BANK OF THAILAND

Financial Stability Report 2024

Contents

Executive Summary

The Thai financial system remains resilient and continues to effectively facilitate economic activities. Overall, financial institutions, including commercial banks, specialized financial institutions (SFIs), non-bank retail lenders (NBRLs), and savings cooperatives, possess strong financial positions, despite some deterioration in loan quality. In addition, the household debt to gross domestic product (GDP) ratio continues to decline, reflecting an ongoing deleveraging process that helps reinforce the Thai financial stability going forward.

Nevertheless, given the recent economic growth and financial trends which are subjected to various domestic and external factors, such as trade and tax policies of different countries, structural challenges faced by certain sectors, the recent earthquake in Myanmar, and high household debt, **there are still risks to the Thai financial stability which warrant close monitoring,** including:

(1) Fragile investor confidence, which has been quite sensitive to both domestic and external factors, notably trade policies of major economies, and sluggish recovery of certain business sectors facing structural challenges or increased competition from Chinese goods and services. **This fragile investor sentiment may lead to asset sales that could depress prices,** affecting the financial positions of institutional and retail investors. It may also **result in higher borrowing costs when raising funds through the capital market and greater rollover risk for maturing corporate bonds.** In addition, should there be a sharp correction in global asset prices, investor confidence could deteriorate further and trigger panic asset selling, which may significantly undermine financial stability.

(2) Tightening financial conditions affecting the liquidity positions of businesses and households, as well as economic activities going forward. In 2024, financial conditions became somewhat more tightened, as reflected in subdued credit growth and a contraction in corporate bond issuance. This was driven by reduced credit demand, ongoing debt repayments, and elevated credit risk among certain borrowers, prompting financial institutions to adopt a more cautious lending practice. **The announcement of higher U.S. import tariffs was poised to deepen strains on investment and trade as well as intensify competition from Chinese imports through import flooding. These developments will particularly affect businesses that have high export shares to the U.S. with limited ability to switch to alternative markets, as well as small and medium enterprises (SMEs) already facing structural challenges in credit access and competitiveness, thereby exacerbating their financial vulnerability. Consequently, such vulnerability can have a profound impact on employment and household income,** leading to weakened debt serviceability of both businesses and households. At the same time, financial institutions and investors may become increasingly cautious in extending credit to higher-risk borrowers. Additionally, deteriorating liquidity positions among businesses and households may put more pressure on economic activities in the periods ahead.

(3) High and rising debt levels among certain highly leveraged large corporations (HLLCs) compared to other firms, despite having strong financial positions overall. The relatively high leverage level of HLLCs can be attributed to the confidence financial institutions and investors have in the ability to service debt of most HLLCs, whose financial performance remains strong. While this will not pose immediate risks to financial stability, the persistent rise in leverage can lead to the accumulation of financial fragility and reduce firms' ability to cushion for future negative shocks, particularly among HLLCs with elevated debt levels and debt serviceability that is sensitive to economic conditions. **Should the global and Thai economies come under significant pressure from trade policies being implemented by various jurisdictions, the financial positions and debt serviceability of some HLLCs could be compromised. This may in turn affect various groups of creditors, ranging from financial institutions to** institutional and retail **investors in the corporate bond market and can dampen investors' and depositors' confidence. Should such loss of confidence become broad-based, it could potentially undermine financial stability,** especially for the case where the affected firms are highly connected with the economy and the financial system.

(4) The financial positions of some property developers which have come under additional pressure due to the recent earthquake, after having experienced a prolonged slowdown and sluggish recovery in the real estate sector. In 2024, the real estate sector faced a decline in demand, driven by weak household purchasing power and persistently high household debt, particularly among financially fragile borrowers. This was evident in a buildup of inventory with the 3-million-baht-or-less housing segment having the largest share. The earthquake further dampened confidence and short-term demand for high-rises. As a result, developers who primarily focus on high-rise projects may face reputational risk and greater difficulty in clearing unsold units, especially if the properties sustained structural damages. These challenges could also undermine their long-term business prospects. **For developers whose financial positions were already weak prior to the event, debt serviceability may deteriorate further, potentially eroding the already-fragile confidence in the financial market**, which could lead to higher risks in the financial system.

In response, the Bank of Thailand (BOT), the Securities and Exchange Commission (SEC), and the Ministry of Finance have introduced a range of measures to safeguard financial stability and mitigate the impact of macro-financial conditions on borrowers.

These include temporary measures to manage near-term risks, comprising of **(1) liquidity support measures aimed at easing financial condition tightness of borrowers. These include maintaining the minimum repayment rate** on credit cards at 8 percent[1] and the **"Jai Trong Kong Sup" measure under the "Khun Soo, Rao Chuay" program,** which helps reduce monthly installments and waive interest incurred if borrowers meet specific conditions. In addition, the BOT has **requested financial institutions to consider providing relief measures for borrowers affected by the recent earthquake,** including a reduction in minimum credit card repayment rates, a temporary increase in emergency credit limits beyond the standard set by the BOT for personal loans under supervision and digital personal loans, and liquidity support along with credit term adjustments on all credit types, **(2) measures to support the real estate sector,** including the BOT's **temporary easing of loan-to-value (LTV) limits for mortgage lending and related loans** to help alleviate the problem of high housing inventory. This measure is also aligned with the Ministry of Finance's reduction in property transfer and mortgage registration fees to 0.01 percent, effective until 30 June 2026, and **(3) market stabilization measures to safeguard against heightened market uncertainty** introduced by the Stock Exchange of Thailand (SET) and Thailand Futures Exchange (TFEX). These include **adjustments to ceiling and floor price limits, intraday dynamic price bands, a temporary ban on short selling for equity stocks,** and **revisions to the daily price limit ranges for futures and options contracts.**

In addition, **long-term measures have been introduced to strengthen financial stability and to effectively support economic activities.** These include: **(1) initiatives to improve access to credit,** such as **preparatory work for the "Your Data" project,** which enables the sharing of personal data from both within and beyond the financial sector to facilitate and enhance credit access at appropriate pricing, and **preparations for the establishment of the National Credit Guarantee Agency (NaCGA)** to enhance the effectiveness of credit guarantee mechanisms. This would provide greater opportunities for SMEs to gain access to a wider range of funding sources with costs that are aligned with their risk profiles. This also enables financial institutions to conduct more comprehensive and effective risk assessments of borrowers, **(2) measures to strengthen investors' confidence,** including **regulatory framework enhancements** by the Securities and Exchange Commission (SEC) **for the issuance and offering of corporate bonds. The criteria have been tightened to promote greater discipline, alongside improvements on disclosure requirements** so that investors can better assess the debt serviceability and financial positions of bond

[1] Extended by 1 year to the end of 2025, from the original plan to revert to the normal rate of 10 percent starting 1 January 2025.

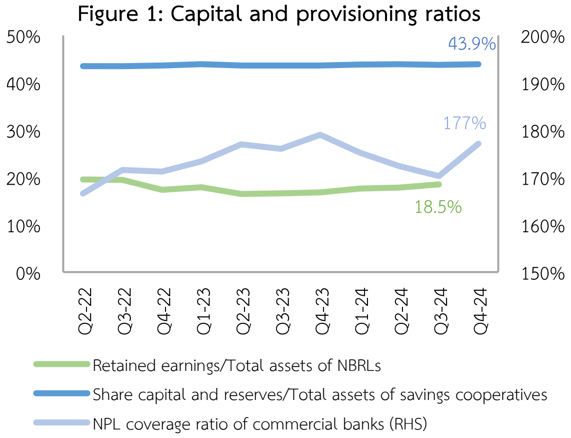
issuers. SEC also introduced measures to **enhance the effectiveness of the roles and responsibilities of key stakeholders in the bond market,** such as bondholder representatives (BHRs), credit rating agencies (CRAs), and financial advisors (FAs), and **(3) <u>measures to address household debt issues,</u>** covering both the resolution of existing distressed debt and the development of a sustainable debt management framework. This is to ensure that households have sufficient capacity to withstand future income uncertainties. In addition, **the terms on the assistance programs for persistent debtors were adjusted** to provide a better relief for borrowers and the **introduction of the "Jai Pid Job" measure** under the "Khun Soo, Rao Chuay" program allows non-performing loan (NPL) debtors with outstanding balances not exceeding 5,000 baht to settle their accounts by partially repaying their debts. Finally, the **Responsible Lending measures have been enforced** to strengthen the role of lenders in supporting customers throughout the debt cycle, while also promoting financial discipline through behavioral nudges at each stage of the debt cycle.

Chapter 1: Risk issues regarding Thailand's financial stability

1.1 Overall financial stability

The Thai financial system remains resilient and continues to effectively facilitate economic activities. Financial institutions have maintained strong financial positions despite some deterioration in loan quality. Commercial banks had gradually set aside loan loss provisions, as reflected in a high non-performing loan (NPL) coverage ratio. As a result, the impact on profitability and capital adequacy (BIS ratio) in 2024 was limited. For non-bank retail lenders (NBRLs), although performance had weakened, they continued to report positive net profits. This is largely due to their sufficiently high net interest margins (NIMs), which have helped absorb expected credit losses and rising funding costs. In addition, NBRLs maintained strong retained earnings buffers, amounting to 18.5 percent of total assets (Figure 1). Meanwhile, savings cooperatives were not significantly affected by the deterioration in loan quality, as repayments are usually deducted directly from borrowers' salaries. As a result, their NPL ratios remained broadly in line with historical levels.

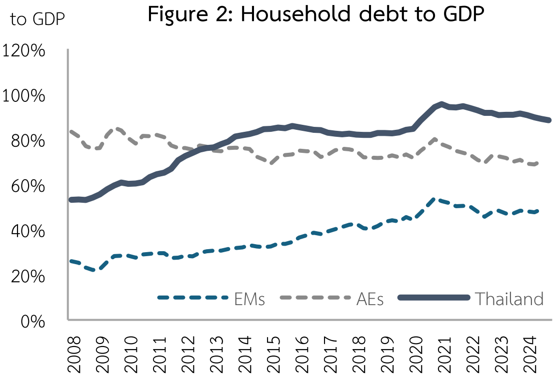
Figure 1: Capital and provisioning ratios



Note: NBRLs data is calculated based on the weighted average of total assets from 31 companies, data as of 2024Q3.
Source: Bank of Thailand (BOT), SETSMART, and Cooperative Promotion Department (CPD).

In addition, **Thailand's household debt level continues to decline,** with the household debt to gross domestic product (GDP) ratio falling to 88.4 percent at the end of 2024. Nevertheless, household debt in Thailand remains elevated compared to both emerging markets (EMs) and advanced economies (AEs) (Figure 2). It is therefore important to monitor the development of household debt dynamics and put in place appropriate policy measures to ensure that the debt level remains manageable. This will enable households to better cope with future uncertainties, such as income shocks, and will help further promote financial stability.

Figure 2: Household debt to GDP

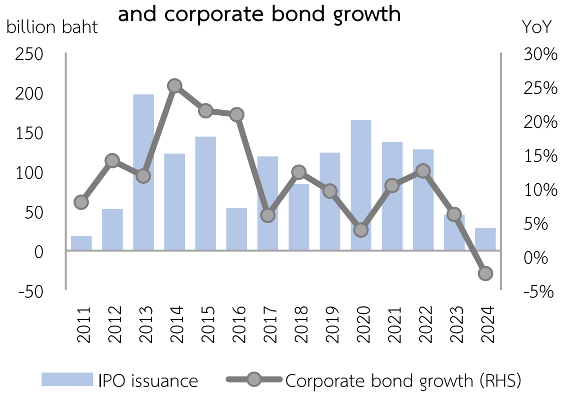


Source: BOT and Bank for International Settlements (BIS) as of 2024Q3.

