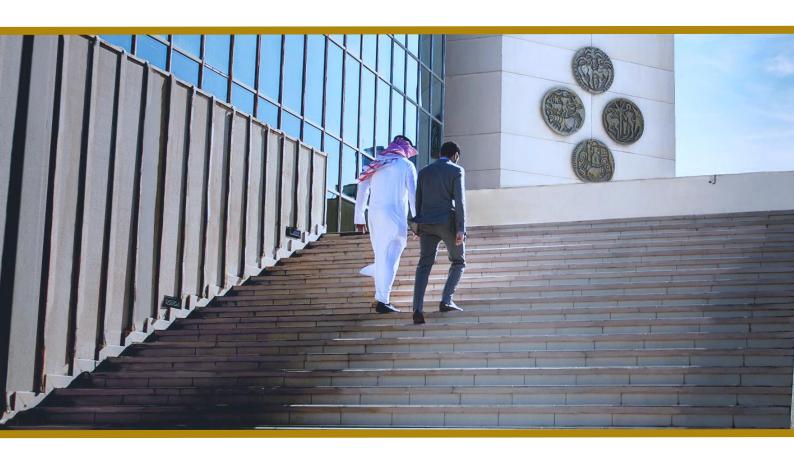


### FINANCIAL STABILITY REPORT

September 2019 | Issue No. 27





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### **Table of Contents**

Table of Contents	i
List of Tables	iv
List of Charts	vi
Preface	1
Executive Summary	3
Part I: Developments in the International and Domestic Financial Markets	7
1. Developments in the International Financial Markets	8
1.1 Overview	8
1.2 Global Macro-financial Environment	8
1.2.1 Economic Performance	8
1.2.2 Financial Markets	11
2. Developments in Bahrain's Financial and non-Financial Sector	12
2.1 Overview	12
2.2 The Financial Sector	12
2.2.1 The Size of the Banking Sector	13
2.2.2 Credit Developments	17
2.2.3 Net Foreign Assets	
2.3 Monetary Indictors	21
2.4 Inflation	
2.5 The Households/Personal Sector	22
2.6 The Bahraini Corporate/Business Sector	24
2.6.1 Construction and Real Estate	
2.7 Overall assessment of the Bahraini Financial sector and non-Financial Sector	27
Part II: Developments in the Banking Sector	28
Overall Banking Sector	
3.1 Overview	
3.2 Overall Banking Sector Performance	
3.2.1 Capital Adequacy	
3.2.2 Asset Quality	
3.2.3 Profitability	
3.2.4 Liquidity	
3.3 Overall Assessment of the Banking Sector	
4. Conventional Banks	
4.1 Overview	
4.2 Conventional Retail Banks	
4.2.1 Capital Adequacy	
4.2.2 Asset Quality	
4.2.3 Profitability	45
4.2.4 Liquidity	46
4.3 Conventional Wholesale Banks	47
4.3.1 Capital Adequacy	47
4.3.2 Asset Quality	47
4.3.3 Profitability	51
4.3.4 Liquidity	52
4.4 Overall Assessment of the Conventional Banking Sector	53
5. Islamic Banks	54
5.1 Overview	
5.2 Islamic Retail Banks	54
5.2.1 Capital Adequacy	
5.2.2 Asset Quality	
5.2.3 Profitability	
5.2.4 Liquidity	
5.3 Islamic Wholesale Banks	

	5.3.1	Capital Adequacy	
	5.3.2	Asset Quality	59
	5.3.3	Profitability	62
	5.3.4	Liquidity	62
5	5.4 Ov	erall Assessment of the Islamic Banking Sector	63
Part	III: Deve	lopments in the Non-Bank Financial Sector	64
6.	Insurar	ice Sector	65
$\epsilon$		erview	
$\epsilon$		formance of the Insurance Sector	
6	5.3 Fin	ancial Position and Profitability of Insurance Sector	67
	6.3.1	Conventional Insurance Firms	68
	6.3.2	Takaful Insurance Firms	
6	5.4 Ins	urance Premiums and Claims Analysis by Class	69
	6.4.1	Overall Insurance	
	6.4.2	Conventional Insurance	70
	6.4.3	Takaful	
	6.4.4	Retention Ratio and Loss Ratio (By Class)	74
6	5.5 Re	gulatory Changes, Market trends and Risks.	74
	6.5.1	Regulatory development initiatives	
	6.5.2	Motor Insurance Subrogation Reconciliation	
7.		nk Financial Institutions	
7		erview	
7	7.2 Inv	estment Businesses	
	7.2.1	Assets Under Management	
	7.2.2	Profitability	78
7		ney changers	
		allenges & Risks in Non-Banking Financial Institutions	
7		velopments in Regulation and Initiatives	
8.		Markets	
8		erview	
8	3.2 Bal	nrain Bourse	
	8.2.1	All Share Index and Islamic Index Overview	
	8.2.2	Bahrain Bourse Trading Statistics	
8		rket Resilience	
8	3.4 Ca <sub>l</sub>	oital Market Activities	
	8.4.1	Offering of Securities	
	8.4.2	Issuance of Shares	
		ks & Challenges in Capital Markets	
8	3.6 De	velopments in Regulation and Initiatives	
	8.6.1	Policy and Regulatory Developments	
	8.6.2	The Capital Markets Supervision Directorate's Upcoming Initiatives	
8	3.6.3 Inv	estor Protection Initiatives	95
Part		elopments in the Payment Systems, FinTech, and Cyber Security	
9.		yment and Settlement Systems	
Š	9.1 Ov	erview	97
9		al Time Gross Settlement System (RTGS)	
		ipless Securities Settlement System (SSSS)	
S		M Clearing System (ATM)	
S		nrain Cheque Truncation System (BCTS)	
S		ctronic Fund Transfer System (EFTS)	
10.		, Innovation and Financial Inclusion	
1		Tech Developments	
		Regulatory Sandbox	
	10.1.2	Crowdfundina	

10.1.3 Open Banking	
10.1.4 Crypto Assets	108
10.1.5 E-Wallets	109
10.1.6 Digital Financial Advice	
10.1.7 FinTech Bay	111
10.1.8 Benefit	112
10.1.9 National e-KYC	112
10.1.10 Small and Medium Enterprises Support	113
10.1.11 Other Regulatory Framework Developments and Projects	113
10.2 Financial Inclusion	113
11. Cyber Security	117
11.1 Overview	117
11.2 The nature of cyber security risk and its impact on financial stability	117
11.3 CBB Cyber Security Survey	
11.3.1 Survey Scope & Objectives	118
11.3.2 Key Survey Findings	
11.4 CBB Cyber Security Initiatives and Regulatory Developments	
Annex: Financial Soundness Indicators and Selected Graphs	127
List of Abbreviations	138

### **List of Tables**

Table 2-1: Evolution of the size of the Banking sector in Bahrain	
Table 2-2: Net Foreign Assets Postion by Banking Segment (June 2019)	
Table 2-3: Money Supply Composoition	
Table 2-4: Personal Loans Breakdown	
Table 2-5: Business Loans by Sector	
Table 2-6: Selected Construction Permits by Type	
Table 3-1: Capital Provision Ratios	
Table 3-2: NPL Ratios	
Table 3-3: NPL Ratios and Specific Provisions by Time Period (June 2019)	
Table 3-4: NPL Ratios by Sector (%)	31
Table 3-5: Lending Distribution (% Total Loans)	32
Table 3-6: SME Lending	33
Table 3-7: Profitability	
Table 3-8: Liquidity	
Table 4-1: CR Banks' Capital Provisions Ratios	40
Table 4-2: CR Banks' NPL Ratios	41
Table 4-3: CR Banks' NPL Ratios by Sector (%)	42
Table 4-4: CR Banks' Lending Distribution by Sector (% Total Loans)	
Table 4-5: Local CR Banks' Lending Distribution by Sector (% Total Loans)	
Table 4-6: Overseas CR Banks' Lending Distribution by Sector (% Total Loans)	45
Table 4-7: CR Banks' Profitability	
Table 4-8: CR Bank's Liquidity	
Table 4-9: CW Banks' Capital Provisions Ratios	47
Table 4-10: CW Banks' NPL Ratios	
Table 4-11: CW Banks' NPL Ratios by Sector (%)	
Table 4-12: CW Banks' Lending Distribution by Sector (% Total Loans)	
Table 4-13: Local CW Bank's Lending Distribution by Sector (% Total Loans)	
Table 4-14: Overseas CW Banks' Lending Distribution by Sector (% Total Loans)	
Table 4-15: CW Banks' Profitability	
Table 4-16: CW Banks' Liquidity	
Table 5-1: IR Banks' Capital Provisions Ratios	
Table 5-2: IR Banks' NPF Ratios	
Table 5-3: IR Banks' NPF Ratios by Sector (%)	
Table 5-4: IR Banks' Lending Distribution by Sector (% Total Facilities)	
Table 5-5: IR Banks' Lending Distribution by Islamic Instrument (%Total Facilities)	
Table 5-6: IR Banks' Profitability (%)	
Table 5-7: IR Banks' Liquidity (%)	
Table 5-8: IW Banks' Capital Provisions Ratios	
Table 5-9: IW Banks' NPF Ratios	
Table 5-10: IW Banks' NPF Ratios by Sector (%)	
Table 5-11: IW Banks' Lending Distribution by Sector (%Total Facilities)	
Table 5-12: IW Banks' Lending Distribution by Islamic Instrument (%Total Facilities)	
Table 5-13: IW Banks' Profitability (%)	
Table 5-14: IW Banks' liquidity (%)	
Table 6-1: Total Assets, Liabilities, Capital, and Profitability of Insurance Sector by Segment	
Table 6-2: Gross Premiums and Claims for all Insurance Firms by Class - Bahrain Operations	
Table 6-3: Gross Premiums and Claims for Conv. Insurance by Class - Bahrain Operations	
Table 6-4: Gross Premiums and Claims for Conv. Local and Overseas Insurance by Class - Bahrain Operations	
Table 6-5: Gross Premiums and Claims for Takaful Insurance Firms by Class – Bahrain Operations	
Table 6-6: Retention and Loss Ratios of Overall Insurance Sector	
Table 7-1: IB Total Assets by Category	
Table 7-2: Assets under Management	
Table 7-3: IB Profitability by Category	
Table 7-4: MC Turnover by Currency Group	80

Table 8-1: Key Indicators of Bahrain Bourse	83
Table 8-2: Bahrain All Share Index by Sector	
Table 8-3: Market Capitalization on the Bahrain Bourse	85
Table 8-4: Largest 5 Companies by Market Capitalization as of June 2019	85
Table 8-5: Value of Shares Traded by Sector (% of Value of all shares traded)	86
Table 8-6: Volume of Shares Traded by Sector (% of Volume of all shares traded)	87
Table 8-7: Number of Transactions by Sector	88
Table 8-8: Value of Transactions by Nationality (in BHD)	89
Table 8-9: Stock Market Indices in GCC counties	
Table 8-10: Price-Earnings Multiples	90
Table 9-1: RTGS Bank Transfers Daily Average Volume and Value	
Table 9-2: SSSS Aggregate Volume and Value	99
Table 9-3: ATM Transactions Daily Average and Volume	
Table 9-4: BCTS Daily Average Volume and Value	
Table 9-5: EFTS Fawri+ Daily Average Volume and Value	
Table 9-6: EFTS Fawri Daily Average Volume and Value	
Table 9-7: EBPP Fawateer Daily Average Volume and Value	
Table 10-1: Digital Wallets and Features in the Kingdom	110
Table 10-2: Volume and Value of Transactions through e-Wallet and Mobile Payments	111
Table 10-3: Financial Inclusion Figures for the Kingdom of Bahrain	
Table 10-4: Point of Sale (POS) Transactions in Bahrain	115
Table 11-1: Examples of Key Transmission Channels that can Impact Financial Stability	118

### **List of Charts**

Chart 1-1: Real GDP Growth in Selected Europeans Countries (Quaterly %) Seasonally Adjusted	
Chart 1-2: Real GDP Growth in Advanced Economies (Quaterly %)	10
Chart 1-3: Quaterly Real GDP Growth in BRIICS (Quaterly %)	
Chart 1-4: Real GDP Growth in GCC Countries (Annual percent change)	
Chart 1-5: Global Equity Market Indices (Re-indexed to January 2008)	11
Chart 2-1: Size of the Banking Sector to RealGDP	
Chart 2-2: Banking Sector Asset Composition	
Chart 2-3: Retail Banks' Assets	
Chart 2-4: Categorization of Retail Banks' Assets	
Chart 2-5: Retail Banks' Assets (%) by Geographical Classification (Jun. 2018)	
Chart 2-6: Retail Banks' Assets (%) by Geographical Classification (Jun. 2019)	
Chart 2-7: Wholesale Banks' Assets	
Chart 2-8: Categorization of Wholesale Banks' Assets	
Chart 2-9: Wholesale Banks' Assets by Geographical Classification (Jun. 2018)	
Chart 2-10: Wholesale Banks' Assets by Geographical Classification (Jun. 2019)	
Chart 2-11: Islamic Banks' Assets	
Chart 2-12: Categorization of Islamic Banks' Assets	
Chart 2-13: Islamic Banks' Assets by Geographical Classification (Jun. 2018)	
Chart 2-14: Islamic Banks' Assets by Geographical Classification (Jun. 2019)	
Chart 2-15: Loans to the Private Sector (BD Million)	
Chart 2-16: Loans to General Government (BD Million)	
Chart 2-17: Total Deposits and total Domestic Credit (BD Million)	
Chart 2-18: Net Foreign Assets Position by Banking Segment	18
Chart 2-19: Net Foreign Assets of the Overall Banking Sector	
Chart 2-20: Money Supply (BD million) from Jan. 2016 to Jun. 2019	21
Chart 2-21: CPI Change (Jan. 2014 – Jun. 2019)	
Chart 2-22: Monthly Inflation Rate (Jun. 2018 – Jun. 2019)	
Chart 2-23: Personal Loans and Advances (Volume and % of GDP)	
Chart 2-24: Growth Rates of Total Personal Loans and Advances (%)	
Chart 2-25: Personal Loans Breakdown (Jun. 2019)	
Chart 2-26: Retail Banks- Average Interest Rates on Personal Loans and Interest rates on Deposits (%)	
Chart 2-27: Business Loans and Advances (Volume and % of GDP)	25
Chart 2-28: Growth Rates of Total Business Loans and Advances (%)	
Chart 2-29: Business Loans by Sector (Jun. 2019)	
Chart 2-30: Retail Banks' Average Interest Rates on Business Loans	
Chart 3-1: NPLs by Time Period (June 2019)	
Chart 3-2: NPLs Concentration by Sector (June 2019)	
Chart 3-3: NPL Ratios by Sectors (%)	
Chart 3-4: Lending Distribution (% Total Loans)	
Chart 3-5: SME Lending by Banking Segment (June 2019)	
Chart 4-1: CR Banks' NPLs Concentration by Sector (June 2019)	
Chart 4-2: CR Banks' NPL Ratios by Sector (%)	
Chart 4-3: CR Banks' Lending Distribution by Sector (% Total Loans)	
Chart 4-4: Local CR Banks' Lending Distribution by Sector (% Total Loans)	
Chart 4-5: Overseas CR Banks' Lending Distribution by Sector (% Total Loans)	
Chart 4-6: CR Banks' NPLs Concentration by Sector (June 2019)	
Chart 4-7: CW Banks' NPL Ratios by Sector (%)	
Chart 4-8: CW Banks' Lending Distribution by Sector (% Total Loans)	
Chart 4-9: Local CW Banks' Lending Distribution by Sector (% Total Loans)	
Chart 4-10: Overseas CW Banks' Lending Distribution by Sector (% Total Loans)	
Chart 5-1: IR Banks' NPFs Concentration by Sector (June 2019)	
Chart 5-2: IR Banks' NPF Ratios by Sector (%)	
Chart 5-3: IR Banks' Lending Distribution by Sector (%Total Facilities)	
Chart 5-4: IR Banks' Lending Distribution by Islamic Instrument (% of Total Facilities)	57

Chart 5-5: IW Banks' NPFs Concentration by Sector (June 2019)	59
Chart 5-6: IW Banks' NPF Ratios by Sector (%)	60
Chart 5-7: IW Banks' Lending Distribution by Sector (%Total Facilities)	61
Chart 5-8: IW Banks' Lending Distribution by Islamic Instrument (%Total Facilities)	62
Chart 6-1: Insurance Sector Contribution and Quarterly Growth to GDP (%)	
Chart 6-2: Gross Premiums of Insurance Sector by Segment (%)	
Chart 6-3: Market Share of Gross Premiums by Class (%)	
Chart 6-4: Concentrations of GPs and Claims for all Insurance Firms by Class - Bahrain Operations	
Chart 6-5: Concentrations of GPs and Claims for Conv.Insurance by Class - Bahrain Operations	
Chart 6-6: Concentrations of GPsand Claims for Conv. Local Insurance by Class - Bahrain Operations	
Chart 6-7: Concentrations of GPs and Claims for Conv. Overseas Insurance by Class - Bahrain Operations	
 Chart 6-8: Concentrations of GPs and Claims for Takaful Insurance Firms by Class - Bahrain Operations	
Chart 6-9: Retention Ratios of Insurance Sector	
Chart 7-1: IB Total Assets by Time Period	
Chart 7-2: IB Profitability (Q4 2010 – Q2 2019)	
Chart 7-3: Money Changers Currency Group Purchase & Sale, Q2 2019 (% of Total)	
Chart 7-4: Money Changers Total Turnover by Currency Group	
Chart 8-1: Bahrain All-Share Index, Jan. 2013 - Jun. 2019	
Chart 8-3: Bahrain Islamic Index, Sep. 2015 – Jun. 2019	
Chart 8-4: Bahrain All-Share Index and Oil price fluctuations	
Chart 8-5: Market Capitalization by Sector, Jun. 2019	
Chart 8-6: Largest 5 companies by Market Capitalization as of June 2019	
Chart 8-7: Value of Shares Traded by Sector (% of Value of all shares traded) as of June 2019	
Chart 8-8: Value of Shares Traded YoY Comparison	
Chart 8-10: Volume of Shares Traded YoY comparison	
Chart 8-11: Number of Transactions (% of all transactions) as of June 2019	
Chart 8-12: Number of Transactions YoY comparison	
Chart 8-14: Share of Trading value of Sell transactions by nationality as of June 2019	
Chart 8-15: Stock Market Net Income	
Chart 8-16: Total Market Price-Earnings Multiples	90
Chart 8-17: Total Equity to Total Assets (%)	
Chart 8-18: Total Equity/Total Assets by Sector	
Chart 8-19: Number of Capital Market Activities	
Chart 8-20: Total Issuance Value	
Chart 9-1: Number and Value of ATM Transactions, July 2018- June 2019	
Chart 9-2: Number and Value of ATM Transactions	
Chart 9-3: Volume of Cheques and % of Returned Cheques	101
Chart 9-4: Value of Cheques and % of Returned Cheques (BD million)	
Chart 9-5: EFTS Fawri, Fawri+, and Fawateer Value (BD million)	
Chart 10-1: Volume and Value of Transactions through e-Wallets and Mobile Payments	
Chart 10-2: Number Accounts	
Chart 10-3: Monthly POS Transactions (Volume and Value)	
Chart 10-4: Volume of POS Transactions Q2 2019	
Chart 10-5: Value of POS Transactions Q2 2019	
Chart 11-1: CBB Cyber Security Survey Results June 2019	121

List of Charts vii

### **Preface**

A key objective of the Central Bank of Bahrain (CBB) is to ensure the continued soundness and stability of financial institutions and markets. As the single regulator for the Bahraini financial system, the CBB attaches utmost importance in fostering the soundness and stability of the financial system. The CBB recognizes that financial stability is critical to maintaining Bahrain's position as a regional financial center and ensuring that the sector continues to contribute significantly to growth, employment and development in Bahrain. The CBB defines financial stability as follows:

A situation where the financial system is able to function prudently, efficiently and uninterrupted, through providing financial services continuously even in the face of adverse shocks.

This objective is the primary responsibility of CBB's Financial Stability Directorate (FSD), which conducts regular surveillance of the financial system to identify areas of concern and undertakes research and analysis on issues relating to financial stability. In pursuit of its objective of promoting financial stability, the CBB conducts regular financial sector surveillance, keeping a close watch on developments in individual institutions as well as in the system as a whole.

The Financial Stability Report (FSR) is one of the key components of CBB's financial sector surveillance framework. Produced semi-annually by the CBB's FSD, its principal purpose is macro-prudential surveillance, assessing the safety and soundness of the financial system as a whole (intermediaries, markets and payments/settlement systems). The ultimate objective of such macro-prudential analysis is to identify potential risks to financial stability and mitigate them before they develop into systemic financial turbulence.

