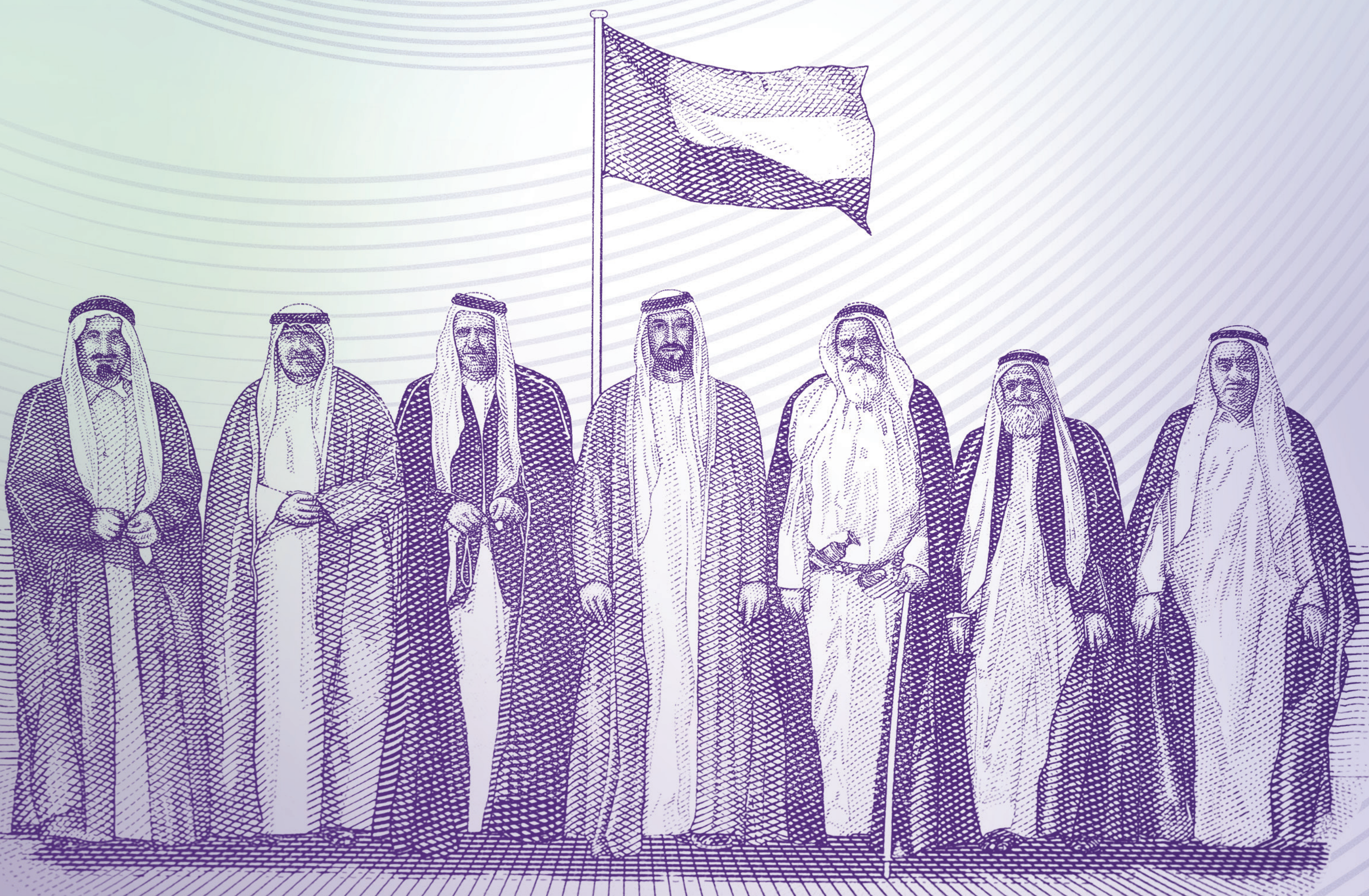
United Arab Emirates

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

Financial Stability Report 2021



Year of the Fiftieth

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STATEMENT FROM H.E. KHALED MOHAMED BALAMA

Governor of the Central Bank of the UAE

The global and UAE's recovery commenced during 2021 as the negative repercussions of the pandemic lessened. The UAE has been among the leading countries in implementing measures to mitigate the impact of the COVID-19 pandemic.

As part of the UAE's overarching efforts, the Central Bank of the UAE (CBUAE) launched the Targeted Economic Support Scheme (TESS) in March 2020. These support measures safeguarded the UAE's financial system and supported the resilience of the country's economy.

As the outlook improved, the CBUAE announced a gradual TESS exit strategy, with the first phase completed by the end of 2021. The strategy provides a balance between a gradual winding down of emergency measures and continued support of the UAE's economic recovery.

The CBUAE projects a positive outlook for the UAE's economy and financial system in 2022. The global macro-financial outlook, however, will be negatively affected by supply chain disruptions, rising inflationary pressures and further escalating geopolitical tensions.

The CBUAE continues to monitor evolving global risks and vulnerabilities closely and stands ready to take additional measures as needed. We are committed to resolve any challenges and contribute to strengthening the resilience of our financial system and the economy.

The CBUAE aims to develop the UAE financial sector further to become among the best globally. We share this determination with the UAE leadership and financial institutions and have jointly started implementing an ambitious transformation strategy.

EXECUTIVE SUMMARY

The global and UAE's economic recovery during 2021 was attributed to an improvement in business and consumer sentiment, unprecedented public policy support and progress in vaccination programmes which allowed the easing of pandemic-related restrictions.

The real GDP growth in the UAE reached 3.8% in 2021, driven by a strong recovery in non-oil economic output. The outlook for 2022 is positive but subject to downside risks, including further waves of the pandemic, supply chain disruptions and escalating geopolitical tensions.

The UAE's macro-financial cycle pointed towards recovery. The real estate market showed signs of bottoming out, stock market indices increased and private credit growth rebounded. Rising inflation globally has accelerated monetary policy normalisation.

The UAE's banking system demonstrated resilience in weathering the pandemic's ramifications and provided relief and support to negatively affected retail and corporate clients. The banking system maintained adequate capital adequacy and liquidity buffers.

The main banking system risks stem from the potential of further deteriorating asset quality post-pandemic and insufficient changes in banks' business models in view of digital transformation, climate change, and rising corporate governance requirements.

As the economic recovery gained traction, the UAE banks' profitability rebounded towards pre-pandemic levels. Nonetheless, the pandemic resulted in additional pressure on asset quality and operational resilience, accelerating digitalisation and exposing cyber-security challenges.

The CBUAE conducted risk-based supervision and forward-looking solvency and liquidity stress tests to assess potential vulnerabilities. Overall, these stress tests indicated that the UAE banking system had adequate capital and liquidity buffers to withstand severe adverse scenarios.

Non-bank financial institutions also started to recover during 2021, as pandemic-related restrictions gradually eased. The insurance sector recorded business growth as aggregate gross written premiums grew across most business lines while insurance claims declined.

The CBUAE's payment systems remained robust without disruptions during 2021. Following the widespread acceleration of digitalization of financial services, the CBUAE further enhanced its steps towards digital transformation and cyber resilience.

OVERVIEW OF THE CBUAE'S TARGETED ECONOMIC SUPPORT SCHEME IN RESPONSE TO THE PANDEMIC

The CBUAE implemented comprehensive broad-based measures under the Targeted Economic Support Scheme (TESS) to mitigate the financial and economic repercussions of the pandemic. The TESS helped in cushioning the negative impact of the pandemic during 2020 and facilitating the economic recovery throughout 2021.

The TESS mitigated liquidity and funding pressures and preempted unwarranted asset quality deterioration due to temporary cash-flow constraints of affected household and corporate borrowers. The UAE banking system continued to maintain sound fundamentals with adequate capacity to support the economy.

TARGETED ECONOMIC SUPPORT SCHEME

TESS Deferral Programme
Loan/financing repayment deferrals to individuals, SME and private corporates

Zero Cost Liquidity Facility
Liquidity facility available for the loan/financing Deferral and Recovery Programme

Reduction in Reserve Requirement
Reduction in reserve requirements for demand deposits from 14% to 7%

Capital Buffer Requirements Relief
- Capital conservation buffer relief of 60%
- D-SIB capital buffer relief of 100%

Liquidity Requirements Relief
- LCR relief from 100% to 70%
- ELAR relief from 10% to 7%

Stable Funding Requirements Relief
- NSFR relief from 100% to 90%
- ASRR relief from 100% to 110%

OTHER MEASURES UNDER THE TARGETED ECONOMIC SUPPORT SCHEME
- Increase of Loan-to-Value for Residential Mortgages
- Waiver of CBUAE Processing Fees in Payment Systems
- Increase of the Cap for Contactless Card Payments
- Gradual Implementation of Basel Standards
- IFRS 9 Guidance and Prudential Filter

Source: *CBUAE*

The TESS deferral programme, designed to provide temporary relief on loan and financing repayments, benefited more than 322,000 bank clients affected by the pandemic, covering individual borrowers, SMEs and corporates. The TESS deferral programme supported up to 15% of total bank loans/financing at the peak of the pandemic.

TESS DEFERRAL PROGRAMME

More than 322,000 bank customers benefitted

Supported up to 15% of total bank loans/financing

309,535 | 10,006 | 1,934

Balanced and Gradual Exit Strategy

As the economy entered the recovery phase in 2021, the focus of the TESS shifted from crisis management towards a gradual winding down of the scheme while supporting sustained economic recovery. The CBUAE developed a comprehensive TESS exit strategy, supporting the right balance between the gradual lifting of measures and targeted support for the recovery.

The first phase of the TESS exit strategy focused on the gradual unwinding of the TESS deferral programme, which was phased down to 50% by 30 September 2021, and phased out fully by 31 December 2021. The phasing out of the deferral programme was aligned with the objectives of a timely exit from measures whose prolonged utilization may increase vulnerabilities.

In ensuring continued support for the recovery, the precautionary TESS recovery program remained in place until the end of Phase II on 30 June 2022. To provide banks with additional flexibility to support the UAE economy, TESS prudential relief measures on capital requirements, liquidity requirements and stable funding requirements remained in place until 30 June 2022.

Furthermore, support measures that temporarily remain in place during Phase III after 30 June 2022 include the reduced reserve requirements, decreased down-payment requirement for new mortgage loans and the prudential filter. The CBUAE is closely monitoring the evolving situation globally and stands ready to take additional measures if necessary.

CBUAE's Targeted Economic Support Scheme (TESS): Gradual Exit Schedule

The Central Bank's well-sequenced crisis management exit strategy strikes the right balance between a gradual lifting of emergency measures and support of the economic recovery.

Phase 1 of the TESS Exit Strategy
- Waiver of CBUAE Payment System Processing Fees
- TESS Deferral Program
- 31 December 2021

Phase 2 of the TESS Exit Strategy
- TESS Capital Buffer Requirements Relief
- TESS Liquidity Requirements Relief
- TESS Stable Funding Requirements Relief
- TESS Recovery Program
- TESS Zero Cost Funding Facility
- Guidance on IFRS 9 Loan Classification
- 30 June 2022

Phase 3 of the TESS Exit Strategy
- Reduction of Reserve Requirements
- LTV Increase for First Time Home Buyers
- Prudential Filter

Source: *CBUAE*

THE MACRO-FINANCIAL ENVIRONMENT

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CHAPTER 1.1

MACRO-FINANCIAL DEVELOPMENTS

The global economy resumed growth in 2021, reflecting the pickup in economic activity on the back of exceptional public policy support, progress in mass vaccination programmes, and ease of lockdowns and travel restrictions. Similarly, real GDP growth in the United Arab Emirates (UAE) was positive in 2021 at 3.8%, as a result of an increase of 5.3% in the non-oil sector. The outlook for 2022 remains optimistic, but depending on global factors such as the evolution of the Ukraine conflict, the pandemic, as well as fiscal and monetary policies normalisation and supply chains disruptions. The UAE financial system remains robust and resilient to support the UAE economy.

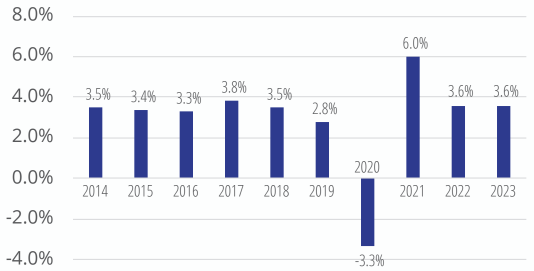
GLOBAL ECONOMY

Global economic growth resumed in 2021. The International Monetary Fund (IMF) estimates a 6.1% growth in global output[1]. This was the result of a pickup in economic activity owing to sharp contraction in 2020 - the base effect, exceptional public policy support, provision and administering of vaccines globally, and the ease of restrictions on economic activities and travel. Nonetheless, global growth remained constrained by persistent supply chain disruptions, labour shortages in developed economies, and rising uncertainties related to new variants of the virus and regional tensions.

Inflation rose globally in most economies, due to rebounding demand amid persistent disruptions to the global supply chains and soaring energy prices.

In 2022, global real GDP growth is expected by the IMF to moderate to 3.6%. A number of factors affect this growth, with an increasing number of vaccinated individuals globally and a higher output base in 2021. Global growth is projected to reach 3.6% in 2023 and to remain between 3.3%-3.4% in the four years to follow. The short term forecasts remain conditional on improving vaccination rates and more effective therapies against COVID-19, limiting the adverse health outcomes and developments around the Ukraine conflict that add more uncertainty and downside risks.

Chart 1.1.1: Global Real GDP Growth Rates and Projections

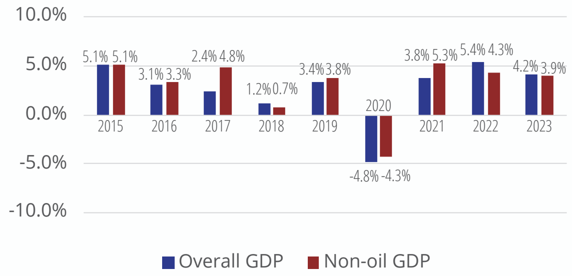


Source: *IMF, World Economic Outlook update, April 2022 report*

UAE ECONOMY

Economic activity in the UAE recovered significantly, recording positive growth in 2021 boosted by a positive global outlook, in tandem with support from the monetary and fiscal authorities. The Federal Competitiveness and Statistics Centre (FCSC) announced that the overall real GDP increased by 3.8% in 2021, compared to a decline by 4.8% in 2020. The overall GDP growth is due to an increase by 5.3% in non-oil real GDP, marginally dragged down by the drop in the real oil GDP. The CBUAE projects real GDP growth to further increase to 5.4% in 2022[2], supported by higher economic activity (i.e. Expo) and higher oil prices, with non-oil GDP rising by 4.3% while forecasts for growth for 2023 for the overall real GDP and the non-oil real GDP are of 4.2% and 3.9%, respectively.

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



Source: *Federal Competitiveness and Statistics Centre (2015 – 2021) and CBUAE (2022 – 2023)*

In 2021, the average annual UAE headline inflation turned positive for the first time since 2018 to 0.2%, reaching 2.5% as of December 2021, following deflation of 2.1% in 2020. The reversal in 2021 was mainly the result of an increase in transportation, recreation and culture price components, while inflation in housing and textiles, clothing and footwear remained negative. The global inflationary trend and the Nominal Effective Exchange Rate (NEER)[3] depreciation of the Dirham contributed to the positive inflation in the UAE.

1 *World Economic Outlook update, April 2022 report.*
2 *This is subject to CBUAE staff revisions.*
3 *NEER is a measure of the value of a currency against a weighted average of several foreign currencies.*

FINANCIAL MARKET DEVELOPMENTS

The interest rates environment in the UAE remained stable during 2021, with no changes in the interest rate levels, with the exception of a technical adjustment on 17 June 2021 following the US Federal Reserve Board change to its Interest on Excess Reserves (IOER) by five basis points. This was the only change in the base rate during the year.

The sovereign Credit Default Swaps (CDS)[4] of Abu Dhabi and Dubai remained low during 2021, compared to historical levels. The CDS of both emirates fell in 2021, compared to 2020, due to a strong improvement in economic conditions globally. The average Dubai 5-year CDS spread in 2021 was 95.8 basis points (bps) (2020: 171.4 bps), while the average Abu Dhabi CDS spread was 43.1 bps in 2021 (2020: 64.5 bps).

Capital markets in both Abu Dhabi and Dubai experienced positive growth in 2021, with the total market capitalisation of Abu Dhabi Securities Exchange (ADX) reaching AED 1.6 trillion (2020: AED 742 billion), representing 119% growth year-on-year. Over the same period, the market capitalisation of Dubai Financial Market (DFM) reached AED 409 billion (2020: AED 340 billion), increasing by 20.5% year-on-year. In terms of domestic equity indices in 2021, the ADX share price index increased by 68.2% year-on-year, and the DFM share price index increased by 28.2% year-on-year.

