, bill e-payment, and shopping e-payment.⁸

Transaction Value and Volume of Retail Fast Payments



- (3) To gradually address the fragmentation of Taiwan's retail payment market, the FISC collaborated with financial institutions and electronic payment institutions to introduce TWQR, a common QR code payment specification, on the "Common Platform for Electronic Payment Platform Institutions" in 2023. With TWQR, merchants and consumers can complete shopping payment by using one common QR code. In addition, to further foster a robust payment ecosystem in Taiwan, the Bank instructed the FISC to expand the application scenarios of TWQR. These efforts included developing a TWQR-based transit QR code for use in the transportation industry, which helps promote cross-sector interoperability and allows the public to pay for transit services via electronic payment or mobile banking apps. Moreover, the FISC worked with its Japanese and South Korean counterparts to roll out a TWQR-based cross-border shopping e-payment service.

Proceeding with the CBDC Research Project

- (1) In response to digital developments, CBDC has become a focus of international research in recent years. The Bank has also conducted relevant studies and experiments, such as completing the "wholesale CBDC technical feasibility study" in 2020 and the "retail CBDC technology experimentation" in 2022, and establishing the "CBDC prototype platform."
- (2) The Bank is currently undertaking three key tasks: continuing extensive communication, strengthening platform technology, and deliberating on the legal framework. Only upon completion of these tasks will the Bank evaluate the feasibility of launching a pilot program.

⁸ The 42 participating financial institutions have provided all four services, whereas electronic payment institutions provide the type(s) of service(s) they see fit. At the end of 2024, all nine electronic payment institutions have provided shopping e-payment services.

- A. Continuing extensive communication: To understand public demand for CBDC and opinions on related designs, a written opinion survey was completed in 2024, and the results were published on the Bank's official website.⁹ In 2025, the Bank plans to hold at least eight in-person engagement events, including public hearings, forums, and briefings, to further gather feedback and enhance public awareness of CBDC.
- B. Strengthening platform technology: To assess the feasibility of future implementation of the "CBDC prototype platform," the Bank is conducting a trial project focused on supporting fund payment and settlement operations involved in the issuance of digital vouchers by government agencies. Leveraging this platform's architecture, the Bank is developing a "digital public infrastructure fund flow platform" and linking it with the Ministry of Digital Affairs' "shared foundational platform for government disbursement" to facilitate the payment, clearing, and settlement of funds under various government disbursement programs. Moreover, in response to the growing trend of asset tokenization, the Bank is collaborating with participating banks to explore the feasibility of using wholesale CBDC to support asset tokenization technologies.
- C. Deliberating on the legal framework: In conjunction with the above initiatives, the Bank continues to monitor legal and regulatory developments in major economies. In addition, legal issues related to CBDC will be discussed with stakeholders during the planned in-person engagement events.

⁹ The results of the opinion survey are available (in Chinese only) at: <https://knowledge.cbc.gov.tw/front/references/inpage/D5766911-2329-EF11-9108-00505694F3B3>.

5. Currency Issuance

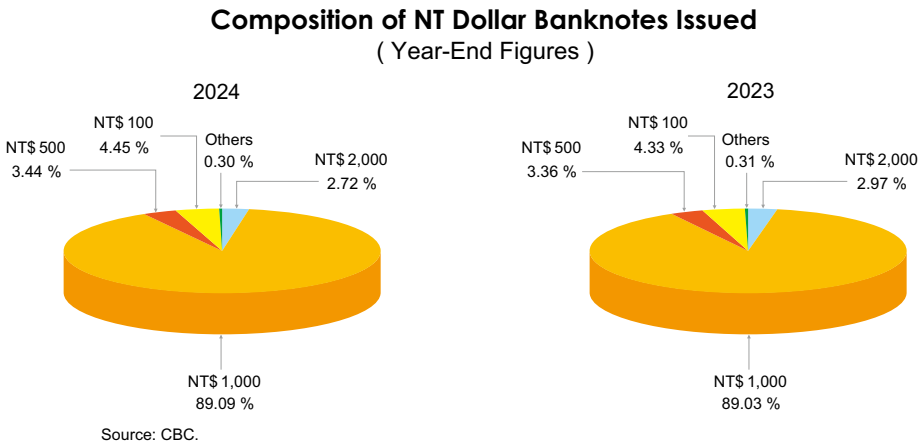
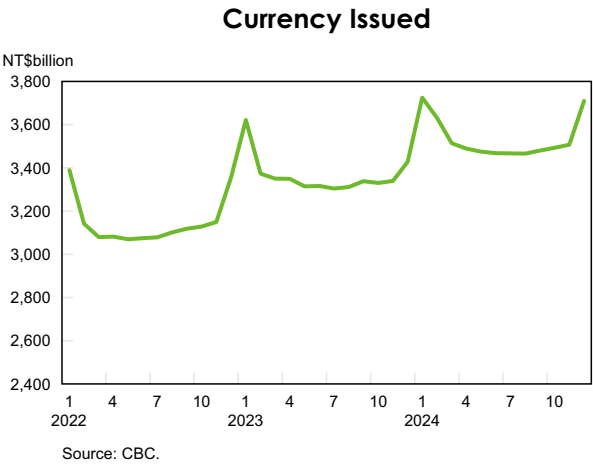
For the year 2024, the Bank, as the sole agency with the authority to issue banknotes and coins, continued to conduct currency issuance with a focus on maintaining an adequate supply of currency to meet public demand, which is dependent on domestic economic conditions, seasonal factors, and the development of noncash payment instruments. The Bank also issued commemorative coin sets to mark national events.

