مصرف الإمارات العربية المتحدة المركزي

CENTRAL BANK OF THE U.A.E.

Financial Stability Report 2019

PROMOTING MONETARY AND FINANCIAL STABILITY TOWARDS SUSTAINABLE ECONOMIC GROWTH

“The United Arab Emirates retains financial and economic stability in an ever changing and stressed global macroeconomic environment, with the Central Bank of the UAE being the anchor of monetary and financial stability in the country.”

H.E. ABDULHAMID M SAEED
GOVERNOR

GOVERNOR'S STATEMENT

The Central Bank of the UAE (CBUAE) is committed to contributing to the further development and prosperity of the United Arab Emirates (UAE) economy through promoting and protecting the stability and resilience of the country's financial and banking system. In keeping with this commitment, CBUAE Financial Stability Reports aim to provide transparent and thorough assessments of the UAE's financial and banking system.

The report covers a comprehensive assessment of macro-financial conditions, the UAE banking system including regulatory stress testing, regulatory developments and other aspects relevant to financial stability. The report also includes valuable contributions and assessments of trends and developments in the capital markets and insurance sector for which I would like to express my gratitude to the Securities and Commodities Authority and the UAE Insurance Authority.

The Financial Stability Policy Committee (FSPC) of the CBUAE provides a focused platform for CBUAE efforts towards the review of and contribution to the stability of the UAE financial and banking system. As Chairman of the committee, I am pleased to note that during 2019, the FSPC achieved an ambitious agenda comprising of comprehensive and in-depth assessments of the UAE financial and economic conditions and has taken decisive actions to further enhance the resilience of the financial system.

During 2019, the Board of Directors of the CBUAE approved the Financial Crisis Preparedness and Management Framework based on the recommendations of the FSPC. The framework provides a comprehensive governance strategy across CBUAE functions to ensure preparedness and coordination to proactively manage and resolve potential financial distress.

The Financial Stability Report demonstrated a robust and resilient banking system in the UAE during 2019, but the global challenges posed by the COVID-19 pandemic must not be underestimated. During 2020, the world economy and financial system will be faced with significant challenges posed by the COVID-19 pandemic. In response, the CBUAE and the government launched substantial support programs to help mitigate its adverse impacts.

The CBUAE is well prepared to further support the UAE economy through maintaining the stability of the UAE financial and banking system and contribute to overcoming the challenges ahead.

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EXECUTIVE SUMMARY

Global growth decelerated in 2019, reflecting international trade tensions and geopolitical uncertainty. In the United Arab Emirates, the real GDP growth improved, primarily driven by the hydrocarbon sector, whereas the non-oil real GDP growth remained moderate. Overall, financial market conditions in 2019 continued to be supportive of a stable financial system although the financial cycle in the UAE remained muted. This was particularly demonstrated by the continued decline in real estate prices, due to demand and supply imbalances, and moderation in credit cycle.

The UAE banking system remained resilient with the ability to withstand shocks stemming from the operating environment, as demonstrated by the regulatory stress tests. Capital ratios and liquidity buffers of the banking sector remained adequate and well above regulatory requirements. The banking system remained profitable with improved cost efficiency benefitting from efficiency gains related to recent mergers in the sector. Asset quality, on the other hand, represented a challenge with an increase in non-performing loans ratio although partially mitigated by good provisioning levels.

During the year, bank lending continued to grow at a steady rate, although its distribution was not broad-based. Retail lending registered a decline, while credit to certain sectors such as real estate and construction continued to grow, supported by improved affordability due to declining real estate prices. International exposures of the UAE banking system increased during 2019 underpinned by cross-border acquisitions and diversification in terms of foreign debt securities.

The finance companies sector recorded a decline in total assets with profitability and cost-efficiency remaining under pressure in a challenging operating environment. Overall liquidity and capital ratios of the finance companies sector remained adequate and specific provision levels improved, with some notable differences between individual finance companies. The size of the finance companies sector represented only about one percent of the banking system.

The year also marked concerted efforts from CBUAE including enhancement of regulatory frameworks regarding corporate governance, anti-money laundering, and the continued implementation of the Basel III capital adequacy standards with further focus on financial technology and cyber risks.

The UAE payment systems remained resilient and continued to operate without any major disruptions. The Securities and Commodities Authority and Insurance Authority recent regulatory developments and other initiatives continue to play a vital role in maintaining the stability of the financial system.

Looking ahead, the COVID-19 pandemic has radically changed the outlook for global and domestic activity in 2020 and brought volatility into the financial markets. This Financial Stability Report focuses on developments during 2019, which the UAE banking system concluded in a resilient position. Therefore, the consequences of the COVID-19 pandemic for the banking system are not visible in this report.

CENTRAL BANK OF THE UNITED ARAB EMIRATES HISTORY TIMELINE

1973

UAE currency board was established as per the Federal Law No. (2)

1980

Central Bank of the UAE was established as per the Union Law No. (10) of 1980 the Monetary System and Organisation of Banking

1985

Enhanced legal framework as per the Federal Law No. (6) of 1985 regarding Islamic Banks, Financial Institutions and Investment Companies

2009

The Financial Stability Department was formed at the Central Bank of the UAE

2018

Issuance of the Decretal Federal Law No. (14) of 2018 regarding the Central Bank and Organisation of Financial Initiations and Activities

2018

Establishment of the Financial Stability Policy Committee of the Central Bank of the UAE

2020

Launch of the Targeted Economic Support Scheme (TESS) to mitigate the repercussions of COVID-19 pandemic

PART 1.
MACRO-FINANCIAL CONDITIONS AND FINANCIAL CYCLE

1.1 MACRO-FINANCIAL DEVELOPMENTS

Global growth decelerated in 2019, reflecting the disruptive impact of trade policy uncertainties and geopolitical tensions. Nonetheless, the real GDP growth of the United Arab Emirates was estimated to improve in 2019, supported by the robust growth in the hydrocarbon sector. Looking ahead, the COVID-19 pandemic has radically changed the outlook for global and domestic economic activity in 2020. While the foundations of the UAE financial system are strong, financial system participants should remain cautious and exercise financial prudence amid the ongoing uncertainties in the economic outlook.

GLOBAL ECONOMY

Global economic growth was estimated by the International Monetary Fund (IMF) at 2.9% in 2019[1], a slight downward revision compared to the earlier projections. The downward revision reflects sluggish growth in advanced and emerging market economies, the broad effects of the trade war between the United States and China, and the impact of increased geopolitical tensions. Commodity prices fluctuated markedly during the year. The Brent oil price averaged USD 64.3 per barrel in 2019, registering a decline of 9.8% year-on-year, mainly explained by the weak global activity.

Since early 2020, COVID-19 pandemic has caused severe demand and supply disruptions. As a result of the pandemic, the global economy was estimated to contract by -3% in 2020 according to the latest April 2020 edition of IMF World Economic Outlook (WEO). A recovery was projected for 2021, with global GDP growth at 5.8% in 2021 in IMF's baseline scenario. The timing and the shape of future recovery remains highly uncertain, depending on containment of the virus, confidence effects, volatile commodity prices, as well as synchronized global efforts in providing fiscal and monetary stimulus.

DOMESTIC ECONOMY

The Federal Authority for Competitiveness and Statistics (FCSA) estimated overall real GDP growth at 1.7% in 2019, up from the 1.2% in 2018. The stronger GDP growth was primarily driven by the hydrocarbon sector, which was estimated to increase by 3.4%. The non-hydrocarbon sector was expected to have advanced at a softer pace, rising by 1.0% in 2019.

The UAE experienced a deflation of 1.9% in 2019 compared to an inflation of 3.1% in 2018. This is the first time the Consumer Price Index (CPI) registered a decline since it was introduced by the FCSA in 2009. This was mainly driven by the continued decline in rent and utilities, which represent 34% of the consumption basket, lower oil price which translated into lower fuel costs, as well as an appreciating AED vis-a-vis major non-US trading partners.

FINANCIAL MARKET DEVELOPMENTS

Reflecting the US Federal Reserve's policy rates decreases during 2019, CBUAE decreased its rate on one-week Certificates of Deposit (CDs) three times from 2.25% to 1.5% during the year which were mirrored by the lower interest rates in money markets.

On the credit markets, the Credit Default Swap (CDS) sovereign spreads of Dubai and Abu Dhabi remained low throughout the year. The average Dubai 5-year CDS spread in 2019 was 128 basis points (2018: 118 basis points), while the average of Abu Dhabi CDS spreads was 54 basis points (2018: 63 basis points).

Equity markets in both Abu Dhabi and Dubai managed to grow, with the total market capitalization of Abu Dhabi Securities Exchange (ADX) and Dubai Financial Market (DFM) reaching AED 905.4 billion, an increase of 3.0% from 2018. In terms of domestic equity indices, the DFM share price index rose by 9.3%, while the ADX index increased by 3.3% in 2019.

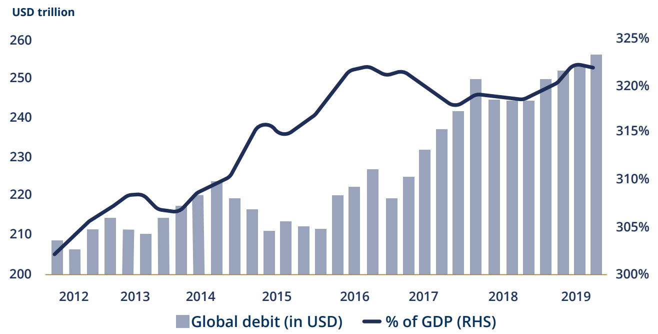
[1] This is according to the IMF World Economic Outlook report in January 2020.

MACRO-FINANCIAL RISK

Since late 2019, there were signs of stabilization in the global economy with the US-China trade tensions de-escalating. However, the COVID-19 pandemic has abruptly changed the outlook for the global and domestic economy. The global financial conditions have tightened amid volatile equity markets, widening credit spreads and tightening funding conditions.

The impact of the pandemic has heightened concerns over debt sustainability of households, corporates and some sovereigns. Although many central banks and governments have rolled out stimulus packages to contain the COVID-19 pandemic risk and support the economy, a number of firm defaults and job losses are inevitable. According to the Institute of International Finance, global debt reached an all-time high of about USD 253 trillion (322% of global GDP) in Q4 2019, which constitutes a vulnerable starting point.

CHART 1.1.1: GLOBAL DEBT



Source: Institute of International Finance

In addition, along with the weakening global demand, oil producing countries - including the UAE - have suffered from the failure of OPEC+ to reach an agreement on oil production cuts in March 2020, contributing to the sharp fall in oil prices during the first quarter of 2020. Over the longer term this may put fiscal pressure on countries with lower financial reserves.

Going forward, the climate change-related risks are likely to have an increasing impact on industries and financial entities. The increase in the frequency and intensity of severe weather phenomena, along with the transition to a low-carbon economy, can also pose risks to financial stability through large and sudden credit losses as well as firms' outdated business models. This poses new challenges to central banks and regulators to improve understanding of climate-related risks and the development of scenario-based stress testing[2].

2 Around 50 central banks have joined the Network for Greening the Financial System (NGFS), a central banks' network focusing on climate change risk management.

1.2 MACRO-FINANCIAL CYCLES

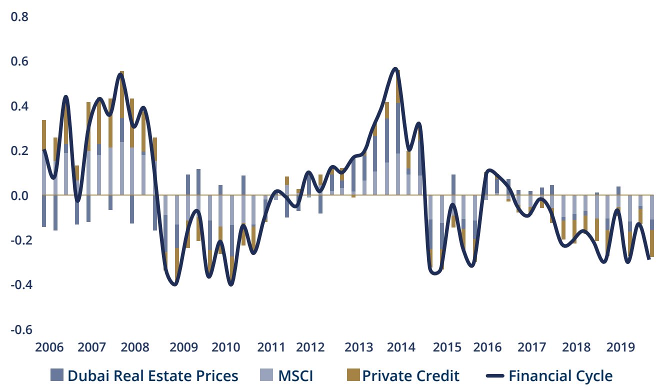
The UAE financial cycle seemed to remain in the contractionary phase in 2019 and since the end of 2016, as illustrated by the recently developed financial cycle index and the credit-to–non-oil-GDP gap. Private credit growth slowed down during 2019 in line with the muted non-oil GDP growth experienced during 2019, coupled with softening of UAE real estate market which added downward pressure on the financial cycle. Credit-to-non-oil-GDP gap and non-core liabilities to core liabilities of the banking sector remained at similar to the previous year around -20% and 24% respectively as at the end of 2019. The Financial Stability Trend Index (FSTI) remained stable during the first three quarters of 2019 before improving in the last quarter. Driving the FSTI upward in late 2019 was the economic index, specifically the oil price increase. The banking index remained stable, while the securities market index improved overall with less realised market volatility and an improvement in the government bond markets.

FINANCIAL CYCLE

The financial cycle is a helpful indicator in measuring how the financial system is performing relative to its long-term historical trend and to align it to the real economy. The financial cycle can be defined as "the self-reinforcing interactions between perceptions of value and risk, risk-taking, and financing constraints" (Borio, 2014). Similar to the principle of an economic business cycle, the financial cycle has its peaks where asset prices are booming and credit growth is also strong, and its troughs where those trends tend to reverse and have their macroeconomic repercussions. Disentangling the trend and cycle components turns out to be challenging and very dependent on the modelling approach, which creates the need to derive the short-versus long-term financial variables' fluctuations assuming alternative methodologies. This implies difficulties in aligning different economic policies in general and gives rise to the importance of the use of macro prudential policy. It is important to emphasise beforehand that estimating cycles whether financial, business or credit is deemed to be a challenging task, due to absence of long data series and the existence of several statistical estimation methods that could lead to significantly different outcomes.

The approximated composed financial cycle of the UAE concentrates on three distinct but interdependent market segments, which are credit growth, housing prices, and equity prices. Thus, the UAE financial cycle is constructed by combining filtered quarterly growth rates of the three following indicators, the UAE-wide private credit, average Dubai real estate sales prices, and the MSCI UAE index. The compilation methodology of the financial cycle follows two main steps, first is the standardising of the variables given their different measurement units using their medians and standard deviations, followed by statistical treatments similar to those proposed by the European Systemic Risk Board[3].

CHART 1.2.1: UAE FINANCIAL CYCLE



Source: CBUAE, FCSA, Bloomberg, REIDIN and CBUAE staff estimates

Generally, the components of financial cycles are synchronized, especially during coincident cyclical episodes in credit and housing markets, which has been the case in the UAE (at least for the data length cover) while the stock market shows less

[3] Hiebert, P., Peltonen, T. and Schüler, Y., "Coherent financial cycles for G-7 countries: Why extending credit can be an asset", Working Paper Series, No. 43, ESRB, Frankfurt am Main, May 2017.

correlation. As of December 2019, the financial cycle in the UAE seemed to remain muted mainly driven by the persistent decline in real estate prices and sub-median credit growth.

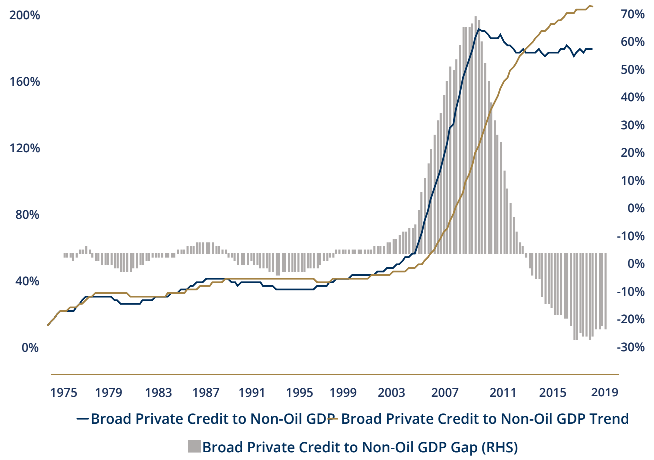
CREDIT CYCLE

Private credit in the UAE experienced the slowest growth in the past ten years growing at 1.3% in 2019 compared to 3.5% in 2018. Total private credit[4] in the UAE are funds borrowed by non-bank UAE entities and comprises of three components: loans from UAE banks, issuance of bonds by UAE entities, and borrowing of UAE entities from abroad.

The Private Credit-to-Non-Oil GDP gap is a widely adopted indicator by researchers and analysts for its historical ability to indicate potential excessive credit growth. As of December 2019, the private credit to non-oil GDP gap stood at -20%, stabilising at this level for the third year in a row. This indicates that the credit growth is growing below the growth rate of the non-oil GDP of the UAE when compared to the long term trend.

Another way to analyse the credit-to-non-oil GDP gap is to estimate with a shorter time series (2007-2019) given the structural shift that is believed to have happened during 2007. The gap with a structural shift[5] is estimated to be around zero percent, indicating that there is no potential excessive credit growth.

CHART 1.2.2: BROAD PRIVATE CREDIT TO NON-OIL GDP: LEVEL, TREND AND GAP



Source: CBUAE, FCSA, Bloomberg and CBUAE staff estimates

As banks funding structures also serve as an important indicator of any potential excessive risk taking and the impact it might have on depositors and borrowers, it is important to monitor the degree of their reliance on non-core liabilities[6], as an increase in this category might signal a build-up of systemic funding risk in the UAE banking system. However, the ratio of non-core liabilities to core liabilities remained stable in line with previous years' figures, hovering around 24% throughout 2019.

CHART 1.2.3: NON-CORE LIABILITIES TO CORE LIABILITIES RATIO

Source: CBUAE

FINANCIAL STABILITY TREND INDEX

The Financial Stability Trend Index is a quantitative measure developed by the CBUAE combining eighteen macro-financial indicators into one composite index. The indicators are grouped into three sub-indices; the Banking Index, the Economy Index, and the Securities Market Index, with each representing certain aspects of the macro-financial environment that affect the UAE financial system. While the index does not predict financial crises, it does reflect important macro-financial characteristics of financial stability. A positive FSTI number indicates supportive macro-financial conditions while a negative FSTI number suggests weakening conditions.

In 2019, the FSTI remained in the positive territory with the overall index increasing around 25 index points, indicating an overall supportive macro-financial environment. The Banking and Securities Market sub-indices stayed positive, while the Economy Index moved from negative to positive territory in the fourth quarter of 2019. The increase in FSTI was mainly due to the Economy Index while the Banking and Securities Market sub-indices also contributed to the improvement.

The Banking Index contributed around 5 index points to the overall increase in FSTI. Banking liquidity

4 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.

5 Due to the several policy changes that happened in the UAE around that period in terms of population growth, real estate and general openness to the world economy.

6 Represents mainly deposits from outside of the UAE.

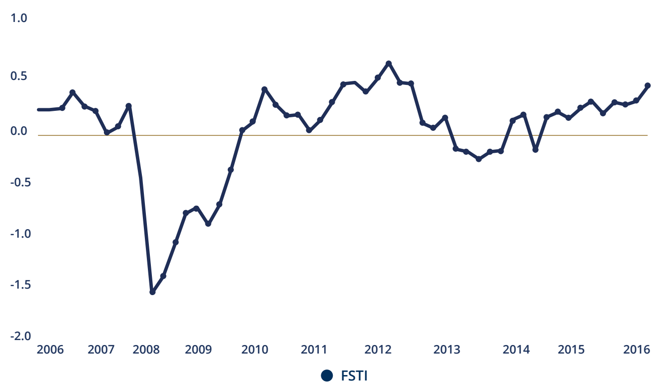
indicators improved during the last quarter of 2019, specifically the Loan to Deposit (LTD) and Eligible Liquid Assets (ELAR) ratios. The gains were however offset by the declining banking equity market indicators such as the volatility of banking sector equities, which kept the banking sub-index stable during 2019.

The Economy Index contributed around 15 index points of the overall increase in the FSTI. Although the real estate prices have continued their decline in 2019, the deviation of real estate prices from the long-term price trend has narrowed compared to the pace of decline in 2018. The main contributor to the performance of the Economy Index is the increase of year-on-year spot oil prices in the last quarter of 2019.

The Securities and Market Index contributed around 6 index points of the overall increase in the FSTI. Remaining stable during the first three quarters, the sub-index increased in the last quarter of 2019. All three indicators in the sub-index, Realized Market Volatility, Credit Default Swaps (CDS) and the Price to Earnings (P/E) ratio have contributed to the increase of the sub-index relatively equally.

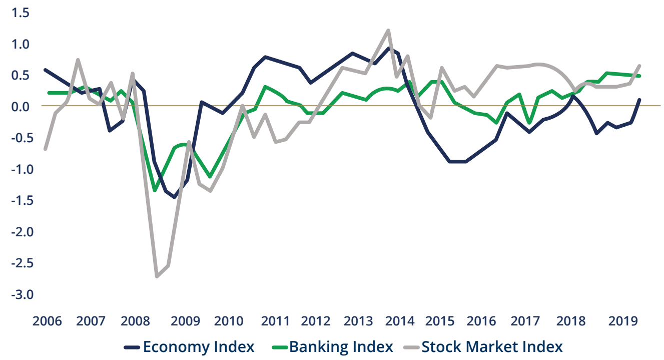
Effects of the challenges posed by the COVID-19 outbreak in early 2020 on the FSTI are expected to be reflected in the 2020 FSTI.

