### II. Macro environmental risk factors

### 2.1 International economic and financial conditions

In 2024, monetary policies of major central banks gradually shifted toward easing. The global economy experienced moderate growth, while inflationary pressures eased alongside improvements in labor market conditions. These developments, coupled with market expectations of future interest rate cuts, led to accommodative financial conditions.

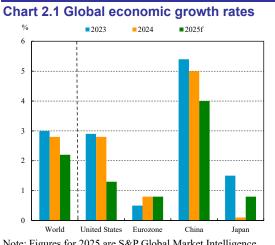
Looking ahead to 2025, US tariff policies are expected to exert adverse effects on global economic growth and inflation. In particular, the heightened uncertainty stemming from the tariff measures has already triggered significant volatility in global financial markets and led to a notable tightening of financial conditions. If financial asset prices continue to correct, and volatility in the sovereign bond markets persists, the risks to financial stability could increase and therefore warrant close and ongoing attention.

### 2.1.1 International economic and financial conditions in 2024

### Global economic growth remained steady, and inflationary pressures eased

Although global economic growth in 2024 slowed compared to 2023, it remained stable as major central banks gradually shifted toward a more accommodative monetary stance. According to S&P Global, 11 the global economic growth rate for 2024 was estimated 2.1), 2.8% (Chart with economic performance diverging across major economies.

In the US, economic momentum was strong, supported by resilient consumer spending. In



Note: Figures for 2025 are S&P Global Market Intelligence estimates.

Source: S&P Global Market Intelligence (2025/5/15).

<sup>11</sup> See Note 1.

the euro area, although manufacturing and goods exports remained weak, continued expansion in private consumption led to slightly higher growth than in 2023. In contrast, China's growth momentum was subdued owing to a sluggish property market and weak consumer demand, accompanied by rising deflationary risks. Japan's economic growth has slowed to near stagnation, primarily reflecting temporary production halts in the auto industry caused by certification violations, as well as the effects of a high base from the previous year.<sup>12</sup>

### 

As international oil and grain prices declined, and nominal wage growth slowed amid a gradually stabilizing labor market, global inflation in 2024 eased from the decades-high levels seen in recent years. According to S&P Global, <sup>13</sup> the global CPI inflation rate fell to 4.5% in 2024, down from 5.6% in 2023 (Chart 2.2), indicating a broad moderation in inflationary pressures. While core goods price inflation declined notably, services price inflation remained somewhat sticky and continued to run above pre-COVID-19 averages, resulting in slower progress toward disinflation in some economies.

### Global financial conditions eased

In 2024, as post-pandemic pressures stemming from supply chain disruptions and surging commodity prices gradually subsided, global labor markets became more balanced and inflation steadily converged toward central bank targets. Most central banks adopted a more accommodative monetary stance, with the US, the euro area, and the UK all cutting their policy rates. Supported by widespread expectations of declining interest rates and improved investor sentiment, volatility in global financial markets declined. As a result, financial conditions eased considerably compared to the end of 2023, although they tightened slightly after October.

In an effort to revive sluggish economic growth, China intensified its monetary easing efforts, which led to a narrowing of credit spreads on corporate bonds. Consequently, financial conditions shifted rapidly from restrictive to expansionary, with a notably steeper decline in

<sup>&</sup>lt;sup>12</sup> Japan's economic growth accelerated significantly in 2023, driven by a surge in inbound tourism.

<sup>13</sup> See Note 1.

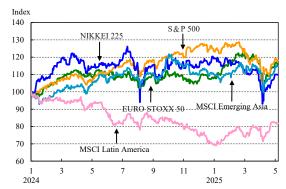
financial condition indicators compared to other major economies.

### Financial markets rebounded steadily

Amid easing inflation in 2024, global stock markets, with the exception of Latin America, staged a gradual recovery. However, in August, owing to weaker-than-expected earnings guidance in the technology sector and growing concerns over the US economic outlook, US stock markets turned downward, dragging down stock markets in other economies as Since October, US stocks have recovered, buoyed by optimism following election victory. Trump's Nonetheless, heightened uncertainty over trade policy has limited upward momentum in other markets (Chart 2.3).

In the bond market, US government bond yields were highly volatile throughout the first half of 2024. Although the Federal Reserve System (Fed) began a rate-cutting cycle in the second half of the year, uncertainty

**Chart 2.3 Major international equity indices** 

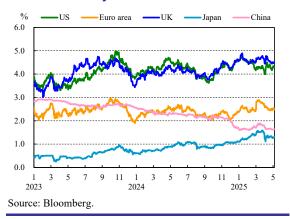


Notes: 1. January 1, 2024 = 100.

The EURO STOXX 50 refers to a stock index consisting of the largest 50 stocks in the 12 major economies of the euro area.

Source: Bloomberg.

Chart 2.4 10-year government bond yields in major economies



surrounding the terminal rate persisted, driven by recession fears, elevated inflation, and increased government bond issuance under new US fiscal policies. These factors led to a rise in the term premium on long-term government bonds, pushing 10-year yields higher (Chart 2.4).

### 2.1.2 Impact of Trump's tariff policies on the global economy and financial markets

### Uncertainty in trade policy exerts negative effects on global economic growth and inflation

In October 2024, as markets began to anticipate Donald Trump's potential re-election, investors engaged in the so-called "Trump trade" in response to the perceived implications of his proposed tariff policies. Initially, markets reacted positively to expectations of tax cuts, propelling financial markets to higher levels. Nevertheless, Trump's policies were perceived as aggressive and unpredictable, exerting varied impacts on economic growth momentum, inflation, and financial markets across major economies. The uncertainty surrounding trade policy, with a particular focus on tariff measures, intensified considerably. Correspondingly, global policy uncertainty indices registered a significant increase (Chart 2.5), reflecting rising market concerns over changes in the future trade landscape. These concerns may have farreaching effects on global supply chain restructuring, cross-border capital flows, and portfolio allocation strategies.