Furthermore, the Bank continued to promote public awareness of counterfeit deterrence and encourage the use of circulating currency through various channels.

Currency Issuance Increased to Meet Currency Demand

In 2024, the Bank ensured an adequate supply of currency to meet public demand. The amount of currency issued peaked at NT\$3,875.3 billion on February 7, the last business day before the Lunar New Year holidays, reflecting a temporary seasonal surge in cash demand. At the end of the year, the outstanding amount of currency issued was NT\$3,710.0 billion, an increase of NT\$281.6 billion or 8.21% over the previous year end.

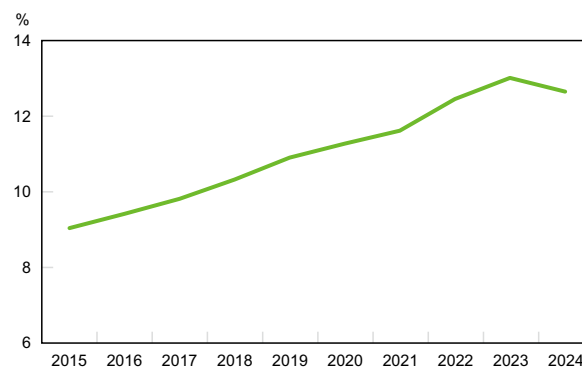
By denomination, the composition of NT dollar banknotes in circulation at the end of 2024 was similar to the end of 2023. The majority of circulating banknotes went for the NT\$1,000 note with a share of 89.09%, followed by the NT\$100 and NT\$500 notes with shares of 4.45% and 3.44%, respectively.



Ratio of Currency in Circulation to GDP Rose Steadily

As cash was still frequently used for small-value transactions, the public's demand for currency remained high. The ratio of currency in circulation to nominal GDP has shown an uptrend in recent years. However, with buoyant domestic economic activity in 2024 leading to a larger increase in nominal GDP, the ratio dropped by 0.37 percentage points to 12.69%, down from 13.06% in the previous year.

The Ratio of Public-Held Currency to GDP



Sources: 1. CBC.
2. DGBAS, Executive Yuan.

Two Commemorative Coin Sets Were Issued

In addition to currency issuance, the Bank may issue gold and silver coins and commemorative coins from time to time, such as for important ceremonies, national holidays, major international

Commemorative Coin Set for the Chinese Zodiac Year of the Dragon



Source: CBC.

events, or other significant national events. During 2024, the Bank issued a casting set of coins for the Chinese Zodiac Year of the Dragon and the commemorative gold and silver coins for the inauguration of the Sixteenth President and Vice President of the Republic of China (Taiwan).

Commemorative Coins for the Inauguration of the Sixteenth President and Vice President of the Republic of China (Taiwan)



Source: CBC.

Efforts to Encourage the Use of Circulating Currency and Raise Public Awareness of Counterfeit Money Continued in 2024

With the aim of deterring and preventing counterfeiting, reducing currency issuing costs, and protecting the environment by maximizing existing resources, the Bank launched several advertising campaigns during 2024 to enhance public understanding on the security features of NT dollar notes and coins and to promote the use of circulating currency.

While striving to improve the cleanliness of currency by inspecting returned banknotes and destroying damaged ones, the Bank also continued to urge the public to help maintain the