CHART 1.2.4: UAE FINANCIAL STABILITY TREND INDEX



Source: CBUAE

CHART 1.2.5: UAE FINANCIAL STABILITY TREND INDEX: SUB-INDICES



Source: CBUAE

1.3 HOUSEHOLD AND CORPORATE SECTOR

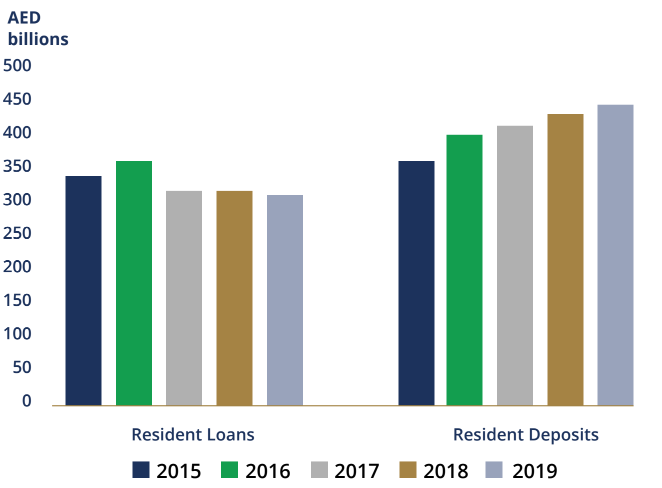
Domestic credit to households contracted by 1.4% in 2019, a slowdown from the muted growth seen last year, while resident household deposits increased by 8.0% in 2019 compared to 5.5% a year earlier. Car loans and consumer loans were the main drivers of the decline in aggregate number. Corporate balance sheets have remained resilient overall, amid relatively stable debt levels and healthy earnings growth. While prolonged low policy interest rates environment would alleviate firms' funding pressure, corporates may become distressed against the backdrop of global economic uncertainties.

HOUSEHOLD LOANS AND DEPOSITS

Households play an important role for financial stability, as they constitute an important source of funds for the banking system. The growing sophistication of household saving and investment patterns gives rising importance to this segment, as households impose more risks on the banking system.

First signs of slowing credit can be seen in during 2017 as the year-on-year bank credit growth declined from a 5.0% growth rate in 2016. Lower demand and tighter lending standards were both likely to have contributed to this trend.

CHART 1.3.1: HOUSEHOLD LOANS AND DEPOSITS



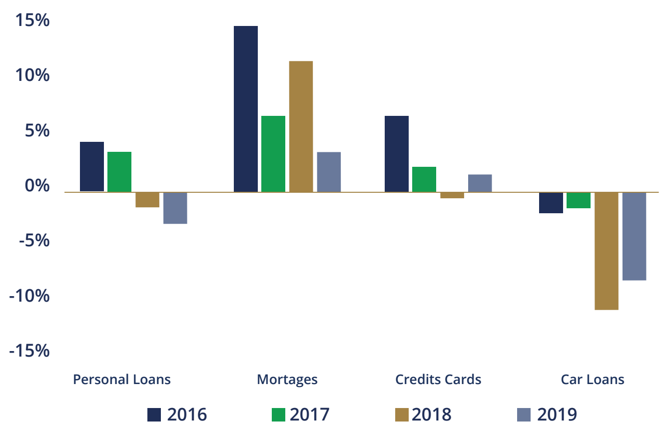
Source: CBUAE

Loans to resident household represent around one-fifth of the UAE banking sector, standing at AED 333 billion as of December 2019, and standing at around 30% of UAE's non-oil GDP. Credit growth to households have slowed in recent years, due both to a slowing economy and tighter lending standards. In 2019, the resident household loan portfolio shrank by 1.4% in 2019, after experiencing zero growth last year.

Resident deposits have outpaced resident loans, suggesting that households' balance sheets have improved with lower leverage. However, households shall continue to be cautious in taking on more debt, given the major uncertainties in the economic outlook. In particular, global and local measures to contain the COVID-19 pandemic will lead to job losses in the short term, putting a strain on household's ability to service the debt.

Different categories of household debt developed differently during 2019. Car loans, for instance, declined by 7.6% in 2019, slightly better than the sharper decline experienced in 2018 of 13.5%. Other categories of lending to households have averaged between a decline of 2.3% in consumer loans to a growth of 2.9% in loans for real estate purposes. The vast majority of household loans are denominated in the UAE Dirham.

CHART 1.3.2: HOUSEHOLD LOANS GROWTH BY CATEGORY



Source: CBUAE

When assessing household indebtedness[7], it is also useful to consider the level of deposits the households hold in the banking system. Resident household deposits grew steadily during 2019 at 8.0%, reaching AED 452 billion as of December 2019, while non-resident deposits shrank by 3.1% to reach AED 25 billion as of December 2019.

Most households park their deposits in demand or saving deposits which make up about three quarters of deposits, while the remainder is held as time deposits. Some 88% of household savings are denominated in the local currency, while the rest is in foreign currencies.

CURRENT REGULATIONS RELATED TO HOUSEHOLD DEBT

CBUAE regulations limit the maximum Debt-Service-to-Income ratio (DSTI) of a household to 50% of their current monthly income.

CBUAE has also set a limit on consumer loans limit at 20x the monthly salary or the total monthly income of the borrower. Banks and finance companies must ensure that this limit is not exceeded. The repayment period of household consumer loans shall not exceed 60 months.

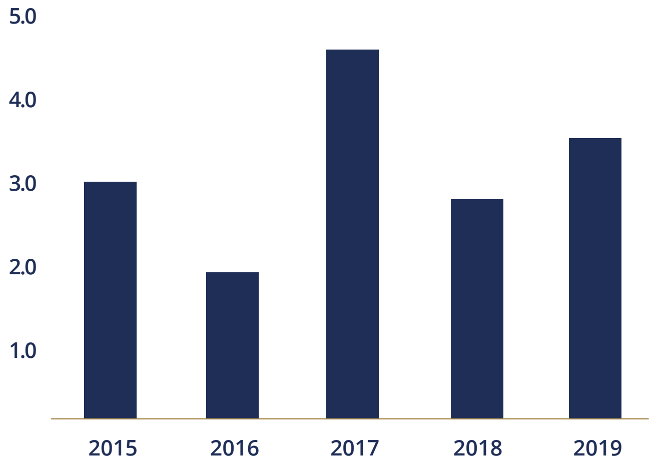
Car loans are treated separately from consumer loans, and must not exceed 80% of the value of the financed vehicle.

CORPORATE SECTOR

The corporate sector[8] plays an important role in the overall economy and for financial stability. This comprises of publicly listed non-financial corporates in the UAE.

Amid the low interest rate environment, corporate debt-to-GDP increased slightly over the past year, increasing from 132% in 2018 to 136% in 2019. The capacity of corporates to meet their debt service obligation is what matters for financial stability than the aggregate size of their credit. This capacity is measured by the interest coverage ratio, which compares the earnings before interest and tax (EBIT) with interest expenses. The average interest coverage ratio has improved to 2.8 in 2019 from 2.1 in 2018.

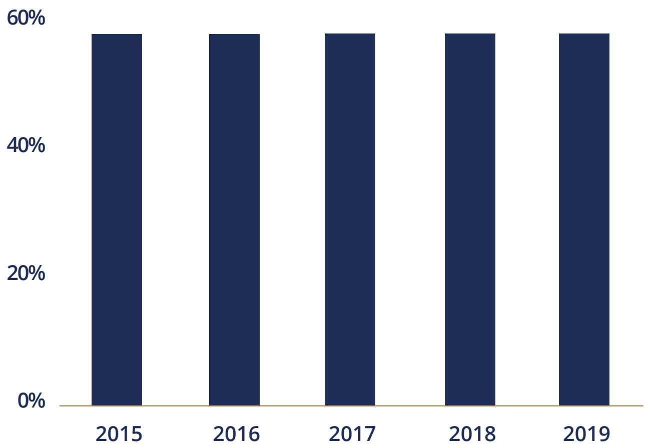
CHART 1.3.3: INTEREST COVERAGE RATIO



Source: Bloomberg

The ratio of liabilities to assets has been decreasing and reached 125% as of the end of 2019, down from its peaks of around 160% during the global financial crisis. Overall, the leverage profile of publicly listed non-financial corporates has remained quite stable over the past years, with liabilities averaging some 55% of assets.

CHART 1.3.4: LIABILITIES TO ASSETS RATIO



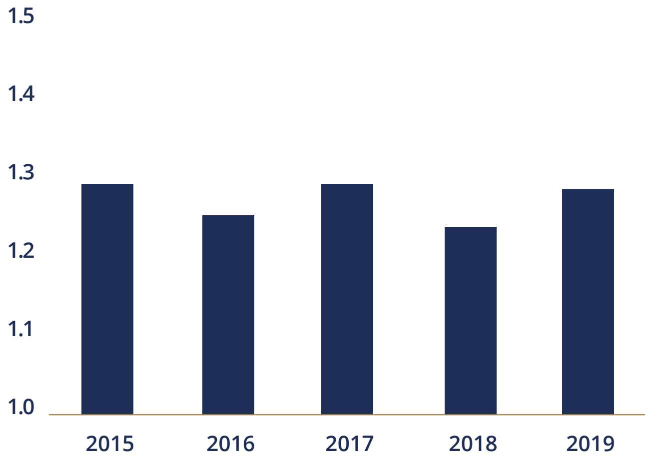
Source: Bloomberg

Corporates' capacity to meet short-term liabilities is also healthy, as measured by the current ratio standing at 1.3 similar to its levels in the past five years, suggesting that corporates have stable short term liquidity.

[7] The Central Bank of the UAE is working with Al Etihad Credit Bureau to better capture the indebtedness of the UAE household and derive precise measurements of household indebtedness.

[8] The sample includes 58 companies that are listed on Dubai Financial Market and Abu Dhabi Securities Exchange.

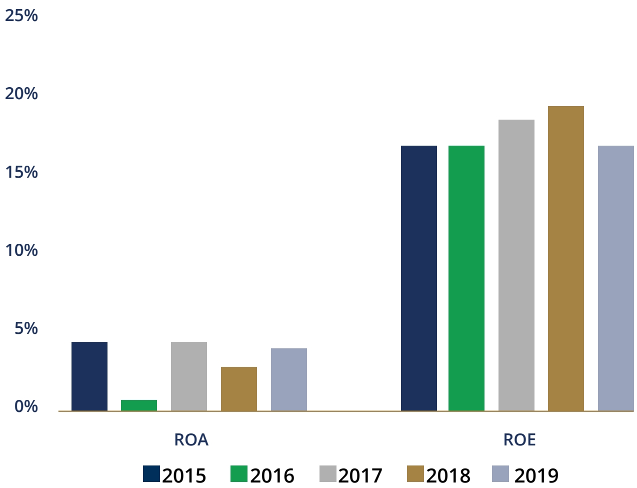
CHART 1.3.5: CURRENT RATIO



Source: Bloomberg

Earnings indicators also remained robust in 2019. While return on assets (ROA) decreased slightly to 3.8% as of the end of 2019, the return on equity (ROE) stayed relatively stable.

CHART 1.3.6: RETURN ON ASSETS AND RETURN ON EQUITY



Source: Bloomberg

While prolonged low policy interest rates could alleviate firms funding pressures, corporates may become distressed against the backdrop of global economic uncertainties and widening credit spread. As a result of the COVID-19 pandemic, debt servicing capacity are expected to deteriorate in 2020, especially those that are over-leveraged.

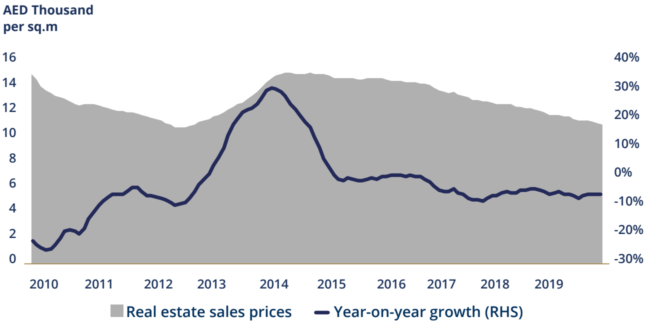
1.4 REAL-ESTATE MARKET

The United Arab Emirates (UAE) real estate market remained on a downward trend as residential real estate sales prices, residential rental prices and offices rental prices continued to decline. While the prices in the residential market remained subdued as a result of the increased housing supply, the overall decline of house prices has moderated. Notwithstanding the supply and demand imbalances and banks' loan exposure to real estate, the 2019 stress testing results indicated that the banking system is resilient to shocks in the real estate market.

RESIDENTIAL REAL ESTATE MARKET

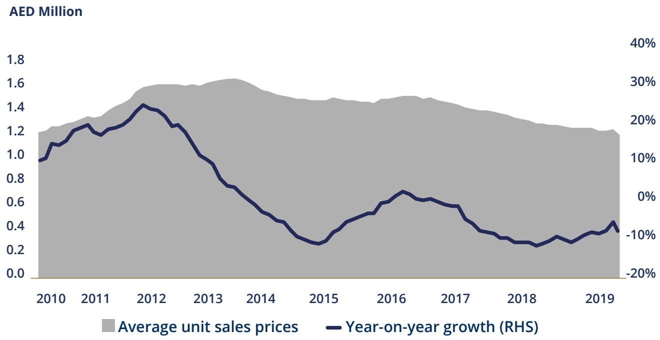
Residential real estate sales and rental prices have been declining since mid-2014 in both Abu Dhabi and Dubai. During 2019, Abu Dhabi residential sales prices declined by 7.5% compared to 6.8% in 2018, whereas Dubai prices declined at a slower pace by 8.1% compared to 11.5% in the previous year as reported by Dubai Land Department (DLD)[9-10]. The residential real estate new supply in Abu Dhabi reached around 3,900 units in 2019 compared to 5,600 units delivered in the previous year. In Dubai, new supply reached around 33,600 units, the highest since 2009[11]. Although prices in residential market remains subdued as a result of the high level of housing supply and a weaker economic backdrop, the overall decline of house price has moderated.

CHART 1.4.1: ABU DHABI RESIDENTIAL REAL ESTATE SALES PRICES



Source: REDIN

CHART 1.4.2: DUBAI RESIDENTIAL AVERAGE UNIT SALES PRICES



Source: DLD

Residential real estate rental prices continued to decline in Abu Dhabi and Dubai. In 2019, rental prices declined by 6.2% in Abu Dhabi compared to 9.6% in 2018. In Dubai, rental prices dropped by 7.9% compared to 5.6% in the previous year[12]. Annual average gross yield on residential property remained at 6.8% for Abu Dhabi while the yield in Dubai picked up slightly reaching 6.4%.

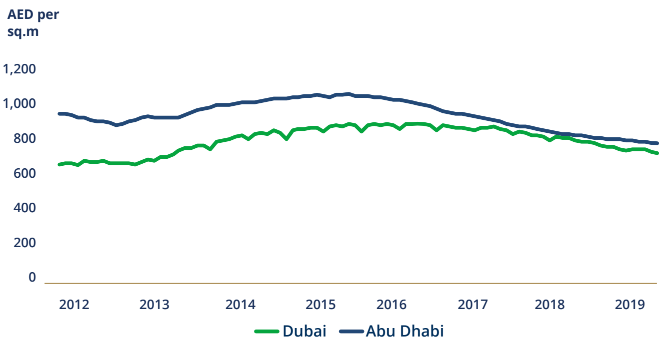
9 The changes in residential real estate sales prices are calculated on a year-on-year basis comparing the end of period monthly figures for December 2018 to December 2019.

10 The average annual rate of change of residential real estate sales prices in 2019 was -7.7% in Abu Dhabi and -8.8% in Dubai. The average annual rate of change represents the average real estate sales prices during the entire year compared to the previous year.

11 Figures for supply sourced from REIDIN.

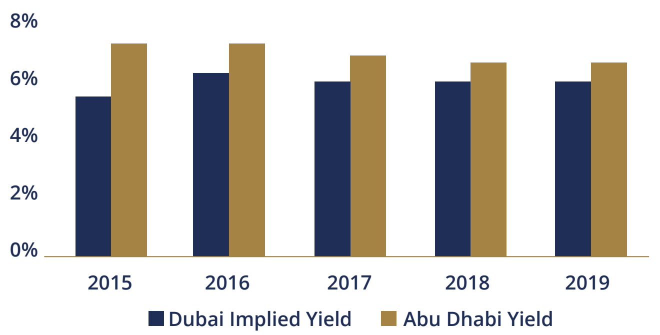
12 Average annual rate of change of residential real estate rental prices in 2019 was –7.7% in Abu Dhabi and –7.2% in Dubai.

CHART 1.4.3: ANNUAL RENTAL PRICES



Source: REIDIN for Abu Dhabi and DLD for Dubai

CHART 1.4.4: AVERAGE RESIDENTIAL YIELD



Source: REIDIN for Abu Dhabi and DLD for Dubai

REAL ESTATE TRANSACTIONS

Amid improved affordability as prices and rents declined, the number of transactions picked up in Dubai during 2019, after a decline in the previous year. The total number of sales transactions increased by 20.2%. Sales transactions for real estate under construction (off-plan), which accounts for more than half of total transactions, increased by 34.5% in 2019, while transactions of completed units increased by 5.8%. In terms of the total value of transactions, under construction sales value increased by 50% while the value of completed transactions dropped by 4.9% compared to the previous year[13]. Transactions data are not available for Abu Dhabi.

COMMERCIAL REAL ESTATE

Office rental prices declined at a slower pace in Abu Dhabi compared to Dubai. Abu Dhabi rents declined by 1.6% compared to 8.5% in 2018 while Dubai office rents declined by 6.1% compared to 4.8% in the previous year. Occupancy rates in Abu Dhabi fell slightly to 78% in 2019 compared to 80% in 2018 while Dubai's remained stable at 80%[14].

In the hospitality sector, hotels and hotel rooms in Abu Dhabi and Dubai witnessed a slight shift. In Abu Dhabi, a total of 138 hotels were operational in 2019 whereas the number of hotel rooms slightly declined to 29,100 rooms from 29,300 in 2018[15]. On the other hand, Dubai in 2019 added 25 hotels and 9,659 hotel rooms[16]. Occupancy rates remained stable at 73% in Abu Dhabi and 75% in Dubai. The increasing number of hotels in Dubai reflects the likely increase in the number of visitors expected for international events like Expo 2020 taking place in Dubai.

GOVERNMENT INITIATIVES

The UAE Government introduced various initiatives and regulations during the past few years. In an effort to balance the real estate market, a Higher Committee for Real Estate has been formed in Dubai in 2019. The aim of the committee is to achieve a balance between supply and demand in the sector and ensure value added projects. Furthermore, the introduction of long-term residence visas - granting visas to investors and highly-skilled professionals such as scientists, among others may act as a catalyst for real estate market growth. Other initiatives include reduction of real estate related fees and changes to foreign ownership rules allowing purchase of freehold properties in certain areas of Abu Dhabi.

13 Sourced from REIDIN.

14 Sourced from REIDIN.

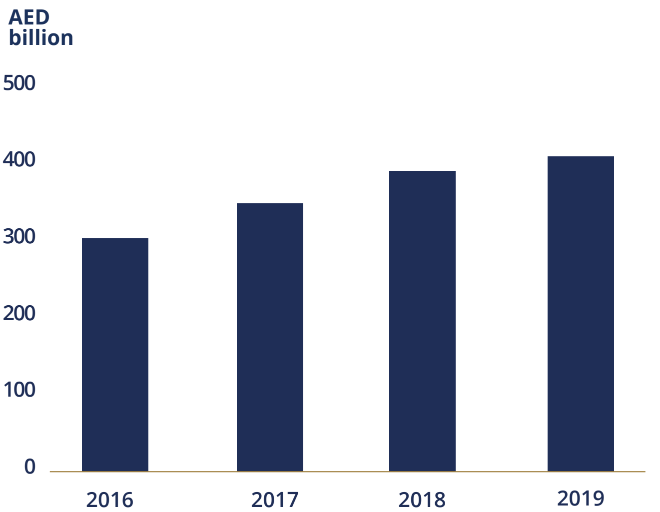
15 Department of Culture and Tourism.

