مصرف الإمارات العربية المتحدة المركزي
CENTRAL BANK OF THE U.A.E.

FINANCIAL STABILITY REPORT 2023

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MESSAGE FROM
H.E. KHALED MOHAMED BALAMA

GOVERNOR

In 2023, the UAE financial system demonstrated its capacity to adapt to a global environment marked by tighter financing conditions, weaker global growth and heightened geopolitical risks. This resilience is supported by the preparedness of the Central Bank of the UAE (CBUAE) to tackle the build-up of risks in the financial system through the application of policy measures and cooperation with domestic and international partners.

Despite an increase in downside risks in the global financial system in 2023, characterised by macro-economic challenges and the banking sector stress observed in certain geographic regions, domestic financial stability conditions remained broadly unchanged in comparison to 2022. In particular, the higher rate environment has improved the profitability of UAE banks, increasing the quantum of capital in the financial system, with notable decrease of net non-performing loans from 3.0% to 2.4%. Amid macro-financial challenges globally, the UAE's economic outlook remains positive, with a real GDP growth projection of 4.0% in 2024 and a further acceleration in 2025. However, the UAE's economy and its financial sector remain sensitive to vulnerabilities in the global financial system given the open nature of its economy.

As a pillar of our Financial Infrastructure Transformation programme, the CBUAE's work on a Central Bank Digital Currency progressed further during the year. More generally, rapid digitalisation of the financial services industry presents substantial potential benefits, such as increased efficiency, accessibility, and innovation. However, this digital transformation also brings associated risks that must be carefully managed by all licensed financial institutions.

With regard to financial infrastructure, 2023 saw two significant developments in our work to maintain the smooth functioning of payment systems operated by the CBUAE. Firstly, Al Etihad Payments was established as a new CBUAE subsidiary to manage the everyday operations of certain payment systems and ensure appropriate ongoing oversight. Secondly, the Instant Payment Platform "Aani" went live, with the participation of a group of pilot financial institutions, and with the intention of ensuring improved functionality in payments within the UAE.

During 2023, the CBUAE has reaffirmed its commitment to sustainability, prioritising resilience in the financial system against climate-related financial risks while transitioning to a sustainable economy. This commitment includes releasing the principles for effective management of climate-related financial risks to further improve the management of climate change risk in the financial sector. The CBUAE has also introduced the climate risk stress test in 2023, primarily aimed at transition risk, to deepen the understanding of climate change's impact on the banking sector.

In the area of anti-money laundering and countering financing of terrorism (AML/CFT), the UAE strengthened its approach to combatting money laundering and terrorist and proliferation financing. These efforts facilitated the UAE's removal from the Financial Action Task Force's (FATF) enhanced monitoring process in February 2024 and highlights the continuing role of all relevant parties to ensure the protection of the UAE's financial system and economy from such risks.

Finally, the establishment of the UAE Financial Stability Council in 2023 represented a significant milestone that will bring together representatives from key regulatory bodies and the Ministry of Finance in order to coordinate efforts on addressing systemic risks across the UAE. Looking ahead in 2024, the CBUAE will continue its critical role in maintaining a resilient and sustainable financial sector in the UAE and protecting the stability of the broader financial system.

EXECUTIVE SUMMARY

Global economic headwinds moderated the UAE's real GDP growth to 3.6% in 2023. However, the non-oil sector continued to be an area of strength, experiencing a robust 6.2% expansion in 2023 driven by strong performances in sectors such as tourism, real estate and finance. Despite a decrease in inflation during the year, the CBUAE forecasts a rise in 2024 due to increasing global commodity prices and potential exchange rate adjustments. The overall economic outlook remains positive, with projections of 4.0% GDP growth in 2024 and further acceleration in 2025.

The UAE's financial system displayed stability in 2023. This success can be attributed in part to successive policy interventions by the CBUAE since the Global Financial Crisis. These interventions have strengthened resilience in key areas such as capital adequacy, liquidity management and risk assessment practices. However, banking turmoil in the US and Switzerland underscored the fragility of the financial system and the need for constant vigilance during periods of policy normalisation. The interconnected nature of the UAE financial system means that global spillovers from stress events have the potential to also impact banks and other financial institutions operating in the UAE.

The UAE banking sector demonstrated its resilience throughout 2023. This strength was evidenced by robust capital buffers, favourable liquidity conditions, improved asset quality ratios, and increased profitability driven by rising interest rates and loan growth.

UAE banks navigate a challenging landscape mirroring financial stability risks prevalent in developed markets, including macroeconomic slowdowns, geopolitical tensions, climate change, cyber threats, and asset price volatility. Despite these headwinds, the sector maintains a strong position. The CBUAE's stress tests conducted in 2023 further confirmed the banking system's ability to withstand challenges such as inflation and market uncertainty. Additionally, a pilot climate risk analysis highlighted potential vulnerabilities and emphasised the need for proactive mitigation measures.

The UAE insurance industry as a whole also exhibited strong financial health in 2023. Rising gross written premiums, enhanced profitability, and sound solvency paint a positive picture. However, similar to the banking sector, the industry faces risks associated with global economic and geopolitical uncertainties. Careful monitoring of market volatility, climate change risks and technological advancements is crucial in 2024.

2023 marked a significant step towards enhancing financial stability in the UAE's payment system with the implementation of key initiatives under the National Payment Systems Strategy.

The UAE's completion of the requirements of the agreed Action Plan with the Financial Action Task Force (FATF) and its exit from the enhanced monitoring process in February 2024 underscores significant progress in implementing recommendations to counter money laundering and terrorist financing, strengthening the integrity and soundness of the UAE's financial system.

Recognising the importance of coordinated efforts, the UAE established the Financial Stability Council in 2023. This council aims to promote and protect financial stability, ensuring the financial system contributes effectively to sustainable economic development. The council's collaborative approach will be critical in navigating future challenges and maintaining the UAE's financial strength.

01 MACRO-FINANCIAL ENVIRONMENT

1.1 MACRO-FINANCIAL DEVELOPMENTS

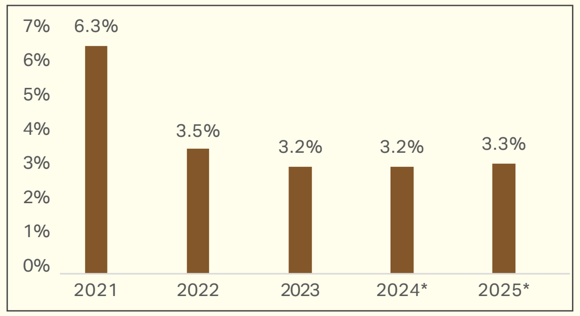
The strong performances in different economic sectors across the UAE have contributed to the expansion of the UAE real non-oil GDP by 6.2%. Inflation in the UAE declined to 1.6% in 2023 but is anticipated to moderately increase this year due to global factors. Key indicators of the UAE macro-financial conditions point to a neutral position in the financial cycle, with no evidence of credit overheating.

GLOBAL ECONOMY

In 2023, the global economic landscape witnessed a shift marked by moderating inflation and stable growth, setting the stage for a soft landing. The International Monetary Fund (IMF) estimates a 3.2% expansion in global growth for the year, as a direct result of elevated central bank policy rates aimed at curbing inflation, a withdrawal of fiscal support amidst mounting debt burdens, and sluggish productivity growth. Global headline inflation decreased to 6.7% in 2023 and is steadily moving toward the targets in most economies. The faster-than-expected decline in inflation across regions is likely due to resolved supply-side challenges and the implementation of restrictive monetary policies.

The outlook for 2024 is driven by stronger-than-anticipated economic resilience in the United States and certain major emerging markets, along with fiscal support in China. The IMF anticipates that global real GDP growth will remain at 3.2% in 2024, as challenges persist, including geopolitical tensions, and the risk of a global slowdown triggered by the need to hold higher interest rates for longer.

Chart 1.1.1: Global Real GDP Growth Rates



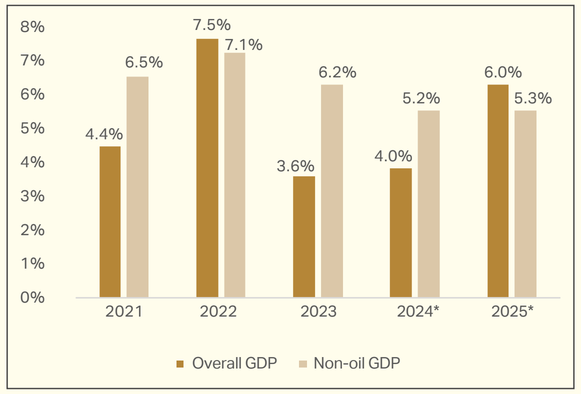
*Projections

Source: *IMF, World Economic Outlook, July*

THE UAE ECONOMY

After an exceptional 2022, real GDP growth in the UAE decelerated to 3.6% in 2023, reflecting both oil production cuts but still strong non-oil economic activity. The non-oil real GDP expanded by 6.2% on the back of the recovery in global travel and tourism, the strong performance in real estate and construction sectors supported by migration inflows among others, increased profits in the financial sector benefiting from the high interest rates, and increased activity associated with events such as COP28. Meanwhile, the OPEC+ agreement to cut production by 1.2 million barrels per day starting in April 2023 weighed heavily on oil GDP in 2023, which contracted by 3.1%. For 2024, the CBUAE projects real output growth to rebound to 4.0%, with 0.7% growth in the oil sector and 5.2% in the non-oil sector. Real GDP expansion is projected to accelerate to 6.0% in 2025, driven by stable oil production and continued growth in the non-oil sector.

Chart 1.1.2: UAE Total and Non-Oil Real GDP Growth Rates and Projections



Source: *Federal Competitiveness and Statistics Centre (2021- 2023) and CBUAE (2024-2025)*

* Estimates and Projections

Inflation in the UAE declined to 1.6% in 2023 from 4.8% in 2022. The disinflation observed during the year largely reflects lower energy prices, which passed through to transportation prices that recorded a decline of 5.6%. In contrast, across the other components of the consumer basket, the largest price increases took place in Restaurant and Hotels (6.6%), Food and Beverages (3.8%), Furniture and Household Goods (3.2%), and Textile, Clothing and Footwear (3.2%). In 2024, the CBUAE forecasts inflation to accelerate to 2.2%, still significantly below the world average, on the back of higher commodity prices (oil, wheat, and corn) and the expected depreciation of the USD. At the same time, inflationary pressures from domestic demand are expected to be subdued in light of the deceleration in migration inflows, a slowdown in non-oil output, and some inertia from the previous year. In 2025, inflation is projected to remain unchanged at 2.2%.

GLOBAL MACRO-FINANCIAL RISKS

Persistent global macro-financial risks defined the financial landscape throughout 2023, driven by the post-pandemic surge in interest rates, geopolitical tensions and a slowdown in economic growth rates. Notably, the banking turmoil in March 2023 in the US and Switzerland (see box 2) underscored the fragility of financial markets, emphasising the critical importance of robust risk management practices across the financial sector.

Debt Levels and Geopolitical Risks

The lingering effects of COVID-19 policies, marked by elevated debt levels across government, corporate and household sectors, are exerting renewed pressure on the global financial system.[1] Higher financing costs pose a threat to credit quality for banks and non-bank investors looking to rollover debt obligations. The potential for falling global asset prices, especially in commercial real estate due to tightened lending conditions, could exacerbate vulnerabilities in 2024. Concerns are heightened by the leverage within non-bank financial institutions and the utilisation of complex derivatives, raising additional concerns about systemic risk contagion.

Ongoing conflicts and regional instability in 2023 and beyond could have a cascading effect, disrupting global supply chains for critical goods and services. This disruption can lead to shortages and price hikes, impacting various sectors from everyday goods to major infrastructure projects. The UAE, being a major trading hub, is susceptible to these external shocks.

Emerging Threats on the Horizon

Exposure to climate-related vulnerabilities is increasingly evident, with physical threats and a disorderly transition to a low-carbon economy posing risks of market destabilisation through rising risk premiums and asset price declines. Growing cyber threats also require vigilance, as a successful attack on critical financial infrastructure could disrupt financial services and erode confidence.

While not an immediate concern, the rapid evolution of cryptocurrency markets and their potential interconnectedness with traditional finance warrants close attention from a financial stability perspective.

Vigilance and Cooperation

The CBUAE maintains vigilance in monitoring evolving trends, proactively identifying vulnerabilities, and mitigating systemic risks within the UAE financial system. Leveraging its comprehensive policy toolkit and instruments, the CBUAE retains the necessary flexibility to address these challenges and fulfill its mandate. The CBUAE also plays an active role in the global policy development process, recognising that international cooperation is essential to addressing vulnerabilities, developing robust risk management frameworks, and promoting financial stability.

MONEY MARKET DEVELOPMENTS

Short-term interest rates in the UAE continued to increase, following the trajectory of the effective US Federal Funds rate. The CBUAE raised the Base Rate from 4.4% at the end of 2022 to 5.4% in July 2023 and kept its key policy rate unchanged until the end of the year.

The gap between the Base Rate and the overnight interbank rates significantly widened during the year. The Dirham Overnight Interest Average (DONIA) rate averaged around 30 bps lower than the Base Rate, reflecting large and growing system-wide excess reserves in the banking sector, which increased by more than 10% (from AED 113.3 billion at the beginning of the year to AED 124.8 billion at the end of 2023). At the same time, some potential US dollar scarcity for term transactions has pushed the cross-currency swap with the Emirati Dirham into negative territory (up to -40 bps) during the second half of 2023; however, the premium on US dollars quickly dissipated during the initial weeks of 2024.

Consistent with higher policy rates, yields on Monetary Bills (M-Bills) kept increasing steadily in 2023. The average yield on the 28-day M-Bill rose from 4.54% in the first auction in 2023 to 5.61% in the last auction, with a secondary market spread to US Treasury Bills of between 20-30 bps on average. Yields on longer-dated M-Bills also increased, but the M-Bills curve flattened slightly as disinflationary pressures and stronger-than-expected US growth suggested a moderate pace of policy rate cuts during 2024.[2]

As in 2022, the cost of protecting against sovereign default of Abu Dhabi and Dubai continued to decrease during the year; sovereign credit default swap spreads declined by about five bps on average across the term structure (and remain at historically low levels).

MACRO-FINANCIAL CYCLES

Key indicators of the UAE macro-financial conditions point to a neutral position in the financial cycle, with the CBUAE's Financial Cycle Index hovering near neutral levels and negative credit-to-non-oil GDP gap. The CBUAE has kept the countercyclical capital buffer (CCyB) at 0% in 2023.

Financial Cycle

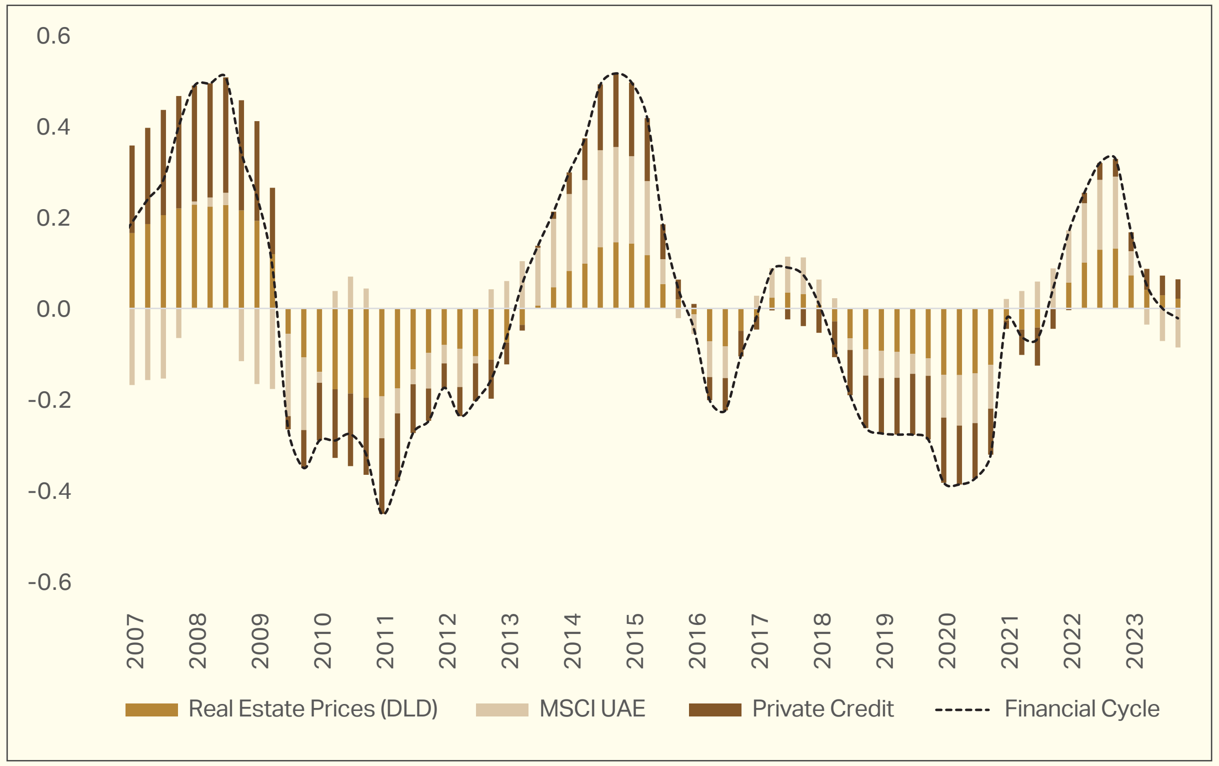
The CBUAE's Financial Cycle Index (FCI)[3] captures contractions and expansions of asset prices and private credit to measure potential credit-fueled asset price booms that are at the core of domestic financial cycle analysis. An elevated positive FCI would indicate that the UAE economy is approaching the peak of the financial cycle and signals potentially increasing systemic risks. In 2023, the index contracted to its neutral level.

1 The total debt level stood at 238% of global gross domestic product last year, 9 percentage points higher than in 2019. Source IMF Global Debt Database.

2 The CBUAE's issuance of M-Bills falls within the core objective of supporting the development of the local capital market and enhancing the collateralization within the financial system. Together with the regular issuance of local currency bonds by the Federal government, M-Bills help establish a continuous yield curve, which provides a liquid and reliable benchmark and reference index for financial transactions within the UAE, including mortgages and capital projects.

3 The UAE Financial Cycle Index is a CBUAE internal index constructed combining moving averages of filtered quarterly growth rates of credit, real estate and stock market performance with equal weights.

Chart 1.1.3: UAE Financial Cycle Index

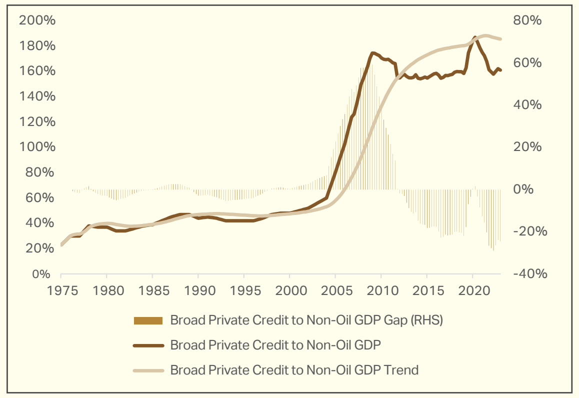


Source: *CBUAE*

Credit Cycle

The analysis of the rate of growth of private sector credit relative to the level of economic activity[4] is another indicator used to detect potential build-up of systemic risk and overheating in the economy due to excessive borrowing and increasing leverage. Private sector credit[5], which includes borrowing from UAE banks (70%), bonds issued by UAE entities (13%), and borrowings of UAE entities from abroad (17%), recorded a strong annual growth of 9.1% in 2023. Most of the growth came from borrowing from UAE banks, whose loans grew at 7.7% year-on-year. The ratio of private sector credit to nominal non-oil GDP grew by 1 percentage point to 161%. Credit-to-non-oil GDP gap, which if positive could signal an overall risk of increasing leverage in the system, was around -25 percentage points in 2023.

Chart 1.1.4: Broad Private Credit to Non-Oil GDP



Source: *CBUAE*

Financial Stability Trend Index

The UAE Financial Stability Trend Index (FSTI)[6] illustrates the position of macro-financial variables relative to their historical values with positive values indicating favourable environment compared to historical observations, whereas negative values indicating weakening resilience and potentially

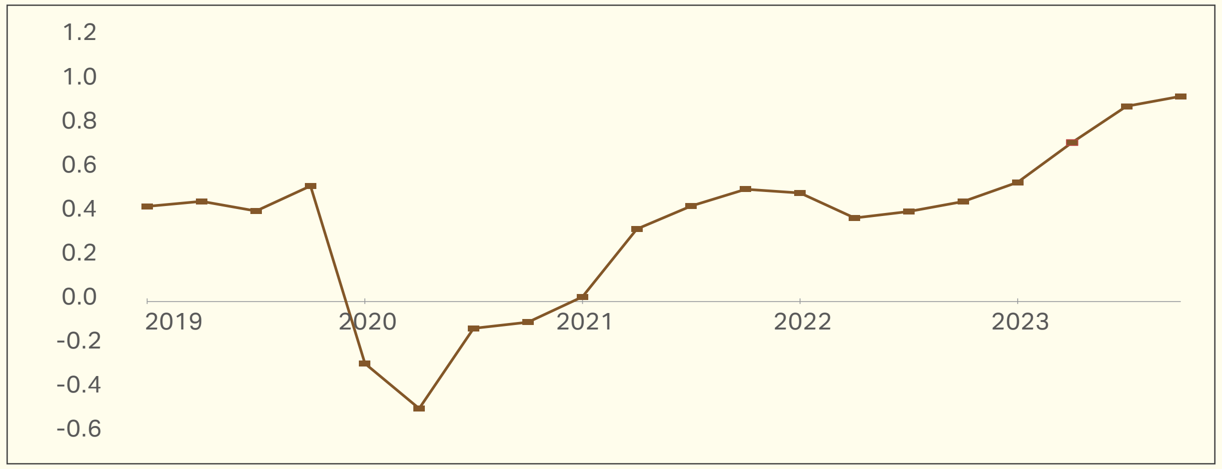
4 Non-oil GDP is used here instead of total GDP, as this is considered a more accurate measure of economic activity in the UAE when compared with levels of borrowing and is a common tool in resource-rich countries.

5 Total private credit is defined as the total credit borrowed by the resident private sector in the UAE, inclusive of government-related entities (GREs) and exclusive of the government sector.

6 The FSTI combines 18 macro-financial indicators that are relevant to the resilience of the UAE's financial system with equal weights.

increased vulnerability. The FSTI significantly improved throughout 2023. The indicator is positively affected by the UAE banking sector's strong liquidity and funding position, as well as banks' profitability and improving asset quality.

Chart 1.1.5: UAE Financial Stability Trend Index

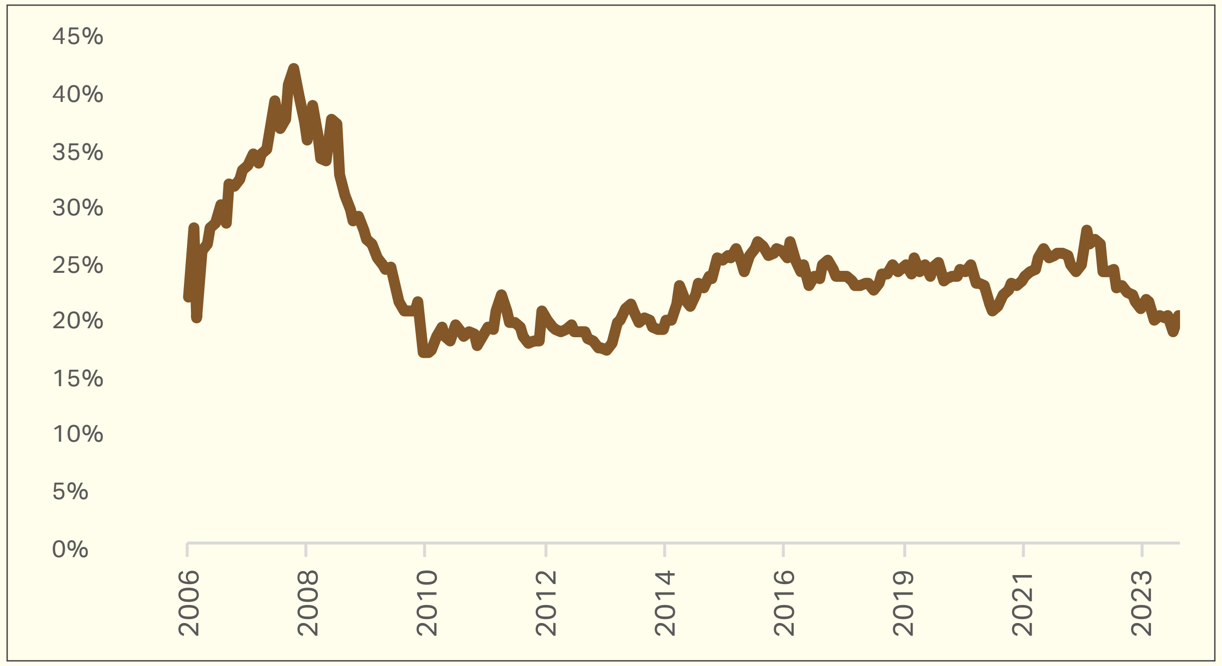


Source: *CBUAE*

Funding Structure

Analysing trends in the funding structure of the banking sector is essential in evaluating potential build-up of systemic vulnerabilities arising from the funding cycle of the banking system. The ratio of non-core liabilities to core liabilities[7] indicates whether credit growth is funded from stable sources. At 20%, the ratio remained well below the historical average of 24% and has improved by 2.6 percentage points since the end of 2022. This was primarily driven by continued strong growth in resident deposits from corporates and individuals. This indicates a robust and stable funding base for UAE banks, strengthening their ability to facilitate potential future credit growth to the economy.