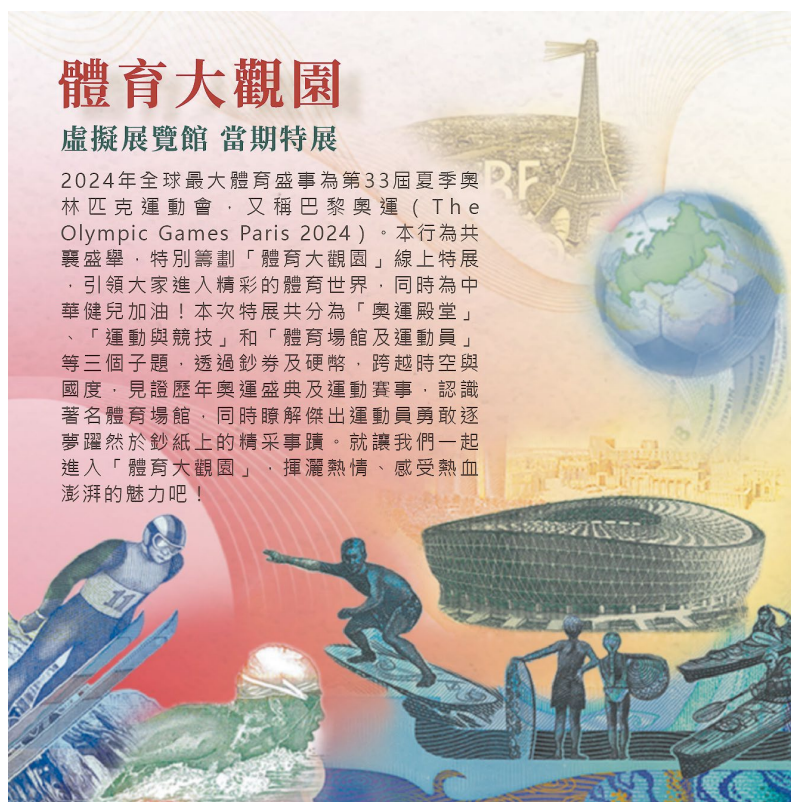
cleanliness of circulating notes and coins.

Educational materials for these campaigns were provided through multiple channels. For example, relevant videos were broadcast on media such as the Bank's website and mobile app, the Virtual Money Museum, and YouTube. Information was also posted on the Bank's Facebook page and published in magazines. Leaflets were distributed to the public and relevant institutions.

A Virtual Exhibition was Held on the Theme of Sports

The Bank's Virtual Money Museum has been running smoothly since it came online in June 2013. In response to increased use of mobile technologies and with the aim of providing optimal viewing experiences across devices, the Bank launched the upgraded version of the Virtual Money Museum website in August 2020. For instance, the Virtual Exhibition Hall of the upgraded website began to showcase banknotes from around the world classified into various themes. During 2024, the Bank held an annual virtual exhibition titled "A Grand Tour of Sports" to celebrate the Olympic Games Paris 2024, the world's largest sporting event.

Annual Exhibition 2024 of Virtual Money Museum—A Grand Tour of Sports



Source: CBC.

The Bank Continued to Promote the Visually Impaired-Friendly NT Dollar Banknote Identification Service

To help visually impaired people to better identify banknotes, the Bank has made multifaceted efforts from 2020 onwards, such as producing video material to introduce how to identify banknotes and distinguish the different denominations. The video is available on the Bank's website and local visually impaired support groups are encouraged to download it for educational purposes. Meanwhile, the Bank has developed the NT dollar banknote gauge card and instructed the Central Engraving and Printing Plant to conduct mass production. The Bank has also sent relevant personnel to local support groups to promote the use of the card and to distribute it for free to the visually impaired.

Raised-Dot Tactile Feature of NTD Banknotes (Left) and NTD Banknote Gauge Card (Right) for the Visually Impaired



Source: CBC.

6. Fiscal Agency Functions

As banker to the central government, the Bank fulfills its responsibilities by managing the treasury deposit account (TDA), handling central government agency deposit accounts, and undertaking the issuance, transfer and registration, redemption, and interest payment of central government bonds and treasury bills.

Managing the Treasury Deposit Account

The Bank manages the TDA on behalf of the Ministry of Finance, processing receipts and disbursements of the central government. In order to provide convenient services for government agencies and the general public, the Bank delegates the handling of treasury business to 14 financial institutions and their 366 branches, including three overseas branches located in New York, Los Angeles, and Paris. In addition, there are another 4,693 national tax collection agencies set in financial institutions. In 2024, the Bank received a total of NT\$4,998.7 billion in treasury deposits, increasing by NT\$253.7 billion or 5.35% over the previous year. Payments made on behalf of the national treasury were NT\$4,852.2 billion, an increase of NT\$23.7 billion or 0.49% from 2023. At the end of 2024, the TDA balance was NT\$207.1 billion, an increase of NT\$146.6 billion or 242.31% from the end of 2023.

Handling Central Government Agency Deposits

Central government agencies are required to make their deposits with the Bank or other delegated banks. At the end of 2024, the balance of central government agencies' deposits with the Bank amounted to NT\$263.9 billion, an increase of NT\$31.6 billion or 13.60% over 2023. Deposits with other delegated banks were NT\$784.0 billion at the end of 2024, decreasing by NT\$9.6 billion or 1.21%.