The large increases in ADX share prices and market capitalisation, and the relatively lower ones in DFM, was due to strong demand and positive market sentiment. In addition to several recent listings/IPOs of state and government-owned companies on ADX and DFM as part of their plans to increase listings in various sectors have also contributed the performance of ADX.

KEY MACRO – FINANCIAL RISKS

Monitoring the macro-financial risks and applying mitigating measures are of critical importance for fulfilling the CBUAE mandate of promoting financial stability.

The economic and financial consequences of the COVID-19 pandemic are still relevant to the current state and the future recovery path of the global economy. Differences in vaccination rates, health system capacities, policy actions and economic structures place the countries at different stages of recovery. In the short-to-medium term, the efficiency of resource relocation across sectors, labour supply imbalances, persistence of supply chain disruptions and material shortages will likely further amplify the divergence across the recovery trajectories. The renewed uncertainty from escalating geopolitical tensions and climate change risks muddles the outlook even further.

The aforementioned risks amid the current low interest rate environment are resulting in rising commodity prices, fuelling inflation readings globally, thus accumulating pressures for monetary policy action. Major central banks around the world are set to make interest rate hikes this year. This will make debt more expensive, having potential adverse impacts on the debt serviceability of the highly leveraged households, corporates, and small and medium-sized enterprises (SMEs).

Furthermore, the resurgence of any future strong COVID-19 virus mutations, or an sudden further escalation in the geopolitical risks in Eastern Europe that have increased since the beginning of 2022, could have an adverse impact on financial markets globally. This could result in a sudden increase in the volatility levels of equities, commodities, international currencies and several other asset prices.

Therefore, central banks around the world are under the spotlight to get the timing right on the rollback and calibration of their pandemic-related economic and financial measures and policies, each to their circumstances. With the expected policy rate hikes in advanced economies, there will be increasing risks to financial and economic stability by some emerging economies' capital flows, currencies, and fiscal positions, considering the significantly rising debt levels since the beginning of the pandemic.

The CBUAE closely monitors these developments, taking a proactive and forward-looking approach to identify and mitigate potential systemic risks and vulnerabilities through policy tools and measures, such as those employed during the TESS programme.

4 *Credit default swaps are credit protection contracts whereby one party agrees, in exchange for a periodic premium, to make a contingent payment in the case of a defined credit event.*

THE MACRO-FINANCIAL ENVIRONMENT

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CHAPTER 1.2

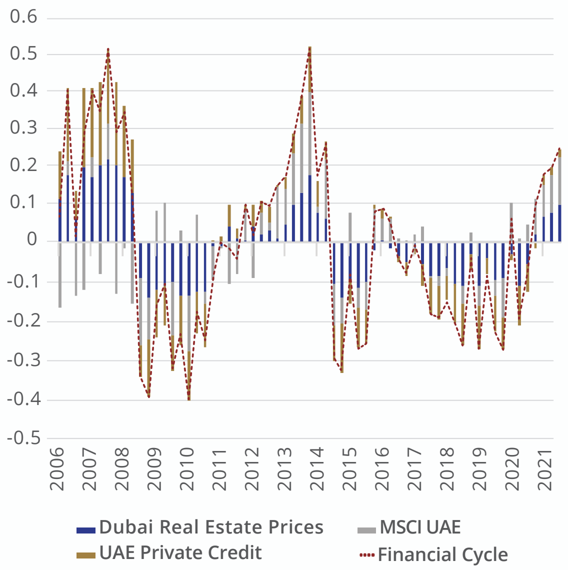
MACRO-FINANCIAL CYCLES

The UAE financial cycle and the UAE Financial Stability Trend Index (FSTI) showed positive signs of recovery in 2021 after the dip experienced in 2020 in alignment with other indicators pointing towards an overall economic recovery. Funding structure and private credit growth in the UAE banking system remained stable during the year.

FINANCIAL CYCLE

The UAE Financial Cycle Index[5], which is an indicator that helps in measuring how the financial system is performing, with a positive number indicating accommodating financial conditions, continued to improve during 2021, reflecting the recovery of the UAE economy. All sub-indicators continued to improve and ended the year in positive territory for the first time since late 2014. The recovery in the Dubai real estate prices has contributed the most to the improvement in the financial cycle. In addition, both private credit growth and the UAE stock market recovered.

Chart 1.2.1: UAE Financial Cycle Index



Source: *CBUAE Staff Estimates*

FINANCIAL STABILITY TREND INDEX (FSTI)

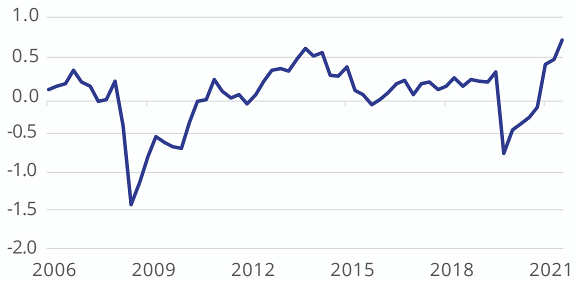
The UAE FSTI combines eighteen macro-financial indicators grouped into three sub-indices that affect the UAE financial system. The index reflects important macro-financial characteristics of financial stability where a positive FSTI number indicates supportive macro-financial conditions while a negative number suggests weakening conditions.

The FSTI reverted to the pre-pandemic levels during 2021 after a drop into negative territory in 2020 due to the adverse impact of the COVID-19 pandemic. Signs of recovery have been evident since the beginning of 2021 with the FSTI trending upwards, indicating an improving macro-financial environment.

The economy sub-index was the main driver of the overall uptick of the index followed by the banking and securities market sub-indices.

In general, twelve indicators indicated supportive macro-financial conditions. These main indicators included the recovery in the real non-oil GDP, higher Brent crude oil prices, lower banking sector's market-implied probability of default[6], and better point-in-time asset quality. On the other hand, the main weakening indicators were the realized market volatility and the slight decline in the aggregate Capital Adequacy Ratio for UAE banks, partially due to applying more conservative measurement metrics[7].

Chart 1.2.2: UAE Financial Stability Trend Index



Source: *CBUAE*

FUNDING STRUCTURE

The banking sector's funding structure, which is mainly comprised of deposits and other sources of funding such as interbank and capital market funding is an important area to analyse. Making a distinction between resident deposits (more stable historically) and non-resident deposits and other types of funding, helps in signalling potential changes in the level of liquidity and funding risks taken by the banks in the UAE and thus, the risks that might eventually transmit to the real UAE economy.

The ratio of non-core liabilities to core liabilities[8] experienced a minor increase during 2021 by 2.4 percentage points and remained broadly within its historical range in the past 10 years standing at 25.3% as of December 2021. This level does not signal any significant change in the levels of foreign deposits[9] in the system, nor does it imply any increase in the banks appetite to attract non-resident deposits at higher costs to fund lending growth.

[5] For further in-depth content on financial cycles and their characteristics, please refer to the financial stability report 2019 of CBUAE.
[6] Market implied risk of default of the banks in the UAE based on total asset weighted probability of default (PD) for the banks sourced from Bloomberg.
[7] Please refer to Capital and Profitabilty under section 2.1 for further details.
[8] The CBUAE classifies core liabilities as resident deposits from governments, non-financial corporations, and households, while considering the rest as non-core liabilities.

Chart1.2.3: Non-core Liabilities to Core Liabilities Ratio

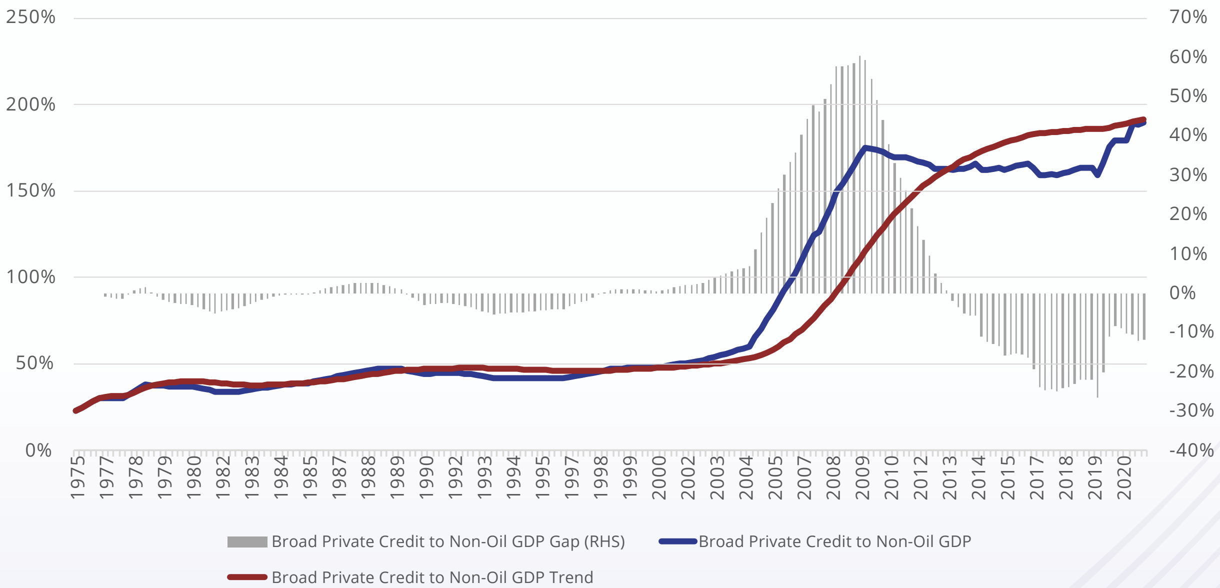
Source: CBUAE

CREDIT CYCLE

The analysis of the growth levels of private sector credit in proportion to the overall economy is a tool that serves to indicate any potential overheating in the economy driven by excessive borrowing whether by corporates, SMEs, or individuals alike. In the UAE, this indicator is calculated over long time series extending for more than 40 years. Private sector credit[10], which includes borrowing from UAE banks (70%), issuances of bonds by UAE entities (14%), and borrowings of UAE entities from abroad (16%), experienced a growth level of 3.9% similar to its growth levels of last year, with half of that growth driven by borrowings of UAE entities locally, with the rest contributed by borrowings from abroad and issuances of bonds. Because nominal non-oil GDP grew at a similar rate as credit growth, the overall ratio of private credit to non-oil GDP remained relatively stable for the year.

The private credit-to-non-oil GDP gap[11], which is a widely followed indicator to monitor potentially excessive credit growth, has stabilised in 2021, standing at around -11 percentage points, indicating improved overall financial conditions compared to the recent years.

Chart 1.2.4: Broad Private Credit to Non-Oil GDP



Source: *CBUAE data and estimates, FCSC and Bloomberg*

[9] Foreign deposits are considered non-core liabilities and are included in the computation of the non-core to core liabilities ratio.
[10] Total private credit is defined as the total credit borrowed by the resident private sector in the UAE, inclusive of GREs and exclusive of the government sector. The statistical trend is calculated using a one-sided HP filter with the smoothing parameter equal to 400,000.
[11] 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 common to use in resource rich countries.

THE MACRO-FINANCIAL ENVIRONMENT

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CHAPTER 1.3

ASSET MARKETS

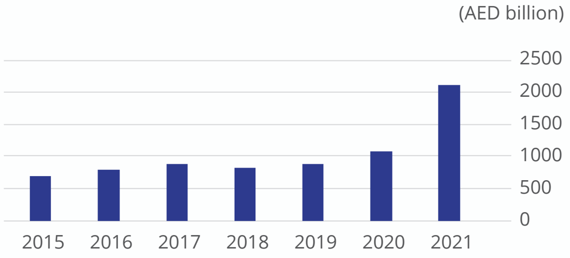
The stock market in Abu Dhabi and Dubai saw an improvement in their performance with new listings in both markets. In addition, the real estate market reversed course, showing signs of a recovery. UAE government initiatives, the low-interest-rate environment and a rebound in economic activity have contributed to a recovery in the real estate market. Moreover, crypto-assets are a disruptor to the financial landscape, promising efficiency in applications, while also bringing new risks.

CAPITAL MARKETS

Contributed by the Securities and Commodities Authority (SCA)

OVERVIEW OF THE UAE STOCK MARKETS DURING 2021

Chart 1.3.1: Market Cap of UAE Financial Markets



Source: *SCA*

The Abu Dhabi Securities Exchange (ADX) general index ended the year with its best annual performance in 16 years. The Abu Dhabi index gained more than 68% in the 2021 making it one of the best performing equity indices in the world. ADX's market liquidity jumped by more than four-fold while market capitalisation soared by 119.0% in 2021 to reach AED 1,626.3 billion supported by a series of listings in 2021. Traded value on the ADX increased by 407.8% from AED 72.8 billion in 2020 to AED 369.5 billion in 2021, driven by higher levels of domestic and international investment. In addition, foreigners' investments have increased whereby total net foreign investments has recorded an inflow of AED 15.3 billion during 2021 and the net institutional investments inflow showed an increase of AED 18.3 billion .

In 2021, the ADX welcomed new companies to its listing. At the start of 2021, the "ADX One" strategy was launched, aiming to bring a broader offering of products and services to market and invest in state-of-the-art infrastructure in partnership with global market leaders. As part of the strategy, the ADX introduced a derivatives market in the fourth quarter of 2021 by signing an agreement with Nasdaq to deliver marketplace technology solutions, including matching, real-time clearing and settlement technology.

Table 1.3.1: ADX Performance

ADX	2020	2021	Change %
Index (point)	5045.3	8488.36	68.2%
Traded value (AED billion)*	72.771	369.51	407.8%
Traded volume (Billion of shares)*	21.831	60.8	178.5%
Trades*	513,080	1,386,313	170.2%
Market Cap (AED billion)**	742.59	1626.31	119.0%
Net Foreign Investment (Buy - Sell) (AED billion)	-2.061	15.27	-
Net Institutional investors (Buy - Sell) (AED billion)	2.904	18.26	-

Source: *SCA*

**includes: domestic public (government) and private companies, direct deals and ETFs.*

***includes public and private companies*

The Dubai Financial Market (DFM) demonstrated its strength to deliver growth and generate momentum during 2021, with a solid performance primarily reflected in a 28.2% increase in the market index, and a 10.2% growth in the total traded volume to reach AED 72.3 billion for the year. The DFM's market capitalisation increased by 21.0% to exceed AED 411 billion in 2021. Foreign confidence in DFM had a positive effect; total net foreign investments reached AED 1.9 billion in 2021. Net institutional investment inflow in DFM increased to AED 0.6 billion.

In 2021, DFM inaugurated the Real Estate Investment Trust (REITs) trading with a new listing. This reinforces DFM's product offering diversification strategy, providing investors with new opportunities, in the form of an exchange-traded fund tracking the performance of liquid UAE-listed stocks on DFM.

This performance of the DFM came as a result of improvements in streamlining accessibility, diversifying products and enhancing services, coupled with a sustained focus on innovation and automation. These constructive factors were bolstered further by the positive effects of Dubai's strategic plan to develop its financial market, with the aim of increasing the total market capitalisation to AED 3 trillion through initiatives including a programme to list 10 government-owned conglomerates.

Table 1.3.2: DFM Performance

DFM	2020	2021	Change %
Index (point)	2492	3,195.91	28.2%
Traded value (AED billion)*	65.615	72.33	10.2%
Traded volume (Billion of shares)*	65.472	49.97	-23.7%
Trades*	977,526	874,591	-10.5%
Market Cap (AED billion)**	340.14	411.47	21.0%
Net Foreign Investment (Buy - Sell) (AED billion)	0.661	1.88	184.4%
Net Institutional investors (Buy - Sell) (AED billion)	-1.031	0.64	-

Source: *SCA*

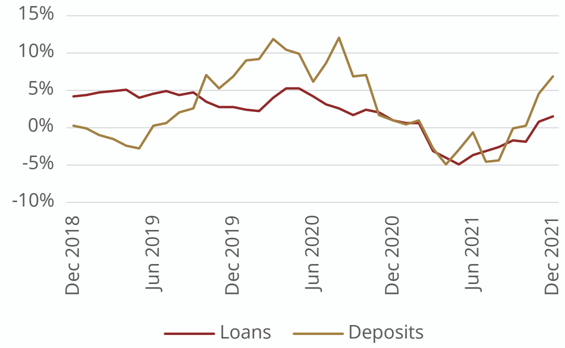
**includes: public and private companies (domestic- foreign) direct deals and ETFs.*

***includes public and private companies*

UAE CORPORATE SECTOR

Corporates play a key role in the UAE economy, as they are one of the main users of the banking system. Their health and resilience have an effect on the UAE financial sector, and thus overall financial stability. The UAE Corporate Sector[12] is a net borrower and makes up around 46% of the total deposits of the UAE banking system and 56% of the total loans. Although during the pandemic the UAE Corporate Sector loans and deposits experienced negative growth, they started picking up in the second half of 2021 with deposits growing at a faster pace at 6.8% compared to 1.7% for loans as of December 2021. This may reflect the tradeoff between economic recovery and pickup in certain activities that has been witnessed lately and the delayed investment decisions due to the uncertainty in economic conditions globally.