Chart 1.1.6: Non-core Liabilities to Core Liabilities Ratio



Source: *CBUAE*

7 Lower value of the ratio implies more stable funding profile of the banking system. The CBUAE classifies core liabilities as resident deposits from governments, non-financial corporations, and households, whilst considering the rest as non-core liabilities.

BOX 1: UAE FINANCIAL STABILITY COUNCIL

OVERVIEW

In 2023, the "Decree Federal Law No- (13) of 2023 Regarding Establishment & Organization of the Financial Stability Council" establishing the UAE Financial Stability Council was approved by the Cabinet and signed into law by His Highness, Sheikh Mohamed bin Zayed Al Nahyan, the President of the UAE. The Council reports to the Cabinet and has legal personality as well as financial and administrative independence. The law was drafted in line with recommendations made by the IMF considering the nature of the regulatory structure in the UAE.

The council aims to promote and protect financial stability in the country, identify and recommend additional measures to mitigate systemic risk, facilitate cooperation between regulatory authorities, ensure that the financial system contributes effectively towards the sustainability of economic development, and strengthen discipline in the financial system.

STRUCTURE

The Council is managed by a Board of Directors (BOD) under the chairmanship of the Chairman of the Central Bank of the UAE in addition to the following members:

- Minister of State for Financial Affairs;
- Governor of the Central Bank of the UAE;
- Chairman of the Board of Directors of the Securities and Commodities Authority;
- Chairman of the Board of Directors of Abu Dhabi Global Market as a representative of Abu Dhabi Financial Services Regulatory Authority;
- Chairman of Board of Directors of Dubai Financial Services Authority;
- Undersecretary of the Ministry of Finance;
- Assistant Governor – Monetary Policy and Financial Stability – Central Bank of the UAE

POWERS

The Council can enforce its decisions by requiring authorities to follow them or explain their reasons for non-compliance. The BOD may issue reasoned resolutions, clarifying the objectives and mechanism of implementation to any of the regulatory authorities represented on the Council or any other authorities added by the Cabinet based on the proposal of the Chairman, requesting them to implement macro-prudential policies regarding the risks associated with the financial system, or carrying out specific tasks to maintain financial stability.

The authorities may object to the BOD decisions within a period not exceeding 30 days from the date of issuance of the decision, otherwise the decision becomes binding, and in this case the authorities are obligated to provide the Council with a report that includes an implementation plan of the decision.

In the event of objection to the BOD decisions within the 30-day period, the authorities must provide the necessary justifications for not implementing the decision, and propose alternative plans to achieve the objective, and present them to the BOD to take whatever decision it deems appropriate.

BOX 2: THE MARCH 2023 BANKING TURMOIL: A WAKE-UP CALL FOR RISK MANAGEMENT AND SUPERVISION

The banking turmoil of March 2023 in the US and Switzerland stands as an important reminder of the fragility of the global financial system and represented the most significant system-wide banking stress since the Great Financial Crisis in 2008/2009.

Over a brief period (March 8th to 19th 2023), five banks across two continents, holding combined assets of roughly $1.13 trillion – were either shut down, placed in receivership, or rescued (BCBS 2023)[8]. This event, triggered by distinct issues within each failing bank, ultimately snowballed into a broader crisis of confidence regarding the resilience of the global banking system.

In response, authorities acted to mitigate the damage. Central banks provided significant liquidity injections, FX swap lines were activated, government guarantees were implemented, and deposit insurance schemes were extended in some jurisdictions. Despite these efforts, the contagion spread, impacting asset prices and driving up the cost of insuring against bank defaults. Banks' Additional Tier 1 (AT1) instruments were particularly affected, prompting reassurances from authorities regarding imposing losses on creditors and shareholders during resolution or insolvency scenarios.

BEYOND THE FAILURES: SUPERVISORY SHORTCOMINGS AND BUSINESS MODEL RISKS

While the March 2023 turmoil undeniably underscores the importance of robust risk management and governance within individual banks, a closer look reveals broader forces which could affect other financial institutions in the future.

Firstly, the failures highlight the uncertainty inherent in the ongoing global adjustment to increasing interest rates – and broader macroeconomic developments – and its impact on banks' balance sheet. For example, the turmoil that led to failures of a number of US banks in March 2023 highlighted the sensitivity of some business models to the ongoing normalisation in interest rates.

The unprecedented speed of deposit withdrawals, particularly among high-value, uninsured depositors, exposed a vulnerability in monitoring liquidity systems. Additionally, the aggressive risk-taking associated with outlier business models caught supervisors off guard.

Furthermore, confidence regarding a single bank, even those not considered globally active, managed to shake confidence in banking sectors and markets across numerous jurisdictions. This highlights the interconnectedness of the financial system and the potential for localised issues to have a ripple effect.

8 Basel Committee on Banking Supervision (2023), Report on the 2023 banking turmoil, October 2023.

LEARNING THE LESSONS FROM THE CRISIS: A WAY FORWARD

According to the BCBS (2023), there are a number of lessons that financial institutions and supervisors can learn from the events in March 2023. Firstly, banks must prioritise robust corporate governance, coupled with internal risk management and controls that ensure informed and prudent risk-taking practices. This includes diligent implementation of the Basel III framework and adherence to established expectations outlined in previous Committee outputs, such as the Corporate Governance Principles for Banks.

Secondly, supervisors have a critical role to play in ensuring banks maintain effective governance and risk management structures. This encompasses evaluating the composition of boards, ensuring relevant expertise among board members, and assessing the board's ability to effectively challenge management, oversee risk profiles, and guide strategy. Additionally, supervisors must scrutinise the independence and empowerment of risk management and internal audit functions. Furthermore, fostering a strong enterprise-wide risk culture and aligning senior management compensation schemes with prudent risk-taking are crucial aspects of effective supervision.

Beyond individual institutions, supervisors must prioritise a thorough understanding of the viability and sustainability of banks' business models. Identifying outlier business models and proactively addressing any weaknesses at an early stage is essential for maintaining financial stability. A critical theme related to the distress of the US banks was their common and concentrated exposure to interest rate risk in the banking book (IRRBB). While these banks were not subject to the existing IRRBB standard, this event raises important questions about the current regulatory treatment of IRRBB under the Basel Framework. The Basel Committee notes that appropriate implementation of the Committee's IRRBB standard should mitigate the risks faced by banks by enabling timely and effective actions from the authorities. In particular, sufficiently detailed reporting, rigorous application of the standard's outlier/materiality test, and in-depth supervisory reviews of the key drivers of banks' interest rate risk profiles would help ensure that banks have a comprehensive understanding and appropriate management of their IRRBB exposures, ultimately strengthening the resilience of the banking sector.

Overall, the March 2023 turmoil, while geographically centered, had global ramifications. The interconnected nature of the UAE financial system means that global spillovers from future stress events have the potential to also impact banks and other financial institutions operating in the UAE. The decision to write down Credit Suisse's AT1 bonds significantly impacted the global AT1 bond market, with bid prices for similar instruments issued by large banks experiencing a sharp decline. However, the CBUAE proactively assessed domestic banks' exposures to AT1 bonds, ultimately concluding that the negative price impact could be managed and would not pose systemic risk within the UAE banking system. This proactive approach exemplifies the importance of close monitoring and effective risk management practices across all levels of the financial system.

BOX 3: IMPROVEMENT OF THE UAE'S FRAMEWORK FOR FIGHTING MONEY LAUNDERING AND TERRORIST FINANCING

The CBUAE is responsible for overseeing the safety and soundness of the UAE's financial system. Money laundering and terrorist financing risks are part of the risk universe subject to CBUAE's ongoing financial system surveillance. Excessive exposure to these risks can distort smooth functioning of the financial system and wider economy, including funding of financial institutions, pricing of assets and flows of capital[9]. It can also lead to very high compliance costs for financial institutions and longer processing times for cross-border payments.

In its February 2024 Plenary, Financial Action Task Force, the international organisation for standard-setting and leading global action against money laundering and terrorist and proliferation financing, removed the UAE from the list of countries subject to increased monitoring[10]. FATF recognised that the UAE has strengthened its anti-money laundering and terrorism financing preventions system in a comprehensive way by six distinct and complementary measures[11]: (1) increased the number of cross-border requests to facilitate money laundering and terrorist financing investigations; (2) improved supervision of designated non-financial business professions, applied effective sanctions for AML/CFT non-compliance, and increasing filing of suspicious activity reports; (3) implemented comprehensive risk-based mitigating measures to prevent the use[12] of legal persons for money laundering purposes; (4) provided additional resources to the Financial Intelligence Unit to increase its capacity; (5) increased investigations and prosecutions; and (6) ensured effective implementation of targeted financial sanctions. The Central Bank of the UAE has provided the overall leadership for the financial sector through the chairmanship of the National Anti-Money Laundering and Combatting Financing of Terrorism and Financing of Illegal Organizations Committee.

The UAE was subject to the FATF's increased monitoring process following an earlier assessment published in April 2020. The MENA-FATF, a regional body for cooperation among 21 countries in the MENA region, published its latest assessment of the UAE's progress in the implementation of the FATF recommendations in June 2023[13].

The CBUAE will continue close supervision of licensed financial institutions across the entire financial ecosystem, to ensure compliance with Federal AML/CFT laws and to maintain the high standards on identifying, monitoring and mitigating financial crime.

9 BIAGOSCH, Z. A. The Impact of Weak AML/CFT Frameworks on Financial Stability. In Current Developments in Monetary and Financial Law, Vol. 5. International Monetary Fund.
10 https://www.fatf-gafi.org/content/fatf-gafi/en/publications/Fatfgeneral/outcomes-fatf-plenary-february-2024.html.
11 https://www.fatf-gafi.org/content/fatf-gafi/en/publications/High-risk-and-other-monitored-jurisdictions/Increased-monitoring-february-2024.html.
12 https://www.fatf-gafi.org/content/dam/fatf-gafi/mer/Mutual-Evaluation-Report-United-Arab-Emirates-2020.pdf.coredownload.pdf.
13 https://www.fatf-gafi.org/content/dam/fatf-gafi/fsrb-fur/UAE-Follow-Up-Report-2023.pdf.coredownload.pdf.

1.2 ASSET MARKETS

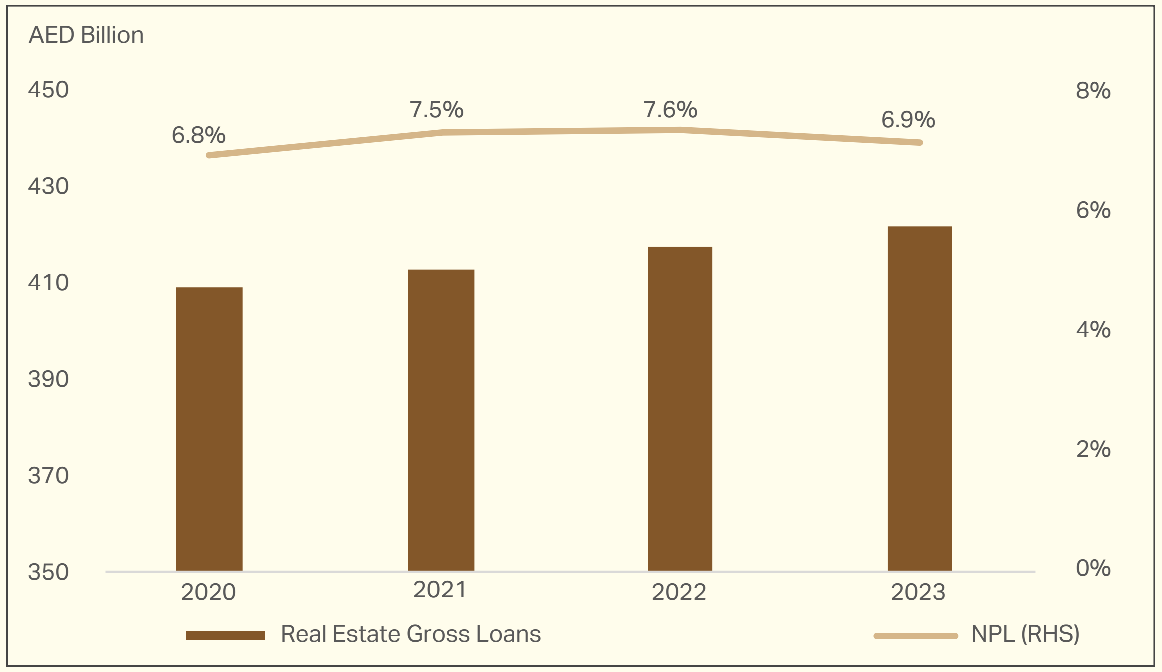
The UAE real estate market witnessed strong growth in Abu Dhabi and Dubai with sales values and transactions reaching high levels. Equity markets reached AED 3.65 trillion in market capitalisation by year-end. In capital markets, Dubai Financial Market (DFM) grew at a faster pace of over 18% than the Abu Dhabi Securities Exchange (ADX) at nearly 13%. The corporate debt sector has seen improvements in assets quality with the NPL and Net NPL ratios returning to pre-pandemic levels of 8.1% and 3.4% for the first time since the pandemic.

THE REAL ESTATE MARKET

The UAE real estate sector sustained its strong performance as the UAE macroeconomic conditions and demographics remained positive and it maintained its attractiveness to visitors and real estate investors. The expansion of UAE's non-oil GDP contributed positively to the real estate sector. The real estate-related activities accounted for 17%[14] of the UAE's 2022 real non-oil GDP, and around 21% of UAE banking sector loans as of 2023. Despite the high-interest rate environment, the real estate loans grew by 2.4%, while non-performing loans declined to 6.9% in 2023 relatively due to the growth in the real estate loans.

The CBUAE maintains prudent borrower-based controls on lending to restrict excessive risk-taking in real estate financing provided by the sector. These controls include loan-to-value limits and maximum debt burden ratios. The CBUAE has also implemented comprehensive standards for bank real estate exposures.

Chart 1.2.1: Real Estate Loans and NPL-ratio



Source: *CBUAE*

14 Source: FCSC. Including real estate and the construction economic sectors.

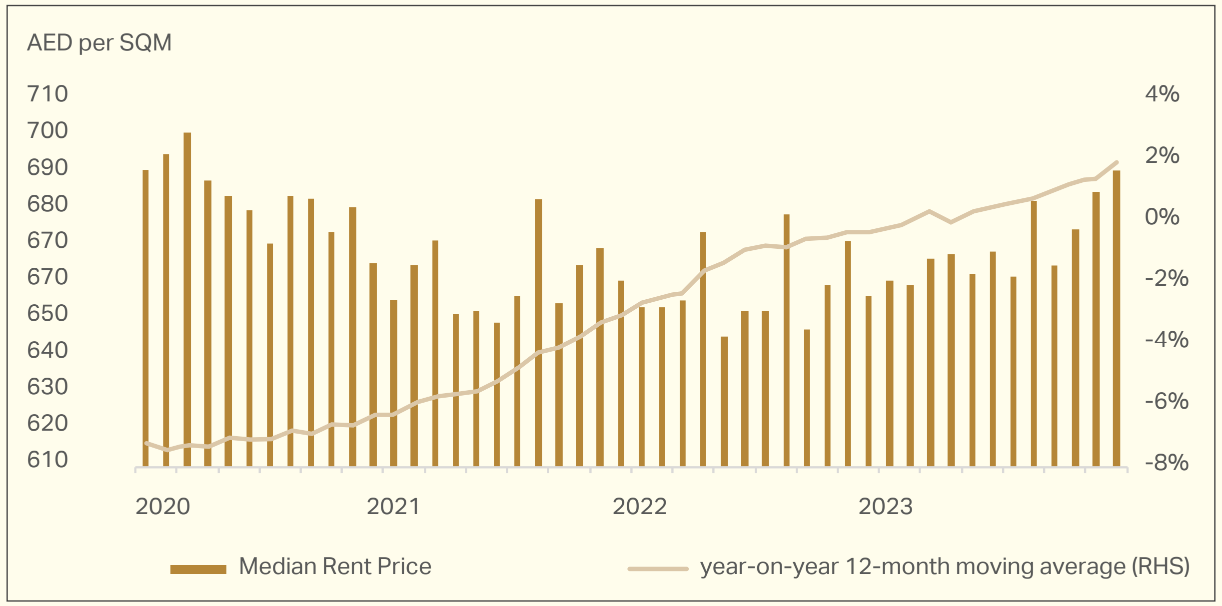
ABU DHABI REAL ESTATE

The Abu Dhabi residential real estate prices picked up in 2023 as demand for Abu Dhabi's residential real estate witnessed a growth, increasing by 7.2%. Similarly, rents in Abu Dhabi picked up increasing by 4% over the same period.

Chart 1.2.2: Abu Dhabi Median Real Estate Sale Prices

Source: *CBUAE calculations based on data from Quanta*

Chart 1.2.3: Abu Dhabi Median Rental Real Estate Price



Source: *CBUAE calculations based on data from Quanta*

The number of transactions in Abu Dhabi residential real estate almost doubled compared to the previous year reaching more than 13,300 units[15]. While rents transactions reached more than 213,900 units.

15 Source: QUANTA

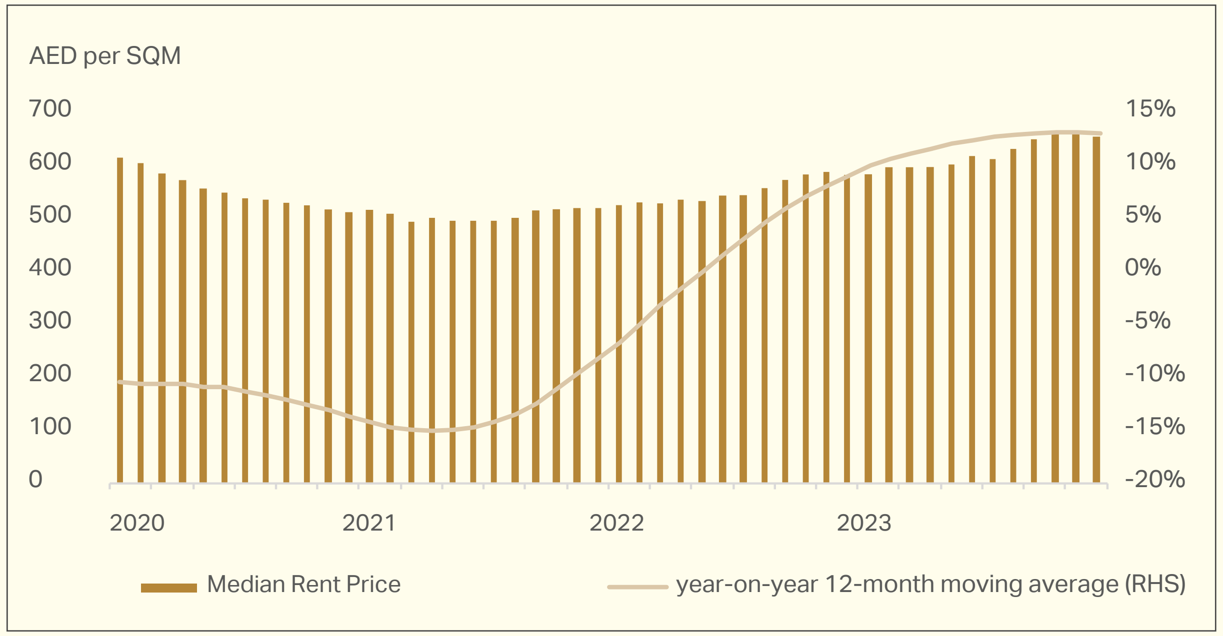
DUBAI REAL ESTATE

The Dubai residential real estate prices increased by 9.9% in 2023 after the price surge during the previous year. Likewise, rents have been on an upward trend, increasing by 12.7%.

Chart 1.2.4: Dubai Median Residential Real Estate Sale Prices

Source: *CBUAE calculations based on data from Dubai Land Department*

Chart 1.2.5: Dubai Median Rental Real Estate Price



Source: *CBUAE calculations based on data from Dubai Land Department*

The number of residential transactions recorded high levels in Dubai, more than 110,400 real estate transactions were registered in Dubai[16]. Rents transactions reached more than 574,500 units.

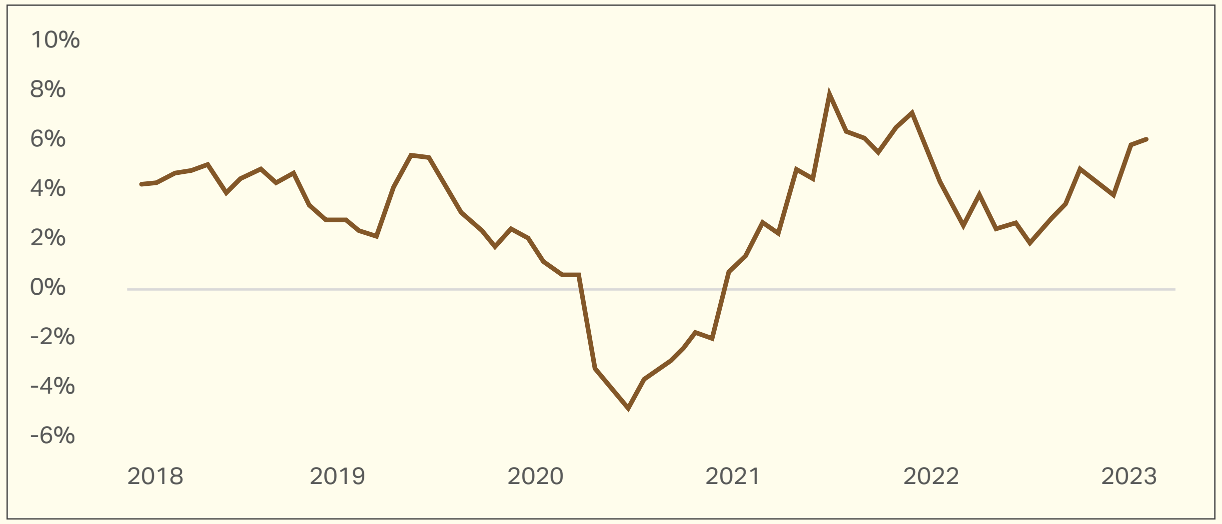
16 Source: Dubai Land Department

UAE CORPORATE DEBT AND CAPITAL MARKETS

UAE CORPORATE DEBT

The UAE corporate sector[17] is one of the main sectors for the UAE banking system. Total loans from UAE banks to the sector make up around 56%[18] of total UAE banking system loans. UAE private sector[19] credit accounts for approximately 74% of the total loans of the UAE corporate sector. Resident corporates loan growth reached 6% by year end 2023.