Enhancing the Efficiency of Electronic Payment Channels for Treasury Funds

To further enhance the diversity of treasury payment methods and promote non-cash payments, all treasury receipt and payment application forms have been revised, and the new versions were effective July 1, 2024. The barcodes on these forms have been changed from a horizontal layout to a vertical one to facilitate barcode scanning by bank personnel handling treasury transactions and to effectively reduce the operational risk associated with barcode reading errors. In addition, information about various treasury payment channels—such as interbank remittance, the "e-Bill National Payment Network" website and app, and QR code mobile payments—along with relevant instructions, have been listed on the treasury payment forms to enhance the overall efficiency of electronic treasury payment channels and improve convenience for payers.

Managing Central Government Bonds

As a fiscal agent, the Bank provides services related to the issuance, transfer and registration, redemption, and interest payment of central government bonds. The Bank also conducts the auctions of central government bonds. There are 55 domestic dealers qualified to directly participate in the auctions, including 23 banks, 18 securities companies, eight bills finance companies, five insurance companies, and Chunghwa Post.

In 2024, the Bank conducted 19 issues of central government bonds in book-entry form worth NT\$538.0 billion in total. Of this amount, 10-year bonds accounted for the lion's share of 39.59%, worth NT\$213.0 billion, followed by 5-year bonds, representing a share of 32.53% with an amount of NT\$175.0 billion.

In addition, the Bank paid NT\$416.4 billion in principal and NT\$81.4 billion in interest for central government bonds. At the end of 2024, the outstanding amount of central government bonds was NT\$6,034.1 billion, an increase of NT\$121.6 billion or 2.06% from the end of 2023.

Handling Treasury Bills

The Bank also handles the auctions of treasury bills. Currently, direct bidders include banks, insurance companies, securities companies, bills finance companies, and Chunghwa Post.

In 2024, the Bank conducted eight issues of book-entry treasury bills with a total amount of NT\$250 billion. The majority of the issuance went for 91-day bills with a value of NT\$125 billion, or a share of 50.00%. At the end of 2024, the outstanding amount of treasury bills was NT\$30 billion, the same as the previous year end.

7. Financial Inspection

Pursuant to the objectives and duties stipulated in *The Central Bank of the Republic of China (Taiwan) Act*, the Bank conducts targeted examinations to ensure the effective implementation of monetary, credit, and foreign exchange policies. The Bank has also established a report auditing system and a financial stability assessment framework to systematically monitor and assess possible sources of potential risks. The Bank adopts appropriate policies accordingly, in a timely manner to achieve the operational goal of financial stability. The following are the main tasks conducted in 2024.

Targeted Examination

Targeted examinations in 2024 were conducted on real estate mortgage loans and related fund flows, foreign exchange derivatives business involving the NTD exchange rate, inward and outward foreign exchange remittances, accuracy of regulatory reports of offshore banking units, operations of foreign currency exchange counters, etc.

Follow-up on Examination Findings

To ensure the effectiveness of the Bank's policy implementation, the Bank continued to track whether the financial institutions under inspection had improved their operations, based on the findings from the Bank's targeted examinations as well as the results of the FSC's financial examinations related to the Bank's operations or regulations. The financial institutions violating the *Regulations Governing the Extension of Mortgage Loans by Financial Institutions* were subjected to administrative actions by the Bank.

Strengthening Off-Site Monitoring

In 2024, the report auditing system was utilized to evaluate financial performance, business status and regulatory compliance of individual financial institutions as a reference for the supervision and inspection by the Bank and relevant authorities. Moreover, to reflect changes in the evolving financial environment and regulatory amendments, the Bank reviewed and modified the content of the report auditing analysis and evaluation. The Bank also leveraged visualization tools to improve the efficacy of data processing and analysis.

Improving Information Transparency of Financial Institution Operations

The Bank regularly compiles and publishes statistics on financial institutions, such as *Condition and Performance of Domestic Banks (Quarterly)* and *Business Overview of Financial Institutions*

(Yearly). All related information is disclosed on the Bank's website and available for inquiry and download, with the aim of strengthening the information transparency of financial institutions' operations and to reinforce market discipline.

In line with the government's open data policy, the financial and operational performance datasets of financial institutions are also regularly uploaded to the designated open government data platform.

Financial Stability Assessment

The Bank regularly conducts an analysis of financial institutions' business operations and their risk exposures so as to identify potential risks to the stability of the overall financial system. It also compiles financial soundness indicators and publishes the *Financial Stability Report* to keep the public updated on the state of the domestic financial system and sources of potential risks and to aid cross-border communication and information sharing.