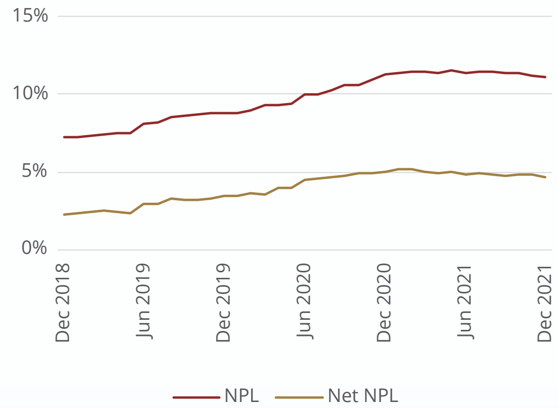
Chart 1.3.2: Growth in Resident Corporates Loans and Deposits (Y-o-Y)



Source: *CBUAE*

The UAE Private Sector[13] credit accounts for around 76% of total loans of the UAE Corporate Sector, while GREs account for about a quarter only. Similarly, 27% of the UAE Corporate Sector deposits are contributed by the GREs as of December 2021. In terms of Non-performing loans ratio of the UAE Corporate sector, it has been on an increasing trend with GREs having the lowest NPLs. However, since the end of 2020, the trend moderated given CBUAE TESS measures.

Chart 1.3.3: Overall[14] UAE Corporate Sector Non-performing Loans

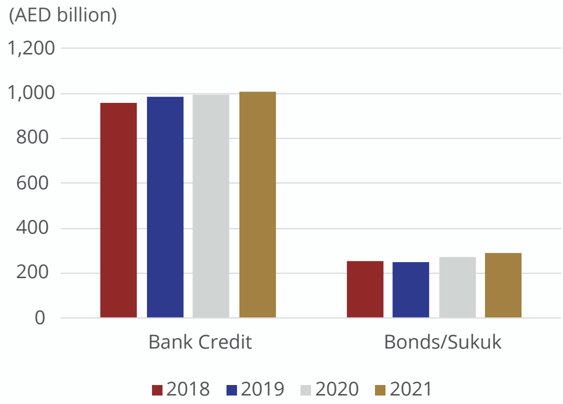


Source: *CBUAE*

[12] UAE corporate sector includes resident GREs, Corporates, SMEs, HNIs and Trade bills.
[13] The UAE Private Sector includes resident Corporates, SMEs, HNIs and Trade bills.
[14] Resident and Non-Resident.

The UAE Corporate Sector credit from banks and borrowing from the capital market has been evolving reaching around 144% of non-oil GDP in 2021. In terms of the funding structure, the main financing comes from the banking sector at over 80% although the role of market finance has increased.

Chart 1.3.4: UAE Corporate Sector Credit Breakdown



Source: *CBUAE & Bloomberg*

The CBUAE monitors and analyses the fundamentals of UAE non-financial corporates that are listed on both ADX and DFM[15]. The impact of the COVID-19 pandemic on different economic sectors was uneven, with travel and hospitality affected the most. Overall leverage levels[16] have decreased slightly from 2020 levels reaching 103%, with leverage variations still present. However, the economic recovery helped revive certain sectors affected by the pandemic. Profitability levels recovered in 2021, as aggregate return on equity reached around 10%, with a significant number of the analysed corporates having positive bottom line growth, when compared to 2020.

THE REAL ESTATE MARKET

The real estate market is a significant contributor to the UAE economy, making up around a fifth of the total GDP, with Dubai and Abu Dhabi real estate markets being the core markets in the UAE.

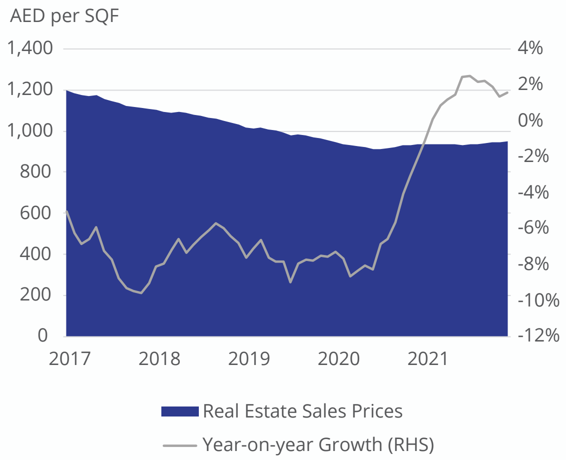
Residential Real Estate

The real estate market in Abu Dhabi and Dubai recovered and showed signs of bottoming out. Residential real estate sales prices increased in both Abu Dhabi and Dubai for the first time in several years, in addition to a stabilisation in rental prices[17].

Abu Dhabi

In 2021, residential real estate sales prices increased by 1.6%. In addition, residential rent prices remained under pressure, but declined by only 1.4%, the lowest decline since 2016[18].

Chart 1.3.5: Abu Dhabi Residential Real Estate Price



Source: *REIDIN*

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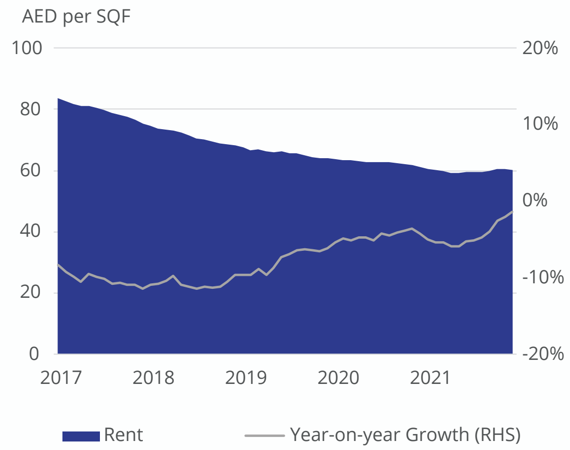
[15] The sample consist of 67 non-financial corporates including publicly listed GREs. The sample is biased to large well-established companies with a sectorial bias towards telecommunications and real estate.
[16] Leverage refers to total liabilities over total equity.
[17] The changes in prices are calculated on a year-on-year basis comparing the end of period monthly figures for December 2021 to December 2020.
[18] Abu Dhabi emirate wide residential real estate sales and rental prices are calculated using REIDIN moving averages.

Chart 1.3.6: Abu Dhabi Annual Rental Price

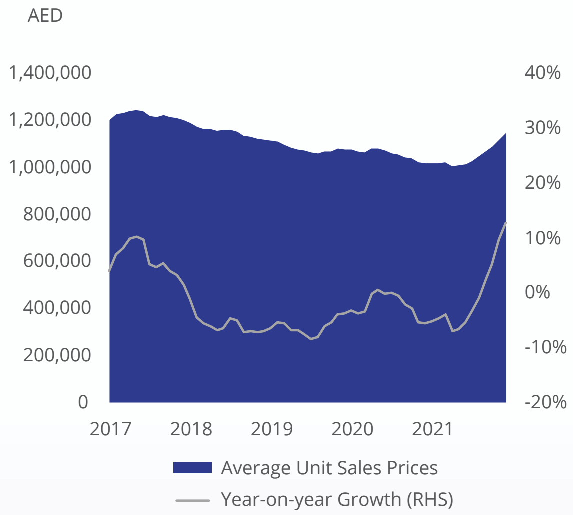


Source: *REIDIN*

Dubai

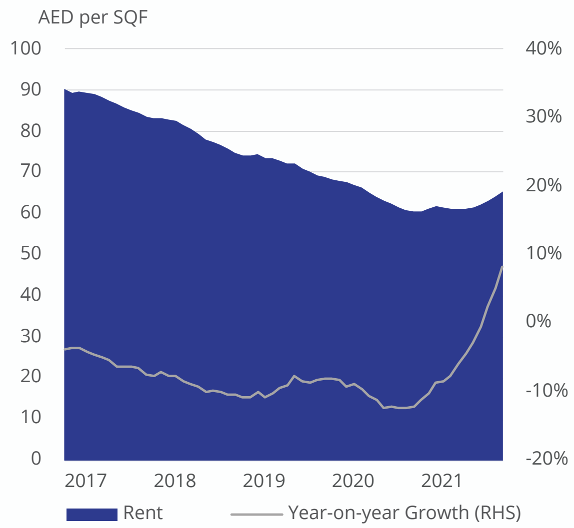
In 2021, residential real estate sales prices surged by 12.6%[19]. In addition, residential rent prices increased by 8.2%, the first time since 2015. Office rental prices in Dubai increased by 4.7%[20].

Chart 1.3.7: Dubai Residential Real Estate Price



Source: *Dubai Land Department*

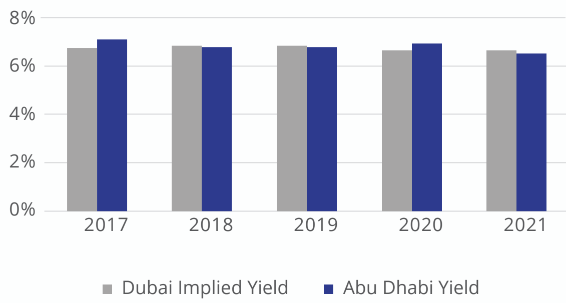
Chart 1.3.8: Dubai Annual Rental Price



Source: *REIDIN*

Annual average gross residential rental yield in Abu Dhabi and Dubai hovered around 6.5% and 6.7% respectively throughout 2021.

Chart 1.3.9: Average Residential Rental Yield



Source: *REIDIN & DLD*

The demand for real estate in Dubai picked up in 2021, as indicated by the number of real estate sales transactions. Sales transactions for the year 2021 reached 84,565 compared to 51,154 in 2020. The 65.3% increase is up from the 8.5% drop in the year 2020[21]. The increase in demand was also met with an increase in the new supply of residential real estate in Dubai to 41,448 units in 2021 (11.3% of stock), compared to 38,900 units in 2020. In Abu Dhabi, the supply of new residential real estate reached around 5,435 units in 2021 (7.9% of stock), compared to 2,900 units in 2020.

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[19] Dubai residential real estate sales prices are calculated using Dubai Land Department data.
[20] Dubai residential rent and office rent prices are calculated using REIDIN data.
[21] Dubai Land Department.

GOVERNMENT INITIATIVES

The efficient response of the UAE Government to the COVID-19 pandemic contributed to the rebound in economic activity, the recovery of the real estate market and the growth in overall investment appetite in the UAE. The announcement of more flexible and long-term residence options for expatriates, and a low-interest environment, have contributed to the real estate and mortgage market recovery. In addition, the government of Abu Dhabi has expanded its housing options for citizens to include the choice of receiving a grant to purchase a property from a list of approved developers, in addition to existing land and housing grants.

PRIVATE CRYPTO-ASSETS

Digitalisation is transforming finance and the growing applications for digital assets is changing the current landscape and the way in which consumers conduct financial services.

Private crypto-assets are digital assets that depend primarily on cryptography and distributed ledger or similar technology[22]. Generally, these assets are neither issued nor guaranteed by a central bank or public authority, and do not have the status of legal tender. Crypto-assets can be used as a means of exchange, collateral or investment, and can be transferred, stored and traded electronically by natural or legal persons.

A growing number of private crypto-asset markets are evolving, with promises of more speed, efficiency and cost reduction to the payment systems, having yet to be entirely fulfilled. This could eventually represent a threat to global financial stability, due to their scale, structural vulnerabilities, and increasing interconnectedness with traditional financial systems. In 2021, crypto-asset market capitalisation grew 3.5 times to reach USD 2.6 trillion, yet representing only a small fraction of the overall global financial system's assets.[23] Nevertheless, stablecoins - a type of crypto-asset - already represent a risk, since they link decentralised finance (DeFi) platforms and traditional payment systems. In a bridge to traditional finance, they can be prime conduits for propagating adverse spillovers. In addition, crypto-assets represent major concerns for financial regulators and governments, due to consumer protection, cyber-security, money laundering, terrorist financing and carbon footprint aspects.

Crypto-assets exist through what is referred to as blockchain or DLT[24], in a form that can function as - or have the characteristics of - digital means of payment. Forms of tokens include:

- Digital tokens, including securities tokens;
- Asset-backed tokens, representing ownership interests in property;
- So-called utility tokens, used to obtain access to goods or services on a particular digital platform, or non-fungible tokens used as collectibles or investment instruments.

A fast-growing segment of the crypto markets, DeFi encompasses a variety of applications that seek to mimic traditional finance functions. The decentralized ledgers of transactions coupled with automated algorithms (i.e. smart contracts) aim to provide financial services without centralized intermediaries such as banks, broker dealers, custodians or centralized exchanges. DeFi currently performs three main types of financial transactions: lending (collateralised borrowing of crypto-assets), trading and investing (resembling traditional investment funds to allocate investors' funds across different crypto lending platforms, according to pre-programmed strategies). Although these activities superficially resemble real financial transactions, they have in fact remained largely confined to the crypto system itself.

However, holding those assets and using the underlying technology comes with both investment and security risks. The main investment risk is that most of those securities are not backed by physical holdings or centralised currencies issued by central banks, which increases their volatility. The main security risk lies in the exchanges and the cyber risk implied in them, as they are a target for hackers and subject to other operational risks such as fraud. Electronic wallets are another target for fraudsters. Additionally, users can simply forget their private key (password) for their digital wallets, and thus lose access to them permanently.

Commercial and central banks around the world are exploring ways to leverage blockchain technology to reduce frictions in the payment systems, making them faster, more secure, and streamlining some financial processes.

[22] *Definition by Financial Stability Board (FSB).*
[23] *Assessment of Risks to Financial Stability from Crypto-assets by Financial Stability Board (FSB).*
[24] *As an electronic ledger, blockchain records digital asset transactions in immutable blocks of data that are "chained" together in a specific order and protected with complex computer "hash" codes.*

The Bank of International Settlements (BIS), the Financial Stability Board (FSB) and other regulatory bodies are making steady efforts to draw up a regulatory framework to define and classify crypto-assets. They are also examining potential regulatory loopholes, such as those arising from the cross-border and cross-sectoral nature of crypto-assets, which will be a crucial component to the overall evolution of these assets.

This may help different financial institutions to deal with crypto-assets within a regulated framework in the near future, so long as implied risks in those assets are well accounted for, and without jeopardizing the overall financial stability [25].

CENTRAL BANK DIGITAL CURRENCY

Central Bank Digital Currency (CBDC) is a nation's fiat currency in digital form. Much like physical currency, it is issued by a central bank and covered under its legal obligations i.e. a direct liability of the central bank, thus the safest digital asset available to the general public, with zero associated credit or liquidty risk. Crypto-assets issued by the private-sector, on the other hand, have no central authority assuming these responsibilities. Many national and international supervisory authorities have issued warnings about the risks associated with crypto-assets.

Different forms of CBDC

CBDCs can possess different architecture. On a high level, a CBDC can either be for wholesale or retail use, account-based or token-based, structured according to direct, hybrid or intermediated model and developed with different technologies.

A wholesale CBDC would only be available to regulated financial institutions, while retail to businesses and households ("a digital banknote"). Token-based CBDCs could be accessed anonymously (like cash), while account-based CBDCs would require identification.

Direct, hybrid or intermediated models differ in how the central bank and private sector cooperation is organised, i.e. what is the role of the central bank and intermediaries in executing payments, customer interface and keeping records. Records (who paid what to whom), can be an organised in centralised or decentralised form. For the latter, distributed ledger technology (DLT) is one technology that can be used.

Operational options are manifold, and assessment of their merits and feasibility is an area of active research. In most cases, retail CBDCs are being designed architecturally to preserve the two-tier structure of the monetary system, i.e. the division of labour between the public and private sector. The role of a central bank is to anchor public trust in money and payments, supporting public welfare, while the private sector strives to innovate and provide better retail services through open competition.

The CBUAE's activities

The CBUAE is investigating actively the benefits and different forms of CBDC. It participates in consortiums of central banks experimenting with technologies to improve efficiency in cross-border payments (both the "Aber" and the "m-Bridge " projects involved multiple CBDCs). The CBUAE intends to continue exploring the potential wholesale and retail use of CBDCs.

[25] *For further details, please refer to the consultation document "Prudential treatment of crypto-asset exposures" by BIS.*

BANKING SYSTEM ASSESSMENT

02

CHAPTER 2.1

BANKING SECTOR ASSESSMENT

The UAE banking system demonstrated resilience in weathering the pandemic's repercussions while also having a supportive role in providing relief to affected households and businesses. The banking system maintained adequate capital and liquidity buffers, while profitability rebounded towards pre-pandemic levels in 2021 as economic recovery started to gain traction. Looking forward, while the banking system remained resilient, the pandemic brought emerging risks in the credit environment and accelerated digitalisation. As a forward-looking supervisory authority, the CBUAE also analyses evolving risks, including Environmental, Social and Governance (ESG) risks, financial implications of geopolitical tensions, AML/CFT compliance and increased cyber risks.