Following President Trump's inauguration in January 2025, a series of tariff measures were announced, including reciprocal tariffs targeting major global trading partners.<sup>14</sup> These actions heightened uncertainty in the global trade environment and posed downside risks to the world

financial economy and markets. widespread use of tariffs has also further increased the unpredictability of monetary policy decisions among central worldwide. The Fed chair Jerome Powell emphasized that, while tariffs may cause a temporary rise in inflation, the Fed must balance its dual mandate of price stability and maximum employment. The European Central Bank (ECB), despite cutting rates again in April 2025, also underscored the highly uncertain environment and refrained from providing forward guidance on interest rates, highlighting its flexible and cautious policy stance.

Note: The uncertainty measures are indices that quantify media attention to global news related to world uncertainty (WUI), economic policy uncertainty (EPU), and trade policy uncertainty (TPU).

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21 22

19

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Source: IMF (2025), World Economic Outlook, April

2015

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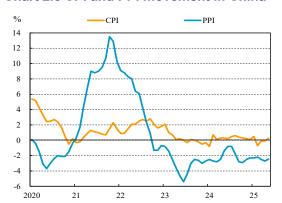
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**Chart 2.5 Policy uncertainty indices** Index TPU (RHS) 70,000 700 60,000 600 50,000 500 40,000 400 30,000 300 20,000 200 10,000 100

<sup>14</sup> See Note 2.

Although the US has recently announced a 90day pause on the reciprocal tariff measures, policy uncertainty and adverse economic spillovers are likely to persist. S&P Global<sup>15</sup> projects that global economic growth will moderate to 2.2% in 2025 (Chart 2.1), marking the weakest pace since the 2008 global financial crisis, excluding the COVID-19 pandemic. Concurrently, the US CPI annual growth rate is anticipated to rise to 3.4% (Chart 2.2). The US tariff measures are expected to have a particularly strong impact on Canada,

### Chart 2.6 CPI and PPI movement in China



Note: The data in the chart are monthly figures, each comparing the given month with the same month of the previous year. Source: S&P Global Market Intelligence (2025/5/15).

Mexico, China, and the US itself. As tariffs constrain capital formation, their effects will likely expand over time. The International Monetary Fund (IMF)<sup>16</sup> projects that global GDP will be reduced by 0.6 pps by 2027. Even so, the inflationary pressures stemming from tariff hikes will be partially offset by the disinflationary effects from reduced economic activity. As a result, global inflation is forecast to edge up only marginally, by approximately 0.1 pps between 2025 and 2026.

After Trump announced the implementation of reciprocal tariffs, China responded with retaliatory measures. Both countries subsequently raised tariff rates in succession, triggering "an upward spiral of tariffs" that further escalated US-China trade tensions and even resulted in economic decoupling between the two nations. These developments would exert substantial pressure on China's export-oriented economy. Apart from external challenges, China is also grappling with internal economic headwinds, including a persistently sluggish real estate sector, elevated local government debt burdens, and subdued domestic demand caused by weak consumer confidence. The IMF<sup>17</sup> projects that China's economic growth rate will fall to 4.0% in 2025. Meanwhile, S&P Global<sup>18</sup> expects a notable increase in the probability that China's annual CPI growth will ease to 1.0%. The producer price index (PPI) has also remained weak (Chart 2.6), signaling a mounting risk of the economy entering a deflationary spiral. Given China's role as a key global manufacturing exporter, the simultaneous escalation of the US-China trade tensions and rising internal deflationary risks in China may lead to cascading effects on global prices and trade conditions.

<sup>15</sup> See Note 1.

<sup>&</sup>lt;sup>16</sup> IMF (2025), "Chapter 1: Global Prospects and Policies," World Economic Outlook, April.

<sup>&</sup>lt;sup>17</sup> See Note 16.

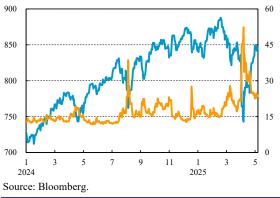
<sup>18</sup> See Note 1.

### Global financial markets experienced substantial disruptions following US tariff measures, accompanied by a noticeable tightening in financial conditions

In the first quarter of 2025, US tariff policies sparked investor anxiety over the possibility of stagflation, culminating in the weakest performance of US equities since 2022. Following the Trump administration's April 2



Chart 2.7 MSCI World Index and VIX Index



announcement of reciprocal tariffs, global stock markets plunged over several days, risk-off sentiment dominated, and the VIX index spiked sharply. However, on April 9, when the Trump administration announced a 90-day suspension of reciprocal tariffs for all economies except China, both global stock markets and the VIX index stabilized, revealing how investor sentiment and market dynamics are highly reactive to developments in trade policy (Chart 2.7). In bond markets, US bond yields have fluctuated markedly amid heightened uncertainty surrounding tariff policies since the beginning of 2025. In Japan, a policy rate hike in early 2025, coupled with renewed inflationary pressures, drove government bond yields sharply higher, reaching levels unseen since 2008. However, yields later retreated owing to intensified market risk aversion triggered by the US reciprocal tariff measures. In China, amid escalating trade tensions with the US, expectations of a more accommodative monetary policy stance by the People's Bank of China have increased, placing downward pressure on long-term government yields (Chart 2.4).

Prior to the announcement of US tariff policies, stock valuations in most advanced economies were at elevated levels, and corporate bond spreads had tightened. Thereafter, repeated shifts in tariff policies caused a pronounced rise in market volatility, contributing to an evident tightening in financial conditions. In contrast, emerging economies outside China experienced a more moderate degree of financial tightening, as relatively stable exchange rates helped offset the adverse effects of falling stock prices.

### 2.2 Domestic macro environment

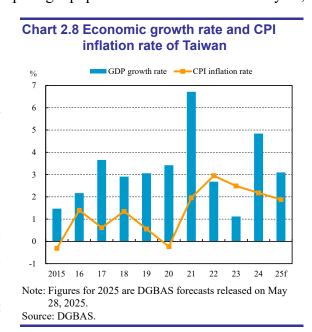
In 2024, strong exports and investment supported steady economic growth, with falling inflation and a recovering housing market. In early 2025, the economy continued to grow, but encountered some external uncertainties, such as US reciprocal tariffs. If these risks escalate, they could adversely impact the corporate sector, household sector, and real estate market stability, warranting close monitoring and prudent responses.