In 2024, to enhance analytical effectiveness regarding financial stability, the Bank continued to improve the graphical user interface of credit and market risk stress-testing models and estimated domestic banks' value at risk (VaR) and unexpected losses from related risks. The Bank also compiled the Financial Vulnerability Index to identify vulnerabilities in the domestic financial system. Moreover, as a reference for the implementation of related policies and future tools, the Bank collected and studied the macroprudential tools of major central banks in addressing climate-related risks.

International Cooperation in Financial Supervision

In 2024, the Bank continued to actively engage in international cooperation related to financial supervision, such as participating in the 15th SEACEN Meeting of Deputy Governors in Charge of Financial Stability and Banking Supervision, and the 26th SEACEN-FSI Conference of the Directors of Supervision of Asia-Pacific Economies concurrently held with the 37th Meeting of Directors of Supervision of SEACEN Members. The Bank also hosted a visit by banking regulators and/or supervisors in Asia.

8. Participation in International Activities

The Bank is committed to engaging in international activities and continues to enhance collaboration with international financial organizations and other central banks. The Bank is a member of the Asian Development Bank (ADB), the Central American Bank for Economic Integration (CABEI), and the South East Asian Central Banks (SEACEN) group. Moreover, the Bank continually strengthens its ties with international forums and institutions such as the Bank for International Settlements (BIS) and the Inter-American Development Bank (IDB). Through participation in international conferences, training courses, and forums, the Bank endeavors to maintain close relationships with other central banks by exchanging views and sharing policy experience on current financial and economic issues.

The Bank continued its efforts in taking part in international activities during 2024. The Bank attended the 59th SEACEN Governors' Conference in Mumbai, India, from February 15 to 16. Through this conference, the Bank and other member banks acknowledged the challenging trade-offs emerging from different policy objectives and discussed approaches to address them using diverse sets of policy tools.

In addition, the Bank attended the 60th SEACEN Governors' Conference in Seoul, South Korea, during December 6 to 7. At this conference, the Bank and other member banks shared views on how trade tensions in the form of rifts and tariffs could threaten the trajectory of global growth, while also discussing the fundamental changes that central banks face nowadays with major structural shifts, driven by digitization, the advent of artificial intelligence (AI), the green transition, population aging, and climate change.

The Bank also participated in the meetings held by other international organizations, such as the IDB's 64th Annual Meeting of the Board of Governors in Punta Cana, the Dominican Republic, during March 6 to 10, the ADB's 57th Annual Meeting of the Board of Governors in Tbilisi, Georgia, from May 2 to 5, the CABEI's 64th Ordinary Meeting of the Board of Governors in Tegucigalpa, Honduras, on May 13, the BIS' 94th Annual General Meeting in Basel, Switzerland, during June 29 to 30, and the 23rd SEACEN Executive Committee Meeting held virtually on August 30.

Chronology of Events of the CBC in 2024



Chronology of Events of the Central Bank of the Republic of China (Taiwan)¹ in 2024

Date	Event
Jan. 22	The CBC issued a commemorative coin set for the Jia Chen Year of the Dragon (2024).
Mar. 21	The CBC's Board decided to raise the discount rate, the rate on refinancing of secured loans, and the rate on temporary accommodations by 0.125 percentage points each to 2%, 2.375%, and 4.25%, respectively, effective from March 22, 2024.
29	The CBC increased the remuneration rates on banks' B reserve accounts with the CBC. Reserves from demand deposits would receive interest at 0.771% per annum, while those from time (savings) deposits would receive interest at 1.459% per annum.
May 20	The CBC issued a commemorative gold coin and a commemorative silver coin to commemorate the inauguration of the Sixteenth President and Vice President of the Republic of China (Taiwan).
Jun. 13	<p>The CBC's Board decided on the following measures:</p> <ol style="list-style-type: none"> 1. Keeping the discount rate, the rate on refinancing of secured loans, and the rate on temporary accommodations unchanged at 2%, 2.375%, and 4.25%, respectively. 2. Amending the <i>Regulations Governing the Extension of Mortgage Loans by Financial Institutions</i> to lower the loan-to-value (LTV) ratio caps on housing loans extended to the second housing loans taken out by natural persons, effective from June 14, 2024. 3. Increasing the reserve requirement ratios on NT dollar demand deposits and time (savings) deposits by 0.25 percentage points, effective from July 1, 2024.

¹ Herein referred to as the CBC.