16 Dubai Statistics Center.

BANKS' EXPOSURE TO REAL ESTATE

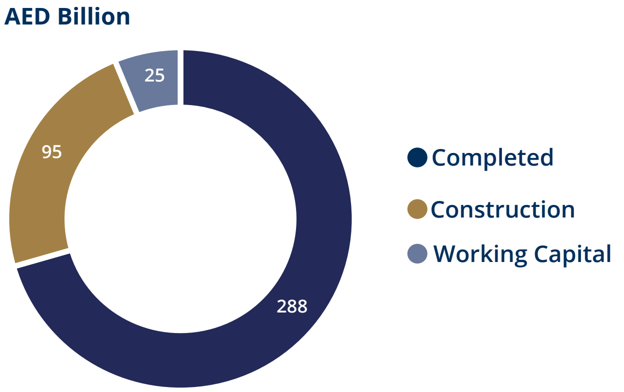
UAE banks' loan exposure to real estate reached AED 408.1 billion in 2019 with a growth rate of 7.9% compared to 8.2% in 2018. Exposure to completed real estate projects represents 70.5% of banks' total real estate loan exposure.

CHART 1.4.5: UAE BANKING SYSTEM REAL ESTATE LOAN EXPOSURE



Source: CBUAE

CHART 1.4.6: REAL ESTATE EXPOSURE BY CATEGORY



Source: CBUAE

The Central bank of the UAE (CBUAE) uses macro-prudential instruments to ensure and promote financial stability in the UAE. To reduce the build-up of systemic vulnerabilities, the CBUAE introduced regulations regarding mortgage loans in 2013[17]. As a response to the COVID-19 pandemic, in March 2020, CBUAE relaxed its Loan-to Value ratio by 5% for first house/owner occupied buyers. The intervention means that maximum loan to value ratios stand as follows:

TABLE 1.4.1: MAXIMUM LOAN TO VALUE SCHEDULE

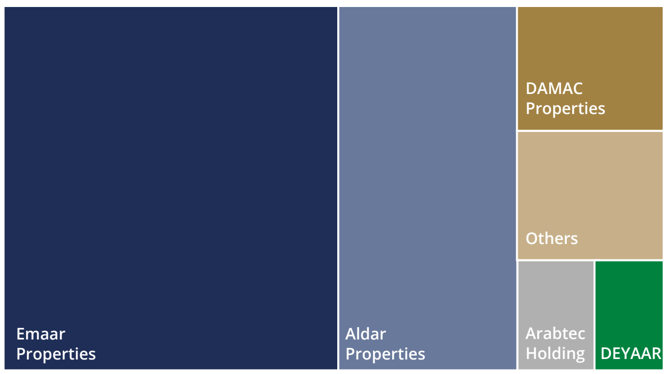
	UAE National	Expatriates
First house/owner occupier		
Value equal or less than AED 5 million	85%	80%
Value equal or greater than AED 5 million	75%	70%
Second House/ Investment property	65%	60%
Off-plan	50%	50%

In addition, the CBUAE will revise the existing limit which sets maximum exposure that banks can have to the real estate sector.

REAL ESTATE DEVELOPERS FOCUS

Given the significance of the real estate sector to the UAE economy and declining prices in the past few years, publicly available financial statements of UAE real estate developers[18] have been analysed assess the overall health of the sector. The real estate sector is dominated by the duo Emaar Group and Aldar Properties, representing around 80% of the sector's market capitalisation.

CHART 1.4.7: REAL ESTATE COMPANIES BY MARKET CAPITALIZATION



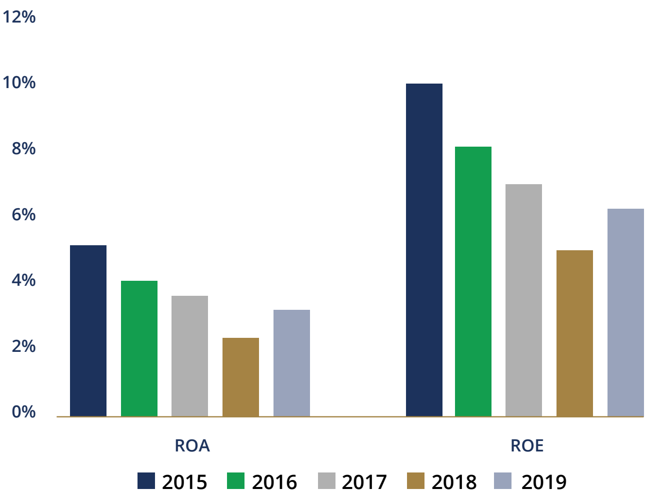
Source: Bloomberg

The profitability of the sector as a whole remained healthy, mainly driven by strong earnings registered by Emaar Group and Aldar Properties with a slight uptick during 2019 measured by positive Return On Assets (ROA) and Return on Equity (ROE). However, the number of loss-generating corporates among the sample companies have also continued to increase.

17 A mortgage loan is a loan that is collateralized against a residential property granted for the purpose of constructing, purchasing or renovating a house for owner occupied or investment purposes. It also includes loans granted for the purchase or the development of land for these purposes.

18 The sample includes 13 real estate companies that are listed on Dubai Financial Market and Abu Dhabi Securities Exchange.

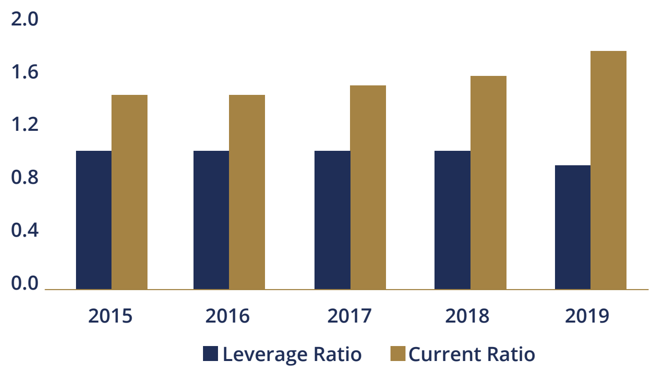
CHART 1.4.8: RETURN ON ASSETS AND RETURN ON EQUITY OF REAL ESTATE COMPANIES



Source: Bloomberg

Liquidity ratios also indicate a stable environment with a current ratio[19] around 1.7. The indebtedness of the sample of publicly listed companies in the sector as measured by the leverage ratio[20], also appear to be healthy at slightly below 1.0.

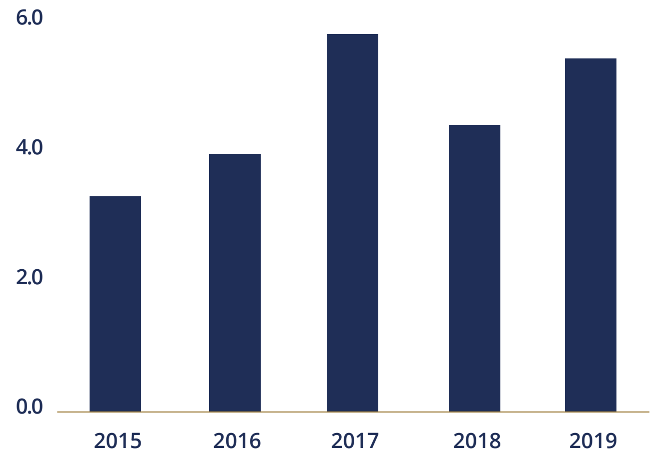
CHART 1.4.9: LEVERAGE AND CURRENT RATIO OF REAL ESTATE COMPANIES



Source: Bloomberg

Finally, the interest coverage ratio, a measure of the ability to cover the companies' interest payments through its earnings, also remained healthy averaging around 4.9 during 2019.

CHART 1.4.10: INTEREST COVERAGE RATIO FOR REAL ESTATE COMPANIES



Source: Bloomberg

[19] The current ratio is a liquidity ratio that measures whether a firm has enough resources to meet its short-term obligations. It compares a firm's current assets to its current liabilities.

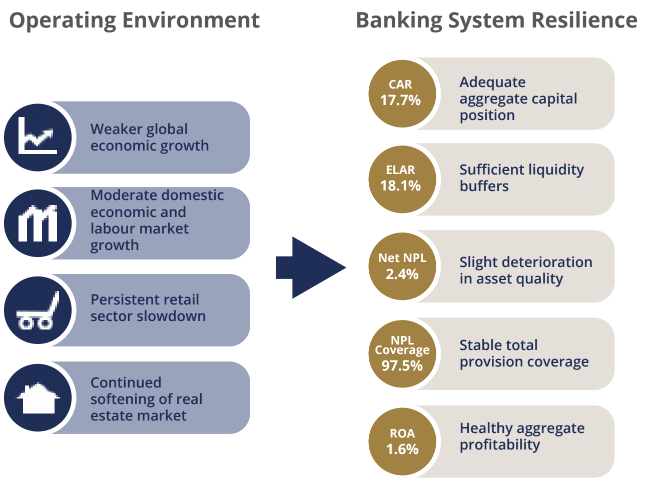
[20] The leverage ratio is a liquidity ratio that measures the proportion of firms' total liabilities compared to its total equity/capital.

PART 2.
BANKING AND FINANCE COMPANIES ASSESSMENT

2.1 BANKING SYSTEM ASSESSMENT

The UAE banking system[21] remained resilient in 2019, with the ability to withstand the challenging operating environment. Capital ratios and liquidity buffers of banks remained adequate and well above regulatory ratios. Banks' asset quality have slightly deteriorated as moderate increases in non-performing loans (NPLs) persisted throughout 2019.The banking system remained profitable with improved cost efficiency that benefited from mergers in the sector. Despite the resilience of the overall banking sector, the challenges posed by the COVID-19 pandemic will affect banks operating environment in 2020.

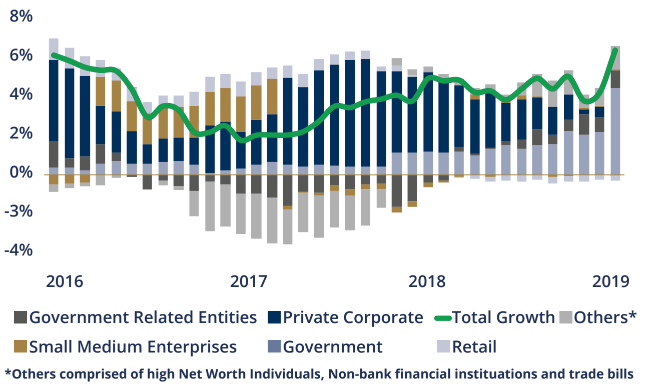
BANKING SYSTEM RESILIENCE INDICATORS



BANKING SYSTEM LENDING CONDITIONS

Growth in loan exposures[22] by the UAE banking system was sustained during 2019, with a 6.1% year-on-year growth to AED 1,729 billion. The aggregate growth was primarily driven by lending to the government, and government related entities (GREs). Lending to household and private sector corporates was relatively slow in comparison to previous years.

CHART 2.1.1: UAE BANKING SYSTEM LENDING, CONTRIBUTION TO GROWTH (YEAR-ON-YEAR, %)



Source: CBUAE

BANK RETAIL SECTOR EXPOSURE

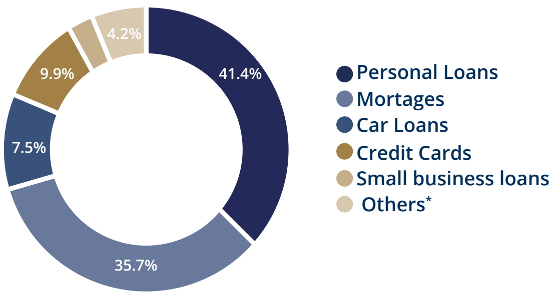
Household debt extended by UAE banking system, which accounted for about 20% of the total loan portfolio, contracted during 2019. While mortgage loans registered positive growth, other retail sub-categories such as credit cards, car loans and personal loans declined. The weaker domestic economic condition influenced retail market lending and the consequent decline in these sub-segments.

The upward trend in mortgage loans was driven by improved affordability amid the decline in house prices and the continued supply and demand imbalances. Demand for properties, was particularly marked in self-occupied category, which was reflected in the sustained growth of mortgage lending.

21 Total assets of about 199% of the total nominal GDP and 266% of the non-oil GDP (Source: CBUAE, FCSA)

22 Loan figures reported in this publication excludes interest in suspense and is gross of specific provisions.

CHART 2.1.2: UAE BANKING SYSTEM COMPOSITION OF RETAIL LOAN PORTFOLIO

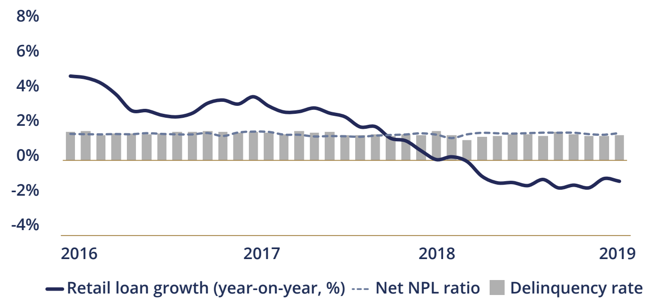


*Others include loans against purchase of shares and overdrafts.

Source: CBUAE

Despite the lackluster growth in household lending, the asset quality of the household sector loan portfolio remained strong with a Net NPL ratio of 1.5%[23] as at end of 2019 unchanged from 2018. Delinquency rate, which measures non-repayment of loan between 30 to 90 days, also remained low.

CHART 2.1.3: UAE BANKING SYSTEM RETAIL LENDING: ASSET QUALITY AND LOAN GROWTH

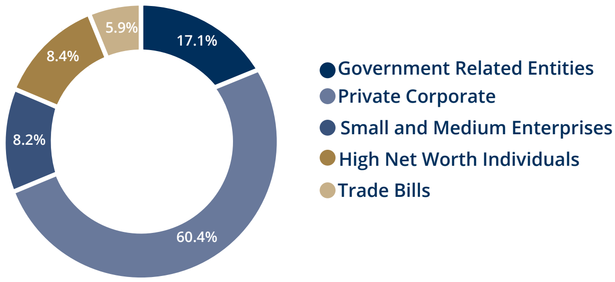


Source: CBUAE

BANK CORPORATE[24] SECTOR EXPOSURE

Growth in bank lending to the corporate sector slowed on the back of challenging business conditions for real estate and oil and gas sectors. Lending moderated gradually throughout the year, registering a 2.8% year-on-year growth as at end of 2019. (2018: 5.6%) The share of corporate credit was stable, accounting for around 60% of total bank loan portfolio.

CHART 2.1.4: UAE BANKING SYSTEM COMPOSITION OF CORPORATE LENDING PORTFOLIO

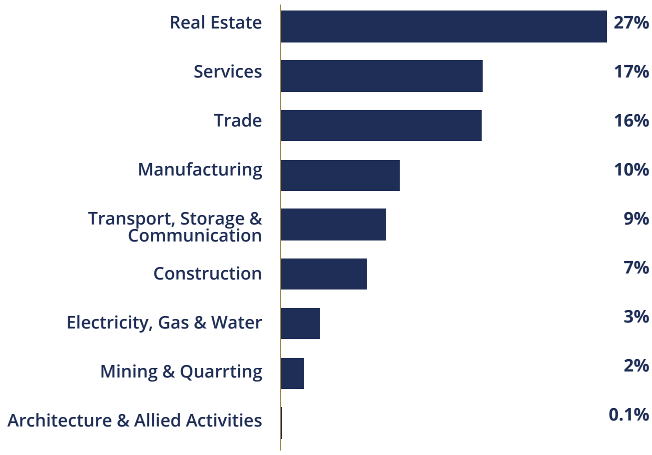


Source: CBUAE

The largest slowdown in credit occurred in private corporates, where the 9.1% growth in 2018 turned stagnant at the end of 2019. Loan growth to Small and Medium Enterprises (SMEs) also slowed, while lending to high net worth individuals (HNIs) and Government Related Entities (GREs) were the only categories that recorded growth.

Broken down by economic activities, the share of real estate and construction loans slightly increased, accounting for about one-third of the total corporate portfolio. The year-on-year loan growth in 2019 to corporations in the real estate and construction sector was 11.0% (2018: 9.8%), although below the four-year average growth.

CHART 2.1.5: UAE BANKING SYSTEM COMPOSITION OF CORPORATE LOAN PORTFOLIO



Source: CBUAE

Asset quality have slightly deteriorated for the wholesale corporate loan portfolio. Both bank-specific factors and the impact of softer real estate market contributing to the increase in NPLs.

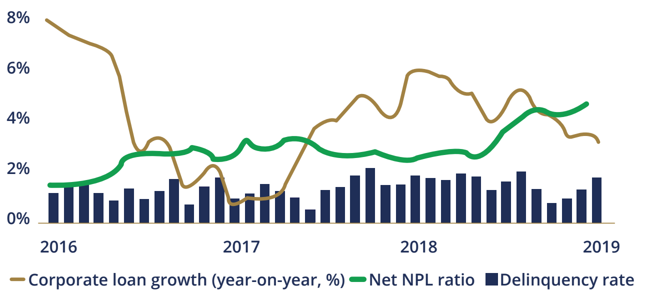
23 The NPL ratio for retail loan portfolio as at end of 2019 stood at 3.4%. (2018: 3.6%).

24 Corporate comprised private corporates, government related entities, small and medium enterprises, and high net worth individuals.

However, the provisioning levels of UAE banks remained prudent with the Net NPL ratio of this sector edged only slightly higher to 3.4%[25] in 2019 compared to 2.1% in 2018 while the delinquency rates were relatively stable at 1.0%.

The UAE banking system exposure to the UAE corporates in the form of debt securities holdings amounted to about AED 46 billion, representing 13.6% of total debt securities portfolio. The majority (91%) of these corporate debt securities are of investment grade.

CHART 2.1.6: UAE BANKING SYSTEM CORPORATE LENDING: ASSET QUALITY AND LOAN GROWTH

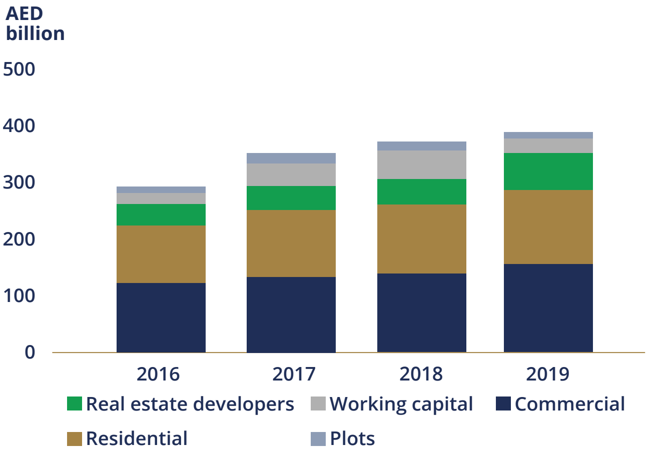


Source: CBUAE

REAL ESTATE AND CONSTRUCTION SECTOR EXPOSURE

Soft property market conditions persisted, with the levels of unsold properties on the rise and business conditions for real estate sector remaining challenging. However, improved affordability from the decline in house prices continued to support bank mortgage financing. On the back of these developments, the growth momentum of UAE banking system loan exposure to the real estate sector remained intact although its pace has moderated.

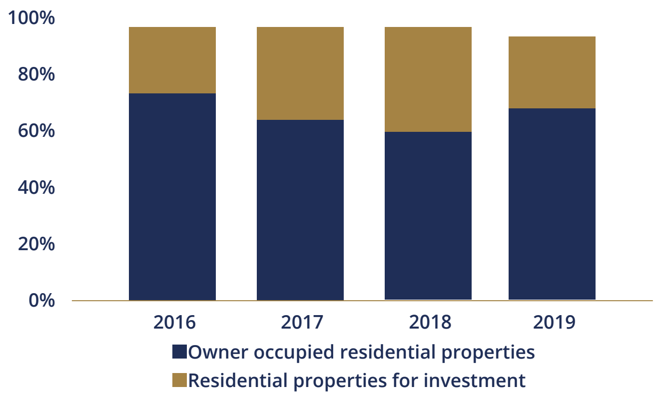
CHART 2.1.7: UAE BANKING SYSTEM REAL ESTATE LOAN PORTFOLIO COMPOSITION



Source: CBUAE

In 2019, total UAE banking system loan exposure to the real estate markets grew, albeit slower at 7.5% year-on-year (2018: 8.2%). The growth was largely driven by financing of the purchase and construction of residential properties. Within the residential properties segment, the share of properties for investments purposes declined compared to owner-occupied purposes. Growth of bank lending to the commercial property segment slowed to 6.4% in 2019. (2018: 11.4%) Banks' exposure to property developers remained stable, accounting for 14% of the total bank real estate loan portfolio in 2019.

CHART 2.1.8: UAE BANKING SYSTEM BREAKDOWN OF RESIDENTIAL PROPERTY PORTFOLIO



Source: CBUAE

Overall, the quality of bank loan exposures to the real estate and construction sector deteriorated with the Net NPL ratio increasing to 4.0%[26] (2018: 1.6%) This was largely explained by the higher NPLs in the construction sector. Delinquency rates increased slightly to 1.0% in 2019.