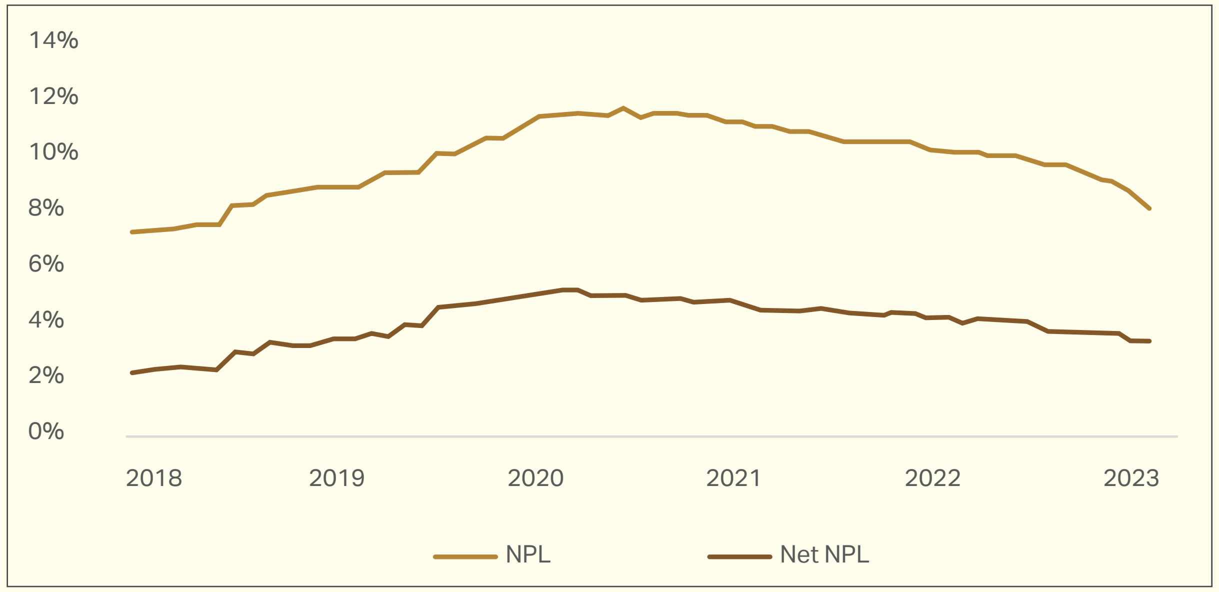
Chart 1.2.6: Resident Corporates Loan Growth



Source: *CBUAE*

The NPL and Net NPL[20] ratios of the UAE corporate sector have reached pre-pandemic levels of 8.1% and 3.4%, respectively, at year end 2023.

Chart 1.2.7: Overall UAE Corporate Sector Non-performing Loans

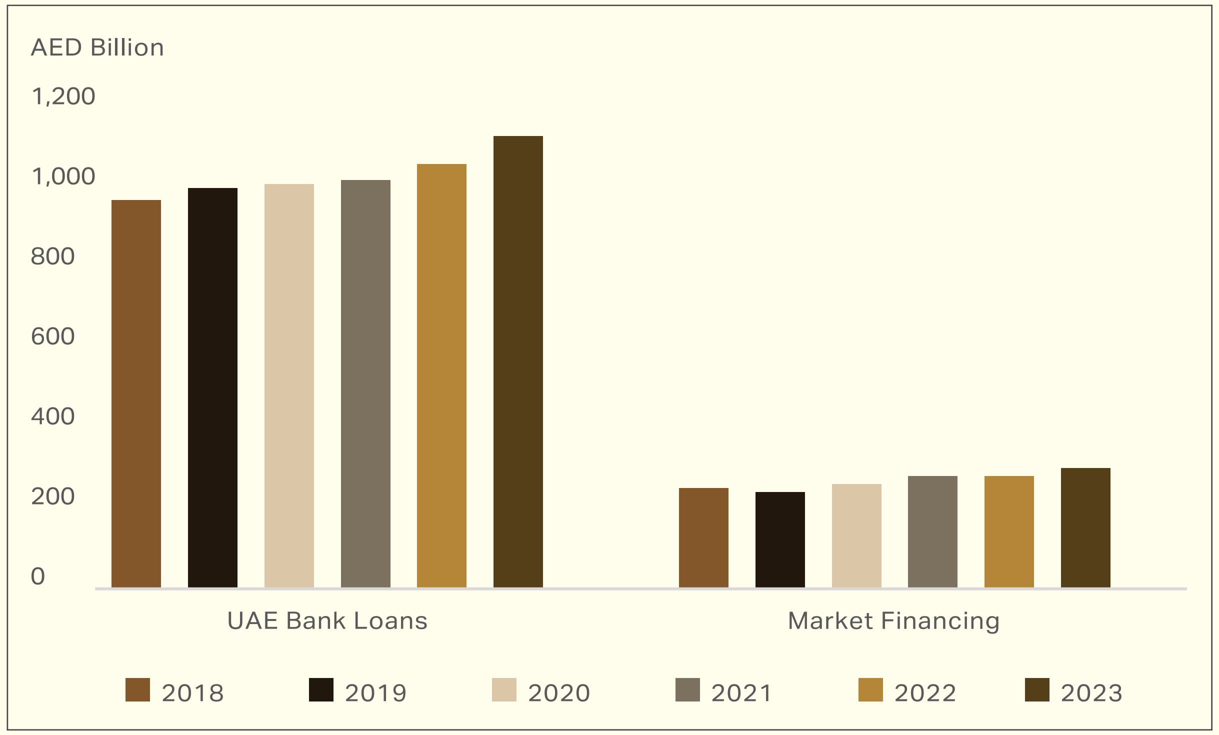


Source: *CBUAE*

17 Corporate Sector includes resident GREs, Corporates, SMEs and HNIs.
18 Does not include corporate credit from non-UAE domiciled banks.
19 Private Sector includes resident Corporates, SMEs and HNIs.
20 The Net NPL ratio excludes specific provisions.

The UAE corporate sector saw increased funding from bank credit and capital markets borrowing which increased by 5.9% and 4.8%, respectively.

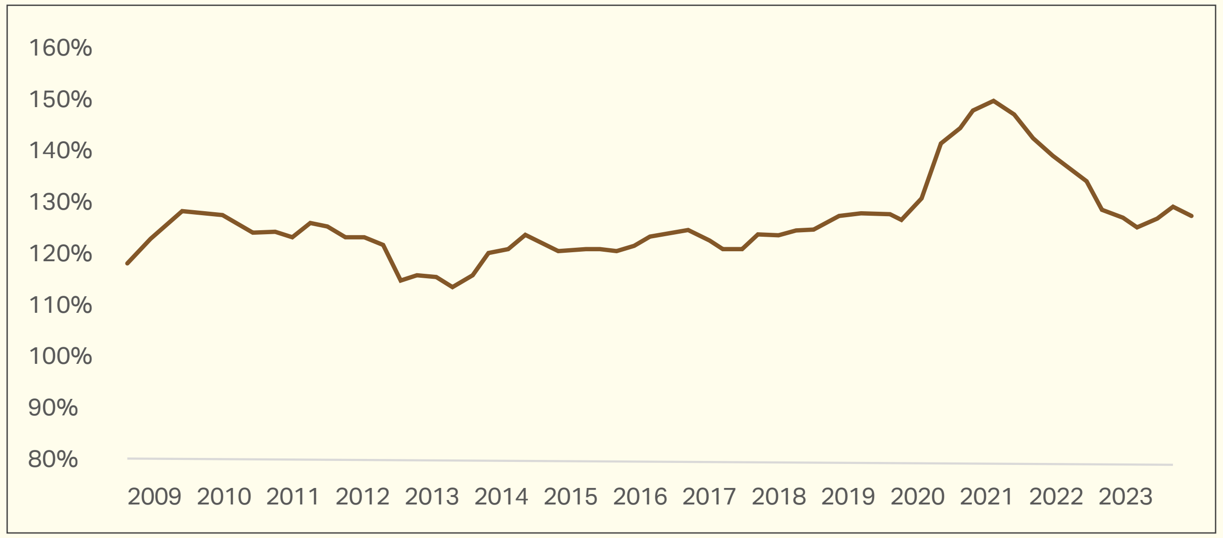
Chart 1.2.8: UAE Corporate Sector Credit



***Source:** CBUAE & Bloomberg*

In 2023, the ratio of broad corporate sector credit to non-oil GDP remained relatively stable throughout the year hovering around 128%. This was driven by the continued strong recovery in non-oil GDP and a more moderate corporate sector credit growth in comparison.

Chart 1.2.9: Broad Corporate Sector Credit to Non-oil GDP Ratio



***Source:** CBUAE Staff Estimates, FCSA and Bloomberg*

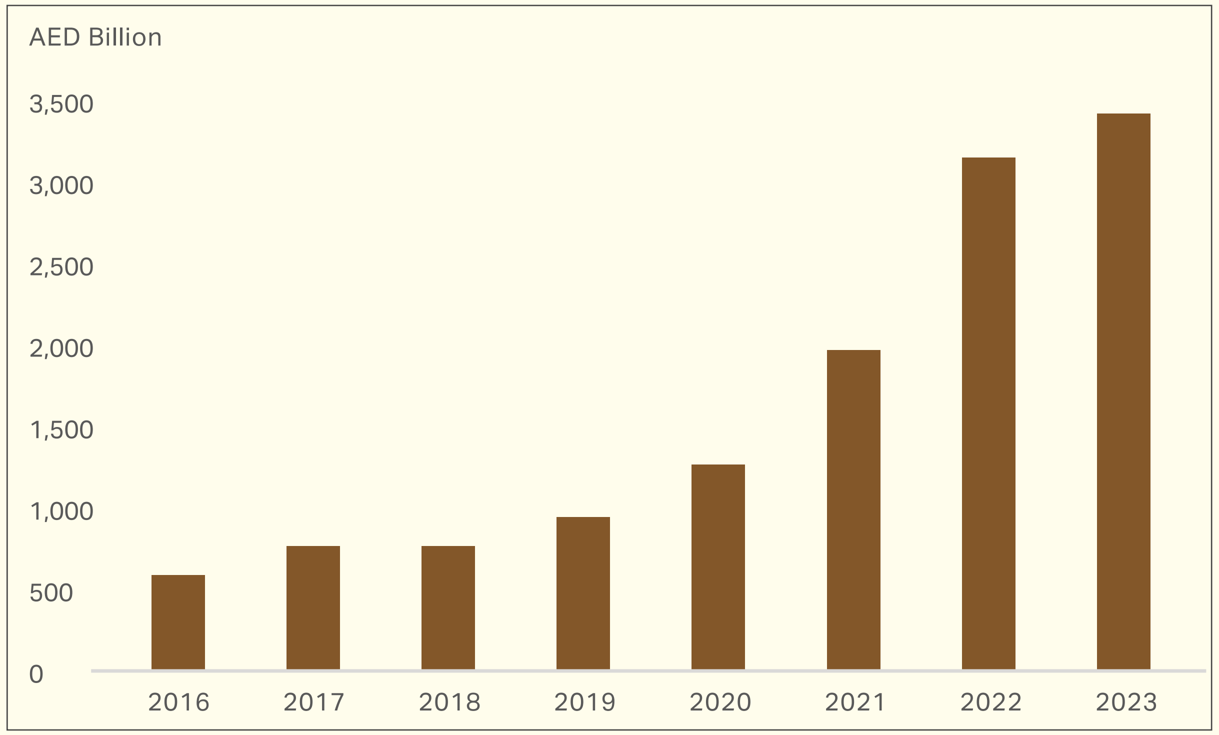
CAPITAL MARKETS

Contributed by the Securities and Commodities Authority (SCA)

OVERVIEW OF UAE CAPITAL MARKETS IN 2023

The UAE's Capital Markets witnessed increased activity during 2023. The combined market capitalisation of both exchanges, the Abu Dhabi Securities Exchange (ADX) and the Dubai Financial Market (DFM) increased to over AED 3.6 trillion mainly due to new listings and increase in the value of shares on DFM. Institutional investor's interest in UAE increased as witnessed in a net inflow of AED 7 billion across the two exchanges. The regulatory framework concerning investment funds and virtual assets (VA) was further strengthened during 2023 by issuing new regulations. Investor protection was also enhanced by launching an intensive campaign against unlicensed activities.

Chart 1.2.10: Market Capitalisation of UAE Equity Markets



***Source:** SCA*

Risks

The Securities and Commodities Authority (SCA) recorded a rise in the commercial licenses being issued to firms for virtual asset related activities. In view of the SCA's mandate to supervise the VA activity for investment purposes in the UAE, communication mechanisms were established with the registrars and Emirate level supervisory authority communicating to it to take appropriate actions against VA service providers, if they were operating outside their license. This resulted in large scale reduction in unlicensed virtual asset activity.

Investment markets experienced rapid growth, in part due to the proliferation of financial products and increased promotional activities by unlicensed entities targeting retail investors. In response, the SCA launched a large-scale awareness campaign to combat unlicensed financial activities, with a focus on mitigating fraudulent practices and enhancing investor knowledge and protection. Consequently, there has been an increase in awareness levels and a rise in the number of investors who report or inquire before engaging with these companies.

The local fund industry faced challenges with the promotion of foreign investment funds to retail investors within the country, due to lack of domestic oversight or enforcement authority over the investment managers of those funds. In response, the SCA amended its fund regulations, allowing the promotion of foreign funds to professional investors only. This measure has contributed to a decrease in the outflow of UAE investors' funds and is expected to drive the establishment of more local funds.

Regulations

The SCA has introduced several key updates to the regulatory framework governing investment funds in the UAE. It has also issued, in support of sustainable finance, a resolution governing green and sustainability-linked bonds and Sukuk, allowing publicly traded companies to issue green bonds and Sukuk exclusively dedicated to financing environmentally friendly and sustainable projects.

Regulations on securitisation were introduced to expand investment opportunities for investors and provide institutions with diverse financing options. In addition, the Regulation for the Virtual Asset Platform Operator was issued in 2023 and the SCA commenced accepting license applications from companies seeking to provide virtual asset services.

In 2023, the government of the UAE approved an optional alternative system to the end of service reward system for workers in the private sector. Subsequently, SCA issued a resolution on the end of service gratuity saving funds, which is a continuation of the said alternative system, with the aim of providing the opportunity to invest workers' end of service reward benefits and ensuring worker's rights and entitlements.

The SCA approved 8 equity offerings with an aggregate value of AED 14.9 billion, and registered 7 offerings of bonds and Sukuk. It also approved the establishment of 6 local investment funds in 2023 with Assets Under Management of AED 6.5 billion.

Table 1.2.1: ADX Performance

Abu Dhabi Securities Exchange "ADX"*	2022	2023	% Change
Index (point)	10,211	9,578	-6.2%
Trading value (AED billion)**	450.6	319.9	-29%
Trading volume (Billion shares)**	80.7	58.2	-27.8%
Trades**	2,860,002	3,487,955	22.0%
Market Capitalisation (AED billion)***	2,624.8	2,963.8	12.9%
Net Foreign Investment (Buy - Sell) (AED billion)	53.7	-9.5	-
Net Institutional investors (Buy - Sell) (AED billion)	7.8	6.2	-19.6%
Free-float Market Capitalisation (AED billion)[21]	565	740.7	31.1%

Source: SCA

* As per ADX website
**includes: domestic public and private companies, direct deals, ETFs and SPACs
***includes: public and private companies

21 Free-float market capitalization refers to the valuation of outstanding shares held publicly.

The ADX's market capitalisation increased by 12.9% to reach almost AED 3 trillion. This increase was supported by a series of listings in 2023. Although the FTSE ADX General Index decreased in 2023, the number of trades increased by 22%. Net institutional investments inflow reached AED 6.2 billion.

Table 1.2.2: DFM Performance

Dubai Financial Market "DFM"*	2022	2023	% Change
Index (point)	3,336	4,060	21.7%
Trading value (AED billion)**	90.0	101.1	12.3%
Trading volume (Billions share)**	38.5	52.6	36.4%
Trades**	1,443,852	1,916,437	32.7%
Market Capitalisation (AED billion)***	580.8	686.8	18.3%
Net Foreign Investment (Buy - Sell) (AED billion)	5.0	5.1	0.6%
Net Institutional investors (Buy - Sell) (AED billion)	2.0	0.8	-60%
Free-float Market Capitalisation (AED billion)	178	217.4	22.1%

Source: SCA

* As per DFM website
**includes public and private companies (domestic- foreign) direct deals and ETFs.
***includes public and private companies

The DFM general index increased by 21.7% in 2023, the total trading value increased by 12.3% reaching more than AED 101 billion for the year. Similarly, the DFM's market capitalisation increased by 18.3% to exceed 685 billion AED in 2023. Foreign investors' confidence in the DFM was positively reflected when total net foreign investments recorded a value of AED 5 billion during 2023. In addition, the DFM listed 2 new companies in 2023.

In December, the carbon credits trading pilot by DFM went live, debuting at the COP28. Institutional investors were enabled to buy and sell carbon credits.

CRYPTO ASSETS

In 2023, the global crypto-asset market witnessed significant regulatory developments as well as higher transaction volumes. Total crypto-asset market capitalisation for the year saw it increasing by over 100%, going from $829 billion at the start of the year to $1.72 trillion at year end 2023[22]. Global regulatory bodies also strengthened their commitment towards establishing clear frameworks that aim to enhance investor protection, address illegal activities, improve corporate governance standards as well as mitigate risks stemming from speculative investment. International organisations such as the FSB, IMF and the Basel Committee have enhanced their effort throughout the year to improve the oversight of the crypto-asset market, as well as more robustly integrate the coverage of risks stemming from the sector into the banking sector capital framework.

The CBUAE's Mandate and Financial Stability Considerations

Following on from the significant sector-wide stress observed in 2022, and analysed in last year's Financial Stability Report, the CBUAE continues to monitor developments in the global crypto-asset system. Although that stress period saw a significant reduction in market capitalisation and the failure of a number of service providers internationally, it showed that the extent of interconnectedness with traditional financial markets and the global economy was relatively low.

Despite the inherent structural constraints of obtaining accurate and granular data on crypto-assets transactions, research from the blockchain analytics provider Chainalysis indicates that the UAE received approximately USD34 billion[23] in on-chain crypto-asset value in the twelve months to June 2023. To put this in context, this represents less than 0.2% of the value transacted on payment systems operated by the CBUAE. Nonetheless, the CBUAE remains alert to sources of financial stability risks within the UAE that may transmit from the sector over the medium term.

Stablecoins have consistently represented the greatest proportion of the inflow of crypto-assets into the country. A typical use case for those stablecoins is enabling transactions with other crypto-assets, for example for speculative trading purposes. Looking forward to potential drivers of greater crypto-asset adoption in the future, the UAE has a particularly young and technology-focused population, with a significant portion of the workforce regularly undertaking significant cross-border remittance activity. Therefore, stablecoins could receive particular attention from this demographic. However, in comparison to many other emerging market economies, it is noted that the primary use cases for stablecoins in emerging markets, namely a store of value and enablement of the US Dollar[24], is not relevant to the UAE due to its strong economic fundamentals and the peg of the UAE Dirham to the dollar.

As per its regulatory mandate, the CBUAE is tasked with the monitoring and control over the use of crypto-assets, and more specifically stablecoins, for payment purposes in the UAE. The design features of stablecoins and the underlying blockchain technology mean this is an activity that, if systemically important, can potentially impact upon wider financial stability, for example via disruptions to the stablecoin arrangement as a payment system, substitution of bank deposits, and fire sales of reserve assets backing systemic stablecoins[25 26]. The UAE's monetary sovereignty could also be impacted through the circulation of foreign-denominated stablecoins[27] and the consequential lack of control over a critical payment infrastructure. To mitigate the materiality of such risks should they emerge over time, the CBUAE has developed a comprehensive regulatory and supervisory payment token framework in 2023 that clarifies the status of crypto-assets where they are used for payment.

22 Source: Coingecko
23 Chainalysis (2023), The 2023 Geography of Cryptocurrency Report, page 67.
24 International Monetary Fund, Financial Stability Board (2023), IMF-FSB Synthesis Paper: Policies for Crypto-Assets, page 8.
25 Panetta (2020), The two sides of the (stable)coin, , Il Salone dei Pagamenti.
26 European Central Bank Crypto-Assets Task Force (2020), Stablecoins: Implications for monetary policy, financial stability, market infrastructure and payments, and banking supervision in the euro area, Occasional Paper Series.
27 Bains, Ismail, Melo, and Sugimoto (2022), Regulating the crypto ecosystem the case of stablecoins and arrangements, IMF Fintech Notes, page 28.

The new framework enhances the CBUAE's oversight of means of payment in the UAE by ensuring the licensing and supervision of related payment token services, and making clear that only Dirham-denominated stablecoins can be used as a means of payment for goods and services in the UAE. To limit the aggregation of prudential risks, the framework sets conservative requirements for a stablecoin's reserve assets that aims to minimise exposure to credit and market risk, and imposes capital requirements for different types of payment token activity. To support macro-prudential objectives in the longer term, the CBUAE will have the ability to place limits on the volume, value and a maximum number of users of a payment token where it is deemed to be systemically important. The framework will be implemented in June 2024 and has been strongly informed by the FSB's high-level recommendations for the regulation, supervision and oversight of global stablecoin arrangements.

Regardless of the specific activity which cryptoassets are used for across the system, the CBUAE considers that applying the same globally-accepted regulatory objectives for traditional financial services to the crypto-asset sector can minimise the impact of spillover risks from the crypto-asset sector to UAE's financial stability. These are: the safety and soundness of financial institutions; orderly financial markets and infrastructure; protection of consumers and investors; and mitigating AML/CFT risks.

The CBUAE supports international cooperation and information-sharing to ensure consistent implementation of standards in these areas, and enable cross-border supervisory oversight. The CBUAE is proactively contributing to these goals through its co-chairmanship of the FSB's Crypto-asset Working Group's (CWG) Workstream on Stablecoin Issues (WSI), with a particular focus upon on the financial stability risks, specific to emerging market and developing economies, that could arise from cross-border stablecoin arrangements.

CENTRAL BANK DIGITAL CURRENCY

Digitalization can bring challenges to the role of money

Financial services are becoming more and more digitalised with sizeable potential benefits. However, the increasing use of alternative forms of digital payments provided outside banking sectors may crowd-out the use of public money, erode monetary sovereignty and make it more challenging for the central banks to meet mandated monetary and financial stability objectives.

For central banks to remain future-proof, central bank digital currencies (CBDCs) should meet the accessibility demands of an increasingly digitalised economy while preserving financial and monetary stability.

CBDCs are designed to be used just like cash but in digital format, facilitating instant electronic transactions, leveraging technology to improve payment efficiency, reducing transaction costs and easing access to financial services[28].

However, the move towards CBDCs must be carefully managed to address the associated risks concerning privacy, cybersecurity, illicit financial flows, monetary and financial stability, and the existing financial ecosystem, particularly banking system due to its role to the economy.

CBDC and Financial Stability Relevance

First, CBDC may impact financial stability via bank disintermediation. The risk is associated with consumers' choice to hold CBDC with the central bank, instead of keeping their funds in bank deposits.

Banks have multiple ways to adjust to deposit displacement, but depending on their actions it could increase their funding cost, impact lending rates, credit creation and thereby adversely impact the economy. In addition to profit impact of bank disintermediation, offering a cheaper and more efficient alternative to payments, and cross-border remittances, CBDC

28 Key differences between cash and CBDC: (1) CBDC may be directly used for online payments; (2) CBDC does not have storage costs; (3) CBDC data privacy needs to be take into account AML/CFT considerations.

may also adversely affect the earnings in the financial sector.

Second, CBDCs could impact the variety of financial shocks. CBDC is a direct liability of the central bank and therefore do not carry any credit risk. During times of stress, public could transfer their deposits rapidly to the safety of CBDC, potentially causing a systemic bank run. In theory, bank runs could become easier and more frequent. However, digitalisation can already make idiosyncratic bank runs easier and faster, as observed during March 2023 banking turbulence in the US.

These risks are mainly associated with the uncertainty regarding the speed of adoption of CBDC. Both too slow (observed so far in other markets) and too fast are potential concerns that need to be addressed with CBDC design choices.

Third, the new technology could be susceptible to cyber-attacks, which could undermine trust in the financial system, as could financial crime, money laundering and fraud. These risks are already important consideration for existing digital payment systems.

Central banks have analysed and devised ways of managing the mentioned risks upfront with appropriate CBDC design choices. Like many other central banks, the CBUAE has initiated a CBDC project, digital dirham as part of Financial Infrastructure Transformation (FIT) program.

CBUAEs Digital Dirham project

The CBUAE has set out several principles that guide the design and governance of the digital dirham to ensure financial and monetary stability, support financial inclusion, and restrict financial crime.

The CBUAE has analysed CBDC issuance thoroughly from an academic, policy and technology standpoint[29]. To reinforce the basis for further work on the policy aspects, CBUAE utilised economic models tailored to UAE data to make quantitative simulations of various expected outcomes of CBDC issuance.

Regarding bank disintermediation, the analysis suggests that digital dirham could displace up to 5% of bank deposits in a conservative, high adoption scenario. This is estimated to have only marginal negative impact on bank profits. Since UAE banks hold surplus liquidity they are unlikely to retrench by reducing their lending and investment activities.[30] The CBUAE staff estimate that a 5% adoption rate could increase real GDP by up to 0.4% over a five-year period, but could give rise to significant network and welfare effects with potential to further boost economic growth.

Two-tiered/hybrid distribution model, where the digital dirham would be issued by the CBUAE and distributed by banks and other digital wallet providers, would preserve the existing role of banks in the financial system. Limiting holding/transaction amount and making digital dirham non-remunerated would encourage the use of the digital dirham as a means of payment rather than a store of value and thus minimise disruptions to the financial intermediation.