Financial Soundness Indicators (FSIs) are used to monitor the banking financial sector on a continuous basis. The data appearing in report is compiled by CBB staff. Revisions and corrections of data can be made and incorporated in an updated electronic version of the report.

The FSR is prepared for the CBB management, reviewing recent trends and identifying areas of concern which require supervisory and policy attention. The FSR is also a tool aimed at informing the public.

This edition of the FSR contains 11 chapters divided into four parts as follows:

- Part I: National and international developments:
  - o Chapter 1: International financial developments.
  - o Chapter 2: Developments in Bahrain's financial sector and household sector.
- Part II: Developments in the banking sector:
  - o Chapter 3: Performance of the banking sector.
  - o Chapter 4: Performance of conventional banks.
  - o Chapter 5: Performance of Islamic banks.
- Part III: Developments in the non-banking financial sector:
  - o Chapter 6: Performance of the insurance sector.
  - o Chapter 7: Performance of the non-banking financial sector
  - o Chapter 8: Performance of capital markets.
- Part IV: Developments in the Payments and Settlements System, FinTech, and Cyber Security:
  - o Chapter 9: Performance of payment and settlement systems.
  - o Chapter 10: FinTech and Financial Inclusion.
  - o Chapter 11: Cyber Security.

Preface 1

In its continued effort to ensure financial stability and developing a financial stability mandate, the CBB has created The Financial Stability Committee (FSC) on 20th of July 2017 by Resolution number 49 for year 2017. The committee is chaired by H.E the Governor and has seven members from various directorates within the organization.

The main functions/Goals of the Committee are:

- 1- To create a Macro-Prudential Policy Framework
- 2- Look at Macro-Prudential Policy tools to be considered for Macro financial risks
- 3- Discuss the risks that can affect the soundness of the financial sector.
- 4- Improve Banking Supervision tools on banking and financial services on a periodic basis to ensure best practices especially DSISBs /DSIFISs.
- 5- Strengthening relations on international level with other regulating entities to prevent cross-border leakages.

Preface

### **Executive Summary**

### Global Macro Financial Environment Overview

The global economic and financial conditions continued to decelerate in the first half of 2019. In its World Economic Outlook, the International Monetary Fund (IMF) is forecasting 3.2% growth for the second half of 2019 lower than the 3.7% realized last year.

Across major advanced economies, US economic growth decreased to 2.3% in Q2/2019 from 2.9% in Q2/2018. The economic performance in Europe decelerated slightly during the first half of the year due to increased uncertainty following the Brexit. In Q2/2019, Euro Area (19 countries) and the European Union (EU) (28 countries) had a slowdown in growth reaching 1.2% and 1.4% respectively. The UK's GDP growth decreased to 1.2% in Q2/2019 from 1.4% in Q2/2018, with the Brexit vote problem. The BRIICS countries' growth was decelerating as it reached 3.7% in Q2/2019 and in China economic growth decreased slightly achieving a growth rate of 6.2%.

### Financial Sector Overview

The size of the banking sector assets in Bahrain was USD 203.4 billion as of June 2019 representing 5.4 times GDP in Q2 2019. Retail banking total assets continued growing to reach BD 34.5 billion (USD 91.8 billion) in June 2019 with GCC assets at 24.4% and Western Europe and American assets at 8.9%. The wholesale banking sector assets increased to USD 111.6 billion in June 2019, with concentrations in GCC (30.2%) and Western Europe (32%). The Islamic banking sector assets (which represent 15.1% of the total banking sector assets) increased to USD 30.7 billion in June 2019 with concentrations in Bahrain (73.9%) and GCC (9.7%).

The total amount of credit extended by retail banks to the private sector (business and personal) increased by 7.9% from BD 8,844.6 million in June 2018 to BD 9,545.1 million in June 2019. Total deposits, decreased to BD 17,538.1 million in June 2019, where 74.0% of them were domestic deposits. Money supply continued to grow with M2 standing at BD 11,832.2 million in end-June 2019 and M3 was at BD 13,546.2 million. Personal loans as a percentage of GDP was at 30.2% in June 2019 and increasing to BD 4,303.3 million. Business loans increased to 5,241.8 million in June 2019 reaching 36.8% as a percentage of GDP.

### Banking Sector

The Capital adequacy ratio (CAR) of the banking sector stood at 19.0% in June 2019. The ratio has increased from the 18.9% recorded in December 2018. The non-performing loans (NPL) ratio reached 5.2% in June 2019.

As at June 2019, return-on-assets (ROA) remained stable at 0.6%. Return-on-equity (ROE) slightly decreased from 4.0% in December 2018 to 3.9% in June 2019. Between December 2018 and June 2019, the overall loan-deposit ratio decreased from 72.1% to 70.8%. Liquid assets as a proportion of total assets increased from 24.1% to 25.1% during the same period.

### Conventional Banks

The CAR of conventional retail banks decreased to 19.8% in June 2019. The NPL ratio remained stable at 5.5% between December 2018 and June 2019. Specific provisions as a proportion of NPLs showed an increase from 63.8% to 66.0% over the same period. For local retail banks, the NPL ratio slightly increased to 4.5% in June 2019. For overseas retail banks, the NPL ratio decreased to 7.3% in June 2019.

ROA for conventional retail banks slightly increased to 0.9% in June 2019. ROE for locally incorporated conventional banks remained stable at 8.0%. The overall loan-deposit ratio for the segment decreased to 67.9% between December 2018 and June 2019. Liquid assets as a proportion of total assets increased over the same period to reach 35.9%.

As for wholesale banks, the CAR for locally incorporated wholesale banks was 19.4% in June 2019, an increase from the 18.1% registered in December 2018. The NPL ratio decreased to 5.3% of total loans. The NPL ratio of locally-incorporated wholesale banks increased to 6.5% in June 2019 from 6.3% in December 2018. Overseas wholesale banks witnessed a decrease in its NPL ratio from 5.2 % to 4.2% over the same period. Specific provisions as a proportion of NPLs witnessed an increase to 74.3% over the same period.

ROA for the conventional wholesale banks was at 0.6% in June 2019. ROE for local wholesale banks was 4.1%. The overall loan-deposit ratio for conventional wholesale banks stood at 63.4%. Liquid assets for wholesale banks as a proportion of total assets decreased to reach 20.9% in June 2019.

### **Islamic Banks**

The CAR of Islamic retail banks decreased from 17.6% in December 2018 to 17.3% in June 2019. Non-performing Facilities (NPF) ratio remained at 9.5% and specific provisioning decreased from 38.6% to 38.0% over the same period.

The ROA for Islamic retail banks remained at 0.3% between June 2018 and June 2019. Return on equity (ROE) increased from 2.5% to 3.9% for the same period. The volume of liquid assets available to Islamic retail banks increased from 14.1% of total assets in December 2018 to 17.7% in June 2019. The ratio of total facilities to deposits increased from 94.8% in December 2018 to 95.9% in June 2019.

The CAR for Islamic wholesale banks decreased from 18.1% in December 2018 to 18.0% in June 2019. The NPF ratio for Islamic wholesale banks slightly decreased to 1.1%. Specific provisioning for NPFs increased from 79.6% to 91.7% over the same period.

ROA for Islamic wholesale banks decreased from 0.6% in June 2018 to 0.4% in June 2019. ROE decreased as well from 3.9% to 2.9% over the same period. Liquid assets of Islamic wholesale banks represented 17.2% of total assets. Additionally, the facilities deposit ratio decreased from 75.2% in December 2018 to 73.0% in June 2019.

### **Insurance Sector**

The Insurance sector in Bahrain is made up of two main segments: conventional and takaful. Total gross premiums registered at BD 284.0 million. The conventional local firms accounted for the largest

segment of total gross premiums (55.3%), followed by Takaful (28.0%) and conventional overseas branches (16.7%).

As of December 2018, total assets of conventional insurance firms were BD 2,182.4 million, a YoY decline of 0.6%. Takaful firms' assets experienced an annual growth by 1.5% reaching BD 184.0 million.

Viewing the concertation of the overall insurance industry, motor records the highest concentration in Gross Premiums (30.1%), Net Premiums Written (43.2%), Gross Claims (27.0%), and Net Claims (48.0%). Similarly, for conventional insurance, motor insurance has the highest concentration for Gross Premiums (20.9%), Net Premiums Written (42.3%), Gross Claims (24.8%) and Net Claims (41.2%).

Takaful insurance companies have very high concentration on the medical and motor Insurance business lines. Gross Premiums for both sectors represented (71.0%), Net Premiums Written (88.8%), Gross Claims (88.3%), and Net Claims (96.9%).

#### Non-Bank Financial Institutions

The two main segments of the non-Bank Financial Institutions sector are investment businesses and money changers. Total assets of investment business reached BD 337.0 million in Q2 2019 with more than 84.8% of those assets coming from Category 1 investment firms. Investment business firms' profit increased by 8.7% to reach BD 5.3 million in June 2019. Profits of Category 1 firms increased by 21.5%, while Category 2 firms' profits decreased by 6.6%.

Between July 2018 and June 2019, money changers' purchase of foreign currencies amounted to BD 8,333.5 million, while the sale of foreign currencies was recorded at BD 9,328.1 million for the year. As of Q2 2019, the USD recorded the highest YoY increase in sales with 32.6%, and 60% of all purchase and sale of currencies were in GCC currencies.

### Capital Markets

As at June 2019, Bahrain Bourse recorded a total listing of 44 Companies, 17 Mutual funds and 14 Bonds and Sukuk. The Bahrain All-Share index reached 1,471.0 points in June 2019, while the Bahrain Islamic Index reached 757.9 points. Market capitalization of the Bahrain Bourse stood at BD 9.2 billion, and the price-earnings ratio (P-E) ratio stood at 10.3, an increase from the 9.7 attained in December 2018.

The majority of the value and the volume of shares traded in June 2019 was in the commercial bank sector whose traded shares by value represented 69.8% and by volume represented 64.3% of total shares. The majority of the number of transactions in June 2019 (11,261 transactions) was attained by the commercial banks sector representing 47.7% of total transactions. As of June 2019, no major mergers & acquisitions were announced, and 44 private offerings occurred with a total value of USD 9.3 billion.

### Payments and Settlement Systems

The RTGS System provides for Payment and Settlement of Customer transactions as a value addition. The daily average volume of Bank transfers for the first half of 2019 (from  $1^{st}$  January to  $30^{th}$  June, 2019) decreased by 3.3% to 176 transfers compared to 182 transfers for the second half of 2018.

The daily average volume of ATM transactions for the first half of 2019 increased by 7.0% to 57,161 transactions per day compared to 53,416 transactions per day for the second half of 2018. The daily average value of ATM transactions for the first half of 2019 reached 5.3 million.

The daily average volume of cheques for the first half of 2019 decreased by 5.6% compared to the second half of 2018 from 12,712 cheques to 12,133 cheques. The value of those cheques similarly decreased by 2.9% over the same period from BD 37.4 million to BD 36.3 million.

### FinTech, Innovation, and Financial Inclusion

Bahrain is repositioning itself to be a Financial Technology (FinTech) hub in the region combining conventional and Shariah compliant FinTech solutions. The CBB has established a dedicated Fintech Unit on the 22nd of October 2017 to ensure best services provided to individual and corporate customers in the financial sector. On 28th May, 2017, the CBB announced the issuance of the Regulatory Sandbox Framework that aims to provide a safe space where business can test FinTech innovative products and services. The sandbox includes 35 companies to date.

In November 2018, the CBB revised its guidelines for Financing Based Crowdfunding Regulations for both conventional and Islamic lending. In December 2018, Bahrain became the first country in the Middle East to adopt Open Banking making access to financial information easier, faster and tailored to the needs of customers. In February 2019, the CBB has issued the final rules on a range of activities relevant to Crypto-assets aimed at ensuring that the related activities are brought within the regulatory perimeter and are subject to comprehensive regulatory and supervisory measures.

### Cyber Security

Cyber risk is steadily evolving into a main threat to all industries. Its impact on the financial services industry is growing into a recognised risk by all financial institutions. In June 2019, the CBB conducted a Cyber Security Survey on financing companies as part its continuous effort to assess the resilience of Bahrain's Financial Sector to cyber threats. The survey was previously done on all retail and wholesale banks in Bahrain. The survey response rate was at 100% and based on the survey, 100% of the financing companies reported that their cyber-security strategy has been approved by their Board of Directors (70% wholesale, 76% retail) , 75% of financing companies measure the effectiveness of the implementation of risk management practices (77% wholesale, 84% retail), and 75% of financing companies reported that they conduct cyber security training to their staff (71% wholesale, 92% retail).

# Part I:

## Developments in the International and Domestic Financial Markets



### Chapter 1

## Developments in the International Financial Markets



- ► The global economic conditions deteriorated and the risks to the global outlook have increased during the first half of the year.
- ▶ Increased Brexit uncertainties have put additional geopolitical tensions and put downward pressure on financial sector in Europe.
- ▶ Trade tensions between China and the US have raised concern to the global financial stability.
- ► Stock markets indices drop in the first half of the year and Equity markets in Europe have endured a volatile couple of months.

### 1.1 Overview

Since the last Financial Stability Report, the global economic activity has tightened after growing trade tensions between the US and China and rising political risk in Europe over Brexit. In the face of the anticipated exit of the UK from the Euro Area, overall environment showed some uncertainty in the first half of 2019. Global economic growth is expected to slow down across almost all major economies next year. Monetary policy remains accommodative in the US other advanced economies to support economic growth following the Federal Reserve cuts in interest rates amid growing concerns of a potential global slowdown.

In the following sections, recent trends in the global economy are highlighted and the major financial and economic indicators during the previous six months are looked at.

### 1.2 Global Macro-financial Environment

The global geopolitical risks have added some risk to financial market. The global economic and financial conditions deteriorated slightly and risks associated to this environment increased in the first half of 2019. In its recent World Economic Outlook, the International Monetary Fund (IMF) is forecasting 3.2% growth in 2019 lower to the 3.7% realized last year.

### 1.2.1 Economic Performance

The economic performance in Europe decelerated slightly during the first half of the year due to increased geopolitical risk and uncertainty following the Brexit, which amplified volatility and raised

new concerns in the global financial markets. Political risk in Italy in the beginning of the year and the debt problem in many European countries, notably Greece and Italy, have added more pressure to the market. As Chart1-1 below shows, most European countries have witnessed a slowdown of their economic growth in the first half of 2019. For example, the growth rate in Ireland moved from 8.7% in the second quarter of 2018 to 6.3% in second quarter of 2019. Similarly, Spain has achieved a restrained economic performance as GDP growth moved from 3.0% for Q2/2018 to 2.3% in Q2/2019 which was a lowest since Q2/2015. Portugal growth has also declined as it moved from 2.4% in Q2/2018 to 1.8% in Q2/2019. Italy has experienced a slowdown in its economic performance as its growth rate moved from 1.4% in Q2/2018 to -0.1 in Q2/2019.

Regarding the two largest economies in the Eurozone, their performances have also slowed in the first half or 2019 as compared to the first half of the same year. Germany experienced weak economic activities in the second quarter of 2019 with GDP growth reach 0.4% the lowest growth since Q1/2015 and France also achieved growth rate of 1.4% in the same period.

Turning to the Euro Area (19 countries) and the European Union (EU) (28 countries) their growth has also experienced a slowdown as it moved from of 2.2% for both blocs in Q2/2018 to 1.2% and 1.4% in Q2/2019 respectively.

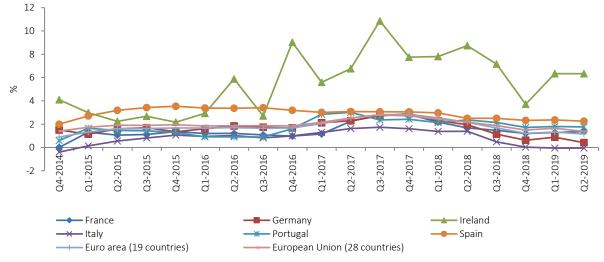


Chart 1-1: Real GDP Growth in Selected Europeans Countries (Quaterly %) Seasonally Adjusted\*

In the US as economic growth decreased to 2.3% in Q2/2019 from 2.9% in Q2/2018. The US economy was affected by the trade tension with China and the increased geopolitical uncertainty. Within the Brexit vote problem, the UK's GDP growth decreased from 1.4% in Q2/2018 to 1.2% in Q2/2019.

As for emerging economies (Chart 1-3), the BRIICS countries' growth was also decelerating as it reached the level of 3.67% in Q2/2019 from 4.23% in Q3/2018. In China, the trade tension with the US and the highly indebted local governments along with the financial sector that continues to pose a significant downside risk have affected economic growth as it decreased slightly to reach 6.2% in Q2/2019, lower than the previous quarters. However, the IMF recently warned about the growing debt-dependency of the world's second biggest economy with China's debt levels posing a stability risk.

<sup>\*</sup>Growth rate compared to the same quarter of previous year, seasonally adjusted. Source: OECD Quarterly National Accounts.

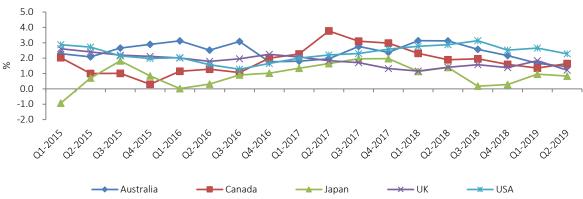


Chart 1-2: Real GDP Growth in Advanced Economies (Quaterly %)\*

The Brazilian growth stands at 1% at Q2/2019 slightly higher that 0.9% recorded in Q2/2018. However, Russia shifted from a long period of recession to a positive growth since the first quarter of 2018 as it achieved a growth of 3% in Q4/2018 but decelerated in the first half the year to reach 0.8% in Q2/2019.

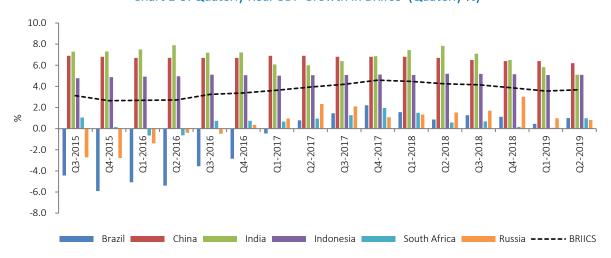


Chart 1-3: Quaterly Real GDP Growth in BRIICS (Quaterly %)\*

Source: OECD Quarterly National Accounts.

Regionally, the drop of energy prices followed by the continuing uncertainty in the global economy have affected the growth of Gulf Cooperation Council (GCC) economies. However, the recent policy actions taken by the governments were fruitful as the growth rate was expected to be around 2.12%, the highest since 2016. Projections for 2019 show that the economic condition will improve and the regional economy will grow at a moderate rate of growth of 2.98%.

<sup>\*</sup> Growth rate compared to the same quarter of previous year, seasonally adjusted Source: OECD Quarterly National Accounts.

<sup>\*</sup>Growth rate compared to the same quarter of previous year, seasonally adjusted.

<sup>\*</sup>Data on Russia is not available since the 4th guarter of 2015.

7.0
5.0
3.0
1.0
-1.0
2013
2014
2015
2016
2017
2018\*
2019
-3.0
Bahrain Kuwait Oman X Qatar Saudi Arabia United Arab Emirates GCCC

Chart 1-4: Real GDP Growth in GCC Countries (Annual percent change)

\*Forecasts.

Source: IMF Regional Economic Outlook, October 2017.

### 1.2.2 Financial Markets

Equity prices have risen across a range of advanced economies. Indices reached new record levels following the presidential election in the US, France and Austria. Equity prices in the Euro Area recovered strongly, supported by signs of economic activities, improving business and consumer confidence. Similarly, the S&P 500 has risen by around 30% since early 2016, reaching a high record since 2007.

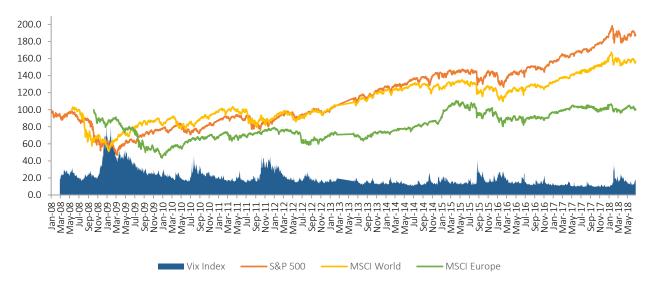


Chart 1-5: Global Equity Market Indices (Re-indexed to January 2008)

Source: Bloomberg.