1.2 Key financial stability risks going forward

While the overall financial system remains stable, **it is important to continue monitoring risks that could undermine Thailand's financial stability going forward.** These risks include: **(1) fragile investor confidence, which has been quite sensitive to both** domestic and external factors. Economic conditions have been affected by the recent U.S. import tariff hikes, while certain business sectors continue to face structural challenges and heightened competition. In addition, an upward trend in credit rating downgrades, together with recent incidents involving executive misconducts and forced selling stemming from company executives having used shares of listed companies as collateral, have further undermined market confidence. These developments have weakened the capital market's role in facilitating fundraising. The Stock Exchange of Thailand (SET) index had declined steadily since 2023, and in 2024, the value of initial public offerings (IPOs) dropped by 37 percent. In addition, outstanding corporate bonds contracted by 2.5 percent, the first contraction in 13 years (Figure 3). Fragile investor confidence may lead to asset sales that could drive down asset prices, weakening the financial positions of institutional and retail investors. It may also lead to higher funding costs in the capital market and an increase in rollover risk, particularly for issuers with higher credit risk. In addition, should there be an event causing a sharp decline in global asset prices, investors' confidence could deteriorate further, potentially triggering panic asset selling, which may undermine financial stability.

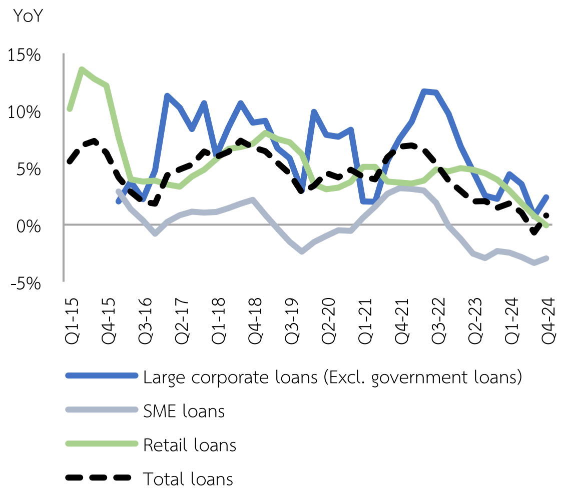
Figure 3: IPO issuance and corporate bond growth



Note: There were revisions to the corporate bond data. See, Revision and enhancement of private sector loan and corporate bond statistics (June 2023)
Source: SETSMART and The Thai Bond Market Association (ThaiBMA).

(2) Potentially tighter financial conditions going forward. In 2024, fundraising through the capital market declined due to fragile investor confidence (Figure 3), while loan growth among financial institutions[2] slowed to 0.8 percent year-over-year, the lowest level in a decade (Figure 4). This slowdown was evident across both corporate and household lending. Loan growth for large corporates and small and medium enterprises (SMEs) decelerated due to repayments of debt incurred earlier during

Figure 4: Private credit



Note: (1) Business loan data covers loans from commercial banks including affiliated companies and SFIs. For commercial banks, firm size classification is based on the credit limit with each bank as of December 2024.
For SFIs, the classification is based on the revenue and employment criteria defined by the Office of Small and Medium Enterprises Promotion (OSMEP).
(2) Business loan data by firm size from SFIs is available starting from 2015.
(3) Retail loan data covers loans from the fianncial institution system, including commercial banks including affiliated companies, SFIs, and NBRLs under the supervision of the BOT.
Source: BOT.

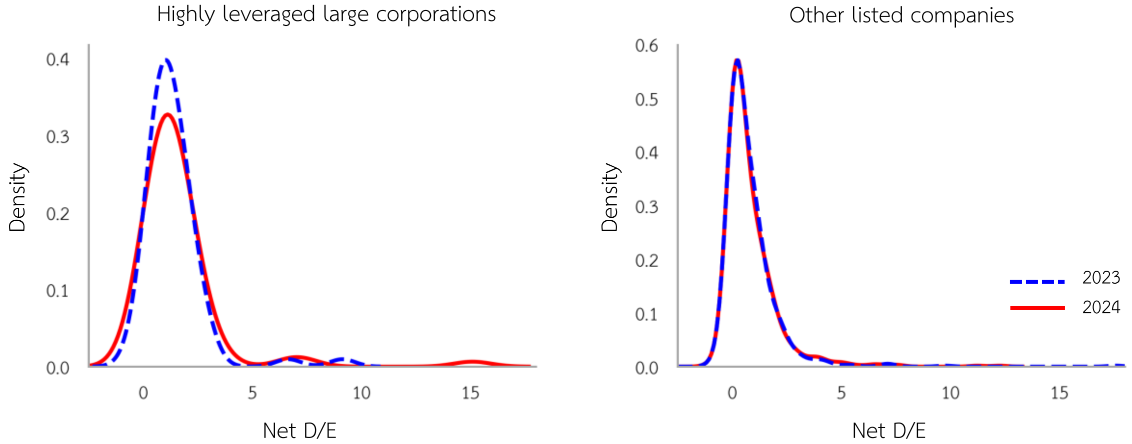
[2] The financial institution system consists of commercial banks including affiliated companies, specialized financial institution (SFIs), and NBRLs under the supervision of BOT.

the COVID-19 crisis, particularly in service sectors linked to tourism, such as hotels, restaurants, and transportation, whose revenues have recovered in line with rising tourist arrivals. In addition, credit demand for investments weakened among businesses facing structural challenges, sluggish income recovery, and more intense competition from Chinese goods and services, especially in sectors such as automotive, electronics, real estate, and private construction. Moreover, rising credit risk among borrowers has prompted financial institutions to adopt a more cautious lending approach. Meanwhile, SMEs continue to face challenges in accessing credit due to their competitiveness problems, weak financial performance, limited credit histories, and insufficient collateral to submit for credit consideration. Some SMEs are also experiencing additional liquidity pressures, as reflected in their worsening cash flow positions since the COVID-19. This has been driven by incomplete income recovery and tighter supplier trade credit terms. On the household side, retail loans contracted by 0.1 percent in 2024 amid rising debt servicing risks among households experiencing slow income recovery and elevated debt burdens. These conditions have led to more constrained access to liquidity from financial institutions. Moreover, particular loan segments have also experienced specific headwinds. For example, hire-purchase loans have been affected by an increase in voluntary vehicle surrenders and declining used car prices, driven by intensified competition from Chinese electric vehicles. Credit card loans have also seen higher repayments following the adjustment of the minimum payment requirement from 5 to 8 percent at the beginning of 2024.

The announcement of higher U.S. import tariffs will add additional pressures on investments and trades, alongside more intense competition from Chinese import flooding. Such pressures could weaken financial positions, debt serviceability, and liquidity positions of both businesses and households, potentially leading to tighter financial conditions in the period ahead. The impact is likely to be more pronounced for businesses with high export shares to the U.S. market with limited ability to switch to alternative markets, as well as SMEs, which are already facing structural challenges related to credit access and competitiveness. In addition, the recent earthquake has further affected real estate businesses, which had been experiencing a slowdown. **Overall, tighter financial conditions could put additional pressure on economic activities in the near term.**

(3) Certain highly leveraged large corporations (HLLCs) have continued to accumulate debt, resulting in leverage levels higher than other firms. While large corporates overall maintain strong financial positions and the corporate debt-to-GDP ratio has continued to decline, HLLCs listed on the stock exchange recorded a median net debt-to-equity (net D/E) ratio of 1.23 times, compared with just 0.47 times for other listed companies. Moreover, some HLLCs exhibited net D/E ratios that were well above the group average or showed a notable increase in 2024 (Figure 5).

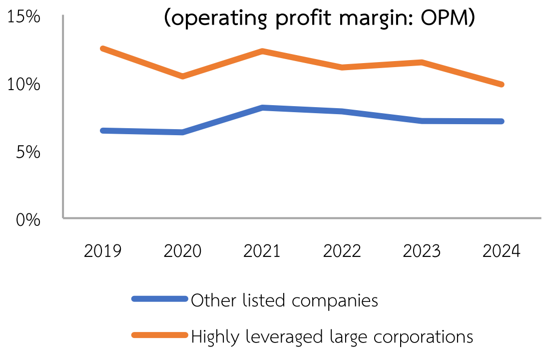
Figure 5: Distribution of net D/E ratios



Note: (1) Kernel Density Estimation (KDE) illustrates the distribution of net D/E ratios for highly leveraged large corporations and other listed companies.
(2) Outliers are excluded from the sample of other listed companies, particularly those with exceptionally high net D/E ratio.
(3) Annual net D/E ratios are computed as the average of quarterly net D/E ratios.
Source: SETSMART.

The relatively high leverage level of HLLCs can be attributed to the confidence financial institutions and investors have in the ability to service debt of most HLLCs, whose financial performance remains strong (Figure 6). While this will not pose immediate risks to financial stability, **the persistent rise in leverage can lead to the accumulation of financial fragility and reduce firms' ability to cushion for future negative shocks**, particularly among HLLCs with elevated debt levels and debt serviceability that is sensitive to economic conditions. **Should the global and Thai economies come under significant pressure from trade policies being implemented by various jurisdictions, the financial positions and debt serviceability of some HLLCs could be compromised. This may in turn affect various groups of creditors, ranging from financial institutions to** institutional and retail **investors in the corporate bond market and can dampen investors' and depositors' confidence. Should such loss of confidence become broad-based, it could potentially undermine financial stability,** especially for the case where the affected firms are highly connected with the economy and the financial system. As of year-end 2024, total outstanding borrowing by HLLCs stood at 6.1 trillion baht, comprising 2.9 trillion baht of loans from financial institutions (accounting for 22 percent of total corporate loans outstanding) and 3.2 trillion baht in corporate bonds (representing 62 percent of the total outstanding value of the corporate bond market).

Figure 6: Profitability (operating profit margin: OPM)

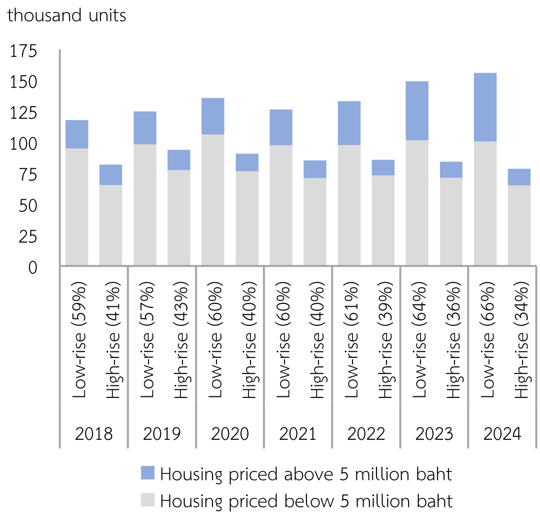


Source: SETSMART.

(4) The financial positions of some property developers which have come under additional pressure due to the earthquake, after having experienced a prolonged slowdown in the real estate sector where signs of recovery remain unclear. Overall housing demand contracted slightly compared to the previous year, driven by weakening purchasing power, particularly among households earning less than 30,000 baht per month. Foreign demand also slowed, primarily due to the dampened demand of Chinese buyers amid China's broader economic slowdown. Meanwhile, the real estate sector continues to face an oversupply issue, especially in the high-end segment priced at 5 million baht and above (Figure 7), as developers continue to launch new projects despite softening demand prospects.

In addition, **the earthquake on 28 March 2025 has adversely affected demand for condominiums and short-term confidence in the real estate sector.** This may hinder efforts to clear existing inventory in this segment. Developers who primarily focus on high-rise projects could face reputational risks, which may in turn undermine their financial positions and long-term business prospects. Furthermore, **developers who were already financially vulnerable prior to the event may experience further deterioration in their debt serviceability, potentially weakening confidence in an already fragile financial market.** Therefore, it is necessary to closely monitor developments in the real estate sector.

Figure 7: Excess supply of housing



Source: Agency for Real Estate Affairs (AREA), calculated by the BOT.