Digital dirham could also influence monetary policy, the structure of monetary system and thus CBUAE's balance sheet. Amending CBUAEs monetary operations and liquidity management facilities for accessing digital dirham would ensure full access to central bank money. The holding limits could be calibrated based on a comprehensive analysis considering all relevant factors in the UAE.

Cybersecurity concerns need to be limited with careful linking to identity networks and incorporation of safeguards such as phased rollout, transaction controls and upgrading risk management frameworks. Reliance on effective identity framework for fulfilling the AML and KYC obligations and traceability of the digital dirham would minimise the risk of financial crime.

29 Forthcoming CBUAE Digital Dirham Whitepaper 2024.

30 Given that there is a significant uncertainty around the adoption rates, the CBUAE also examined the sensitivity of disintermediation and associated impact on the banking sector to higher DD adoption cases.

In 2023, the CBUAE piloted four digital economy use cases for the digital dirham with selected banks. The CBUAE also tested the CBDC life-cycle end-to-end to ensure operational readiness of the underlying technology.

Following the successful completion of several pilot programs during 2022 - 2023, the CBUAE has created the technical, policy and legal foundations for rolling out the digital dirham across domestic and cross-border channels.

The CBUAE in the coming years will continue advancing preparations for the full launch of the retail, wholesale and cross-border versions of the digital dirham in different stages. A phased and controlled rollout aligns with CBDC initiatives in other countries, fostering confidence in the secure and widespread introduction of the digital dirham. This approach also allows for ongoing monitoring of global CBDC developments, enabling the identification of emerging insights and lessons learned.

02 UAE BANKING SYSTEM ASSESSMENT

2.1 BANKING SECTOR ASSESSMENT

The UAE banking system remained resilient in 2023 with adequate aggregate capital position, strong liquidity buffers, favourable funding conditions, and improved asset quality ratios. Furthermore, banks' profitability increased on the back of higher interest rates and sustained loan growth amid a positive economic outlook in the UAE. Looking ahead the banking sector has to navigate a dynamic operating environment characterised by global macro and geopolitical uncertainties. Further, the fast-paced digital transformation of financial services and the need for climate-change resilience necessitate prudent and agile business models.

OVERVIEW AND TRENDS IN THE UAE BANKING SECTOR

The global banking industry's operating landscape continues to be affected by a confluence of factors including a challenging global macroeconomic backdrop, characterised by high interest-rate and inflation environment, ongoing geopolitical uncertainties, climate change-related risks, and the fast-paced adoption of disruptive technologies and digitalisation of financial services.

Global financial conditions tightened through 2023 driven by rising policy rates in major global economies. Based on financial market sentiment, interest rates are expected to hold steady towards the first half of 2024, with potential rate cuts only late in the year. While rising rates benefited UAE banks' profitability in 2023, banks will need to continue to prudently manage the potential implications of the higher interest rate environment.

Global and regional geopolitical tensions and the challenging macroeconomic outlook in some key economies will continue to represent significant headwinds in 2024. While UAE banks' exposure to countries affected by geopolitical tensions and macroeconomic challenges remained moderate, spillover risks to the global financial conditions and domestic banking sector warrant continued close monitoring.

Climate change presents the global banking sector with climate-related financial risks and opportunities. The UAE Sustainable Finance Working Group issued in 2023 the Principles for the Effective Management of Climate-related Financial Risks. During the year, the UAE banks' new issuance of ESG debt securities was the highest on record amounting to about USD 11.6 billion[31] as the UAE banks continued enhancing their commitments to sustainable finance.

The rapid digitalisation of financial services and the adoption of new technologies require banks to demonstrate strategic agility in their business models as well as resilience to technology-related risks. The CBUAE advanced a comprehensive digital transformation of the financial sector in the UAE, including an instant payment platform, a UAE domestic card scheme, and the central bank digital currency.

In the areas of AML/CFT, the UAE made significant enhancements to complete the FATF-agreed action plans and recommendations. In February 2024, the UAE successfully exited the FATF's enhanced monitoring process. Moreover, continued commitment from UAE financial institutions to uphold AML/CFT standards will continue to enhance the integrity and safety of the UAE's financial system.

BANK CREDIT ENVIRONMENT

The UAE banking sector assets reached AED 4.1 trillion by the end of 2023 with an annual growth of 11.1%. The UAE banking system's loan portfolio expanded by 6.0% in 2023. Domestic lending continued to be the key driver of the overall credit growth, particularly to private corporates and retail sectors. The sustained credit growth was supported by business and consumer demand amidst a positive domestic economic outlook, which outweighed the impact of high-interest rates.[32] Banks' credit appetite was reinforced by strong funding conditions and ample credit capacity to accommodate the rise in loan demand during 2023.

Retail Credit Exposures

Retail credit extended by UAE banks grew by 11.3% in 2023. Growth in the retail loan portfolio continued to be broad-based across key retail sub-categories. Despite higher financing rates, mortgage loans expanded by 10.8% during the year reflecting sustained demand for residential properties amid supportive governmental structural measures encouraging homeownership. Personal loans, car loans, and credit cards each saw notable growth of 8.9%, 27.7%, and 15.9%, respectively.

Wholesale Credit Exposure

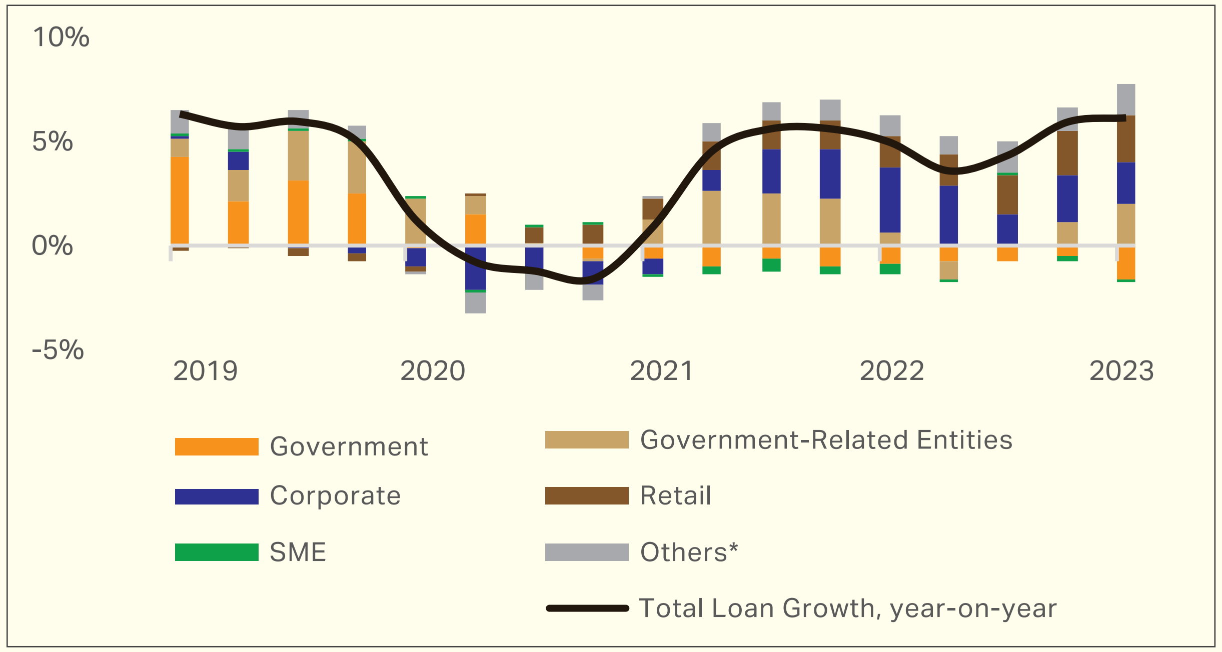
Banks' wholesale lending[33] experienced a growth rate of 4.6% in 2023. The majority of the growth was attributed to the expansion in private corporates and government-related corporates loan segments, which grew by 5.1% and 13.9% respectively, reflecting the continued demand for business financing and infrastructure projects. Meanwhile, the aggregate bank credit to SMEs contracted albeit at a slower pace of 1.1% during the year. Lending to the government sector declined for the second consecutive year, by 12.4% amidst favourable fiscal conditions.

31 CBUAE estimates based on S&P Capital IQ

32 The Credit Sentiment Survey published by the CBUAE in Q4 2023.

33 Wholesale Credit comprised lending to the private corporate, government-related corporates,government , trade finance, high-net-worth individuals, SMEs and non-bank financial institutions.

Chart 2.1.1: Banking System Loan Growth



*Others comprised of non-bank financial institutions, high-net-worth individuals, and trade bills.

Source: *CBUAE*

Real Estate Exposure

The CBUAE implemented a new comprehensive standard for bank real estate exposures[34]. The standard establishes a comprehensive definition across all on-balance sheet and off-balance sheet real estate exposures based on credit-risk weighted assets. The implementation of the standard enhanced the definition, measurement, and risk-based supervision of bank real estate exposures. Based on the comprehensive standards, the overall credit-risk-weighted real estate exposure of the UAE banking system represents 20.5% of the total credit-risk-weighted assets as of the end of 2023, a moderation from 22.4% a year ago. The reduction in the real-estate exposure ratio is attributed primarily to a moderation in loans and financing to commercial real estate.

Bank Debt Securities Portfolio

The UAE banking system's debt securities portfolio grew by 21.9% in 2023, on the back of ample liquidity. The debt securities portfolio accounted for 14.0% of total assets and 97.0% of the total financial investment portfolio.

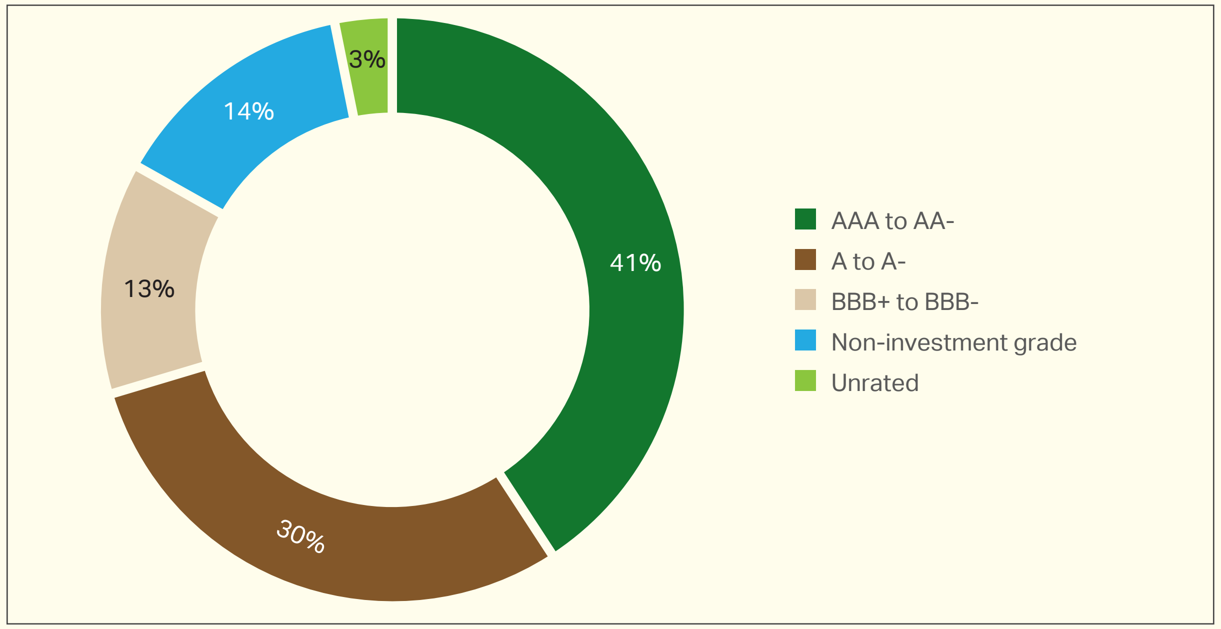
Holdings of foreign debt securities grew by 27.6%, mainly of sovereign debts, while holdings of domestic debt securities increased by 10.5%, in both sovereign and private corporate debt securities.

The global financial market volatility has impacted prices of debt securities. While the impact on the UAE banking sector remained limited, it underscores the importance of prudent risk management practices and continued attention to potential spillover risks from global financial conditions to the domestic banking sector.

The UAE banking sector's debt securities portfolio comprised 53.9% classified as Amortised Cost, 38.7% as Fair Value through Other Comprehensive Income, with the remaining 7.4% as Fair Value through Profit and Loss. Credit risk in the UAE banking sector's debt securities portfolio remained moderate. More than 85% of the portfolio comprised investment-grade securities, with debt securities rated AA- and above accounting for over 40%.

34 For more details regarding the CBUAE Bank Real Estate Exposure Standard, refer to CBUAE (2021): https://www.centralbank.ae/media/2lqnbudr/cbuae-enhances-its-oversight-over-uae-banks-real-estate-exposures-en_0.pdf

Chart 2.1.2: Composition of Debt Securities Portfolio



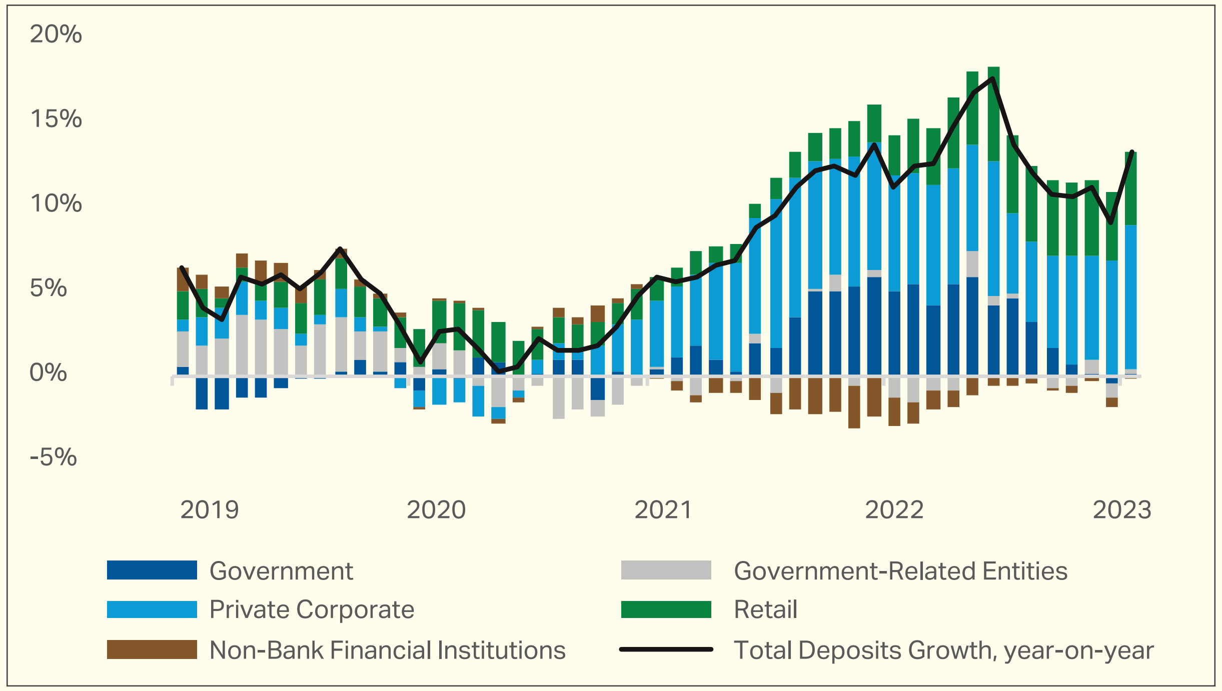
Source: *CBUAE*

FUNDING AND LIQUIDITY

The UAE banking system's funding and liquidity conditions remained favourable in 2023, supported by strong deposits growth. Deposits represent the primary source of funding, accounting for 71.4% of the total liabilities, while capital market funding contributed by a smaller share of 6.4% of the total liabilities.

The UAE banking system recorded double-digit deposit growth in 2023. The aggregate banking system's deposits increased by 13.5% year-on-year, mainly driven by strong resident deposits inflows from private corporate and retail sectors. The private corporate deposits contributed 8.7 percentage points of the total deposits growth, followed by the retail deposits with 4.5 percentage points.

Chart 2.1.3: UAE Banking System Deposits Growth



Source: *CBUAE*

As a result of the strong deposit growth, the aggregate Loan-to-Deposit ratio improved by 5.6 percentage points to 79.0%. The Loan-to-Deposit ratio was 10.4 percentage points lower than the 5-year average, indicating ample credit capacity of the UAE banking system.

Capital market funding continued to decline, reflecting the strong deposit growth and higher interest rate environment. The outstanding amount of the capital market funding declined by 2.4% year-on-year mainly driven by maturing debt instruments and moderate new issuances.

The UAE banking system's liquidity ratios Eligible Liquid Asset Ratio (ELAR)[35] and Liquidity Coverage Ratio (LCR)[36] reflected ample liquidity conditions, reaching 22.0% and 160.8%, respectively. Furthermore, the UAE banking system's funding indicators remained sound throughout the year with Advances to Stable Resources Ratio (ASRR) and Net Stable Funding Ratio (NSFR) at 73.9% and 111.6%, respectively.

ASSET QUALITY

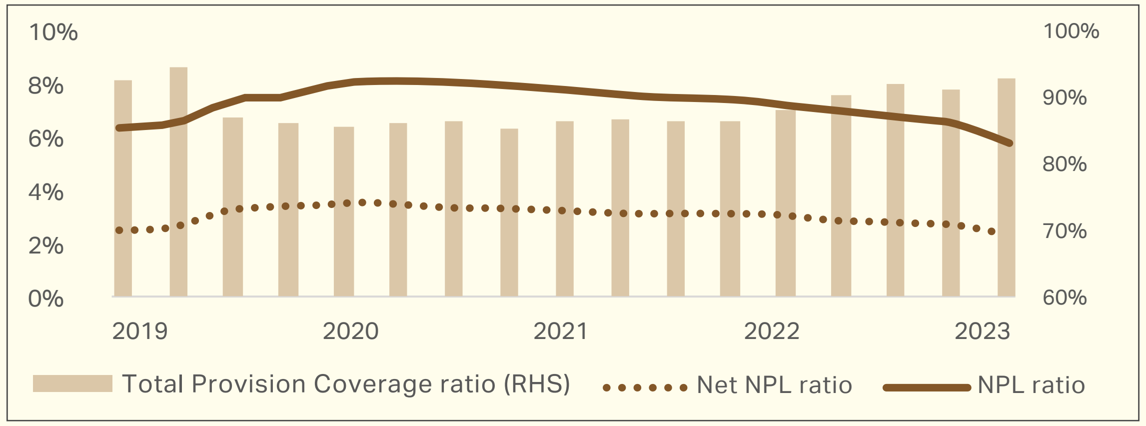
The aggregate asset quality ratios[37] of UAE banks' loan portfolio continued to improve with moderating NPLs and NPL ratios, stable delinquency rates, and improving provisioning levels. The implication of higher interest rates amidst global financial tightening on headline asset quality ratios has so far remained limited.

By the end of 2023, the Net NPL ratio[38] and NPL ratio moderated to 2.4% and 5.9%, respectively. The overall banking system provisions levels have also improved. The total provision coverage increased to 93.8%, a 2.1 percentage points higher than the 5-year average, with the specific provision coverage of 60.6%. The improvement in asset quality ratios was attributable to the favourable domestic economic outlook, recovery from the pandemic, and continuous CBUAE supervisory assessments and remedial actions to address legacy NPLs.

The Net NPL ratio of banks' retail portfolios remained stable at 1.3% as of the end of 2023, 0.4 percentage points lower than the 5-year average. The overall corporate loan portfolio Net NPL ratio edged lower to 3.3%, 0.8 percentage points below the 5-year average.

Notwithstanding the limited impact of the high-interest rate environment on credit quality ratios during 2023, banks shall continue to remain vigilant in risk management and forward-looking provisioning of potential medium-term implications of the higher interest rate environment.

Chart 2.1.4: Banking System Asset Quality Ratios (%)



Source: *CBUAE*

35 For more details of liquidity requirements in the UAE refer to CBUAE Regulations Re Liquidity and Box on Key Bank Prudential Requirements.
36 LCR and NSFR applicable to 5 approved banks.
37 For the methodology of the NPL ratio and the Net NPL ratio reporting, refer to CBUAE (2019): Central Bank of the UAE Enhances its Reporting of Non-performing Loans.
38 The Net NPL ratio excludes specific provisions and provides a better indicator of asset quality, taking into account the provisioning levels in the UAE banking system.

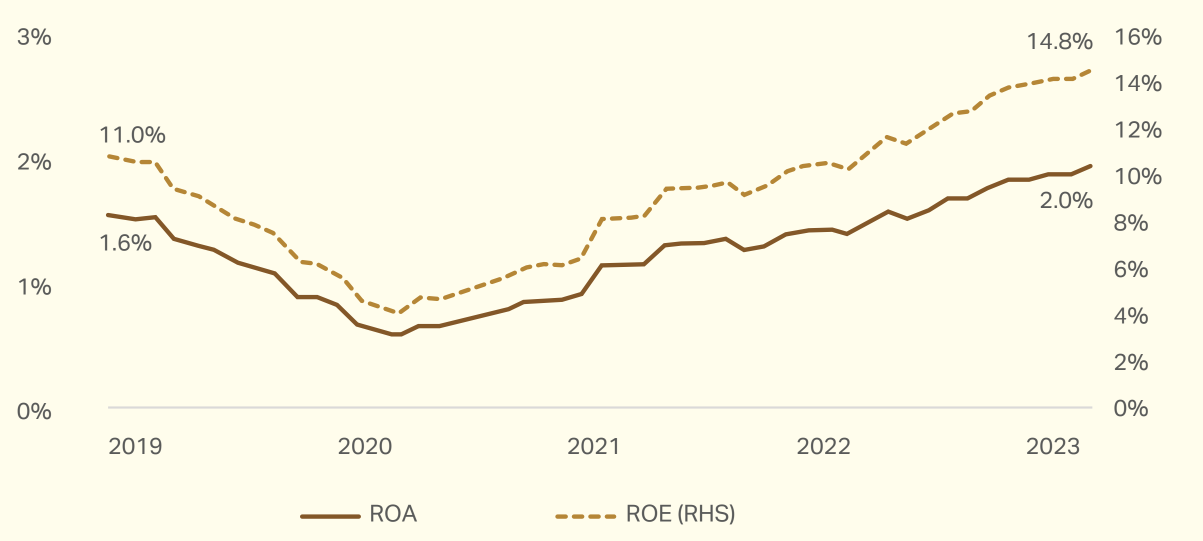
PROFITABILITY

The UAE banking system's profitability increased significantly in 2023 on the back of the high-interest rate environment and sustained loan growth. On aggregate, net profit grew by 55.3% year-on-year, with Return on Assets (ROA) increasing by 0.5 percentage points to 2.0% and Return on Equity (ROE) by 4.3 percentage points to 14.8%. Furthermore, the cost-to-income ratio improved by 4.8 percentage points to 31.9%, reflecting enhanced cost efficiency relative to improved profitability.

The total operating income grew by 32.6% year-on-year and continued to be supported by strong growth in net interest income and a recovery in non-interest income. The aggregate net interest income grew by 41.1% year-on-year from higher interest rates coupled with sustained credit growth. The aggregate net interest margin strengthened to 2.6% in 2023 from 2.1% in 2022. Similarly, non-interest income grew by 14.2% year-on-year, driven mainly by the recovery in trading and derivative income during the year.

On the other hand, total operating expenses increased by 15.3% year-on-year, due to higher staff expenses, IT outsourcing and other expenses. Net impairment charges declined by 0.2% year-on-year, with increase in specific provisions offset by an increase in write-backs.