### 2.2.1 Domestic economic conditions

In 2024, continued growth in emerging technology applications boosted export dynamics of related domestic supply chains and led to profit growth in the corporate sector. Coupled with an increase in private investment momentum, the annual economic growth rate hit 4.84%, reflecting steady expansion. Meanwhile, the CPI and core CPI growth rates fell to 2.18% and 1.88%, respectively, indicating a sustained gradual downward trend in inflation (Chart 2.8).

Looking ahead to 2025, with domestic demand and exports expected to maintain growth momentum, the Bank forecasted in March that the annual economic growth rate would reach 3.05%. Inflation is expected to decline gradually, with annual CPI inflation forecasted to ease to 1.89% and annual core CPI (1.79%) likely to stay below 2% for the second consecutive year. However, given the high uncertainty surrounding US tariff policies, the DGBAS forecasted in May that economic growth could slow significantly in the second half of 2025. Nevertheless, strong exports of AI and high-performance computing equipment in the first half of the year,

along with early inventory buildup by clients in response to US tariff measures, led to betterthan-expected export performance. Accordingly, the DGBAS revised its 2025 economic growth forecast to 3.10%, slightly down by 0.04 pps from its February forecast. Additionally, falling international oil and raw material prices, combined appreciation of the NT dollar against the US dollar, are expected to ease import cost pressures and curb domestic inflation. As a result, the DGBAS lowered its 2025 annual CPI inflation forecast to 1.88%, the lowest level since 2021.



Nevertheless, the spillover effects of the US announcement of reciprocal tariff policies are likely to exacerbate economic uncertainties both domestically and globally. Should the tariffs be fully implemented, demand for Taiwan's information and communication technology products may be postponed or weakened, dampening export momentum across related supply chains. Furthermore, if Taiwan's traditional industries are subject to higher tariff rates compared to those imposed on competitor economies, their export competitiveness could be undermined, limiting export growth and, in turn, potentially amplifying downside risks to the economy. Several investment banks currently estimate that a 32% tariff on Taiwan could lower the 2025 economic growth rate by 0.4 to 1.1 pps, 19 while the DGBAS and the National Development Council project a decline of 0.43 to 1.61 pps. 20

On the other hand, US tariff policies could also generate positive effects for Taiwan's economy. Taiwan's AI and other emerging technology-related supply chains maintain a global competitive edge, which may sustain overall export performance. Strong demand for these technologies, along with inventory buildup by firms in the first and second quarters of 2025, is expected to support corporate investment. In addition, divergent reciprocal tariff rates across countries could allow Taiwanese firms to benefit from order reallocation. In May 2025, S&P Global forecasted Taiwan's economic growth at 2.88%, up by 0.26 pps from its April estimate. As for domestic prices, the inflationary impact of US reciprocal tariffs on Taiwan is expected to be limited. However, recent years have seen shorter adjustment cycles in core CPI, reflecting volatility in international commodity prices, geopolitical risks, and climate change related factors. These developments may reshape Taiwan's inflation dynamics and pose new challenges for monetary policy formulation and implementation (Box 1).

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<sup>&</sup>lt;sup>19</sup> Specifically, the estimates were provided by Nomura (assessed on April 3, 2025; a reduction of 0.4 pps), Goldman Sachs (April 4, 2025; a reduction of 1.0 pp), and Bank of America and Standard Chartered (April 4, 2025; a reduction of 1.1 pps).

Referencing the minutes of the 7th plenary meeting of the Economics Committee, 3rd session of the 11th congress of the Legislative Yuan, held on April 9, 2025, and the DGBAS special report, "Impact of the Trump Administration's Reciprocal Tariff Policy on Taiwan's Stock and FX Markets, Economic Growth, Prices, and Real Estate Market, and Response Measures," released on April 10, 2025.

### Box 1

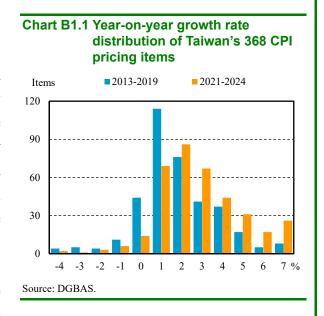
### Exploring the recent changes in Taiwan's inflation structure through price adjustment intervals

During the post-pandemic period from 2021 to 2022, as global vaccine coverage gradually increased and economic activity progressively resumed, the world began to emerge from the shadow of the pandemic, and demand started to recover. However, supply chain bottlenecks stemming from the pandemic, which had not yet been fully alleviated, together with geopolitical tensions such as the Russia-Ukraine war, disrupted the global supplydemand balance, thereby driving up international prices of major commodities, including energy and food. Taking the United States and the euro area as examples, these factors, coupled with tight labor markets in the post-pandemic era, forced firms to implement frequent and sizable price modifications to maintain profit margins. The shift in price adjustment intervals, in addition to exerting upward pressure on inflation across economies, has affected price rigidity and shaped inflation expectations. As a result, these structural changes in pricing behavior have become a focus for central banks in major economies such as the US and the euro area. In light of these developments, this box attempts to construct an index measuring the price adjustment intervals of various items in Taiwan's CPI. This index assesses changes in Taiwan's inflation structure before and after the pandemic (i.e., from 2016 to 2019 and from 2021 to 2024), as a general reference.