1.3 <u>Recent policy measures to safeguard financial stability</u>

Looking ahead, the Thai economy is expected to expand at a slower pace than previously assessed, due to structural challenges in the manufacturing sector and more intense competition from foreign products. Downside risks and heightened uncertainty, particularly stemming from the trade and tax policies of different economies, may further amplify vulnerabilities in the financial system. In response, the Bank of Thailand (BOT), the Securities and Exchange Commission (SEC), and the Ministry of Finance have been monitoring financial stability developments closely and have introduced a range of measures, programs, and policies to mitigate these vulnerabilities. These include:

Temporary measures to manage near-term risks

(1) <u>Liquidity support measures aimed at easing financial condition tightness of borrowers</u>. These include maintaining the minimum repayment rate on credit cards at 8 percent to help maintain sufficient liquidity for vulnerable borrowers and ease the burden for debtors with good repayment discipline (effective until 31 December 2025). **Another measure is the "Jai Trong Kong Sup" under the "Khun Soo, Rao Chuay" Program,** which helps reduce monthly installments and waive interest incurred if borrowers meet specific conditions. This applies to mortgage, hire-purchase, and small SME loans with relatively low credit limits. This also helps borrowers retain their assets pledged as collateral (applications open until 30 April 2025 under the Khun Soo, Rao Chuay Program). **In addition, to mitigate the impact of the recent earthquake, the Bank of Thailand (BOT) has requested financial institutions to consider relief measures for affected borrowers.** These include the possibility of lowering the minimum repayment rate on credit cards, temporarily increasing emergency credit limits for personal loans under supervision and digital personal loans beyond the standard set by BOT[3], and providing liquidity support and adjusted terms for all types of credit. These relief measures may be applied for a period of up to 12 months (announced on 29 March 2025).

(2) <u>Measures to support the real estate sector.</u> The BOT temporarily eased the supervisory criteria on mortgage loans and related loans (loan-to-value or LTV measures) to help support the real estate sector and related businesses and help alleviate the problem of high housing inventory. Under the eased criteria, borrowers are eligible for LTV ratios of up to 100 percent when purchasing homes priced below 10 million baht from the second contract onward, and for homes priced above 10 million baht starting from the first contract. These measures apply to loan agreements signed between 1 May 2025 and 30 June 2026. This measure is also aligned with the Ministry of Finance's policy to reduce property transfer and mortgage registration fees to 0.01 percent for homes priced below 7 million baht.

(3) <u>Measures to manage volatility in the capital market.</u> The Stock Exchange of Thailand (SET) and the Thailand Futures Exchange (TFEX) temporarily adjusted trading regulations during a period of heightened uncertainty (between 8 – 11 April 2025). The SET **reduced the ceiling and floor price limits** for securities from ±30 percent to ±15

[3] For personal loans under supervision, borrowers with monthly incomes below 30,000 baht are subject to a credit limit of up to 1.5 times their income (with up to 3 creditors).
For borrowers with monthly incomes of 30,000 baht or more, the credit limit is capped at 5 times their income.
For digital personal loans, the credit limit must not exceed 20,000 baht, with a maximum repayment period of six months.

percent relative to the previous day's closing price. It also **narrowed the intraday dynamic price band** from ±10 percent to ±5 percent relative to the most recent traded price and **temporarily suspended short selling.** Meanwhile, TFEX **reduced the daily price limit for futures and options contracts** referencing the SET50 Index, sector indices, and single stocks from ±30 percent to ±15 percent of the latest settlement price.

Long-term measures to strengthen financial stability and support the economy

(1) Measures to improve credit access. Preparations are underway for the "Your Data" project, which enables the sharing of personal data from both within and beyond the financial sector. The system will consolidate information such as loan repayment records, loan outstanding balances, and utility payments such as electricity and water bills, to help households and SMEs access more tailored financial services, such as streamlined loan application processes. In addition, it will help enhance credit access at appropriate pricing. In addition, the **establishment of the National Credit Guarantee Agency (NaCGA)** is ongoing to enhance the effectiveness of credit guarantee mechanisms. This would provide greater opportunities for SMEs to gain access to a wider range of funding sources with costs that are aligned with their risk profiles.

(2) Measures to strengthen investors' confidence. The SEC tightened regulatory criteria for the issuance and offering of corporate bonds, including enhanced disclosure requirements, such as key financial ratios, financial highlights, and financial covenants, to help investors better assess issuers' debt serviceability and financial positions. These new requirements took effect on 1 August 2024. Moreover, **additional measures were introduced to enhance the effectiveness of the roles and responsibilities of key stakeholders in the bond market ecosystem,** including bondholder representatives (BHRs), credit rating agencies (CRAs), and financial advisors (FAs).

(3) Measures to address household debt issues. As household debt still remains an issue, it requires **both the resolution of existing distressed debt and the development of a sustainable debt management framework.** To cope with the existing debt, the terms on the assistance programs for persistent debtors were adjusted to provide a better relief for borrowers, including extending the debt settlement period from 5 to 7 years (effective in 2025Q1). The conditions for debt consolidation were also changed, allowing for a temporary relaxation of the LTV ratio cap (effective until 31 December 2025). In addition, the "Jai Pid Job" measure under the "Khun Soo, Rao Chuay" program enables borrowers to negotiate partial repayment agreements to settle NPL with outstanding balances not exceeding 5,000 baht (applications accepted until 30 April 2025 under the Khun Soo, Rao Chuay program). For a sustainable debt management framework, Responsible Lending measures have been enforced to enhance the role of lenders in appropriately providing support to customers throughout the debt cycle. These standards include: (1) requiring lenders to offer debt restructuring at least once both before and after a loan becomes NPL, (2) supporting persistent debtors by facilitating faster debt resolution and reducing interest burdens, and (3) protecting borrowers' rights through fairer interest rates charges and fees, ensuring that borrowers receive accurate, complete, and comparable information, while promoting financial discipline through behavioral nudges throughout the debt cycle.

Chapter 2: Thailand's financial stability assessment

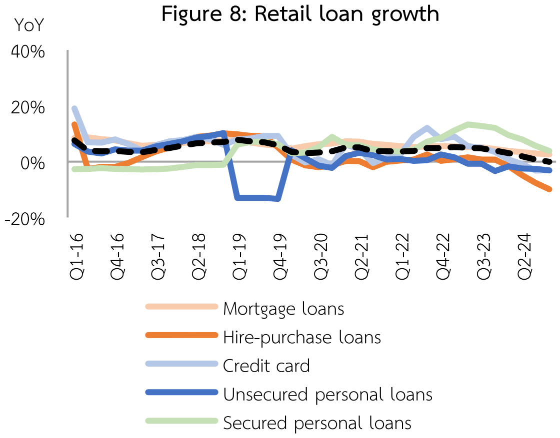
2.1 Macro-financial backdrop

2.1.1 Financial conditions

Financial conditions in 2024 had tightened from the previous year, as reflected by subdued loan growth, a contraction in corporate bond issuance, and a decline in fund raising through the equity market. Total credit by financial institutions expanded at a low rate of 0.8 percent year-over-year (Figure 4). Loans to large corporates grew by 2.4 percent year-over-year, decelerating from 11.7 percent growth in 2022. The slowdown was driven by lower credit demand in tourism-related sectors, repayments of loans obtained during the COVID-19 crisis, and a subdued investment appetite in sectors facing structural issues, slow income recovery, and more intense competition from Chinese products. Financial institutions also remain cautious in lending due to heightened credit risks. Meanwhile, loans to small and medium-sized enterprises (SMEs) contracted by 3 percent year-over-year, following rising credit risks associated with slow income recovery, structural issues, and competition from Chinese products.

Retail loan growth continued to decelerate, with a year-over-year contraction of 0.1 percent, marking the first contraction in the past decade (Figure 8). This was due to weakened purchasing power among certain households, stemming from slow income recovery and high debt burdens, as well as specific factors in the automotive sector, which caused a contraction in hire-purchase loans. Credit card loans also declined as households repaid debt following the adjustment of the minimum repayment rate in 2024. Additionally, financial institutions became more selective, focusing on borrowers with good credit quality and issuing more low-risk loans, particularly secured loans such as title loans, home for cash loans, car for cash loans, and mortgage loans, which continued to expand still.

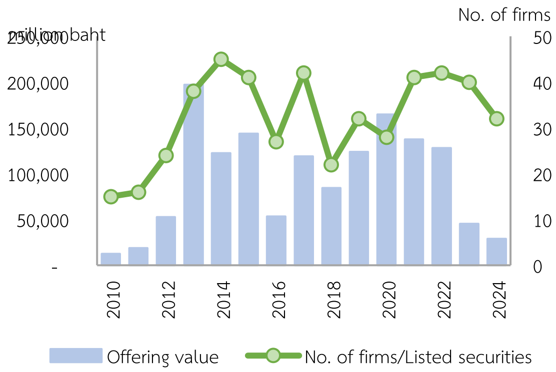
Figure 8: Retail loan growth



Note: The definitions for reporting types of loans, including unsecured personal loans and secured personal loans, have changed since the first quarter of 2019, resulting in the reclassification of data between these two types of loans.
Source: BOT.

Corporate bond issuance contracted by 2.5 percent year-over-year, marking a continuous decline since 2024Q2. The contraction was due in part to some issuers having sufficient liquidity to repay maturing debt, while others faced heightened funding pressures amid slow recovery in certain sectors, an increase in the number of issuers experiencing credit rating downgrades, and governance issues of some firms. As a result, investors shifted their preferences to bonds issued by well-known corporates with credit ratings of A or higher. In contrast, issuers rated BBB, non-investment grade, and unrated group faced greater rollover risks. Therefore, these issuers responded by offering secured bonds or higher yields to attract investors.

Figure 9: Initial public offerings (IPOs)

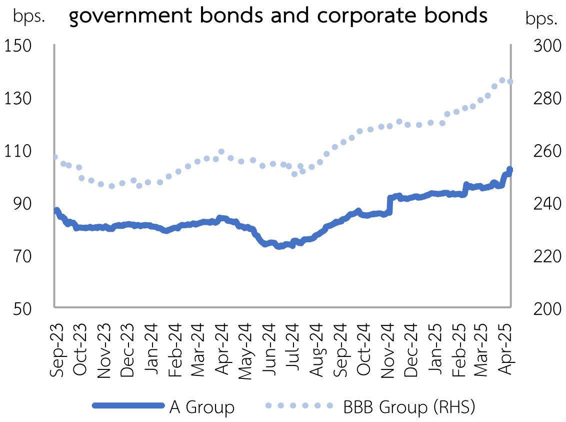


Source: SETSMART.

Funding through the equity market via initial public offerings (IPOs) also declined. In 2024, the number of IPOs fell from 40 firms in the previous year to 32 firms, with the total offering value dropping by 37 percent to 28,745 million baht (Figure 9). This was attributed to a decline in the Stock Exchange of Thailand (SET) index caused by both domestic and external risk factors, making Thailand's stock market less attractive and causing investors to delay their investments. As a result, fund raising by businesses through the equity market became more challenging.

2.1.2 Asset prices

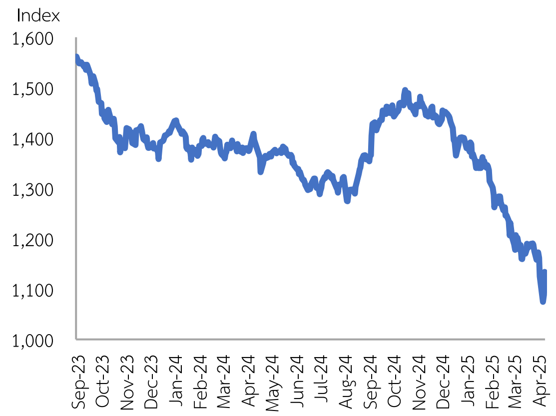
Figure 10: Credit spreads between government bonds and corporate bonds



Note: Average spread of corporate bonds (tenor ≤ 3 years).
Source: ThaiBMA, data as of 11 April 2025.