TRENDS AND RISK OUTLOOK

Banking systems globally, including banks in the UAE, demonstrated resilience in weathering the repercussions of the coronavirus pandemic. Nevertheless, recent developments exposed the global banking system to evolving risks with a rising prominence. These risks include (1) credit risk implications from future recognition of exposures impaired as a consequence of the pandemic, (2) accelerated digitalisation affecting bank business models and operational, cyber security and strategic risks, (3) greater emphasis on ESG risks, renewed uncertainty related to geopolitical tensions and addressing AML/CFT compliance risks.

Credit Risk Repercussions of the Pandemic

The pandemic brought disruption affecting most businesses globally with different intensities across economic sectors. These repercussions resulted in temporary cash-flow challenges, mitigated in the UAE through different government-led initiatives, including the TESS deferral programme extended by the CBUAE and the UAE banking system. Most affected businesses resumed operations as pandemic-related restrictions were lifted gradually. Nonetheless, the pandemic continues to impact vulnerable sectors, and - in some cases - may result in long-term scarring effects of the most affected businesses and sectors.

The bank credit-risk outlook reflects the expectation of ongoing recovery in the business environment. Accordingly, credit rating agencies revised their outlook for the majority of UAE national banks from negative to stable during 2021. The CBUAE scaled back the TESS deferral programme fully by the year-end 2021. While most of the deferred credit exposures resumed with the original or restructured repayment schedule, banks should proactively identify longer-term asset quality concerns and take adequate provisions.

Digitalisation and Changes in Business Models

The acceleration in digitalisation globally during the pandemic increased the pressure on banks' traditional business models. Greater technological transformation implies potential benefits and risks to the banking sector.

Digitalisation and technology-induced financial innovation promotes business efficiency and broadens financial services. Nonetheless, in addition to traditional financial risks, digitalisation also poses non-financial risks such as heightened risks related to IT deficiencies, outsourcing risks, business continuity and cyber risk.

Digitalisation challenges banks' traditional business models and strategies through new technological advances and greater competition with new financial technology companies. Addressing challenges related to digital transformation should therefore be a priority for banks.

The pandemic has accelerated digitalisation and changes in bank business models in the UAE as well. New digital banks applied for licenses to operate in the UAE. Since the start of the pandemic in 2020, the number of physical UAE bank branches declined by 20.1%, reducing expenses for physical premises by 29.1%. On the other hand, IT and outsourcing expenses increased.

Evolving Risks in ESG, Geopolitics, and AML/CFT

The growing global prevalence of ESG-risk factors requires banks to develop sustainable finance strategies and related risk management frameworks. ESG risks comprise financial and non-financial risks, which banks need to integrate with their risk management, underwriting and governance frameworks.

The degree of ESG risk management varies considerably among financial institutions and regions. While the global market for ESG bonds and sukuk grew from around USD 100 billion five years ago to over USD 1 trillion in 2021, the GCC region has not yet been at the forefront of global ESG products origination.

Moreover, geopolitical tensions escalated in Europe during the first half of 2022. Although the direct credit exposure of the UAE's licensed financial institutions to Russia and Ukraine was low, the indirect repercussions on the financial system may manifest through second-round effects or operational risk disruptions.

Further, in line with the UAE's strong commitment to AML/CFT the CBUAE expects financial institutions to further strenghten AML/CFT compliance risk monitoring, and to ensure complete alignment with FATF recommendations and the UAE's National Action Plan.[26]

[26] *The Financial Action Task Force (FATF) has recognized that the United Arab Emirates has made positive progress in its anti-money laundering (AML), countering the financing of terrorism (CFT), and counter proliferation financing (CPF) efforts. FATF has announced that it has placed the UAE under increased monitoring (See Annex- Key Regulatory Developments).*

Key Global Trends and Risks Affecting Banks

Credit risk Repercussions of the Pandemic

- Longer-term scaring effects and exposures to vulnerable sectors
- Recovery in credit demand amid uncertain economic outlook

Digitalisation and Changes in Business Models

- Accelerated digitalisation and changes in bank business models
- Exposure to operational, business continuity and cyber risk

Evolving risks in ESG, Geopolitics and AML/CFT

- Greater emphasis on ESG risks, sustainability and AML/CFT
- Direct and indirect repercussions of rising geopolitical tensions

Source: *CBUAE*

BANK CREDIT EXPOSURE

Overall bank lending[27] increased only moderately in 2021 at 0.8% year-on-year, while credit to the domestic economy increased 1.1% and cross-border credit contracted by 1.8%. Lending growth rebounded in the second half of 2021, as business activities started to recover and pandemic containment measures were gradually lifted. The credit demand outlook is likely to improve in 2022, along with the recovery of global and domestic economies.[28]

Chart 2.1.1: UAE Banking System Loan Growth and Selected Sectors (year-on-year, %)

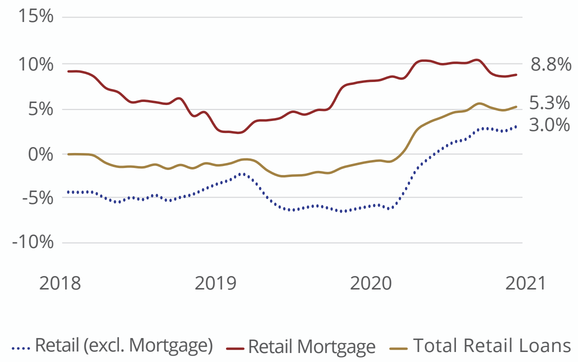
** Corporate sector loans comprised loans to private sector corporates, government related entities, high net worth individuals and SMEs*

Source: *CBUAE*

Retail Credit Exposures

Banking system lending to the retail sector recorded the highest growth in 5 years, up by 5.2% year-on-year in 2021. Overall retail lending expansion was driven by strong residential mortgage loan growth of 8.8% in 2021. This was underpinned by an environment of low interest rates, government structural measures[29] and the LTV relaxation for first-time homebuyers under the CBUAE's TESS. Other retail subcategories (excluding residential mortgage) grew 3.0% in 2021, also the highest in 5 years, reflecting the recovery in consumer activities. In particular, credit card and car loans grew by 6.0% and 1.9% year-on-year respectively.

Chart 2.1.2: UAE Banking System Retail Loan Growth (year-on-year, %)



Source: *CBUAE*

Credit risks from bank retail loan exposures remained manageable, reflected by a lower non-performing loans ratio and a decline in new past-due loans. The Net NPL ratio of the retail portfolio declined 0.4 percentage points to 1.7%. The loan repayment deferrals extended under the CBUAE TESS provided temporary easing of cash flow constraints for negatively-affected borrowers. As a result, the risks of a sharp deterioration in retail asset quality due to temporary cash-flow pressures were mitigated.

[27] *The UAE banking system assets expanded by 4.2% in 2021, to AED 3.3 trillion. The UAE banking system assets represented 221% of total nominal GDP.*

[28] *The CBUAE Credit Sentiment Survey in December 2021 highlighted increased credit appetite of businesses and households, amid more favourable credit conditions expected in the first quarter of 2022.*

[29] *Refer to page 24 on UAE government initiatives.*

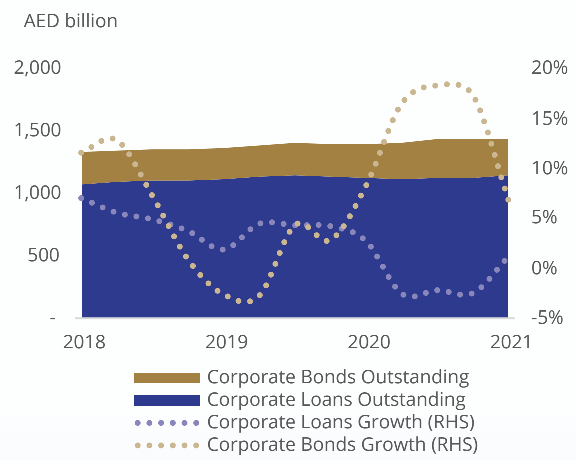
Wholesale[30] Credit Exposure

Total wholesale credit grew by 0.8% in 2021 compared to 0.9% in the previous year. The lending growth was driven by wholesale corporate[31] loans, which grew 2.1% year-on-year to AED 1.2 trillion, while bank lending to the government declined 4.4% in 2021.

Lending to government-related corporates and trade financing were the primary contributors to the wholesale corporate loan growth with growth rates of 9.6% and 27.3% respectively. Private corporate loans contracted by 1.9% in 2021, although the rate of decline was slower towards the end of the year. Similarly, SME lending declined 2.8% in 2021.

Balancing the slower growth in bank lending to the corporate sector, corporates continued to access capital markets, taking advantage of the low-interest-rate environment. The year-on-year growth of outstanding corporate bonds peaked at 18.6% in June 2021 and moderated to 6.8% at the end of 2021. Corporate bonds outstanding amounted to AED 289.3 billion.

Chart 2.1.3: Wholesale Corporate Loans and Bonds Outstanding



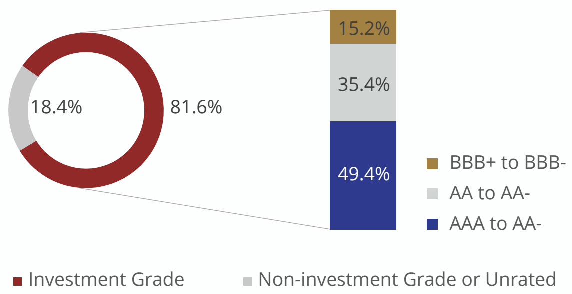
***Source:** CBUAE, Bloomberg*

Overall, the credit risk of corporate loan exposures remained elevated. Corporate loan portfolios had historically higher NPLs ratios from legacy NPLs. Risk factors remain in exposures to vulnerable sectors affected during the pandemic. Nevertheless, the Net NPL ratio has improved 0.4 percentage points since 2020 to 4.7%.

Bank Investment Portfolio

The aggregate bank investment portfolio accounted for 15.5% of total assets or AED 516.3 billion. Bank investment portfolio comprised primarily of debt securities at 96.7% of the investment portfolio, with the remainder in equities and other financial investments. Bank investments in debt securities expanded by 7.0% year-on-year, reflecting ample bank funding conditions and moderate credit demand. Credit risks from bank investment in debt securities remained relatively low as more than 80% were rated investment grade. The remainder comprised of around 16% non-investment grade debt securities and 4% unrated securities.

Chart 2.1.4: UAE Banking System Debt Securities Portfolio: Breakdown by Rating Buckets



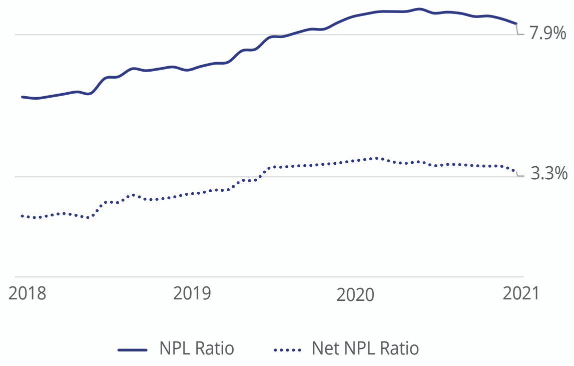
***Source:** CBUAE*

ASSET QUALITY

The asset quality in the UAE banking system was impacted by the repercussions of the pandemic, the restructuring of some large borrowers in recent years, and legacy exposures prior to the pandemic. NPL ratios peaked in Q1 2021 and declined moderately during the remainder of the year. The stabilization in the NPLs in 2021 was expedited by CBUAE's measures, including the facilitation of some write-offs.

The Net NPL ratio and NPL ratio declined slightly to 3.3%[32] and to 7.9% respectively in 2021, respectively. The provision coverage improved during 2021 due to an increase in specific provisions at 3.0% year-on-year, while NPL stock declined by 1.8% year-on-year. As a result, the specific provision coverage ratio improved to 60.0% of non-performing assets, and the total provision coverage ratio improved to 86.6%.

Chart 2.1.5: UAE Banking System Asset Quality Ratios



***Source:** CBUAE*

During the pandemic, the CBUAE implemented a sizable TESS Loan Deferral Programme, which - at its peak - supported up to 15% of banks' lending portfolios. The programme provided relief to borrowers with temporary cash-flow constraints due to the reduction of business activities during the coronavirus-related restrictions, which prevented large-scale borrower defaults.

In addition to its financial and economic benefits, the TESS Loan Deferral Programme benefitted society by providing temporary loan repayment relief to over 300,000 retail clients, more than 10,000 small and medium enterprises and up to 2,000 private corporates. The CBUAE exited the temporary TESS Deferral Programme fully by the end of 2021.

STANDARDS FOR BANK REAL ESTATE EXPOSURES

The Central Bank of the UAE (CBUAE) developed and enhanced its framework for the oversight of banks' real estate exposures. The new Standards for Bank Real Estate Exposures took effect on 30 December 2021, starting with a one-year observation period, during which banks will be required to implement the best practices entailed in the framework.

The new standards cover all types of on-balance-sheet loans and investments and all off-balance-sheet exposures to the real estate sector. This reflects the deepening of financial markets, with bank real estate exposures occurring through a broader range of financial instruments, including off-balance-sheet instruments, in addition to conventional real estate lending.

The comprehensive standards also require banks to review and improve their internal policies to enhance sound underwriting, valuation and collateral management and general risk management for their real estate exposures. In terms of governance, banks' internal policies related to real estate exposures shall be approved by the Board of Directors or relevant Board committee.

The standards introduced a new risk-based threshold to measure banks' exposure concentration to real estate, based on credit risk-weighted assets. Banks with higher risk-weighted real estate exposures in their portfolios will be subject to a more extensive supervisory review of their underwriting and risk management practices in this segment.

[30] *Wholesale credit comprised lending to government, government-related corporates, private corporate, SME, trade finance and high net worth individuals.*
[31] *Wholesale corporate comprised government related corporates, private corporate, SME, trade finance and high net worth individuals.*
[32] *The Net NPL ratio excludes specific provision and provides for a better indicator of asset quality taking into account the provisioning levels in the UAE banking system.*

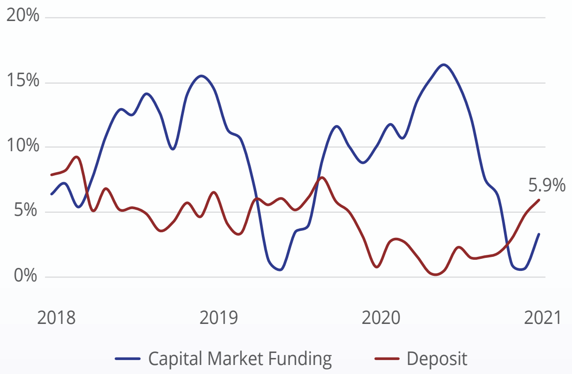
FUNDING AND LIQUIDITY

Funding and liquidity conditions remained ample, supported by robust deposit growth and capital market funding. Deposits remained primary source of funding, accounting for 69.5% of total liabilities while capital market funding accounted for 9.1% of total liabilities.

Banking system deposits grew 5.9% in 2021, driven by resident deposits, which accounted for 88.4% of total deposits. Growth in resident deposits was anchored by stable retail deposit growth during the pandemic and pick-up in corporate deposits as business activities started to recover. The increment in Current Account and Savings Account (CASA) deposits, which are considered one of the cheapest bank funding sources, lowered banks' funding costs.

Bank capital market funding growth reached double-digit rates in the first half of the year, as banks took advantage of the low-interest-rate environment and high demand for debt securities issued by UAE banks. The capital market funding growth reached 16.4% year-on-year in June 2021, the highest growth recorded since 2016. However, the capital market funding growth moderated to 3.3% year-on-year at the end of 2021, resulting from moderation in new issuances and some maturing debts.

Chart 2.1.6: UAE Banking System Deposits and Capital Market Funding Growth, (year-on-year, %)

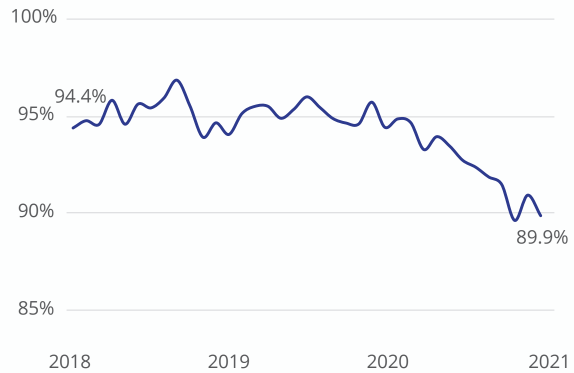


Source: *CBUAE*

As a result, aggregate liquidity and funding conditions recovered to pre-pandemic levels. The overall LCR[33] was at 140.6%, while ELAR improved to 19.6% in 2021, reflecting ample liquidity buffers. The NSFR[34] and ASRR improved to 110.6% and 77.3% respectively, reflecting the adequate stable funding resources. The continued strong performance of the liquidity indicators reflected that the UAE banking system's overall funding and liquidity risks remained low.

Restoring liquidity conditions to pre-pandemic levels has been one of the key objectives of the CBUAE's TESS. As a result of ample funding and subdued credit demand, the loan-to-deposit ratio declined to 89.9% from over 95.5% at the start of the pandemic. The lower loan-to-deposit ratio reflected an adequate capacity of the UAE banking system to meet the expected increase in credit demand, in tandem with the economic recovery.