Date	Event
18	The CBC reappointed the Taipei Branch of Mizuho Bank as the clearing bank for Japanese yen on the foreign currency clearing platform.
Jul. 4	The CBC amended the <i>Directions for Banking Enterprises While Assisting Customers in Declaring Foreign Exchange Receipts and Disbursements or Transactions</i> and the <i>Directions for Domestic Securities Firms Approved to Conduct Foreign Exchange Business While Assisting Customers in Declaring Foreign Exchange Receipts and Disbursements or Transactions</i> , in order to simplify foreign exchange settlement operations by the banking industry and domestic securities firms approved for forex business and to facilitate dual-currency trading for ETFs on the OTC market, both effective immediately.
Aug. 21	The CBC met with 34 domestic banks and credit cooperatives to urge them to draw up a self-disciplinary improvement plan covering a one-year horizon (from the fourth quarter of 2024 to the fourth quarter of 2025) to reduce over-concentration of credit resources in loans to the real estate sector.
Sep. 19	<p>The CBC's Board decided on the following measures:</p> <ol style="list-style-type: none"> 1. Keeping the discount rate, the rate on refinancing of secured loans, and the rate on temporary accommodations unchanged at 2%, 2.375%, and 4.25%, respectively. 2. Amending the <i>Regulations Governing the Extension of Mortgage Loans by Financial Institutions</i>, including introducing a new restriction to grant no grace period for a first outstanding home loan taken out by a natural person with home ownership but no housing loans, lowering the LTV ratio cap on natural persons' second home loans and expanding the applicable scope nationwide, and further lowering the LTV ratio caps on housing loans extended to corporate entities, high-value housing loans, the third (or more) housing loans taken out by natural persons, and

Date	Event
	<p>unsold housing unit loans, effective from September 20, 2024.</p> <p>3. Increasing the reserve requirement ratios on NT dollar demand deposits and time (savings) deposits by 0.25 percentage points each, effective from October 1, 2024.</p>
Oct. 18	The CBC reappointed Mega International Commercial Bank as the clearing bank for the euro on the foreign currency clearing platform.
31	The CBC raised the ceilings on the annual aggregate forex settlement amount of an association or an individual from US\$5 million to US\$10 million, and that of a company or a firm from US\$50 million to US\$100 million, effective from November 1, 2024.
Dec. 19	The CBC's Board decided to keep the discount rate, the rate on refinancing of secured loans, and the rate on temporary accommodations unchanged at 2%, 2.375%, and 4.25%, respectively.

Financial Statements of the CBC

1. Balance Sheet

Unit: NTD Millions

	December 31 2024	December 31 2023	Change	
			Amount	%
Assets				
Foreign Assets	19,051,664	17,709,401	1,342,263	7.58
Due from Domestic Banks	808,524	903,526	-95,002	-10.51
Loans and Accommodations to Financial Institutions	308,288	288,731	19,557	6.77
Other Assets	738,020	636,257	101,763	15.99
Total Assets	20,906,496	19,537,915	1,368,581	7.00
Liabilities				
Currency Issued	3,709,964	3,428,365	281,599	8.21
Deposits of Financial Institutions	3,136,871	2,788,740	348,131	12.48
Certificates of Deposit Issued	7,331,995	8,135,935	-803,940	-9.88
Redeposits of Financial Institutions	1,959,436	1,997,049	-37,613	-1.88
Government Deposits	471,487	293,028	178,459	60.90
Other Liabilities	2,941,552	1,592,580	1,348,972	84.70
Total Liabilities	19,551,305	18,235,697	1,315,608	7.21
Equity	1,355,191	1,302,218	52,973	4.07
Total Liabilities and Equity	20,906,496	19,537,915	1,368,581	7.00

Note: Figures for 2024 are unaudited. Figures for 2023 are audited by the National Audit Office.

2. Income Statement

Unit: NTD Millions

	2024	2023
Income		
Interest Income	450,599	435,695
Fee Income	100	94
Foreign Exchange Gains	110,933	111,487
Revenue from Trust Investment	10,919	10,189
Subsidiaries' Investment Income	2,230	2,386
Others	1,133	5,637
Total Income	575,914	565,488
Expenses		
Interest Expenses	164,546	148,491
Fee Expenses	247	226
Expenses for Coin Issuance	1,216	1,476
Expenses for Banknote Issuance	3,730	2,509
Allowances	150,057	173,029
Operating Expenses	1,685	1,591
Administrative Expenses	571	547
Others	841	993
Total Expenses	322,893	328,862
Net Income	253,021	236,626