25 NPL Ratio for the system's corporate portfolio was at 8.8% in 2019 compared to 7.1% in 2018.

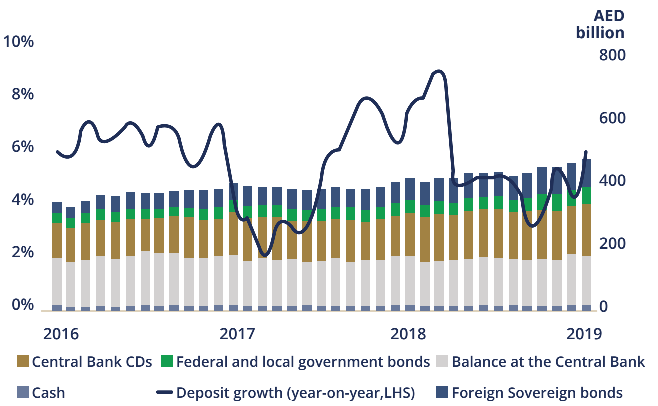
26 NPL ratio for the real estate and construction sector was at 8.9% as at end of 2019.

Risks from the real estate sector to UAE banks will remain a challenge amid the ongoing COVID-19 pandemic, persistent supply and demand imbalances as well as deteriorating financial performance of property developers. Greater vigilance and prudent risk management remain key for the UAE banks.

FUNDING AND LIQUIDITY CONDITIONS

The structure of the UAE banking system funding was unchanged, characterised by strong domestic deposit base which accounts for approximately 88% of total deposits of AED 1.8 trillion. Overall deposit growth improved in 2019, amounting to 6.5% year-on year. Retail and corporate deposits remained key contributor to the overall deposit growth and accounted for about 63% of total deposits.

CHART 2.1.9: UAE BANKING SYSTEM DEPOSIT GROWTH AND COMPOSITION OF LIQUID ASSETS



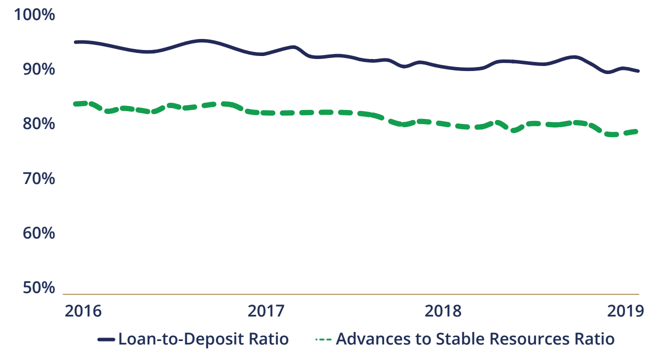
Source: CBUAE

Capital market funding also increased in light of the continued efforts by banks to diversify funding sources. In 2019, UAE banks' capital market borrowing increased by 14.5% year-on-year, with a term average maturity of issuances increasing to 34 months. Large portion of these debt issuances were dominated in USD.

Overall, the liquidity position of the UAE banking system remained sound. The Advances to Stable Resources Ratio (ASRR) comprising of stable funding sources - deposits and long-term borrowings to support assets - improved to 81% in 2019, supported by the deposit growth. The CBUAE's regulatory Eligible Liquid Asset Ratio (ELAR) remained at a high level, at 18.1% in 2019, compared to 17.5% in 2018. Banks' high-quality liquid assets (HQLA) continued to be dominated by balances held with the CBUAE, accounting for 67% of the total. However, qualified sovereign debt outpaced the investments in other liquid assets and accounted for about 19.0% of the total HQLA portfolio compared to 16.7% in 2018.

The aggregate Liquidity Coverage Ratio[27] (LCR) which measures the amount of high quality liquid assets to meet liquidity needs in a stressed scenario of 30-day period stood well above the minimum ratio of 100%. The Loan-to-deposit ratio stood at around 92.5%.

CHART 2.1.10: UAE BANKING SYSTEM LOAN-TO-DEPOSIT RATIO AND ADVANCES TO STABLE RESOURCES RATIO



Source: CBUAE

Non-resident funding, which comprised of non-resident deposits, interbank and capital market funding accounted for approximately 20% or AED 517.9 billion of the system's total liabilities[28]. The growth of non-resident deposits moderated in 2019 with a year-on-year growth rate of 3.9%. (2018: 11.3%). Similar downward trend was also true for non-resident interbank funding, which declined by 3.8% year-on-year.

Overall, banks' reliance on interbank funding remained small, comprising 6.0% of the total liabilities. With the strong liquidity buffers, the UAE banking system on aggregate continues to be net lender in the international interbank market, with net interbank lending position of AED 46.6 billion, increasing by 33.2% from the previous year.

INVESTMENT PORTFOLIO

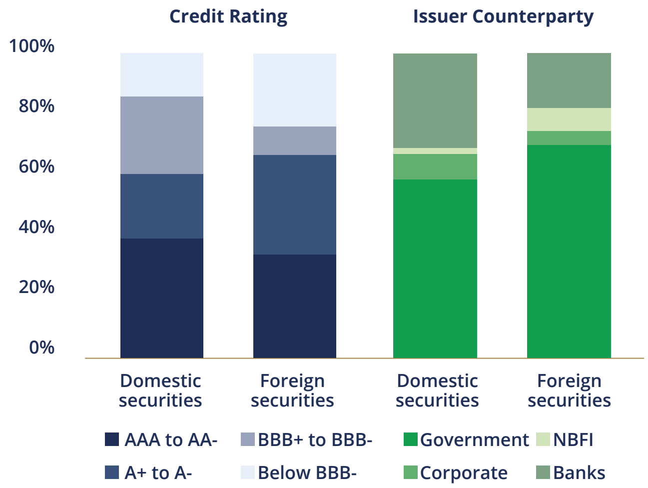
The UAE banks' investment portfolio (excluding the holdings of CBUAE CDs of AED 162.4 billion) amounted to AED 355.9 billion in 2019 and consisted to about 95% of debt securities. Foreign securities comprised 61.6% of the aggregate debt securities portfolio.

Debt securities held by banks are primarily held in the banking books and are largely dominated by government bonds, which increased 14% year-on-year in 2019 to account for 51.4% of the total securities portfolio. Corporate debt accounted for 19.8% of the portfolio while the remainder was issued by banks or non-bank financial institutions.

[27] Aggregate LCR of four approved banks.

[28] Total liabilities of the system amounted to AED 2.6 trillion as of end of 2019.

CHART 2.1.11: UAE BANKING SYSTEM COMPOSITION OF DEBT SECURITIES PORTFOLIO



Source: CBUAE

About 36.6% of the holdings in AA- and above rated buckets, while the majority of the remaining holdings are in investment grades. Foreign debt securities largely consisted of foreign government securities. Foreign debt securities holdings increased 32.3% year-on-year and was also reflected by the increase in foreign sovereign securities in banks' HQLA portfolio.

Bank holdings of domestic debt securities consist primarily of government and government related entities, of which, about 40% are rated AA- and above. Geographically, main debt securities held are from the Gulf Cooperative Council (GCC) region, Asia and Europe.

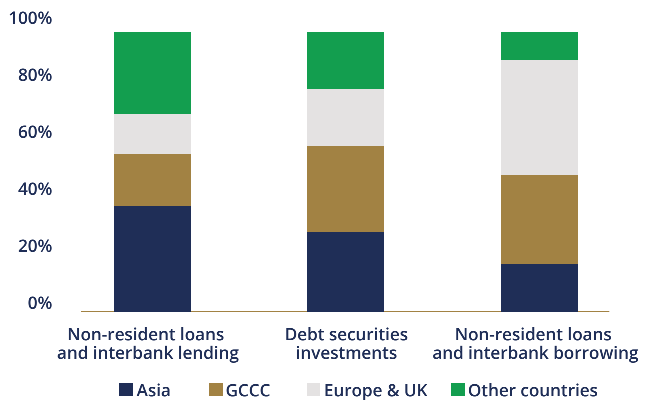
CROSS-BORDER EXPOSURES OF UAE BANKS[29]

Cross-border exposures, which comprised non-resident assets and liabilities of UAE banks, accounted for about 35% of total assets in 2019, compared to 24% in 2018. The recent increase in the share of cross-border assets was underpinned by overseas expansion, cross-border acquisitions mainly in Turkey and foreign debt securities investments. The majority of cross-border assets relates to the holdings of foreign debt securities, non-resident lending and intra-group transactions between UAE banks and their overseas branches, subsidiaries and affiliates.

In terms of cross-border liabilities, non-resident deposits and international capital market borrowings remained the biggest components with 35% and 29% respectively. Cross-border interbank exposures of the UAE banking system remained limited with both the interbank lending and borrowing accounting for 5.1% and 3.6% of total assets and liabilities respectively. Cross-border interbank borrowings declined by 3.8% year-on-year while foreign interbank lending increased slightly by 4.8%. The UAE banking system remained a net lender in the foreign interbank markets.

The geographical composition remained unchanged with the Asia and GCC region accounting for majority of the cross-border deposits and cross-border lending followed by Europe.

CHART 2.1.12: UAE BANKING SYSTEM GEOGRAPHICAL DISTRIBUTION OF SELECTED CROSS-BORDER EXPOSURES



Source: CBUAE

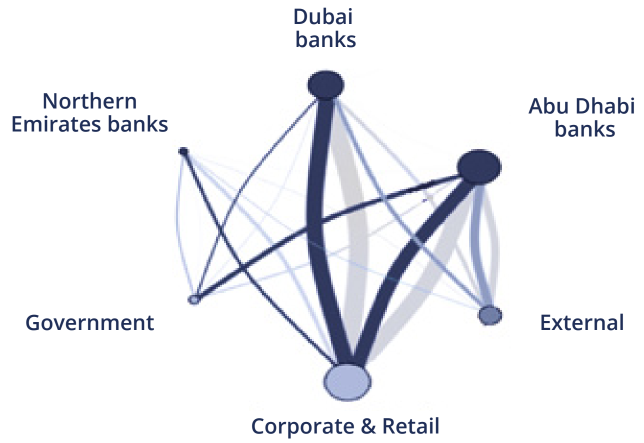
ASSESSING EXTERNAL CONTAGION AND NETWORK ANALYSIS OF THE UAE BANKING SYSTEM

The degree of interconnectedness of the UAE banking system to international markets increased in 2019, in part due to the business diversification strategies of UAE national banks and the increase in financial investments as well as international capital market funding.

The network of cross-border exposures serves to (i) trace the paths of cross-border lending and funding exposures, (ii) identify potential cross-border systemic linkages to measure UAE banking system's susceptibility to external spillovers. The external contagion channel for the UAE banking system remains relatively small, as the domestic private and government sector deposits remained the primary source of funding for the UAE based banks. On a relative basis, the exposures to non-resident funding are more apparent amongst Abu Dhabi based banks. Part of the reason is the larger cross-border capital market funding activities by these banks, amid the shallow domestic capital markets.

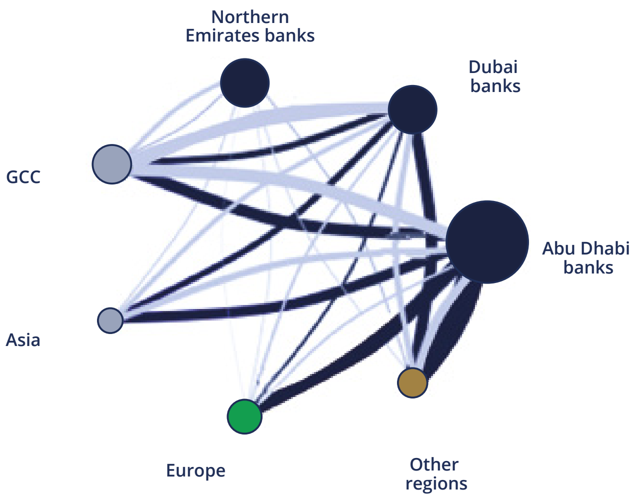
[29] Cross-border exposures of UAE banks and foreign subsidiaries, branches and affiliates of UAE National banks and only accounts for on-balance sheet exposures.

CHART 2.1.13: UAE BANKING SYSTEM FUNDING AND LENDING NETWORK OF UAE BASED BANKS



Source: CBUAE

CHART 2.1.14: UAE BANKING SYSTEM CROSS-BORDER FUNDING AND LENDING NETWORK OF UAE BASED BANKS



Source: CBUAE

Note:

- **The network comprised loans, deposits and inter bank funding.**
- **Node size represents the total size of exposures while the line thickness represents the size of lending or funding to the counterparties.**
- **Grey lines represent lending exposures while those in blue are the funding exposures.**

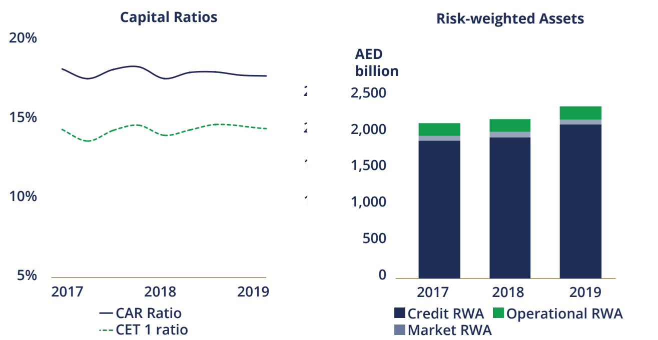
BANKING SYSTEM CAPITAL ADEQUACY

The capital adequacy of UAE banks on aggregate remained stable with the total Capital Adequacy Ratio (CAR) increasing slightly to 17.7%. Banks' aggregate capital comprised primarily of Common Equity Tier-1 capital at 83% of total capital with the Additional Tier-1 capital at 11% and Tier-2 capital at 7%.

The largest asset class remained claims on Corporates and GREs, which account for approximately 52.2% of total Credit Risk RWAs followed by claims on retail (11.7%) and Commercial Real Estate (11.4%).

Banks in the UAE have limited exposure to Market Risk, which accounted for only 2.8% of the total risk-weighted assets.

CHART 2.1.15: UAE BANKING SYSTEM CAPITAL RATIOS AND RISK-WEIGHTED ASSETS



Source: CBUAE

BANKING SYSTEM ASSET QUALITY

The overall asset quality remained a challenge as asset quality ratios slightly deteriorated. The aggregate Net NPL ratio edged higher to 2.5% from 1.8% in the previous year[30]. The NPL ratio was 6.5% in 2019 of which 4.0% was covered by specific provision reserves. The increase was primarily attributed to idiosyncratic events related to specific banks that occurred during the second half of the year.

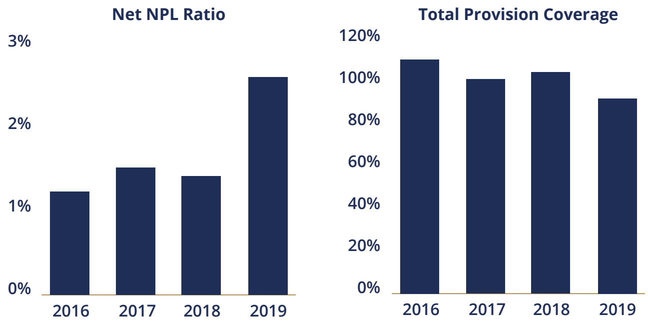
TABLE 2.1.1: UAE BANKING SYSTEM ASSET QUALITY RATIOS OF SELECTED LOAN CATEGORIES

	Net NPL Ratio	NPL Ratio
Retail	1.1%	3.4%
Corporate	3.3%	6.5%
Out of which:		
Government Related Entities	1.2%	4.2%
Private Corporate	3.4%	9.0%
High Net Worth Individuals	3.9%	12.7%
Total Loans	**2.5%**	**6.5%**

30 The Net NPL ratio excludes specific provision and provides for a better indicator of asset quality taking into account the high provisioning levels in the UAE banking system.

Looking into specific economic sectors, the continued softening of the domestic property markets has weighed on the overall asset quality. The NPL growth during 2019 was largely attributed to the real estate and construction segment while growth in other segments were not very significant. Despite increased NPLs, the provisioning levels were sustained throughout the year; the specific provision coverage totaled 62.4% and the overall provision coverage[31] 92.0% at the end of 2019.

CHART 2.1.16: UAE BANKING SYSTEM NET NPL RATIO AND TOTAL PROVISION COVERAGE

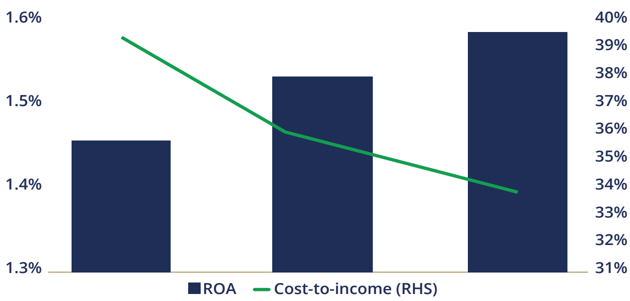


Source: CBUAE

BANKING SYSTEM PROFITABILITY AND COST EFFICIENCY

The UAE banking system remained profitable with a net profit of AED 45.3 billion and recorded an increase in Return On Assets (ROA)[32] to 1.6% in 2019[33]. The UAE banking system improved its operational efficiency during 2019, as the total operating income of the banking sector recorded a higher year-on-year growth compared to the operating expenses. The banking system also improved its cost-to-income ratio to 33.8%. The mergers in the UAE banking system contributed to the improvement in cost efficiency[34].

CHART 2.1.17: BANKING SYSTEM PROFITABILITY RATIOS



Source: CBUAE

OPERATING INCOME OF THE UAE BANKING SYSTEM

The total operating income of the UAE banking system grew in 2019 by 7.2% year-on-year. The net interest income represented 67.9% of the total operating income. In 2019, the net interest income recoded a slight increase of 1.8% year-on-year. Furthermore, other operating income recorded an increase of 20.8% year-on-year, mainly stemming from other fees and income such as disposal of assets and an increase in trading income.

OPERATING EXPENSES AND IMPAIRMENT CHARGES IN THE UAE BANKING SYSTEM

The operating expenses of the UAE banking system grew slightly in 2019 by 0.9% year-on-year. The operating cost increased mainly due to depreciation and amortisation and IT expenses. However, staff expenses, which represent the largest expense category, remained flat compared to the previous year and the premises expenses significantly decreased in 2019. The mergers in the UAE banking system contributed to the reduction in the premises expenses. Moreover, the net profit had been affected by an increase in the net impairment charge due to an increase in provision charges and lower recoveries and write backs.

TABLE 2.1.2: BANKING SYSTEM PROFITABILITY

	2018-2019
Profit and Loss	**Year-on-year Change**
Net interest income	↑ 1.8%
Other Operating Income	↑ 20.8%
Total Operating Income	↑ **7.2%**
Operating Expenses	↑ 0.9%
Net Impairment Charge	↑ 14%
Net Profit	↑ **10.5%**

Source: CBUAE

[31] Total provision coverage includes specific provisions and CBUAE required provisions of 1.5% on normal and watch-list credit risk-weighted exposures. (CBUAE Circular 28/2010)

[32] ROA is calculated as net profit over monthly average of total assets excluding the specific provisions and interest in suspense.

[33] The corresponding return on equity (ROE) of the UAE banking sector was 11.0% during 2019. The ROE was calculated based on the monthly average equity.

[34] Operating expenses in some categories of these banks declined in after the mergers.

BOX 2.1.1: THE UAE BANKING SYSTEM DURING Q1 2020 AND MEASURES BY THE CENTRAL BANK OF THE UAE TO ADDRESS REPERCUSSIONS OF THE COVID-19 PANDEMIC

During the first quarter of 2020, the outbreak of the COVID-19 pandemic changed the outlook for global and domestic activity. These developments will pose challenges to the operating environment of the banking sector during 2020. In response, the Central Bank of the UAE (CBUAE) launched a wide-ranging support program to help to mitigate repercussions of the COVID-19 pandemic on the UAE banking system and the wider economy.

The UAE banking system concluded the year 2019 in a resilient position as described in this report, with adequate capital and liquidity buffers and sustained profitability and cost-efficiency. The changing operating environment was reflected in Q1 2020 in higher provisions taken by banks and a lower net interest income in relation to the lower policy rates.

Nonetheless, during Q1 2020, aggregate lending and deposit growth reached 5.6% and 5.9% year-on-year, respectively. The banking sector on aggregate maintained adequate liquidity and capital buffers, as measured by the Eligible Asset Ratio (ELAR) at 17.3%, the loan-to-deposit ratio at 95.5%, the Advances to Stable Resources Ratio (ASSR) at 82.3%, and the Capital Adequacy Ratio (CAR) at 16.9%.

Looking ahead to the potential challenges posed by COVID-19 pandemic, the Central Bank of the UAE launched the Targeted Economic Support Scheme (TESS) and related measures in order to support the UAE economy through the banking system. Banks are expected to continue supporting their customers impacted by COVID-19 pandemic including their liquidity needs while retaining sound lending standards. The aggregate value of the measures under TESS amounts to AED 256 billion.