Chart 2.1.7: UAE Banking System Loan-to-Deposit Ratio



Source: *CBUAE*

[33] *Liquidity Coverage Ratio applicable to 5 approved banks.*
[34] *Net Stable Funding Ratio applicable to 5 approved banks.*

BANK EXTERNAL EXPOSURES

Cross-border Assets

The UAE banking system's external assets represented about 40.9% of the sector's total consolidated[35] assets in 2021 (with an increase of 1.6 percentage points compared to the previous year). This comprised 23.6% of UAE banks' local operations cross-border assets and 17.3% of UAE banks' foreign branches and subsidiaries' assets. In terms of geographical distribution, the external assets were mainly due from Saudi Arabia, Turkey and Egypt.

Cross-border Liabilities

The UAE banking system external liabilities accounted for about 36.7% of the sector's total consolidated assets in 2021 (with an increase of 1.2 percentage points compared to 2020). This comprised 19.5% of UAE operations' cross-border liabilities, and 17.2% of foreign subsidiaries and branches liabilities. In terms of geographical distribution, total external liabilities were mainly due to Saudi Arabia, Turkey and Egypt.

Cross-border Interbank Activities

The UAE banking system continued to be a net lender in the cross-border interbank markets similar to previous years. This reflects the UAE banking systems' historically strong liquidity position. The net cross-border interbank lending position remained stable, representing 1.4% of total assets compared to 1.1% in 2020.

UAE National Banks' Foreign Subsidiaries and Branches

The total assets of UAE national banks' foreign subsidiaries and branches accounted for 17.3% of the total consolidated assets. At the end of 2021, UAE national banks had a presence in 24 countries, with largest foreign subsidiaries and branches located in Turkey, the United States, the United Kingdom, France, and Egypt. The majority of the UAE banks' foreign branches and subsidiaries undertake traditional banking activities, with loans as the main component in their portfolios, while some foreign subsidiaries and branches were established primarily for treasury operations and investment purposes in foreign financial centres.

[35] *Total consolidated assets comprised assets of UAE banks' local operations and that of UAE national banks' foreign subsidiaries and branches.*

MERGERS AND ACQUISITIONS IN THE GCC REGION

Mergers and acquisitions (M&A) represent one of the means by which banks can expand their operations, either domestically or overseas. The key factors that encourage banks to conduct M&A include diversifying their business activities, gaining market share, following their clients' operations in international markets and achieving synergies through greater cost and revenue efficiency. In recent years, bank M&A deals accelerated in the UAE and in the broader GCC region. The evidence from research studies[36] diverges on the impact of mergers and acquisitions on bank performance. Some of the research suggested that banks benefited from M&A through technological advances, diversification of products and services, increase in market share and cost-efficiency. However, other studies indicated that M&A bring risks that could affect banks' performance negatively, including affecting employee performance, increasing exchange rate risks (in cross-border M&A), higher costs from protracted integration processes and added reputational and operational risks.

Cross-border M&A deals allow banks to expand their international footprint. Within the GCC, UAE national banks were the most active in cross-border M&A deals, with the majority of their cross-border acquisitions, by UAE and GCC banks, in Turkey and Egypt. As a result, the UAE banks' exposure to Turkey and Egypt increased in recent years. In 2021, cross-border M&A increased the assets of the UAE banks' foreign subsidiaries in Egypt to 1.8 % of the total consolidated assets of the UAE banking system, whilst the assets of the UAE banks' foreign subsidiaries in Turkey declined to 2.7% of the total consolidated assets due mainly to the Turkish lira's depreciation.

Nonetheless, the GCC region's largest M&A deals were conducted at the country level, resulting in banking system consolidations notably in the UAE and KSA. Since 2015, UAE national banks have concluded four M&A deals, whose combined total assets (involving seven UAE banks) were AED 1.4 trillion. As such, nearly half of the UAE banking sector assets were involved in domestic M&A consolidation. The Saudi Arabian banking system in recent years involved two significant M&A consolidation deals (involving four Saudi banks) with a total volume of AED 1.1 trillion. Other smaller-sized M&A deals were also concluded, and some new deals were announced in the region.

Table 2.1.1: Overview of GCC Banks Mergers and Acquisitions

Top Three GCC Banks Cross-Border M&A Destinations (2015-2021)			Top Three GCC Countries with Domestic Banking System Consolidation (2015-2021)		
	M&A Deal Assets (AED billion)	M&A Deal (Number)		M&A Deal Assets (AED billion)	M&A Deal (Number)
Turkey	267	3	UAE	1,398	4
Egypt	35	3	KSA	1,126	2
UK	8	1	Qatar	265	2

Source: *S&P Capital IQ and CBUAE Staff Estimates*

[36] *Ullah, N., & Abu Seman, J. (2018). Merger and Acquisition in Banking Sector: A Review of the Literature. Östlund, A., & Lindblad, P. (2008). Cross-border Mergers and Acquisitions in the Banking Sector. Gattoufi, S., Al-Muharrami, S., & Al-Kiyumi, A. (2009). The Impact of Mergers and Acquisitions on the Efficiency of GCC Banks. Ayadi, R., & Pujals, G. (2004). Banking Consolidation in the EU: Overview and Prospects.*

CAPITAL AND PROFITABILITY

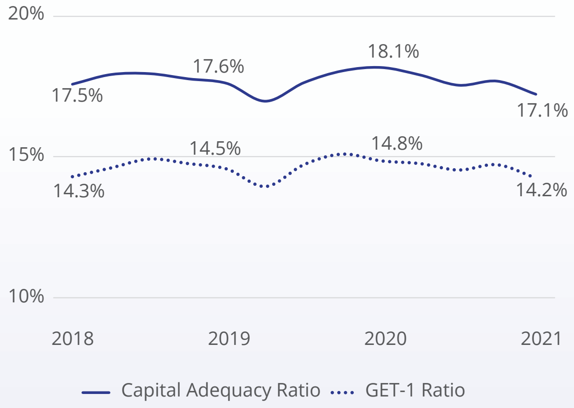
Capital

Overall, the UAE banking system continued to maintain adequate capital levels, and remained profitable on aggregate during the pandemic. This rebound in profitability supported the stable capital position.[37] The aggregate banking system's capital adequacy ratio stood at 17.1% and CET-1 was 14.2% as of December 2021, well above the CBUAE minimum capital requirements. In 2021, the CBUAE further tightened its capital adequacy requirements applicable to credit and market risk, strengthening prudential requirements in line with the Basel standards.

The risk-weighted assets (RWA) increased by 6.1% in 2021. This is mainly attributed to the impact of the implementation of a more prudent capital adequacy regulation for credit and market risk and the pandemics' repercussion on risk-weights of certain exposures and the slight expansion in bank assets. As a result of the increase in the RWAs along with stable dividend payouts, the overall capital adequacy ratios moderated during 2021. Credit risk-weighted assets represent the largest RWA component at 87.7%, with operational and market risk elements comprising about 7.5% and 4.6% of total RWA respectively.

The UAE banking system recorded an overall leverage ratio of 9.8% as of December 2021, well above the minimum regulatory leverage ratio requirement of 3.0%.[38]

Chart 2.1.8: UAE Banking System Capital Adequacy Ratios

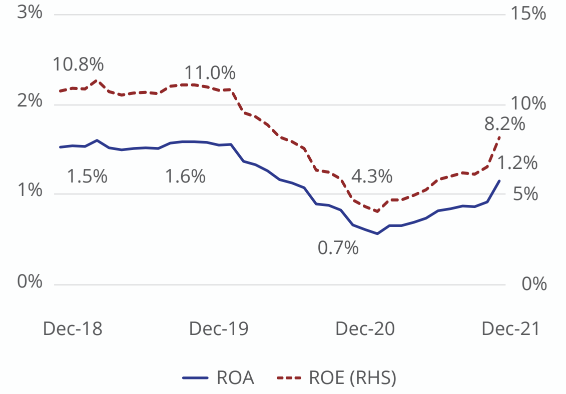


Source: *CBUAE*

Profitability

The UAE banking system's profitability rebounded in 2021 towards pre-pandemic levels and reached AED 35.7 billion, reflecting an improvement in business sentiment, economic conditions and the lifting of the coronavirus-related restrictions. As a result, the Return on Assets (ROA) increased to 1.2%, the Return on Equity (ROE) improved to 8.2%, and the Cost-to-Income ratio improved to 36.4%. As the economic recovery gains momentum, profitability is expected to improve further in 2022.

Chart 2.1.9: The UAE Banking System Profitability



Source: *CBUAE*

The total operating income grew moderately in 2021 by 1.2% year-on-year. The increase was driven by improvements in other operating income by 19.6% year-on-year, mainly due to the growth in income from trading, fees and commissions. On the other hand, net interest and profit income declined in 2021 for a second consecutive year by 7.3% year-on-year, largely due to protracted low interest rates and subdued credit demand.

Total operating expenses remained stable, with a slight reduction of 0.5% year-on-year as the pandemic accelerated adjustments in banks' business models towards remote working, digitalisation and cost-efficiency. As a result, premise expenses declined 29.4% year-on-year and staff expenses were reduced by 7.6% year-on-year, while outsourcing and IT expenses increased by 4.5%. These changes may result in improved cost efficiency and increased digitalisation, even after the pandemic abates.

[37] *The solvency stress test conducted by the CBUAE concluded that the banking system maintains sufficient capital to withstand a hypothetical adverse scenario (for more information, see Chapter 2.2).*
[38] *D-SIB have an additional D-SIB leverage ratio buffer requirement of 0.5%.*

To a large extent, the improvement in the UAE banking system's profitability was supported by a 44.4% year-on-year decrease in net impairment charges compared to the previous year, a reflection of higher impairment charges recognised early in 2020. Banks' provision coverage ratios improved in 2021, compared to the previous year.

Table 2.1.2: The UAE Banking System's Profitability (AED Billion)

AED Billion	2019	2020	2021
Net Interest or Profit Income	68.0	58.4	54.2
Other Operating Income	32.1	26.9	32.2
Operating Expenses	33.8	31.6	31.4
Net Impairment Charge	20.5	33.1	18.4
Taxation	0.5	0.3	0.8
Net Profit	45.3	20.4	35.7

Source: *CBUAE*

CAPITAL & LIQUIDITY REQUIREMENTS IN THE UAE

Bank Capital Requirements in the UAE

The CBUAE requires all banks operating in the UAE to comply with the CBUAE's capital regulations, following the Basel III capital standards. In addition to the minimum Pillar 1 capital requirements, a Capital Conservation Buffer (CCB) of 2.5% in the form of CET-1 Capital applies to all banks. The counter-cyclical capital buffer was set at 0% for UAE exposures.

Table 2.1.3: Capital Requirements in the UAE[39]

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 Requirements		
D-SIBs Capital Buffer	0.5%-2.5% individual capital surcharge for identified D-SIBs	
Counter-Cyclical Buffer	0% counter-cyclical capital buffer for UAE exposures	

Source: *CBUAE*

The CBUAE kept the designation of four banks as Domestic Systemically Important Banks (D-SIBs) and additional capital requirements unchanged during 2021. The additional D-SIB capital-buffer requirements for First Abu Dhabi Bank (FAB) and Emirates NBD (ENBD) were set at 1.5% of the CET-1 capital, while for Abu Dhabi Commercial Bank (ADCB) and Dubai Islamic Bank (DIB) at 0.5% of the CET-1 capital[40].

[39] *Note that the prudential requirements stated in the table were adjusted during the pandemic as part of the Targeted Economic Support Scheme (see: Prudential Relief Measures during the Pandemic).*

[40] *For more information of the DSIBs Assessment Methodology, refer to the FSR 2020.*

CAPITAL & LIQUIDITY REQUIREMENTS IN THE UAE (cont)

Bank Leverage Ratio Requirements in the UAE

All banks operating in the UAE have to comply with the CBUAE's leverage ratio standards, which follow the Basel III leverage ratio minimum standards. All banks must meet the leverage ratio minimum requirements at all times with Tier 1 capital. The D-SIB leverage-ratio buffer requirement represented an additional 0.5 percentage points of the minimum leverage ratio requirement.

Table 2.1.4: 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

Source: *CBUAE*

Bank Liquidity Requirements in the UAE

Following the Basel III Liquidity Standards, the CBUAE applies the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) requirements to five national banks operating in the UAE. Banks subject to these LCR/NSFR requirements are FAB, ENBD, ADCB, DIB, and Mashreq. 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 2.1.5: Liquidity Requirements in the UAE[41]

	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*

Prudential Relief Measures during the Pandemic

The CBUAE applied prudential relief measures on capital and liquidity requirements during the pandemic as part of its Targeted Economic Support Scheme (TESS).[42] The TESS relief measures on capital, liquidity and stable funding requirements will apply until 30 June 2022 to all banks operating in the UAE as part of the TESS Recovery programme. The precautionary relief measures provide additional flexibility to support the UAE economy during the recovery phase.

Table 2.1.6: TESS Prudential Relief Measures

TESS Capital Buffer Requirements Relief	TESS Liquidity Requirements Relief	TESS Stable Funding
• Capital conservation buffer relief from 2.5% to 1% • D-SIB capital buffer relief to 0%[43]	• LCR relief from 100% to 70% • ELAR relief from 10% to 7%	• NSFR relief from 100% to 90% • ASRR relief from 100% to 110%

Source: *CBUAE*

[41] *Note that the prudential requirements stated in the table were adjusted during the pandemic as part of the TESS (see: Prudential Relief Measures during the Pandemic).*

[42] *For more information on the TESS see: Overview of the CBUAE's Targeted Economic Support Scheme in Response to the Pandemic.*

[43] *D-SIB capital buffer requirement relief to 0% for all D-SIB from 1.5% for First Abu Dhabi Bank (FAB) and Emirates NBD (ENBD) and from 0.5% for Abu Dhabi Commercial Bank (ADCB) and Dubai Islamic Bank (DIB).*

BANKING SYSTEM ASSESSMENT

02

CHAPTER 2.2

2021 REGULATORY STRESS TEST

The CBUAE resumed its annual bottom-up stress testing exercise in 2021, after a break in 2020 to ease operational burden on UAE banks during the COVID-19 crisis. The stress test aims to assess the resilience of the UAE's banking system, using a common methodology and scenarios to identify potential vulnerabilities and to provide support for supervisory policies. The stress test results showed that the UAE banking system would be able to withstand a sharp hypothetical economic contraction, with the average CET-1 ratio falling by 288 bps from 14.0% to a trough of 11.2% under the adverse scenario. The CBUAE also conducted regular top-down liquidity stress tests, whose results showed that the UAE banking sector could withstand hypothetical stress periods (up to 60 days) involving a significant outflow of deposits and limited access to market funding.

INTRODUCTION

In 2021, the CBUAE resumed the bottom-up stress test focusing on potential vulnerabilities in the UAE banking sector amid the COVID-19 pandemic. The hypothetical adverse scenario was based on a double-dip recession triggered by new waves of the COVID-19 virus, with adverse shocks further transmitted to the UAE GDP growth rate, oil price, capital, and real estate markets.

The stress test involved 18 banks, covering more than 90% of the UAE banking sector assets. The methodology was similar to the previous round, with a three-year horizon under both a baseline and an adverse scenario. Other key features of the stress test included:

(1) An assessment of banks' lending to vulnerable economic sectors during the COVID-19 pandemic; and

(2) An assessment of banks' deferred loan portfolios. The results showed that the UAE banking sector would be able to withstand the considered scenarios while maintaining adequate capital and liquidity levels thanks to the financial resilience built before entering the pandemic.

Risk and Scenarios

The stress test scenarios were based on CBUAE's assessment of global and domestic risks relevant to the UAE economy. The baseline scenario was a hypothetical projection for a three-year forecast horizon, assuming gradual economic recovery. The adverse scenario envisaged new waves of COVID-19 outbreaks, implying a double-dip recession in the UAE and a significant delay in recovery.

In addition, the adverse scenario also included a concurrent global recession, a persistent decline in oil prices, solvency and liquidity pressures in corporate and GRE sectors, a further decline in equity and housing prices and a rise in credit spreads, and pressure on banks' net interest margins from a low-interest-rate environment[44]. The scenario variable paths were calibrated based on a CBUAE in-house model, historical analysis and expert judgment.