Chart 2.1.5: UAE Banking System's Profitability Indicators (%)



Source: *CBUAE*

CAPITAL

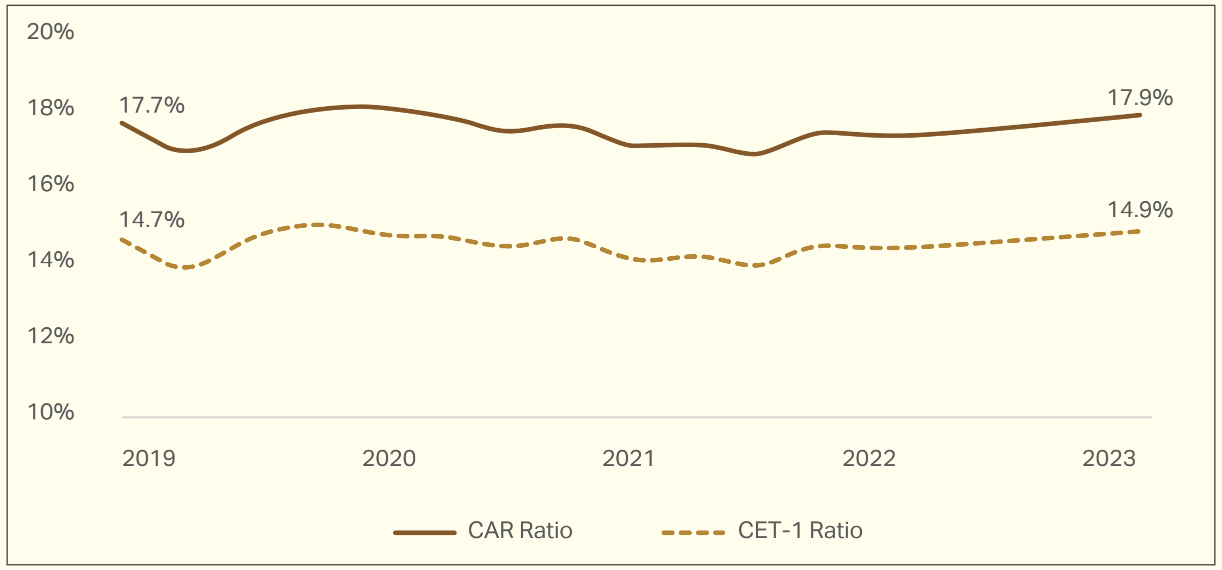
The UAE banking system continued to maintain sound capital buffers above the minimum regulatory requirements. Overall, Capital Adequacy Ratio (CAR) and CET-1 ratios improved to 17.9% and 14.9%, respectively, both increasing 0.5 percentage points from the previous year.

The improvement in the capital adequacy ratios was attributed to the higher growth in capital compared to Risk-Weighted Assets (RWA). The increase in total capital by 12.9% in 2023 was mainly driven by higher retained earnings, growing by 24.1% on the back of higher profitability levels during the year. The aggregate RWA increased by 9.5% in 2023, mainly attributed to the increase in total assets. The Credit Risk-Weighted Assets (CRWA) represents the largest component of RWA at 89.1%, with operational and market risk elements comprising about 7.9% and 3.1% of total RWA, respectively.

The UAE banking system recorded an aggregate leverage ratio of 9.7% as of December 2023 well above the minimum regulatory leverage ratio requirement of 3.0%.[39]

39 D-SIB have an additional D-SIB leverage ratio buffer requirement of 0.5%.

Chart 2.1.6: UAE Banking System's Capital Ratios (%)



Source: *CBUAE*

EXTERNAL EXPOSURES[40]

UAE Banks' External Exposures

The share of consolidated external assets of the UAE banking system remained the same as last year, representing 39.2% of total consolidated assets.[41] The share of consolidated external liabilities of the UAE banking system accounted for 30.8% of the total consolidated assets, a 1.9 percentage points decline from last year. The CBUAE closely monitors external exposure due to and due from the UAE banking system. The CBUAE also organises and participates in cross-border supervisory colleges with foreign regulators.

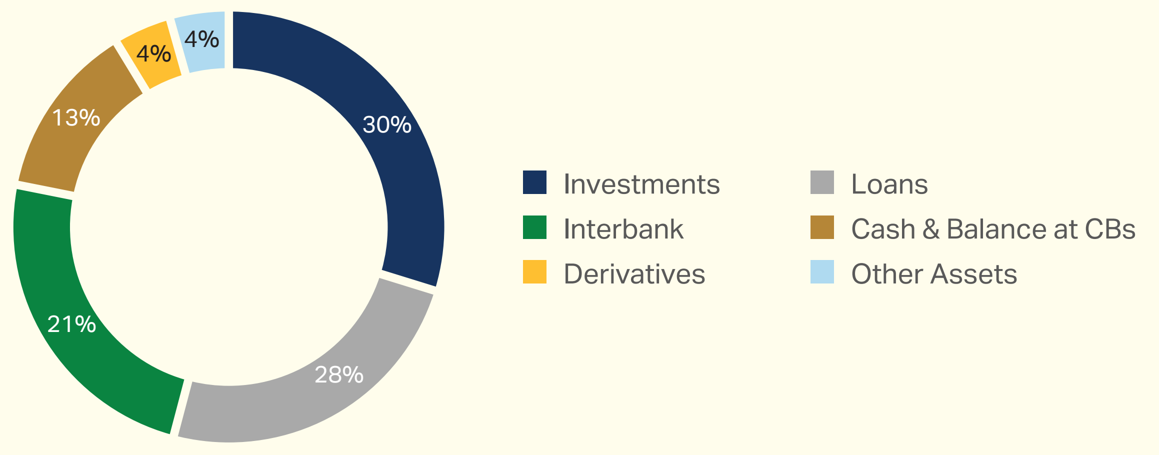
UAE Banks' Consolidated External Assets

The UAE banking sector consolidated external assets grew by 10.0% year-on-year mainly from growth in investment in financial securities supported by strong funding conditions. The external assets mainly comprised of investment assets, followed by loans and interbank lending. The top five countries with external asset exposures were the United States, Türkiye, Saudi Arabia, Egypt, and the United Kingdom.

40 The UAE banking system's external exposures comprised of cross-border exposure of UAE licensed banks' local operations and of UAE national banks' foreign subsidiaries and branches. The consolidated exposures exclude intragroup exposures between the head office and foreign branches and subsidiaries.

41 Total consolidated assets includes assets of UAE banking system's domestic operations and UAE banking system's foreign subsidiaries and branches.

Chart 2.1.7: UAE Banking System's Consolidated External Asset Composition

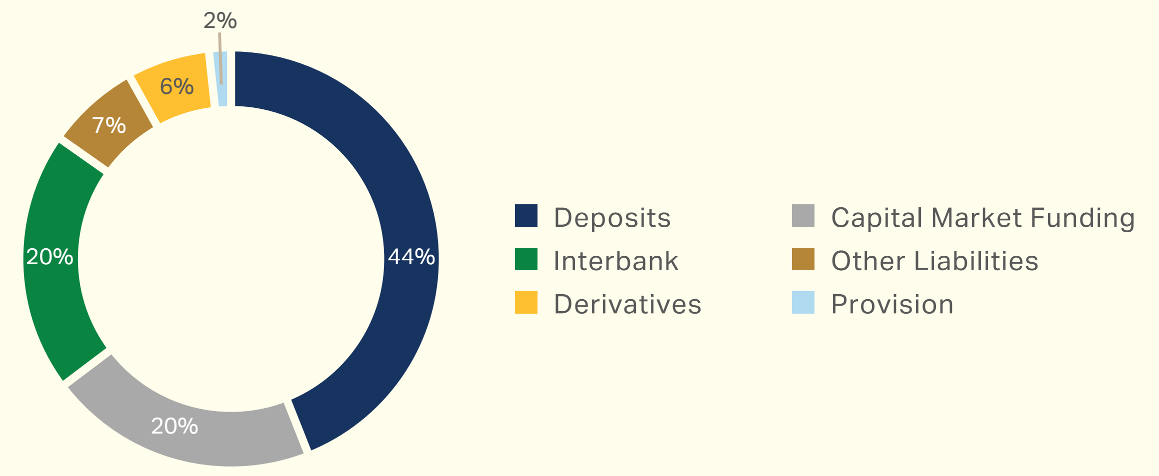


Source: *CBUAE*

UAE Banks' Consolidated External Liabilities

The consolidated external liabilities of UAE banks' grew by 3.6% year-on-year amid favourable domestic funding conditions in the UAE characterised by strong resident deposit growth. The external liabilities mainly comprised of deposits, followed by capital market funding and interbank borrowing. The top five countries with cross-border liabilities exposures were Türkiye, the United States, the United Kingdom, Egypt, and Saudi Arabia.

Chart 2.1.8: UAE Banking System's Consolidated External Liabilities Composition



Source: *CBUAE*

BOX 4: KEY BANK PRUDENTIAL REQUIREMENTS IN THE UAE

BANK CAPITAL REQUIREMENTS IN THE UAE

The CBUAE requires all banks operating in the UAE to comply with CBUAE capital regulations, which follow the standardised approach of the Basel III capital standards.[42,43] In addition to the minimum Pillar 1 capital requirements, banks have to fulfil capital buffer requirements with CET-1 capital (see table below). A Capital Conservation Buffer (CCB) of 2.5% in the form of CET-1 capital applies to all banks. The counter-cyclical capital buffer on UAE exposures remained at 0%. The CBUAE maintained the designation of four banks as D-SIBs and additional capital requirement applies for designated D-SIBs.

Table 2.1.1: Capital Requirements in the UAE

Capital Requirement	Minimum Requirement – excluding Capital Conservation Buffer	Minimum Requirement – including Capital Conservation Buffer
CET-1 Ratio	7.0%	9.5%
Tier-1 Ratio	8.5%	11.0%
Capital Adequacy Ratio	10.5%	13.0%
Additional CET-1 Requirements		
D-SIB Capital Buffer[44]	0.5% - 2.5% individual capital surcharge for designated D-SIBs Note: First Abu Dhabi Bank (FAB): 2.0% (2024), Emirates NBD (ENBD): 1.5%, Abu Dhabi Commercial Bank (ADCB) and Dubai Islamic Bank (DIB): 0.5%	
Counter-Cyclical Buffer	0% Note: A 0% counter-cyclical capital buffer requirement applies for UAE exposures.	

Source: *CBUAE*

Bank Leverage Ratio Requirements in the UAE

All banks operating in the UAE must comply with CBUAE leverage ratio standards, which follow Basel III leverage ratio standards[45]. All banks must meet the leverage ratio minimum requirements at all times with Tier 1 capital.

Table 2.1.2: Leverage Ratio Requirements in the UAE

Leverage Requirement	Minimum Requirement
Leverage Ratio	3.0%
Additional Requirements	
D-SIBs Leverage Ratio Buffer	0.5% additional Leverage Ratio minimum requirement for the designated D-SIBs

Source: *CBUAE*

42 Specialised Banks with Low Risk have to fulfil an Aggregate Capital Funds to total assets ratio of 12.5%.
43 The CBUAE capital requirements will be further revised in the coming years following the revised Basel III capital standards.
44 For more information on DSIBs Assessment Methodology, refer to the FSR 2020. The CBUAE designated four banks in the UAE as Domestic Systemically Important Banks (D-SIBs) with additional D-SIB capital buffer requirements set for the designated banks. D-SIBs included First Abu Dhabi Bank, Emirates NBD, Abu Dhabi Commercial Bank, and Dubai Islamic Bank.
45 Specialised Banks with Low Risk do not have to fulfil a leverage ratio requirement.

BANK LIQUIDITY REQUIREMENTS IN THE UAE

Following the Basel III Liquidity Standards, the CBUAE applies Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) requirements to five national banks operating in the UAE.[46,47] The remaining banks operating in the UAE are regulated according to UAE-specific requirements based on Eligible Liquid Asset Ratio (ELAR) and Advances to Stable Resources Ratio (ASRR).

Table 2.1.3: Liquidity Requirements in the UAE

	Requirement
Liquidity Coverage Ratio	Min 100%
Net Stable Funding Ratio	Min 100%
Eligible Liquid Assets Ratio	Min 10%
Advances to Stable Resources Ratio	Max 100%

Source: *CBUAE*

The CBUAE prudential relief measures on liquidity, and stable funding requirements applied during the pandemic as part of the TESS were applicable until 30 June 2022 and consequently discontinued under the gradual TESS exit strategy.

BANK LOAN-TO-VALUE RATIO REQUIREMENTS

The CBUAE applies Loan-to-Value (LTV) requirements to retail mortgages. LTV requirements were segmented for owner-occupied, subsequent, and off-plan properties. The CBUAE, as part of TESS, adjusted LTV ratio requirements for first-time home buyers. This measure has remained in place and was deemed appropriate in the current macro-financial environment.

46 Banks subject to these LCR/NSFR requirements are First Abu Dhabi Bank, Emirates NBD, Abu Dhabi Commercial Bank, Dubai Islamic Bank, and Mashreq.
47 The CBUAE capital requirement will be further revised in the coming years following the revised Basel III liquidity standards.

Table 2.1.4: Loan to Value Ratio Requirements

UAE Nationals	
First House / Owner Occupier	
Value of Property	**Loan-to-Value Ratio**
Less than or equal to AED 5 million	Max 85% of the value of the property
More than AED 5 million	Max 75% of the value of the property
Subsequent property	
Max 65% of property value	
Off-plan schemes	
Max 50% of property value	

Expatriates	
First House / Owner Occupier	
Value of Property	**Loan-to-Value Ratio**
Less than or equal to AED 5 million	Max 80% of the value of the property
More than AED 5 million	Max 70% of the value of the property
Subsequent property	
Max 60% of property value	
Off-plan schemes	
Max 50% of property value	

Source: *CBUAE*

LARGE EXPOSURES

The CBUAE has set out a suite of large exposure limits. Large exposure limits to a single counterparty or to a group of connected counterparties are applied in line with BCBS large exposure standards. In addition, the CBUAE applies exposure limits relevant to the UAE operating environment, comprising exposures to UAE emirates' governments and their commercial and non-commercial entities, and exposures to related parties. The CBUAE issued an updated large exposure regulation in 2023, providing additional details on the measurement of large exposures and identification of connected counterparties in alignment with the BCBS large exposure standards.

RECOVERY AND RESOLUTION

The CBUAE issued the recovery planning regulation in 2023. The recovery planning regulation requires licensed financial institutions to maintain recovery plans to effectively deal with periods of financial distress. As part of the overall recovery and resolution approach, the CBUAE intends to also issue a resolution regulation setting out how and in which cases licensed financial institutions can be resolved, and the preparatory measures taken to ensure resolution plans can be implemented when needed.

SUSTAINABLE FINANCE

The principles for effective management of climate-related financial risks were adopted in 2023 to further enhance the regulatory approach for managing climate change risk in the financial sector. In line with the principles, the CBUAE completed the climate-related financial risk thematic supervisory reviews. The principles will guide the CBUAE's further regulatory framework in this area. Additionally, the principles for sustainability-related disclosures and a summary of high-level design principles to inform the UAE taxonomy were also drafted and finalised in 2023.

CREDIT RISK STANDARDS

The CBUAE is finalising its updated regulation and standards on the management of credit risk, which will be applicable to all licensed financial institutions engaging in activities that give rise to credit risk. Among the key topics are governance and risk management, classification of exposures, provisions, and write-offs.

RULEBOOK

In 2023, the CBUAE launched its Rulebook which can be accessed via the CBUAE website. It is a service provided by the CBUAE that offers access to the regulations, standards and guidelines issued by the CBUAE to the financial industry and the wider public.

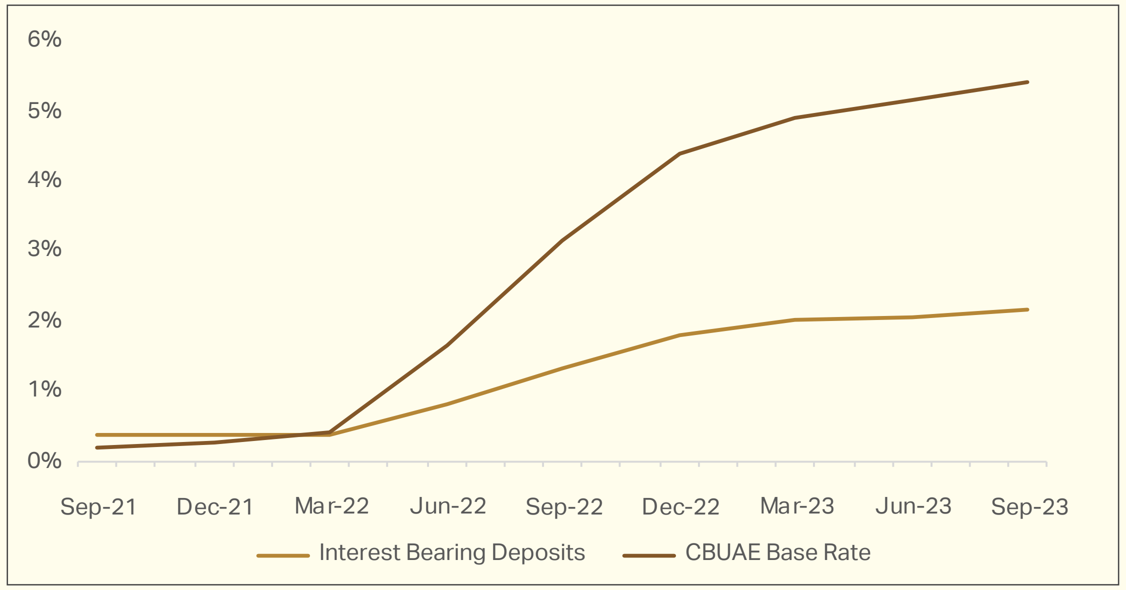
BOX 5: FUNDING COSTS AND DEPOSIT BETA

DEPOSIT BETA

This section examines the extent to which UAE banks adjust their deposit rates in response to changes in the Central Bank of the UAE's policy rates. Details on UAE banking sector deposits and funding structure are presented in previous section (2.1).

The environment in which UAE banks operate changed in the course of 2022-23 as the interest rates continued to rise and CBUAE policy rate peaked at 5.4% in 2023. This tighter monetary policy created a shift from a prolonged period of low interest rates and contributed to an upward shift of the yield curve. As shown in the graph below, the base rate rose sharply in 2022-23, however the interest rates on interest bearing (IB) deposits lagged behind the changes in policy rate during the rate increase cycle. For example, the policy rate went up to 5.4% in Q2 2023, while average rate on IB deposits was at 2.2%.

Chart 2.1.9 Policy rate, Interest bearing deposit rate

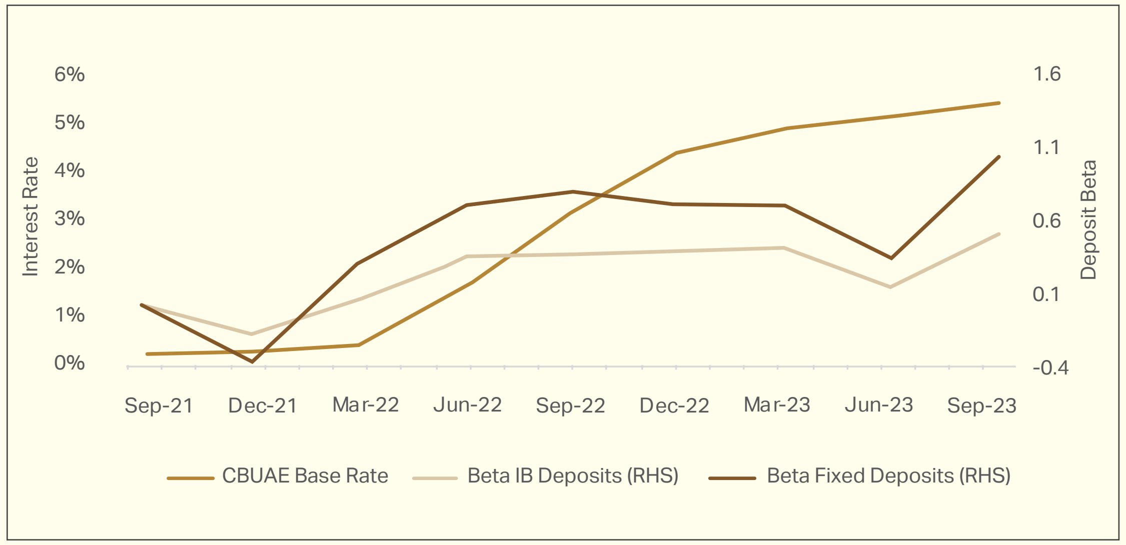


Source: *CBUAE*

Customer deposits are the main source of UAE banks' funding and make up AED 2.4 trillion (60% of Total liabilities). As the CBUAE raises the base rate, the banks respond by increasing the customer deposit rates.

The deposit beta measures the sensitivity of deposit rates to policy rate changes. It measures the percentage pass-through of the increase in the CBUAE policy rate to new or rolled over customer deposit rates. For example, if the policy rate is raised by 50 bps and subsequently a bank increases its deposit rate by 25 bps, the deposit beta is 50%.

Chart 2.1.10 Deposit Betas



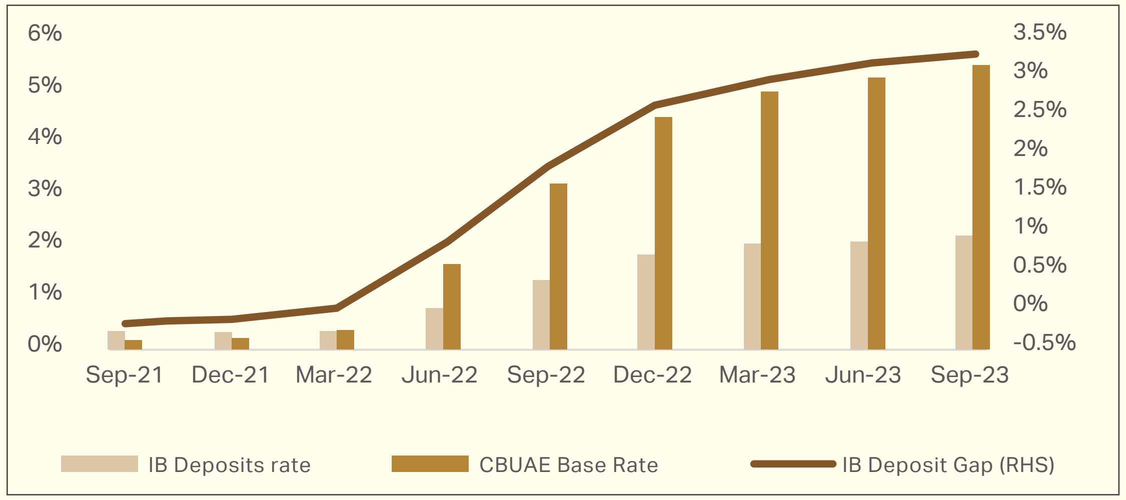
Source: *CBUAE*

The graph above shows deposit beta during the low interest rate period was at the lowest point, primarily because banks had little incentive to attract additional deposits due to ample liquidity in the market. However, as the policy rate started to increase, the deposit rates also started to rise accordingly. In Q3 2023, the policy rate reached its peak of 5.4%. The beta of interest bearing deposits stood at 0.49, indicating that UAE banks' deposit funding rates are less sensitive to changes in market interest rates. On the other hand, fixed deposit rates increased more than interest bearing deposit rates and its beta went up to 1.0 in Q3 2023, possibly due to customers seeking higher return from fixed deposits amid high interest rate environment.

One measure to look at the opportunity cost of depositors is the gap between deposit rate and the policy rate. The deposit gap looks at the absolute difference between deposit rates and the benchmark rate. For example, if the policy rate is 5.4% and the average deposit rate offered by UAE banks is 3.2%, the deposit gap is 2.2 percentage points, indicating that depositors are earning 2.2 percentage points less than the policy rate. This gap can indicate the degree to which depositors are incentivised to seek alternative investments or switch banks to seek higher return.

The graph below shows a widening spread between IB Deposits vs. the CBUAE policy rate. As the policy rate increased, the gap widened to 3.2 percentage points in Sep-2023. The wider gap suggests that there is a lag between increase in policy rate and banks' deposit rates likely driven by the amount of excess liquidity in the market. Widening of the deposit gap also indicates that depositors are more likely to move their funds to other higher rate products that are more responsive to monetary policy e.g. fixed deposits. This shift in deposit composition is evident as the fixed/time deposits share of total deposits increased to 43% in Q3 2023 compared to 37% in Q3 2021.