### 1. Impact and empirical findings on post-pandemic inflation and price adjustment interval changes

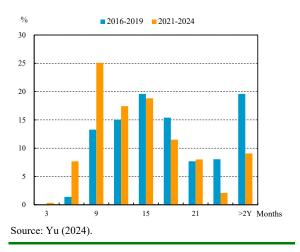
### 1.1 Recent changes in Taiwan's inflation structure

Observing historical price changes in Taiwan, inflation generally followed a low and stable trend before 2020, with the annual CPI inflation rate typically fluctuating around 1%. Between 2013 and 2019, of the 368 items surveyed in Taiwan's CPI, 114 items had an average annual growth rate of 0% to 1%, accounting for about one-third of the total items and indicating relatively mild price changes. Nonetheless, since 2021, owing to



global supply chain bottlenecks, geopolitical tensions like the Russia-Ukraine war, and climate change, the imported prices of raw materials such as crude oil and food have surged. This cost pressure originating from the supply side has gradually been transmitted to various components of the domestic CPI, driving a notable upward trend in the prices of many commodities. domestic Among abovementioned 368 pricing items in Taiwan's CPI basket, 185 items had an average annual growth rate higher than 2% from 2021 to 2024, making up 50.3% of

Chart B1.2 Changes in price adjustment intervals of core CPI items over the past 36 months (2% price increase threshold)



the total items, far more than the 108 items (29.3%; see Chart B1.1) from 2013 to 2019. It signals that inflationary pressures have extended to a broader range of daily consumer items since 2021, suggesting a possible structural shift in overall inflation and implying that price adjustment intervals across various product items in Taiwan have changed. Furthermore, Price et al. (2023)¹ also found a considerable uptick in the frequency of price changes in certain US manufacturing and service industries commencing in 2021, indicating that after inflation started climbing, US firms began to adjust prices more frequently and adopted a strategy of "gradual, modest price modifications," allowing consumers to progressively adapt to the rising price environment rather than a large change all at once.

### 1.2 Recent changes in the price adjustment intervals of core prices

According to the weighting statistics of the 2021-based CPI pricing items published by the DGBAS, core inflation components (excluding energy, fruit, and vegetables) accounted for 287 of the 368 pricing items in Taiwan's CPI basket, representing more than 90% of the total CPI weight. In other words, the overall CPI changes are strongly affected by the pricing dynamics of its internal components. To analyze differences in price adjustment intervals, a further comparison of the two periods before and after the pandemic, namely from 2016 to 2019 and from 2021 to 2024, was conducted using a total of 48 months of data for each period, under the 2% price increase threshold. The results showed that the adjustment interval for core CPI items shortened from 17.4 months before the pandemic to 12.5 months after the pandemic, suggesting that the overall price adjustment frequencies

had increased significantly. Moreover, the distribution of core CPI price adjustment intervals also exhibited a marked shift to the left as shown in the chart (Chart B1.2):

- (1) Core items with adjustment intervals shorter than half a year (less than six months) accounted for only 1.4% of all core items before the pandemic (2016-2019), but rose to 8% after the pandemic (2021-2024), indicating that short-term price changes had increased significantly.
- (2) Core items with adjustment intervals longer than two years (24 months or more) accounted for 19.58% of all core items before the pandemic, but decreased to 9.1% after the pandemic, reflecting a reduction in long-term price rigidity.

These estimates reveal that the price adjustment intervals of many core consumer items in Taiwan, previously characterized by price rigidity, have shortened since 2021. This suggests that the changes in international raw material prices, geopolitical risks, and climate change are gradually reshaping Taiwan's current inflation structure. The shifting price adjustment intervals across various product categories not only challenge consumers' previous perceptions of those intervals but also lead to more pronounced public sensitivity to inflation.<sup>2</sup>

### 2. Conclusion

Stabilizing price fluctuations and maintaining consumer purchasing power are crucial for stabilizing society and remain key policy concerns for the government. Central banks worldwide, in accordance with their legal mandates, primarily focus on maintaining price stability as their top monetary policy objective. They employ tools such as guiding market interest rates and controlling the money supply to mitigate the adverse economic effects of inflation volatility. In recent years, Taiwan's core CPI price adjustment intervals have significantly shortened, reflecting that unexpected factors, including international raw material price fluctuations, geopolitical risks, and climate change, may be reshaping Taiwan's current inflation structure. This poses new challenges for the Bank's formulation and implementation of monetary policy. The Bank will continue to closely monitor changes in price adjustment frequencies across various items and adjust monetary policy in a timely manner to achieve price stability, maintain financial stability, and fulfill its legal duties to support economic development in line with the aforementioned objectives.

- Notes: 1. Price, A. David, Tim Sablik, and Matew Wells (2023), "How the Pandemic Era Changed Price-Setting," Econ Focus, Federal Reserve Bank of Richmond, Fourth Quarter.
  - 2. Yu, Hsin-Jung (2024), "Exploring the Recent Changes in Inflation Structure through Price Adjustment Intervals: A Case Study of Taiwan," CBC Internal Report.

### 2.2.2 Corporate sector

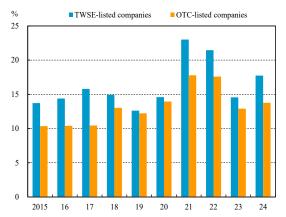
In recent years, as AI has rapidly advanced, revenues in related industries have increased significantly. In 2024, the overall profitability of the corporate sector exceeded market expectations. By the end of the year, listed companies maintained moderate levels of financial leverage and demonstrated improved short-term debt servicing capacity. The NPL ratio for corporate loans granted by financial institutions hit a new low, reflecting sound credit quality in the corporate sector. Nevertheless, with heightened uncertainty over US tariff policies, which could impact future profitability and debt servicing capacity of the corporate sector, close attention should be paid to the impact of subsequent developments on the credit quality of financial institutions.

## Revenue increased substantially and overall profitability surpassed market expectations

As global economic growth recovered steadily,

strong demand for emerging technologies such as AI boosted export momentum across related supply chains. In 2024, the net operating revenues of TWSE- and OTC-listed companies reached NT\$38.64 trillion and NT\$2.70 trillion, respectively, representing notable year-on-year increases of 12.73% and 7.16%. This pushed profit before tax in the corporate sector to NT\$4.65 trillion, a surge of 30.5% from the previous year, with overall profitability surpassing market expectations. Additionally, the average ROEs for TWSE- and OTC-listed companies rose to 17.74% and 13.76%, respectively (Chart 2.9).

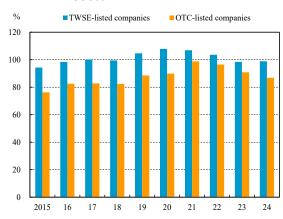
Chart 2.9 Return on equity in corporate sector



Note: Return on equity = net income before interest and tax/average equity.

Source: TEJ.

Chart 2.10 Leverage ratios in corporate sector



Note: Leverage ratio = total liabilities/total equity. Source: TEJ.