In 2024, there was no indication of price bubbles in financial and real estate assets in Thailand. On the contrary, the yield on the 10-year Thai government bonds declined by 39 basis points (bps), reflecting lower-than-expected economic growth and a reduction in the policy rate. Meanwhile, credit spreads between short-term government bonds and corporate bonds widened, particularly in the BBB group, where the spread increased by 23 bps. This reflected investors' concerns over firms' financial performance, credit risk, and negative news regarding certain issuers, leading to a flight to quality and more investments in low-risk assets (Figure 10).

Figure 11: SET index

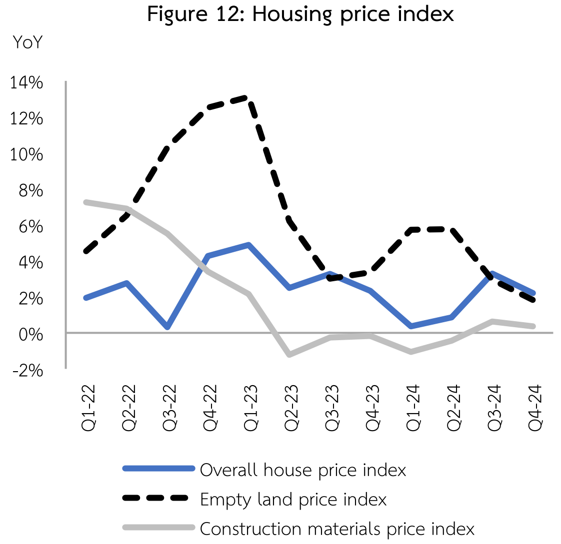


Source: Bloomberg, data as of 11 April 2025.

The SET index continued to decline from 2023 (Figure 11), despite a temporary rebound in 2024Q4 driven by improved political stability and government measures aimed at promoting confidence in the equity market, including the establishment of the Vayupak Fund and revisions of conditions regarding the tax-incentive funds (ThaiESG and ThaiESGX) to discourage sales by unit holders in the capital market. In 2024, the SET index reached its lowest point at 1,274.01, a 10 percent decline from the end of 2023, as the uneven economic recovery, delays in government budget disbursement, governance issues of some firms, and more attractive returns on foreign assets weighed on investors' sentiment. The index continued to decline into the beginning of 2025, hitting a 10-year low, driven by lower-than-expected economic growth, the uncertainty surrounding tariff and trade policies of different countries, and the impact sustained from the end-of-March earthquake.

In the real estate sector, the house price index increased slightly in 2024, driven by rising project development costs, including higher land prices, construction materials and construction costs (Figure 12), particularly land prices along mass transit lines. Overall housing demand slightly contracted from the previous year, despite some signs of improvement around the end of 2024. The decline was primarily due to weaker purchasing power among prospective buyers, especially those earning less than 30,000 baht per month. Foreign demand also slowed, notably among Chinese buyers, in line with China's economic slowdown. Meanwhile, the real estate sector continues to face oversupply pressures, especially in the segment of housing priced above 5 million baht (Figure 7), where developers launched more projects in recent years despite softening demand. At the same time, demand for second-hand residential real estates had been increasing because of their favorable urban locations and affordable prices.

Figure 12: Housing price index



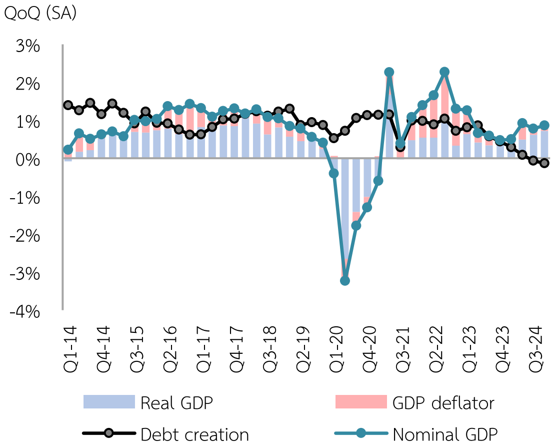
Note: Single-detached house price index (including land) and empty land price index, specifically in Bangkok and vicinity.
Source: BOT, Real Estate Information Center (REIC), and Trade Policy and Strategy Office (TPSO).

2.2 Financial health of household and corporate sectors

2.2.1 Leverage levels of households and corporates

Household and corporate debt levels continue to gradually decline. Household debt deleveraging remains an ongoing process, which will help reduce risks to financial stability over the longer term. The household debt to gross domestic product (GDP) ratio stood at 88.4 percent at the end of 2024, gradually declining from its peak of 95.5 percent in 2021 (Figure 2), while remaining elevated compared to other countries. The decline in the household debt-to-GDP ratio was due to a faster decrease in debt growth relative to the gradual improvement in economic growth (Figure 13). Consequently, vulnerable households with high debt burdens may face limited access to credit and potential liquidity shortage. Nevertheless, over the longer term, a reduction in household debt will help lower risks to financial stability. A suitable level of household debt will help support sustainable economic growth and enhance households' resilience to future uncertainties, particularly in the event of income shocks.

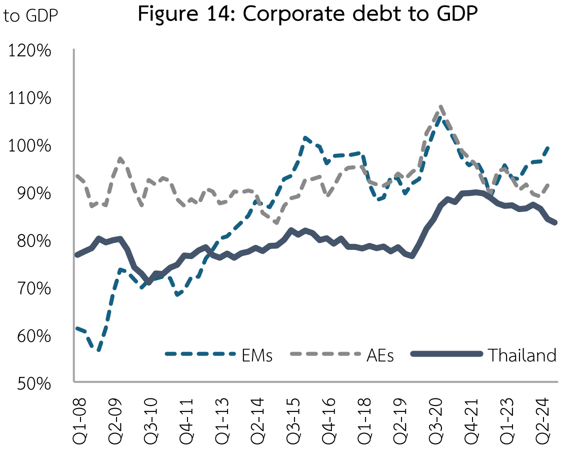
Figure 13: Contributions to changes in the household debt-to-GDP ratio



Note: Contributions to changes in the household debt-to-GDP ratio are seasonally adjusted. The contribution of nominal GDP is presented as a positive value for ease of comparison. Normally, an increase in nominal GDP contributes negatively to the household debt-to-GDP ratio.
Source: BOT and Office of the National Economic and Social Development Council (NESDC).

Corporate debt levels exhibit a declining trend across both loans and corporate bonds. The corporate debt-to-GDP ratio stood at 83.5 percent at the end of 2024, declining from 86.8 percent at the end of 2023, driven by a sharper slowdown in corporate borrowing relative to economic growth. In addition, Thailand's corporate debt-to-GDP ratio is lower than, and continues to decline in contrast to, the average of emerging markets (EMs) and advanced economies (AEs) in the recent periods (Figure 14).

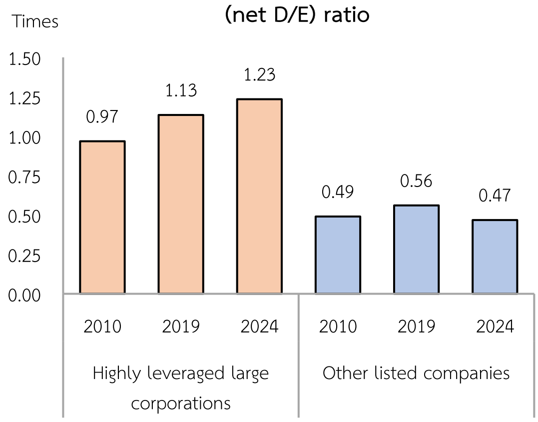
Figure 14: Corporate debt to GDP



Source: BOT and BIS as of 2024Q3.

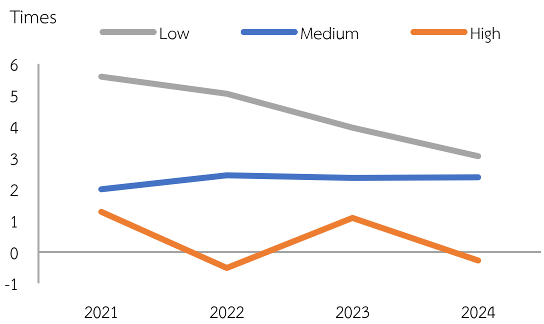
Nevertheless, some highly leveraged large corporations (HLLCs) continue to exhibit net debt-to-equity (net D/E) ratios higher than the average of other listed companies (Figure 15), **although most HLLCs still possess sound financial performances and good debt serviceability.** However, some firms continued to accumulate debt or experienced a decline in financial performance from the previous year. Therefore, it is essential to monitor HLLCs with high debt levels and increasing debt serviceability risk (Figure 16). Elevated debt could accumulate financial vulnerabilities that might weaken firms' resilience to future uncertainties and undermine their debt serviceability, both for loans from financial institutions and corporate bonds. This could then affect the financial positions of investors in the corporate bond market and the equity market, including mutual funds, insurance companies, and savings cooperatives, and might also weigh on investors' and depositors' confidence.

Figure 15: Net debt-to-equity (net D/E) ratio



Note: The annual average net D/E ratio is calculated from the quarterly average net D/E ratio.
Source: SETSMART.

Figure 16: Interest coverage ratio (ICR) by debt burden



Note: The classification of ICR by debt burden for HLLCs is based on net D/E as follows:
- High debt level: Significantly higher debt level compared to other groups (outlier).
- Medium debt level: Net D/E ratio greater than 1.5 times.
- Low debt level: Net D/E ratio less than or equal to 1.5 times.
Source: SETSMART.

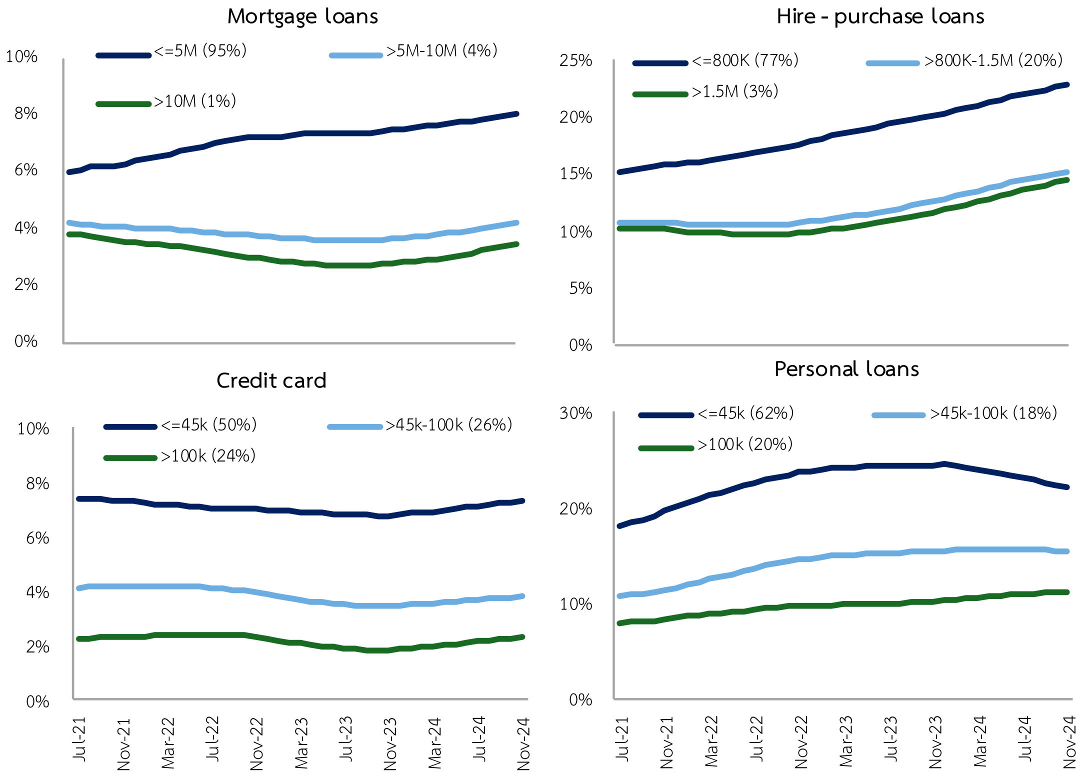
2.2.2 Debt serviceability of household and corporates

The debt serviceability of households and SMEs has deteriorated, exerting additional pressures on their tightened liquidity positions. Household debt serviceability weakened across all loan types, as reflected by a continuous increase in the proportion of accounts with more than 30 days past due (DPD)[4] across all borrower segments (Figure 17). The deterioration in household loan quality was driven by several factors: (1) the uneven economic recovery, leaving some households with yet-to-be-fully-recovered income levels, particularly the self-employed. Despite having stronger income recovery in recent periods, the income recovery for self-employed still lags behind other groups and falls short in

[4] The number of personal loan accounts with more than 30 DPD declined following debt forgiveness measures for vulnerable groups implemented by certain SFIs.