Chart 2.1.11 Deposit Gap – Interest Bearing Deposit Rates

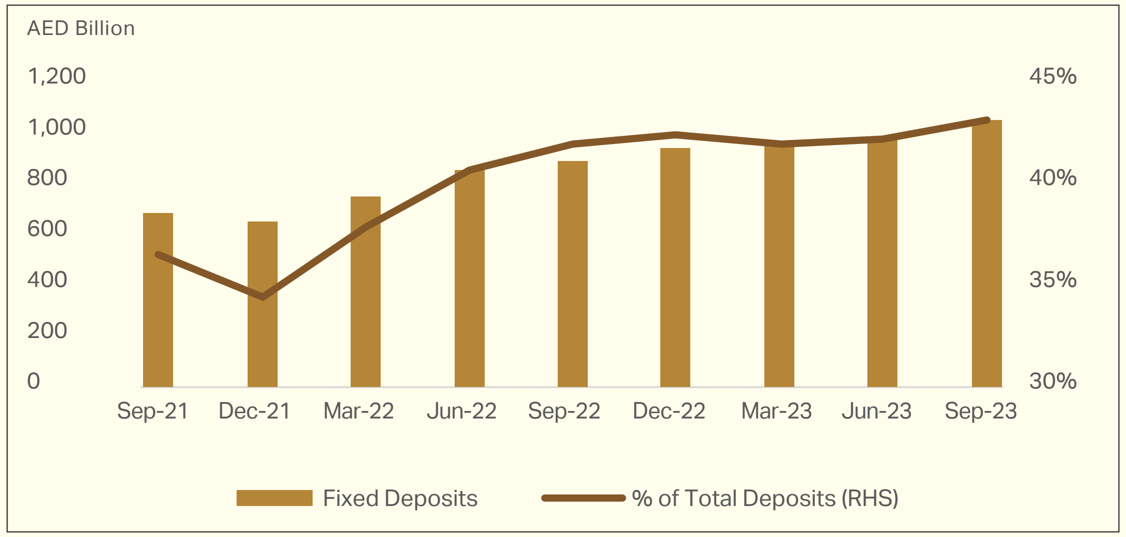


Source: *CBUAE*

Similarly the fixed deposits gap was around 1.1 percentage points in Q3 2023 reflecting that banks paid higher interest rates due to their fixed-term nature and to maintain more stable deposit base.

The UAE banking sector has maintained a robust liquidity position in recent years, supported by its stable deposit base. However there is a steady increase in the share of banks' fixed deposit to their total deposits since the inception of the monetary tightening cycle. This development might potentially lead to an increase in deposit beta and banks' funding costs during the tightening cycle.

Chart 2.1.12 UAE Banks' Fixed deposit growth



Source: *CBUAE*

2.2 REGULATORY STRESS TEST

The 2023 CBUAE regulatory stress test evaluated the resilience of the UAE banks and the banking system under a hypothetical adverse scenario. The scenario focused on a synchronised global recession amid elevated inflation and a high interest-rate environment. The results showed that the UAE banking system would withstand the severe stress materialising in the adverse scenario, with the average CET-1 ratio falling by 350 bps from 13.8% to 10.3% in the worst year of the scenario. The stress test demonstrated that the banks would be able to meet the minimum solvency and liquidity requirements while maintaining lending to the economy in times of stress. In addition to the bottom-up stress test, the CBUAE conducted regular top-down liquidity stress tests, that showed the UAE banking sector could withstand hypothetical stress periods (up to 60 days) involving a significant outflow of funding and limited access to the capital market.

INTRODUCTION

In line with its mandate to promote financial stability in the UAE, the CBUAE engaged with the banks under its jurisdiction in 2023 to conduct a bottom-up stress test. The objective of the stress test is to assess the resilience of the banking system under a severe but plausible hypothetical scenario as well as to assist the banks with building the capacity to manage the risks in a forward-looking manner.

The stress test closely involves the participating banks in quantifying the risks and projecting the risk parameters under common macro-financial scenarios and methodology. 15 national banks and four largest foreign branches participated in the 2023 stress test, with more than 90% of the total UAE banking system assets covered.

Based on the CBUAE risk and vulnerability assessment, the 2023 stress test introduced the following new key elements:

(1) To evaluate banks' resilience amid the high-interest rate environment, more granular reporting requirements for the debt-burden-related ratios for large corporate and retail portfolios were introduced. A backstop rule for the significant increase in credit risk trigger based on debt ratio thresholds was also added to the stress test constraints;[48]

(2) Given the banking turmoil in the US in early 2023, the UAE banks were required to calculate the fair value of the amortised-cost debt securities (that qualified as high-quality liquid assets) under the adverse scenario;

(3) The stress test placed greater focus of cross-border exposures amid geopolitical tensions and mounting sovereign risk in certain Emerging Market Economies.

(4) An additional module on transition climate change risk was introduced. The module utilised the transition scenarios from the Network of Central Banks and Supervisors for Greening the Financial System (NGFS), with the impact evaluated by the participating banks at granular obligor level.

The stress test outcome showed that the UAE banking system is well positioned to withstand significant stress under the hypothetical adverse scenario while maintaining sufficient levels of capital and liquidity buffers. Moreover, the static balance sheet assumption used for the stress test assumes that the banks maintain credit supply to the economy. This is essential in containing the severity of an economic downturn and facilitating faster recovery.

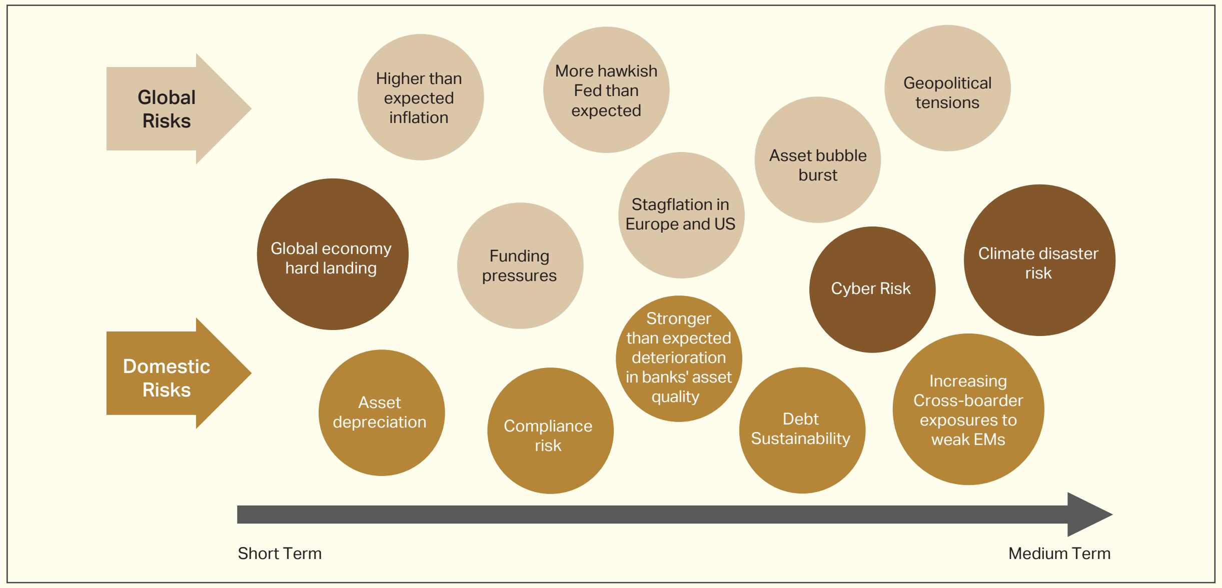
48 The minimum requirement was to place corporate exposure with Debt Service Coverage Ratio below 1.2 in IFRS 9 Stage 2. Similarly, retail exposure with Debt Burden Ratio above 60% in low-income brackets would be allocated to Stage 2. IFRS 9 Stage 2 refers to financial assets that have experienced a significant increase in credit risk since initial recognition. These assets are measured at lifetime expected credit losses and require more provisioning.

RISKS AND SCENARIOS

The 2023 stress test considered a baseline and an adverse scenario over a three-year forecast horizon. The baseline scenario assumes a path that is in line with consensus macro-financial projections. The hypothetical adverse scenario, which is the main focus of the stress test, centered on recession risks to the UAE economy.[49]

The starting point of formulating the stress test scenarios is identifying existing vulnerabilities, risk triggers and transmission channels that could escalate into systemic risk events. Such risks are identified based on the review of external risks literature and CBUAE internal collaboration and discussion.

Chart 2.2.1 Key Hypothetical Risks to the UAE Economy and Financial System



Source: *CBUAE*

The 2023 adverse scenario focused on the global economy's hard landing, persistent inflation and debt-sustainability concerns stemming from high interest rates.

Given the small-open economy setting for the UAE, the global shocks are transmitted to the UAE economy through trade, tourism, interest rate, and confidence channels, with the paths of oil price determined in the international energy market and the interest rate driven by the US policy rate due to fixed exchange rate regime.

A synchronized global recession combined with restrictive financial conditions would lead to a severe recession in the UAE, associated significant decline in asset prices and deterioration in asset quality for the banking sector.

The severity of the stress test scenario is measured based on key macro-financial variables that effectively summarize the state of the UAE economy – non-oil GDP and oil price, which are calibrated based on historical recession analysis and expert judgment. The paths of the remaining variables are determined using the satellite models.[50]

49 Stress test scenarios consist of scenario narratives and variable paths. The scenario narrative summarises vulnerabilities, shocks and associated propagation channels. Variable paths include quarterly projections over the projection horizon for 12 main macro-financial variables, covering key sectors of the UAE economy – real GDP, real non-oil GDP, UAE oil production, CPI, oil price, real estate prices, stock price indices, three-month EIBOR, and hotel occupancy rates. Participating banks have the option to use additional variables following CBUAE approval of the relevant scenario expansion methodology and scenario paths of additional variables.

50 The satellite models are based on univariate econometric analysis and Bayesian Model Averaging approach.

Table 2.2.1 Adverse Scenario Severity Measures for Selected Macro-Financial Variables

Variable names	Start-to-trough change
Real non-oil GDP	-6.1%
Real GDP	-8.0%
Real estate price - Dubai	-31.9%
Real estate price – Abu Dhabi	-27.2%
Average oil price per barrel	-46.7%
Three-months EIBOR rate	2.9%

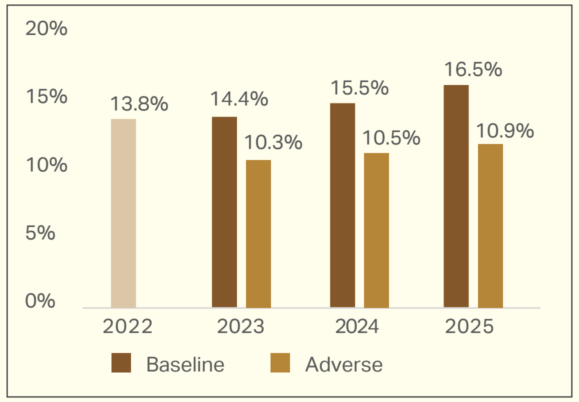
Source: *CBUAE*

The results of the stress test were benchmarked against the top-down stress test conducted by the CBUAE in parallel. Unlike the bottom-up stress test, the top-down stress test is conducted by the CBUAE using the regulatory and market data, and the participating banks are not involved in the computation of the outcome. The scenarios used are identical, while the methodology constraints are similar. The suite of stress testing tools also includes less complex but more frequent sensitivity and liquidity stress tests as well as thematic stress tests tailored for specific pockets of risk.

Bottom-up Stress Test Results

The 2023 stress test results indicated that the UAE banking sector remained well-capitalised under both baseline and adverse scenarios. The average CET-1 ratio would reach 16.5% under the baseline scenario and decrease to 10.3% under the adverse scenario, a reduction of 350 bps.

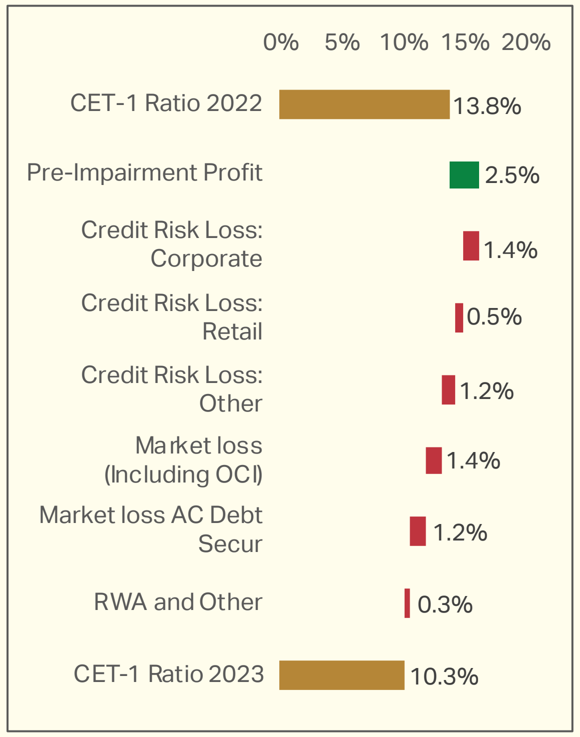
Chart 2.2.2 CET-1 Capital Ratios under the Stress Test



Source: *CBUAE*

Deteriorating credit quality was a key driver of the capital depletion in the adverse scenario, with higher defaults increasing credit risk losses. The corporate lending segment saw the highest increase in credit losses. The banks would also incur market risk losses mainly driven by their holdings of debt securities (including fair valued and amortised cost securities). These securities would result in substantial losses from interest rates and credit spreads shocks under the adverse scenarios.

Chart 2.2.3 Decompositions of CET-1 Ratio Change 2022-2023

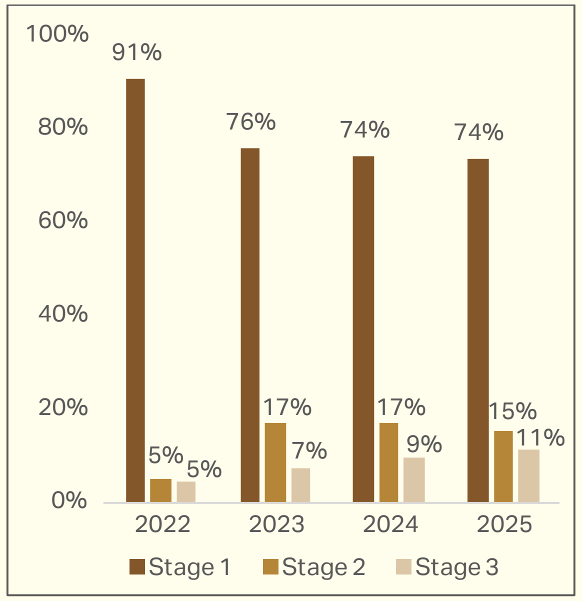


Source: *CBUAE*

The pre-impairment profits added to the starting position capital even in the adverse scenario as the net interest income and non-interest income remain positive. However, there was a significant decrease in pre-impairment profits in the adverse scenario compared to the baseline scenario.

Additionally, the results revealed a significant increase in the classification of exposures into stages 2 and 3, under the adverse scenario. The average stage 2 and stage 3 exposures increased from 5% to 15% and 5% to 11% respectively. The increase is mainly driven by higher default rates across corporate, retail, SME, government, and off-balance sheet lending.

Chart 2.2.4: Total Exposure by IFRS9 Stages – Adverse Scenario



Source: *CBUAE*

In conclusion, the stress test results show that the UAE banking sector is resilient to a hypothetical hard landing scenario, as represented in the adverse scenario.

Stress Test Review and Policy Actions

The CBUAE continues to enhance the stress testing methodology and review process through a more granular examination of salient risks, automated data checks and reconciliation of the results with the CBUAE internal models.

The insights from the 2023 stress test provide policy support for the decision of dividend distribution approval, enhance supervisory examination of UAE banks in 2024, inform the potential need for corrective actions, and use of macroprudential tools. Overall, the stress test provides confidence in the UAE banking system while guiding policies to further strengthen financial crisis preparedness.

Top-down Liquidity Stress Tests

Liquidity stress tests provide insights into the banking sector's resilience to plausible liquidity shocks under different stress scenarios. The CBUAE conducted regular liquidity risk stress tests in 2023 to determine potential risk sources that banks might encounter and to assess banks' counterbalancing capacity to withstand sudden shocks.

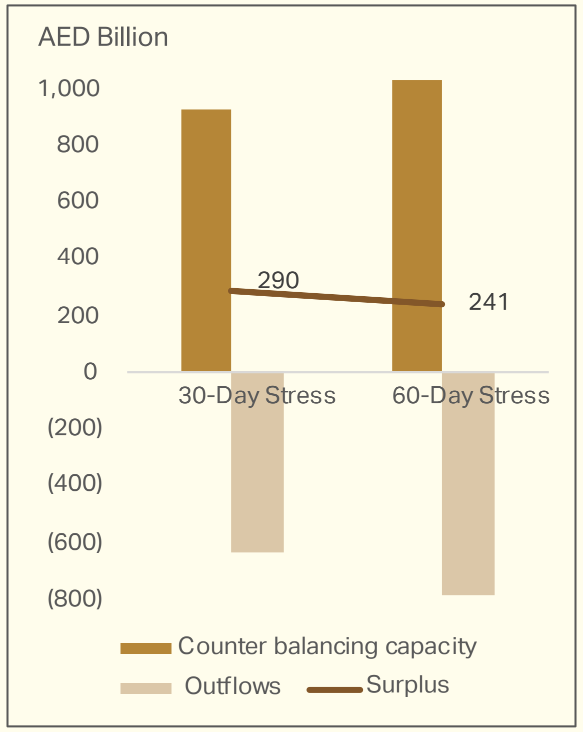
The methodology is based on survival period assessment, measuring both sides of the balance sheet in terms of the cumulative effect of inflows and outflows during a stressed period. The stress test assesses short-term resilience of the liquidity risk profile of banks by ensuring that they have sufficient high quality liquid assets (HQLA) to survive a significant deposits outflow lasting 30 or 60 days.

The scenario encompasses both idiosyncratic and market-wide shocks and is calibrated based on UAE historical experience from recent global financial crisis episodes. It also incorporates other liquidity risk drivers such as asset quality deterioration, funding concentration and non-resident deposit shocks.

The stress test is a key risk monitoring tool, conducted to ensure early detection and mitigation of liquidity risks. The stress test covered all UAE national banks and results indicated the resilience of banks to potential short-term liquidity shocks.

The UAE banks held strong funding and liquidity profiles in terms of stable deposit base and maintain diversified HQLA portfolio. The stress test results show that the UAE banks would fare well under the hypothetical stress period (up to 60 days), despite a significant outflow of deposits and limited access to market funding. Under the adverse scenario, banks liquidity surplus, measured as the difference between available liquid assets post-haircuts and net cash outflows under stress, was at AED 290 billion and AED 241 billion in 30-day and 60-day horizons respectively. This reflects ample liquidity buffers held by the banks. Stress tests confirm that systemic liquidity remained adequate in the UAE banking system.

Chart 2.2.5 Survival Days – UAE Banks



Source: *CBUAE*

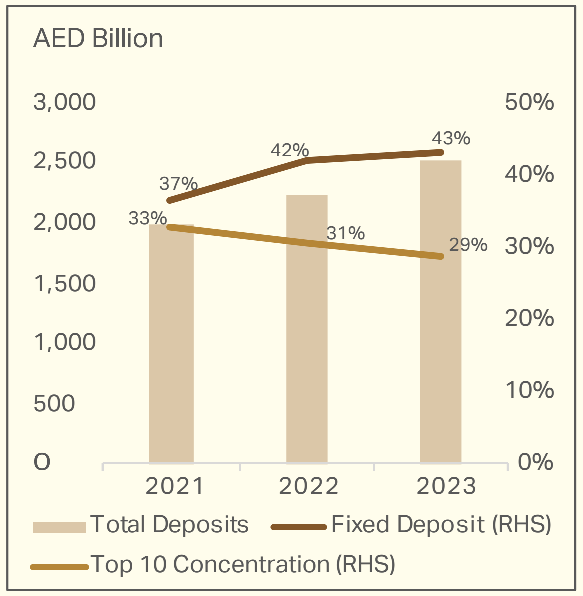
Deposit concentration risk

The UAE banking sector has experienced steady growth in deposits since 2021. There has been a visible shift in depositor behavior as interest-bearing time deposits increased to 43% of total customer deposits in 2023, primarily driven by an increase in the interest rates paid on time deposits amid a high interest rate environment.

As the deposit base expands, banks might face increasing levels of depositor concentration, which can elevate funding risk and potentially impact financial stability during times of stress. Maintaining a diversified deposit base with low depositor concentration is essential for banks to mitigate these risks.

The depositor concentration of the top ten depositors in the UAE banking sector was 29% in 2023. Depositor concentration has declined over the past three years, with the share of the top ten depositors decreasing from 33% in 2021 to 29% in 2023. This improvement enhances the resilience of the banking sector against unexpected liquidity shocks.

Chart 2.2.6 Top 10 Deposit Concentration – UAE Banks



Source: *CBUAE*

BOX 6: CLIMATE RISK SCENARIO ANALYSIS

Climate change poses significant challenges to the global economy. Financial disruption arising from climate risks could have negative implications across all sectors including the banking system. Climate-related financial risks can be broadly categorised as physical and transition risks. Physical impacts include the potential economic costs and financial losses resulting from the increasing severity and frequency of extreme climate-change related events, and longer-term progressive shifts in the climate. Transition impacts arise from the process of adjusting to a low-carbon economy.[51]

TRANSITION RISK:

Under the UAE Net Zero by 2050 strategic initiative, the UAE economy needs to deploy significant resources to reduce greenhouse gas (GHG) emissions that would have a profound implication on economic sectors such as energy, transportation, mining, and manufacturing. These shifts in policies and market changes have the potential to affect the UAE banks and impact the stability of the wider financial system.

Scenario analysis and stress testing are important forward-looking tools to assess the vulnerabilities of financial institutions to the highly uncertain impact of climate-change related risks. In 2023, the CBUAE conducted a pilot bottom-up climate risk scenario analysis aimed at evaluating the resilience of the banking system to climate transition risk and support existing climate initiatives by UAE Sustainable Finance Working Group.

The CBUAE adapted the established UN methodology (UNEP – United Nations Environmental Program) to assess banks' lending to economic sectors potentially vulnerable to transition risk. The bottom-up approach was based on three scenarios from the Network for Greening the Financial System (NGFS).[52]

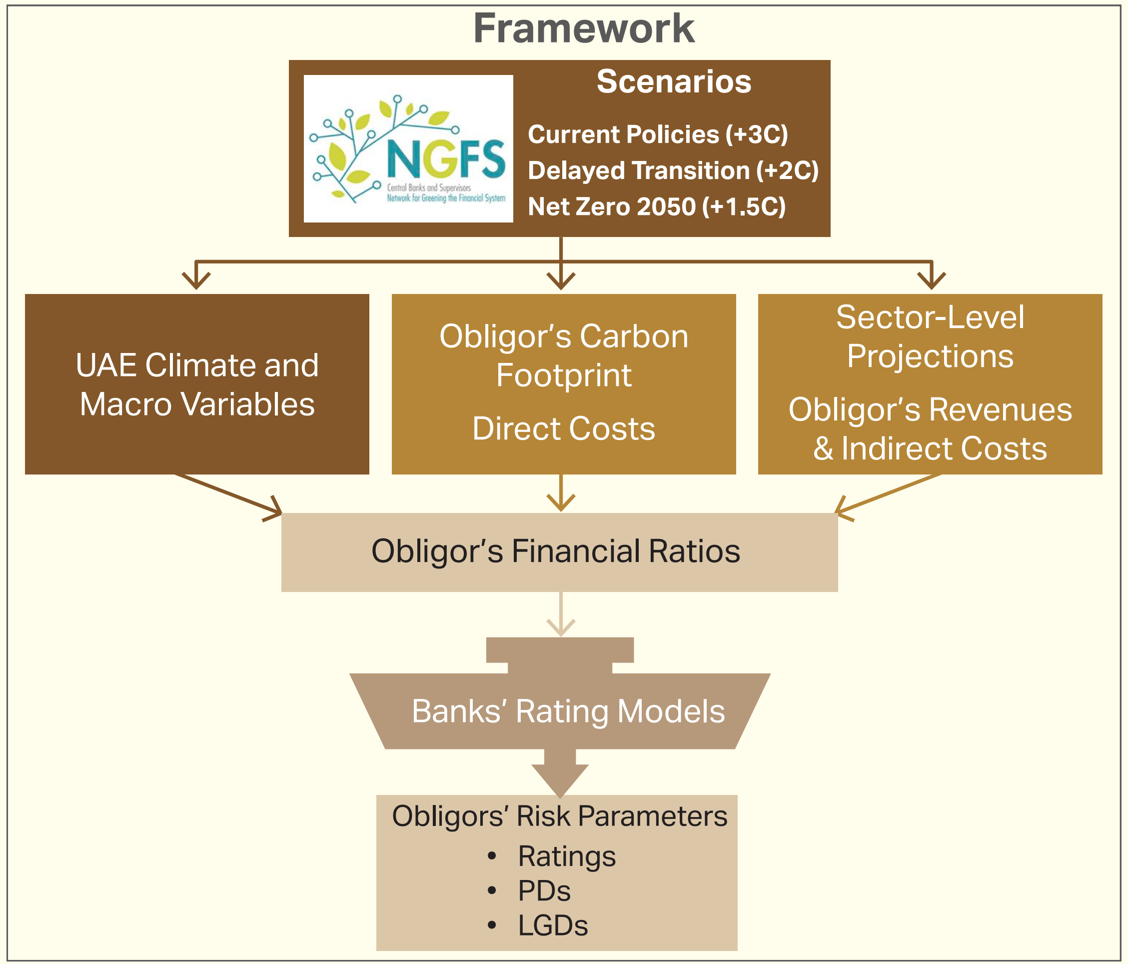
The selected scenarios:

1. **Current Policies (+3.0˚C)**: Baseline scenario, with no or little change of current policies to combat climate change, causing high physical risks but minimal transition risk with global temperature increase by more than 3 degrees;
2. **Net Zero 2050 (+1.5˚C)**: Coordinated global policy implementation (Paris Agreement) to combat climate change and limit the global temperature increase to 1.5 degrees, implying moderate transition risks but low physical risks;
3. **Delayed Transition (+2.0˚C)**: Delayed policy implementation results in higher economic costs of transition and to some extent higher physical risks.