## Corporate leverage remained moderate, and short-term debt servicing capacity improved

As market demand rebounded, firms increased their investments, resulting in a slight increase in the average leverage ratio of TWSE-listed companies from 98.44% at the end of the previous year to 98.88% at the end of 2024. Meanwhile, OTC-listed companies, which adopted relatively conservative financing strategies, saw their average leverage ratio decline from 90.89% to 86.78% (Chart 2.10), suggesting that overall corporate leverage remained at a moderate level.

At the end of 2024, the current ratios of TWSE- and OTC-listed companies rose from 161.97% and 176.60% a year earlier to 163.38% and 186.14%, respectively (Chart 2.11). In addition, the average interest coverage ratio increased from 10.83 times and 13.18 times at the end of the previous year to 14.98 times and 13.35 times, respectively, primarily because of a reduction in interest expenses (Chart 2.12), indicating improved overall short-term debt-servicing capacity.

## An increase in foreign currency liabilities among TWSE-listed companies warrants prudent exchange rate risk management

As of the end of September 2024, TWSE-listed companies saw a notable rise in foreign currency liabilities, raising the foreign currency liability-to-equity ratio from 23.45%

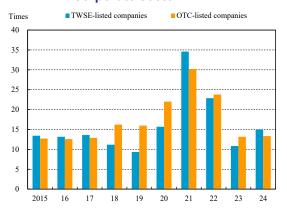
Chart 2.11 Current ratios in corporate sector



Note: Current ratio = current assets/current liabilities.

Source: TEJ.

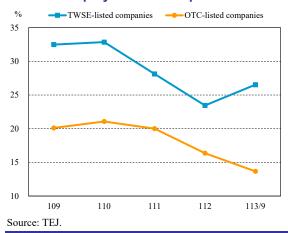
Chart 2.12 Interest coverage ratios in corporate sector



Note: Interest coverage ratio = income before interest and tax/interest expenses.

Source: TEJ.

Chart 2.13 Foreign currency liability-toequity ratios in corporate sector

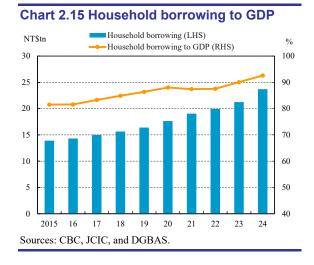


at the end of the previous year to 26.53%. In contrast, the same ratio for OTC-listed companies continued to decline, falling from 16.36% to 13.67% (Chart 2.13). The announcement of reciprocal tariff policies by the US has significantly increased uncertainty surrounding global trade and supply chains, which is expected to weigh on global economic growth. In addition, ongoing geopolitical tensions could intensify volatility in FX markets, thereby affecting the ability of both TWSE- and OTC-listed companies to service their foreign currency debts. In light of these risks, prudent exchange rate risk management is advisable.

### Credit quality remained sound as the NPL ratio of the corporate sector continued to reach a new low

At the end of 2024, the NPL ratio for corporate loans extended by financial institutions <sup>21</sup> declined to a new low of 0.17% from 0.18% a

# Chart 2.14 NPL ratio of corporate loans % 0.5 0.4 0.3 0.2 0.1 0.0 2015 16 17 18 19 20 21 22 23 24 Source: JCIC.



year earlier (Chart 2.14). This indicates that the overall credit quality of the corporate sector remained sound.

Given the recent announcement by the Trump administration to impose reciprocal tariffs, Taiwan's corporate sector is expected to face challenges such as a decline in exports, reduced output value, and lower revenue. These developments may negatively impact future profit growth momentum and debt-servicing capacity. Therefore, close attention should be paid to the impact of subsequent developments on the credit quality of financial institutions.

### 2.2.3 Household sector

In 2024, household borrowing expanded continually, resulting in a slight increase of household indebtedness. Meanwhile, short-term household debt servicing pressure tightened marginally.

<sup>&</sup>lt;sup>21</sup> Based on JCIC statistics on loans by financial institutions to all enterprises, excluding data from overseas branches of domestic banks.

However, the household sector maintained substantial net worth, reflecting that the debt servicing capacity of households remained sound. Moreover, the NPL ratio of household borrowing from financial institutions grew slightly but stayed at a low level, indicating sound credit quality of household borrowing. Nevertheless, in 2025, the potential rise in utility rates is likely to increase household expenditures, while the volatility in equity and markets driven by the administration's tariff policies and the spillover effects on the domestic labor market may place pressure on household wealth and income. Therefore, changes in the debt servicing capacity of some households with higher debt burdens warrant close attention.

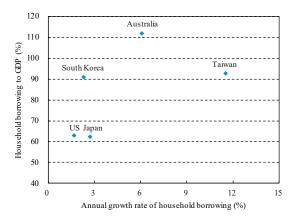
### Household borrowing continually expanded

Household borrowing reached NT\$23.70 trillion at the end of 2024, equivalent to 92.62% of the year's annual GDP (Chart 2.15), higher than the 90.07% of the previous year. The main purpose of household borrowing was

to purchase real estate, accounting for 61.29% of the total.

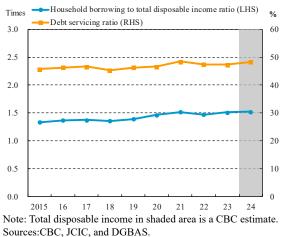
Household borrowing maintained an upward trend, with the annual growth rate rising to 11.52%, mainly attributable to the purposes of real estate purchase and working capital needs. Compared to other countries, household borrowing to GDP in Taiwan was higher than those in the US, Japan, and South Korea, and the growth rate of household borrowing in Taiwan was also relatively high. The impact of household borrowing growth on household debt burden warrants attention (Chart 2.16).

Chart 2.16 Household indebtedness in selected countries



Note: Figures are as of the end of 2024. Sources: Fed, BoJ, BoK, ABS, IMF, DGBAS, JCIC, and CBC.