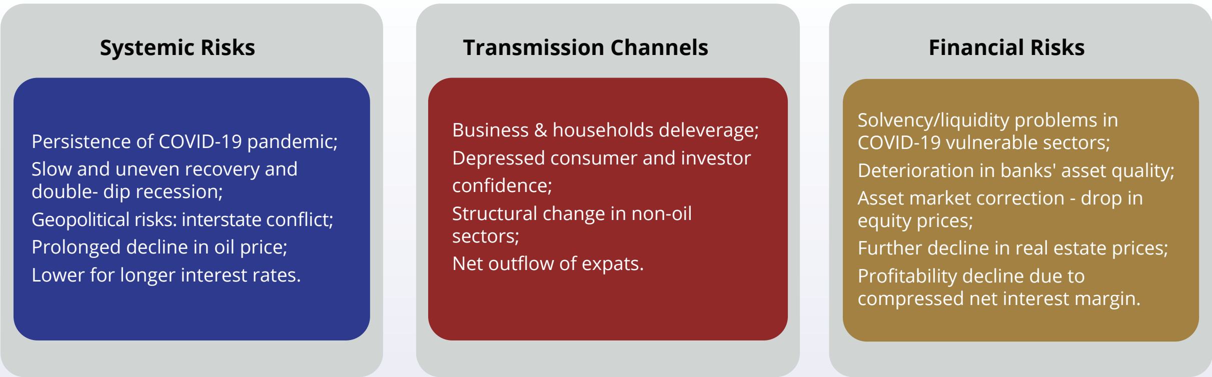
Table 2.2.1: Adverse Scenario Severity Measures for Selected Variables[45]

Variable names	Change from end-2020 to trough
Real estate price (Dubai)	-13.5%
Real estate price (Abu Dhabi)	-14.5%
UAE real GDP	-3.2%
UAE real Non-Oil GDP	-6.9%
Average oil price per barrel	-32.3%

Source: *CBUAE*

In addition to the annual bottom-up stress test, the CBUAE also conducts regular top-down solvency and liquidity stress tests to challenge the bottom-up results and obtain a more up-to- date view on banking sector developments.

Chart 2.2.1: Key Hypothetical Risks to UAE Economy and their Transmission Channels

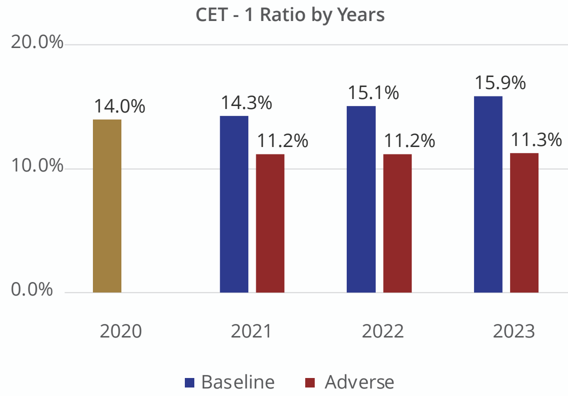


Source: *CBUAE*

Bottom-up Stress Test Results

Under the baseline scenario, banks would remain well capitalised, with an average CET-1 ratio of 15.9% in 2023. Under the hypothetical adverse scenario, the average banking system CET-1 ratio would fall by 288 bps from 14.0% to a trough of 11.2%.

Chart 2.2.2: CET-1 Capital Projections

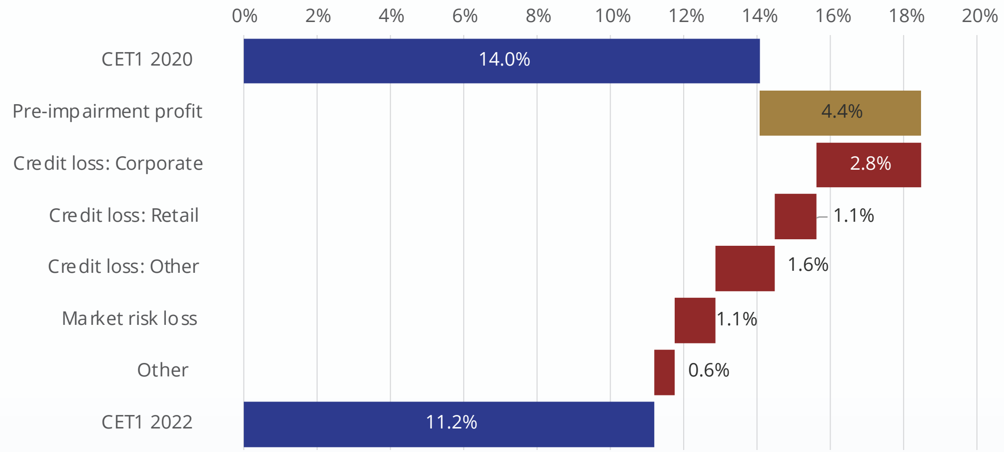


Source: *CBUAE*

The results showed a sizable increase in default rates across all exposure classes. As seen in chart 2.2.3, corporate and retail segments contributed most to the reduction of the CET-1 capital ratio. Other sectors that contributed to the credit risk loss include SMEs, debt securities, local governments, banks and off-balance sheet items.

Overall, the stress test results showed that the UAE banking sector can withstand significant shocks and maintain capital levels above the minimum requirement, despite the stressed starting position and a rather severe adverse scenario.

Chart 2.2.3: Decomposition of CET-1 Ratio Decline



Source: *CBUAE*

[44] *Scenarios consist of scenario narrative and variable paths. The scenario narrative summarises shocks and associated propagation channels. Variable paths include quarterly scenario projections over three-year forecast horizon for 12 main macroeconomic variables, covering key sectors of the economy.*

[45] *Note that the severity of the shocks to GDP and non-oil GDP were reduced compared to the previous stress test, due to their significant low starting positions at the end of 2020. The timing of the trough is different for different variables, and typically occurs 4-6 quarters after the start of the scenario.*

The COVID-19 Vulnerable Sectors and Deferred Loans

The impact of the COVID-19 pandemic on different economic sectors has been uneven. Based on CBUAE research and analysis, the following economic sectors in the UAE were especially vulnerable during the COVID-19 outbreak: tourism, hospitality, transportation, construction and retail trade. In the stress test, the banks were required to consider a more conservative approach in projecting provisions for these sectors under the adverse scenario. In particular, banks were required to move most of the stage 1 exposures in these sectors to stage 2, depending on how recently the rating of a facility was updated.

According to the stress test methodology, the loan repayment moratorium of the deferred loan portfolio was assumed to have ended at the start of the stress test in the adverse scenario, as banks were asked to reassess the credit quality of the loans still classified as deferred at the start of the stress test scenarios.[46] Although the projected adverse scenario share of stage 3 loans was higher for deferred loans compared to the non-deferred loans (16% for deferred loans in 2023 of the adverse scenario compared to 12% of non-deferred loans for the same period), the overall credit risk loss from the deferred portfolio remained limited because of relatively low share of deferred loans in total exposure at the start of the scenario horizon.

Stress Test Review and Policy Actions

In 2021, the CBUAE enhanced its stress testing review process with newly-developed automated quality assurance tools.

The stress test results will support banking supervisors in assessing banks' vulnerabilities under the stress scenario, and contribute to the dividend approval process.

In a macro-prudential policy setting, the stress testing results will serve as one of the inputs to inform the calibration of Counter-cyclical Capital Buffer and the use of other macro-prudential instruments.

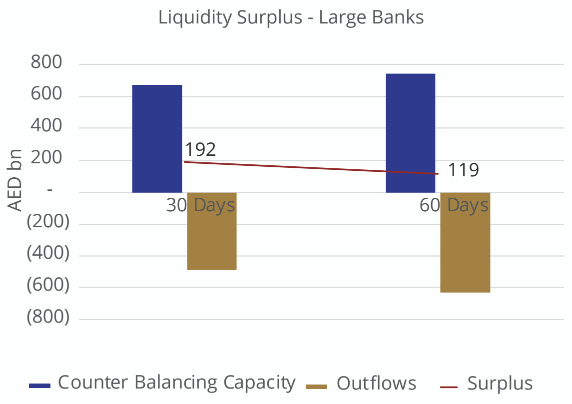
Top-down Liquidity Stress Tests

In addition to the bottom-up stress test, the CBUAE conducted regular top-down liquidity stress tests to assess banks' resilience to hypothetical short-term acute liquidity shocks. The methodology is based on the liquidity coverage ratio with 30-day and 60-day horizons. The liquidity stress tests assessed the resilience of UAE banks against a significant hypothetical outflow of deposits and limited access to market funding. Moreover, the scenario also incorporated asset quality deterioration, funding concentration, and non-resident funding shocks.

The stress tests were performed as one of the CBUAE risk monitoring measures to ensure that liquidity risks could be detected early and promptly addressed. The survival days analysis showed that the UAE banking sector could withstand the stress period (up to 60 days), despite a significant hypothetical outflow of deposits and limited access to market funding. The stress test included all UAE national banks, and the results indicated the resilience of the banks to cover potential short-term liquidity shocks.

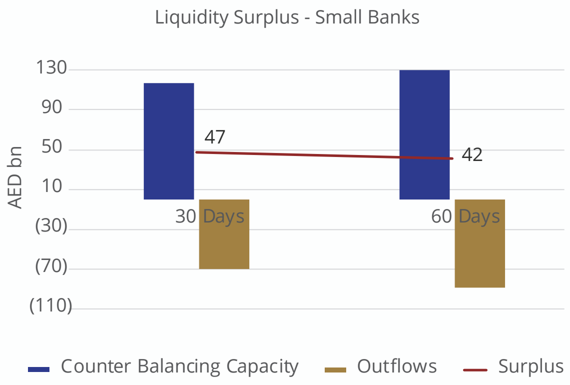
Under the stress scenario, large banks' liquidity surplus (i.e. difference between available liquid assets and net cash outflows under stress) was at AED 192 billion and AED 119 billion in 30-days and 60-days horizons, respectively[47]. Approximately 28% and 16% of counterbalancing capacity remained available for 30-days and 60-days horizons, even under severe stressed outflow assumptions, whereas small banks' liquidity surplus was at AED 47 billion and AED 41 billion at the 30-day and 60-day horizons respectively. This amounts to about 40% and 32% excess counterbalancing capacity for the respective stress horizons.

Chart 2.2.4: Liquidity Stress Test Results – Large Banks



Source: *CBUAE*

Chart 2.2.5: Liquidity Stress Test Results Survival Days – Small Banks



Source: *CBUAE*

In addition to liquidity stress tests, the CBUAE also conducted a liquidity risk survey. This sought to assess UAE banks' preparedness to perform liquidity risk stress test and to provide a better understanding of the key risk drivers of liquidity stress. The survey results showed that most UAE banks have adequate internal liquidity risk controls and management frameworks in place to manage liquidity and funding risks.

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[46] *As part of the TESS, CBUAE issued a joint guidance "The treatment of IFRS 9 Expected Credit Loss provisions in the context of COVID-19 crisis", under which banks were able to freeze the automatic application of certain IFRS9 staging movements. To reflect the most recent trend of deferred loan portfolio, the stress test starting point for the deferred loan portfolio was set to 30 June 2021. The outstanding exposures under deferrals were much lower in mid-2021, compared to the peak of the pandemic in 2020.*

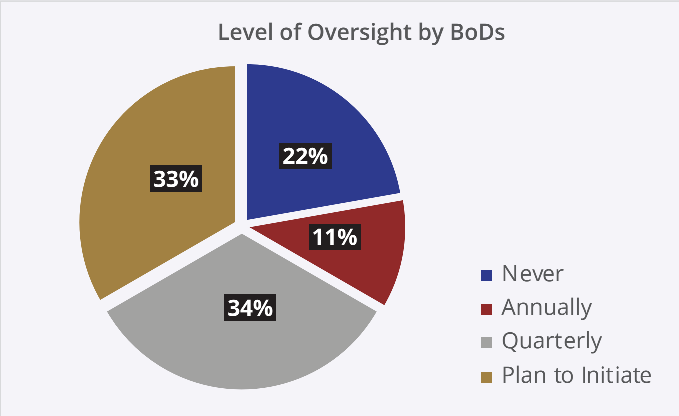
[47] *Top six UAE banks in terms of total assets are designated as "Large." A liquidity surplus is defined as high quality liquidity assets plus cash inflows minus cash outflows.*

CLIMATE-RELATED RISK SURVEY

During the 2021 bottom-up stress test, the CBUAE initiated a climate risk survey to raise awareness related to climate change risks as a first step towards developing a climate risk stress test[48].

Survey results showed that most UAE banks recognise the importance of integrating the physical and transition risks from climate change into their risk governance frameworks. 45% of the UAE banks discuss climate-related risks periodically with their boards, while an additional 33% plan to do so in the near future.

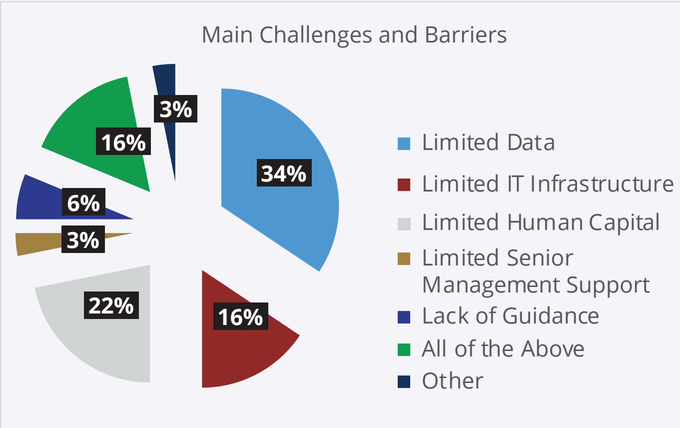
Chart 2.2.6: Level of Oversight of Climate-Related Risks by Board of Directors



Source: *CBUAE*

Although many UAE banks have implemented one or more sustainability policies, the banks cited a lack of data (34%) and human capital (22%) as major impediments.

Chart 2.2.7: Main Challenges and Barriers to Implementing Climate Risk Policies

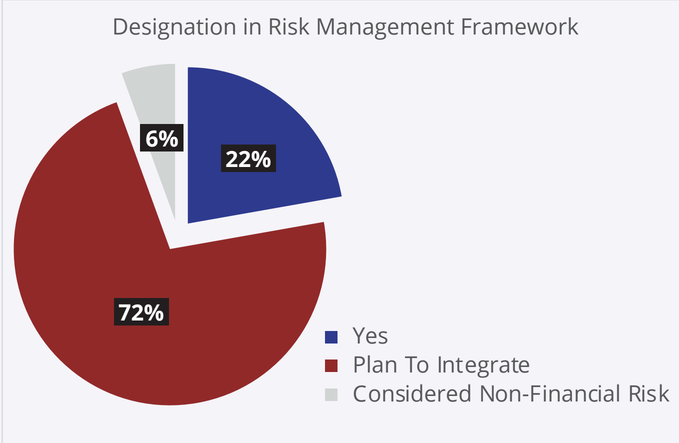


Source: *CBUAE*

Most banks had already integrated or are planning to integrate climate-related risks into their risk management framework, while a smaller share of respondents did not consider climate change as a source of financial risks. Most banks are planning to allocate resources to define risk appetite, develop risk measurement methodologies and incorporate climate risk in loan pricing.

CLIMATE-RELATED RISK SURVEY (contd.)

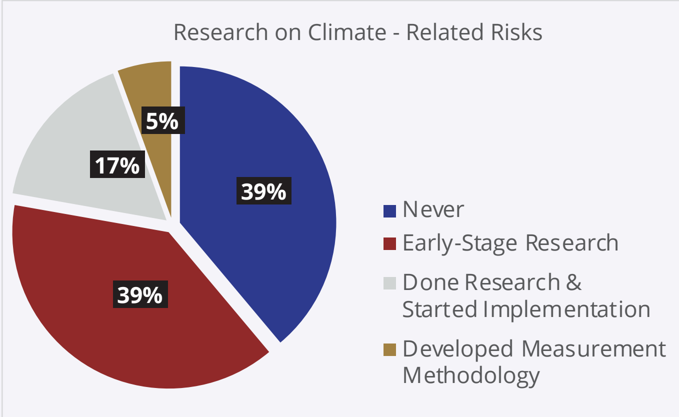
Chart 2.2.8: Designation in Risk Management



Source: *CBUAE*

Finally, a large share of the UAE banks had already initiated research (39%), or have completed research and started implementation (17%), while a smaller share (5%) is in the process of implementing the findings into the risk management framework.

Chart 2.2.9: Research on Climate-Related Risks



Source: *CBUAE*

The survey results showed that most of the banks are engaged in addressing climate change risk, while a minority of the banks have not done enough. The CBUAE is committed to play a central role in supporting UAE banks to integrate climate change risks into banks' governance, strategy, and risk management framework to identify, assess and manage climate change risks.

[48] *The survey included 18 banks that participated in the 2021 bottom-up stress test. Some of the survey results are presented in this box.*

NON-BANK FINANCIAL INSTITUTIONS ASSESSMENTS

03

CHAPTER 3.1

INSURANCE SECTOR

The UAE insurance sector remained resilient and recorded business growth in 2021, as the economic recovery started to gain traction and pandemic-related restrictions were gradually lifted. As a result, Gross Written Premiums grew in 2021, following the decline reported in the previous year. Insurance claims declined in 2021, after higher claims in the previous year, due to the pandemic's impact. Aggregate solvency position for the sector remained above the minimum regulatory requirement.

MARKET STRUCTURE

The UAE insurance sector comprised 62 insurance companies, with a total asset size of AED 123 billion[49] in 2021, growing by about 3.6% from the previous year. Composite insurance companies with a licence to conduct both life and non-life insurance businesses account for the largest share of the sector's total assets representing 51%, followed by life insurance companies at 28% and non-life insurance companies at 21%.