The measures under the TESS comprise reduction in the cash reserve ratio of AED 61 billion, a loan deferral program of AED 50 billion, a capital buffer relief of up to AED 50 billion, and a liquidity buffer relief up to AED 95 billion. In addition, the CBUAE adopted a broader set of further measures to provide relief to the UAE financial and economic system, including a reduction of down payment for first-time homebuyers and limits put on bank fees charged to small and medium enterprises.

The CBUAE furthermore announced measures and guidelines for banks and financial companies comprising: guidance on international financial reporting standards (IFRS 9) during the COVID-19 pandemic, postponement of the implementation of remaining Basel III standards and regulatory stress testing to ease the operational burden on the banks, waiver of the CBUAE part of processing fees in its settlement system, and a prudential filter to neutralise the effects of increased provisioning on capital base of banks.

2.2 DOMESTIC SYSTEMICALLY IMPORTANT BANKS

In 2019, the list of Domestic Systemically Important Banks (DSIBs) remained unchanged. Going into 2020, First Abu Dhabi Bank (FAB), Emirates NBD (ENBD) Abu Dhabi Commercial Bank (ADCB) and Dubai Islamic Bank (DIB) are the banks designated as systemically important to the UAE financial system.

The DSIBs in the UAE are designated using a framework approved by the Board of Directors of the Central Bank of the UAE (CBUAE)[35]. The methodology takes into account five criteria to categorize banks as systemically important. Complexity, interconnectedness, substitutability and size are the four criteria that were adopted under the recommendations of the Basel Committee for Banking Supervision (BCBS). However, since each market is unique with its own characteristics, a 5th criteria, Supervisory Overlay, was adopted to account for the different characteristics of the UAE market. The assessment of DSIBs is done annually and covers both national and foreign banks in the UAE. It is conducted based on consolidated data for national banks and UAE branch data for foreign banks.

In 2019, the annual assessment concluded without any significant changes, and all four banks that were designated systemically important in 2018, FAB, ENBD, ADCB and DIB, remain on the list of DSIBs. There were also no movements between the buckets of the DSIB buffer. FAB and ENBD remained in the third bucket requiring them to hold 1.5% of Risk Weighted Assets (RWA) of Common Equity Tier 1 (CET-1). ADCB and DIB are in the same bucket as of 2018, requiring them to hold 0.5% of RWA of CET-1. However, in light of the COVID-19 outbreak in late 2019, the CBUAE has allowed all DSIBs to use up to 100% of the DSIB buffer effective on the 15th of March, 2020 for a period of 1 year without any supervisory consequences.

TABLE 2.2.1: DOMESTIC SYSTEMICALLY IMPORTANT BANKS BUFFER

Buckets	Banks	DSIBs Capital Buffer
Bucket 1	ADCB & DIB	0.5%
Bucket 2		1%
Bucket 3	FAB & ENBD	1.5%
Bucket 4		2%

35 For more information on the DSIBs methodology, please refer to the Regulatory Developments section of the 2016 Financial Stability Report.

2.3 REGULATORY STRESS TEST IN THE UAE

The Central Bank of the UAE (CBUAE) further enhanced its stress testing methodology in 2019 by incorporating International Financial Reporting Standard 9 (IFRS 9) provisioning standards and broadened data collection of the real estate exposures. The hypothetical adverse scenario combined a negative oil price shock, global economic growth slowdown and a decline in real estate prices. On aggregate level, the adverse scenario had an impact of -242 basis points (bps) on banks' Common Equity Tier 1 (CET1) capital ratio, leading to 11.1% CET1 ratio, well above the minimum capital requirement. Despite the significant uncertainties from the COVID-19 pandemic, the UAE Banking system entered 2020 from a strong position. As shown by the 2019 stress testing results, the UAE banking system remains resilient to withstand significant macro-financial shocks.

OVERVIEW OF REGULATORY STRESS TESTING IN THE UAE

Stress testing is a key risk management tool for banks that can be combined with other tools, allowing banks to assess inherent risks of their exposures. One of the key objectives of the CBUAE stress test is to measure the resilience of individual UAE banks and the banking system to hypothetical adverse shocks under a common methodological framework. CBUAE stress tests also aim at enhancing banks' risk management and enable CBUAE to better understand banks' risk management practices.

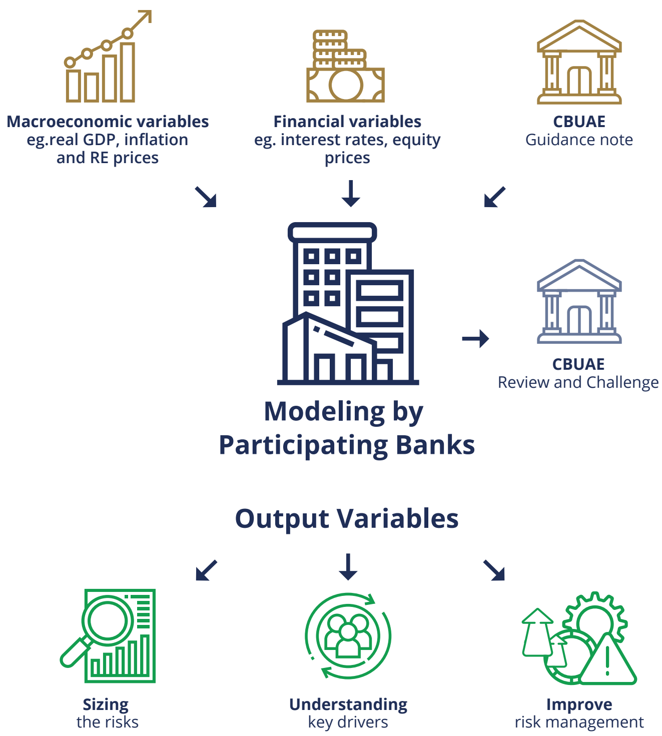
The 2019 stress test included a stress scenario focusing on a negative oil price shock stemming from a trade confrontation, resulting in a global economic slowdown and a fall in real estate prices. Similar to the previous stress tests, the 2019 stress test covered the UAE national banks and selected foreign banks.

As of 1 January 2018, the IFRS 9 accounting standard was implemented in the UAE. The participating banks in the 2019 stress test were required to model loan impairment based on the new accounting standard.

THE 2019 STRESS TESTING PROCESS

The 2019 stress testing process is summarised in the chart below.

CHART 2.3.1: STRESS TESTING PROCESS



The stress test scenarios and methodology guidance note were used uniformly by all participating banks. The banks used their internal models to quantify the risks and translate the impact of macroeconomic and financial variables on their financial positions.

The banks are required to demonstrate their understanding of key stress drivers and to integrate stress testing results and feedback into their risk management practice.

THE SCENARIOS

The 2019 stress test scenarios incorporated baseline and adverse scenarios, with specified paths for macroeconomic and financial market variables. The baseline scenario was developed based on the CBUAE economic projections that were close to consensus forecasts. The adverse scenario was modelled to mimic economic and financial conditions during the global financial crisis, but the severity of the scenario was adjusted to take into account the cyclical position of the UAE economy. The adverse scenario is in line with the CBUAE assessment of the potential vulnerabilities and threats in the UAE banking sector. These potential risks are (i) significant repricing of the UAE real estate assets; (ii) Trade war and oil supply glut leading to severe drop in global economic activity and sustained low oil price; (iii) Funding pressure in the banking sector with potential spillovers to the real economy.

To calibrate the severity of shocks in the adverse scenario, the CBUAE used both historical and statistical modelling approaches. All macroeconomic variables were calibrated with a 3-year stress testing forecast horizon. Scenario forecasts were further extended, implying a reversion to long-term trends, to allow for the computation of lifetime provisions for stage 2 and stage 3 exposures under IFRS 9 standard.

In addition to the scenario variable paths and narratives provided by the CBUAE, banks had an option to use additional risk factors relevant to their portfolios, as long as these were consistent with the CBUAE scenarios and clearly documented.

Under the CBUAE adverse scenario, Brent oil price had a peak-to-trough decline of 50% to USD 34 per barrel in the second year. Real GDP fell -4.1% in the second year and slowly started to recover towards the end of the third year. The average real estate prices in Dubai and Abu Dhabi decreased by 19% and 18% respectively by the second year. Finally, the CBUAE added eight more macroeconomic variables in the 2019 stress test to enhance the coverage of the scenarios and to support banks' stress testing modelling process[36].

Similar to the previous stress tests, the adverse scenario also included financial market variables. A summary of the market risk shocks is presented below.

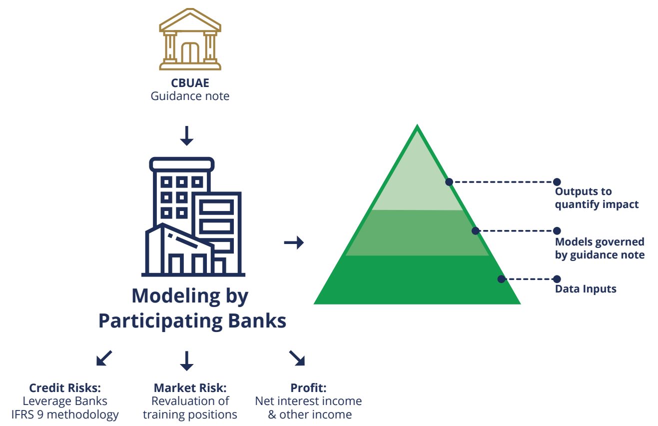
TABLE 2.3.1: SUMMARY OF MARKET RISK SHOCKS

Interest Rates	
AED and USD	+150 BPS
The rest of the world	+100 BPS
Foreign Exchanges (against USD)	
JPY	+10%
GBP	-15%
The rest of the world	-10%
Equities	
All countries	-15%
Credit spread	
Investment grade	+60 BPS
Non-investment grade	+140 BPS

STRESS TESTING METHODOLOGY

As shown in the chart 2.3.2, the participating banks were required to project credit, market risks and pre-impairment profits by following the CBUAE guidance note.

CHART 2.3.2: STRESS TESTING METHODOLOGY



The key change in the 2019 stress test methodology pertained to credit risk. As the UAE banks used IFRS 9 accounting standard from 2018, they are now required to ensure that credit risk losses are projected using IFRS 9 provisioning models. The scenarios should be translated into relevant credit risk parameters. In addition, the banks need to follow their internal triggers of significant increase of risk. To take into account the capital dynamics in the stress test, the rights issuance approved by CBUAE up to mid-2019 were included.

36 The new variables are Dubai and Abu Dhabi stock prices, 3-month EIBOR, UAE real exports, imports, investment, private and government consumption.

TABLE 2.3.2: SUMMARY OF 2019 STRESS TESTING METHODOLOGY

Type	Impact	Methodology
Credit Risk	**Profit and Loss (P&L)**	Credit risk losses for exposures measured at amortised cost (both loans and debt securities); Projected expected credit risk flows based on banks' internal IFRS 9 models; No negative loss is allowed, no transfer from stage 3 to other stages; Additional losses should be estimated for credit concentration risk.
	Risk Weighted Assets (RWA)	Credit rating transitions through transition matrices
Market Risk	**P&L**	Trading assets measured at Fair Value through Profit or Loss (FVPL) and Fair Value through other Comprehensive Income (FVOCI), including debt securities and designated hedge accounting portfolios. Full revaluation based on the market risk shocks. The largest derivative counterparty default with 60% loss given default. Prescribed haircuts on debt securities. The losses are fully realised in the first year of the adverse scenario. 5 large banks are required to estimate credit and debt valuation adjustment.
	RWA	Basel 2 Standardised Approach
Operational Risk	**P&L**	No Change
	RWA	Basel 2 Standardised Approach
Pre-impairment profit	**Net-interest income**	Based on banks' internal estimation and CBUAE imposed caps
	Non-interest income	Based on banks' internal estimation and CBUAE imposed caps
	Operating expenses & other operating income	Based on banks' internal estimation and CBUAE imposed floors

The Main Changes in 2019 Stress Test

Incorporating IFRS 9:	Proportionality treatment:	Additional requirement for credit concentration risk:
Provisioning projection should follow banks' IFRS 9 models under the baseline and adverse scenarios.	Additional requirement for 5 large banks to take into account credit valuation adjustment (CVA) and debt valuation adjustments (DVA), additional stress in liquidity risk.	Banks are required to incorporate additional methodology to stress credit concentration risk exposures.

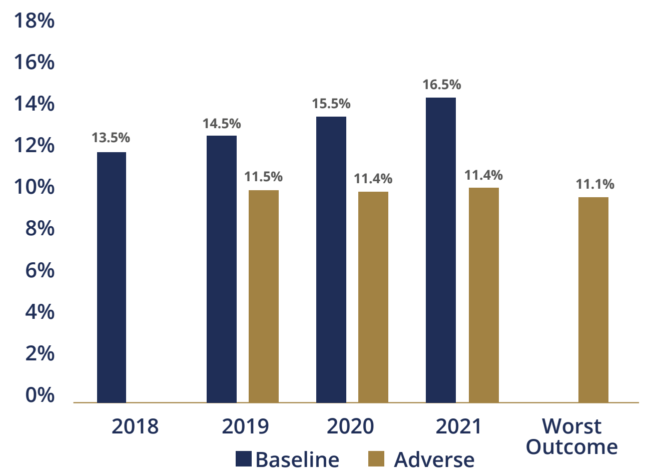
STRESS TEST RESULTS

The participating banks reported weighted average CET1 capital ratio at 13.5% as of December 2018, slightly lower than in 2017 mainly due to the one-off impact from the implementation of IFRS 9.

Under the baseline scenario, the banks reported an aggregate increase of CET1 capital ratio of 300bps, leading to a 16.5% CET1 capital ratio at the end of 2021.

Under the adverse scenario, banks reported an aggregate decrease of CET1 capital ratio of 210 bps, resulting in a ratio of 11.4% at the end of 2020 (Chart 2.3.3). As expected from the forward-looking nature of IFRS 9 methodology, the impact of capital reduction happens earlier in this year's stress test than in the previous stress test. The stress reduced banks' CET1 ratio to the lowest point at 11.1%, a decrease of 242 bps. The lowest point is measured as the difference between the CET1 ratio at the starting position (December 2018) and the lowest point in the duration of stress test period (three years) for each bank.

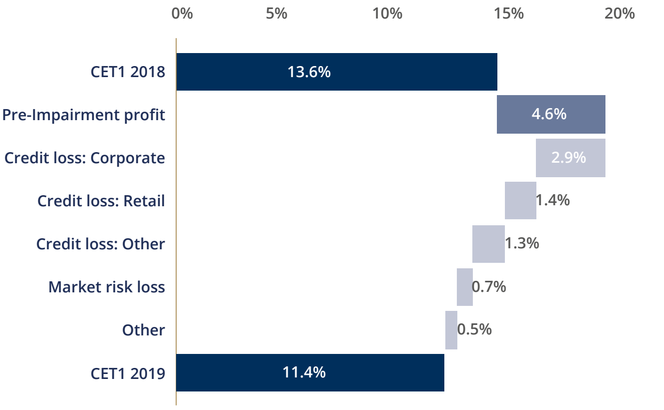
CHART 2.3.3: CET1 RATIOS BY PROJECTION YEARS



Source: CBUAE

Chart 2.3.4 shows the contribution of different profit and loss (P&L) and balance sheet items to the change in the aggregate CET1 capital ratio between 2019 and 2020 under the adverse scenario. Pre-impariment profit had a positive impact on CET1 ratio at +460 bps though it shows a decrease of around 20% compared to the starting point of the stress test. Credit risk losses arising from the impairment of loans and advances were the main contributors to the stress impact.

CHART 2.3.4: MAIN CONTRIBUTIONS TO CET1 RATIO CHANGE IN THE ADVERSE SCENARIO

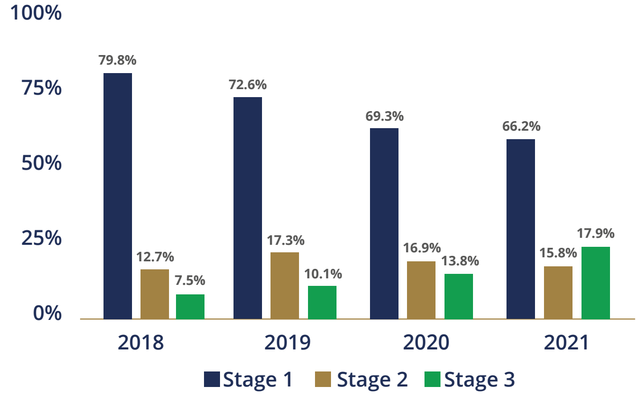


Source: CBUAE

Corporate and retail credit risk losses contributed to a reduction of 290 bps and 140 bps from the CET1 capital ratio as of end-2020, as these exposures account for a significant share of the banks' loan book. Other credit risk includes Small and Medium Enterprises (SMEs), Government Related Entities (GREs), Government and Financial Institutions sectors, which contributed to a 130 bps reduction. Lastly, market risk losses had an impact on CET1 capital ratio of -50 bps, and the rest is attributed to deterioration in risk weighted assets.

In 2019 stress test, additional data on real estate exposure were collected by the CBUAE. As can be seen below, the distribution of real estate exposures under the adverse scenario is moving towards stages 2 and 3 due to the scenario shock on real estate prices in Dubai and Abu Dhabi. This implies significant credit losses, as stages 2 and 3 exposures require lifetime provisions.

CHART 2.3.5: REAL ESTATE EXPOSURE BY STAGE UNDER THE ADVERSE SCENARIO



Source: CBUAE

THE STRESS TEST REVIEW AND POLICY ACTIONS

The CBUAE performed a thorough review of banks' stress testing submissions focusing on the following four key areas:

I. Reporting template and documentation quality.

II. Governance and validation processes.

III. Consistency of stress testing models.

IV. Peer benchmarking and comparison to CBUAE internal estimation.

The results and findings from the stress test serve as an input to CBUAE's risk-based supervision. A formal linkage with Pillar 2 assessment is under consideration for the next round of stress tests.

Additionally, the CBUAE requires that all banks continue conducting regular bank-specific stress tests. It is also expected that banks' senior management and boards are actively engaged in the process, so that the stress testing results can be well integrated in the capital planning (Internal Capital Adequacy Assessment Process, ICAAP) and risk appetite framework. The review process showed that most banks' stress testing processes have improved compared to previous years, with gaps and areas of further improvement identified and communicated to the banks.

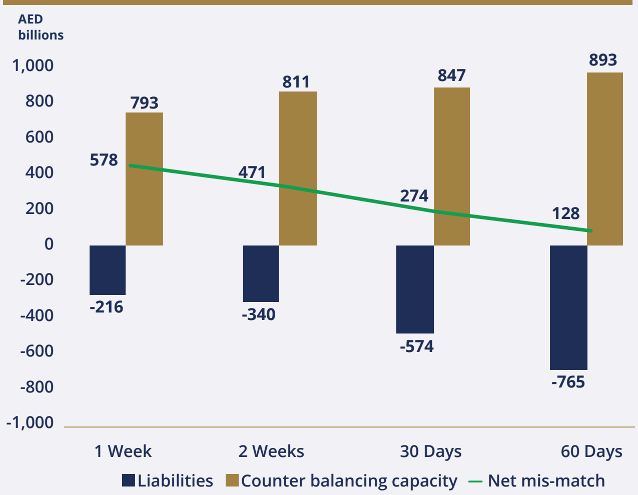
Overall, the stress testing results demonstrate resilience of the banking system to adverse shocks to critical risk areas such as oil demand and real estate sector. Estimated capital for four small banks fell below the minimum capital requirements under the adverse scenario. Given their small share of the total banking system assets (3.4%), they would not pose significant systemic risk to the banking sector. Improved reporting consistency through IFRS 9 framework and stress testing capacity at the banks should further enhance readiness to stress events. Although there are significant uncertainties on the duration and severity of the COVID-19 pandemic, the 2019 stress test results showed that UAE banks had strong capital position before entering the pandemic and remained resilient to withstand severe shocks.

BOX 2.3.1: LIQUIDITY STRESS TESTING IN THE UAE

Funding liquidity risk is the risk that a financial institution is unable to meet its cash and collateral obligations without incurring significant losses. The UAE banking sector has long been experiencing ample liquidity, having sufficient cash reserves to meet depositors' obligations. Customer deposits remain the primary source of funding in the UAE banking sector, with relatively low reliance on money market and capital markets. Depositor concentration is mainly attributed to deposits from government entities with large banks. However, concentration risk has been of less concern as the deposits from these entities has been historically stable.

From a regulatory perspective, banks are required to ensure that a minimum level of liquid assets should be held to ensure their ability to counter any short-term liquidity stress. The UAE banking sector holds sufficient stock of High Quality Liquid Assets (HQLA) that can be converted easily into cash with little or no loss of value in a stress event. This was evident, as banks remained resilient under Top-down Survival Days stress tests (30 and 60 days maturity mismatch under stressed situation). The methodology of the survival day stress test is closely following Basel requirement on Liquidity Coverage Ratio (LCR) where significant cash outflows, haircuts on HQLA and reduced cash inflows are assumed. As can be seen from the chart below, net mismatch between banks liabilities and counter-balancing capacity is positive, i.e. the UAE banking sector as a whole could withstand more than 60 days stress.