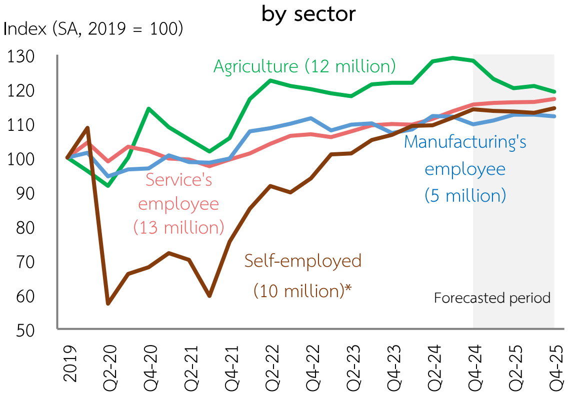
offsetting the income losses incurred during the COVID-19 crisis (Figure 18), (2) the elevated cost of living following a sharp increase in the headline consumer price index in 2022 (Figure 19), (3) the persistently high household debt burden, and (4) vulnerable borrowers who were offered assistance previously but left the debt relief program amid partial income recovery.

Figure 17: Proportion of accounts with 30 DPD by portfolio



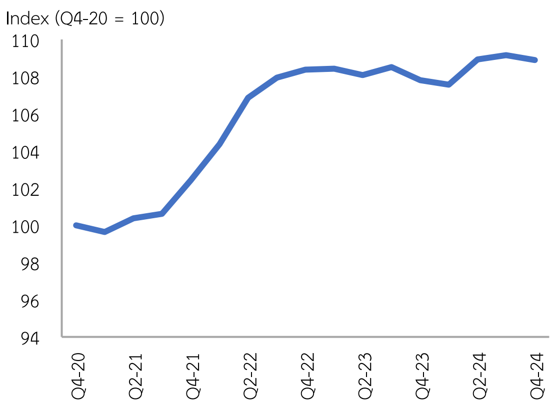
Note: The data covers commercial banks including affiliated companies, SFIs, NBRLs, and other companies that are members of the National Credit Bureau (NCB) as of November 2024, and a 12month moving average. Data in ( ) indicates the proportion of accounts in each portfolio.
Source: NCB, calculated by the BOT.

Figure 18: Non-farm employee's income by sector



Note: ( ) denotes each sector's employees in 2023, * Including employers.
Source: National Statistics Office's Labor Force Survey and Household socio-economic survey and Office of Agricultural Economics, BOT calculation and forecast

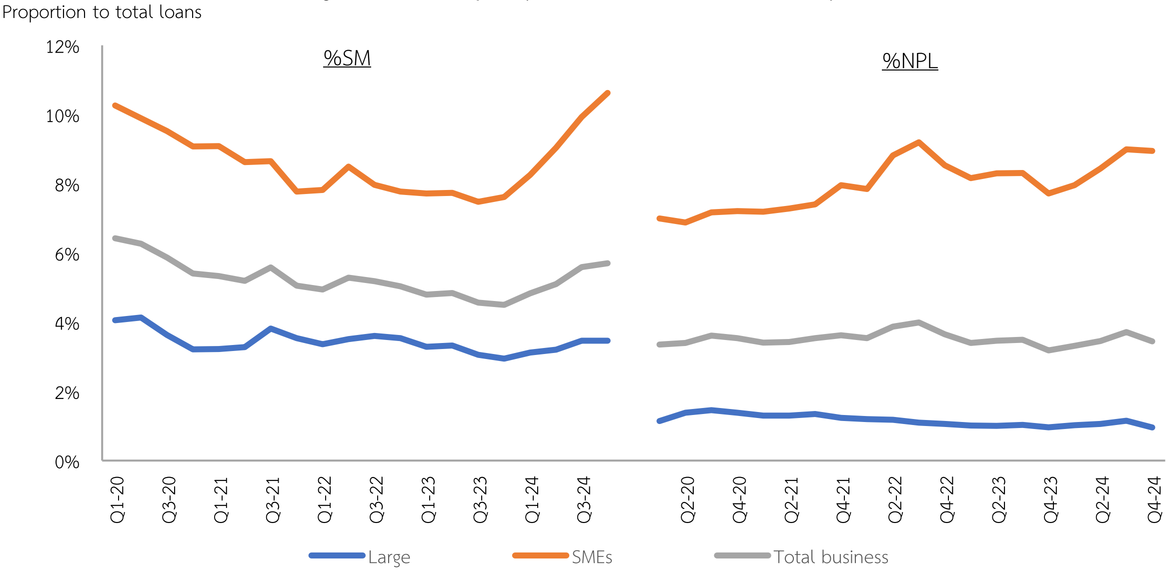
Figure 19: Headline consumer price index



Source: TPSO.

The debt serviceability of corporates deteriorated from the previous year, despite the stable non-performing loan (NPL or stage 3) ratio. The special-mentioned loan (SM or stage 2) ratio rose from 4.5 percent in 2023 to 5.7 percent in 2024, while the NPL ratio, after increasing earlier in the year, stabilized in 2024Q4 (Figure 20). The rise in both SM loans and NPLs mainly reflected weaker loan quality among SMEs, which have experienced a slow recovery and tighter liquidity conditions. This could be seen by declining cash flows since the COVID-19 crisis, stemming from partial income recovery, tighter supplier trade credit terms (Figure 21), particularly among smaller businesses, who recovered more slowly than large corporates (Figure 22), as well as longstanding challenges faced by SMEs in accessing credit. For large corporates, there were early signs of deteriorating debt serviceability, as the interest coverage ratio (ICR[5]) declined to 4.4 times in 2024 from 4.9 times in 2023. This was mainly driven by the manufacturing sector, where some firms came under pressure from structural challenges and rising competition from foreign products. Nevertheless, the ICR for large corporates in all sectors remained above the 1-time threshold which is typically used to signal heightened default risks (Figure 23).

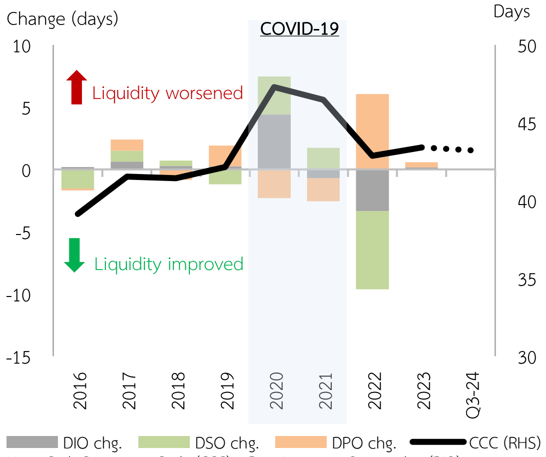
Figure 20: Loan quality of the financial institution system



Note: (1) The financial institution system consists of commercial banks including affiliated companies, SFIs, and NBRLs that are not subsidiaries of commercial banks; (2) The definition of business loan size is as follows: for commercial banks including affiliated companies, the classification is based on total credit lines (excluding interbank loans) that each business has with a given commercial bank as of December 2024 (large corporates: more than 500 million baht; SMEs: up to 500 million baht). SFIs use the OSMEP's definition, which is based on income and employment. NBRLs use nano finance and unsecured personal loans under supervision for occupation.
Source: BOT.

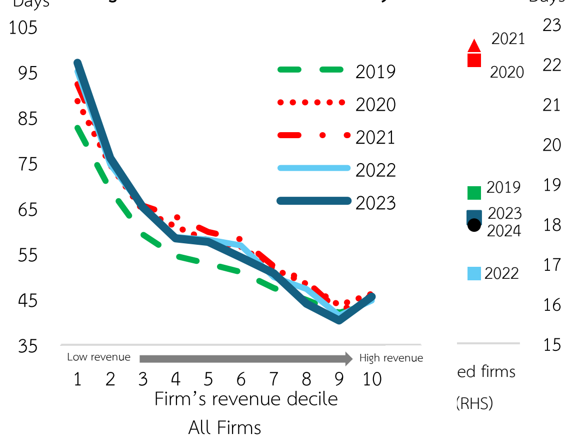
[5] ICR is calculated as the ratio of earnings before interest and taxes (EBIT) to interest expenses.

Figure 21: Sources of cash flow



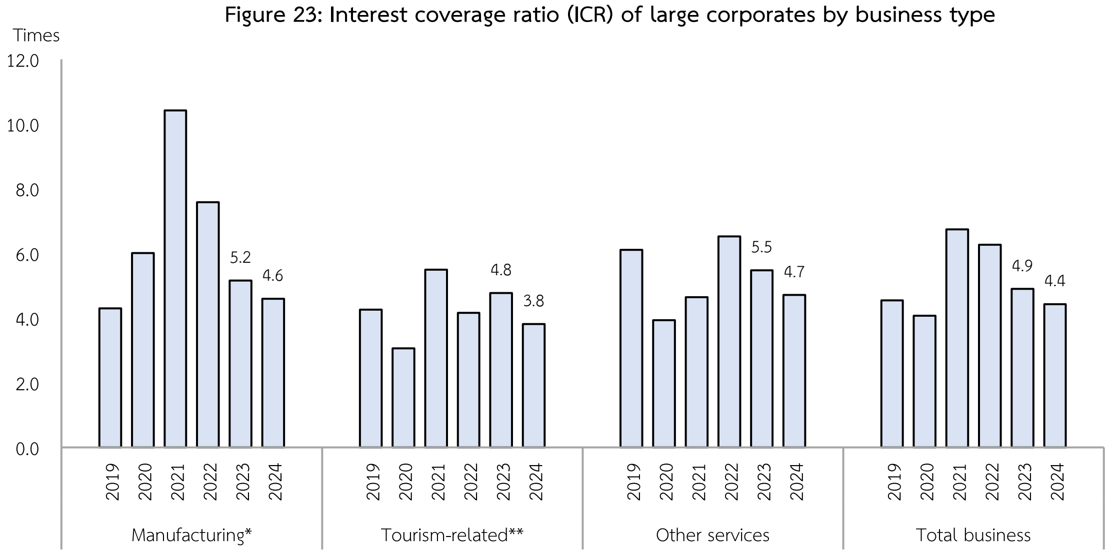
Note: Cash Conversion Cycle (CCC) = Days Inventory Outstanding (DIO) + Days Sales Outstanding (DSO) – Days Payable Outstanding (DPO).
Source: SETSMART and Department of Business Development (DBD), calculated by the BOT.

Figure 22: Cash conversion cycle



Note: Data excludes financial and insurance businesses
Source: SETSMART as 2024Q3 and DBD as of 2023, calculated by the BOT using median.