The participating banks evaluated the impact of the transition scenarios on top-20 exposures in climate-sensitive sectors. The climate-sensitive sectors were defined based on the UNEP methodology and the banks had an option to consider additional sectors if deemed necessary. As shown in Chart 2.2.7, carbon footprint was estimated for each obligor and combined with scenario variables – carbon price and sector level output projections – to estimate the transition impact on the obligor's financial ratios and subsequently on the risk parameters (credit ratings, probability of default and loss given default).

51 Basel Committee on Banking Supervision: Climate-related financial risks: a survey on current initiatives.
52 NGFS Scenarios for Central Banks and Supervisors, 2022, NGFS.

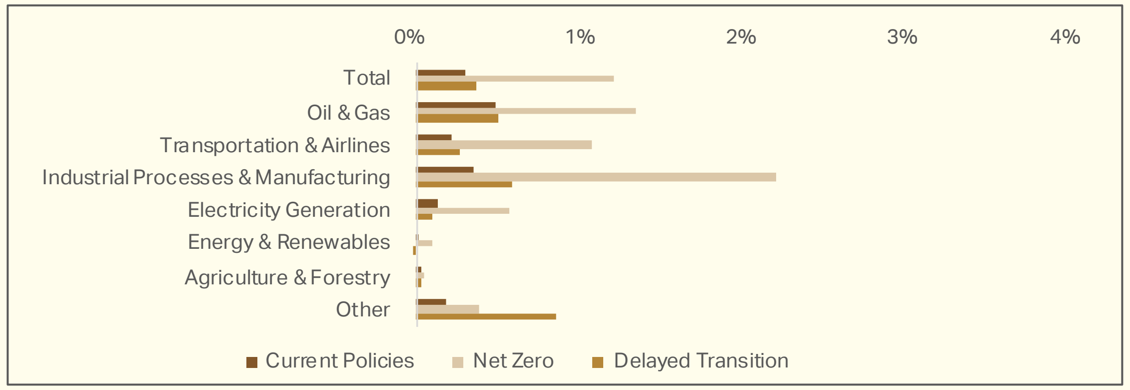
Chart 2.2.7. Transition Climate Risk Scenario Analysis Methodology



Source: *CBUAE*

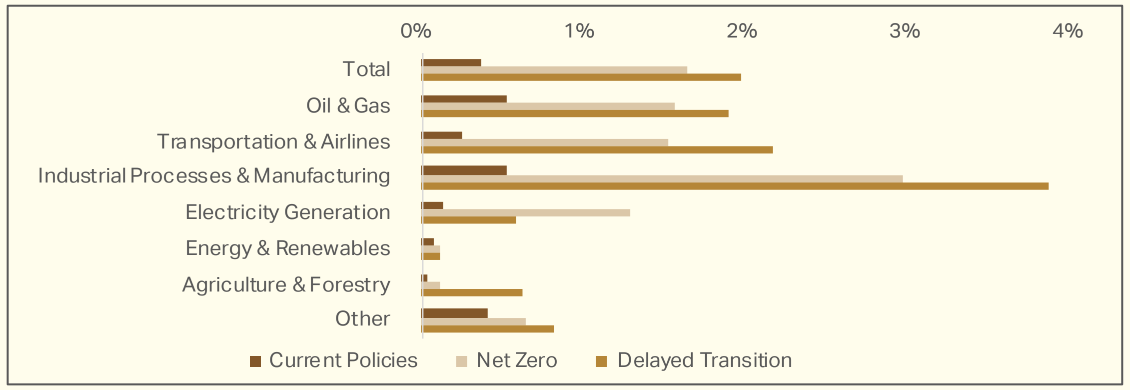
The results from the transition risk analysis showed an increase in probabilities of default (PDs) by 2030 and 2040 in the scenarios. The increase is relatively large in the Net Zero scenario in 2030, but more so for the Delayed Transition scenario in 2040. Charts 2.2.8 and 2.2.9 show change in PDs for selected climate-sensitive sectors in 2030 and 2040 compared to end of 2023. The transition impact is strongest in the Delayed Transition scenario for the Industrial Processes & Manufacturing, Transportation & Airlines and Oil & Gas sectors. For example, the PD would increase by almost 4 percentage points in the Industrial Processes & Manufacturing Sector by 2040 in the Delayed Transition Scenario.

Chart 2.2.8. Change in Probabilities of Default in 2030 by Sector and Scenario



Source: *CBUAE*

Chart 2.2.9. Change in Probabilities of Default in 2040 by Sector and Scenario



Source: *CBUAE*

PHYSICAL RISK

Physical risk pertains to the tangible consequences of a shifting climate, encompassing the risk of asset destruction, operational disruptions, and disturbances to trade routes, supply chains and markets.

These can be acute, resulting from extreme weather events, or chronic, arising from progressive shifts in weather patterns. Rising global temperatures as a result of taking no policy action to lower GHG emissions would expose the global economy to higher physical risk.

In general, physical risk drivers or hazards can be linked to financial exposures using damage functions that define the impacts of specific hazards on the real assets and activities that generate financial flows. The disruptions to assets, activities and their corresponding financial flows can then be integrated, in principle, into established risk models and associated risk parameters. The 2023 stress test included an additional optional component on physical risk where the participating banks (large banks and banks exposed to vulnerable geographical areas) were asked to assess the impact of acute and chronic physical risks on underlying commercial and residential real estate exposures as well as on the value chain of corporate borrowers located in high physical risk zones.

In 2024, the CBUAE is planning to conduct a pilot physical risk scenario analysis. The exercise will follow the NGFS proposal to identify relevant climate hazards for the UAE and the vulnerability of assets, relevant to UAE lending portfolios to these risks.

03 UAE NON-BANK FINANCIAL INSTITUTIONS AND FINANCIAL INFRASTRUCTURE ASSESSMENT

3.1 NON-BANK FINANCIAL INSTITUTIONS

The UAE insurance sector remained resilient, with an adequate solvency position, continued growth in gross written premiums and improved profitability. Climate change and technological advances, amongst others, pose further challenges and opportunities for the insurance industry. Overall, finance companies remained adequately capitalised, with further improvements in liquidity levels and overall profitability. However, the asset size and number of finance companies declined and asset quality concerns remain despite some improvements in loan quality and provisions. The UAE exchange business continued to demonstrate resilience and grow with a steady rise in business activities.

UAE INSURANCE SECTOR

OVERVIEW OF THE UAE INSURANCE SECTOR

As of the end of 2023, the UAE insurance sector encompassed 60 insurance companies with total assets of AED 125.7 billion. (2022: AED 119.1 billion). The sector on aggregate continued to demonstrate resilience with adequate solvency, sustained business growth and profitability. The CBUAE is enhancing its regulatory oversight by defining risk-based supervision framework for the insurance sector.

Solvency

The UAE insurance sector's aggregate solvency position remained adequate with the Solvency Capital Ratio (SCR) of 221.0%. The improvement in SCR was attributed to a more modest increase in capital required compared to the growth in availability of own funds.

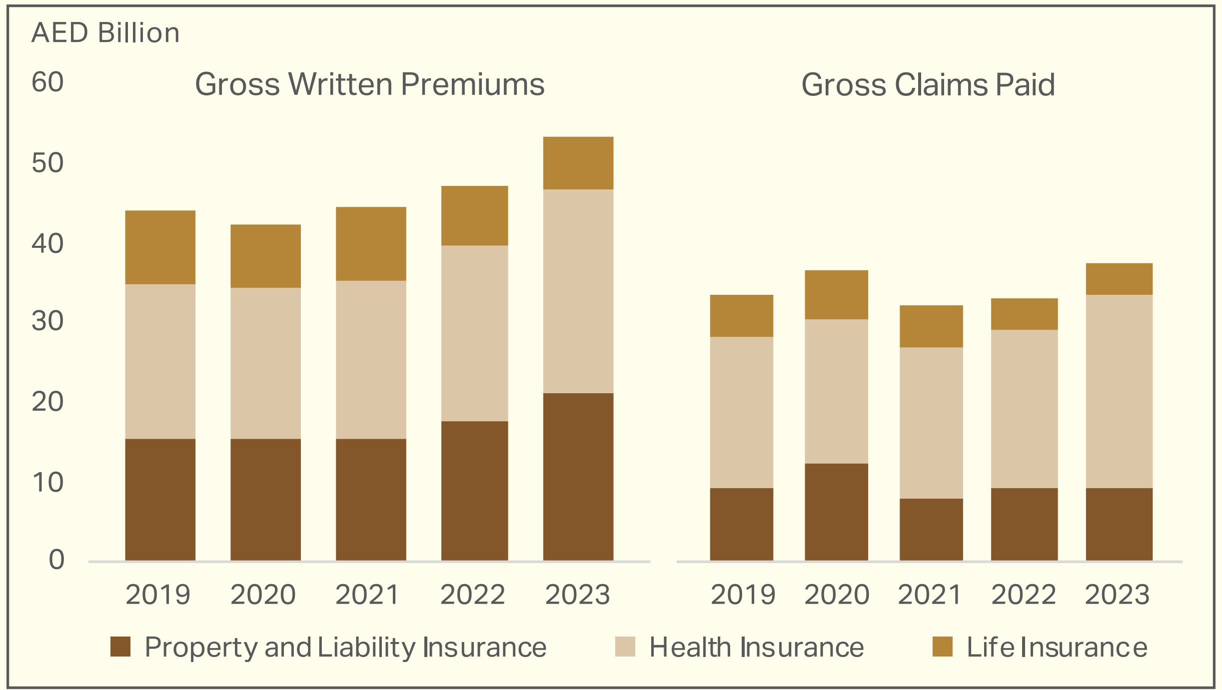
Gross Written Premiums

Gross written premiums (GWP) in the UAE continued to expand by 12.7% in 2023 to AED 53.2 billion, indicating sustained demand for insurance products. Health insurance premiums take up 49.1% of the total insurance premiums, followed by property and liability insurance at 38.3% and life insurance at 12.6%. The GWP growth was led by the increased take-up of health insurance premiums followed by property and liability insurance that grew by 16.5% and 18.9% respectively in 2023. GWP of life insurance on the other hand, continued to contract for the third consecutive year, by 12.4%.

Gross Claims Paid

Gross claims paid increased by 12.8% driven by health insurance claims payout, followed by property and liability insurance, which increased by 16.9% and 10.9% respectively. Life insurance claims payout, on the contrary, declined by 2.8%. Looking further ahead, in view of global climate change-related uncertainties more frequent and severe weather events could impact the insurance industry both in the UAE and globally, requiring a forward-looking approach towards prudent climate-related risk management.

Chart 3.1.1 Gross Written Premiums and Claims Paid



***Source:** CBUAE*

Profitability

In 2023, the overall profitability of the UAE insurance sector improved compared to the previous year. Total profit increased to AED 3.7 billion, led by the improvement in investment performance along with sustained underwriting performance. Net unrealised gains and investment income rebounded in 2023, on the back of improved equity and bond market performance towards the end of the year.

The sustained underwriting performance was attributed to GWP growth that continues to outpace claims payout, resulting in an improved loss ratio of 52.3%.

Investment Portfolio

UAE insurance sectors' investment portfolio grew by 7.0% to AED 76.0 billion in 2023 reflecting a recovery in financial markets performance towards the second half of the year. Accounting for about 60% of insurers' total assets, the investment portfolio was comprised largely of equity investments at about 35%, followed by debt securities at 30%, cash and deposits at 29%, real estate investments at 5.4% and the remaining were other assets. Insurance companies with a notable share of equities in the investment portfolios are more exposed to financial market volatility, requiring prudent asset-liability and risk management practices.

FINANCE COMPANIES

OVERVIEW OF FINANCE COMPANIES

The total assets of finance companies continued to decline and asset quality remained under pressure, however profitability rebounded in 2023. The sector as a whole maintained adequate capital and liquidity buffers.

ASSETS OF FINANCE COMPANIES

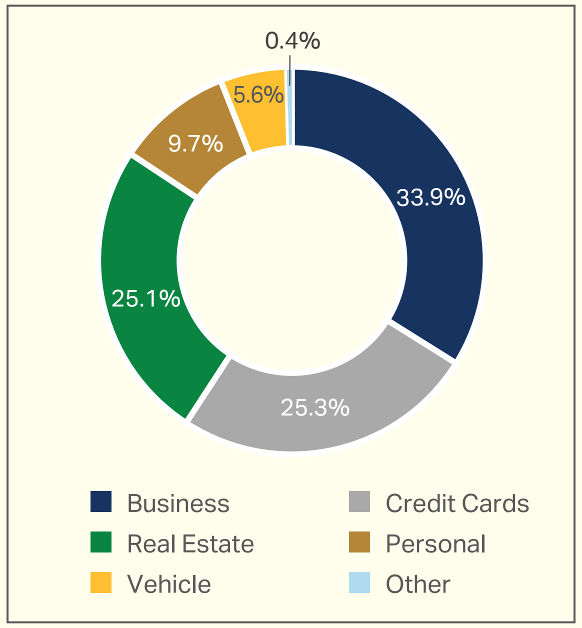
The number of active finance companies operating in the UAE decreased from 16 to 15, of which three were owned by banks. Total gross assets of finance companies declined by 8.9% during 2023 to AED 23.1 billion. Loans remained the main component of finance companies' assets, accounting for 55.9% of total assets in 2023.

LENDING ACTIVITIES

After a 7.2% reduction of credit activities in 2022, finance company lending in 2023 declined further by 9.7% to AED 12.9 billion.

The lending portfolio of finance companies consisted mainly of business loans and credit cards, which combined accounted for almost 60% of the total loan portfolio, followed by real estate and personal loans. Whereas the share of business loans, vehicle loans and credit cards grew in 2023, other key loan segments declined.

Chart 3.1.2: Finance Companies' Loan Portfolio



***Source:** CBUAE*

LIABILITY AND DEPOSITS

Finance companies are prohibited, as per CBUAE regulation, from taking retail deposits. Corporate deposits, funding from banks and related parties are thus their main sources of funding. In 2023, the total funding of finance companies further contracted by 21.1% to AED 6.6 billion from AED 8.3 billion in 2022.

LIQUIDITY

The average Liquid Assets Ratio[53] of finance companies further improved in 2023 and reached 51.9%. Continuing liquidity measures taken by finance companies resulted in the increase in liquidity, coupled with weaker demand for new financing during the year.[54]

ASSET QUALITY

The asset quality of finance companies slightly improved in 2023. The average Net NPL ratio[55] decreased to 7.9% in 2023, from 8.6% in 2022.

At the same time, loan provisions, including specific and general provisions, declined by 14.4% to AED 3.0 billion. Despite that, the Provision Coverage remained high at 96.1%.

53 This ratio is calculated by dividing liquid assets, as defined in Art. 12.1 of the Finance Companies Regulation, by net aggregate liabilities.
54 Bank-owned finance companies reported significantly higher Liquid Assets Ratios than non-bank owned institutions.
55 The Net NPL ratio is defined as non-performing loans divided by gross loans; interest in suspense (IIS) and specific provisions are deducted from both numerator and denominator.

CAPITAL ADEQUACY

Overall, the finance companies sector remained adequately capitalised in 2023, with a capital-to-total-assets ratio of 54.5%, up 8.0 percentage points from last year due to a rise in aggregate capital funds.[56]

PROFITABILITY

After a balanced result in 2022, only two companies reported losses in 2023 and the finance company sector's profit grew – driven by non-recurring items – to AED 1.1 billion.

EXCHANGE BUSINESSES

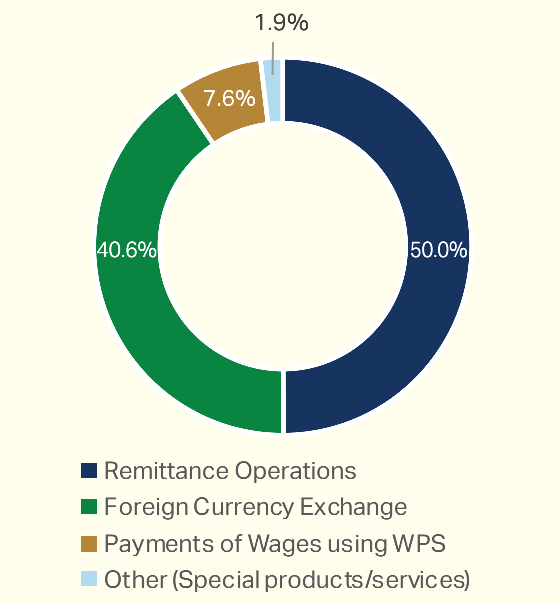
OVERVIEW OF EXCHANGE BUSINESSES

The UAE exchange business sector comprised 77 exchange houses licensed and supervised by the CBUAE, a decline from 84 exchange houses last year, indicating continued of consolidation in the exchange houses sector. The total asset size of the sector moderated to AED 8.1 billion. As the UAE's economic activities continued to recover in 2023, the exchange business sector remained resilient, supported by continued remittance operations and a rebound in foreign currency exchange activities.

PRODUCTS AND SERVICES OF EXCHANGE BUSINESSES

The UAE exchange houses primarily derive their core income from remittance operations, foreign currency exchange, and the administration of wage payments. The core income from operations increased by 6.0% in 2023, a continued rebound from a temporary drop in exchange business activities during the pandemic.

Chart 3.1.3: Core Income of Exchange Businesses



Source: *CBUAE*

Foreign Currency Exchange

In 2023, the income from foreign currency exchange business experienced a notable growth of 23.0% to AED 1.2 billion, surpassing pre-pandemic levels. Comprising 40.6% of exchange houses' total core income, it recorded the highest rate of increase compared to other business activities.

Remittance Operations

Income from remittance operations declined by 5.4% to AED 1.5 billion, following an increase during the previous year. Nevertheless, remittance operations continued to be the primary source of exchange business activities, accounting for 50.0% of the sector's total core income.

Wage Payments Administration

Payments of wages through the Wage Protection System (WPS) represented a 7.6% share of the total core income. Income from the administration of wage payments increased by 10.2% in 2023 to AED 0.2 billion.

Aggregate Expenses

The exchange house sector recorded an increase of 14.9% in aggregate expenses, contrasting to the decline last year. The increase in expenses was spread across key expense categories, including commission, staff, administrative, and other expenses.

Net Profit

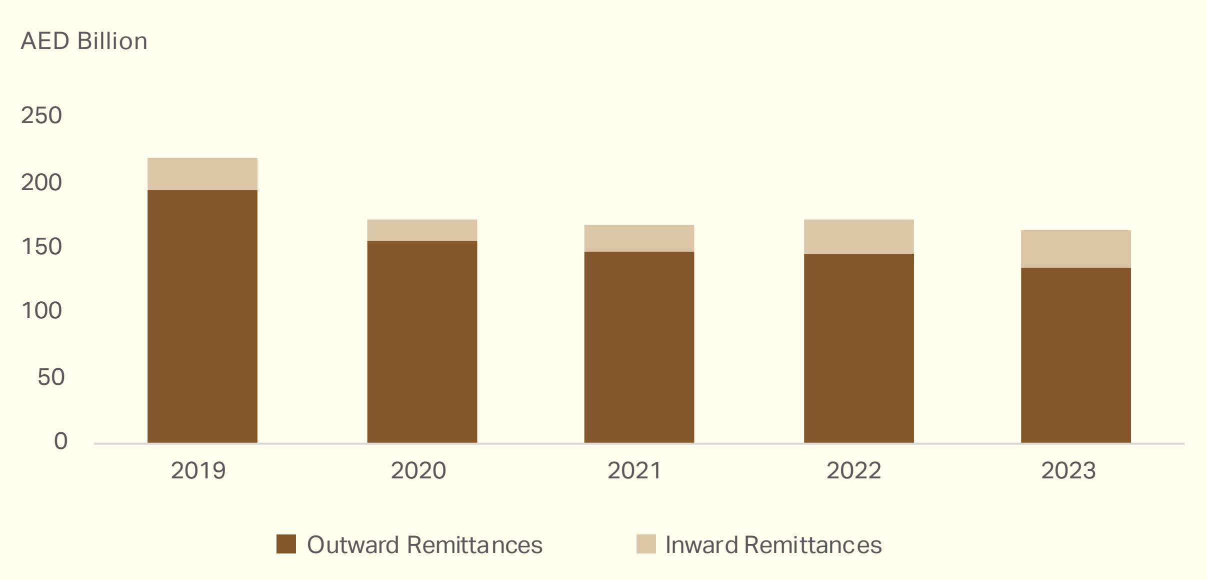
The exchange house sector recorded a decrease of 7.0% in net profits to AED 777.5 million in 2023. This was driven by an increase in revenue from core activities that was more than offset by the increase in overall expenses.

REMITTANCE OPERATIONS OF EXCHANGE BUSINESSES

Outward remittances through exchange houses recorded an 8.2% decline to AED 133.7 billion, a continued moderation for a fourth consecutive year. The major categories for outward remittances were personal remittances (AED 98.6 billion), trade remittances (AED 26.4 billion), other remittances (AED 8.1 billion), and investment remittances (AED 0.6 billion). The top three countries for outward remittances were India (28.5% of the total), Pakistan (10.3% of the total), and the Philippines (8.9% of the total).

Inward remittances through exchange houses increased by 19.8% to AED 30.3 billion during 2023. The largest inward remittances were trade remittances (AED 14.1 billion), followed by personal remittances (AED 12.0 billion), other remittances (AED 3.7 billion), and investment remittances (AED 0.5 billion). The top three countries for inward remittances were Oman (23.5% of the total), Iraq (18.3% of the total), and Kuwait (12.8% of the total).

Chart 3.1.4: Remittances through Exchange Houses



Source: *CBUAE*

CAPITAL OF EXCHANGE BUSINESSES

The overall capital position in the exchange business sector grew by 1.9% during 2023, reaching AED 4.1 billion. The sector's capital accounted for 49.9% of the sector's total assets as of December 2023.[57]

56 Pursuant to Art. 11.1 of the Finance Companies Regulation, aggregate capital funds consist of paid-up capital, reserves and retained earnings.

57 The required minimum paid-up capital for Exchange Houses based on CBUAE regulation is AED 50 million for entities incorporated as limited liability companies and for Exchange Houses operating as sole proprietorships or partnerships, the minimum paid-up capital ranges between AED 2 million to 10 million depending on the type of license.

3.2 FINANCIAL INFRASTRUCTURE

PAYMENT AND SETTLEMENT SYSTEMS

As part of its operational plan for the year 2023, the CBUAE has implemented key initiatives under the National Payment Systems Strategy, with the launch of the Instant Payments Platform (IPP) under the brand name of "Aani" and the comprehensive revamp of its data center. These developments contribute towards strengthening the soundness, efficiency and resiliency of all payment systems operated by the CBUAE, which will enhance the stability of the financial sector.

CBUAE payment systems have processed in 2023 a total of 334.3 million transactions amounting to AED 19.2 trillion, marking an increase of 20% compared to last year's volume of transactions. With the launch of Aani, the year 2023 started a new page in the digital payment space, which will drive the increasing usage of digital payments in the UAE starting next year onwards.

PROMOTING CROSS-BORDER PAYMENTS

1. Readiness to Join the GCC-RTGS and BUNA

In its objective of diversifying and facilitating the processing of cross-border transactions, the CBUAE has started in 2023 live operations in The Arabian Gulf System for Financial Automated Quick Payment Transfer - (AFAQ), which is the GCC's Real Time Gross Settlement System. The first cross-border transaction through the system was initiated and recorded by a UAE-based commercial bank on 29 November 2023.

2. Compliance with ISO20022

In 2023, the CBUAE continued implementing ISO20022 for all SWIFT payment categories in line with the roadmap announced by SWIFT.

In parallel, the CBUAE has already introduced this advanced standard in domestic payments, with the Instant Payments Platform being built on the basis of ISO 20022.