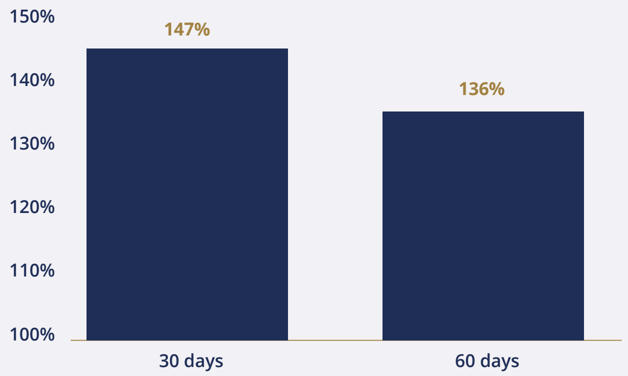
CHART 2.3.6: SURVIVAL DAYS



Source: CBUAE

In addition to the Survival Day stress test, the liquidity risk impact was also measured through 30 days LCR and 60 days LCR for the 5 largest banks (4 of these 5 banks are currently under LCR requirement). The chart below shows that average LCR for these banks declined from 147% (30 days) to 136% (60 days). Looking at individual bank level, all large banks were able to maintain 30 days LCR well above 100% minimum level, and only one bank was below 100% for 60 days LCR.

CHART 2.3.7: LIQUIDITY COVERAGE RATIO



Source: CBUAE

2.4 FINANCE COMPANIES

The finance companies[37] sector recorded a further decline in total assets during 2019 while the profitability and cost-efficiency remained under pressure. However, the sector remained adequately capitalised, and liquid asset ratio of the sector was above the minimum requirement, although some notable differences between individual finance companies remain. The asset quality of the sector improved as reflected by a decrease in Net Non-Performing Loans Ratio to 5.4%, mainly due to an increase in specific provisions. The size of the finance companies' sector represented only about one percent of the banking system.

FINANCE COMPANIES IN THE UNITED ARAB EMIRATES

The Non-Bank Financial Institution (NBFI) sector in the UAE is comprised of the following entities:

I. Finance companies
II. Investment companies
III. Insurance companies
IV. Pension funds

This chapter assesses the finance companies' sector, which is licensed to operate and regulated by the Central Bank of the UAE (CBUAE).

In April 2018, the CBUAE issued the new Finance Companies Regulation with a three-year implementation period. By the end of 2019, 67% of the finance companies were already compliant with the new requirements[38].

ASSETS OF THE FINANCE COMPANIES

The 22 actively operated finance companies in the UAE reported total assets[39] of AED 37.3 billion in 2019. The finance companies' total assets contracted by 8.9% year-on- year

Total assets of the finance companies[40] were about 1.2% of the total assets of banking system, which showed that the finance companies sector had low impact to transmit systematic threats to the UAE financial system as a whole.

TABLE 2.4.1: TOTAL ASSETS FOR FINANCE COMPANIES

Active Finance Companies	Number	Share of Total Assest
Ownership		
Bank-Owned	6	29.60%
Non-Bank-Owned	16	70.40%
Type		
Islamic	11	59.60%
Conventional	11	40.40%

Source: CBUAE

BANK-OWNED AND NON-BANK-OWNED FINANCE COMPANIES

The total assets of bank-owned finance companies declined in 2019 by 15.9% year- on-year, while total assets of non-bank-owned finance companies reduced at a slower pace of 5.6% year-on-year in 2019. The mergers in the banking sector are expected to reduce the number of finance companies.

ISLAMIC AND CONVENTIONAL FINANCE COMPANIES

The Islamic finance companies accounted for 59.6% of the total assets of the finance companies sector in 2019. During 2019, total assets of Islamic finance companies declined by 14.6% year-on-year, while the total assets for the conventional companies increased by 1.2% year-on-year.

37 The assessment in this chapter is captures on 22 active finance companies.

38 Finance Companies Regulation, Circular No.: 112/2018, Article 21.1-21.2.

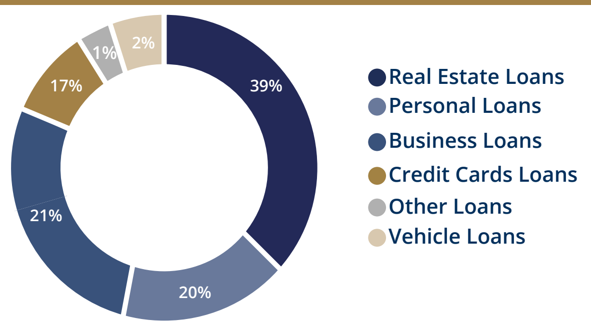
39 The total assets for the finance companies included interest in suspense, specific provisions and general provisions.

40 The total assets of finance companies represented approximately 2.4% of the nominal GDP and 3.2% of the nominal non-oil GDP. (Source: CBUAE, FCSA)

LENDING ACTIVITIES

Loans[41] remained the main component of the assets, accounting for 59.7% of the assets in 2019, followed by cash, placements and investments and fixed and other assets. Finance companies' lending declined in 2019 by 8.5% compared to 2018 and reached AED 21.2 billion. The largest six finance companies hold about 69.2% of the finance companies' total loan portfolio.
Finance companies lending portfolio[42] comprised mainly of real estate loans which accounted for 39.3%, followed by business loans and personal loans.

CHART 2.4.1: FINANCE COMPANIES LOANS PORTFOLIO



Source: CBUAE

Almost all categories in the loans portfolio recorded a decline in 2019, except credit cards which showed an increase of 10.1% and business loans which increased by 2.0% year-on-year.

LIABILITIES AND DEPOSITS

Finance companies are prohibited from taking retail deposits. Their main funding source were corporate deposits which reached AED 10.7 billion, and recorded a decrease by 22.7% compared to 2018, followed by borrowing and due to related parties.

LIQUIDITY

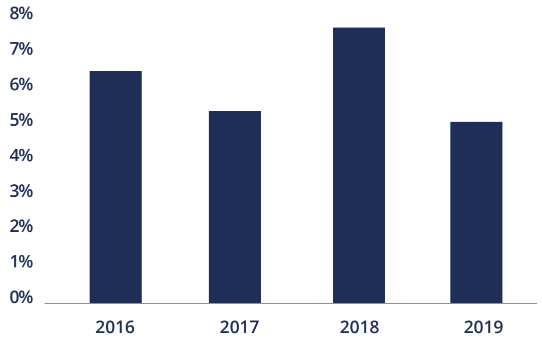
The average liquid assets ratio for the finance companies, as defined by the regulation[43], increased in 2019 and reached 16.9%, which is well above the minimum regulatory requirement of 10.0%.

In 2019, bank-owned finance companies recorded a significantly higher liquid assets ratio than the non-bank owned, with 33.5% and 12.4% respectively.

ASSET QUALITY

The asset quality of the finance companies actively operating in the UAE improved in 2019. The Net Non-Performing Loans (Net NPL) ratio[44] decreased from 7.6% to 5.4% The improvement in the Net NPL ratio was primarily due to an increase in specific provisions by 8.6% year-on-year.

CHART 2.4.2: FINANCE COMPANIES NET NPL RATIO



Source: CBUAE

Due to the increase in specific provisions achieved during the year, the total loans provision coverage for the NPLs increased to 96.6% in 2019 and the specific provision coverage for NPLs reached 83.1%[45].

CAPITAL ADEQUACY

The capital to asset ratio for the sector increased in 2019 and reached 38.5% compared to 37.1% in 2018. While the aggregate capital[46] for the finance companies declined the higher reduction in net total assets contributed to the improvement in the capital ratio. The bank-owned finance companies recorded a higher overall capital ratio than the non-bank owned.

PROFITABILITY

On aggregate, the finance companies sector recorded a further loss in 2019 at AED 842.9 million, reflecting the challenging operating environment. About half of companies actively operated in the UAE in 2019 recorded a net loss, while the other finance companies remained profitable. The high cost-to-income ratio was one of the factors affecting weak profitability for the sector. The increase in cost during the year was also impacted by higher provision charges, which resulted in better provision levels.

41 Loans for finance companies are excluding interest in suspense.

42 Loans portfolio is the gross loans which included interest in suspense.

43 Liquid assets over aggregate liabilities: Art. 12.1 of the Finance Companies Regulation considers cash, certificates of deposit, short-term deposits with U.A.E. banks and U.A.E. bonds as liquid assets.

44 Net NPL ratio calculated as a non-performing loans divided by gross loans (interest in suspense and specific provision are deducted from numerator and denominator).

45 Specific coverage ratio calculated as: specific provisions over the stock of the non-performing loans excluding the interest in suspense.

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

PART 3.
REGULATORY DEVELOPMENTS

3.1 OVERVIEW OF REGULATORY DEVELOPMENTS IN 2019

The Central Bank of the UAE (CBUAE) further enhanced its regulatory framework during 2019, in particular in the area of corporate governance, anti-money laundering, and the further implementation of the Basel III compliant capital adequacy framework. The CBUAE regulatory framework is based on five pillars: (i) Risk Management, (ii) Basel III Framework (iii) Controls and Compliance, (iv) Resolution Framework and (v) Market Development. In addition, the CBUAE progressed its efforts on regulations pertaining to Islamic finance, resolution framework, consumer protection, and anti-money laundering.

TABLE 3.1.1: SUMMARY OF REGULATORY INITIATIVES BY THE CBUAE

Areas	Description
Corporate Governance	The CBUAE issued the Corporate Governance regulation and accompanying standard in 2019, which established the overarching prudential framework for corporate governance among licensed banks ensuring that Board of Directors have a strong corporate governance culture in place. The regulation comes with a 3-year transition period.
BASEL III Framework	Furthermore, the CBUAE BASEL III framework standards were issued in 2019 and early 2020 covering credit risk standard, market risk standard, operational risk standard, and leverage ratio standard. This reflects the Basel III phase-in, while the complete Basel III-compliant capital framework were to be effective as of 30 June 2020 but the effective date was moved back to 31 March 2021 due to COVID-19.
AML- CFT	A new supervisory and enforcement provisions were issued in 2019 relating to Anti-Money Laundering and Counter-Terrorist Financing and Illegal Organisations (AML/CFT) in accordance with Decree Federal Law No. (20) of 2018.
	The CBUAE introduced a Registered Hawala Providers Regulation in 2019. Key provisions of the regulations include the certification requirements, business conduct and the compliance to AML/CFT regulations.
Controls and compliance	A new risk-based supervision approach and methodology was implemented by the CBUAE in 2019, consistent with the Basel Committee's Core Principles on Banking Supervision.
	Introduction of the new enforcement mandate and policy in 2019 led to the establishment of an internal and external enforcement referral procedure.
Market Development	The CBUAE's licensing activity expanded in line with market requirements and granted the first license to a retail Payment Service Provider for providing eWallet services. It also updated its licensing manual and rolled out a project aiming to fully automate its licensing services and application forms.
	The National Loan Scheme was launched in 2019 with an objective of easing the burden of UAE nationals' debt accumulation. The scheme, which was initiated in partnership with several national banks and the UAE Banks Federation has already benefitted more than 4,000 UAE nationals.
Payments and Settlements Systems	The payments system oversight unit commenced its work on the development of the Payments Systems Oversight Framework, to cover all financial infrastructure systems across the UAE.
Islamic Finance	The CBUAE continues to the development of the regulatory framework for Islamic Finance for financial institutions. The strong focus and initiatives conducted by the Higher Sharia Authority (HSA) in 2019 contributed to the further development of UAE Islamic Finance sector.
Resolution Framework	In 2019, CBUAE commenced its work on the Resolution Framework, which will cover recovery and resolution planning and early intervention measures.

BOX 3.1.1: STANDARDIZATION AND HARMONIZATION OF SHARI'AH REQUIREMENTS FOR ISLAMIC FINANCIAL INSTITUTIONS

Islamic banking assets in the UAE represent approximately 26% of the UAE total banking assets. While the Central Bank of the UAE (CBUAE) strengthened the overall prudential aspects of the banking sector, there are some unique features of Islamic banking that requires special attention. Islamic banks are subject to Shari'ah non-compliance risk that may lead to loss of income and reputational risk.

Absence of a standardised approach as to what constitutes Shari'ah compliance in relation to banking operations and businesses in the UAE as a whole may create a state of uncertainly in the market. With a view of supporting the UAE's vision of becoming the center for Islamic finance, CBUAE took major steps in addressing regulatory needs of Islamic banking sector. One of the main achievements of the UAE in this regard is the establishment of the Higher Shari'ah Authority (HSA).

HSA was established and its members appointed as per resolutions by the UAE Cabinet. Decretal Federal Law No. (14) of 2018, regarding CBUAE and the organisation of financial institutions and activities, reaffirmed the establishment of HSA and provided further details related to its mandate. The HSA aims to harmonise and standardize the practices of Islamic Financial Institutions, aligning them to international recognized Shari'ah standards and widely recognised practices through collaboration with the relevant stakeholders. HSA's goal is to support creation of a robust infrastructure that enables further development of the Islamic financial sector in the country and advances the UAE's vision in becoming an internationally recognised hub for Islamic finance.

The Decretal Federal Law No. (14) of 2018 mandated the HSA to determine the rules, standards, and general principles applicable to Shari'ah-compliant businesses and Licensed Financial Activities, and shall undertake supervision and oversight of the Internal Shari'ah Supervision Committees of licensed Islamic financial institutions. In addition, the HSA is mandated to approve Islamic monetary and financial tools issued and developed by CBUAE to manage monetary policy operations in the UAE, and provide its opinion regarding the specific regulatory rules and instructions relating to the operations and activities of Licensed Islamic Financial Institutions.

In the course of two years, the HSA lead the market to greater harmony by adopting reputable and widely accepted Shari'ah standards issued by Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), serving as the minimum requirement for Shari'ah compliance for Islamic financial institutions. In addition, the HSA introduced a number of Shari'ah governance measures to strengthen the assurance of Shari'ah compliance in Islamic financial institutions.
The HSA adopted a consultative approach by working closely with the UAE Banks Federation (UBF) Islamic banking committee, organising consultative meetings with the Internal Shari'ah Supervision Committees, and participating and engaging with relevant local and international standard setters, including Islamic Financial Services Board (IFSB) and similar centralised Shari'ah authorities.

3.2 IMPLEMENTATION OF CAPITAL STANDARDS IN THE UAE

The implementation of the Basel III framework that started in 2017 represents one of the key pillars in the regulatory framework of the Central Bank of the UAE (CBUAE). The full implementation of the capital framework was to be effective as of 30 June 2020, but due to the COVID-19, the effective date was moved back to 31 March 2021. The regulation, introducing UAE liquidity standards, was published in 2015 and LCR/NSFR liquidity ratios were applicable to four designated banks in 2019.

BASEL III CAPITAL ADEQUACY REGULATION

Capital Adequacy is a key pillar for ensuring the safety and soundness of banks. The CBUAE requires all banks operating in the UAE to comply with the capital regulations, which include Pillars 1, 2, and 3. The Pillar 1 regulatory capital requirements are based on standardised approaches which covers capital adequacy in relation to credit risk, market risk, and operational risk. These CBUAE Basel III capital adequacy regulations strengthen the quality of capital and also introduce capital buffers, which are required to be fulfilled using Common Equity Tier-1 (CET-1) capital. The minimum capital and capital buffer requirements in the UAE are summarised below.

TABLE 3.2.1: CAPITAL REQUIREMENTS IN THE UAE

Capital Requirement	As of January 2020
Minimum CET-1 ratio	7.0%
Minimum Tier-1 ratio	8.5%
Minimum Capital Adequacy Ratio (CAR)	10.5%
Capital Conservation Buffer (CCB)	2.5%
Domestic Systemically Important Banks (D-SIBs) buffer	0.5%-2.0% individual capital surcharge for identified D-SIBs
Counter-Cyclical Buffer (CCyB)	0%-2.5% CCyB for UAE exposures 0%

The Capital Conservation Buffer (CCB) requirements were phased in and are fully implemented as of January 2020. While the Capital Conservation Buffer (CCB) applies to all banks as a percentage of their total Risk Weighted Assets (RWA) in the form of the CET-1 Capital, the D-SIB buffer is imposed on banks that are designated by CBUAE as systemically important in the domestic financial system. As at the end of 2019, the CBUAE designated four UAE national banks as Systemically Important Banks.

D-SIBs are obliged to hold more capital to ensure not only their soundness and stability but also to help safeguard the stability of the UAE financial system. For this reason, the framework requires additional capital buffers in the form of CET-1 maintained by the D-SIBs. Although the Countercyclical Capital buffer (CCyB) in the UAE is 0%, banks may have an additional Countercyclical buffer requirement based on exposures in jurisdictions with non-zero countercyclical buffer requirements.

The CBUAE finalised the remaining capital requirements in 2019 and published by January 2020.In response to contain the repercussion of COVID-19, the Board of Directors, in a series of measures, approved to move the planned effective date for the remaining Basel III Capital Standards from 30 June 2020 to 31 March 2021. The Leverage ratio that will be effective during 2020 serves as a backstop to the risk-based capital measures. Pillar 2 standards on Internal Capital Adequacy Assessment (ICAAP) and Pillar 3 standards on Disclosure Requirements Complete the capital framework.

LIQUIDITY STANDARDS

In the UAE, banks manage their liquidity based on CBUAE Regulation No. 33/2015 published in 2015. The Regulation is applicable to all banks in the UAE. It introduces a LCR/NSFR framework for large international active banks and an alternate liquidity framework for all other banks. In 2019, four approved banks were under LCR/NSFR liquidity standards regime. The banks which are not under LCR/NSFR requirements are regulated based on the Eligible Liquid Asset Ratio and the Advances to Stable Resources Ratio.

The minimum requirements for banks are in line with those stipulated by Basel requirements, i.e. LCR minimum requirement of 100% and NSFR of 100%. The ELAR requirement is set at 10% and the LSRR requirement at 100%. High Quality Liquid Assets (HQLA) are the most essential component from the point of view of maintaining an on-going bank liquidity requirements. Not only the absolute amount of HQLA but also their decomposition influence banks' ability to settle their obligations.

3.3 FINANCIAL TECHNOLOGY

FinTech or Financial Technology is defined as "technologically enabled financial innovation that could result in new business models, applications, processes, or products with associated material effect on financial markets and institutions and the provision of services[47]." In recent years, a number of FinTech-driven innovations along with transformative, disruptive technologies have reshaped and disrupted some core traditional business models across financial segments. This is especially the case in the areas of payments, financing or credit provision, insurance and wealth management.

UAE – REGIONAL FINTECH HUB

The evolution of personal devices stimulates the demand for financial and banking solutions that can be easily accessible and provide multitude of services like payment/billing, money transfer/remittance and others. The Middle East and North Africa (MENA) has seen unprecedented growth in the FinTech sector in a very short time. Based on the MENA FinTech Venture Report by ADGM/MAGNiTT, FinTech is the top most invested industry across MENA by deals in 2018 and 2019, surpassing e-commerce and logistics.

Underpinned by the most advanced ecosystem to support the fast pace of innovation and growth, the UAE is ranked the largest FinTech hub and registered the highest amount of funding in 2019. The UAE also has one of the highest levels of ICT adoption globally (2nd of 140)[48]. In addition, the UAE was ranked first in the Arab region and 12th globally in Digital Competitiveness in 2019[49]. The main drivers to this growth were internet and mobile penetration, innovative products and services, regulatory development, and funding and investments from the government and private sectors. Among its regional counterparts, the UAE houses the most number of FinTech startups and successfully attracted the largest amount of funding as of 2019.

CBUAE - FINTECH OFFICE

The CBUAE FinTech vision is to establish a resilient regional and global FinTech Hub, underpinned by a robust and sustainable UAE FinTech ecosystem, supported by:

- A balanced and harmonised regulatory framework that is technology-neutral and proportionate to risks
- Cohesive FinTech development initiatives to strengthen core enablers of the ecosystem

The CBUAE FinTech Office acts as a FinTech enabler as well as coordinator for all stakeholders that share the collective vision of developing a mature FinTech ecosystem in the UAE through the implementation of five strategic focus areas:

- Research and Application - an initiator of industry research in potential application and risks of FinTech solutions, e.g. Distributed Ledger Technology for trade finance, e-payments, e-KYC (Know Your Customer), Open API and Artificial Intelligence
- Regulatory Interface - an interface between market participants and UAE regulators e.g. a common and transparent FinTech regulatory framework and regulatory co-sandboxing

47 Financial Stability Implications from FinTech - Financial Stability Board (27 June 2017).

48 Global Competitiveness Index Report 2019.

49 IMD World Digital Competitiveness Ranking 2019.

- Coordination and Liaison - a coordination platform for exchanging ideas of innovative FinTech initiatives among key stakeholders
- Talent Development - a facilitator to nurture talents to meet the growing needs of FinTech, e.g. FinTech Talent Development Programme
- National / Cross-border Collaboration - a collaborator to build a partnership model with onshore and cross-border key stakeholders.