### Chart 2.17 Household indebtedness and debt servicing ratio



## Household indebtedness increased slightly but net worth remained substantial

The ratio of household borrowing to total disposable income<sup>22</sup> continually increased to 1.52 in 2024, reflecting an increasing household debt burden. Moreover, with the rise in interest rates on bank loans, the debt servicing ratio also climbed to 48.32% (Chart 2.17), indicating that short-term household debt servicing pressure tightened. However, household net worth 23 in Taiwan remained robust, amounting to nearly 8 times the GDP in 2023. Compared to other countries, the household net worth to GDP ratio in Taiwan was significantly higher than those in the US, the UK, Singapore, and South Korea (Chart 2.18), showing that the financial condition of households in Taiwan was sound.

# The NPL ratios of household borrowing rose marginally but remained at a low level, indicating healthy credit quality

### Chart 2.18 Household net worth to GDP

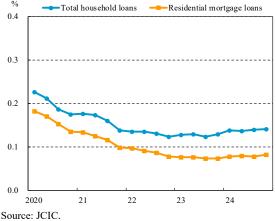


Notes: 1. The household sector herein includes households and non-profit organizations.

2. Figures are as of the end of 2023.

Sources: DGBAS and official websites of selected countries.





The NPL ratio of household borrowing<sup>24</sup> rose gradually to 0.14% at the end of 2024. Among the categories, the NPL ratio of loans for purchase of real estate rebounded slightly to 0.08% but remained at a low level (Chart 2.19), indicating sound credit quality.

As the minimum wage rose in recent years, real monthly regular earnings for employees registered an annual growth rate of 0.57% in 2024, which helped ease the household debt burden. However, potential increases in utility rates, such as railway fares, electricity, and water charges in 2025, could push up household expenditures. In addition, the tariff policy introduced

<sup>&</sup>lt;sup>22</sup> Total disposable income = disposable income + rental expenses + interest expenses.

<sup>23</sup> See Note 5.

<sup>&</sup>lt;sup>24</sup> The data for the household sector herein are on the basis of all financial institutions, excluding overseas branches of domestic banks.

by the Trump administration has intensified fluctuations in equity and bond markets, elevating financial risks for households. Its spillover effects could also weaken the domestic labor market, thereby affecting household income. As a result, changes in the debt servicing capacity of some households with higher debt burdens warrant close attention.

### 2.2.4 Real estate market

In the first half of 2024, transactions in the housing market grew rapidly, accompanied by an accelerated increase in banks' mortgage loans. The credit concentration in mortgage loans remained high. In the second half of the year, following the MOF's request in June for state-owned banks to strengthen the review process for the Preferential Housing Loans for the Youth,<sup>25</sup> the Bank adjusted its selective credit control measures twice, in June and September. In August, the Bank also urged banks and other financial institutions to proactively monitor overall mortgage loans for the coming year (from 2024 Q4 to 2025 Q4). Therefore, transactions in the housing market cooled down, the growth in house-purchasing loans slowed down moderately, the credit concentration in mortgage loans decreased slightly, and the related credit risk remained well managed.

### Transactions in the real estate market declined after a surge

In the first half of 2024, supported by improved economic conditions, strong performance of Taiwan's stock markets, rising public expectations of real estate price increases, the implementation of the Preferential Housing Loans for the Youth, and large deliveries of new home completions, the growth rate of the total number of building ownership transfers increased to 27.23%. Subsequently, in June, the MOF strengthened oversight of the Preferential Housing Loans for the Youth. Moreover, the Bank adjusted its selective credit control measures twice, in June and September 2024. Beginning in August, the Bank also urged banks and other financial institutions to proactively monitor the overall volume of mortgage loans. The aforementioned factors resulted in a continuous decline in the monthly growth rate of the total number of building ownership transfers. Coupled with a higher base period in the same period of the previous year, the growth rate decreased from a high of 28.28% in Q2 to 18.22% in Q3, and further turned into a year-on-year decrease of 10.00% in Q4 (Chart 2.20). However, the total number of building ownership transfers increased to 350 thousand units in 2024, the highest level from 2014 onwards, rising by 14.19% year on year.

<sup>&</sup>lt;sup>25</sup> The enhanced project, new Preferential Housing Loans for the Youth, has been implemented since August 2023.

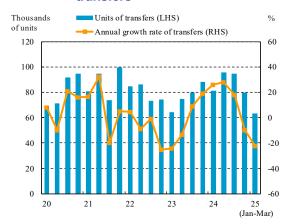
In the beginning of 2025, owing to a wait-andsee attitude among homebuyers in the real estate market and a higher base period in the previous year, the total number of building ownership transfers decreased by 22.11% year on year from January to March. The combined total of the six metropolitan areas in April recorded a year-on-year decline of 26.32%.

In terms of land transactions, as a result of the slowdown in the housing market in the second half of 2024, the total number of land ownership transfers showed negative growth from October 2024 to March 2025.

### Real estate prices rose, but the pace of increase gradually slowed

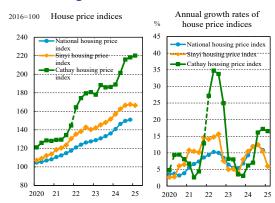
Amid a booming housing market since early 2024, the national housing price index released by the MOI reached a high of 151 in 2024 Q4 (Chart 2.21). However, the quarter-to-quarter growth rates narrowed for two consecutive quarters, and the year-on-year growth rate also slid from the high of 12.40% in Q3.

### Chart 2.20 Number and growth of building transfers



Source: Monthly Bulletin of Interior Statistics, MOI.

### Chart 2.21 House price indices and annual growth rates



Note: For comparison purposes, all three indices use the same base year of 2016 (2016 average = 100).

Sources: MOI, Cathay Real Estate, and Sinyi Real Estate Inc.

The Cathay housing price index (for newly built houses) rose quarter by quarter in 2024. It hit a high of 220 in 2025 Q1. Nevertheless, its quarter-on-quarter and year-on-year growth rates declined to 0.78% and 16.52%, respectively. The Sinyi housing price index (for existing houses) rose quarter by quarter in 2024, reaching a peak of 167 in Q4, before declining moderately to 166 in 2025 Q1. The year-on-year growth rate stood at 5.99%, showing a downward trend for the second consecutive quarter (Chart 2.21).