Health insurance is the most prominent line of business in the UAE insurance market, accounting for almost 45% of the Gross Written Premiums (GWP). This is followed by property and liability (non-life) with 36% market share and life insurance with a market share of 19%. The UAE ranks first in the GCC region for insurance penetration, reflected by GWP to GDP ratio (3.3%).[30]

INSURANCE SECTOR PERFORMANCE[51] AND THE IMPACT OF COVID-19

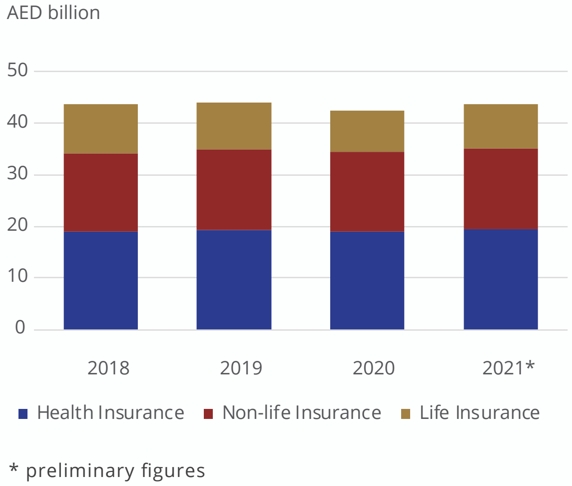
Gross Written Premiums

The insurance sector's GWP rebounded in 2021, after being impacted by the pandemic's repercussions in 2020. GWP grew by 4.2% overall in 2021, compared to a decline of 3.5% in the previous year, attributed to improvements across most business lines.

Health insurance GWPs recorded a 3.0% growth in 2021, compared to the 1.5% decline in the previous year. Life insurance premiums expanded also by 11.0% in 2021, compared to two consecutive years of contraction since 2019.

Non-life insurance GWP grew in 2021, after the previous year's contraction. This growth was driven by an increase in fire, workers' compensation and professional indemnity insurance premiums. Conversely, motor and transportation insurance premiums contracted for a second consecutive year.

Chart 3.1.1: Insurance Sector Gross Written Premiums

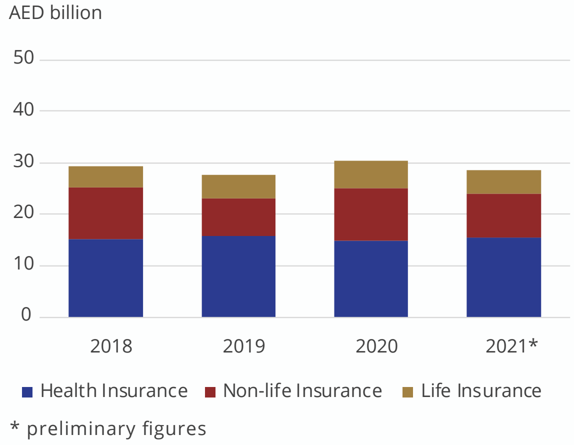


Source: *CBUAE*

Gross Claims Paid

Total gross insurance claims paid declined by approximately 3.0% year-on-year compared to the 9.6% increase in 2020. The largest reduction was from non-life insurance claims, particularly in the engineering, construction and fire categories, where business interruption claims declined more than 25% in 2021 from the recovery in business activities as pandemic restrictions were eased. Similarly, claims from the life insurance category have also reduced. However, health insurance claims that previously declined amid pandemic containment measures on non-essential medical procedures in 2020 rebounded in 2021, as the restrictions were eased.

Chart 3.1.2: Insurance Sector Gross Claims Paid



Source: *CBUAE*

Investment Portfolio Structure

Collectively, the insurance sector's investment portfolio expanded by about 9% to AED 80 billion in 2021, reflecting the recovery in premium growth. Debt securities and equities accounted for the largest share of the portfolio at 32% and 30% respectively, followed by cash and deposits at 26%, while the remainder was in real estate investments.

Composite insurers, accounting for 56% of the sector, have a balanced investment portfolio composed of equity and debt securities, reflecting their diverse product mix. Meanwhile, non-life insurer's investment portfolio comprised more liquid assets, particularly cash and deposits, given the shorter-term liability structure of their products.

Solvency and Profitability

Overall net profit moderated in 2021 to AED 2.2 billion, due to higher operating expenses offsetting increase in income from investments and underwriting (investment income accounted for more than 60% of the insurance sector's total income). On aggregate, the sector's solvency position remained adequate, with the Solvency Capital Ratio at 191.2%, well above the minimum regulatory solvency ratio requirement of 100%.[52]

[49] Total assets of the insurance sector represented approximately 8% of the nominal GDP.
[50] Swiss Re-Sigma Report.
[51] 2021 figures are preliminary.

[52] Recognising solvency deficits in some individual insurance companies, the CBUAE developed a solvency action plan for 2022

NON-BANK FINANCIAL INSTITUTIONS ASSESSMENTS

03

CHAPTER 3.2

FINANCE COMPANIES

The total assets of the nineteen actively operating finance companies contracted further in 2021. Although the majority of finance companies recorded a profit last year, finance companies' profitability and asset quality remained under pressure. The sector remained adequately capitalised and the overall liquid assets ratio of the sector was above the minimum requirement.

OVERVIEW OF FINANCE COMPANIES

In 2021, amid the ongoing repercussions of the COVID-19 pandemic, finance companies' total assets continued to decline, while profitability and asset quality remained under pressure. Nonetheless, the overall finance companies sector remained adequately capitalised, and the overall liquidity ratio of the sector was above the minimum requirements, although there were some notable differences between individual finance companies.

ASSETS OF FINANCE COMPANIES

The total gross assets of the nineteen active finance companies operating in the UAE declined by 6.3% during 2021 to AED 29.5 billion.[53]

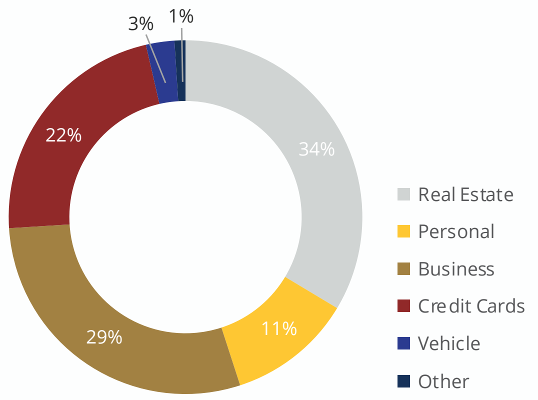
Loans remained the main component of finance companies' assets, accounting for 52.2% of total assets in 2021.

Lending Activities

After a significant reduction of their underwriting activities in 2020 (-22.9%), finance companies remained cautious in 2021, which led to a further decline in gross loans by 12.8% to AED 15.4 billion.

The lending portfolio of finance companies consisted mainly of real estate loans, which accounted for 33.6% of the total portfolio, followed by business loans, credit cards and personal loans. Whereas the share of business loans grew from 22.7% (AED 4.0 billion) to 29.0% (AED 4.5 billion) in 2021, all other loan segments recorded a decline.

Chart 3.2.1: Finance Companies' Loan Portfolio



Source: *CBUAE*

LIABILITIES 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 2021, the total funding of finance companies contracted by 15.4% to AED 10.4 billion, compared to AED 12.3 billion in 2020.

LIQUIDITY

The finance companies' average Liquid Assets Ratio[54] improved in 2021 to 36.7%, well above the minimum regulatory requirement of 10.0%. The increase in liquidity was achieved by liquidity measures in connection with COVID-19 uncertainties, coupled with weaker demand for new financing during the year.[55]

ASSET QUALITY

The asset quality of finance companies continued to decline in 2021. The average Net NPL ratio[56] increased to 7.3% in 2021, from 6.1% in 2020. The NPL ratio represented 37.1% with relatively strong loan-loss provisions, which resulted in the lower Net NPL ratio.

Correspondingly, the Total Provision Coverage ratio[57] and the Specific Provision Coverage ratio remained stable in 2021 at 95.0% and 83.1% respectively, as loan-loss provisions were raised almost proportionately with the increasing non-performing loans.

CAPITAL ADEQUACY

Overall, the finance companies sector remained adequately capitalised in 2021, with an overall capital-to-total assets ratio of 45.6%, up 5.6 percentage points from last year due to a rise in Aggregate Capital Funds.[58]

PROFITABILITY

The sector's profitability broke its negative trend which started in 2018, and bounced back from net loss of AED 1.5 billion in 2020 to a profit of AED 1.3 billion in 2021. Finance companies managed to lower their average cost-to-income ratio to 39.6%, contributing to this positive result.

[53] *The total assets of finance companies represented approximately 2% of the nominal GDP.*
[54] *Liquid assets as defined in Art. 12.1 of the Finance Companies Regulation divided by net aggregate liabilities.*
[55] *Bank-owned finance companies reported a significantly Higher Liquid Assets Ratio than non-bank owned institutions.*
[56] *The Net NPL ratio is defined as non-performing loans divided by gross loans, with interest in suspense and specific provision are deducted from both numerator and denominator.*
[57] *General and specific loan provisions divided by non-performing loans minus IIS.*

[58] *Pursuant to Art. 11.1 of the Finance Companies Regulation, aggregate capital funds consist of paid-up capital, reserves and retained earnings. The aggregate capital funds of finance companies represented AED 10.2 billion compared to an aggregate capital requirement of AED 4.9 billion pursuant to Article 11.6 of the Finance Companies Regulation.*

NON-BANK FINANCIAL INSTITUTIONS ASSESSMENTS

03

CHAPTER 3.3

EXCHANGE BUSINESSES

The exchange house sector remained resilient during the challenging operating environment caused by the pandemic, which witnessed gradual improvement in 2021. The sector comprised of 82 actively-operating exchange houses licensed by the CBUAE. Following a drop in core operations during 2020, the exchange business segment recovered in 2021, supported by a rebound in business activity amid the easing of travel restrictions.

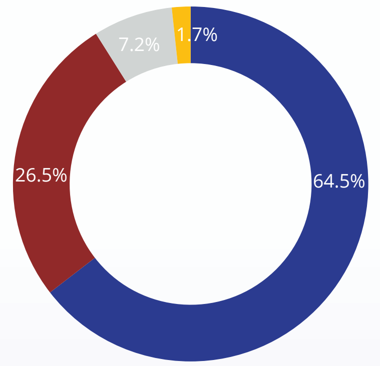
OVERVIEW OF EXCHANGE BUSINESSES

The CBUAE supervised 82 actively-operating exchange houses, with total assets of approximately AED 11.1 billion as of December 2021.[59] The UAE's position as the world's second-largest outbound remittances market (after the United States) emphasises the importance of exchange enterprises in the country's non-bank financial infrastructure.[60] The exchange business segment improved its profitability in 2021, driven by a rebound in foreign exchange operations, as the UAE economy started to recover and travel restrictions were eased.

PRODUCTS AND SERVICES OF EXCHANGE BUSINESSES

The core income of exchange houses consists mainly of remittance operations, foreign currency exchange and wage payments administration. Core operations have been negatively affected by a challenging business environment, in particular during the first year of the pandemic. However, the total core income of exchange businesses operating in the UAE increased by 7.3% in 2021, compared to the decline of 31.2% in the previous year.[61]

CHART 3.3.1: Core Income Of Exchange Businesses



Source: *CBUAE*

Core income from foreign currency exchange business increased substantially by 63.0%, in sharp contrast to the slowdown in business activity during the first year of the pandemic. Nonetheless, foreign exchange operations still did not recover to the pre-pandemic levels, ending the year 26.0% lower than in 2019.

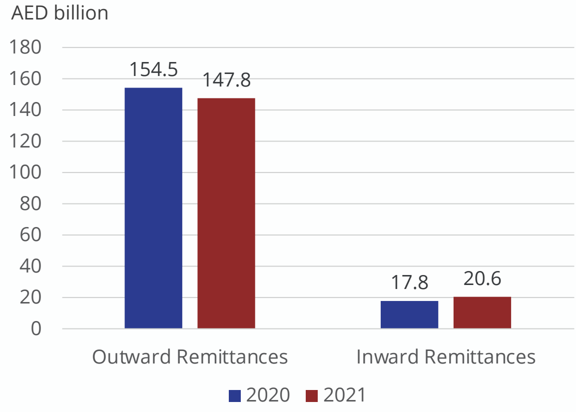
During 2021, core income from remittance operations recorded a decline of 3.4% in contrast to 2020. However, remittance operations maintained their position as the largest income source, accounting for 65.4% of core income of exchange businesses. Meanwhile, 7.2% of the core income was attributed to the payment of wages through exchange houses.

The total expenses of exchange houses during 2021 declined by 6.1%, as the segment optimised cost structures through lower administrative and other expenses. Overall, the exchange house sector recorded a net income of AED 135.8 million in 2021 due to an upturn in core income, compared to a net loss of AED 185.3 million in the previous year.[62]

REMITTANCE OPERATIONS OF EXCHANGE BUSINESSES

Outward remittances through exchange houses during 2021 totalled AED 147.8 billion, with the main component being personal remittances accounting for AED 107.8 billion, followed by trade remittances, AED 26.4 billion, other remittances, AED 12.7 billion and investment remittances, AED 915.3 million. In 2021, outward remittances through exchange houses declined by 4.3%, the second consecutive year of decline amid the repercussions of the global pandemic. Overall inward remittances through exchange houses in the UAE accounted for AED 20.6 billion, with the largest sub-segment being trade remittances, AED 9.2 billion, followed by family remittances, AED 6.1 billion, other remittances, AED 4.6 billion and investment remittances, AED 662.8 million. Total inward remittances recorded by the exchange business increased by 15.7% compared to the previous year.

CHART 3.3.2: Remittances through Exchange Houses



Source: *CBUAE*

CAPITAL OF EXCHANGE BUSINESSES

Overall, the exchange business sector had an aggregate capital position of AED 2.4 billion, representing approximately 21.6% of the sectors' total assets.[63]

[59] *The top 25 exchange houses facilitate over 90% of the sectors' business volume.*
[60] *World Bank. (2020). Migration and Remittances Data.*
[61] *During 2020, one of the largest exchange house operating in the UAE discontinued operations, which also negatively affected the sector's performance.*
[62] *In 2021, the exchange house sector recorded a net income of AED 2.5 billion and total expenses of AED 2.4 billion, resulting in a total net income of AED 135.8 million.*
[63] *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.*

PAYMENT AND SETTLEMENT SYSTEMS, AND CYBER SECURITY

04

CHAPTER 4.1

PAYMENT AND SETTLEMENT SYSTEMS

In 2021, the CBUAE's payment systems continued to be sound and efficient. A total of 231 million transactions were processed and settled through the payment systems during the year, amounting to AED 11 trillion. In particular, the Instant Payment Instruction System (IPI), offering real-time instant domestic fund transfers, witnessed a significant increase in transaction volumes, confirming the trend of higher use of digital payments over traditional fund transfer methods.

PROMOTING CROSS-BORDER PAYMENTS

1. Readiness to Join the GCC-RTGS and BUNA

In 2021, the CBUAE completed all milestones to ensure its readiness to join the Arabian Gulf System for Financial Automated Quick Payment Transfers (AFAQ), which connects the payment systems of the central banks in the GCC countries. After the launch, the banks operating in the UAE will be able to process transactions with other financial institutions in the GCC using their domestic currencies.

The CBUAE also worked closely with BUNA, the Arab Monetary Fund's platform that allows central and commercial banks in the Arab region to process, clear and settle their cross-border transactions by using their domestic currencies[64]. The UAE dirham will ultimately be used as a settlement currency in both systems, which will increase the use of the UAE dirham outside the country.

2. First Phase of the mBridge Project

The CBUAE collaborated on "The mBridge project" with the Hong Kong Monetary Authority, the Bank of Thailand, the Digital Currency Institute of the People's Bank of China, under the auspices of the Bank for International Settlements Innovation Hub Centre in Hong Kong.

The project aims to further explore the capabilities of blockchain technology through developing a Proof-of-Concept (PoC) prototype, to facilitate real-time cross-border foreign exchange payment transactions in a multi-jurisdictional context and on a 24/7 basis.

The project's prototype phase was successfully completed in 2021, with the issuance of a final report. The concerned central banks are now discussing the next phase, which consists of the further development and deployment of the solution to be used in production.

[64] *22 members of Arab Monetary Fund participate in the system.*

FINANCIAL MARKET INFRASTRUCTURE

The launch of Instant Payment Platform

As part of the National Payment Systems Strategy, the CBUAE launched a critical element of the UAE Financial Market Infrastructure modernisation in 2021. Its key objective is to implement the National Instant Payment Platform (IPP) to ensure safe, innovative and convenient electronic payments, making the UAE a leading cashless economy.

The IPP lays the ground to transform the financial services ecosystem in the UAE. It represents the beginning of the next generation of payment services in the region, providing the flexibility needed to respond to a rapidly-changing payment landscape, while complying with best practice and international standards, including ISO 20022.