CBUAE – ROLE AS FINTECH ENABLER

Towards realising this vision, CBUAE thinks beyond its traditional regulatory remit and acts as an enabler for FinTech development. However, it is a challenge for central banks and regulatory authorities to consider how to strike the right balance between ensuring the safety and soundness of the financial and banking systems, while minimising the risk of inadvertently inhibiting beneficial innovation in the financial sector.

The CBUAE therefore adopts a pragmatic approach that helps financial institutions be able to respond quickly to new developments and benefit immediately from transformative, disruptive technologies, while ensuring that all players are subjected to adequate supervision. Such dual-role includes:

- To ensure the safety of the financial and banking systems
- To ensure adequate user and consumer protection, especially as regards the safe-keeping and non-misappropriation of user funds, while ensuring that no misconduct issues may affect the interests of users and consumers
- To allow more and better choices of financial products and services so as to enable financial inclusion
- To foster innovation in the financial industry
- To improve the competitiveness of our financial market
- To create a level playing field with regulatory clarity for all market participants

3.4 CYBER RISK

Cyber-attacks on central banks and financial market infrastructures have become more frequent and sophisticated, prompting ever-increasing security investments and concerted focus on mitigating and managing cyber risk. The Central Bank of UAE (CBUAE) together with the UAE Government have been working to improve the overall resiliency and stability of critical infrastructures. To mitigate cyber security risk within the organisation, the CBUAE focuses on four main areas: (1) CBUAE cyber security governance framework, (2) CBUAE risk management framework, (3) operational excellence, and, (4) learning and development.

INTRODUCTION

Cyber security threats and associated costs have been on an increasing trend in the context of improved interconnectedness of global economy and sophisticated methods used by cyber criminals. When unchecked, shocks stemming from cyber security incidents may transmit to financial system and escalate into financial distress, with significant adverse impact on real economic activity. Similar to financial market shocks, cyber security shocks are difficult to anticipate, thus the focus is on building resilience through robust risk management and controls as well as an effective recovery process.

The CBUAE regulates and operates payment systems in the UAE and is heavily dependent on information technology systems. Any form of disruption to these critical systems could undermine confidence and result in the loss of business and trust. The complexity and close interconnection of the payment systems with different sectors creates vulnerabilities that can be exploited by cyber attackers. Thus, supporting and upgrading critical infrastructure are key to ensuring secure performance of the system.

As cyber threats continue to grow in sophistication, organisations face a persistent challenge in recruiting skilled cybersecurity professionals capable of protecting their systems against the threat of malicious actors. The CBUAE, with concerned UAE Government entities, is working to expand the talent pool by attracting local and international professionals and invest in developing the technical skills.

Against the backdrop of increasingly digitalised financial services, the CBUAE continues its close collaboration with the banking sector and other government entities to promote cyber resilience. Furthermore, in order to enhance its internal processes and capabilities in tackling cyber security risks, the CBUAE recruited top talent while adopting best practices in information security. It also strengthened its information and cyber risk management processes by implementing a dynamic risk-analysis methodology, identifying and protecting high-value information assets, assessing third parties, and enhancing reporting at the executive level.

To strengthen cyber resilience within the CBUAE, four main pillars have been designed:

PILLAR 1 – CBUAE CYBER SECURITY GOVERNANCE

The CBUAE has worked on upgrading its governance structure by identifying relevant laws and regulations locally and internationally, such as Payment Card Industry Data Security Standard, ISO27001, Basel Principles for Financial Market Infrastructures, and Local Federal regulations UAE – Information Assurance. To enhance information security governance, the CBUAE is in the process to apply for ISO27001 certification.

PILLAR 2 – CBUAE RISK MANAGEMENT

The CBUAE developed a maturity-based cyber security framework, associating an implementation of a roadmap and an integration into Enterprise Risk Management (ERM) framework and taxonomy, with defined appetite and quantified cyber risk.

Cyber risk for both the CBUAE and financial sector as a whole is reviewed at relevant committees on regular basis. The Risk Committee reviews cyber risk strategy, information security and supporting policies, establishes clear accountabilities at an organisational level, in particular across the three lines of defense.

The CBUAE proactively conducts internal and external vulnerability assessment, using both internal and external experts to build internal capabilities to conduct security tests on all its systems. The level of knowledge accumulated from these exercises allowed the teams to identify and solve problems related to payment systems, while improving the system security together with developers.

PILLAR 3 – OPERATIONAL EXCELLENCE

At the CBUAE, cyber security is focused on operational excellence taking into account that cyber security is a business enabler to the CBUAE operations. The cyber security teams are integrated in all projects, process and procurement life cycle to enforce cyber security policies and continuously enhance operations security posture and tackle cyber risks.

The CBUAE employs the latest technologies in managing its cyber risks and use the capabilities of big data to help correlate the data from different systems and identify risks. In 2020, the CBUAE continues to work towards enhancing its capabilities and to make use of artificial intelligence and orchestration tools to enhance its efficiency in detecting risks and responding to incidents.

PILLAR 4 – LEARNING AND DEVELOPMENT

One of the key strategies at the CBUAE to counter cyber risks is to continuously raise the awareness of staff on cyber-attacks. Accordingly, it invests heavily in developing its cyber security awareness programme and provides awareness sessions to all employees on a regular basis through class room or e-learning trainings. Furthermore, the CBUAE has conducted multiple training sessions for existing and new joiners based on their job profile, and benchmarked each employee's knowledge on multiple cyber risks topics.

KEY TECHNICAL MEASURES AND PROCESSES FOR ALL STAKEHOLDERS

As part of the continued development, the CBUAE is driving the enhancement of the technical measures and processes for all related stakeholders.

The CBUAE is currently developing third-party risk assessment process to monitor vendors' cyber security posture using cyber security scoring services to identify and monitor compliance of the vendors with the CBUAE's policies and procedures.

The CBUAE cyber risk team also contributes to cyber security in the financial sector by conducting regular information briefings on latest cyber risk trends. The cyber risk team also works with different stakeholders to launch information sharing solution, to support the financial and banking community and to share information on specific cyber security threats related to banks in the country.

To strengthen the financial sector in UAE against cyber-attacks, all licensed entities by CBUAE are required to apply and meet the UAE Information Assurance Standards, at the very least. In addition, all banks and financial institutions are required to meet and apply the minimum requirements to ensure E-mail and web security.

PART 4.
UAE PAYMENT AND SETTLEMENT SYSTEMS, CAPITAL MARKETS AND INSURANCE SECTOR

4.1 UAE PAYMENT AND SETTLEMENT SYSTEMS

The UAE payment systems remained resilient and continued to operate without any major disruptions. In 2019, the CBUAE released the Instant Payment Instruction (IPI) system in which the transmission of the payment messages and the availability of the final funds to the payee occur in real-time on a 24-hour and seven-day (24/7) basis. In addition, implementation roadmap of the National Payment System Strategy and FinTech Office were approved. The CBUAE has a principal role in the development, operations, management, and oversight of key UAE payment and settlement systems and continues to enhance their robustness, efficiency and effectiveness.

UAE PAYMENT AND SETTLEMENT SYSTEMS

Efficient and secure payment systems are the foundation of a stable financial system. The CBUAE secures and monitors cashless payments in the UAE, provides settlement and clearing services and plays an active role in the further advancement of financial market infrastructure.

In continuation of the effort to enable innovative transformative payment technology, the CBUAE announced the launch of the National Payment System Strategy, which is a strategic initiative to enhance all the components of Financial Market Infrastructure through the development of new payment features that caters individuals and businesses the latest technology in payment landscape and achieve highest levels of convenience in terms of digital payments, digital bills, financial settlement, and peer-to-peer money transfers. The journey to National Payment System Strategy started in 2018 through identifying key gaps and opportunities in the current payment systems, and identifying the desired outcome to close these gaps and capture these opportunities. In 2019, the CBUAE announced the launch of National Payment System Strategy, and committed to lead the implementation of the desired outcome with collaboration of financial institutions in the UAE. The implementation plan constitutes of three phases and the anticipated completion year is by 2023.

Furthermore, CBUAE committed to examine the current payment policy and regulation pertaining integrity, efficiency, pricing, and provision of payment services to financial providers in the UAE. The aim of the examination is to cater for recent change in disruptive technology, and to foster the participatory role of CBUAE in leading financial technology. The new payment policy is anticipated to cover wide-range of payment services, products and activities with focus on digital payments, and financial technology providers. CBUAE is anticipating the release of the new payment policy by 2020 in consultation with the financial institutions in the UAE.

During 2019, not only the payment systems in the UAE remained resilient and continued to operate without any major disruptions, but also Instant Payment Instruction (IPI) system was introduced to offer real-time money transfer for consumer payments, available 24 hours a day at zero extra cost.

INSTANT PAYMENT INSTRUCTION SYSTEM (IPI)

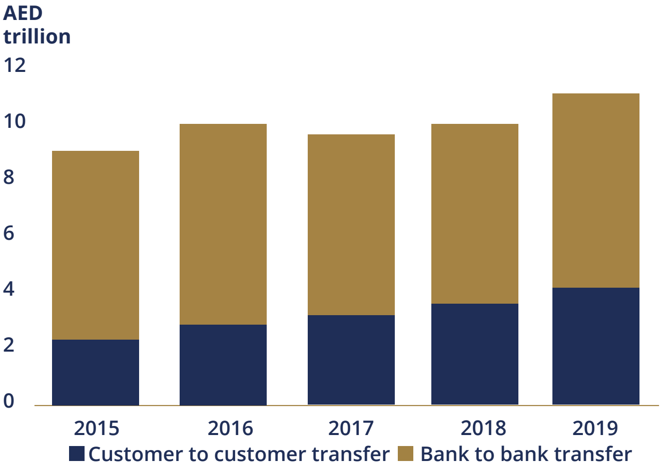
Also known as real-time payments, or faster payments system, IPI was launched in June 2019to enable payments across banks within the UAE to be made within 1 minute with service availability of 24 x 7 x 365 at zero cost to the banks and consumers. The provision of the Financial Market Infrastructure in real-time ensure the convenience and faster availability of funds. The IPI system has registered 1.9 million transactions and AED 4.7 billion in value since the launch in June until the end of 2019.

UAE FUNDS TRANSFER SYSTEM (UAEFTS)

UAEFTS has shown encouraging growth for the 10th year in a row, including inter-bank and consumer payment transactions. In 2019, the total number of transactions and value increased by 9.0% (from 43.7 million to 47.49 million) and 10% (from AED 10 trillion to AED 11 trillion) respectively.

The number of bank-to-bank transfers was about 477,000 which amounted to AED 7.5 trillion.

CHART 4.1.1: VALUE OF TRANSACTIONS THROUGH UAEFTS SYSTEM

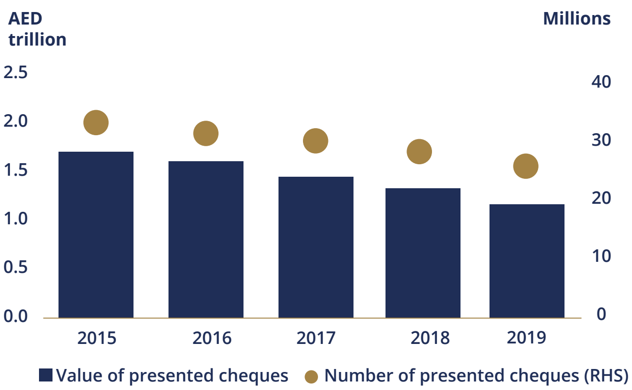


Source: CBUAE

IMAGE CHEQUE CLEARING SYSTEM (ICCS)

The ICCS continued to operate in 2019 with a lower volume and value of cheques compared to 2018 and 2017, which is aligned with the strategic objective of the CBUAE to promote Cashless Payments. The number of presented cheques declined by 4.0% (from 28.0 million to 27.0 million), while the value declined 6.0% year-on-year compared to 2018 (from AED 1.4 trillion to AED 1.3 trillion).

CHART 4.1.2: PRESENTED CHEQUES THROUGH THE ICCS

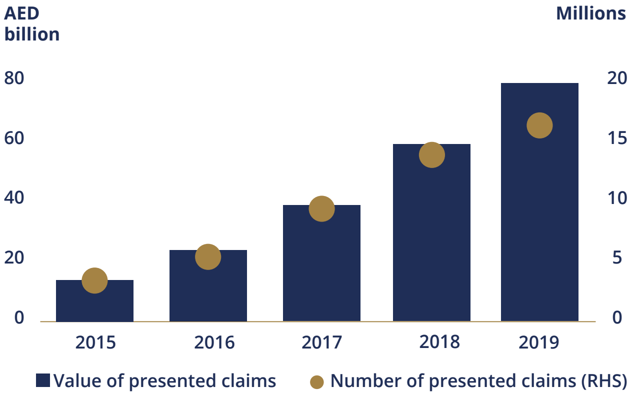


Source: CBUAE

THE UAE DIRECT DEBIT SYSTEM (UAEDDS)

The UAEDDS operated by the CBUAE functioned in 2019 with encouraging growth of 17.0% compared to 2018 in total number of presented claims (from 13.4 million to 16.0 million) and 7.0% in terms of the value (from AED 57 billion to AED 61 billion). The growth in volume and value continues to reflect an increasing usage of debit cards in the UAE.

CHART 4.1.3: PRESENTED CLAIMS THROUGH UAE DIRECT DEBIT SYSTEM

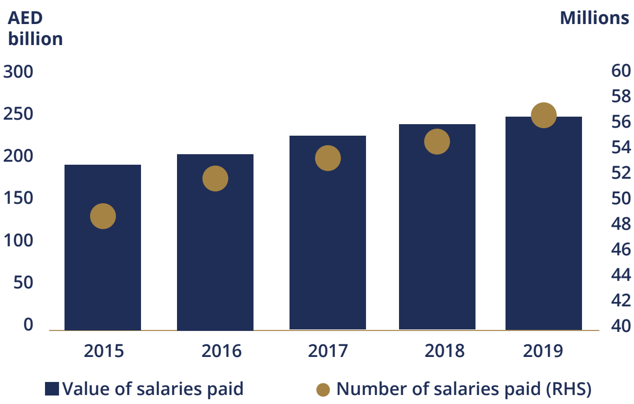


Source: CBUAE

THE WAGE PROTECTION SYSTEM (WPS)

The UAEWPS in 2019 continued to provide safe, secure, and timely payments of wages to employees. The adoption of the UAEWPS by employers has improved since its inception with the value of transactions steadily increasing to AED 240 billion in 2019.

CHART 4.1.4: TRANSACTIONS THROUGH UAEWPS



Source: CBUAE

UAE SWITCH

The growth of cash withdrawals through the UAE switch remained stable but moderated in 2019. The number of cash withdrawals via the UAE switch decreased 7.0% year-on-year (from 92 million to 86 million). At the same time, the value of withdrawals also declined by 8.0% (from AED 132 billion to AED 122 billion).

ASSESSMENT OF THE UAE PAYMENT SYSTEMS

A systemically important payment system is one in which a failure could have serious consequences throughout the UAE financial system. The CBUAE recognises two systemically important payment systems in the UAE: UAE Funds Transfer System (UAEFTS) and image cheques clearing system (ICCS). All payment systems operated by Central Bank of the UAE including UAEFTS and ICCS are assessed annually against the Principles for Financial Market Infrastructure (PFMI) to ensure the sound functionality and availability of the systems. As per 2019 PFMI assessment, these payment systems are fully compliant to majority of the applicable principles and broadly compliant to others. CBUAE has set a targeted date of 2023 to be fully complaint to all principles with a projected timeline for completion.

KEY DEVELOPMENTS IN THE UAE PAYMENT SYSTEM LANDSCAPE

In 2019, a number of initiatives have been undertaken to enhance the robustness, efficiency and effectiveness of the payment and settlement systems operated by the CBUAE:

I. The Launch of the National Payment Systems Strategy.

II. Completion of the Joint Central Bank Digital Currency (CBDC) and Distributed Ledger Technology Proof of Concept (Project Aber).

III. Development of Fintech strategy and the implementation roadmap for the establishment of Fintech Office.

IV. Fostering the regional payments through multiple cross border initiatives to provide seamless real time payments in terms of Cards, Remittances, and Inter-bank transactions within the region.

V. The launch of current payment policy examination.

DEVELOPMENT PRIORITIES AND KEY INITIATIVES FOR 2020

The CBUAE continues to highlight the focus on digital payments with a goal to provide faster, easier, and cost-efficient payment services for consumers and businesses domestically and cross-border within the region. The major initiatives that are part of the 2020 plan include:

I. Foster UAE Payments landscape through wider regulatory framework covering recent technologies in the region.

II. Reinforce the Financial Market Infrastructure through the National Payment System Strategy project to enable innovative payment use cases with most recent technology.

III. Establish Fintech Office within CBUAE.

IV. Continue to pursue faster payments and settlement services for consumers and corporates within the region through various initiatives.

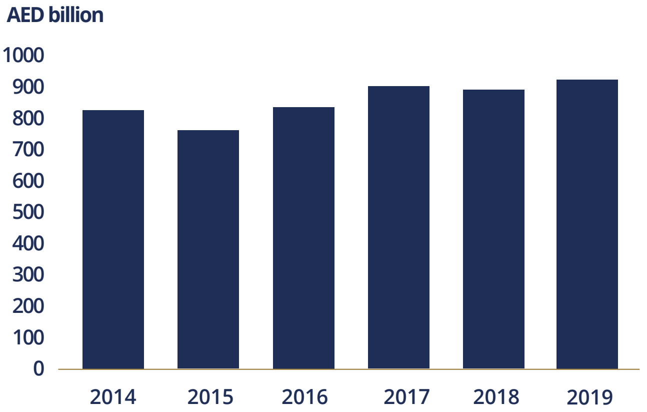
V. Enhance the pricing models and fee structure of various payment services in the UAE.

4.2 UAE CAPITAL MARKETS

(Contributed by the Securities and Commodities Authority)

The Securities and Commodities Authority (SCA) is responsible for monitoring and regulating the UAE's financial markets including the Dubai Financial Market (DFM) and the Abu Dhabi Securities Exchange (ADX). SCA has set-up a legislative framework necessary for the development of UAE capital markets and safeguard the rights of financial market investors by promoting transparency and also employing best corporate governance practices. During 2019, the total market capitalisation of the Abu Dhabi and Dubai Stock markets combined reached AED 905.4 billion, an increase of 3% from 2018.

CHART 4.2.1: MARKET CAP OF UAE FINANCIAL MARKETS



OVERVIEW OF THE PERFORMANCE OF THE UAE STOCK MARKETS DURING 2019

Abu Dhabi Stock Exchange (ADX) and the Dubai Financial Market (DFM) performed relatively well during 2019 on back of improved foreign investors' confidence in ADX and DFM. Total net foreign investments in ADX recorded a value of AED 9.706 billion, more than a fourfold increase, whereas DFM recorded an increase in foreign investment of 300% amounting to AED 2.828 billion during 2019.

TABLE 4.2.1: PERFORMANCE OF THE ABU DHABI STOCK EXCHANGE (ADX)

Abu Dhabi Securities Exchange "ADX"	2019	2018	Annual Change%
Index (point)	5075.77	4915.07	3.27%
Traded value (AED Billion)	56.818	39.541	43.69%
Traded volume (Billion shares)	15.526	15.367	1.03%
Trades	387,693	273,940	41.52%
Market Cap (AED Billion)	531.112	528.752	0.45%
Ner Foreign Investment (AED Billion)	9.706	1.928	403.42%
(Buy-Sell) (AED Billion)	9.82	2.09	369.86%

Source: SCA

TABLE 4.2.2: PERFORMANCE OF THE DUBAI FINANCIAL MARKET (DFM)

Dubai Financial Market "DFM"	2019	2018	Annual Change%
Index (point)	2764.86	2529.75	9.29%
Traded value (AED Billion)	53.097	59.128	-10.20%
Traded volume (Billion shares)	40.045	44.608	-10.23%
Trades	656,674	659,650	-0.45%
Market Cap (AED Billion)	374.303	346.035	8.17%
Net Foreign Investment (AED Billion)	2.828	-1.41	301%
(Buy-Sell) (AED Billion)	1.292	0.334	286.83%

Source: SCA

REVIEW AND ANALYSIS OF RISKS DURING 2019

PERFORMANCE OF FINANCIAL MARKETS

Global stock markets posted their best year since the aftermath of the financial crisis a decade ago. Most of the global stock markets including the USA, Europe and Asia ended the year 2019 with an excellent performance. The MSCI World Index, which tracks stocks across the developed world, gained 24.1% in 2019.