Figure 23: Interest coverage ratio (ICR) of large corporates by business type



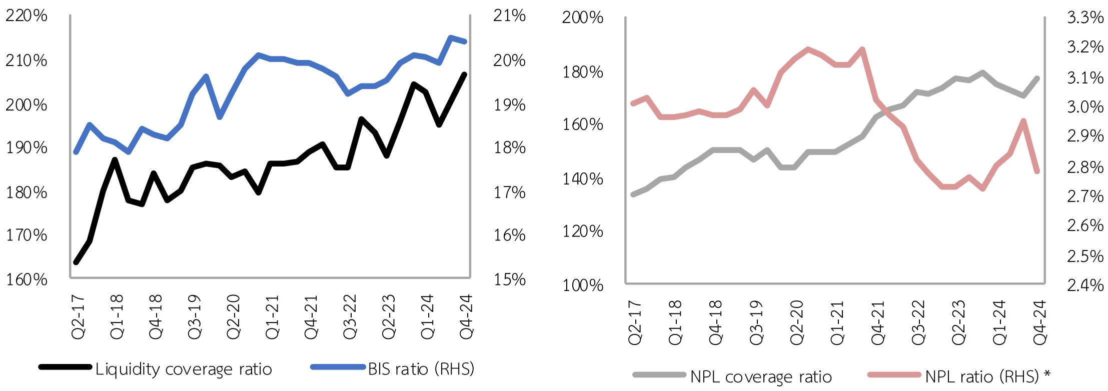
Note: *Manufacturing includes manufacturing and petroleum businesses.
**Tourism-related includes hotel, airline, restaurant, and trade businesses.
Source: SETSMART, calculated by the BOT using median.

2.3 Resilience of financial intermediaries in the system

The Thai financial institutions in the system remain solvent and resilient in all types of financial institutions—commercial banks, non-bank retail lenders (NBRLs), savings cooperatives (co-ops), insurance companies, and daily fixed income (DFI) funds.

The Thai banking system continues to demonstrate resilience in terms of both solvency and liquidity. The BIS ratio continued to increase, reaching 20.4 percent at the end of 2024, well above the regulatory requirement[6] and the second highest among regional peers[7]. The NPL coverage ratio steadily increased following the COVID-19 crisis, rising from 150 percent in 2019Q4 to 177.1 percent at the end of 2024. Meanwhile, the liquidity coverage ratio (LCR) stood at 206.4 percent at the end of 2024, more than double the regulatory minimum requirement[8] (Figure 24).

Figure 24: Capital, loan loss provision, and liquidity indicators of the banking system



Note: Commercial bank data excludes affiliated companies.
*Commercial bank loan data includes affiliated companies.
Source: BOT.

The banking system's financial performance in 2024 improved from the previous year, mainly supported by non-interest income from fair value through profit or loss (FVTPL) on financial instruments. Expected credit loss (ECL) declined as banks had already accumulated loan loss provisions over the past 2–3 years. Although loan quality showed signs of deterioration, as reflected by an increase in the NPL ratio, commercial banks successfully managed distressed debt through debt restructuring and NPL sales, preventing a sharp spike in NPLs (NPL cliff). At the end of 2024, the NPL ratio stood at 2.8 percent, lower than the level during the COVID-19 crisis and below the 2022 average of 3.3 percent for EMs[9].

Overall, NBRLs remain financially sound, although profitability had weakened for some lenders in line with the deteriorating loan quality. In the first three quarters of 2024, NBRLs recorded a net profit margin (NPM) of 15.2 percent, down from 16.9 percent in 2023, due to higher ECL and rising funding costs (Figures 25 and 26). Nonetheless,

[6] The BIS ratio requirement is 12% for domestic systemically important banks (D-SIBs) and 11% for commercial banks that are not D-SIBs.

[7] Regional peers include Indonesia, Malaysia, the Philippines, Singapore, and Vietnam, based on data as of 2024Q3.

[8] The LCR requirement for commercial banks is 100%.

[9] EMs as classified by MSCI Emerging Markets.

most NBRLs maintained strong financial positions, with retained earnings accounting for 18.5 percent of total assets, alongside prudent provisioning practices to absorb credit risks. In addition, NBRLs managed debt in line with slowing loan growth and higher funding costs, resulting in a lower debt-to-equity (D/E) ratio compared to the previous year (Figure 27).

However, amid tighter financial conditions in both the credit and corporate bond markets, some NBRLs with weaker financial positions may face an increase in refinancing risks. This vulnerability stems from NBRLs' reliance on credit from financial institutions and corporate bond issuance, which together accounted for over 50 percent of their funding sources (Figure 28).

Figure 25: Credit cost of NBRLs

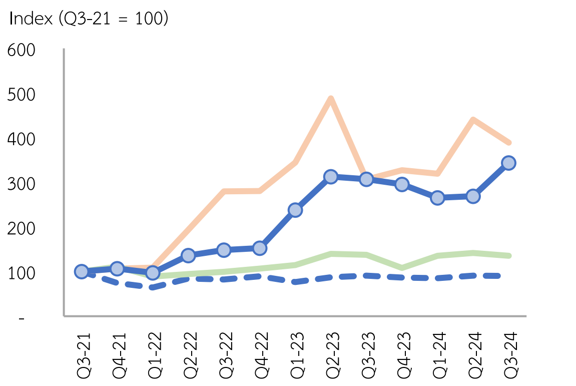
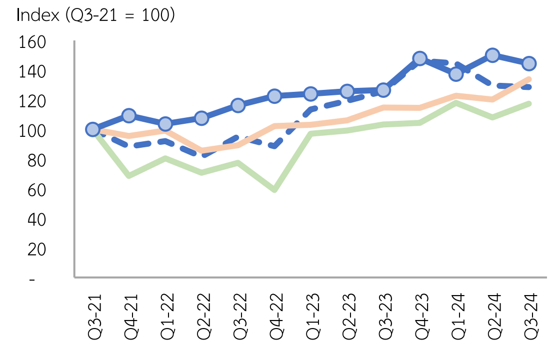
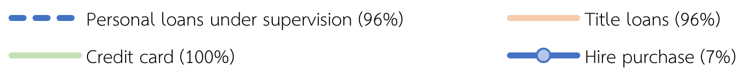


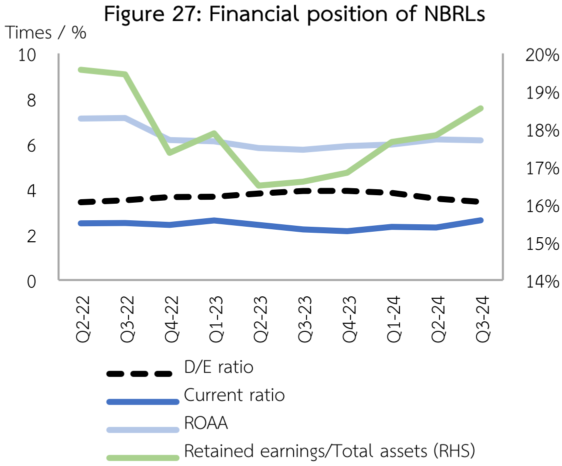
Figure 26: Funding cost of NBRLs





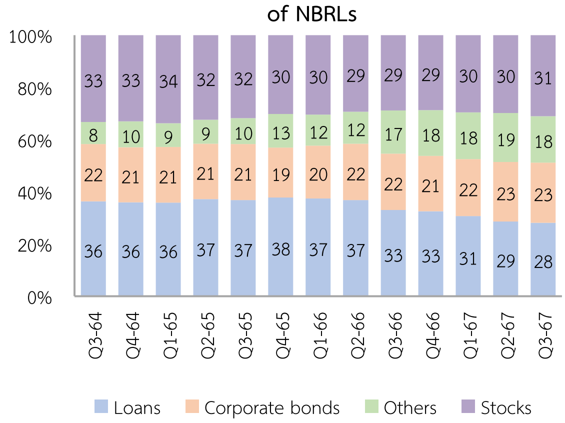
Note: The weighted average is based on the loan proportions from companies with high loan proportions in each portfolio. It is calculated from 21 personal loan under supervision companies, 19 title loan companies, 8 credit card companies, and 13 hire-purchase loan companies. ( ) indicates the share of total loans of each portfolio that is covered by the representative companies.
Source: SETSMART and BOT, calculated by the BOT.

Figure 27: Financial position of NBRLs



Note: Return on average assets (ROAA).
Source: SETSMART and BOT, calculated by the BOT using the weighted average based on the proportion of total assets from 31 companies.

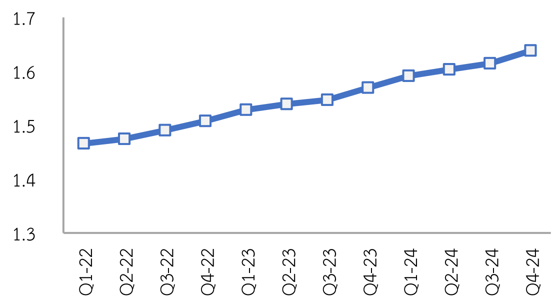
Figure 28: Proportion of funding sources of NBRLs



Source: BOT, calculated by the BOT using the weighted average based on the proportion of total assets from 31 companies.

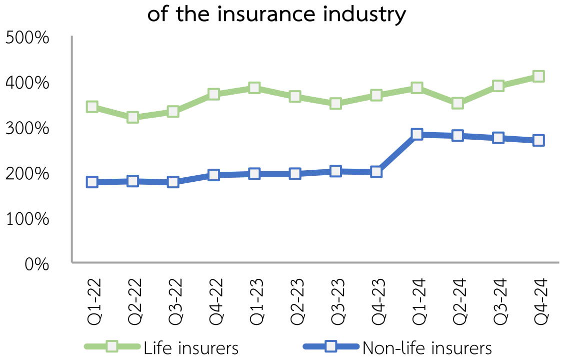
Co-ops' financial positions remain solid. In 2024, share capital and reserves continued to expand by 4.4 percent year-over-year (Figure 29). Credit risk remains low, as co-ops benefit from the ability to deduct loan repayments directly from members' salaries, supporting continuous loan growth. The impact of tighter financial conditions on co-ops remains limited, as their primary funding sources are share contributions and member deposits. Moreover, given subdued investors' confidence that could affect risks in the corporate bond market, co-ops, which hold nearly 25 percent of their assets in investments, have continued to manage investment risks prudently. Most investments are concentrated in corporate bonds with good credit ratings, in accordance with investment guidelines, alongside the implementation of concentration limits to further mitigate investment concentration risks.

Figure 29: Share capital and reserves of savings cooperatives



Note: Data includes savings cooperatives and the Federation of Savings and Credit Cooperatives.
Source: CPD, calculated by the BOT.

Figure 30: Capital adequacy ratio (CAR) of the insurance industry

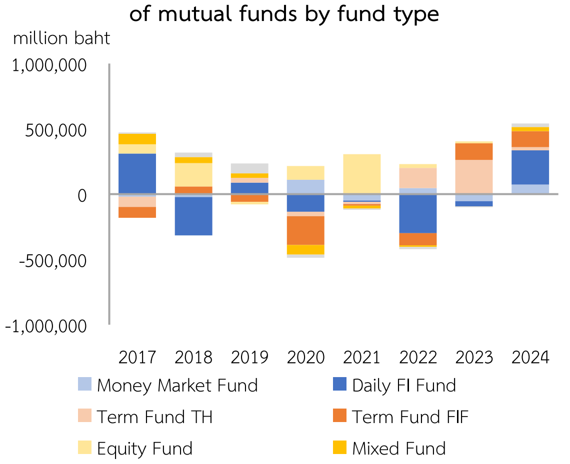


Source: Office of Insurance Commission (OIC), calculated by the BOT.