Chapter 2

### Developments in Bahrain's Financial and non-Financial Sector



- ▶ The retail banking sector assets showed an increase to USD 91.8 billion and wholesale banking sector assets also increased to USD 111.6 billion as of end-June 2019.
- ▶ The volume of credit showed an increase to BD 9,887.3 million in June 2019.
- ▶ Household debt and business debt ratio increased.
- Construction permits increased and commercial licenses dropped.

### 2.1 Overview

This chapter assesses the recent developments of the Bahraini financial and non-financial sectors and the resilience of the local banking sectors since the last FSR. The financial condition and performance of financial institutions depend to a large extent on the financial condition of their customers (households and enterprises) and their vulnerabilities to changes in the economic environment.

The assessment requires an evaluation of the financial condition and performance of non-financial entities: households, business enterprises, as well as the construction and real estate sector. Households and business enterprises are the major customers of financial institutions. Not only are they sources of deposits, they represent major sources of demand for financial sector products and services.

### 2.2 The Financial Sector

Bahrain position as a regional financial center has been essential to the development of its economy where the financial sector has come to play a significant role in economic activity and employment creation. The financial sector is currently the largest non-oil contributor to GDP representing 16.5% of real GDP as of 2018. By the end of Q2 2019, the financial sector represented 16.4% of real GDP showing an increase of 0.3% since 2018.

As of June 2019, 383 banks and financial instititions were licensed by the CBB. The banking sector in Bahrain is made up of 97 banks, categorized as follows:

• 31 retail banks (including 6 Islamic retail banks); 14 locally incorporated and 17 branches of foreign banks

 66 wholesale banks (including 15 Islamic wholesale banks); 28 locally incorporated and 38 branches of foreign banks

As of June 2019, there are 286 non-banking financial institutions operating in Bahrain, including investment business firms, insurance companies (including Takaful and Re-Takaful firms), Representative Offices for conventional banks and specialized licenses.



Chart 2-1: Size of the Banking Sector to RealGDP

Source: Information and e-Government Authority (IGA).

The insurance industry continued to grow during the past few years. Insurance contribution increased to 5.4% of GDP by end of 2017 and 5.5% by end of 2018 and remained stable at that rate in June 2019. As of June 2019, the insurance market in Bahrain comprises of 23 locally-incorporated firms and 13 overseas firms carrying out insurance, reinsurance, takaful and retakaful. These institutions offer all basic and modern insurance services such as medical and health insurance and long-term insurance (life and savings products).

Bahrain's first Islamic Commercial Bank, Bahrain Islamic Bank, was established in 1979 and since that, Bahrain has become the home to the Accounting and Auditing Organization for Islamic Financial Institutions, International Islamic Financial Market, and Islamic International Rating Agency, and the Bahrain Institute of Banking and Finance.

### 2.2.1 The Size of the Banking Sector

The size of the assets of the banking sector in Bahrain was USD 203.4 billion as of June 2019. The banking sector started as 5.7 times GDP in 2014 and by June 2019, the banking sector was 5.4 times of GDP. The change of the size of the banking sector times GDP is attributed to a decrease in the wholesale banking sector along an increase in GDP.

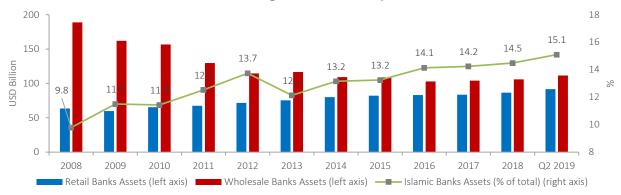
Table 2-1 below shows the change of the size of the various banking sements to GDP. The retail banking sector remained between 2.3 to 2.6 times of GDP over the same period. The sector has continued to grow over the years (from USD 80.0 billion in 2014 to USD 91.8 billion in June 2019) along with the growth in GDP. Since 2014, the size of the wholesale banking sector started declining from USD 109.3 billion to USD 106.0 billion in 2018. It recently started to recover and increased by 8.5% in June 2019 to reach USD 111.6 billion. As for the Islamic banking sector, it grew steadily over the same period from USD 24.9 billion in 2014 to USD 30.7 billion in June 2019.

Table 2-1: Evolution of the size of the Banking sector in Bahrain

Indicator	2014	2015	2016	2017	2018	Q2 2019*
Banking Sector (USD billion)	189.3	191.0	186.1	187.4	192.6	203.4
times GDP	5.7	6.1	5.8	5.3	5.1	5.4
Retail Sector (USD billion)	80.0	82.2	83.0	83.5	86.6	91.8
times of GDP	2.4	2.6	2.6	2.4	2.3	2.4
Wholesale Sector (USD billion)	109.3	108.8	103.0	104.0	106.0	111.6
times of GDP	3.3	3.5	3.2	2.9	2.8	2.9
Islamic Sector (USD billion)	24.9	25.3	26.3	26.7	27.9	30.7
times of GDP	0.7	0.8	0.8	0.8	0.7	0.8

<sup>\*</sup> Using current GDP estimate.

Chart 2-2: Banking Sector Asset Composition



Source: CBB Monthly Statistical Bulletin.

Despite the global uncertainty and the troubles in MENA region, retail banking total assets continued growing since 2014 to reach BD 34.5 billion (USD 91.8 billion) in June 2019 (see Chart 2-3).

Chart 2-3: Retail Banks' Assets

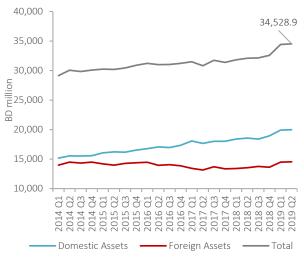
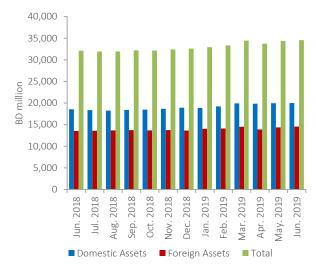


Chart 2-4: Categorization of Retail Banks' Assets

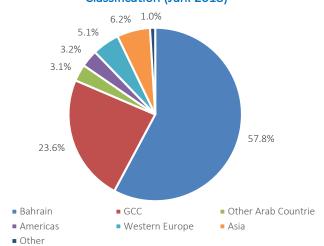


Source: CBB Monthly Statistical Bulletin.

Source: CBB Monthly Statistical Bulletin.

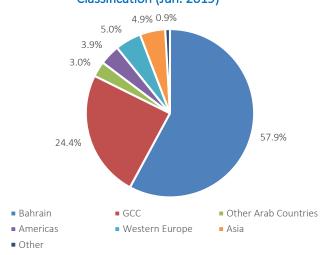
The share of GCC assets of total retail banking assets was 24.4%. The level of Europe and American contribution is 8.9%. This shows that the retail-banking sector in Bahrain is relatively exposed to foreign risk from GCC countries and lightly exposed to foreign risk from Europe and U.S.

Chart 2-5: Retail Banks' Assets (%) by Geographical Classification (Jun. 2018)\*



<sup>\*</sup> For conventional and Islamic retail banks. Source: CBB Monthly Statistical Bulletin.

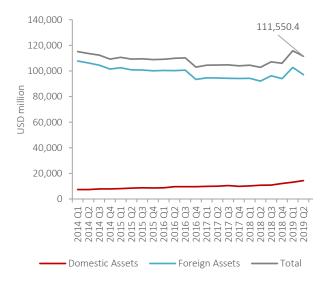
Chart 2-6: Retail Banks' Assets (%) by Geographical Classification (Jun. 2019)\*



<sup>\*</sup> For conventional and Islamic retail banks. Source: CBB Monthly Statistical Bulletin.

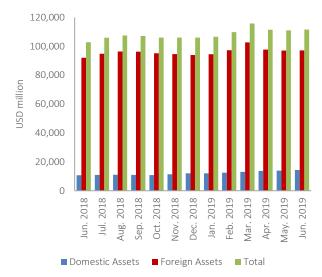
The wholesale banking sector showed an increase to USD 111.6 in June 2019. Domestic assets witnessed a year-on-year (YoY) growth of 33.6% while foreign assets rose by 5.5% on a yearly basis (See Charts 2-7 and 2-8).

Chart 2-7: Wholesale Banks' Assets



Source: CBB Monthly Statistical Bulletin.

Chart 2-8: Categorization of Wholesale Banks' Assets

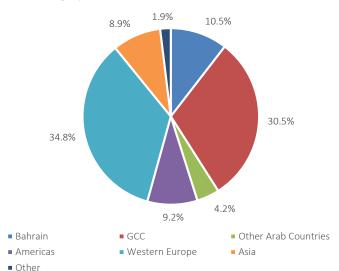


Source: CBB Monthly Statistical Bulletin.

According to the geographical classification of wholesale banks' assets, wholesale banks are exposed to foreign risk from Western Europe and the GCC countries:

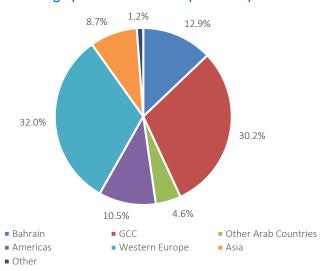
- The share of America's total assets increased from 9.2% in June 2018 to 10.5% in June 2019.
- The share of Europe's total assets decreased to 32.0%.
- Asian assets slightly decreased from 8.9% to 8.7% in June 2019.
- GCC total assets continued to decrease to 30.2% in June 2019, they represent a smaller portion of Wholesale bank assets now compared to Europe.

Chart 2-9: Wholesale Banks' Assets by Geographical Classification (Jun. 2018)\*



<sup>\*</sup> For conventional and Islamic wholesale banks. Source: CBB Monthly Statistical Bulletin.

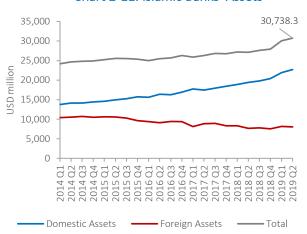
Chart 2-10: Wholesale Banks' Assets by Geographical Classification (Jun. 2019)\*



\* For conventional and Islamic wholesale banks. Source: CBB Monthly Statistical Bulletin

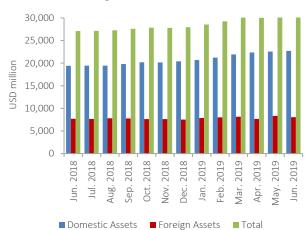
The Islamic banking sector increased from USD 24.2 billion in 2014 to USD 30.7 billion as of June 2019. On an annual basis, the domestic assets increased by 17.0% while foreign assets grew by 4.6%.

Chart 2-11: Islamic Banks' Assets



Source: CBB Monthly Statistical Bulletin.

Chart 2-12: Categorization of Islamic Banks' Assets



Source: CBB Monthly Statistical Bulletin.

Islamic banks continue to be majorly exposed to domestic risks as the share of Bahrain's total assets increased from 71.6% in June 2018 to 73.9% in June 2019. GCC total assets decreased from 10.7% to 9.7% over the same period.

Chart 2-13: Islamic Banks' Assets by Geographical Classification (Jun. 2018)

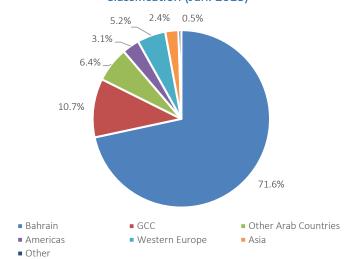
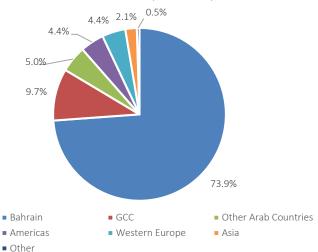


Chart 2-14: Islamic Banks' Assets by Geographical Classification (Jun. 2019)

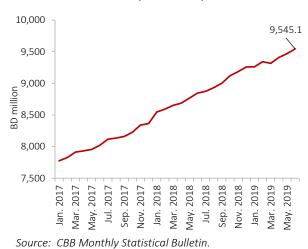


Source: CBB Monthly Statistical Bulletin.

#### 2.2.2 Credit Developments

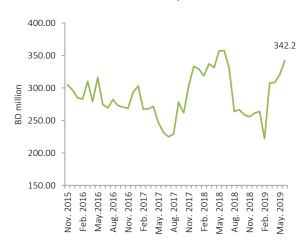
The total amount of credit given to the private sector (business and personal) by retail banks witnessed a considerable increase since June 2018 moving from BD 8,844.6 million to BD 9,545.1 million in June 2019 (Chart 2-15). The high credit growth reveals the growth of the economic activities and the restore of confidence in the Kingdom of Bahrain. Regarding retail banks' lending to the general government, there was a decrease to BD 342.2 million at end-June 2019, from BD 357.7 million at end-June 2018 (Chart 2-16).

Chart 2-15: Loans to the Private Sector (BD Million)\*



\*Excluding securities.

Chart 2-16: Loans to General Government (BD Million) \*



Source: CBB Monthly Statistical Bulletin.

\*Excluding securities.

As for total deposits, they decreased to BD 17,538.1 million in June 2019, where 74.0% of them were domestic deposits. This was parallel to the total domestic credits, which moved from BD 8,844.6 million at end-June 2018 to 9,887.3 in June 2019 (Chart 2-17).

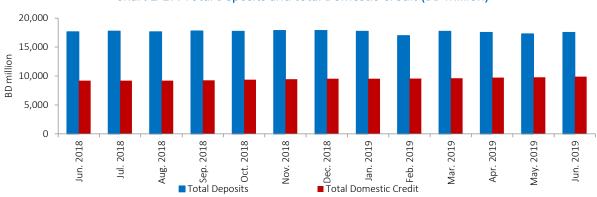


Chart 2-17: Total Deposits and total Domestic Credit (BD Million)

Source: CBB Monthly Statistical Bulletin.

### 2.2.3 Net Foreign Assets

The net foreign asset (NFA) position of the banking system is the value of the assets that the banking system owns abroad (Foreign Assets) minus the value of the domestic assets owned by foreigners (Foreign Liabilities). A positive NFA balance means that the system is a net lender, while a negative NFA balance shows that it is a net borrower.

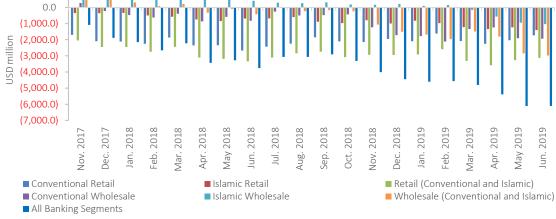
The NFA position by banking segment, as of June 2019, is negative (net borrowers) for retail banks, both conventional and Islamic, and all wholesale banks, both conventional and Islamic. As of June 2019, the NFA position for retail banks was *negative* USD 3,127.6 million and for wholesale banks, the NFA position was *negative* USD 2,975.91 million.

Table 2-2: Net Foreign Assets Postion by Banking Segment (June 2019)

Banking Segment (USD million)	Foreign Assets	Foreign Liabilities	Net Foreign Assets	
Conventional Retail	36,362.3	38,093.2	(1,730.9)	
Islamic Retail	2,313.1	3,709.6	(1,396.5)	
Retail (Conventional and Islamic)	38,675.2	41,802.8	(3,127.6)	
Conventional Wholesale	90,926.6	92,789.1	(1,862.5)	
Islamic Wholesale	5,725.3	6,760.7	(1,035.4)	
Wholesale (Conventional and Islamic)	97,170.2	100,146.1	(2,975.9)	
Total Banking Segments	135,845.4	141,948.7	(6,103.3)	

Source: CBB.

Chart 2-18: Net Foreign Assets Position by Banking Segment



Source: CBB.

While the foreign assets for some banking segments have been increasing steadily with an upward trend, there is also an increase in foreign liabilities which leads to the increasing negative NFA position. The NFA for conventional wholesale banks decreased significantly in November 2018. Islamic Wholesale remained the only banking segment with positive NFA until February 2019.

Looking at the NFA position for the overall banking sector, data shows that there is a continuous downward trend as seen in the graph below. The NFA position of every banking segment is seen in the Box below.



Chart 2-19: Net Foreign Assets of the Overall Banking Sector

Source: CBB.



### 2.3 Monetary Indictors

Money supply continued to grow. M2 stood at BD 11,832.2 million in end-June 2019, 9.1% higher than its value of December 2018 (YoY increase was 11.3%). M3 was at BD 13,546.2 million in end-June 2019, 7.3% higher than in December 2018 (YoY increase was 9.2%) (Chart 2-20).



Chart 2-20: Money Supply (BD million) from Jan. 2016 to Jun. 2019

Source: CBB Monthly Statistical Bulletin.

Table 2-3 sets out an analysis of Bahrain's M1, M2 and M3 money supply as at the dates indicated.

2017 2016 2018 O2 2019 **BD** million (%) **BD** million **BD** million **BD** million (%) (%) (%) (3.4)535.3 565.3 **Currency Outside Banks** 19 526.8 528.1 0.2 (1.6)Demand Deposits 7.7 2.780.6 0.4 2 828 1 17 2 893 9 23 3 013 5 **M1** 3,315.9 3,354.9 3,422.0 2.0 3,578.8 5.8 0.7 1.2 Time and savings deposits 6,852.0 1.5 7,239.6 5.7 7,423.3 2.5 8,253.4 13.9 M2 10,167.9 10,594.5 10,845.3 11,832.2 11.3 1.2 4.2 2.4 General Government Deposits 1,853.9 0.1 1,926.8 3.9 1,776.8 (7.8)1,714.0 (3.4)**M3** 12,021.8 2.9 12,521.3 1.2 12,622.1 2.0 13,546.2 9.2

Table 2-3: Money Supply Composoition

Source: CBB Monthly Statistical Bulletin.

As of June 2019, the growth in money supply has been stimulated by a growth in deposits. In particular, time and savings deposits increased by 13.9% from BD 7,245.8 million in June 2018 to BD 8,253.4 million in June 2019, while demand deposits increased by 7.7%.

### 2.4 Inflation

The CBB maintains the Bahraini Dinar's peg against the U.S. Dollar, which has provided price stability over the years and as a result managed to keep inflation relatively stable. As Bahrain has no significant domestic production, its inflation (as measured by CPI) has been mainly affected by the cost of imports. The CPI for Bahrain includes 12 broad categories of consumer goods that are representative of consumption patterns in the economy. These components are food and non-alcoholic beverages; alcoholic beverages, tobacco and narcotics; clothing and footwear; housing, water, electricity, gas and other fuels; furnishing, household equipment and routine household maintenance; health; transport; communication; recreation and culture; education; restaurants and hotels; and miscellaneous goods and services.

The index has been rebased to April 2019=100, with effect from May 2019, which resulted in certain methodological changes which include updating the expenditure weight, revising the sample of goods and services and improving the methods of price collection. Since 2014, there was a reversal of the deflationary trend seen over the preceding three years and consumer prices increased moderately.



Chart 2-21: CPI Change (Jan. 2014 – Jun. 2019)

Source: IGA.

As of June 2019, the Consumer Price Index (CPI) stood at 99.8 points. Monthly inflation increased by 0.2% and the largest increases came from Housing, Electricity, Water and Gas. On an annual basis, inflation increased by 0.2% in June 2019 as compared to June 2018.



Chart 2-22: Monthly Inflation Rate (Jun. 2018 – Jun. 2019)

Source: IGA.

Contrary to expectations of an inflationary spike following the introduction of VAT, the Consumer Price Index (CPI) in Bahrain continued broadly in line with the trend observed over the past year. The CPI reading during the first four months of 2019 was 1.1% higher than a year earlier.

### 2.5 The Households/Personal Sector

The household sector in Bahrain plays an important role in financial stability and the overall economy. The household sector can allocate funds to financial assets through bank deposits and securities, and to non-financial assets from land and other fixed assets. It can also receive funds from financial and

non-financial institutions. The construction and real estate sector plays a huge importance on economic developments and is a good indicator of macroeconomic conditions in the country.

Outstanding personal loans, used as a proxy for household borrowing, for the period shows that the household debt saw an increase throughout the period between December 2018 and June 2019 (Chart 2-23).

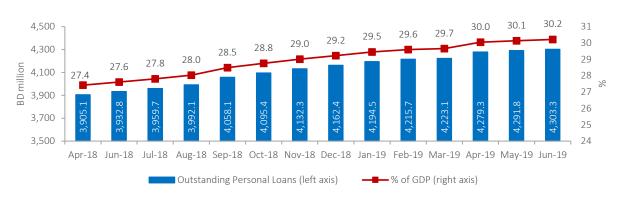


Chart 2-23: Personal Loans and Advances (Volume and % of GDP)

\*Using 2018 GDP.

Source: CBB Monthly Statistical Bulletin.

Personal loans as a percentage of GDP increased to 30.2% by June 2019 (BD 4,303.3 milllon). There was a 3.4% increase in outstanding personal loans between December 2018 and June 2019 (YoY increase was 9.4%).