### Mortgage burden increased

The debt servicing ratio for housing loans<sup>26</sup> rose in 2024, peaking at 46.80% in Q3 before slightly decreasing to 46.62% in Q4. This decline occurred as housing price growth slowed and the median household disposable income increased, with Taipei City recording the heaviest mortgage burden at 71.21% (Chart 2.22, left panel). Similarly, Taiwan's house price-to-income ratio increased quarter by quarter, reaching 10.76 times in 2024 Q4 (Chart 2.22, right panel).

### Construction licenses issued rose, building commencement kept increasing moderately, and newly built surplus housing (for sale) expanded continuously

Owing to the booming transactions in the housing market, real estate developers aggressively launched new pre-sale residential housing projects in the first half of 2024. Coupled with a lower base period in the previous year, the growth rate of the total floor space of construction licenses issued year-on-

Chart 2.22 Debt servicing ratios for housing loans and house price to income ratios

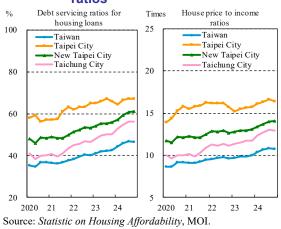
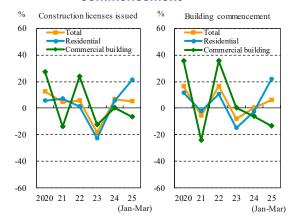


Chart 2.23 Annual growth rates of floor space of construction licenses issued and construction commencement



Note: Commercial building includes buildings for commerce, industry, storage, business and service.

Source: *Monthly Bulletin of Interior Statistics*, MOI.

year shifted from a decline of 18.30% in 2023 to a rise of 6.68% in 2024. The year-on-year growth rate of total floor space declined to 5.11% in 2025 Q1.

Meanwhile, the total floor space of construction commencement increased by 0.19% year on year in 2024 and by 6.13% year on year in 2025 Q1, mainly reflecting a slight easing of the labor shortage (Chart 2.23).

With the completion of construction projects in recent years, the total floor space of usage

Monthly payments of the debt servicing ratio for housing loans are calculated based on 70% of the median national housing price, using average mortgage interest rates, and assuming a 20-year mortgage period.

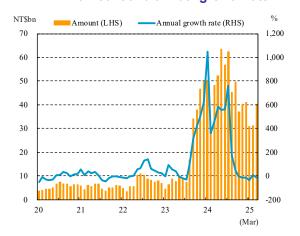
licenses issued continued to grow, increasing by 6.07% year on year in 2024, but decreasing by 1.40% year on year in 2025 Q1.

According to statistics from the MOI, the number of newly built surplus housing (for sale) units exceeded 100,000 units since 2023 Q4, expanding to 103,100 units by the end of 2024 Q2. Given the ample supply, higher prices, and sales performance under expectations of new residential buildings, the inventory of newly built surplus housing (for sale) might continue to accumulate in the future, which deserves close attention.

# Growth in construction loans and loans for house purchases and refurbishments slowed, while mortgage interest rates slightly rose

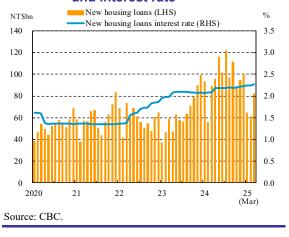
The amount of new Preferential Housing Loans for the Youth disbursed by state-owned banks has continuously increased since the beginning of 2024. However, starting in August, as homebuyers adopted a wait-and-see attitude and banks tightened their approval criteria, the disbursement amount of the

Chart 2.24 Preferential Housing Loans for the Youth from state-owned banks – amount and annual growth rate



Source: Statistic on Preferential Housing Loans for the Youth, MOF.

Chart 2.25 New housing loans by the dominant five banks – amount and interest rate



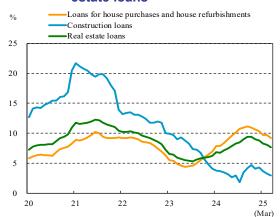
aforementioned loans shrank. From 2025 onwards, as state-owned banks resumed approvals gradually, the number of accepted applications and the amount disbursed began to rebound. Nevertheless, the annual growth rate of the total lending declined by 16.44% (Chart 2.24). The provision of new housing loans by the dominant five banks<sup>27</sup> has declined gradually since October 2024. For the entire year, the amount reached approximately NT\$1.16 trillion, an increase of 51.74% compared to the previous year. However, in 2025 Q1, the amount was NT\$207.6 billion, reflecting a year-on-year decrease of 12.88% (Chart 2.25).

<sup>&</sup>lt;sup>27</sup> The five major banks refer to Bank of Taiwan, Taiwan Cooperative Bank, First Commercial Bank, Hua Nan Commercial Bank, and Land Bank of Taiwan.

Regarding the interest rate of real estate loans, the Bank raised its policy rates by 0.125 pps in March 2024 and increased the reserve requirement ratios on NT dollar deposits by 0.25 pps in both July and October 2024. In addition, banks enhanced their risk control measures, resulting in a gradual increase in the average interest rate on new housing loans granted by the dominant five banks. The rate reached 2.264% in March 2025, a new high since January 2009 (Chart 2.25).

Since the beginning of 2024, driven by strong public demand for loans, the annual growth rate of loans for house purchases and refurbishments granted by banks<sup>28</sup> rose to a high of 11.15% by the end of September. Subsequently, as the Bank strengthened its credit control measures, the annual growth rate gradually declined to 9.26% at the end of March 2025. The annual growth rate of construction loans declined to a low of 1.89% by the end of July 2024. Nevertheless, as construction loans and revolving loans expanded, these loans turned to increase, reaching 4.72% by the end of October. However, with the Bank's credit controls continually effective, the growth rate

### Chart 2.26 Annual growth rates of real estate loans



Note: Real estate loans refer to the aggregate amount of loans for house purchases, house refurbishments, and construction loans.

Source: CBC.

#### Chart 2.27 Real estate loans to total loans



Note: Real estate loans refer to the aggregate amount of loans for house purchases, house refurbishments, and construction loans.

Source: CBC

decreased to 2.97% by the end of March 2025 (Chart 2.26). The outstanding balance of real estate loans registered NT\$14.64 trillion and accounted for 36.89% of total loans by the end of March 2025 (Chart 2.27).