Insurance companies maintain sound financial positions and performance. The capital adequacy ratio (CAR) stood at 410 percent for life insurers and 269 percent for non-life insurers, well above the regulatory requirement of 100 percent (Figure 30). The key risk facing insurance companies in recent periods has been health insurance, which has been affected by rising medical costs and treatment frequency, resulting in higher insurance claim costs. In response, the Office of Insurance Commission (OIC) announced regulatory changes requiring co-payments upon the renewal of health insurance starting from 20 March 2025. The measure aims to manage risks and control costs associated with medical treatments, mitigate excessive claims behaviors, and slow the pace of health insurance premium increase over the longer term, thereby improving access to health insurance and supporting the long-term sustainability of the insurance system. Meanwhile, it is essential to monitor the potential impact of insurance claims related to the earthquake on 28 March 2025. Preliminary assessments suggest that the event is unlikely to materially affect insurance companies' financial positions, as most companies have secured excess of loss reinsurance as well as facultative reinsurance for large-scale events with financially sound reinsurers.

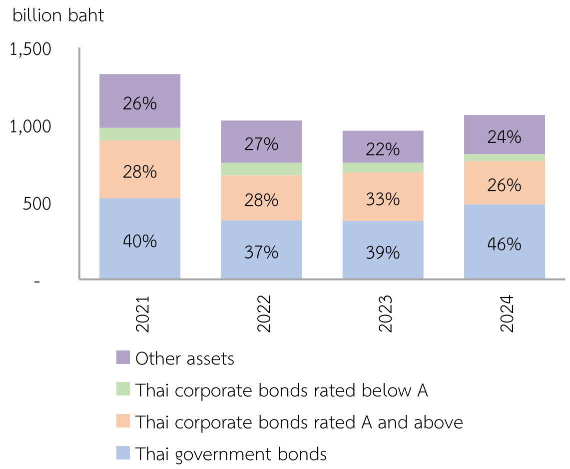
Daily fixed income (DFI) funds recorded steady net inflows in 2024 (Figure 31), supported by market expectations of policy rate cuts by major central banks globally. While news related to the governance issues of some listed companies led to redemptions from certain funds during July and August, overall DFI funds maintained sufficient liquidity to accommodate redemptions. DFI funds also enhanced liquidity management by increasing allocations to Thai government bonds and adopted a more cautious investment strategy by reducing exposure to Thai corporate bonds following negative news involving multiple listed companies (Figure 32). Nevertheless, the funds continue to see inflows, supported by more attractive return expectations in the upcoming easing cycle.

Figure 31: Annual flows of mutual funds by fund type



Source: Morningstar.

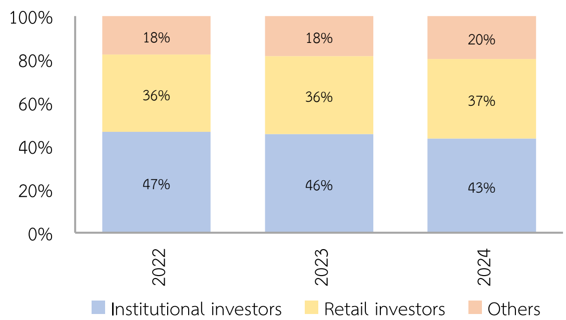
Figure 32: Investment of DFI funds



Source: Securities and Exchange Commission (SEC), calculated by the BOT.

Going forward, two key factors that are important to the stability of the financial institution system and other financial intermediaries and warrant close monitoring are: (1) investors' confidence amid investors remaining cautious. Any event that may further erode confidence could worsen rollover risks in the corporate bond market, particularly for issuers rated BBB and A-. **This could undermine confidence in institutional investors, who held over 43 percent of total outstanding corporate bonds** (Figure 33), and **(2) the financial positions of certain NBRLs, which may come under additional pressure from deteriorating loan quality.** This could lead to more difficulty in fund raising and higher funding costs, potentially affecting the liquidity of NBRLs and overall financial market confidence.

Figure 33: Share of outstanding corporate bonds by investor type

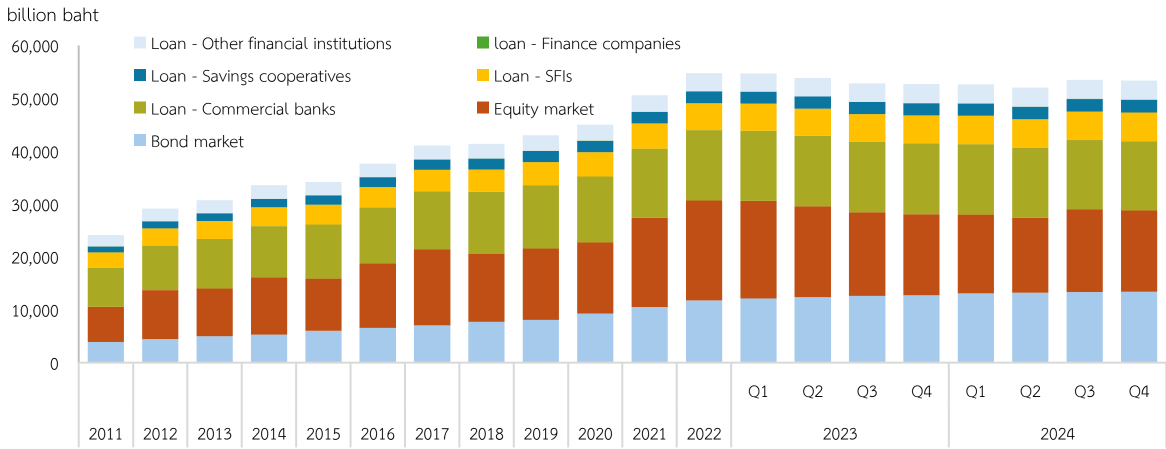


Source: SEC, calculated by the BOT.

Annex: Thailand's financial system data

1. Structure of the Thai financial system

1.1 The Thai financial system: Types of funding



Note: 1. Loan to households, non-profit financial organizations, and public non-financial corporations.
2. SET and MAI market capitalizations excluding financial issuers and non-resident.
3. Par value of bonds issued in Thailand excluding financial issuers and non-resident.

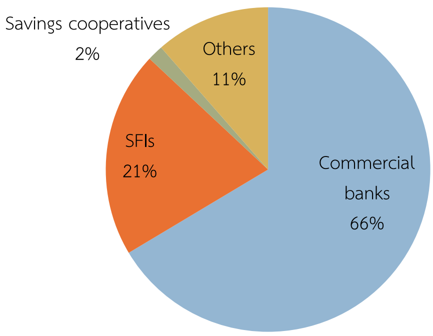
1.2 Financial institution system: Number and asset size of major financial institutions

Type of financial institutions	2024 Q4[P]	
	Number	% of total assets of financial institutions
Depository corporations		
Commercial banks	28	45.3
Specialized financial institutions (SFIs)	6	16.2
Savings cooperatives[1/]	1,383	6.8
Finance companies	4	0.03
Money market mutual funds (MMFs)	53	0.7
Other financial corporations		
Mutual funds (excluding MMFs)	2,241	9.4
Insurance companies	70	9.1
Leasing companies	806	2.0
Credit card, personal loan, and nano finance companies under supervision[2/3/]	133	3.1
Provident funds	351	2.7
Government pension fund	1	2.5
Asset management companies	83	0.8
Securities companies	48	0.8
Other non-depository financial institutions[4/]	833	0.5

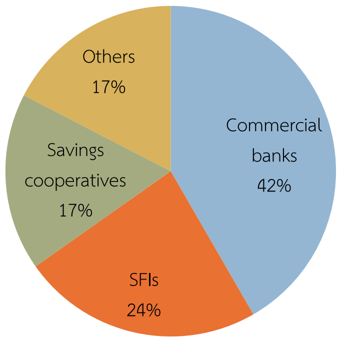
Note: [P] Preliminary data.
[1/] Savings cooperative data does not include credit unions cooperatives.
[2/] Credit cards and personal loans under supervision include only financial institutions that operate with licenses issued by the BOT and satisfy the definition of financial institutions according to the International Monetary Fund (IMF) Monetary and Financial Statistics Manual (2000).
[3/] There were 54 nano-finance operators as of 2024Q4.
[4/] Consists of the Thai Credit Guarantee Corporation (TCG) and pawnshops.