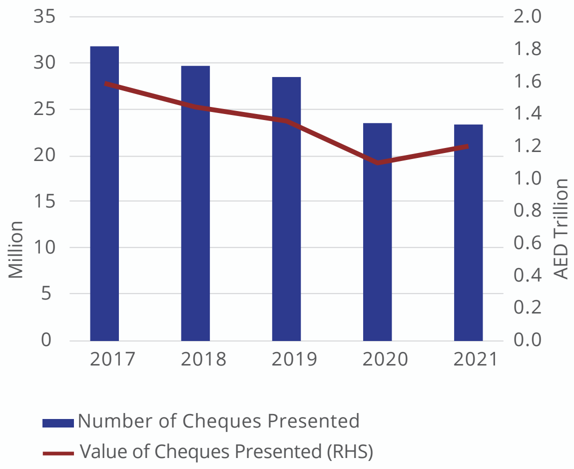
The CBUAE signed an agreement with a consortium of companies selected to lead the IPP implementation at the Future of Finance conference hosted by the CBUAE in October 2021. The first release of the IPP is expected at the end of 2022.

The Operational Capacity of the Existing Payment Systems

The operational capacity of the UAE payment systems continued to be sound and robust in 2021. The operational performance of individual systems are summarised below.

The **Image Cheque Clearing System (ICCS)** processed 22.1 million cheques in 2021, worth AED 1.1 trillion. Although the number of cleared cheques decreased by 0.8% in 2021, their overall value increased by 9.3% compared to the previous year.

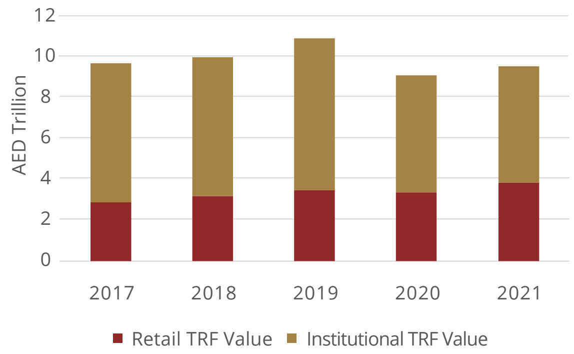
Chart 4.1.1: Presented Cheques Through ICCS



Source: *CBUAE*

The **UAE Funds Transfer System** (UAEFTS) processed 61 million retail transfer transactions worth AED 3.9 trillion (an increase of 19.2% in volume and of 13.9% in value compared to the previous year), plus 537,000 institutional transfers worth AED 5.7 trillion (an increase of 17.1% in volume and a decrease of 0.3% in value compared to last year).

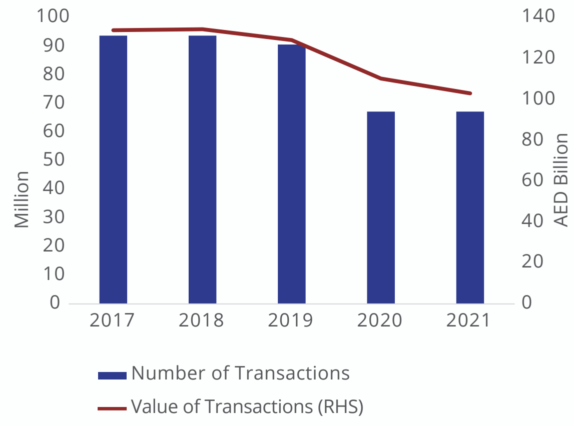
Chart 4.1.2: Value of Transactions Through UAEFTS System



Source: *CBUAE*

The **UAE Switch** volume and value of transactions remained stable at around 66 million transactions worth AED 101.4 billion (compared to 65.9 million and AED 108.5 billion in the previous year).

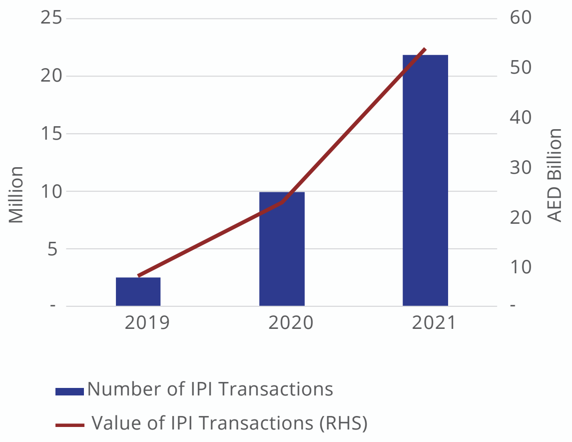
Chart 4.1.3: UAE Switch: Value and Number of Transactions



Source: *CBUAE*

The number of transactions on **Instant Payment Instruction System** (IPI) increased noticeably to 21.1 million transactions, worth AED 51.7 billion in 2021 (compared to 9.6 million transactions amounting to AED 20.9 billion in 2020.)

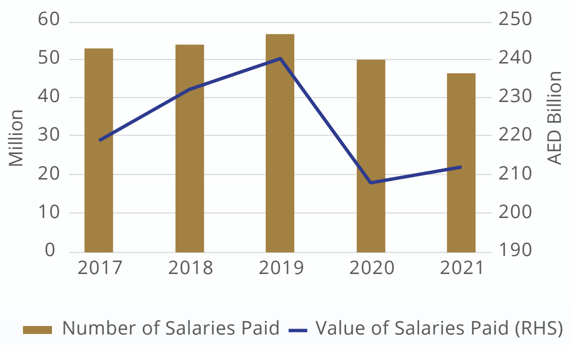
Chart 4.1.4: IPI: Value and Number of Transactions



Source: *CBUAE*

The average number of registered employees on the **UAE Wage Protection System** (WPS) declined from 4.1 million in 2020 to 4 million in 2021[65]. Although the total number of salaries paid reduced from 49.9 million to 46.4 million, the value of transactions increased to AED 212 billion, compared to AED 208 billion in 2020. The number of employers registered on 31 December 2021 in the WPS fell to 216,900 from 219,649 – a decrease of 1.3% compared to 2020.

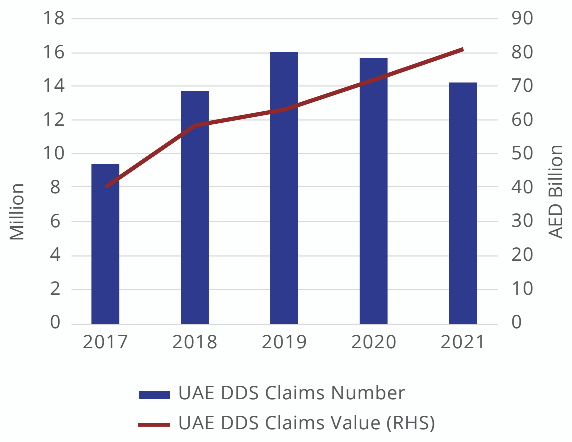
Chart 4.1.5: Transactions Through Wage Protection System



Source: *CBUAE*

The **UAE Direct Debit System (UAEDDS)** performed 13.9 million transactions worth AED 79 billion, a 9% decrease in transactions, whilst their value increased by 13%.

Chart 4.1.6: Claims Through UAE Direct Debt System



Source: *CBUAE*

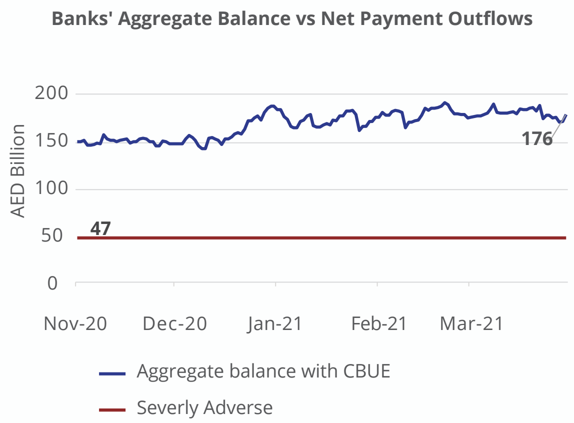
[65] *The WPS includes all employees registered with the Ministry of Human Resources and Emiratisation.*

THE PAYMENT SYSTEM STRESS TEST

The CBUAE conducted a payment and settlement system stress test to evaluate the resilience of the UAE Fund Transfer System (UAEFTS), as part of its internal risk management framework. The stress test measured the impact of hypothetical stress shocks on UAEFTS liquidity levels, and evaluated whether the system participants (the banks) would have sufficient balances with the CBUAE to manage intraday settlements arising from the highest historical aggregate payment obligation under the stress scenarios.

The stress test results showed the strong resilience of the system and sufficient liquidity levels supported by the efficient liquidity management features of the UAEFTS, with high overall payments capacity of UAEFTS participants during the observed periods. A severe hypothetical liquidity stress scenario, assuming very high net payment outflow by participants, led to relatively mild results, with net payment outflow far below banks' balances with the CBUAE[66].

Chart 4.1.7: Payment System Stress Test Results



Source: *CBUAE*

[66] *In the severely adverse scenario, it is assumed that net payment flow would be 120% of the highest net payment outflow observed between 2020 and 2021.*

PAYMENT AND SETTLEMENT SYSTEMS, AND CYBER SECURITY

04

CHAPTER 4.2

CYBER RISK

With accelerated digitalisation and the use of communication technologies in every aspect of social and economic interaction, cyber security incidents remain a threat even for resilient systems. The CBUAE has developed a multi-pillar approach to instil cyber resilience within the Central Bank and across licensed financial institutions.

INTRODUCTION

Computation and communication technologies have become an essential part of everyday activity for individuals, firms and governments. The widespread use of digital technologies and increasing reliance on artificial intelligence allow the expansion and automation of productive processes that were previously unthinkable. This trend has accelerated during the COVID-19 outbreak, with an associated switch to remote working and increased demand for online services.

Whilst the commercial benefits of greater accessibility, scope and efficiency stemming from digital technologies grow, so do the associated frequency and cost of cyber incidents. Firstly, greater reliance on (and the increased complexity of) digital technologies creates a greater number of opportunities and vulnerabilities for cyber criminals to exploit. Remote working requires the traditional office IT security infrastructure to be effective beyond office boundaries. Secondly, criminal methods are becoming increasingly sophisticated, such as ransomware and deep fake technology for social engineering.

Given the increasing number of cyber incidents and potential systemic impact, cyber threats are considered among the top risks globally and in the GCC region[67] – and one of the top five risks for the UAE. Critical national infrastructure vulnerabilities, including within the financial system, have the potential to harm national economic activity and weaken public confidence.

The CBUAE's Response

The CBUAE has developed a multi-pronged approach to cyber security, tightening surveillance systems within CBUAE and within national IT systems, enhancing internal and external awareness, increasing preparedness through multilateral simulations, and by enhancing cyber security governance. For instance, the CBUAE and UAE Banks Federation conducted cyber war-game exercises in early 2021 to strengthen the banking sector's cyber resilience.

As cybersecurity incidents remain a possibility even for resilient systems, all stakeholders should take responsibility for the detection, containment and recovery from cyber incidents, including coordination with other relevant bodies. In late 2021, the CBUAE announced the establishment of the CBUAE Networking and Cyber Security Operations Centre to coordinate and lead security operations to protect the critical financial infrastructure.

As technologies and cyber threats evolve, the CBUAE will continue to develop its cyber response to fulfil its mission of promoting financial and monetary stability, and supporting the UAE's competitiveness.

[67] *According to the World Economic Forum's Global Risk Report 2021.*

ANNEX - KEY REGULATORY DEVELOPMENTS

CBUAE REGULATIONS AND STANDARDS ISSUED IN 2021

1	Minimum Capital for Banks Regulation
2	Specialised Banks with Low-Risk Regulation
3	Outsourcing Regulation and Standards
4	Standard Re Liquidity at Islamic Banks
5	National Shareholding in Banks Regulation
6	Consumer Protection Standards
7	SME Market Conduct Regulation
8	Retail Payment Services and Card Schemes Regulation
9	Regulation on the Reissuance of Certain Regulations
10	Regulation on the Cancellation of Certain Regulations
11	Standards for Bank Real Estate Exposures
12	Large-Value Payment Systems (LVPS) Regulation
13	Retail Payment Systems (RPS) Regulation

In March 2022, the UAE was placed under increased monitoring by the FATF to address strategic deficiencies in its regime to counter money laundering, terrorist financing, and proliferation financing. The country has committed to resolve swiftly the identified strategic deficiencies within agreed timeframes and until the next review is subject to increased monitoring. In its Public Statement in March 2022, the FATF acknowledge that the UAE has made significant progress across its Mutual Evaluation Report's 2020 (MER) recommended actions to improve its system, including by finalising a Terrorist Financing (TF) Risk Assessment, creating an AML/CFT coordination committee, establishing an effective system to implement Targeted Financial Sanctions (TFS) without delay, and significantly improving its ability to confiscate criminal proceeds and engage in international cooperation. Additionally, the FATF stressed that the UAE addressed or largely addressed the majority of the key recommended actions from the MER 2020 and the country will work to implement its FATF action plan. Much progress has been made in the financial sector's supervisory initiatives and regulatory oversight to develop an effective and integrated structure to combat financial crimes of all kinds, which FATF has already recognised.

AML/CFT GUIDANCE INSTRUCTIONS ISSUED IN 2021

1	Guidance for Licensed Financial Institutions on Suspicious Transaction Reporting
2	Guidance for LFIs Providing Services to Legal Persons and Arrangements
3	Guidance for LFIs providing services to the Real Estate and Precious Metals and Stones Sector
4	Guidance for LFIs on the implementation of Targeted Financial Sanctions
5	Guidance for Registered Hawala Providers and for LFIs providing services to Registered Hawala Providers
6	Guidance for LFIs on Transaction Monitoring and Sanctions Screening
7	Guidance for LFIs providing services to Cash-Intensive Businesses
8	Guidance for Licensed Exchange Houses

ANNEX - KEY BANKING INDICATORS

	2019	2020	2021
Capital Adequacy			
CET-1 capital to RWA ratio	14.7%	14.8%	14.2%
Tier 1 capital to RWA ratio	16.5%	17.0%	16.0%
Total capital to RWA ratio	17.7%	18.1%	17.1%
Profitability			
ROA	1.6%	0.7%	1.2%
Cost-to-income ratio	33.9%	37.0%	36.4%
Liquidity and Funding			
Eligible Liquid Asset Ratio	18.1%	18.4%	19.6%
Advances to Stable Resources	81.0%	77.6%	77.3%
Lending Indicators			
Loan-to-deposit	93%	95%	90%
Loan-to-deposit in foreign currency	67%	73%	72%
Asset Quality			
Net NPL ratio	2.6%	3.6%	3.3%
Specific provision coverage ratio	61.6%	57.7%	60.0%
Total Provision coverage ratio	93.1%	86.1%	87.0%

List of Abbreviations

ADCB	Abu Dhabi Commercial Bank
ADX	Abu Dhabi Securities Exchange
AED	United Arab Emirates Dirham
AFAQ	Arabian Gulf System for Financial Automated Quick Payment Transfers
AML-CFT	Anti Money Laundering -Combating the Financing of Terrorism
ASRR	Advances to Stable Resources Ratio
BIS	Bank of International Settlements
Bps	Basis Points
CAR	Capital Adequacy Ratio
CASA	Current Account and Savings Account Deposits
CBDC	Central Bank Digital Currency
CBUAE	Central Bank of the UAE
CDS	Credit Default Swap
CET-1	Common Equity Tier-1
COVID-19	Coronavirus Disease 2019
DFM	Dubai Financial Market
DIB	Dubai Islamic Bank
DLD	Dubai Land Department
D-SIB	Domestic Systemically Important Bank
ELAR	Eligible Liquid Asset Ratio
ENBD	Emirates NBD
FAB	First Abu Dhabi Bank
FCSA	Federal Competitiveness and Statistics Authority
FSB	Financial Stability Board
FSTI	Financial Stability Trend Index
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GRE	Government-Related Entities
GWP	Gross Written Premium
HP filter	Hodrick-Prescott (HP) filter

List of Abbreviations

HQLA	High Quality Liquid Assets
ICCS	Image Cheque Clearing System
IMF	International Monetary Fund
IOER	Interest on Excess Reserves
IPI	Instant Payment Instruction System
IPP	Instant Payment Platform
IRF	Interchange Reimbursement Fees
LCR	Liquidity Coverage Ratio
M&A	Mergers and Acquisitions
NEER	Nominal Effective Exchange Rate
NFSR	Net Stable Funding Ratio
NPL	Non-Performing Loans
OPEC	Organisation of the Petroleum Exporting Countries
PoC	Proof-Of-Concept
POS	Point of Sale
ROA	Return on Assets
ROE	Return on Equity
RTGS	Real Time Gross Settlement
RWA	Risk Weighted Assets
SCA	Securities and Commodities Authority
SME	Small and Medium Enterprises
TESS	Targeted Economic Support Scheme
UAE	United Arab Emirates
UAEFTS	UAE Funds Transfer System
WPS	Wage Protection System