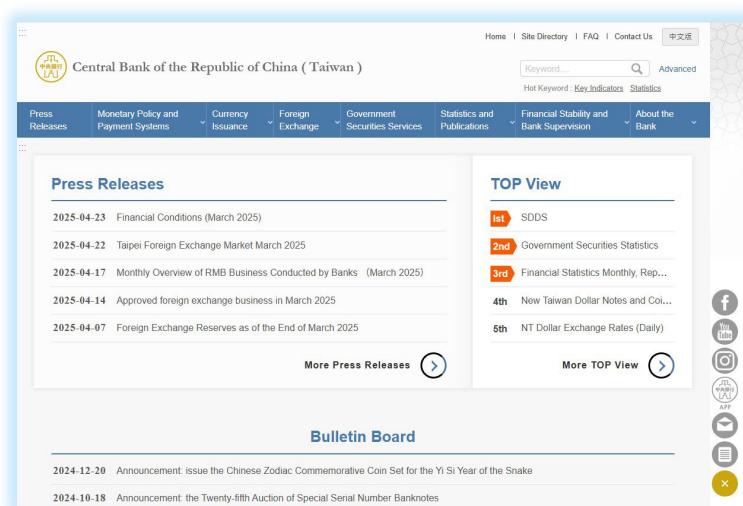
Note: Figures for 2024 are unaudited. Figures for 2023 are audited by the National Audit Office.

APPENDIX: CENTRAL BANK OF THE REPUBLIC OF CHINA (TAIWAN) WEBSITE

I. Official Homepage

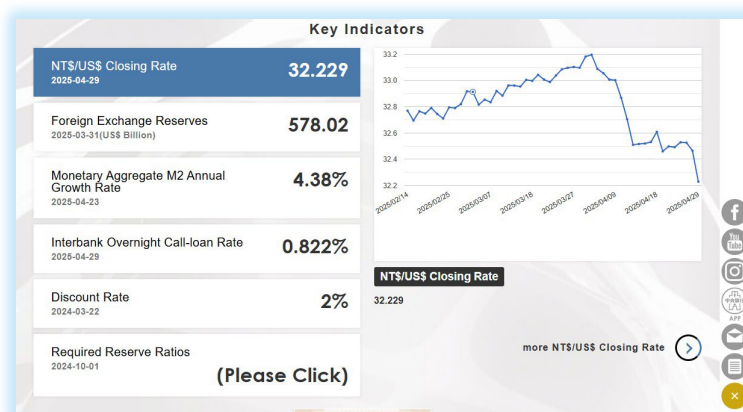
 <https://www.cbc.gov.tw/en/mp-2.html>

Introduces the Bank's operations regarding monetary policy and payment systems, currency issuance, foreign exchange, government securities services, as well as financial stability and bank supervision, and contains other crucial information such as press releases, statistics and publications, and general information about the Bank.



▼ Key Indicators

Displays data charts of the Bank's key indicators that are periodically updated, such as the NT\$/US\$ closing rate, foreign exchange reserves, monetary aggregate M2 annual growth rate, and important policy-related and market interest rates.



▼ FAQ

 <https://www.cbc.gov.tw/en/lp-2168-2.html>

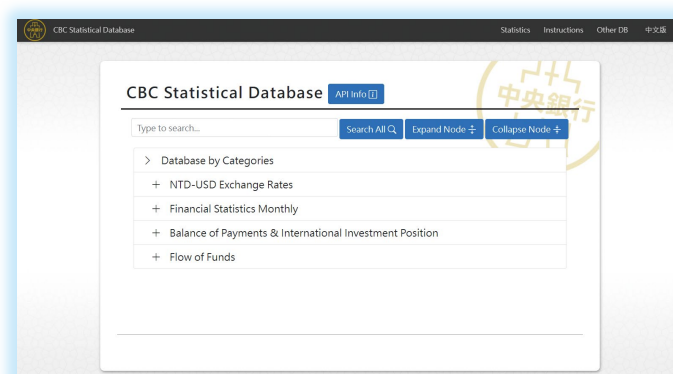
Provides a list of frequently asked questions and answers regarding the Bank's operations and policy-related issues. Information here is updated as needed.

II. Statistics and Publications

▼ Statistics

 <https://cpx.cbc.gov.tw/Tree/TreeSelect?mp=2>

Presents statistical data released by the Bank for browsing, querying, and downloading.



▼ Publications

 <https://www.cbc.gov.tw/en/lp-535-2.html>

- Provides access to periodical publications, including statistical publications (e.g., financial statistics, balance of payments, flow of funds, and condition and performance of domestic banks), quarterly bulletins, financial stability reports, and annual reports.
- Offers occasional notes or reports on topics related to the Bank's operations or international and domestic economic and financial conditions.

III. Monetary and Financial Knowledge Hub (Chinese Only)

 <https://knowledge.cbc.gov.tw/front/index>

Introduces various kinds of monetary and financial knowledge with up-to-date, interesting, and easy-to-understand contents to facilitate public understanding of the Bank's policies and operations. Information here covers a wide range, including short reports on special topics such as globalization and the US-China trade conflict, the latest news on central banks worldwide, major events in monetary and financial history, current issues in finance, and videos introducing the Bank's operations and NT dollar-related knowledge.