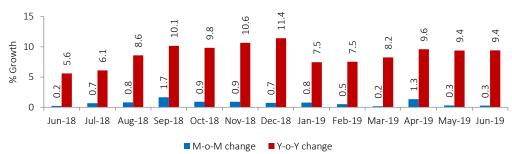


Chart 2-24: Growth Rates of Total Personal Loans and Advances (%)

Source: CBB Monthly Statistical Bulletin.

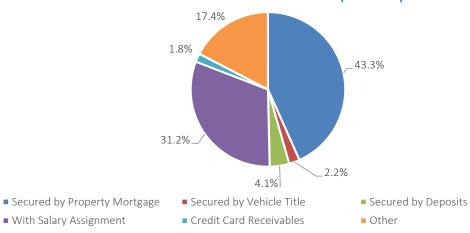
The monthly growth rate in total personal loans and advances fluctuated between June 2018 to June 2019. Initially at 0.2% in June 2018, it rose to reach its highest level for the year of 1.7% in September 2018 and later fell to reach 0.3% in June 2019. On a yearly basis, the biggest Y-o-Y increase was in December 2018 where the personal loans and advances increased from BD 3,735.3 million in December 2017 to BD 4,162.4 million in December 2018 (11.4%).

The two main contributors to personal loans as seen in chart 2-20 were personal loans secured by property mortgages which made up 43.3% of the total personal loans followed by personal loans secured with salary assignments at 31.2% of total personal loans as of end of June 2019.

Table 2-4: Personal Loans Breakdown

BD million	Dec. 2018	Jan. 2019	Feb. 2019	Mar. 2019	Apr. 2019	May 2019	Jun. 2019
Total	4,162.4	4,194.5	4,215.7	4,223.1	4,279.3	4,291.8	4,303.3
Secured by Property Mortgage	1,796.7	1,822.8	1,843.5	1,845.6	1,858.5	1,860.7	1,863.9
Secured by Vehicle Title	103.0	103.1	101.3	100.7	99.2	96.6	96.6
Secured by Deposits	134.1	139.7	145.6	153.1	179.1	175.7	175.3
With Salary Assignment	1,325.1	1,329.3	1,322.8	1,320.1	1,322.3	1,335.8	1,343.1
Credit Card Receivables	72.5	72.0	71.5	69.5	71.8	75.0	76.8
Other	731.0	727.6	731.0	734.1	748.4	748.0	747.6

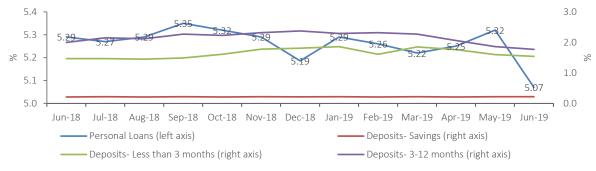
Chart 2-25: Personal Loans Breakdown (Jun. 2019)



Source: CBB Monthly Statistical Bulletin.

Interest rates on personal loans started off at 5.29% in June 2018 and increased to 5.07% in June 2019 (Chart 2-26). The chart also shows the retail deposit rate for: Saving deposits, time deposits less than 3 months, and time deposits 3 months to 12 months over the same period.

Chart 2-26: Retail Banks- Average Interest Rates on Personal Loans and Interest rates on Deposits (%)



Source: CBB Monthly Statistical Bulletin.

### 2.6 The Bahraini Corporate/Business Sector

Business loans and advances grew by 2.9% between December 2018 and June 2019 from BD 5,096.4 million in June 2018 to BD 5,241.8 million in June 2019 (Chart 2-27). In June 2019, YoY growth for business loans was 6.7%. Outstanding business loans as a percentage of GDP increased to 36.8% in June 2019.

5,300 37.0 36.3 36.0 36.0 5,200 35.8 35.6 35.5 36.0 35.3 5,100 34.7 34.5 34.5 5,000 35.0 % 4.900 34.0 4,800 4,700 33.0 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18 Jan-19 Feb-19 Mar-19 Apr-19 May-19 Jun-19 Outstanding Business Loans (BD million) (left axis) → % of GDP (right axis)

Chart 2-27: Business Loans and Advances (Volume and % of GDP)



Chart 2-28: Growth Rates of Total Business Loans and Advances (%)

Source: CBB Monthly Statistical Bulletin.

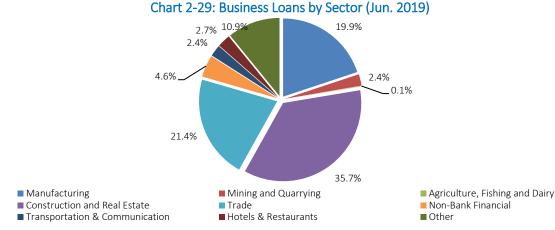
The monthly growth rate in total personal loans and advances fluctuated between June 2018 to June 2019. Initially at 1.5% in June 2018, it rose to reach its highest level for the year of 1.6% in October 2018 to reach 1.3% in June 2019. The highest y-o-y growth was in June 2018 (14.3%)

For the past six months, the main contributor to the increase in business loans was the loans to the construction and real estate sector. The biggest contributors to business loans in June 2019 were the construction and real estate sector (35.7%) followed by trade (21.4%), manufacturing (19.9%) and then other sectors (10.9%) (Chart 2-28).

Table 2-5: Business Loans by Sector

BD million	Dec. 2018	Jan. 2019	Feb. 2019	Mar. 2019	Apr. 2019	May 2019	Jun. 2019
Total	5,096.4	5,064.9	5,127.0	5,092.8	5,131.1	5,176.7	5,241.8
Manufacturing	916.3	901.5	954.6	972.7	984.3	1,000.8	1,043.1
Mining and Quarrying	96.5	90.0	94.5	96.3	98.8	93.9	124.7
Agriculture, Fishing and Dairy	2.3	2.6	2.8	3.0	2.9	5.0	4.7
Construction and Real Estate	1,866.8	1,868.7	1,892.5	1,827.3	1,875.0	1,872.4	1,872.9
Trade	1,132.1	1,122.7	1,113.2	1,146.0	1,131.1	1,133.8	1,120.3
Non-Bank Financial	228.1	228.5	222.9	210.2	217.7	246.0	239.1
Transportation & Communication	143.4	144.1	142.6	108.8	110.1	115.0	125.0
Hotels & Restaurants	177.3	178.1	165.1	166.1	160.4	160.4	141.9
Other Sectors	533.6	528.7	538.8	562.4	550.8	549.4	570.1

Source: CBB Monthly Statistical Bulletin.



Average interest rates on business loans fluctuated throughout the period from June 2018 to December 2018. It was at its peak in November 2018 at 6.62% (Chart 2-29).



Chart 2-30: Retail Banks' Average Interest Rates on Business Loans

Source: CBB Monthly Statistical Bulletin.

### 2.6.1 Construction and Real Estate

The total number of construction permits issued by the Ministry of Municipality & Agricultural Affairs has seen a decrease from Q3 2017 to Q4 2018, with a total of 1,360 and 1,485 permits issues respectively.

2016 2017 2018:Q1 2018:Q2 2018:Q3 2018:Q4 2019:Q1\* Type 162 Renovation 674 509 169 148 163 117 Reclamation 18 18 1 7 1 8 1 **New Construction** 3,420 2,656 613 730 596 675 371 **Demolition and New Construction** 37 25 10 8 13 6 Demolition 519 118 95 88 67 433 56 Addition 2,599 2,314 567 525 434 605 541 Total 7,267 5,955 1,471 1,533 1,531 1,092 1,275

Table 2-6: Selected Construction Permits by Type

Sources: Ministry of Works, Municipalities Affairs and Urban Planning.

\* 2019: Q1 is up until March 1, 2019.

### 2.7 Overall assessment of the Bahraini Financial sector and non-Financial Sector.

Bahrain's financial sector was influential in fostering economic growth and creating employment opportunities. Bank loans continued their growth with mortgage loans growing steadily. Overall funding conditions have improved and demand for loans has accelerated in Bahrain. Banks operating in Bahrain are well capitalized, funding and liquidity buffers are well above minimum required standards, and non-performing loans continue to drop. Regulatory changes in recent years have helped to improve prudential standards for retail and wholesale banks (conventional and Islamic). All these changes have been beneficial for financial stability and will further strengthen the position of Bahrain as a financial center.

# Part II:

Developments in the Banking Sector



# Chapter 3

### **Overall Banking Sector**

Key Highlights						
CAR	NPL	Provisioning	ROA	ROE	Liquidity	Loan/Deposit
19.0% ↑	5.2% ↓	64.7% ↑	0.6↔	3.9% ↓	25.1% ↑	70.8% ↓

- ► An increase in capital positions.
- ▶ Non-performing loans (NPLs) decreased slightly.
- ▶ Loan portfolios remain concentrated in some sectors despite the decrease in some sectors, but no significant change from previous quarter.
- ► Stable earnings for banks.
- Liquidity position remains resilient.

#### 3.1 Overview

This chapter offers an assessment of the banking sector in Bahrain. Macro prudential analysis of the entire banking sector is performed based on a set of selected Financial Soundness Indicators (FSIs). The banking sector in Bahrain is divided into four segments: conventional retail (CR), conventional wholesale (CW), Islamic Retail (IR), and Islamic wholesale (IW). The performance of each of the four banking segments is analysed in Chapters 4 and 5.¹ Annex 1 presents selected FSIs for the different banking segments. Annex 2 presents selected graphs showing the development of selected indicators over time.

Chapters 3, 4, and 5 cover the period between end-December 2018 and end-June 2019, unless otherwide indicated.

#### 3.2 Overall Banking Sector Performance

#### 3.2.1 Capital Adequacy

#### Increase in Capital Adequacy Ratio

The capital adequacy ratio<sup>2</sup> (CAR) for the banking sector stood at 19.0% in June 2019. The ratio has increased from 18.9% in December 2018. The core capital ratio (ratio of Tier 1 capital to risk-weighted assets) showed an increase from 17.6% in December 2018 to 17.7% in June 2019. Whereas the leverage ratio (ratio of assets over capital) increased to 7.6% during the same period.

-

<sup>&</sup>lt;sup>1</sup> Chapters 3, 4, and 5 do not contain any sections on stress testing. Stress testing exercises are performed separately in an internal report to obtain information on the potential quantitative impact of hypothetical scenarios on selected Bahraini Domestically Systemically-Important Banks (DSIB's).

<sup>&</sup>lt;sup>2</sup> The capital adequacy ratio relates total capital to risk-weighted assets (RWA). The discussion excludes overseas retail banks, which do not have prescribed capital levels or ratios.

Table 3-1: Capital Provision Ratios

Indicator*	Dec. 2018	Jun. 2019
CAR (%)	18.9	19.0
Tier 1 CAR (%)	17.6	17.7
Leverage (Assets/Capital) (Times)	7.2	7.6

<sup>\*</sup> For Locally Incorporated Banks only.

#### 3.2.2 Asset Quality

#### Decrease in NPLs

The non-performing loans (NPLs) ratio has been flat remaining within the same range. The NPL ratio decreased to 5.2% in June 2019. The specific provisions as a proportion of NPLs showed increase to 64.7% in June 2019 from 61.2% in December 2018.

Table 3-2: NPL Ratios

Indicator	Dec. 2018	Jun. 2019
NPLs (% Total Loans)	5.5	5.2
Specific provisions (% of NPLs) *	61.2	64.7

<sup>\*</sup> Specific provisions as a percentage of NPLs are calculated as specific provisions divided by gross impaired loans. Source: CBB.

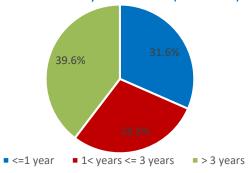
Data on NPLs by time segment (up to 1 year, 1 year to 3 years, and over 3 years) show that the majority of NPLs in the banking sector are for over 3 years (39.6% of total NPLs). NPLs for over 3 years represented 2.1% of total gross loans. Specific provisioning for NPLs increases as they are non-performing for longer periods of time. As seen in Table 3-3, NPLs for a period for more than 3 years are provisioned by 74.8%.

Table 3-3: NPL Ratios and Specific Provisions by Time Period (June 2019)

Indicator	Up to 1 year	1 up to 3 years	Over 3 years	Total
NPLs (% Total Loans)	1.7	1.5	2.1	5.2
Specific Provisions (% of NPLs)	46.7	70.8	74.7	64.7

Source: CBB.

Chart 3-1: NPLs by Time Period (June 2019)



Source: CBB.

Data on the concentration of NPLs by sector shows that the majority of NPLs come from the manufacturing sector (21.8%), construction (21.0%), and trade (14.9%) as indicated in chart 3-2.

<sup>&</sup>lt;sup>3</sup> The other sectors category includes sectors such as private banking, services, tourism, and utilities.

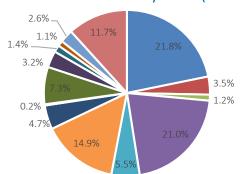


Chart 3-2: NPLs Concentration by Sector (June 2019)

- Manufacturing
- Agriculture, fishing and forestry
- Personal / Consumer finance
- Commercial real estate financing
- Transport

Financial

Residential mortgage

Mining and quarrying

Government

Credit Card

Construction Trade

- Technology, media and telecommunications
- Other sectors

Source: CBB.

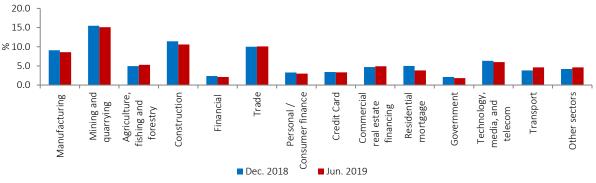
Data on the sectoral breakdown of NPLs ratios (NPLs per sector as a percentage loans in each sector) shows some sectors experiencing an increase in impairment, while some experience a decrease and others remaining unchanged (Table 3-4 and Chart 3-2). The overall changes though have been minimal. The highest increase was in transport by 0.9%. The highest decrease was in residential mortgage by 1.1%.

Table 3-4: NPL Ratios by Sector (%)

Sector	Dec. 2018	Jun. 2019	Change
Manufacturing	9.1	8.6	(0.5)
Mining and quarrying	15.5	15.1	(0.4)
Agriculture, fishing and forestry	4.9	5.3	0.4
Construction	11.4	10.6	(8.0)
Financial	2.4	2.1	(0.3)
Trade	10.0	10.1	0.1
Personal / Consumer finance	3.3	3.0	(0.3)
Credit Card	3.4	3.3	(0.1)
Commercial real estate financing	4.7	4.9	0.2
Residential mortgage	5.0	3.8	(1.2)
Government	2.1	1.8	(0.3)
Technology, media and telecommunications	6.3	6.0	(0.3)
Transport	3.8	4.6	0.8
Other sectors	4.2	4.6	0.4

Source: CBB.

Chart 3-3: NPL Ratios by Sectors (%)



#### Loan portfolios faces slight fluctuations and concentrated in some sectors

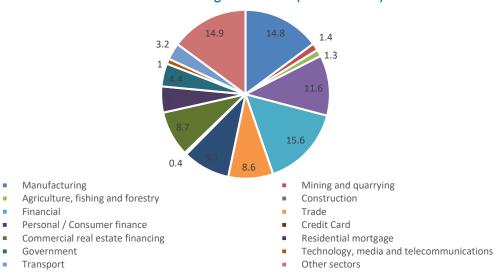
The loan portfolio of *the banking system* remains concentrated in four sectors with no major change in the exposure to the sectors and with no sector exceeding 20% of total loans. Financial represented the highest exposure with 15.5% of total loans in June 2019. Manufacturing was close behind, with 14.7% exposure in June 2019. Also, the sector with the largest decline was trade after dropping from 9.4% in December 2018 to 8.7% in June 2019.

Table 3-5: Lending Distribution (% Total Loans)

Sector	Dec. 2018*	Jun. 2019*	Change
Manufacturing	14.6	14.8	0.2
Mining and quarrying	1.5	1.4	(0.1)
Agriculture, fishing and forestry	1.2	1.3	0.1
Construction	11.9	11.6	(0.3)
Financial	14.6	15.6	1.0
Trade	9.4	8.6	(0.8)
Personal / Consumer finance	9.0	9.1	0.1
Credit Card	0.4	0.4	0.0
Commercial real estate financing	9.2	8.7	(0.5)
Residential mortgage	4.8	5.0	0.2
Government	4.1	4.4	0.3
Technology, media and telecommunications	1.0	1.0	0.0
Transport	3.6	3.2	(0.4)
Other sectors	14.7	14.9	0.2
Top Two Sectors (%)	29.3	30.5	1.2
Real Estate/ Construction Exposure (%) **	25.8	25.3	(0.5)

<sup>\*</sup> Figures may not add to a hundred due to rounding.

Chart 3-4: Lending Distribution (% Total Loans)



Source: CBB.

The top two recipient sectors financial and manufacturing jointly represented 30.5% of loans in June 2019, increasing from 29.3% in December 2018. Exposure to real estate/construction was 25.3% of total lending in June 2019, a decrease from 25.8% registered in December 2018.

<sup>\*\*</sup> Real Estate/Construction exposure is calculated as the share of the construction, commercial real estate financing, and residential mortgages sectors of total lending.

Source: CBB.

#### SME lending

Credit extension to Small and Medium Enterprises (SMEs) showed stability between December 2018 and June 2019. SME loans (as a % of total loans) remained at 2.0% in June. SME Non-performing loans dropped between the same periods to 6.9%, down from 9.7%. Provisioning levels recorded an increase from 48.6% in December 2018 to 50.9% in June 2019.

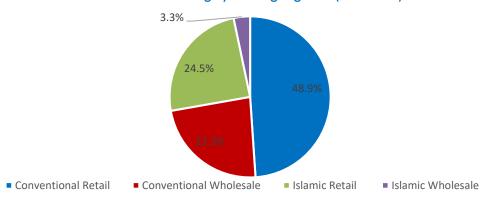
Table 3-6: SME Lending \*

Indicator	Dec. 2018	Jun. 2019
SME Loans (% of total Loans)	2.0	2.0
SME NPLs (% of total SME Loans)	9.7	6.9
SME Provisioning (% of total SME NPLs)	48.6	50.9

<sup>\*</sup>For Bahrain Operations Only

Source: CBB.

Chart 3-5: SME Lending by Banking Segment (June 2019)



Source: CBB.

#### 3.2.3 Profitability

#### Profitability remains stable

The overall banking sector's profitability indicators have been stable from June 2018 to June 2019 and remains robust. Return-on-assets (ROA) remained stable at 0.6% from June 2018 to June 2019. As of end-June 2019, return-on-equity (ROE) decreased slightly to 3.9 from 4.0% in June 2018.

Table 3-7: Profitability

Indicator	Jun. 2018	Jun. 2019
ROA (%)*	0.6	0.6
ROE (%) **	4.0	3.9
Net Interest Income (% Total Income)***	59.6	58.4
Operating Expenses (% Total Income)	62.4	71.4

<sup>\*</sup> ROA = ratio of net income to assets.

Source: CBB.

Net interest income (as a % of total income) stood at 58.4% in June 2019. In addition, operating expenses as a proportion of total income was 71.4% in June 2019, an increase from the 62.4% registered in June 2018.

<sup>\*\*</sup> ROE = ratio of net profit to tier 1 capital (for Locally Incorporated Banks only).

<sup>\*\*\*</sup> Net interest income only for Conventional Banks.

#### 3.2.4 Liquidity

#### Liquidity position stays resilient

Between December 2018 and June 2019, the overall loan-deposit ratio decreased from 72.1% to 71.5%. Liquid assets as a proportion of total assets increased from 24.1% to 25.1%, over the same period.

Table 3-8: Liquidity

	Dec. 2018	Jun. 2019
Liquid Asset Ratio (%)	24.1	25.1
Loan-Deposit Ratio (%)	72.1	70.8

Source: CBB.

#### 3.3 Overall Assessment of the Banking Sector

The financial soundness indicators show that the Banking Sector witnessed an increase in capital adequacy ratios. Capital adequacy ratios for the banking sector increased to 19.0% in June 2019 from 18.9% in December 2018. NPLs have slightly decreased between the periods of December 2018 to June 2019, from 5.5% to 5.2%. Profitability has remained stable with ROA being at 0.6% and ROE at 3.9%. Liquidity improved as the liquid asset ratio increased by 1.0% between December 2018 and June 2019.