SCA has developed different scenarios for potential impactful future developments and how to deal with them given different market situations. These scenarios have been translated into initiatives that SCA can undertake in light of the challenges ahead. Internal and external challenges have been identified.

SCA has been publishing warnings to the public about unlicensed providers of services and products, as well as, the transfer of serious violations to the competent judicial bodies, which contributed to the achievement of deterrence and reduced the number of violations. In the context of the SCA's efforts to create an attractive investment environment by reducing the number of violations in the capital markets. The SCA has intensified its inspection on the licensed companies and listed companies at the local markets. The inspection aimed to ensure their conformity with the provisions of the laws and regulations in a manner that leads to the reduction of those violations, in addition to publishing the names of the violators on the website of the SCA in accordance with the regulations issued in this regard.

OPPORTUNITIES AND CHALLENGES

The emergence of new and innovative financial products and services by emerging technology companies, such as, block-chain and security tokens. These developments and innovations in the capital markets and the financial industry in general, present both opportunities and challenges for regulatory bodies in terms of the need to keep pace with these developments and assess their impact on industry and markets, while taking into account the need to allow for positive innovation. Technological innovations are not free of certain risks, the most important of which are regulatory and legal risks related to the uncertainty in the classification, licensing and control of such companies and services. This includes the difficulty of monitoring cross-border transactions, the operational risks of enterprises adopting such technologies, as well as, the risks of cyber security, privacy and data protection.

New unregulated products and services are still emerging in the markets that are promoted through free zones and over the internet and pose a challenge to all regulators in how to deal with these products to protect investors and maintain the integrity of financial markets

REVIEW OF RECENT REGULATORY DEVELOPMENTS AND OTHER INITIATIVES DURING 2019

The SCA amended the "Guide to Institutional Discipline Standards and Governance of Public Joint-Stock Companies". The amendments aim to address the weak participation of shareholders in general assembly meetings and to inform those interested as soon as possible of amendments to the companies' articles of association. It keeps pace with the changes in investor protection, to accommodate sustainability and social responsibility requirements, and to preserve the environment.

The SCA Board approved a draft decision on the suitability criteria, which are the information that the licensing entity must obtain from each customer, with the exception of qualified investors, prior to the execution of any transaction. This is done by measuring the customer's investment objectives, financial position, solvency, and experience, all of which will enable the licensing entity to determine whether investments are suitable and appropriate for customers.

The SCA issued a circular to oblige all public shareholding companies to implement the electronic voting system for the decisions of the general meetings of these companies in coordination with the financial markets in the country. Work is underway to verify the market readiness to implement the electronic voting system. The SCA also issued a directive to start the pilot implementation of the electronic voting system for shareholders in a sample of listed companies.

In order to measure investors' confidence, the SCA has sent a survey to both retail and qualified investors. The results of the questionnaire were analysed and the SCA is working on putting an action plan to deal with all comments and proposals.

The Chairman of SCA issued Decision No. (32 / Chairman) for the year 2019, regarding the procedures for companies whose shares are listed in the markets and whose accumulated losses are 20% or more of its capital. The decision includes distinguishing the losing companies with a distinctive sign (yellow and red) at the trading screens, according to the ratio of accumulated losses to the company's capital. The decision imposes disclosure requirements on these companies for a detailed analysis of accumulated losses, their amount, and their ratio to capital, the main reasons that led to the attainment of these accumulated losses, their history, and the actions that will be taken to address them. It also includes the requirements for disclosure and submission of a plan to address the accumulated losses for companies whose accumulated losses exceed 50% or more of their capital.

The SCA amended the Administrative Decision No. (6/CEO) for the year 2019 concerning Real Estate Investment Funds. By this amendment, a real estate investment fund may establish or own one real estate services company or more. In addition, the funds are allowed to accept in-kind contributions as part of its capital, which opens up the possibility of establishing an investment fund to fund parts of its share capital are real estate properties. This amendment will support the real estate market in the country.

The SCA coordinated with the concerned authorities in the UAE regarding the regulation of crowdfunding. As the central bank is responsible for crowdfunding based on loans (loan based), while the SCA is responsible for crowdfunding based on ownership (equity based), a draft regulation has been sent to the Cabinet.

The SCA joined the Global Financial Innovation Group (GFIN), in which regulators from all over the world participated, to find appropriate solutions to deal with technological developments and innovations in the financial sector.

The SCA continued its efforts to complete the regulatory framework that is required for market upgrade on international indices from emerging to developed; SCA will send its new draft law to the concerned authorities for approval. Currently, SCA is in the process of drafting additional regulations that help bridge the gaps for a market upgrade, (i.e. Initial Coin Offering, Securities Dealers, Micro prudential, securitization, etc.)

At the same time, SCA is working to increase the depth of the market by introducing new regulations that allow for more diversification of products or investment instruments, such as, preferred stocks, as well as projects to enhance the liquidity of the financial market, such as, the Crowdfunding and the mechanism for financing SMEs.

SCA held a series of consultations with a number of leading government institutions to implement an initiative that aims to find innovative solutions to finance pioneering enterprises and SMEs, such as creating channels through which such enterprises can access the capital markets and make use of the available financing methods, given the role that these enterprises play in achieving sustainable development.

In general, SCA has a roadmap to 2021 which includes a list of priorities for the projects it works for during the year: access to advanced financial markets, sustainable financial markets, a leading Islamic capital market, supporting brokerage firms to offer integrated financial services, Securities Token Offerings (STO), the development of innovative capital using smart solutions, and maintaining the UAE among top 10 competitive countries in the world. The Authority's list of priorities also includes launching joint initiatives with financial markets to increase market depth and liquidity.

SCA, as a policy maker, and a government regulator of one of the key drivers of the economy, the capital markets, has taken on itself the responsibility to use its role as a regulator and facilitator of the UAE capital markets, to actively support the achievement of the UAE national sustainability agenda, through all areas that fall within its purview. These areas include, but are not limited to: providing new cost-effective means for obtaining finance for sustainable projects and ventures; enhancing corporate governance practices in companies that incorporate sustainability in their strategic decision making; promoting high quality disclosure of sustainability related matters; encouraging investors and those who act on their behalf, to become strong advocates of sustainable investing and providing them with the information, tools, channels and instruments to do so; and incorporating the concepts of sustainability into its regulatory policies, wherever possible and relevant.

4.3 UAE INSURANCE SECTOR

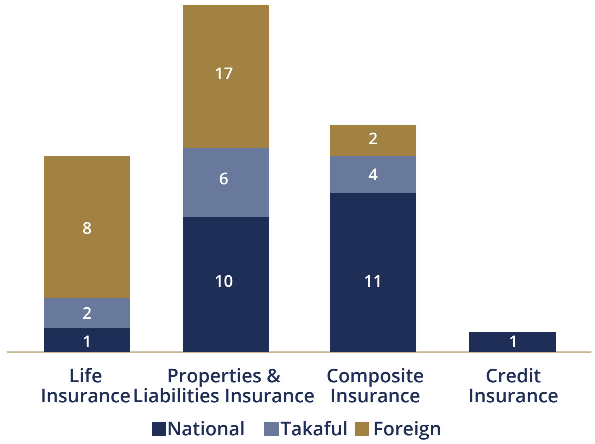
(Contributed by Insurance Authority)

The insurance sector is one of the most active economic sectors in the UAE, playing a vital role in serving the national economy and increasing growth rates of its contribution to GDP. The UAE maintains the first position in the MENA region for Gross Written Premiums in the last 10 years. The sector plays a key role in protecting persons and property in the country by ensuring that the obligations towards insurance policyholders are met and also in growing, accumulating and investing national savings.

INSURANCE SECTOR PERFORMANCE

The total number of the licensed insurance companies in the UAE during 2019 remained stable at 62 companies, of which more than half are properties and liabilities insurance companies.

CHART 4.3.1: NUMBER OF LICENSED INSURANCE COMPANIES IN 2019



Source: Insurance Authority

TABLE 4.3.1: NUMBER OF RELATED INSURANCE PROFESSIONS

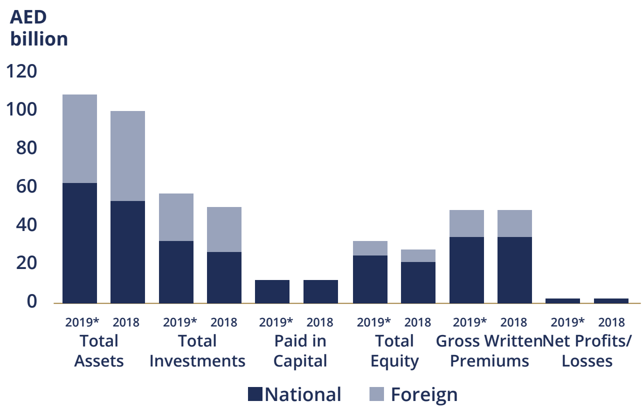
	2018	2019
Insurance Brokers Companies	164	167
Insurance Agents Companies	22	23
Insurance Consultant*	47	44
Loss & Damage Adjusters*	117	109
Actuaries*	51	59
Third Party Administrator "TPA"	28	26

* Individuals and Companies

KEY FINANCIAL INDICATORS FOR INSURANCE COMPANIES

Total assets of the insurance sector increased during 2019 by 5.7%. In addition, the sector recorded an increase in net profit by 29.5% compared to the previous year.

CHART 4.3.2: KEY FINANCIAL INDICATORS FOR INSURANCE COMPANIES



Source: Insurance Authority

INSURANCE AUTHORITY LEGISLATIONS

The year 2019 was a special year in terms of insurance legislation as the UAE Insurance Authority issued several new legislations. The new legislations will contribute to developing and enhancing the role of the insurance sector to secure lives, properties, and liabilities against risks.

THE FIRST INSTRUCTIONS FOR ORGANISING REINSURANCE OPERATIONS

The reinsurance regulation instructions include several new provisions of the reinsurance business, including:

- Reinsurance companies may engage in Re-takaful.

- Reinsurance companies may combine the two types of property reinsurance and liability business with reinsurance of persons and the funds accumulation operations.

- The federal government, the local government, and any company or entity wholly owned by either of them may be a shareholder in a reinsurance company or establish a public joint stock company on its own to exercise reinsurance in accordance with the provisions of the Federal Commercial Companies Act.

- The maximum of reinsurance premiums received is set at 49% of the gross written premiums of the company.

The new regulation will encourage the establishment of national reinsurance companies, as well as branches of foreign reinsurance companies to conduct their business in the UAE for the benefit of the national economy.

INSTRUCTIONS FOR LIFE INSURANCE AND FAMILY TAKAFUL INSURANCE

The new life insurance and family takaful insurance instructions marks a paradigm shift in the organization of the life insurance market in the UAE, for the following reasons:

- Organising production commissions in the life insurance by dividing it over the policy years by 10% per annum and for the single premium the commission does not exceed 10%.

- Standardizing the comparative basis for illustrations of life insurance products.

- All savings products must include at least 10% benefit of insurance protection (death/life).

- Increasing the level of disclosures by insurance companies to customers.

- Applying "Free-look period" for the first time with limited to 30 days.

CODE OF CONDUCT AND ETHICS

The Insurance Authority issued the amendment of certain provisions of the decision No. 3 of 2010 by adding insurance-related professions in the decision, the amendments increased the level of insured rights and beneficiaries of insurance operations.

THE COMMITTEES FOR THE SETTLEMENT & RESOLUTION OF INSURANCE DISPUTES

The Insurance Authority established the committees for the settlement and resolution of insurance disputes for all types and classes of insurance.

The committees are a judicial system specialized in quick, simplified procedures, without costs and financial burdens, since resorting to committees without fees.

Moreover, communication with the parties of an insurance the dispute is remotely via electronic channels, in order to achieve social and economic stability in the insurance sector, ultimately supporting the UAE's sustainable development.

The work of the committees in Abu Dhabi and Dubai began from November 2019, with the possibility of forming other committees in any emirate if needed.

THE SUPERVISORY RULES FOR THE EXPERIMENTAL ENVIRONMENT OF FINANCIAL TECHNOLOGY IN THE INSURANCE INDUSTRY "SAND BOXES"

The Insurance Authority issued the above-mentioned rules with the aim of contributing to achieving the UAE Vision 2021, and transforming the UAE insurance market into a smart insurance market.

The provisions outline the general framework of the innovative solution, categories of applicants and eligibility criteria during the pilot period.

In addition, the Insurance Authority supports the emerging Emirati Financial Technology (FinTech) companies', which helps the UAE create a competitive knowledge economy based on innovation, and that requires the support of the innovative solution owners.

ENHANCING SHARI'AH CONTROLLER'S ROLE IN TAKAFUL INSURANCE COMPANIES OPERATING IN THE STATE

The Insurance Authority is keen on the development of the insurance sector, especially Takaful which represents 10% of the gross written premiums in the UAE insurance sector.

Therefore, within the framework, new regulations have been issued from the Insurance Authority to organise the main duties and functions of the Shari'ah Controller in the Takaful companies, such as:

I. Review insurance contracts and transactions to confirm that they comply with the provisions of the Islamic Shari'a Principles and the Fatwa(s) issued to newly originated transactions.

II. Takaful insurance operations in the company are carried out in accordance with the provisions of Islamic Shari'a Principles.

III. The Company carries out its business either in accordance with the basis of Wakala or both Wakala and Mudaraba together.

MARKETING INSURANCE POLICIES THROUGH BANKS

"Bank-assurance" or marketing insurance policies through banks" is one of the most important distribution channels, especially in life insurance, which represents 35% of the gross written premiums in the life insurance sector.

The Insurance Authority issued an amendment to the instructions concerning marketing insurance policies through banks following-up the implementation of previous instructions in the market.

EXCLUSION OF SOME INSURANCE POLICIES FROM THE REQUIREMENT OF BEING WRITTEN IN THE ARABIC LANGUAGE

Due to the characteristics of insurance policies and their international nature, the Insurance Authority has identified the types of insurance policies that shall be excluded from the requirement of being written in the Arabic language as follows: marine hull, aviation, satellites, balloons, spaceships and oil.

INTERNATIONAL FINANCIAL REPORTING STANDARD (IFRS 17)

Following the internal gap analysis and implementation roadmaps in early 2019, the Insurance Authority supported companies in updating their systems and operations. In this regards, the Insurance Authority issued a circular, in December 2019 to all insurance companies, requesting for financial impact assessments of these companies, as a result of the implementation of the new standard. The new IFRS 17 will be effective in 2022 and will have an impact on the reporting of financial results.

APPENDIX

KEY INDICATORS FOR UAE BANKING SYSTEM

	2016	2017	2018	2019
Capital Adequacy				
CET 1 capital to RWA ratio	15.1%	14.6%	14.3%	14.7%
Tier 1 capital to RWA ratio	17.3%	16.6%	16.2%	16.5%
Total capital to RWA ratio	18.9%	18.1%	17.5%	17.7%
Profitability				
Return on Assets	1.4%	1.5%	1.5%	1.6%
Cost-to-income ratio	38.0%	39.1%	35.9%	33.9%
Liquidity Risk				
Eligbile Liquid Asset Ratio	16.2%	18.3%	17.5%	18.1%
Advances to Stable Resources	86.2%	84.5%	82.3%	81.0%
Lending and funding conditions				
Loan-to-deposit	99.4%	97.1%	94.3%	92.5%
Loan-to-deposit in foreign currency	75.1%	69.0%	64.3%	66.6%
Asset quality				
Net NPL ratio	1.5%	1.8%	1.8%	2.4%
Specific provision coverage ratio	72.7%	68.1%	70.0%	62.4%
Total provision coverage ratio	113.0%	107.0%	104.7%	97.5%

KEY INDICATORS FOR NATIONAL BANKS

	2016	2017	2018	2019
Capital Adequacy				
CET 1 capital to RWA ratio	14.6%	14.0%	13.7%	14.0%
Tier 1 capital to RWA ratio	17.1%	16.6%	16.2%	16.1%
Total capital to RWA ratio	18.5%	18.1%	17.5%	17.3%
Profitability				
Return on Assets	1.6%	1.5%	1.5%	1.5%
Cost-to-income ratio	36.6%	39.1%	35.9%	31.2%
Liquidity Risk				
Eligbile Liquid Asset Ratio	14.9%	18.3%	17.5%	16.6%
Advances to Stable Resources	88.1%	84.5%	82.3%	82.6%
Lending and funding conditions				
Loan-to-deposit	100.4%	97.1%	94.3%	93.3%
Loan-to-deposit in foreign currency	71.4%	69.0%	64.3%	61.7%
Asset quality				
Net NPL ratio	1.3%	1.6%	1.6%	2.4%
Specific provision coverage ratio	72.6%	69.7%	70.1%	59.6%
Total provision coverage ratio	118.0%	107.0%	104.7%	97.0%

KEY INDICATORS FOR ISLAMIC BANKS

	2016	2017	2018	2019
Capital Adequacy				
CET 1 capital to RWA ratio	12.4%	11.4%	12.7%	13.4%
Tier 1 capital to RWA ratio	16.5%	15.3%	16.2%	16.8%
Total capital to RWA ratio	17.1%	16.4%	17.3%	17.9%
Profitability				
Return on Assets	1.5%	1.7%	1.8%	1.8%
Cost-to-income ratio	40.0%	37.9%	37.5%	35.4%
Liquidity Risk				
Eligbile Liquid Asset Ratio	16.8%	20.0%	19.6%	19.7%
Advances to Stable Resources	86.7%	83.1%	81.6%	80.7%
Lending and funding conditions				
Loan-to-deposit	96.1%	92.2%	93.0%	86.5%
Loan-to-deposit in foreign currency	93.9%	88.9%	82.5%	79.2%
Asset quality				
Net NPL ratio	1.8%	2.0%	1.7%	2.0%
Specific provision coverage ratio	72.9%	66.5%	65.6%	59.7%
Total provision coverage ratio	143.9%	100.1%	105.9%	97.8%

ACRONYMS AND ABBREVIATIONS

AAOIFI	Accounting and Auditing Organization for Islamic Financial Institutions
ADCB	Abu Dhabi Commercial Bank
ADGM	Abu Dhabi Global Market
AED	United Arab Emirates Dirham
ASRR	Advances to Stable Resources Ratio
ADX	Abu Dhabi Securities Exchange
AML	Anti-Money Laundering
BCBS	Basel Committee for Banking Supervision
BPS	Basis points
BRICS	Brazil, Russia, India, China, South Africa
CAR	Capital Adequacy Ratio
CCB	Capital Conservation Buffer
CCyB	Counter-Cyclical Buffer
CBDC	Central Bank Digital Currency
CBUAE	Central Bank of the UAE
CFT	Counter-Terrorist Financing
CET-1	Common Equity Tier
COVID-19	Coronavirus disease 2019
CDS	Credit Default Swaps
CVA	Credit Valuation Adjustment
DTI	Debt to income
DFM	Dubai Financial Market
DIB	Dubai Islamic Bank
DLD	Dubai Land Department
D-SIBs	Domestic Systemically Important Banks
DSTI	Debt-Service-to-Income ratio
DVA	Debt valuation adjustment
EBIT	Earnings Before Interest and Tax
ELAR	Eligible Liquid Asset Ratio
ENBD	Emirates NBD
FAB	First Abu Dhabi Bank
FCSA	Federal Competitiveness and Statistics Authority
FSPC	Financial Stability Policy Committee
FSTI	Financial Stability Trend Index
FinTech	Financial Technology
FVOCI	Fair Value through Other Comprehensive Income
FVPL	Fair Value through Profit or Loss
GFIN	Global Financial Innovation Group
GRE	Government Related Entity
GDP	Gross Domestic Product
GCC	Gulf Cooperation Council
HSA	Higher Shari'ah Authority
ICAAP	Internal Capital Adequacy Assessment Process
ICCS	Image Cheque Clearing System
IFRS 9	International Financial Reporting Standard 9
IIF	Institute of International Finance
IPI	Instant Payment Instruction
IFSB	Islamic Financial Services Board
LAR	Liquid Assets to Total Assets Ratio
LCR	Liquidity Coverage Ratio
LTD	Loan to Deposit Ratio
LTV	Loan to value Ratio
LTD	Loan-to-deposit Ratio
MENA	Middle East North Africa
NPSS	National Payment Systems Strategy
NBFI	Non-Bank Financial Institution
NPL	Non-performing Loans
NSFR	Net Stable Funding Ratio
P&L	Profit and Loss
PFMI	Principles for Financial Market Infrastructure
PMI	Purchasing Managers' Index
ROA	Return on Assets
ROE	Return on Equity
RWA	Risk Weighted Assets
SCA	Securities and Commodities Authority
SME	Small Medium Enterprises
STO	Securities Token Offerings
TESS	Targeted Economic Support Scheme
UBF	UAE Banks Federation
UAEDDS	The UAE Direct Debit System
UAEFTS	UAE Funds Transfer System
UAE	United Arab Emirates
US	United States
USD	United States Dollar
WEO	World Economic Outlook
WPS	The Wage Protection System

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