IV. Virtual Money Museum and Virtual Exhibition Hall

▼ Virtual Money Museum

 <https://museum.cbc.gov.tw/web/en-us>

Presents information about currency issuance, including the history of banknotes and coins, banknotes and coins in circulation, coin sets and commemorative banknotes and coins, and security features of the NT dollar.



▼ Virtual Exhibition Hall (Chinese Only)

 <https://museum.cbc.gov.tw/museum>

Allows viewers to browse banknotes and coins featured in various themes.



V. Gender Equity Hub (Chinese Only)

 <https://www.cbc.gov.tw/tw/np-6250-1.html>

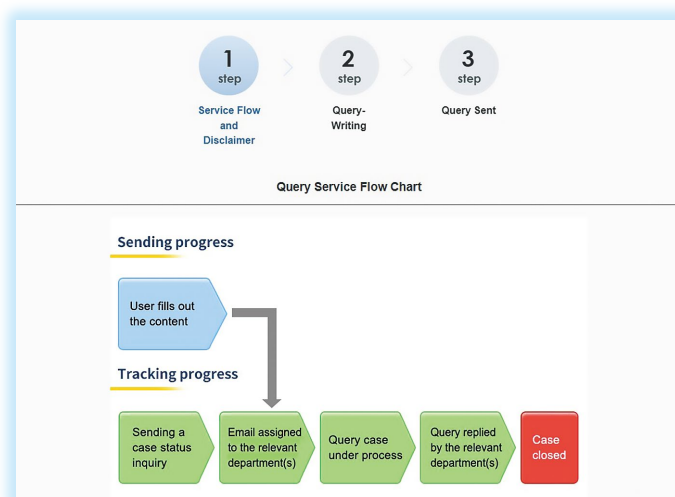
Showcases a variety of works and knowledge on gender equity, including the Bank's promotion plans and progress reports, gender statistics and indicators, gender analysis reports, and publications and resources aimed at advancing gender equity.



VI. Contacting the Bank

 <https://www.cbc.gov.tw/en/sp-opma-form-2.html>

For questions or suggestions, please contact the Bank through the following steps. We will reply to you within 7 working days.



VII. Official Social Media Channels and Mobile Apps (Chinese Only)

The Bank also provides the latest news and announcements on social networking sites and our official mobile apps. Stay up-to-date and communicate with us by following the Bank's social media accounts as listed below and/or downloading our mobile apps on iOS or Android devices.

Facebook	https://www.facebook.com/cbc.gov.tw/
YouTube	https://www.youtube.com/user/TheCBCTube
Instagram	https://www.instagram.com/cbc.gov.tw/
Android	https://play.google.com/store/apps/details?id=hyweb.mobilegip.gip_cbc
iOS App	https://appsto.re/tw/LyAH6.i

Abbreviations

ADB	Asian Development Bank
BIS	Bank for International Settlements
BoJ	Bank of Japan
BoK	Bank of Korea
BOP	balance of payments
CABEI	Central American Bank for Economic Integration
CBC	Central Bank of the Republic of China (Taiwan)
CBDC	central bank digital currency
CD	certificate of deposit
CGSS	Central Government Securities Settlement System
CIER	Chung-Hua Institution for Economic Research
CIFS	CBC Interbank Funds Transfer System
COFER	Currency Composition of Official Foreign Exchange Reserves
CPI	consumer price index
DBU	domestic banking unit
DGBAS	Directorate-General of Budget, Accounting and Statistics
DVP	delivery-versus-payment
ECB	European Central Bank
Fed	Federal Reserve (System)
FINIs	foreign institutional investors
FISC	Financial Information Service Co., Ltd.
FOMC	Federal Open Market Committee
FSC	Financial Supervisory Commission
GDP	gross domestic product
GNI	gross national income
ICT	information and communication technology
IDB	Inter-American Development Bank
IMF	International Monetary Fund
LTV	loan-to-value
NCCC	National Credit Card Center of R.O.C.
NCD	negotiable certificate of deposit

n.i.e.	not included elsewhere
NTD	New Taiwan dollar
OBU	offshore banking unit
OIU	offshore insurance unit
OSU	offshore securities unit
PBoC	People's Bank of China
PPI	producer price index
PVP	payment-versus-payment
Repo	repurchase agreement
SEACEN	South East Asian Central Banks
SITE	securities investment trust enterprise
SMEs	small and medium enterprises
TAIEX	Taiwan Stock Exchange Capitalization Weighted Stock Index
TCH	Taiwan Clearing House
TDA	treasury deposit account
TDCC	Taiwan Depository and Clearing Corporation
TDR	Taiwan depository receipt
TPEX	Taipei Exchange
TWSE	Taiwan Stock Exchange Corporation
Var	value at risk
YCC	yield curve control

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