The CBB implemented new standards for capital and liquidity requirement proposed by the Basel Committee on Banking Supervision ("Basel III") in Bahrain starting from 1 January 2015, which are applicable to both conventional and to Islamic banking institutions. Local banks are required to maintain a minimum capital adequacy ratio of 12.5% which exceeds the minimum ratio requirements set by Basel III. All Bahraini banks are currently following the standardised approach to Credit Risk under Pillar One of Basel III. The basic indicator and standardised approaches are permitted for operational risk, while the standardised and internal model approaches are permitted for market risk. As part of Basel III implementation, new more extensive Pillar Three Disclosure requirements came into effect for all locally-incorporated banks' financial statements dated 30 June 2015 onward. With effect from 30 June 2019, the CBB requires all locally-incorporated banks to also report Basel III ratios on leverage and liquidity on a quarterly basis for LCR. From 31 December 2019, the CBB will also require all locally-incorporated banks to report in respect of NSFR.

In the following two chapters (chapters 4 and 5) of the FSR, the FSIs of the four banking sectors (Conventional Retail, Conventional Wholesale, Islamic Retail, and Islamic Wholesale) are analysed to assess the performance of the sectors in the banking system in Bahrain.

#### Box 2: The Financial Stability Index

The Aggregated Financial Stability Index (FS Index) has received a great attention by central bankers around the world and many central banks in developed and developing countries have started constructing their own indices. The CBB has constructed a Financial Stability Index which is a combination of a set of banking stability index, economic stability index and capital market index.

The aggregate banking stability index aims to assess the risks to financial stability by focusing on a set of key financial soundness indicators of the retail banks in Bahrain. The aggregated economic index is also made up of a set of variables that might have an impact on financial stability, and capital market index employs variables that could play crucial role in ensuring financial stability in Bahrain.

The sample used to calculate the index covered all retail banks in Bahrain: conventional and Islamic for the period 2008-2018, in addition to forecasting the trend for 2019 and 2020. To construct the index, the FSD proposed the methodology based on empirical normalization techniques. Generally, the method gives the 0 value (Min) to the most unfavorable observed value and 1 (Max) to the best recorded value. All intermediary values are calculated based on the formula:

$$I_{it}^{n} = \frac{I_{it} - Min(I_{i})}{Max(I_{i}) - Min(I_{i})}$$

 $I_{it}$  is the value of indicator i in period t; Min ( $I_i$ ) and Max ( $I_i$ ) are the minimum and maximum of the indicator in the analyzed period.

The empirical normalization method, gives either the possibility to calculate a stress index (if the analysis is based on the volatility of the variables) or a stability index (if the normalization procedure takes into consideration the worst and the best values recorded by the indicators in the analyzed time horizon). The FSD has chosen the second approach.

The FSD considers the FS Index to be a useful tool that contributes to the macro prudential framework and the Financial Stability mandate that the CBB is working on.

#### 1. Banking Stability Index

To construct the Banking Stability Index, the FSD collected 8 financial soundness indicators and classified them in four categories: capital adequacy, liquidity, profitability and assets quality. The suggested approach was to weigh each category based on its significance, and the possible risk it has on the banking sector (Table 1).

Table 1. Banking Stability Indicators

D:-I-	In disease	<u> </u>	A 1 14/-!
Risk	Indicator	Individual weight	Aggregated Weight
	Capital Adequacy Ratio	20%	35%
Capital Adequacy	Tier 1	15%	3370
Liquidity	Liquid Assets % of Total Assets	10%	20%
			2070
	Loan to Deposit Ratio	10%	
Profitability	ROE	10%	10%
Assets Quality	NPLs	15%	
	Growth rate of NPLs	10%	35%
	Provisioning	10	

Source: CBB and staff calculations.

Combining the above indicators gives the banking stability index. The increase in the index means improved banking stability, while the decrease denotes stability worsening.

As for 2020, the BSI will recover and increase further to reach the level of 0.72. therefore, we can conclude that the banking sector in Bahrain will remain capitalized, liquid, well regulated and returns will also remain high.



#### 2. Economic Stability Index

Using the same methodology, we computed the economic stability index in Bahrain using the following indicators:

Table 2. Definition of the variables

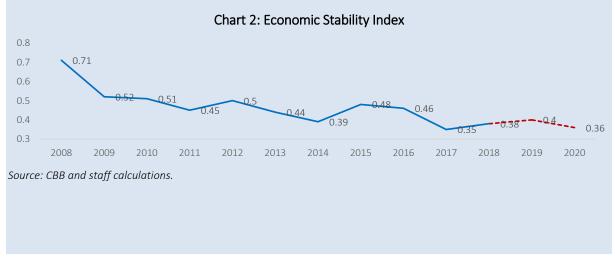
Table 2. Definition of the variables			
Indicator	Definition		
Economic Growth	Proxied by Growth in Non-Oil Real GDP		
External Sector Performance	Current Account Surplus/ Deficit as % of GDP		
Financial Sector Development	Credit to private sector as % of Non-oil GDP		
Monetary Development	Money supply (M2) as % of GDP		
<b>Economic Condition</b>	Inflation		
Real Estate Price	Proxied by credit to construction as % of total credit		

Source: CBB database.

Factors explain the drop of the economic index:

- The global economic condition has witnessed an unprecedented slowdown.
- While the global economic condition improved in the beginning of 2014, oil price declined sharply
  in the second half of the year generating economic problems in oil depending countries including
  Bahrain (rise of debt, fiscal balance deficit, drop of government revenues and also drop of foreign
  reserves).

In 2018, the global economic condition improved slightly and oil price is currently in an upward trend and expected to stay at the level of USD\$65. These improvements will have positive impact of Bahrain economy as it is explained in the chart 2 where Economic index will reach 0.4 in 2019 but will decrease further to 0.36 due to increased uncertainty that could trigger a new global downturn.



#### 3. Capital Market Index.

The capital market stability index was calculated using the following two indicators:

- Market capitalization as a percentage of GDP
- Price to Earnings Ratio

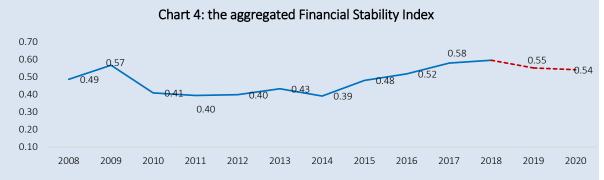
The movement of capital market stabilityty index is revealed in the chart below.

Chart 3: Capital Market Index 1.00 0.96 0.80 0.77 0.60 0.58 0.50 0.47 0.420.40 0.45 0.36 0.2 0.20 0.00 2008 2009 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Source: CBB and staff calculations.

#### 4. The aggregated Financial Stability Index for Bahrain

In the aggregated FS Index, the FSD used all the 16 variables in one model. It comprises 8 banking variables, 6 economic variables and 2 capital market variables. Using the empirical normalization, and the weight of each sub-index (Banking Stability Index weight is 50%, Economic Stability Index weight is 37.5%, and Capital Market Index weight is 12.5%).<sup>4</sup>



Source: CBB and staff calculations.

From the chart above, we can conclude that despite the multiple events that Bahrain has experienced during the past few years, the overall index remained stable and acceptable.

From Chart 4 it can be concluded that the oil price drop did not have an obvious impact on the overall financial stability index in Bahrain and this conclusion was also found in Chart 2 on banking stability index.

<sup>&</sup>lt;sup>4</sup> The weight of each sector is calculated as follows:

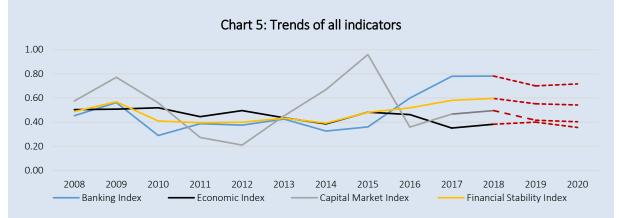
<sup>•</sup> Weigh of Banking sector = (Number of variables used in the banking sector / total number of the variables) = 8:16=50

<sup>•</sup> Weigh of Economic sector = (Number of variables used in the Economic sector / total number of the variables) = 6:16=37.5

<sup>•</sup> Weigh of capital sector = (Number of variables used in the capital market sector / total number of the variables) = 2:16=12.5

<sup>•</sup> The aggregated financial stability index (FSI) = (0.5\*banking index) + (0.375\*Economic Index) + (0.125\*Capital market index).

Chart 5 displays the movements of all indicators and it clearly shows that unlike the previous years that there is no severe volatility in the economic, banking and capital market indicators and for the coming two years as all of theme will remain stable at almost their current levels.



Source: CBB and staff calculations.

There advantages of developing a FS Index are:

- 1- Financial stability continues to be relevant topic with continuous developments in macro prudential surveillance. The FS Index is considered a new analytical tool in macro-prudential analysis used to detect stress in the respective financial systems by measuring financial stability levels and help monitor and analyze risks and threats to the stability of the financial system. Similar to the publication of Financial Stability Reports (FSR) and contingency planning exercises, it is seen as an addition to further develop a comprehensive Early Warning System.
- 2- The Index incorporates many of the already IMF proposed list of Financial Soundness Indicators (which are specifically reflected in the banking sub-index). The banking sub-index incorporates the main core indicators related to basic areas relevant to the banking business: Capital Adequacy, Asset Quality, Liquidity, and Profitability. The advantage of the having a banking sub index is that the multidirectional movements of these indicators are converted into one sub-index making their trends easier to interpret and follow.
- 3- Financial stability is essential for economic growth because most transactions in the real economy are concluded through the banking system. There is an interdependence between the financial system and the real economy and the index provides a link by incorporating macro-economic variables (which are reflected in the economic sub-index). Correlations between the economic growth and the levels of profit generated from financial activities or between economic growth and nonperforming loan rates can be followed by the index to help ensure that the banking sector is capable of financing the economy.
- 4- The FS Index assesses the evolution of indicators affecting stability over a period of time and not just a standalone period, and therefore should always be looked at as a time series. Looking at the index at one specific period of time is seen as ineffective if not compared over multiple reference points which allows various historic episodes "financial crises" to be identified. For example, looking at the Financial Stability Index over a period of 10 years may allow to (1) see the fluctuation in the index and the sub-indices over some major financial events such as the Global Financial Crisis and (2) see which of the indicators within the index and sub-indices are sensitive to which events.

5- Looking at the FS Index as a time series allows the Index to be used as a short term prognosis tool. Assumptions on the performance of some indicators can be made and lead to projections for the next period of time (t+1). For example, an assumption can be made on the real economy growth for the next period of time (GDPt+1) and applied to the current performance of the economy (GDPt) and FS Index (FSIndext+1) is generated. Other assumptions can be made on the stabilization of oil prices as well as higher capital adequacy and liquidity buffers of banks within the Kingdom.

The FS Index is meant to be a dynamic tool always adapting to various financial stability issues. Going forward, as additional data on non-bank financial intuitions and macroeconomic indicators become available, the comprehensiveness of the FS Index will be enhanced further as there will be more awareness of which indicators play a bigger role in the financial stability of the country.

#### Chapter

4

### **Conventional Banks**



- ▶ A decrease in capital positions of conventional retail banks.
- Non-performing loans (NPLs) for conventional retails banks remained stable, while NPLs for conventional wholesale banks decreased.
- ▶ Loan portfolios in conventional retail and wholesale banks remain concentrated despite the decrease in some sectors.
- ▶ Growth in earnings for conventional banks.
- Liquidity improved for conventional retail banks, but dropped for conventional wholesale banks.

#### 4.1 Overview

Chapter 4 offers macro prudential analysis of the conventional banking sector based on a set of selected FSIs. The Chapter analyses the following conventional banking segments: conventional retail (CR) banks (section 4.2), conventional wholesale (CW) banks (section 4.3). Section 4.4 provides an overall assessment of the conventional banking industry. Unless specified otherwise, the analysis in this chapter is based on consolidated financial data (Bahraini and non-Bahraini operations).

#### 4.2 Conventional Retail Banks

#### 4.2.1 Capital Adequacy

#### Decrease in capital adequacy

The CAR for conventional retail decreased from 20.9% in December 2018 to 19.8% in June 2019. The core capital ratio (ratio of Tier 1 capital to risk-weighted assets) showed a decrease from 19.4% in December 2018 to 18.5% in June 2019,

Table 4-1: CR Banks' Capital Provisions Ratios

Indicator *	Dec. 2018	Jun. 2019
CAR (%)	20.9	19.8
Tier 1 CAR (%)	19.4	18.5
Leverage (Assets/Capital) (Times)	6.4	7.0
NPLs net of Provisions to Capital (%)	5.8	6.3

<sup>\*</sup> For Locally Incorporated Banks only.

The leverage ratio (ratio of assets over capital) increased to 7.0% during the same period. The ratio of non-performing loans (NPLs) net provisions to capital increased to reach 6.3% in June 2019 from 5.8% in December 2018.

#### 4.2.2 Asset Quality

#### Stability in NPLs

The NPL ratio remained at 5.5% between December 2018 and June 2019. The specific provisions as a proportion of NPLs showed an increase to 66.0% in June 2019 from 63.8% in December 2018. For local retail banks, the NPLs slightly increased to 4.5% in June 2019. For overseas retail banks, the NPLs decreased from 7.9% in December 2018 to 7.3% in June 2019.

Table 4-2: CR Banks' NPL Ratios

Indicator	Dec. 2018	Jun. 2019
NPLs (% Total Loans)	5.5	5.5
NPLs Local Banks (%)	4.4	4.5
NPLs Overseas Banks (%)	7.9	7.3
Specific Provisions (% of NPLs) *	63.8	66.0

<sup>\*</sup> Specific provisions as a percentage of NPLs are calculated as specific provisions divided by gross impaired loans. Source: CBB.

Data on the concentration of NPLs by sector shows that the majority of NPLs come from the manufacturing sector (36.9%), commercial real estate sector (11.9%), other (9.9%) and trade (9.8%) as indicated in chart 4-1.

1.9% 1.6% 7 5% 0.4% 2.6% 2.7% Manufacturing Mining and quarrying Agriculture, fishing and forestry Construction Financial Trade Personal / Consumer finance Credit Card Commercial real estate financing Residential mortgage Technology, media and telecommunications Government Transport Other sectors

Chart 4-1: CR Banks' NPLs Concentration by Sector (June 2019)

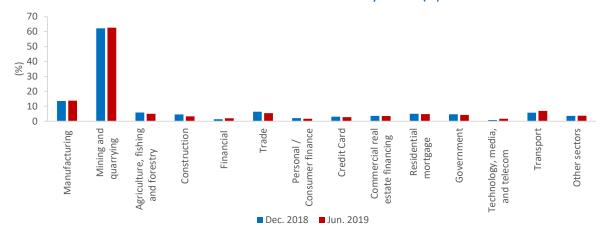
Source: CBB.

Available data on the sectoral breakdown of NPLs shows some sectors experiencing an increase in impairment, while some experience a decrease (Table 4-3 and Chart 4-1). The highest increase was in transport by 1.1%, and the highest decrease was in construction by 1.3%.

Table 4-3: CR Banks' NPL Ratios by Sector (%)

Sector	Dec. 2018	Jun. 2019	Change
Manufacturing	13.6	13.8	0.2
Mining and quarrying	62.2	62.6	0.4
Agriculture, fishing and forestry	5.9	5.0	(0.9)
Construction	4.6	3.3	(1.3)
Financial	1.4	2.0	0.6
Trade	6.4	5.4	(1.0)
Personal / Consumer finance	2.1	1.7	(0.4)
Credit Card	3.1	2.8	(0.3)
Commercial real estate financing	3.6	3.5	(0.1)
Residential mortgage	5.0	4.8	(0.2)
Government	4.7	4.2	(0.5)
Technology, media and telecommunications	0.8	1.7	0.9
Transport	5.8	6.9	1.1
Other sectors	3.6	3.7	0.1

Chart 4-2: CR Banks' NPL Ratios by Sector (%)



Source: CBB.

#### Loan portfolios remain concentrated

The loan portfolio of *retail banks* remains concentrated with fairly small, if any, changes in the composition of the loans. The top recipient of loans remains to be the commercial real estate financing sector accounting for 18.7% of total loans in June 2019, compared with 18.1% in December 2018. The manufacturing sector represented 14.6% of total loans and the personal/consumer finance sector represented 15.1%.

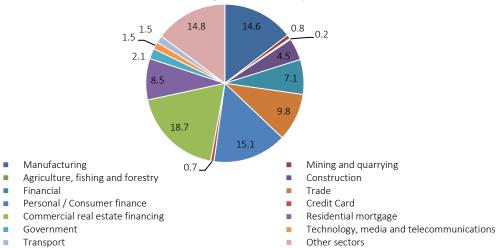
The top two recipient sectors, commercial real estate financing and personal/consumer finance, jointly represented 33.8% of loans in June 2019. Exposure to real estate/construction increased to 31.7% of total lending in June 2019.

Table 4-4: CR Banks' Lending Distribution by Sector (% Total Loans)

Sector	Dec. 2018*	Jun. 2019*	Change
Manufacturing	13.8	14.6	0.8
Mining and quarrying	0.9	0.8	(0.1)
Agriculture, fishing and forestry	0.2	0.2	0.0
Construction	4.3	4.5	0.2
Financial	8.8	7.1	(1.7)
Trade	10.2	9.8	(0.4)
Personal / Consumer finance	14.7	15.1	0.4
Credit Card	0.7	0.7	0.0
Commercial real estate financing	18.1	18.7	0.6
Residential mortgage	8.3	8.5	0.2
Government	2.0	2.1	0.1
Technology, media and telecommunications	1.5	1.5	0.0
Transport	1.7	1.5	(0.2)
Other sectors	15.0	14.8	(0.2)
Top Two Sectors (%)	33.1	33.8	0.7
Real Estate/ Construction Exposure (%) **	30.7	31.7	1.0

<sup>\*</sup> Figures may not add to a hundred due to rounding.

Chart 4-3: CR Banks' Lending Distribution by Sector (% Total Loans)



Source: CBB.

The loan portfolio of *locally incorporated retail banks* remains concentrated with the top recipient of loans being the commercial real estate financing sector accounting for 19.5% of total loans in June 2019.

The manufacturing sector represented 15.3% of total loans over the same period, an increase from 14.7%. The top two recipient sectors commercial real estate financing and manufacturing jointly represented 34.8% of loans in June 2019, an increase from the 33.2% in December 2018. Exposure to real estate/construction increased to 37.1% of total lending in June 2019.

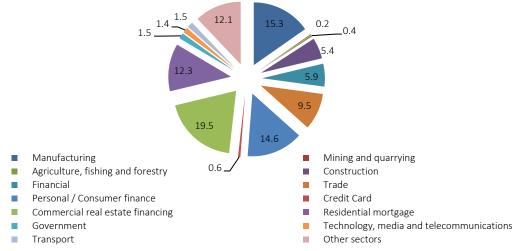
<sup>\*\*</sup> Real Estate/Construction exposure is calculated as the share of the construction, commercial real estate financing, and residential mortgages sectors of total lending.

Table 4-5: Local CR Banks' Lending Distribution by Sector (% Total Loans)

Sector	Dec. 2018	Jun. 2018	Change
Manufacturing	14.7	15.3	0.6
Mining and quarrying	0.1	0.2	0.1
Agriculture, fishing and forestry	0.3	0.4	0.1
Construction	5.0	5.4	0.4
Financial	6.6	5.9	(0.7)
Trade	9.8	9.5	(0.3)
Personal / Consumer finance	14.4	14.6	0.2
Credit Card	0.6	0.6	0.0
Commercial real estate financing	18.5	19.5	1.0
Residential mortgage	11.7	12.3	0.6
Government	1.9	1.5	(0.4)
Technology, media and telecommunications	1.4	1.4	0.0
Transport	1.7	1.5	(0.2)
Other sectors	13.1	12.1	(1.0)
Top Two Sectors (%)	33.2	34.8	1.6
Real Estate/ Construction Exposure (%) **	35.3	37.1	1.8

<sup>\*</sup> Figures may not add to a hundred due to rounding.

Chart 4-4: Local CR Banks' Lending Distribution by Sector (% Total Loans)



Source: CBB.

The numbers as of end-June 2019 continue to show high concentration of risk for *overseas retail banks* (Table 4-6 and Chart 4-4). The top recipient of loans, excluding the others sector, was the commercial real estate financing sector with 17.2% of total loans in June 2019, a slight decrease from the 17.3% in December 2018.

The top two recipients of loans (commercial real estate financing and other sectors) jointly accounted for 37.3% of total loans. Exposure to real estate/ construction was 21.3% of total lending in June 2019, decreasing from 21.5% in December 2018.

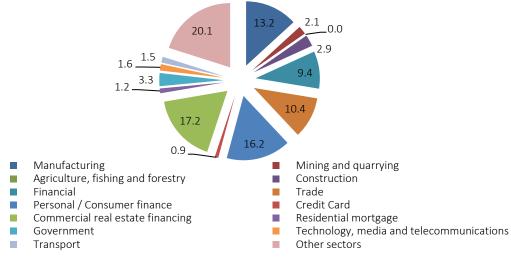
<sup>\*\*</sup> Real Estate/Construction exposure is calculated as the share of the construction, commercial real estate financing, and residential mortgages sectors of total lending.