FINANCIAL MARKET INFRASTRUCTURE

National Payment System Strategy

The National Payment Systems Strategy includes the following key objectives:

a- Rationalization of CBUAE's Payment Systems landscape

b- Development and operation of the Instant Payment Platform (IPP)

c- Modernization of infrastructure and data center for payment systems

d- Establishment of a fully owned subsidiary to implement and operate the Financial Market Infrastructure (FMI)

In line with the National Payment Systems Strategy aiming at developing and operating the Instant Payment Platform (IPP), the CBUAE has launched in 2023 its IPP under the brand name of "Aani" with the participation of a group of pilot entities.

Aani is expected to act as a significant driver towards wider digitalisation of payments in the UAE, and address the market needs related to transaction processing from time and cost perspective.

In parallel, the CBUAE has established in 2023 a new subsidiary under the commercial name of "Al Etihad Payments (AEP)", which will be in charge of the day-to-day operation of the different payment systems and financial market infrastructures required by the UAE market, in line with the strategic objectives and directions of the CBUAE.

Moreover, the CBUAE has completed in 2023 its full-fledge revamp and modernisation of its data center for payment systems. This will significantly contribute to the efficiency of the operation and resiliency of the payment systems and related infrastructures, in compliance with the international standards and Principles for Financial Market Infrastructures (PFMIs).

Domestic Card Scheme

In 2023, the CBUAE has completed Phase 1 of its domestic card scheme, which entails the routing of all card point-of-sale transactions done within the UAE through the UAE National card switch (UAESWITCH).

This has laid the groundwork for Phase 2, which consists of developing the entire ecosystem for the issuance, acceptance and processing of the new UAE-branded domestic debit and prepaid cards.

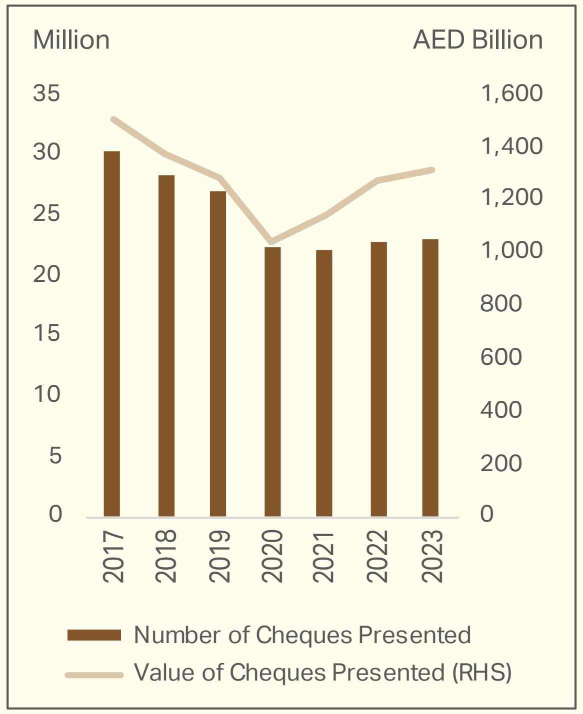
The CBUAE payment systems in figures

In 2023, the overall volume of transactions processed by the CBUAE payment systems increased by 56 million transactions, which translates into an additional value of AED 4.6 trillion.

The growth in transaction was due to various measures adopted by the CBUAE, one of which was to increase the limit of Immediate Payment Instructions (IPI) transactions from AED 25,000 to AED 50,000. The IPI system contributed approximately to additional 26 million incremental transactions in count and 63% increment in value equivalent to AED 165 billion, without impacting the usage of the other systems.

The Image Cheque Clearing System (ICCS) processed a volume of 22.9 million cheques worth AED 1.3 trillion (an increase compared to last year of 1.11% in transaction volume and 3.14% in value respectively).

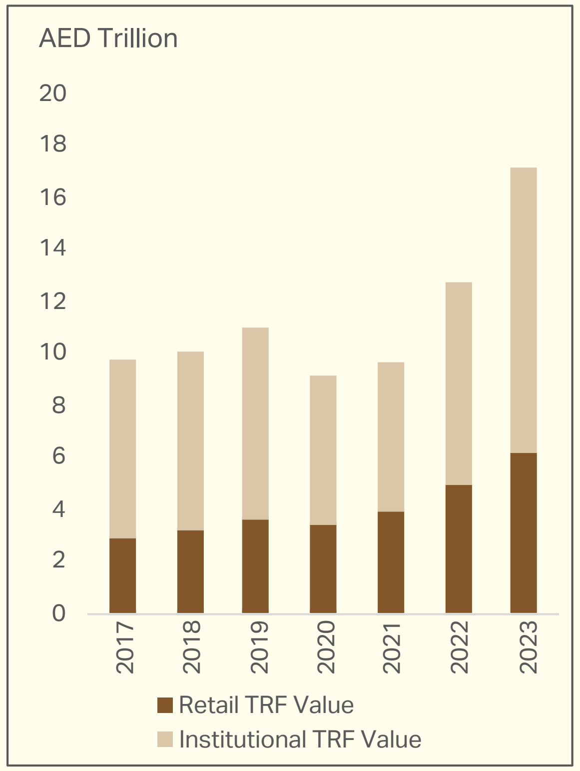
Chart 3.2.1 Presented Cheques through ICCS



Source: *CBUAE*

The UAE Funds Transfer System (UAEFTS) processed 89.5 million transactions worth around AED 6.2 trillion for retail transfers (evidencing an increase compared to last year of 20.1% in volume and 25.4% in value), while institutional transfers reached around 675,000 worth AED 11.0 trillion (an increase compared to 2022 of 6.4% in volume and an increase of 41.1% in value).

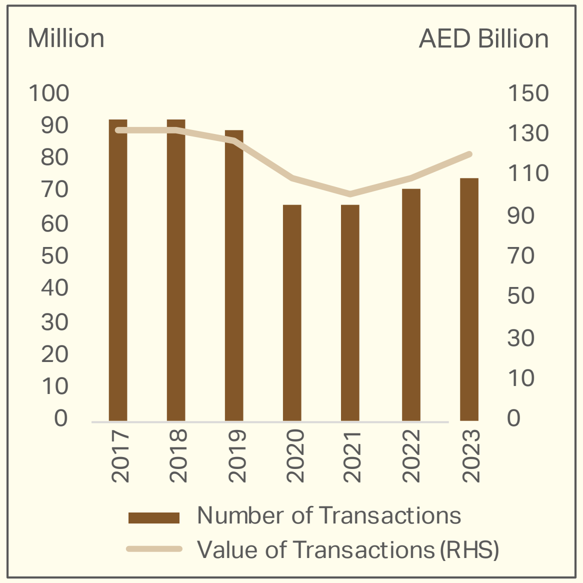
Chart 3.2.2 Value of Transactions through FTS System



***Source:** CBUAE*

The UAE Switch volume increased approximately by 4.7% reaching 74.2 million transactions worth AED 120 billion as compared to 70.9 million transactions worth AED 108 billion last year.

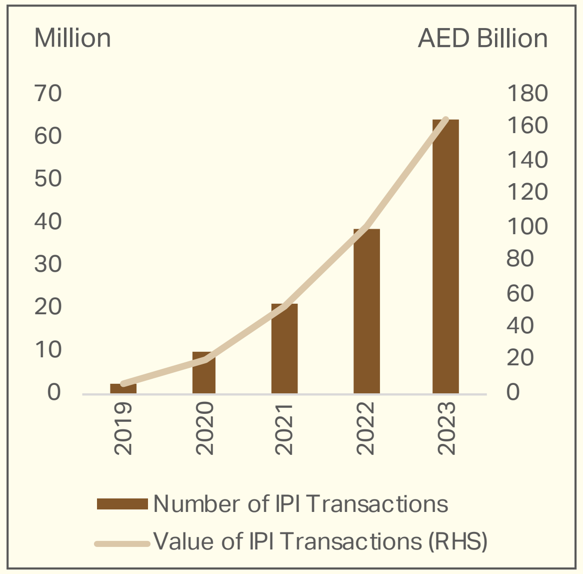
Chart 3.2.3: UAE Switch: Value and Number of Transactions



***Source:** CBUAE*

The number of transactions on Instant Payment Instruction System (IPI) increased noticeably to 64.1 million transactions amounting to AED 164.7 billion in 2023, compared to 38.3 million transactions amounting to AED 101 billion in 2022.

Chart 3.2.4: IPI Value and Number of Transactions

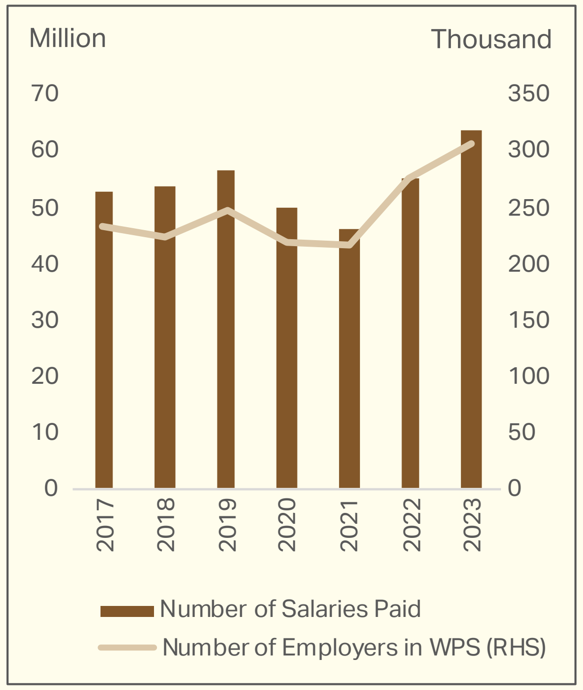


***Source:** CBUAE*

The average number of registered employees[58] on the UAE Wage Protection System (WPS) increased from 5.2 million in 2022 to 5.9 million in 2023. While the total number of salaries increased from 55.5 million to 62.6 million, there was also an increase in the value of salaries paid amounting to AED 296 billion in 2023 compared to AED 249 billion in 2022. Further, the number of employers registered in 2023 in the WPS increased to 306,450 from 275,680, evidencing an increase of 11% compared to 2022.

58 WPS processes all wages paid by private sectors companies and some GREs.

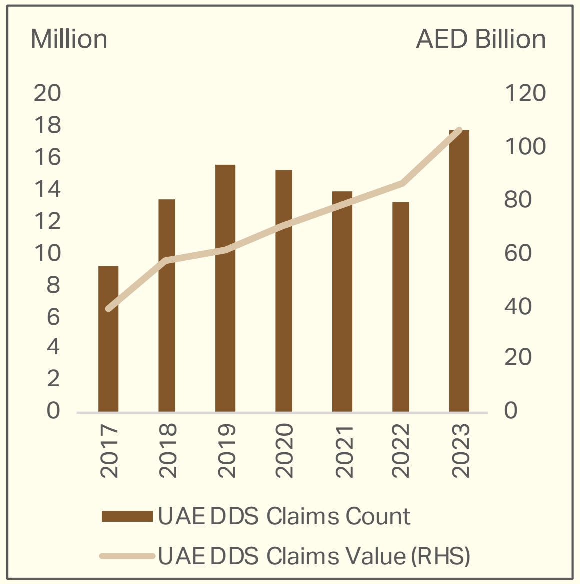
Chart 3.2.5: Transactions through Wage Protection System



***Source:** CBUAE*

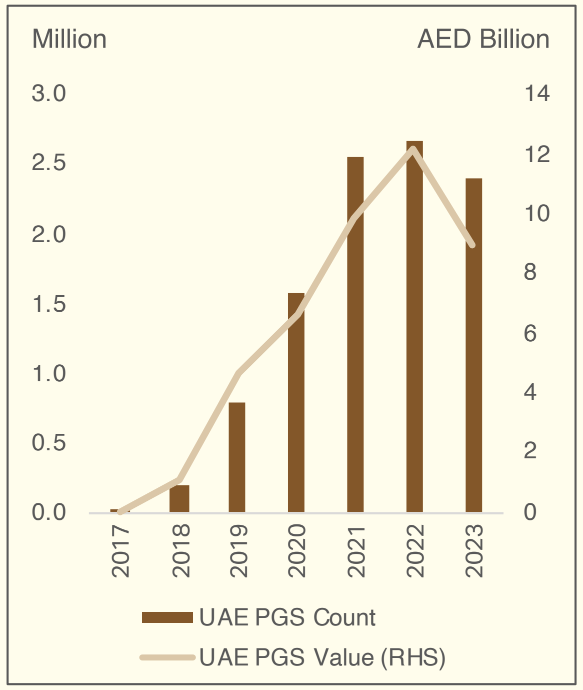
The UAE Direct Debit System (UAEDDS) performed 17.8 million transactions worth of AED 106.9 billion evidencing a 34% increase in the number of transactions while the value of transactions increased by 23.7%.

Chart 3.2.6: Claims through UAE Direct Debt System



***Source:** CBUAE*

Chart 3.2.7: Transactions processed using UAE Payment Gateway System (UAEPGS)



***Source:** CBUAE*

In 2023, UAEPGS processed 2.4 million transactions worth AED 8.95 billion evidencing a decrease of 10% in count and 27% in value compared to previous year.

Aani, BUNA & AFAQ systems

Aani is an open loop system that is accessible to all licensed financial institutions (banks, exchange houses, finance houses, acquirers, wallet providers, etc.).

In 2023, the status of Aani can be summarized as below:

1. Number of financial institutions live on Aani: 10 (8 Banks, 1 Exchange House and 1 Fintech - Stored Value Facilities wallet provider)
2. Number of enrolled customers on Aani: 436,979 customers (420,994 accounts, 8,721 Stored Value Facilities accounts 6,927 travel cards and 337 WPS cards)
3. Total volumes processed by Aani since launch: 4.6 million transactions
4. Total values processed by Aani since launch: AED 11.9 billion

Aani is a stand-alone payment system in the UAE, and is not dependent on any other payment platform in the country. In the near future CBUAE is planning to link Aani to other similar instant payment systems in other geographies.

Transactions processed using BUNA and AFAQ

BUNA

BUNA is a cross-border payment system owned by the Arab Monetary Fund. It went live in 2021. Participating banks have been able to perform live transactions in the system from end of July 2022 onwards.

In 2023, around 23,000 transactions have been performed by participants (from and outside the UAE) in BUNA all currencies.

AFAQ

CBUAE along with a UAE-based bank went live with the GCC-RTGS system on 29 November 2023. Total of 6 cross-currency transfers involving AED have been performed in the system during 2023.

In 2024 CBUAE will onboard additional UAE based banks to increase system usage in both value and volume terms.

UAE payment systems assessment and supervision

In 2023, the CBUAE conducted on-site assessments of all of its payment systems, focusing on the adherence to the Principles for Financial Market Infrastructures (PFMI). These assessments are crucial for evaluating the resilience of payment systems to various risks, including operational, credit, liquidity, and legal risks. The results of these assessments, along with pertinent recommendations, have been shared with the relevant CBUAE departments for prompt implementation. Additionally, the CBUAE initiated the first assessment of the cross-border payment system BUNA in relation to the PFMI, in collaboration with other concerned Central Banks, namely Saudi Central Bank, the Central Bank of Jordan, and the Central Bank of Egypt. This collaborative effort underscores the importance of addressing risks associated with cross-border transactions and ensuring the smooth functioning of international payment flows.

This shows CBUAE's commitment to ensuring the robustness and efficiency of payment systems, aligning them with international standards outlined in the PFMI. Through proactive assessment and collaboration, CBUAE continues to bolster the resilience and effectiveness of payment infrastructures, thereby playing a pivotal role in maintaining overall financial stability and integrity.

CYBER RISK

The digital ecosystem that underpins the global financial system continues to rapidly evolve, primarily driven by an underlying demand to improve efficiency, foster collaboration, and enhance transparency, thereby establishing trust in financial interactions by investors, financial institutions, government authorities, and central banks. Technology infrastructure enabling the digital ecosystem is required to ensure confidentiality, integrity and availability at all times.

Innovation is a core driver of digital transformation, in particular through the emergence of technology products and services, characterised by the high impact of Artificial Intelligence (AI), data and service outsourcing (including the use of cloud service providers), mobile applications and data management solutions. However, innovation in technology is evolving the risk and threat landscape across people, process and technology factors at an accelerated pace, introducing unique risks and cyber vulnerabilities that are now the norm. Social engineering remains the key vulnerability used by cyber attackers through a variety of methods that include phishing, scam telephone calls (vishing), erroneous social media links or advertisement, among others.

Cyber resilience – the ability to identify, prevent, respond to and adapt to cyber related disruptions - is paramount. Cyber-attacks continue to become more sophisticated, geographically diverse, and more common, consistently exploring opportunities to exploit vulnerabilities. The absence of robust controls and weak cyber resilience posture may lead to cyber incidents across the financial system, thereby potentially threatening financial stability.

CBUAE actively engages with financial institutions to understand technology driven initiatives, and changes in the technology landscape in order to identify and pre-empt inherent risks before they materialise, providing a consistent remediation approach across the sector and to share information that may help address other risks. This collaboration extends to other authorities to continuously foster a culture of openness and sharing of information and best practices.

Another component of CBUAE’s supervisory function is to provide oversight and support to financial institutions in the event of cyber incidents. At the system-wide level, understanding actual cyber incidents, and how they can unfold, transmit and amplify through the financial sector is key to effective mitigation and recovery. Through the Security Operations Centre, CBUAE facilitates the sharing of information and threat intelligence, coordinates possible incident response, periodically evaluates the cyber resilience of regulated entities and helps develop the capacity to respond to cyber incidents. The CBUAE continuously issues Cyber Advisory Notices to inform financial institutions on system-wide cyber alerts.

The CBUAE oversight embraces thorough on-site examinations to determine compliance with national cyber security laws and regulations and guidelines issued by the CBUAE. Examinations cover multiple domains with the main objective of assessing the robustness of the control environment, focusing on the overall governance, resilience, security, infrastructure and data protection related controls.

The CBUAE continues to collaborate closely with the UAE Banks Federation, and recently co-hosted the annual Cyber Wargaming Exercise, which simulates a cyber-attack on the financial sector to test cyber incident readiness. Selected large UAE banks and authorities participated, with GCC central bank representatives in attendance. The simulation was scenario-based, designed using the latest methods and procedures used by adversaries. Overall, the exercise demonstrated the capacity of the participants to effectively respond to real-world cyber threats and, most importantly, provided valuable experience to enhance future readiness and cooperation.

Cyber security has such a profound and escalating impact on economies, that it deserves to be a leadership-level agenda item at commercial and public institutions, supported by an effective risk management model to minimise risks, with a robust security function to continuously monitor existing threats, identify new ones and consistently recover and learn from incidents in order to refine cyber risk management processes.

ANNEX: KEY BANKING INDICATORS

Indicator/Year	2023
Capital Adequacy	
CET-1 capital to RWA ratio	14.9%
Tier 1 capital to RWA ratio	16.6%
Total capital to RWA ratio	17.9%
Profitability	
ROA	2%
Cost-to-income ratio	31.9%
Liquidity and Funding	
Eligible Liquid Asset Ratio	22%
Advances to Stable Resources	73.9%
Lending Indicators	
Loan-to-deposit	79%
Loan-to-deposit in foreign currency	63%
Asset Quality	
Net NPL ratio	2.4%
Specific provision coverage ratio	60.6%
Total Provision coverage ratio	93.8%

LIST OF ABBREVIATIONS

ADCB	ABU DHABI COMMERCIAL BANK
ADGM	ABU DHABI GLOBAL MARKET
ADX	ABU DHABI SECURITIES EXCHANGE
AED	UNITED ARAB EMIRATES DIRHAM
AEP	AL ETIHAD PAYMENTS
AFAQ	ARABIAN GULF SYSTEM FOR FINANCIAL AUTOMATED QUICK PAYMENT TRANSFER
AI	ARTIFICIAL INTELLIGENCE
AML	ANTI-MONEY LAUNDERING
ASRR	ADVANCES TO STABLE RESOURCES RATIO
AT1	ADDITIONAL TIER1
BCBS	BASEL COMMITTEE ON BANKING SUPERVISION
BOD	BOARD OF DIRECTORS
BPS	BASIS POINTS
BUNA	THE ARAB REGIONAL PAYMENT SYSTEM
CAR	CAPITAL ADEQUACY RATIO
CBDC	CENTRAL BANK DIGITAL CURRENCY
CBUAE	THE CENTRAL BANK OF THE UAE
CCB	CAPITAL CONSERVATION BUFFER
CCYB	COUNTERCYCLICAL CAPITAL BUFFER
CET-1	COMMON EQUITY TIER-1
CFT	COMBATING THE FINANCING OF TERRORISM
COP28	THE 28TH UN CLIMATE CHANGE CONFERENCE (CONFERENCE OF THE PARTIES)
COVID-19	CORONAVIRUS DISEASE 2019
CPI	CONSUMER PRICE INDEX
CRWA	CREDIT RISK-WEIGHTED ASSETS
DBR	DEBT BURDEN RATIO
DFM	DUBAI FINANCIAL MARKET
DIB	DUBAI ISLAMIC BANK
DONIA	DIRHAM OVERNIGHT INTEREST AVERAGE
D-SIBS	DOMESTIC SYSTEMICALLY IMPORTANT BANKS
EIBOR	EMIRATES INTERBANK OFFERED RATE
ELAR	ELIGIBLE LIQUID ASSET RATIO
ENBD	EMIRATES NATIONAL BANK OF DUBAI
ESG	ENVIRONMENTAL, SOCIAL AND GOVERNANCE
FAB	FIRST ABU DHABI BANK
FATF	FINANCIAL ACTION TASK FORCE
FCI	FINANCIAL CYCLE INDEX
FMI	FINANCIAL MARKET INFRASTRUCTURE
FSB	FINANCIAL STABILITY BOARD
FSTI	FINANCIAL STABILITY TREND INDEX
GCC	GULF COOPERATION COUNCIL
GCC-RTGS	GULF COOPERATION COUNCIL REAL-TIME GROSS SETTLEMENT SYSTEM
GDP	GROSS DOMESTIC PRODUCT
GHG	GREENHOUSE GAS
GREs	GOVERNMENT-RELATED ENTITIES

LIST OF ABBREVIATIONS

GWP	GROSS WRITTEN PREMIUMS
HNIs	HIGH NETWORTH INDIVIDUALS
HQLA	HIGH-QUALITY LIQUID ASSETS
IB	INTEREST BEARING
ICCS	IMAGE CHEQUE CLEARING SYSTEM
IFRS 9	INTERNATIONAL FINANCIAL REPORTING STANDARD
IIS	INTEREST IN SUSPENSE
IMF	INTERNATIONAL MONETARY FUND
IPI	IMMEDIATE PAYMENT INSTRUCTION
IPP	INSTANT PAYMENT PLATFORM
IRRBB	INTEREST RATE RISK IN THE BANKING BOOK
ISO	INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
KYC	KNOW YOUR CLIENT
LCR	LIQUIDITY COVERAGE RATIO
LFI	LICNSED FINANCIAL INSTITUION
LGD	LOSS GIVEN DEFAULT
LTV	LOAN-TO-VALUE
MB/D	MILLION BARRELS PER DAY
M-BILLS	MONETARY BILLS
MENA	MIDDLE EAST and NORTH AFRICA
NBFIS	NON-BANK FINANCIAL INSTITUTIONS
NFSR	NET STABLE FUNDING RATIO
NGFS	NETWORK FOR GREENING THE FINANCIAL SYSTEM
NPLS	NON-PERFORMING LOANS
OPEC+	ORGANIZATION OF THE PETROLEUM EXPORTING COUNTRIES PLUS
PD	PROBABILITY OF DEFAULT
PFMI	PRINCIPLES FOR FINANCIAL MARKET INFRASTRUCTURES
ROA	RETURN ON ASSETS
ROE	RETURN ON EQUITY
RWA	RISK-WEIGHTED-ASSETS
S & P	STANDARD AND POORS
SCA	SECURITIES AND COMMODITIES AUTHORITY
SCR	SOLVENCY CAPITAL REQUIREMENT
SMES	SMALL AND MEDIUM ENTERPRISES
SVF	STORED VALUE FACILITIES
SWIFT	SOCIETY FOR WORLDWIDE INTERBANK FINANCIAL TELECOMMUNICATIONS
TESS	TARGETED ECONOMIC SUPPORT SCHEME
UAE	THE UNITED ARAB EMIRATES
UAEDDS	UAE DIRECT DEBIT SYSTEM
UAEFTS	UAE FUNDS TRANSFER SYSTEM
UAEPGS	UAE PAYMENT GATEWAY SYSTEM
UAESWITCH	UAE SWITCHING SYSTEM
UAEWPS	UAE WAGES PROTECTION SYSTEM
UNEP	UNITED NATIONS ENVIRONMENTAL PROGRAM
VA	VIRTUAL ASSETS
UN	UNITED NATIONS
UNEP	UNITED NATIONS ENVIRONMENTAL PROGRAM
VA	VIRTUAL ASSETS

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