1.3 Loan: Corporate and consumer loans (as of 2024Q4)

Share of corporate loan market

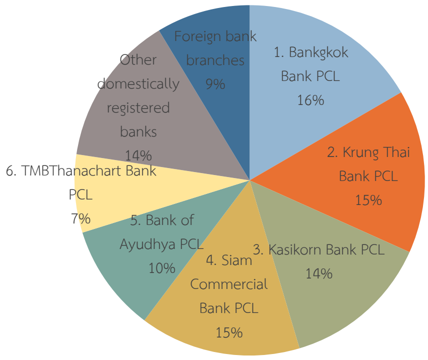


Share of consumer loan market

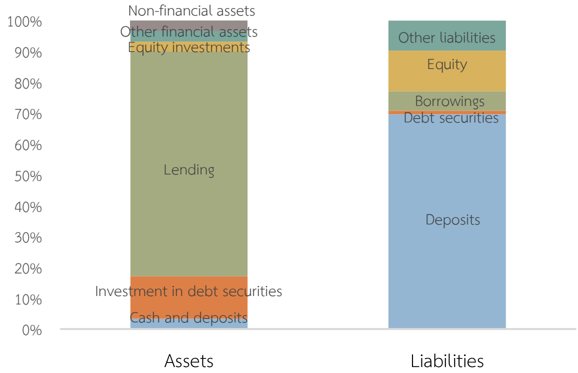


1.4 Structure of the commercial banking system (as of 2024Q4)

Share of commercial banks by asset size

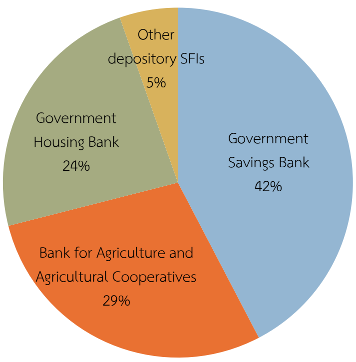


Asset and liability structure of commercial banks

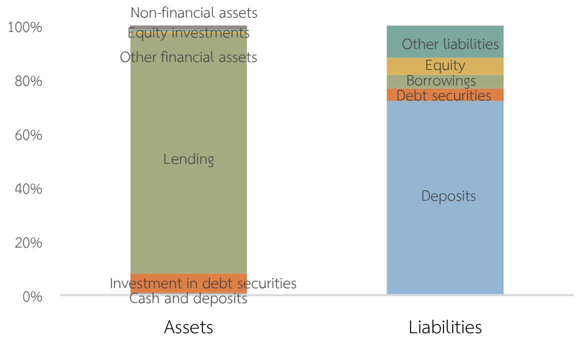


1.5 Structure of deposit-taking specialized financial institutions (as of 2024Q4)

Share of depository SFIs by asset size



Assets and liability structure of SFIs



2. Financial condition and financial stability risk indicators

Financial condition and financial stability risk indicators

Indicators	2019	2020	2021	2022	2023	2024 Q1	2024 Q2	2024 Q3	2024 Q4
Overall financial system									
Nominal GDP (million baht)[1/]	16,889,174	15,661,146	16,186,634	17,377,997	17,954,668	18,053,830	18,238,398	18,398,114	18,578,916
Funding structure									
Private sector loans to GDP (times)[2/]	1.6	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7
Stock market capitalization to GDP (times)	0.8	1.0	1.2	1.2	1.0	0.9	0.9	1.0	0.9
Bond market capitalization to GDP (times)	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
1. Financial institutions									
Commercial banks[3/]									
Total assets (billion baht)	20,095	21,764	22,681	23,574	23,906	24,273	24,035	24,067	24,139
% YoY	6.0	8.3	4.2	3.9	1.4	2.8	1.4	0.0	1.0
Deposits (excluding interbank) (billion baht)	14,031	15,383	16,043	16,770	16,907	17,145	17,097	16,925	17,280
% YoY	4.1	9.6	4.3	4.5	0.8	1.3	2.2	1.2	2.3
Loans (excluding interbank) (billion baht)	13,505	14,198	15,119	15,430	15,379	15,444	15,337	15,111	15,288
% YoY	2.0	5.1	6.5	2.1	-0.3	0.7	-0.4	-2.3	-0.6
Business loans (billion baht)	8,653	9,135	9,853	10,075	9,900	10,011	9,927	9,742	9,931
% YoY	-0.8	5.6	7.9	2.3	-1.7	0.4	-0.5	-2.8	0.3
- Credit line up to 500 million baht (excl. financial companies)[4/]	-5.0	-2.5	2.2	-1.9	-5.7	-5.5	-5.3	-5.7	-5.0
- Credit line more than 500 million baht (excl. financial companies)[4/]	2.4	11.9	11.6	5.1	0.4	3.6	2.0	-1.0	3.4
Consumer loans (billion baht)	4,852	5,063	5,266	5,356	5,479	5,433	5,410	5,369	5,357
% YoY	7.5	4.3	4.0	1.7	2.3	1.1	0.0	-1.3	-2.2
- Mortgage loans	5.4	5.9	4.4	3.1	1.3	1.0	0.8	0.4	0.3
- Hire-purchase loans	7.6	2.4	0.1	0.3	-0.4	-3.0	-6.2	-9.1	-11.4
- Credit card	10.1	-2.1	1.7	-14.2	2.6	0.2	-2.4	-4.7	-3.9
- Personal loans	11.8	4.8	7.8	3.7	7.0	5.4	4.4	2.9	0.9
Liquidity									
Loans to deposits (%)	96.3	92.3	94.3	92.0	91.0	90.1	89.7	89.3	88.4
Loans to deposits and B/E (%)	96.2	92.3	94.3	92.0	91.0	90.1	89.7	89.3	88.3
Asset quality									
NPL ratio (%)[5/]	2.98	3.12	2.98	2.73	2.66	2.74	2.78	2.91	2.73
SM ratio (%)[5/]	2.79	6.65	6.39	6.23	5.88	6.13	6.25	6.61	6.75
Provisions for loans/NPL (%)[5/]	150.0	149.2	162.6	171.2	179.0	175.1	172.4	170.3	177.1
Profitability									
Operating profit (billion baht)	500	405	416	474	503	129	140	134	125
Net profit (billion baht)	271	147	181	238	251	68	76	71	68
Return on assets (%)	1.4	0.7	0.8	1.0	1.1	1.1	1.3	1.2	1.1
Net interest margin (%)	2.7	2.6	2.5	2.6	3.0	3.0	3.0	3.0	2.9
Capital adequacy									
Regulatory capital to risk-weighted assets (%)	19.6	20.1	19.9	19.4	20.1	20.1	19.9	20.5	20.4
Tier 1 ratio (%)	16.7	17.4	17.0	16.6	17.3	17.3	17.4	18.1	18.0
Common equity tier 1 (%)	16.6	17.0	16.5	16.1	16.8	16.8	16.8	17.5	17.5
Interest rates[6/]									
Weighted average minimum loan rate (MLR) (%)	3.9	3.1	3.0	3.5	4.6	4.5	4.6	4.5	4.4
12-month fixed deposit rate (%)	1.3	0.5	0.5	1.0	1.7	1.7	1.7	1.7	1.5

Note: [1/] Nominal GDP (or GDP at current prices) data has been revised from 2012 onward. Quarterly data is calculated from four-quarter moving sum of nominal GDP.

[2/] Loans to the private sector include loans granted to households, non-profit financial institutions and non-financial corporations.

[3/] Commercial bank data excludes affiliated companies.

[4/] Corporates' credit lines with each commercial bank.

[5/] Since 2020Q1, NPL means Stage 3 loans and SM means Stage 2 loans with a significant increase in credit risk, which has a greater coverage compared to SM classifications prior to TFRS9.

[6/] Interest rates for retail customers, based on rates from 5 commercial banks (Bangkok Bank, Krung Thai Bank, Siam Commercial Bank, Kasikorn Bank, and Bank of Ayudhya).

Financial condition and financial stability risk indicators (continued)

Indicators	2019	2020	2021	2022	2023	2024 Q1	2024 Q2	2024 Q3	2024 Q4
2. Financial markets									
Government bond market									
Bond spread (10 years - 2 years) (%)[7/]	0.3	0.9	1.2	1.0	0.4	0.4	0.3	0.3	0.3
Non-resident holdings (%)[8/]	9.8	8.5	9.7	9.8	8.2	7.5	7.4	7.7	7.1
Stock markets (SET and mai)									
SET Index (end of period)	1,579.8	1,449.4	1,657.6	1,668.7	1,415.9	1,377.9	1,301.0	1,448.8	1,400.2
SET actual volatility (%)	9.4	30.4	12.0	11.0	11.8	10.0	10.5	12.7	11.3
SET price to earnings ratio (times)	19.4	28.8	20.8	18.2	18.4	18.1	17.1	18.0	19.3
mai Index (end of period)	309.6	336.3	582.1	584.2	411.6	411.7	355.5	354.4	311.8
mai actual volatility (%)	10.5	22.9	15.4	21.2	18.1	10.0	10.5	12.7	11.3
mai price to earnings ratio (times)	23.1	72.6	58.2	54.5	109.2	109.4	41.0	38.0	41.8
Foreign exchange market									
Exchange rates (end of period) (USD/THB)	30.0	30.0	33.4	34.6	34.1	36.4	36.7	32.2	34.1
Actual volatility (% annualized)	4.1	5.4	5.4	8.7	9.1	8.6	6.4	7.9	9.8
Nominal effective exchange rate (NEER) (2012 = 100)	123.2	122.6	117.8	115.5	119.8	118.8	117.2	121.8	126.2
Real effective exchange rate (REER) (2012 = 100)	113.0	110.2	104.7	103.3	104.3	100.9	100.0	103.6	106.7
3. External sector									
Current account to GDP[9/] (%)	7.0	4.2	-2.1	-3.5	1.5	2.6	0.9	1.7	3.0
External debt to GDP[10/] (%)	31.0	37.2	40.6	42.1	39.1	37.6	37.4	37.9	35.1
Foreign currency external debt to GDP (%)	19.9	24.7	28.0	28.8	26.4	25.2	25.1	24.3	22.8
External debt (million USD)	172,708	190,125	196,870	201,426	196,547	190,215	185,502	200,432	191,685
Short-term (%)	34.6	39.4	38.3	40.3	41.3	42.4	43.4	43.7	43.8
Long-term (%)	65.4	60.6	61.7	59.7	58.7	57.6	56.6	56.3	56.2
International reserves									
Net reserves (million USD)	259,047	286,476	279,157	245,813	254,589	252,913	252,644	269,032	262,186
Gross reserves to short-term external debt (times)	3.1	3.0	2.7	2.3	2.4	2.4	2.4	2.4	2.5
Capital flows									
Net capital flow (million USD)	-16,494	-15,085	-7,048	6,682	-11,864	-5,097	-2,380	551	-9,222
Direct investment (million USD)									
Thailand direct investment abroad	-10,164	-18,606	-19,410	-7,806	-13,675	-1,207	-1,790	-2,564	-2,241
Foreign direct investment in Thailand	5,534	-4,294	15,390	11,855	6,516	2,508	936	2,050	4,737
Portfolio investment (million USD)									
Thailand portfolio investment abroad	-7,853	-4,058	-16,831	-2,430	-3,338	-6,728	-817	-4,639	-5,129
Foreign portfolio investment in Thailand	-946	-7,890	4,865	8,210	-10,389	2,234	-2,236	2,766	-5,428
4. Households									
Household debt to GDP (%)	84.1	94.2	94.6	91.6	91.3	90.7	89.7	88.9	88.4
Household debt growth YoY (%)	4.9	3.9	3.8	3.9	3.0	2.4	1.6	0.8	0.2
Financial assets to debt (times)	2.6	2.5	2.7	2.7	2.6	2.7	2.7	2.7	2.7
Proportion of consumer loans more than 30 DPD of commercial banks (NPL and SM ratio) (%)[5/] :									
- Mortgage loans	5.59	9.59	8.85	7.54	8.33	8.63	8.98	9.43	10.00
- Hire-purchase loans	9.29	10.95	12.59	15.54	16.42	16.63	17.35	17.99	17.71
- Credit card	4.38	8.90	10.16	7.70	7.79	9.38	10.42	9.77	8.42
- Personal loans	4.62	8.62	8.36	7.07	7.18	7.31	7.71	7.97	8.34

Note: [7/] Calculated using the interpolated yield curve from ThaiBMA.
[8/] Non-resident holding data includes government bonds, BOT bonds, and state-owned enterprises' bonds for which the BOT serves as a registrar.
[9/] Current account to GDP is calculated using quarterly nominal GDP of the same period.
[10/] External debt to GDP is calculated as the ratio of external debt to four-quarter moving sum of nominal GDP.

Financial condition and financial stability risk indicators (continued)

Indicators	2019	2020	2021	2022	2023	2024 Q1	2024 Q2	2024 Q3	2024 Q4
5. Corporates									
Corporate debt to GDP (%)	76.4	87.1	89.7	87.5	86.5	87.2	86.4	84.2	83.5
Proportion of business loans more than 30 DPD of commercial banks (NPL and SM ratio) (%)[5/] :									
- Credit line up to 500 million baht[4/]	9.85	19.79	17.86	17.49	17.52	18.13	18.31	19.26	20.07
- Credit line more than 500 million baht[4/]	3.22	5.19	5.51	5.31	4.49	4.77	4.86	5.26	5.11
Performance of non-financial listed companies									
Operating profit margin (%)	6.9	6.2	7.9	7.8	7.2	7.9	7.8	6.9	6.8
Debt to equity ratio (times)	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7
Interest coverage ratio (times)	5.3	4.0	5.8	6.5	4.8	5.3	4.7	4.0	4.2
Current ratio (times)	1.6	1.5	1.6	1.8	1.8	1.7	1.7	1.8	1.7
6. Real estate sector									
Number of mortgages approved by commercial banks (Bangkok and vicinity)									
Single- and semi-detatched houses (unit)	15,476	16,814	17,626	18,559	15,393	3,156	3,566	3,411	3,354
Townhouses and commercial buildings (unit)	24,710	23,052	21,368	19,745	16,062	3,158	3,337	3,209	2,981
Condominiums (unit)	30,270	30,524	23,526	25,415	20,630	4,365	5,120	5,590	5,205
Number of new housing units for sale (Bangkok and vicinity)									
Single- and semi-detatched houses (unit)	19,683	17,746	13,240	24,748	30,929	6,617	5,313	3,427	5,583
Townhouses and commercial buildings (unit)	32,925	29,370	23,709	28,525	21,577	4,071	3,800	3,157	1,554
Condominiums (unit)	66,367	25,906	23,445	53,778	49,030	5,877	7,893	2,534	11,627
House price index (Bangkok and vicinity) (2011 = 100)									
Single-detatched houses (including land)	127.9	132.5	133.0	138.0	141.7	141.3	141.0	143.4	144.4
Townhouses (including land)	150.0	155.6	157.9	163.7	167.8	166.9	168.0	173.4	174.8
Condominiums	162.8	170.1	180.4	184.0	191.3	196.1	193.9	200.1	201.3
7. Fiscal sector									
Public debt to GDP (%)	41.2	52.0	59.6	60.9	61.7	63.6	63.3	63.2	63.8

Bank of Thailand
www.bot.or.th

Bank of Thailand Learning Center
www.botlc.or.th

Bank of Thailand

@bankofthailand

@bankofthailand

Bank of Thailand

Pursuing Sustainable
Economic Well-Being

FSU@bot.or.th

273 Samsen Road, Watsamphraya, Phra Nakhon District, Bangkok 10200