Table 4-6: Overseas CR Banks' Lending Distribution by Sector (% Total Loans)

Sector	Dec. 2018	Jun. 2019	Change
Manufacturing	12.1	13.2	1.1
Mining and quarrying	2.3	2.1	(0.2)
Agriculture, fishing and forestry	0.0	0.0	0.0
Construction	2.9	2.9	0.0
Financial	13.1	9.4	(3.7)
Trade	11.0	10.4	(0.6)
Personal / Consumer finance	15.3	16.2	0.9
Credit Card	1.0	0.9	(0.1)
Commercial real estate financing	17.3	17.2	(0.1)
Residential mortgage	1.3	1.2	(0.1)
Government	2.1	3.3	1.2
Technology, media and telecommunications	1.5	1.6	0.1
Transport	1.5	1.5	0.0
Other sectors	18.7	20.1	1.4
Top Two Sectors (%)	36.0	37.3	1.3
Real Estate/ Construction Exposure (%) **	21.5	21.3	(0.2)

<sup>\*</sup> Figures may not add to a hundred due to rounding.

Chart 4-5: Overseas CR Banks' Lending Distribution by Sector (% Total Loans)



Source: CBB.

#### 4.2.3 Profitability

#### Increase in Overseas Banks' profitability

Profitability of the banks was positive, and, as at end-June 2019, ROA increased to 0.9%. ROA for *locally incorporated banks* remained the same at 1.1% in June 2019. For *overseas banks*, ROA increased from 0.2% in June 2018 to 0.5% in June 2019. ROE for *locally incorporated banks* remained the same at 8.0% during the same period. Net interest income (as a % of total income) increased from 75.3% in June 2018 to 77.5% in June 2019. Operating expenses as a proportion of total income decreased from 50.7% in June 2018 to 42.9% in June 2019.

<sup>\*\*</sup> Real Estate/Construction exposure is calculated as the share of the construction, commercial real estate financing, and residential mortgages sectors of total lending.

Table 4-7: CR Banks' Profitability

Indicator	June 2018	June 2019
ROA (%) *	0.8	0.9
ROA Locally Incorporated Banks (%)	1.1	1.1
ROA Overseas Banks (%)	0.2	0.5
ROE (%) **	8.0	8.0
Net Interest Income (% Total Income)	75.3	77.5
Operating Expenses (% Total Income)	50.7	42.9

<sup>\*</sup> ROA = ratio of net income to assets.

#### 4.2.4 Liquidity

#### Liquidity position improves

Between December 2018 and June 2019, bank deposits and non-bank deposits remained at similar level for retail banks. The overall loan-deposit ratio for the segment decreased to 67.9% in June 2019 from December 2018. Liquid assets as a proportion of total assets increased from 32.9% in December 2018 to 35.9% in June 2019. Liquid assets as a proportion of the short-term liabilities presented an increase from 41.3% to 44.9% over this period.

Table 4-8: CR Bank's Liquidity

Indicator	Dec. 2018	Jun. 2019
Liquid Asset Ratio (%)	32.9	35.9
Loan-Deposit Ratio (%)	69.6	67.9
Non-Bank Deposits (% of Total Deposits)	80.3	73.7

<sup>\*\*</sup> ROE = ratio of net income to tier 1 capital (for Locally Incorporated Banks only).

#### 4.3 Conventional Wholesale Banks

#### 4.3.1 Capital Adequacy

#### Increase in capital adequacy

As at end-June 2019, the CAR for locally-incorporated wholesale banks increased to 19.4% in June 2019 from the level of 18.1% it registered in December 2018. The core capital ratio (ratio of Tier 1 capital to risk-weighted assets) increased by 1.1% from 17.3% in December 2018 to 18.5% recorded in June 2019. Furthermore, the leverage ratio (ratio of assets over capital) remained at 7.4% in June 2019. Finally, the ratio of non-performing loans (NPLs) net of provisions to capital decreased to 4.3% over the same period.

Table 4-9: CW Banks' Capital Provisions Ratios \*

Indicator	Dec. 2018	Jun. 2019
CAR (%)	18.1	19.4
Tier 1 CAR (%)	17.3	18.5
Leverage (Assets/Capital)(times)	7.4	7.4
NPLs Net of Provisions to Capital (%)	6.2	4.3

<sup>\*</sup> For Locally Incorporated Banks only.

Source: CBB.

#### 4.3.2 Asset Quality

#### Non-performing loans slightly increase for local banks

As at end-June 2019, loans classified as non-performing as a % of total loans decreased from 5.7% in December 2018 to 5.3% in June 2019. The NPL ratio of locally-incorporated wholesale banks increased from 6.3% in December 2018 to 6.5% in June 2019. Additionally, overseas wholesale banks witnessed a decrease in its NPL ratio from 5.2% to 4.2% over the same period. Specific provisions as a proportion of NPLs also witnessed an increase as well from 67.9% in December 2018 to 74.3% in June 2019.

Table 4-10: CW Banks' NPL Ratios

Indicator	Dec. 2018	Jun. 2019
NPLs (% Total Loans)	5.7	5.3
NPLs Local Banks (%)	6.3	6.5
NPLs Overseas Banks (%)	5.2	4.2
Specific provisions (% of NPLs) *	67.9	74.3

<sup>\*</sup> Specific provisions as a percentage of NPLs are calculated as specific provisions divided by gross impaired loans. Source: CBB.

Looking at the data on the concentration of NPLs by sector indicates that that the majority of NPLs are concentrated and come from the manufacturing sector (41.3%), trade (16.6%), other (14.4%) and manufacturing (9.4%) as indicated in chart 4-6.

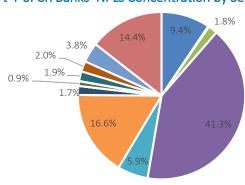


Chart 4-6: CR Banks' NPLs Concentration by Sector (June 2019)

- Manufacturing
- Agriculture, fishing and forestry
- Financial
- Personal / Consumer finance
- Commercial real estate financing
- Government
- Transport

- Mining and quarrying
- Construction
- Trade
- Credit Card
- Residential mortgage
- Technology, media and telecommunications
- Other sectors

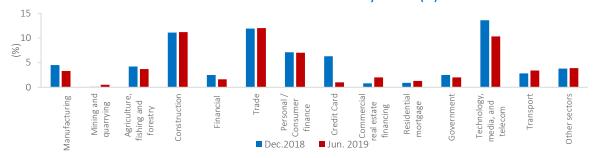
Table 4-11 depicts data on the sectoral breakdown of impaired loans, it demonstrates that impairment in trade was the highest between all sectors at 12.0%, followed by the construction sector with an impairment of 11.2%. The biggest increase was seen in the commercial real estate financing sector which increased by 1.2%. The greatest decrease in impairment was found in the credit card sector which decreased by 5.3%.

Table 4-11: CW Banks' NPL Ratios by Sector (%)

Sector	Dec. 2018	Jun. 2019	Change
Manufacturing	4.5	3.3	(1.2)
Mining and quarrying	0.1	0.5	0.4
Agriculture, fishing and forestry	4.2	3.7	(0.5)
Construction	11.1	11.2	0.1
Financial	2.5	1.6	(0.9)
Trade	11.9	12.0	0.1
Personal / Consumer finance	7.1	7.0	(0.1)
Credit Card	6.3	1.0	(5.3)
Commercial real estate financing	0.8	2.0	1.2
Residential mortgage	0.9	1.3	0.4
Government	2.5	2.0	(0.4)
Technology, media and telecommunications	13.6	10.3	(3.3)
Transport	2.8	3.4	0.6
Other sectors	3.8	3.9	0.1

Source: CBB.

Chart 4-7: CW Banks' NPL Ratios by Sector (%)



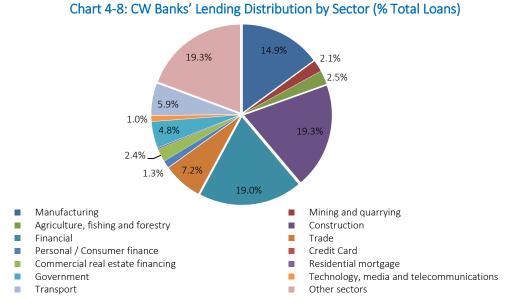
#### Loan portfolios remains concentrated despite decreases in some sectors

An examination of lending patterns as at end-June 2019 shows that, for conventional wholesale banks, the top recipient of loans was the construction sector, which accounted for 19.3% of total loans representing a decrease of 0.9% compared to December 2018 (Table 4-12 and Chart 4-6). The top two sectors in conventional wholesale banks' Lending as a % of total loans are the construction and financial sectors, they jointly account for 38.7% of total lending in June 2019.

Table 4-12: CW Banks' Lending Distribution by Sector (% Total Loans)\*

Sector	Dec. 2018	Jun. 2019	Change
Manufacturing	14.7	14.9	0.2
Mining and quarrying	2.0	2.1	0.1
Agriculture, fishing and forestry	2.5	2.5	0.0
Construction	20.2	19.3	(0.9)
Financial	16.5	19.0	2.5
Trade	8.8	7.2	(1.6)
Personal / Consumer finance	1.2	1.3	0.1
Credit Card	0.0	0.0	0.0
Commercial real estate financing	2.6	2.4	(0.2)
Residential mortgage	0.3	0.2	(0.1)
Government	4.7	4.8	0.1
Technology, media and telecommunications	1.0	1.0	0.0
Transport	6.6	5.9	(0.7)
Other sectors	18.8	19.3	0.5
Top Two Sectors (%)	39.0	38.7	(0.3)
Real Estate/ Construction Exposure (%) **	23.2	22.0	(1.2)

<sup>\*</sup> Figures may not add to a hundred due to rounding.



<sup>\*\*</sup> Real Estate/Construction exposure is calculated as the share of the construction, commercial real estate financing, and residential mortgages sectors of total lending.

Source: CBB.

For *locally-incorporated wholesale banks*, the top recipient of loans is the manufacturing sector, which accounted for 20.3% of total loans in June 2019, representing a decrease of 0.6% from the 20.9% in December 2018 (Table 4-13 and Chart 4-7).

Table 4-13: Local CW Bank's Lending Distribution by Sector (% Total Loans)

Sector	Dec. 2018	Jun. 2019	Change
Manufacturing	20.9	20.3	(0.6)
Mining and quarrying	1.3	1.1	(0.2)
Agriculture, fishing and forestry	5.2	5.4	0.2
Construction	7.4	7.5	0.1
Financial	19.2	19.2	0.0
Trade	12.4	12.5	0.1
Personal / Consumer finance	2.5	2.8	0.3
Credit Card	0.0	0.0	0.0
Commercial real estate financing	4.6	4.6	0.0
Residential mortgage	0.7	0.4	(0.3)
Government	1.6	1.6	0.0
Technology, media and telecommunications	1.9	2.2	0.3
Transport	8.9	8.2	(0.7)
Other sectors	13.5	14.1	0.6
Top Two Sectors (%)	40.1	39.5	(0.6)
Real Estate/ Construction Exposure (%) **	12.7	12.6	(0.1)

<sup>\*</sup> Figures may not add to a hundred due to rounding.

Source: CBB.

The highest two sectors continue to be the manufacturing and financial accounting for 39.5% of total lending in June 2019, a decrease of 0.6% from the December 2018 level. The real estate/ construction exposure decreased to 12.6% in the same period.

Chart 4-9: Local CW Banks' Lending Distribution by Sector (% Total Loans) 14.1% 8.2% 1.1% 2.2% 5.4% 1.6% 4.6% 2.8% Manufacturing Mining and quarrying Agriculture, fishing and forestry Construction Financial Trade Personal / Consumer finance Credit Card Commercial real estate financing Residential mortgage Technology, media and telecommunications Government Other sectors Transport

Source: CBB.

While observing *overseas wholesale banks*, the top recipient of loans in June 2019 was the construction sector, with 29.3% of total loans, followed by the other sectors sector, with 23.7% of total loans, with

<sup>\*\*</sup> Real Estate/Construction exposure is calculated as the share of the construction, commercial real estate financing, and residential mortgages sectors of total lending.

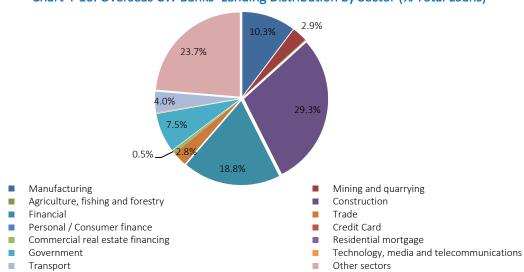
decreases of 2.8% and 0.1% respectively from their December 2018 levels (Table 4-14 and Chart 4-8). The top 2 sectors (Construction and Other) jointly represented 53.0% in June 2019, a decrease of 2.8% from December 2018. Real estate/construction exposure decreased from 32.8% in December 2018 to 29.7% in June 2019.

Table 4-14: Overseas CW Banks' Lending Distribution by Sector (% Total Loans)

Sector	Dec. 2018	Jun. 2019	Change
Manufacturing	8.9	10.3	1.4
Mining and quarrying	2.8	2.9	0.1
Agriculture, fishing and forestry	0.0	0.1	0.1
Construction	32.1	29.3	(2.8)
Financial	13.9	18.8	4.9
Trade	5.6	2.8	(2.8)
Personal / Consumer finance	0.1	0.1	0.0
Credit Card	0.0	0.0	0.0
Commercial real estate financing	0.8	0.5	(0.3)
Residential mortgage	0.0	0.0	0.0
Government	7.5	7.5	0.0
Technology, media and telecommunications	0.1	0.1	0.0
Transport	4.5	4.0	(0.5)
Other sectors	23.8	23.7	(0.1)
Top Two Sectors (%)	55.8	53.0	(2.8)
Real Estate/ Construction Exposure (%) **	32.8	29.7	(3.1)

<sup>\*</sup> Figures may not add to a hundred due to rounding.

Chart 4-10: Overseas CW Banks' Lending Distribution by Sector (% Total Loans)



Source: CBB.

#### 4.3.3 Profitability

#### Growth in profitability for Locally Incorporated Banks

ROA for the conventional wholesale banking sector increased to 0.6% in June 2019 from 0.4% in June 2018. The ROA for *local wholesale banks* also increased from 0.2% to 0.5%, while *overseas wholesale* 

<sup>\*\*</sup> Real Estate/Construction exposure is calculated as the share of the construction, commercial real estate financing, and residential mortgages sectors of total lending
Source: CBB.

banks slightly decreased from 0.7% to 0.6%. ROE for *local wholesale banks* increased from 1.7% to 4.1%. Net interest income as a proportion of total income decreased from 45.4% in June 2018 to 42.0% in June 2019. Operating expenses as a proportion of total income showed a decrease from 67.5% in June 2018 to 54.6% in June 2019.

Table 4-15: CW Banks' Profitability

Indicator	Jun. 2018	Jun. 2019
ROA (%) *	0.4	0.6
ROA Locally Incorporated Banks (%)	0.2	0.5
ROA Overseas Banks (%)	0.7	0.6
ROE (%) **	1.7	4.1
Net Interest Income (% Total Income)	45.4	42.0
Operating Expenses (% Total Income)	67.5	54.6

<sup>\*</sup> ROA = ratio of net income to assets.

Source: CBB.

#### 4.3.4 Liquidity

#### *Liquidity position declines*

As at end-June 2019, the overall loan-deposit ratio for conventional wholesale banks stood at 63.4%, a decrease from the 64.2% recorded in December 2018. The loan deposit ratio for *local wholesale banks* also decreased to 55.5% in June 2019 from 59.7% in December 2018. Over the same period, the loan deposit ratio for *overseas wholesale* bank increased from 69.0% in December 2018 to 71.9% in June 2019.

Liquid assets for wholesale banks as a proportion of total assets declined to 20.9% in June 2019 from 23.0% in December 2018. Liquidity for *local wholesale banks* also declined over this period where their liquid asset ratio decreased to 28.2% from 27.7%. *Overseas wholesale banks'* liquid assets ratio decreased from 17.2% in December 2018 to 13.4% in June 2019.

The liquid assets as a proportion of short-term liabilities decreased to 26.2% in June 2019 from 29.0% in December 2018, 2.8% lower than the level it registered in December 2019. Finally, non-bank deposits as a proportion of total deposits stood at 43.7%, a decrease from the 49.1% level achieved in December 2018, while bank deposits increased from 50.9% in December 2018 to 56.3% in June 2019.

Table 4-16: CW Banks' Liquidity

Indicator	Dec. 2018	Jun. 2019
Liquid Asset Ratio (%)	23.0	20.9
Loan-Deposit Ratio (%)	64.2	63.4
Non-Bank Deposits (% of Total Deposits)	49.1	43.7

<sup>\*\*</sup> ROE = ratio of net income to tier 1 capital (for Locally Incorporated Banks only).

#### 4.4 Overall Assessment of the Conventional Banking Sector

The financial soundness indicators show that conventional banks witnessed a slight decrease in capital adequacy ratios. Capital adequacy ratios for conventional retail banks decreased to 19.8% in June 2019. Capital adequacy ratio for conventional wholesale banks increased to 19.4% over the same period. Non-performing loans remained at 5.5% between the periods of December 2018 to June 2019 for conventional retail banks. As for conventional wholesale banks, loans classified as non-performing decreased from 5.7% in December 2018 to 5.3% in June 2019. Loan concentration remains high for conventional retail and for wholesale banks.

As at end-June 2019, return-on-assets (ROA) increased from 0.8% to 0.9% for conventional retail banks and increased to 0.6% for conventional wholesale banks. Return-on-equity (ROE) for *local retail banks* remained at 8.0% in June 2019. ROE for *local wholesale banks* increased from 1.7% to 4.1% over the same period. For conventional retail banks, liquid assets as a proportion of total assets increased over the period of December 2018 to June 2019 to reach 35.9%. Liquid assets for wholesale banks as a proportion of total assets slightly decreased from 23.0% in December 2018 to 20.9% in June 2019.

# Chapter 5

## **Islamic Banks**



- Capital positions for Islamic banks decreased.
- Non-performing facilities (NPFs) remained stable for both Islamic retail banks and wholesale banks.
- ▶ Concentration of facilities for Islamic banks continues in specific sectors.
- Earnings remained positive for Islamic banks but decreased for Islamic wholesale banks.
- ▶ Liquidity positions improved for Islamic banks.

#### 5.1 Overview

Chapter 5 offers macroprudential analysis of the Islamic banking sector based on a set of selected FSIs. The chapter analyzes the banking sector under the following segments: Islamic retail (IR) banks (section 5.2) and Islamic wholesale (IW) banks (section 5.3). Section 5.4 provides an overall assessment of the Islamic banking industry. Unless specified otherwise, the analysis in this chapter is based on consolidated financial data (Bahraini and non-Bahraini operations).

#### 5.2 Islamic Retail Banks

#### 5.2.1 Capital Adequacy

#### Decrease in capital positions

The CAR of Islamic retail banks decreased from 17.6% in December 2018 to 17.3% in June 2019. Tier 1 capital also decreased from 14.6% in December 2018 to 14.5% in June 2019.

Table 5-1: IR Banks' Capital Provisions Ratios

Indicator	Dec. 2018	Jun. 2019
CAR (%)	17.6	17.3
Tier 1 CAR (%)	14.6	14.5
NPFs net of provisions to capital (%)	34.8	36.1

#### 5.2.2 Asset Quality

#### Stability in non-performing facilities

Non-performing facilities (NPF) ratio remained at 9.5% in June 2019. Specific Provisoining decreased to 38.0% in June 2019 from 38.6% in December 2018.

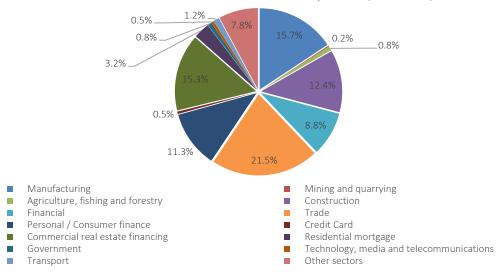
Table 5-2: IR Banks' NPF Ratios

Indicator	Dec. 2018	Jun. 2019
NPFs (% Gross Facilities)	9.5	9.5
Specific Provisions (% of NPFs)	38.6	38.0

Source: CBB.

Looking at the data on the concentration of NPFs by sector indicates that that the majority of NPLs are concentrated and come from the trade sector (21.5%), manufacturing (15.7%), commercial real estate financing (15.3%) and construction (12.4%) as indicated in chart 5-1.