### Banks' risk management on real estate loans remained satisfactory, with appropriate adjustments to the regulations regarding real estate loans

Even though the Bank continued to reinforce credit control measures, <sup>29</sup> domestic banks

<sup>&</sup>lt;sup>28</sup> Refers to domestic banks and the local branches of foreign and China's banks.

<sup>&</sup>lt;sup>29</sup> See "IV. Measures to promote financial stability and in response to the impact of US tariff policies" *Financial Stability Report*, May 2025.

persisted in expanding their housing loans for borrowers without owner-occupied residences. The proportion of their share has exceeded 61% since the end of September 2024, reaching 61.93% by the end of March 2025. In 2024, the weighted average LTV ratio for new housing loans registered 72.27%. Nevertheless, the average LTV ratio for the regulated loans newly granted by banks dropped significantly. As of March 2025, among the regulated loan categories, the inventory of newly built surplus housing and high-priced housing loans extended to natural persons registered the lowest level of 28.56% and 28.84%, respectively.

From October 2024, the NPL ratios of domestic banks' construction loans increased slightly owing to a rise in overdue loans, but subsequently turned to a moderate decline as banks wrote off non-performing assets. The NPL ratios of construction and housing loans granted by domestic banks dropped to 0.19% and 0.07%, respectively, at the end of March 2025.

## The Bank and relevant ministries and agencies persistently endeavored to implement and refine associated measures of the Healthy Real Estate Market Plan to ensure a sound real estate market

Since the government launched the Healthy Real Estate Market Plan in December 2020, the Bank and relevant ministries and agencies have successively enhanced related measures. Since then, the Bank has adjusted its selective credit control measures seven times. In addition, the Bank requested banks to independently manage the total amount of real estate loans and strengthen their risk controls on real estate loans in August 2024. As a result, the effectiveness of relevant credit controls has gradually become evident. To achieve the goals of the Bank's real estate credit control measures, the Bank continues to review the implementation of the improvement plans of each bank's self-management of real estate loans on a quarterly basis and persistently conducts targeted examinations of mortgage loans. Furthermore, through the sharing of supervisory information, the Bank collaborates with the FSC to jointly urge the banks to rectify deficiencies in their lending practice. As transactions in the housing market gradually cool down and many uncertainties surrounding US economic and trade policies persist, the spillover effects on the domestic economy and financial markets may indirectly impact the domestic housing market, which could then influence the asset quality of financial institutions. The Bank will closely monitor future developments and continue to remind borrowers to remain vigilant regarding the risk of interest rate fluctuations.

In addition, since July 2024, the MOI has carried out restrictions on the resale of newly built and pre-sale housing units through contract transfers. The MOF also introduced the "House Tax Differential Rates 2.0 Program," which increases the property tax burden on owners

holding multiple housing units that are not effectively utilized. Furthermore, the MOF has continued to urge local governments to adjust the assessed tax base of housing and, in February 2025, amended the standards for calculating personal income tax on property transactions involving house sales. All of the abovementioned efforts contributed to the sound development of the real estate market. Moreover, as part of the responsibility related to the implementation of healthy real estate market measures falls under the jurisdiction of local governments, in the future, continued cooperation between central and local governments is required further to refine the relevant measures and ensure their effective enforcement, thereby achieving the goal of sound development of the real estate market.

### 2.3 General assessment of international and domestic macro environments

As for international economic and financial conditions, major central banks gradually adopted a more accommodative monetary policy stance in 2024. In the meantime, the global economy saw steady growth and inflationary pressures began to ease, along with market expectations of interest rate cuts. All of these contributed to more favorable financial conditions. However, in 2025, the heightened uncertainties stemming from US tariff policies have already triggered significant turbulence in global financial markets and led to a tightening of global financial conditions, potentially posing downside risks to global economic growth and inflation.

Regarding the domestic macro environment, Taiwan's economy grew steadily in 2024, and the price indices declined moderately, reflecting easing inflationary pressures. The corporate sector saw significant revenue growth and profitability that exceeded market expectations. Moreover, their leverage ratios remained at an acceptable level and the short-term debt servicing capacity improved. As for the household sector, borrowing continued to grow, and short-term debt burden trended mildly upwards. However, the financial health of households was sound, supported by their substantial net worth. In the housing market, although transactions declined after a significant increase and the upward trend in housing prices moderated, the financial burden on homebuyers continued growing. On a positive note, the NPL ratios of housing loans remained low, indicating that risk management was still effective.

From the beginning of 2025, US tariff policies have introduced considerable uncertainty to Taiwan's macroeconomic outlook. Should the policies be fully implemented, these could impact the supply chains and competitiveness of Taiwan's information and communication technology products and erode the traditional industries, thereby dampening export momentum and affecting economic performance. Furthermore, they may amplify the downside risks. Preliminary estimates by domestic and foreign institutions suggest that the tariff policies could reduce Taiwan's economic growth rate in 2025 by 0.4 to 1.61 pps. Nevertheless, Taiwan's globally competitive supply chains in emerging technologies such as AI, robust inventory buildup by firms, and potential positive order reallocation are expected to mitigate the impact from the tariff policies. In May 2025, S&P Global also revised Taiwan's economic growth forecast upward by 0.26 pps to 2.88%.

Additionally, the tariff policies may pose several challenges for Taiwan's corporate sector, including declining exports, reduced production and revenue, as well as intensified exchange rate volatility. These factors could, in turn, inhibit growth momentum in profits and impair debt servicing capacity in the future. As for households, a deteriorating labor market may erode

disposable income, and increased volatility in stock and bond markets could heighten the financial risks of households. Therefore, close attention should be paid to changes in the debt servicing capacity of some households with higher debt burdens. Regarding the real estate market, the ongoing moderation of housing prices, together with uncertainty about US economic and trade policies which may indirectly affect the domestic housing market through Taiwan's economy and financial markets, may have an impact on financial institutions' asset quality, thus warranting close attention.

In summary, Taiwan's macroeconomic conditions, along with its corporate and household sectors, remain sound at present. However, given the potential direct and indirect effects of the heightened uncertainty stemming from US tariff policies, it is essential to continue paying close attention to the future developments and related spillover effects.