Chart 5-1: IR Banks' NPFs Concentration by Sector (June 2019)



Source: CBB.

A look at the non-performing facilities by sector indicates that the transport sector had the highest impairment of 34.6% in June 2019 followed by construction and trade with 30.7% and 19.5% respectively. The biggest declines in NPFs by sector was in the residential mortgage Sector with a 5.0% decrease in NPFs from December 2018 to June 2019. The biggest increase in NPFs was the transport sector with an increase of 8.5%.

Chart 5-2: IR Banks' NPF Ratios by Sector (%)

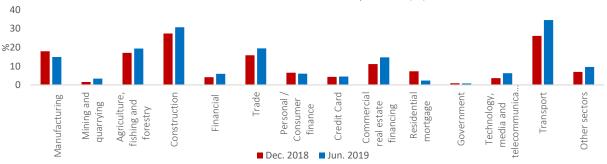


Table 5-3: IR Banks' NPF Ratios by Sector (%)

Sector	Dec. 2018	Jun. 2019	Change
Manufacturing	17.9	14.8	(3.1)
Mining and quarrying	1.6	3.3	1.7
Agriculture, fishing and forestry	17.1	19.4	2.3
Construction	27.4	30.7	3.4
Financial	4.1	5.9	1.8
Trade	15.8	19.5	3.7
Personal / Consumer finance	6.5	6.0	(0.5)
Credit Card	4.3	4.5	0.2
Commercial real estate financing	11.1	14.7	3.6
Residential mortgage	7.3	2.3	(5.0)
Government	0.9	0.8	(0.1)
Technology, media and telecommunications	3.6	6.3	2.7
Transport	26.1	34.6	8.5
Other sectors	6.9	9.6	2.7

#### Diversification in asset concentration (loan portfolio)

There has been a diversification in the asset concentration among most of the sectors. At the end of June 2019, the top recipient of financing was personal/consumer finance at 18.2%, an increase from 17.2% in December 2018. The top two recipients of financing (personal/consumer finance and financial) accounted for 32.4% of total facilities extended, compared to 31.9% for the top two sectors in December 2018.

Table 5-4: IR Banks' Lending Distribution by Sector (% Total Facilities)

Sector	Dec. 2018*	Jun. 2019*	Change
Manufacturing	10.3	10.1	(0.2)
Mining and quarrying	1.3	0.6	(0.7)
Agriculture, fishing and forestry	0.5	0.4	(0.1)
Construction	4.1	3.8	(0.3)
Financial	14.7	14.2	(0.5)
Trade	10.1	10.5	0.4
Personal / Consumer finance	17.2	18.2	1.0
Credit Card	1.0	1.0	0.0
Commercial real estate financing	14.3	9.9	(4.4)
Residential mortgage	9.6	13.0	3.4
Government	7.8	9.2	1.4
Technology, media and telecommunications	0.8	0.8	0.0
Transport	0.4	0.3	(0.1)
Other sectors	8.1	7.8	(0.3)
			` '
Top two recipient sectors	31.9	32.4	0.5
Real Estate/ Construction Exposure**	28.0	26.8	(1.2)

Source: CBB.

Moreover, the share of the commercial real estate financing sector declined from 14.3% in December 2018 to 9.9% in June 2019. Mining and quarrying exposure decreased from 1.3% in December 2018 to 0.6% in June 2019.

<sup>\*</sup>Figures may not add to a hundred due to rounding

<sup>\*\*</sup> Real Estate/ Construction exposure is calculated as the share of the Construction, Commercial real estate financing and Residential Mortgages sectors of total lending.

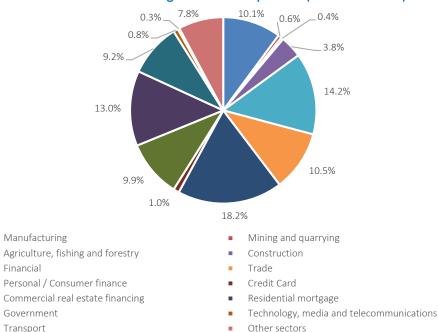


Chart 5-3: IR Banks' Lending Distribution by Sector (%Total Facilities)

Lending distribution by Islamic instrument witnessed some fluctuations over the past quarter in aggregate. At the end of June 2019, the top recipient of finance was Murabaha at 57.0% down from 60.3% in December 2018. This was followed by Ijarah, which increased from 24.1% to 25.9% for the same period.

Table 5-5: IR Banks' Lending Distribution by Islamic Instrument (%Total Facilities)

Instrument	Dec. 2018*	Jun. 2019*	Change
Murabaha	60.3	57.0	(3.3)
Istisna'a	0.7	0.9	0.2
Ijarah	24.1	25.9	1.8
Salam	0.5	0.5	0.0
Others	14.5	15.8	1.3

<sup>\*</sup>Figures may not add to a hundred due to rounding.

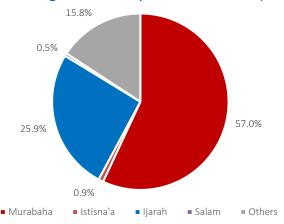
Financial

Government

Transport

Source: CBB.

Chart 5-4: IR Banks' Lending Distribution by Islamic Instrument (% of Total Facilities)



#### 5.2.3 Profitability

#### Stability in earnings

The return on assets (ROA) for Islamic retail banks remained at 0.3% in June 2019 compared to June 2018. Return on equity (ROE) increased from 2.5% to 3.9% for the same period. Furthermore, operating expenses decreased from 77.5% in June 2018 to 73.3% in June 2019.

Table 5-6: IR Banks' Profitability (%)

Indicator	Jun. 2018	Jun. 2019
ROA*	0.3	0.3
ROE**	2.5	3.9
Operating expenses (% total operating income)	77.5	73.3

Source: CBB.

#### 5.2.4 Liquidity

#### Increase in liquidity

The volume of liquid assets available to Islamic retail banks increased from 14.1% of total assets in December 2018 to 17.7% in June 2019. The ratio of total facilities to deposits increased from 94.8% in December 2018 to 95.9% in June 2019.

Table 5-7: IR Banks' Liquidity (%)

Indicator	Dec. 2018	Jun. 2019
Liquid Assets (% of total assets)	14.1	17.7
Facilities – deposits ratio (%)	94.8	95.9

<sup>\*</sup> ROA = ratio of net income to assets.

<sup>\*\*</sup>ROE = ratio of net income to tier 1 capital.

#### 5.3 Islamic Wholesale Banks

#### 5.3.1 Capital Adequacy

#### Stable capital positions

As at end-June 2019, the CAR for Islamic wholesale banks decreased marginally to 18.0% from 18.1% in December 2018. Tier1 capital also decreased from 17.0% to 16.9% over the same period. The ratio of NPFs net of provisions to capital decreased to reach 0.4% in June 2019.

Table 5-8: IW Banks' Capital Provisions Ratios

Indicator	Dec.2018	Jun. 2019
CAR (%)	18.1	18.0
Tier 1 CAR (%)	17.0	16.9
NPFs net of provisions to capital	1.0	0.4

Source: CBB.

#### 5.3.2 Asset Quality

#### Stability in non-performing facilities (NPFs)

As of end-June 2019, NPF ratio for Islamic wholesale banks decreased to 1.1% from 1.3% in December 2018. Provisioning for NPFs increased remarkably from 79.6% to 91.7% over the same period.

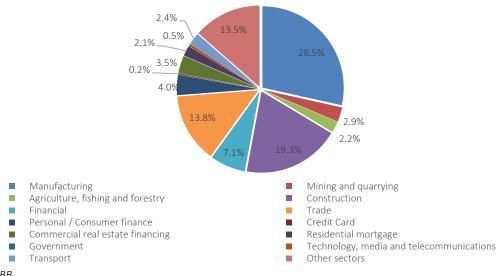
Table 5-9: IW Banks' NPF Ratios

Indicator	Dec. 2018	Jun. 2019
NPFs (% Gross Facilities)	1.3	1.1
Specific Provisioning (% of NPFs)	79.6	91.7

Source: CBB.

Looking at the data on the concentration of NPFs by sector indicates that that the majority of NPLs are concentrated and come from manufacturing (28.5%), construction (19.3%), and trade (13.8%) as indicated in chart 5-5.

Chart 5-5: IW Banks' NPFs Concentration by Sector (June 2019)



The sector with the highest impairment was the technology, media and telecommunications sector with 34.9% in June 2019, up from the 11.2% in December 2018. This was followed by the agriculture, fishing and forestry and the mining and quarrying sectors with 16.9% and 15.2% respectively.

Table 5-10: IW Banks' NPF Ratios by Sector (%)

Sector	Dec. 2018	Jun. 2019	Change
Manufacturing	7.7	8.5	0.8
Mining and quarrying	21.8	15.2	(6.6)
Agriculture, fishing and forestry	5.1	16.9	11.8
Construction	14.5	9.5	(5.0)
Financial	2.0	1.5	(0.5)
Trade	9.2	9.5	0.3
Personal / Consumer finance	1.8	2.1	0.3
Credit Card	2.6	3.6	1.0
Commercial real estate financing	6.9	9.0	2.1
Residential mortgage	2.3	2.6	0.3
Government	0.0	0.0	0.0
Technology, media and telecommunications	11.2	34.9	23.7
Transport	7.0	8.6	1.6
Other sectors	8.3	10.9	2.6

Source: CBB.

Available data on the sectoral breakdown of non-performing facilities shows that the biggest increase was in the technology, media and telecommunications sector with an increase of 23.7%. The biggest drop was in mining and quarrying with a decrease of 6.6% from 21.8% in December 2018 to 15.2% in June 2019.

Chart 5-6: IW Banks' NPF Ratios by Sector (%) 40 35 30 25 **%20** 15 10 Agriculture, fishing Trade Consumer finance Technology, media Mining and Construction Credit Card Commercial real Residential Manufacturing Financial Sovernment Transport Other sectors telecommunications estate financing quarrying mortgage Personal/ and forestry ■ Dec. 2018

Source: CBB.

#### Diversification in asset concentration (loan portfolio)

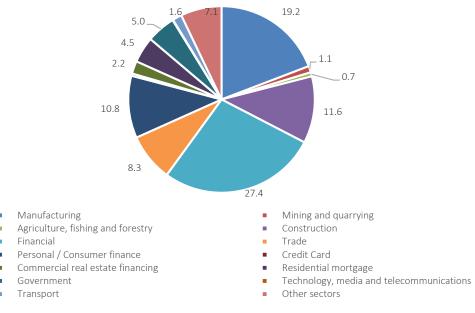
At end-June 2019, the financial sector was the top recipient of financing from Islamic wholesale banks, at 26.4%. The construction sector saw the largest decrease from 12.1% in December 2018 to 11.2% in June 2019. The financial sector saw the largest increase, rising by 2.6%.

Table 5-11: IW Banks' Lending Distribution by Sector (%Total Facilities)\*

Sector	Dec. 2018	Jun. 2019	Change
Manufacturing	20.0	19.2	(0.8)
Mining and quarrying	1.4	1.1	(0.3)
Agriculture, fishing and forestry	0.7	0.7	0.0
Construction	12.1	11.6	(0.5)
Financial	23.8	27.4	3.6
Trade	8.8	8.3	(0.5)
Personal / Consumer finance	11.5	10.8	(0.7)
Credit Card	0.4	0.4	0.0
Commercial real estate financing	2.3	2.2	(0.1)
Residential mortgage	5.3	4.5	(0.8)
Government	5.0	5.0	0.0
Technology, media and telecommunications	0.1	0.1	0.0
Transport	1.6	1.6	0.0
Other sectors	7.0	7.1	0.1
Top two recipient sectors	43.7	46.6	2.9
Real Estate/ Construction Exposure**	19.8	18.3	(1.5)

The top two recipient sectors in June 2019 (financial and manufacturing) jointly represented 46.6% of total financing, up from 43.7% in December 2018. Real estate/ construction exposure decreased from 19.8% in December 2018 to 18.3% in June 2019.

Chart 5-7: IW Banks' Lending Distribution by Sector (%Total Facilities)



Source: CBB.

Lending distribution by Islamic instrument shows that at the end of June 2019, the top recipient of finance was Murabaha at 63.9%, down from 66.8% in December 2018.

<sup>\*</sup>Figures may not add to a hundred due to rounding.

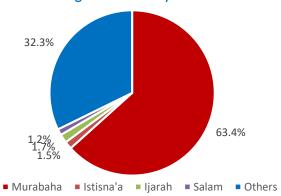
<sup>\*\*</sup> Real Estate/ Construction exposure is calculated as the share of the Construction, Commercial real estate financing and Residential Mortgages sectors of total lending.

Table 5-12: IW Banks' Lending Distribution by Islamic Instrument (%Total Facilities)

Instrument	Dec. 2018	Jun. 2019	Change
Murabaha	66.8	63.4	(3.4)
Istisna'a	1.2	1.5	0.3
ljarah	1.9	1.7	(0.2)
Salam	1.2	1.2	0.0
Others	28.9	32.3	3.4

<sup>\*</sup>Figures may not add to a hundred due to rounding.

Chart 5-8: IW Banks' Lending Distribution by Islamic Instrument (%Total Facilities)



Source: CBB.

#### 5.3.3 Profitability

#### Slight decline in earnings

Return on assets (ROA) slightly decreased from 0.6% in June 2018 to 0.4% in June 2019. Return on equity (ROE) also decreased from 3.9% to 2.9% in the same period. Furthermore, operating expenses (as % of total income) increased from 66.2% in June 2018 to 71.2% in June 2019.

Table 5-13: IW Banks' Profitability (%)

Indicator	Jun. 2018	Jun. 2019
ROA*	0.6	0.4
ROE**	3.9	2.9
Operating expenses (% total operating income)	66.2	71.2

Source: CBB.

#### 5.3.4 Liquidity

#### Increase in Liquidity

As of end-June 2019, liquid assets of Islamic wholesale banks represented 17.2% of total assets, 4.6% higher than the 12.6% registered in December 2018. Additionally, the facilities deposit ratio decreased from 75.2% to in 73.0% in June 2019.

Table 5-14: IW Banks' liquidity (%)

Indicator	Dec. 2018	Jun. 2019
Liquid assets (% of total)	12.6	17.2
Facilities-deposit ratio	75.2	73.0

<sup>\*</sup> ROA = ratio of net income to assets.

<sup>\*\*</sup>ROE = ratio of net income to tier 1 capital.

#### 5.4 Overall Assessment of the Islamic Banking Sector

The financial soundness indicators show that Islamic retail banks and wholesale banks capital positions decreased to 17.3% and 18.0% respectively during the period between December 2018 and June 2019. Non-performing facilities remained at 9.7% for Islamic retail. Facilities concentration has decreased in some sectors while increasing in others in retail Islamic banks and wholesale Islamic banks.

Earnings remained at the same level for Islamic retail banks but decreased for Islamic wholesale banks. Islamic retail banks and wholesale banks' liquidity positions showed an increase in liquid assets, and the facilities to deposit ratio for Islamic retail banks increased.

# Part III:

Developments in the Non-Bank Financial Sector



# Chapter

# **Insurance Sector**

Key Highlights Insurance Contribution Contribution Assets of Conv. Assets of Takaful to GDP to Financial Licenses Insurance Insurance **Premiums** BD 2,182.4 mn BD 184.0 mn BD 284.0 mn 142 5.4% 32.7%

- Conventional firms account for 72.0% of total insurance industry with BD 204.5 million in total gross premiums as of December 2018.
- General insurance contributes for 82.0% of total gross premiums.
- Local Conventional insurance firms' performance is concentrated on Motor business line, and Takaful is concentrated in Medical and Motor business lines.
- Overseas insurance firms' performance is concentrated on Long-term (Life) and Engineering business line.

### 6.1 Overview

This chapter highlights the overall performance of the insurance industry in Bahrain by looking at two main insurance segments: conventional and takaful, their different business lines, and classes.<sup>5</sup> The insurance industry has been growing steadily in recent years, mirroring the growth of Bahrain's financial sector, the increased access to financial services and products has led to demand for insurance services. A notable development in recent years has been international insurers developing their regional operations, many of whom have chosen Bahrain as their regional base.

Chapter 6 covers the period between end-December 2017 and end-December 2018, unless otherwise indicated.

A significant number of insurance companies and organizations have established their presence in Bahrain. As of June 2019, there are a total of 142 insurance organizations licensed and registered in the Kingdom. There are 36 insurance companies: 16 conventional local, 13 conventional overseas/foreign branches, and 7 takaful. From these companies, 2 companies are conventional re-insurance firms and 2 re-takaful firms. The remaining 106 other registered insurance licenses include:

- 34 Insurance Brokers,
- 4 Insurance Managers,
- 4 Insurance Consultants,
- 18 Insurance Firms, brokers and consultants restricted to business outside Bahrain,
- 31 Registered Actuaries,
- 13 Registered loss Adjusters, and
- 2 Insurance Pools and Syndicates.

<sup>&</sup>lt;sup>5</sup> Takaful companies are companies conducting takaful business in line with Islamic principles. Overseas insurance companies are branches of foreign companies.

As of June2018, the insurance sector represented 5.5% of the real GDP. The contribution of the Insurance sector to the overall financial sector has increased representing 32.7% as of Q2 2019. Chart 6-1 shows the contribution of the Insurance sector to GDP since 2015, along with the quarterly growth rates, and the contribution of the insurance sector to the financial sector.

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Chart 6-1: Insurance Sector Contribution and Quarterly Growth to GDP (%)

Source: IGA.

# 6.2 Performance of the Insurance Sector

The insurance sector in Bahrain is made up of two main segments: conventional and Takaful. The conventional sector is further divided into local and overseas/branch firms. As of December 2018, conventional insurance represented 72.0% of the total gross premiums accounting for BD 204.5 million. Local conventional and branches represented 55.3% and 16.7% of total gross premiums accounting for BD 157.2 million and BD 47.3 million respectively (Chart 6-2). Takaful firms accounted for BD 79.5 million which is 28.0% of gross premiums in the industry for the same period.

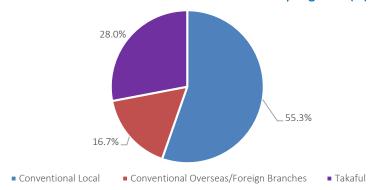


Chart 6-2: Gross Premiums of Insurance Sector by Segment (%)

Source: CBB.

The Insurance products and services in the Kingdom are delivered via two main insurance classes: Life and non-life insurance.<sup>6</sup> As of December 2018, life insurance represented 18.0% of gross premiums while non-life/general insurance represented 82.0% covering the various classes (Graph 6-3).

<sup>&</sup>lt;sup>6</sup> Non-life or general insurance includes: Fire, Property & Liability, Miscellaneous Financial Loss, Marine & Aviation, Motor, Engineering, Medical and Others.

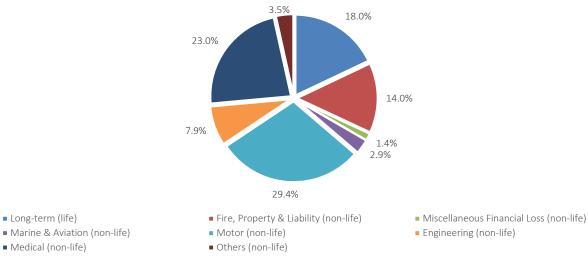


Chart 6-3: Market Share of Gross Premiums by Class (%)

For non-life insurance, motor and medical insurance had the largest share in terms of their contribution to gross premiums accounting for 29.4% and 23.0% respectively. Fire, property, and liability made 14.0% of gross premiums. The top 3 business lines sectors represented 70.4% of total gross premiums. The high concentration within these sectors can be explained by:

- Banks imposing an obligatory requirement on the customers to have a life insurance prior to getting specific loans.
- Third party motor insurance being a mandatory requirement.
- Many institutions providing their employees with health insurance.

# 6.3 Financial Position and Profitability of Insurance Sector

As of December 2018, Total Assets of the Insurance sector reached BD 2,366.4 million with an increase of 0.7% compared to 2,350.1 in December 2017. Total Liabilities had an increase of 0.3% over the same period reaching BD 1,771 million.

Table 6-1: Total Assets, Liabilities, Capital, and Profitability of Insurance Sector by Segment

BD'000 -	Total	Total Assets*		Total Liabilities*		ailable *	Net I	Profit*
	2017	2018	2017	2018	2017	2018	2017	2018
Conventional	2,168,747	2,182,442	1,643,678	1,656,215	304,250	287,643	26,855	4,461
Local	1,882,956	1,901,574	1,383,553	1,402,974	282,566	264,505	22,113	1,812
Overseas	285,791	280,868	260,125	253,241	21,684	23,138	4,742	2,649
Takaful	181,375	184,012	121,385	114,779	50,329	58,196	1,282	3,183
All Insurance	2,350,122	2,366,454	1,765,063	1,770,994	354,579	345,839	28,137	7,644

<sup>\*</sup>For takaful it only includes Shareholder figures.

Source: CBB.

Total capital on the other hand, decreased from 354.6 BD million in December 2017 to 345.8 BD million in December 2018. Profitability saw a decrease between December 2017 and December 2018 reaching BD 7.6 million.

### 6.3.1 Conventional Insurance Firms

- a. Assets: As of December 2018, total assets of the conventional insurance sector stood at BD 2,182.4 million decreasing by 0.6% compared to the BD 2,168.7 million registered in December 2017.
  - i. Total assets of local insurance Firms were BD 1,901.6 million (80.4% of total assets) with a growth rate of 1% since December 2017.
  - ii. Total assets of overseas foreign branches were BD 280.9 million (11.9% of total assets) recording a growth of -1.7%
- b. Liabilities: As of December 2018, the liabilities of the conventional insurance sector registered at BD 1,656 million with a 0.7% increase from the BD 1,643.8 million in December 2017.
  - i. The liabilities for local insurance firms registered at BD 1,403 million with an increase of 1.4%.
  - ii. The liabilities of overseas foreign branches were BD 253.2 million in December 2018 with a decrease of 2.6%.
- c. Available Capital<sup>7</sup>: Total capital as of December 2018 was at BD 287.6 million decreasing by 5.5% from the BD 304.3 million in the equivalent period of the year.
  - i. Total available capital for local insurance was BD 264.5 with a year to year decrease of 6.4%.
  - ii. Total available capital for overseas foreign branches insurance increased by 6.5%. The amount raised from BD 21.7 million in December 2017 to BD 23.1 million in December 2018.
- d. Profitability: Net income decreased for conventional insurance firms from BD 26.8 million in December 2017 to BD 4.5 million in December 2018.
  - i. Net income for local insurance was BD 1.8 million with a year to year decrease of 91.9%.
  - ii. Net income for overseas insurance was BD 2.6 with a year to year decrease of 44.7%.

# 6.3.2 Takaful Insurance Firms

- a. Assets: Total assets in Takaful firms in December 2018 experienced an annual growth of 1.4% reaching BD 184.0 million compared to BD 181.4 million in December 2017.
- b. Liabilities: The liabilities decreased by 5.4% from BD 121.4 million in December 2017 to BD 114.8 million in December 2018.
- c. Available Capital: Total regulatory capital experienced an annual increase of 15% from BD 50.3 million in December 2017 to BD 58.2 million in December 2018.
- d. Profitability: Takaful companies showed a 146.2% increase in profits between December 2017 and December 2018 reaching BD 3.2 million.

<sup>&</sup>lt;sup>7</sup> As per the CBB Rulebook, equity is a regulatory equity, which means encompasses Tier 1 Capital, Tier 2 Capital and deduction.

# 6.4 Insurance Premiums and Claims Analysis by Class

# 6.4.1 Overall Insurance

As of December 2018, the <u>Gross Premiums</u> for the overall insurance sector stood at BD 284.0 million, increasing by 5.7%. Looking at the performance by class, Engineering category experienced the greatest increase within the rest of the insurance business line, with an annual increase of 38.6%, followed by Marine and Aviation and Miscellaneous Financial Loss, both increasing by 29.3% and 20.0% respectively. On the other hand, Long-term and Medical insurance experienced an annual decline by 2.3% and 1.1% during the same period.

As of December 2018 <u>Net Premiums Written</u> increased compared to the previous period registering a value of BD 180.9 million, which is a 1.1% YoY increase from the BD 179.0 million in December 2017. The Medical class showed the biggest increase over the period increasing by 16.8%, from BD 36.6 million in December 2017 to BD 42.7 million in December 2018. On the other hand, the biggest decline was derived Engineering class, decreasing from BD 4.6 million in December 2017 to BD 0.3 million in December 2018.

However, <u>Gross Claims</u> for the overall insurance industry recorded a YoY decrease of 14.6% from BD 272.4 million in December 2017 to BD 232.6 million in December 2018. The decline was mainly due to a decrease in Fire, Property & Liability by BD 33.4 million (45.4%) from BD 73.6 million in December 2017 to BD 40.2 million in December 2018 followed by Motor decreasing by BD 9.5 million (12.6%) over the same period. Long term (life) had an increase of BD 6.2 million (20.0) over the same period).

<u>Net Claims</u> for the overall insurance industry show an increase of 3.9%, which was derived from an annual increase in Long-term (Life) by BD 5.2 million (18.8%). The greatest decline was experienced in Motor by BD 4.7 million (7.9%).

Table 6-2: Gross Premiums and Claims for all Insurance Firms by Class—Bahrain Operations

BD '000	Gross Pro	emiums	Net Premiums Written		Gross C	laims	Net Claims	
	2017	2018	2017	2018	2017	2018	2017	2018
Long-term (Life)	52,422	51,209	47,354	45,688	30,734	36,882	27,601	32,787
Fire, Property & Liability	33,929	39,902	8,474	6,704	73,581	40,200	3,245	4,231
Miscellaneous Financial Loss	3,348	4,018	537	675	2,842	-319	194	36
Marine & Aviation	6,424	8,304	1,394	1,494	1,370	1,667	783	638
Motor	80,909	82,576	77,352	79,183	75,261	65,786	58,883	54,214
Engineering	16,304	22,594	4,609	331	41,106	43,151	4,123	4,814
Medical	66,229	65,497	36,582	42,716	42,724	42,139	26,529	29,962
Others	9,083	9,924	2,717	4,140	4,755	3,137	1,304	779
Total	268,648	284,024	179,018	180,932	272,371	232,643	122,661	127,460

Source: CBB.

The concentrations of premuims and claims by class are viewed in Graph 6-4. For the overall insurance indusry, the exposure in Motor was the highest in Gross Premiums (29.1%), Net Premiums Written (43.8%), Gross Claims (28.3%), and Net Claims (42.5%).

100% 18.1 23.6 80% 60% 29.1 40% 20% 0% **Gross Premiums** Net Premiums Written **Gross Claims** Net Claims ■ Long-term (life) ■ Fire, Property & Liability (non-life) ■ Miscellaneous Financial Loss (non-life) ■ Marine & Aviation (non-life) ■ Motor (non-life) ■ Engineering (non-life) ■ Medical (non-life) ■ Others (non-life)

Chart 6-4: Concentrations of Gross Premiums and Claims for all Insurance Firms by Class – Bahrain Operations (2018)

# 6.4.2 Conventional Insurance

The <u>Gross Premiums</u> recorded for conventional insurance (Bahraini operations only) exhibited a decrease by BD 1.7 million (0.8%) based on a YoY comparison, where total gross premiums decreased from BD 206.2 million in December 2017 to BD 204.5 million in December 2018 (Table 6-2). The greatest increases where from Fire, Property & Liability by around BD 6.0 million (21.9%) and Engineering BD 5.6 million (37.2%). The greatest annual decline was contributed by Medical business line by BD 7.1 million (16.7%) and Motor BD 5.6 million (9.0%). In terms of concentration, Motor and Long-term (Life) business classes represented 27.5% and 22.1% respectively of the total gross premiums.

<u>Net Premiums Written</u> reflected an annual decrease by 7.1% compared to December 2017. Motor insurance remained the largest in terms of Net Premiums Written concentration as well, accounting for 42.3%, decreasing by 8.9% from BD 59.3 million in December 2018 to BD 54.0 million in December 2017.

<u>Gross Claims</u> decreased at an annual rate of 17.0% in December 2018 due to a substantial decrease in Motor by 46.2%, from BD 72.5 million in December 2017 declining to BD 39.0 million by December 2018. The highest share in gross claims was Motor 24.8%, followed Engineering at 22.1%

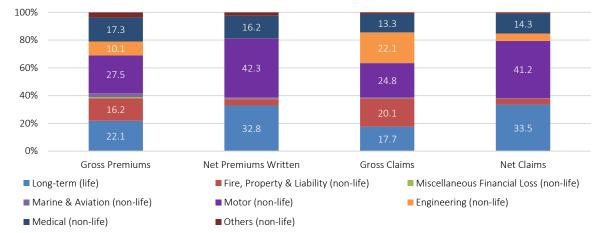
Net Claims on the other hand, experienced a modest annual increase of 0.3% from BD 94.8 million in December 2017, reaching BD 95.1 million in December 2018. Engineering and Fire, property, and Liability business line increased by 21.9% and 26.9% respectively. Nonetheless, the concentration falls heavily within the Motor insurance class, accounting for 41.2% of the total net claims.

Table 6-3: Gross Premiums and Claims for Conventional Insurance by Class – Bahrain Operations

BD '000	Gross Pre	Gross Premiums		Net Premiums Written		Claims	Net Claims	
	2017	2018	2017	2018	2017	2018	2017	2018
Long-term (Life)	46,073	45,163	43,096	41,869	28,905	34,288	26,676	31,888
Fire, Property & Liability	27,144	33,101	7,644	5,865	72,473	38,982	3,080	3,910
Miscellaneous Financial Loss	2,440	2,068	505	378	1,129	258	138	37
Marine & Aviation	5,698	5,615	1,244	1,339	1,055	1,531	744	585
Motor	61,704	56,147	59,343	54,041	57,972	48,021	45,663	39,224
Engineering	15,043	20,639	4,468	154	40,905	42,787	4,062	4,951
Medical	42,551	35,462	18,897	20,761	28,647	25,712	13,668	13,641
Others	5,593	6,317	2,421	3,432	2,536	2,337	768	888
Total	206,245	204,512	137,618	127,838	233,622	193,916	94,799	95,123

Motor insurance has the highest exposure in Gross Premiums (27.5%), Net Premiums Written (42.3%), Gross Claims (24.8%), and Net Claims (41.2%).

Chart 6-5: Concentrations of Gross Premiums and Claims for Conventional Insurance by Class - Bahrain Operations (2018)



Source: CBB.

Table 6-4 below and Charts 6-6 and 6-7 shows a further division of the premiums and claims by class between Local and Overseas firms within the conventional insurance industry for 2018. For local conventional insurance, Motor insurance has the highest concentration for Gross Premiums (33.1%) and Net Premiums Written (51.2%), Gross Claims (32.1%), and Net Claims (44.6%).

Only two foreign overseas branches operations focus more on life insurance and contribute towards the concentration in Gross Premiums (42.0%) and Net Premiums written (63.2%). As for Gross Claims, Engineering business line had the highest share (79.2%).

Table 6-4: Gross Premiums and Claims for Conventional Local and Overseas Insurance by Class – Bahrain Operations (2018)

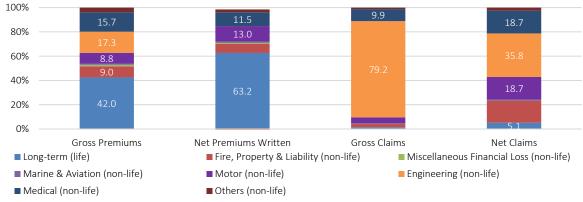
BD '000	(	Gross Premiums			Net Premiums Written			Gross Claims			Net Claims	
BD 000	Local	Overseas	Total	Local	Overseas	Total	Local	Overseas	Total	Local	Overseas	Total
Long-term (Life)	25,291	19,871	45,163	22,920	18,949	41,869	33,476	812	34,288	31,252	636	31,888
Fire, Property & Liability	28,829	4,272	33,101	3,633	2,232	5,865	37,611	1,371	38,982	1,641	2,268	3,910
Miscellaneous Financial Loss	1,425	643	2,068	104	274	378	153	104	258	25	11	37
Marine & Aviation	5,175	440	5,615	1,035	304	1,339	1,428	102	1,531	487	98	585
Motor	52,004	4,143	56,147	50,154	3,887	54,041	45,261	2,760	48,021	36,898	2,326	39,224
Engineering	12,458	8,181	20,639	605	(451)	154	809	41,979	42,787	486	4,465	4,951
Medical	28,018	7,444	35,462	17,326	3,435	20,761	20,437	5,275	25,712	11,311	2,330	13,641
Others	3,994	2,323	6,317	2,087	1,345	3,432	1,708	629	2,337	567	321	888
Total	157,193	47,319	204,512	97,863	29,975	127,838	140,884	53,032	193,916	82,666	12,456	95,123

Chart 6-6: Concentrations of Gross Premiums and Claims for Conventional Local Insurance by Class - Bahrain Operations (2018)



Source: CBB.

Chart 6-7: Concentrations of Gross Premiums and Claims for Conventiaonal Overseas Insurance by Class
- Bahrain Operations (2018)



Source: CBB.

# 6.4.3 Takaful

The <u>Gross Premiums</u> for Takaful companies increased on a YoY basis by 27.4%, from BD 62.4 million at December 2017 reaching BD 79.5 million in December 2018, where the highest increase was attributed to Motor increasing by BD 7.2 million (37.6%) followed by Medical increasing by BD 4.3 million (23.2%).

Medical Insurance line however recorded the highest contributor towards total Takaful gross premiums, accounting for 37.8% of the total.

Net Premiums Written increased by 28.2% from December 2017 to December 2018, reaching BD 53.1 million. Miscellaneous Financial Loss increased on an annual basis by 828.1%, whereas Family Takaful (Long-term) decreased by 10.3%. Motor is the largest in terms of net premiums written, representing around 47.4% of the total.

Gross Claims slightly decreased by 0.1% compared to December 2017, with Engineering registering the highest increase within the same period. Motor and Medical insurance accounted for the largest components in terms of gross claims, representing 45.9% and 42.4% of the total gross claims.

Net Claims recorded an annual increase of 16.1% at December 2018, with Medical and Motor having the highest increase of 26.9% and 13.4% respectively. Furthermore, Medical and Motor representing the largest components of net claims, accounting for 50.5% and 46.4% from the total respectively.

Table 6-5: Gross Premiums and Claims for Takaful Insurance Firms by Class – Bahrain Operations

BD '000	Gross Pre	Gross Premiums		Net Premiums Written		Claims	Net Claims	
	2017	2018	2017	2018	2017	2018	2017	2018
Long-term (Life)	7.2 mil	6,046	4,258	3,819	1,828	2,594	925	899
Fire, Property & Liability	6,785	6,801	830	840	1,108	1,219	165	321
Miscellaneous Financial Loss	908	1,950	32	297	1,713	(577)	55	(1)
Marine & Aviation	726	2,689	149	156	315	136	39	53
Motor	19,205	26,429	18,009	25,142	17,289	17,765	13,220	14,990
Engineering	1,261	1,956	140	177	201	364	61	(137)
Medical	23,678	30,035	17,684	21,955	14,076	16,427	12,861	16,321
Others	3,490	3,607	297	708	2,219	800	536	(109)
Total	62,403	79,512	41,400	53,093	38,749	38,728	27,862	32,337

Source: CBB.

Takaful insurance companies have very high concentration on the Medical and Motor Insurance business lines. Gross Premiums for both sectors combined represents (71.0%), Net Premiums Written (88.8%), Gross Claims (88.3%), and Net Claims (96.9%).

Chart 6-8: Concentrations of Gross Premiums and Claims for Takaful Insurance Firms by Class -Bahrain Operations (2018)



# 6.4.4 Retention Ratio and Loss Ratio (By Class)

Life insurance business line registered a retention ratio of 89.2 % in December 2018. Observing the non-life insurance, Motor and Medical, that accounted for 29.1%% and 23.1% of the total Gross Premiums in December 2018 respectively, registered retention ratios of 95.9% for Motor 65.2% for Medical respetively. Nevertheless, retention ratios were significantly lower for other business lines such as Miscellaneous Financial Loss and Marine & Aviation, registering 16.8% and 18% respectively.

**Retention Ratio 1** Loss Ratio 2 % 2017 2018 2017 2018 90.3 89.2 55.6 70.3 Long-term Fire, Property & Liability 58.0 25.0 16.8 38.8 Miscellaneous Financial Loss 16.0 16.8 32.6 4.7 41.2 Marine & Aviation 21.7 18.0 57.1 Motor 95.6 95.9 77.4 72.1 **Engineering** 28.3 1.5 121.2 127.6 Medical 55.2 65.2 76.1 74.2 **Others** 29.9 41.7 33.0 39.2

Table 6-6: Retention and Loss Ratios of Overall Insurance Sector

Source: CBB.

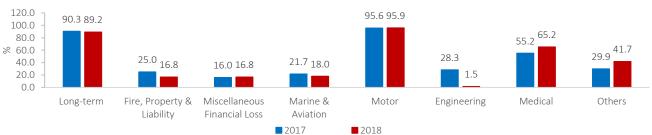


Chart 6-9: Retention Ratios of Insurance Sector

Source: CBB.

# 6.5 Regulatory Changes, Market trends and Risks.

# 6.5.1 Regulatory development initiatives

As part of the CBB's ongoing policy in enhancing transparency and raising awareness on the CBB's regulatory development initiatives. The CBB has communicated via its circular dated 3<sup>rd</sup> January 2019 to all Insurance Licensees the expected proposed rules under Volume 3 that the CBB would issue for consultation during 2019:

- 1- Introducing "Training & Competency" Module;
- 2- The minimum insurance cover for the unified "Motor Comprehensive Policy";
- 3- Solvency Control Levels;
- 4- Enhancing the requirements of Appointed Representatives;
- 5- Enhancing the requirements of "Client Money" Module;
- 6- Enhancing the requirements of "Insurance Manager" Module; and

<sup>1.</sup> Net Premiums Written / Gross Premiums

<sup>2.</sup> Net Claims Incurred/Net Premiums Earned

7- Introducing new regulatory framework for "Insurance Aggregator".

The CBB on 8<sup>th</sup> August 2019, has informed the market of the issuance of rules governing insurance aggregators (Insurance Aggregators Module - Module IA) as part of the CBB Rulebook Volume 3.

Furthermore, the CBB encourages Insurance Licensees to follow prudent practices in the conduct of their business and promptly communicate with it on relevant policy matters in the best interests of the financial stability and soundness of the sector.

# 6.5.2 Motor Insurance Subrogation Reconciliation

Receivables due from insurance companies arising out of motor subrogation process between insurance firms is vital to enhance the liquidity and regulatory capital of the firms when this process run efficiently.

Thus, the CBB has attempted to stimulate the process of receivables reconciliation among insurance firms and ensure all insurance receivables are valued fairly on the insurance firms' books and records.

Accordingly, through a series of efforts and through its circulars dated 6<sup>th</sup> June 2016, 27<sup>th</sup> December 2017, 1<sup>st</sup> April 2018 and 16<sup>th</sup> July 2018 along with its monitoring of the reconciliation progress, the CBB has noted considerable progress that was made by insurance companies to reconcile the outstanding balances. Furthermore, the CBB has requested insurance firms to fully set aside provisions by 30<sup>th</sup> June 2018 against any outstanding amounts that are not settled for the period of 2015 and prior for the financial statements ended 31<sup>st</sup> December 2015.

On 11<sup>th</sup> September 2019, the CBB has requested all insurance firms to reconcile motor subrogation claims with their counterparties from 1<sup>st</sup> January 2016 up to 31<sup>st</sup> December 2018 by 31<sup>st</sup> December 2019. In which insurance firms are required to fully set aside provisions against any outstanding amounts that are not settled for the period mentioned above in the financial statements for the year ending 31<sup>st</sup> December 2019.

# 6.5.3 Exposure to Controllers

On 25<sup>th</sup> March 2019, with a view to establishing stringent controls over licensees being used to finance their controllers, the CBB prohibited licensees from having any form of direct or indirect exposure to its controllers (including subsidiaries and associated companies of the controllers).

Licensees that already had an exposure as of the date of the circular were requested to submit a listing of all such exposures within one month from the date of the circular, together with an action plan for addressing such exposures within a timeline to be agreed with the relevant supervisory point of contact of the CBB (SPOC). The submission required the inclusion of the name of the counterparty, its relationship (business or legal) with the licensee, the amount of exposure, its maturity, if any, the purpose of the exposure and the particulars of collateral held if any together with the action plan.

# 6.5.4 Amendment to the Unified Compulsory Third Part Motor Insurance Policy

The CBB made an amendment to Resolution No. (23) of 2016 in respect to the Unified Compulsory Third Party Motor Insurance Policy and the procedures on dealing with claims arising from the compulsory third party motor policy. The amendment was mainly related to depreciation.

The aforementioned amendment was made through Resolution No. (50) of 2019 and its correction issued in the Official Gazette issue number 3434.

# 6.5.5 IFRS 17 "Insurance Contract"

The International Accounting Standard Board (IASB) has proposed the implementation of a new standard IFRS 17 "Insurance Contract" with an agreed mandatory effective date of 1<sup>st</sup> January 2022, under which Insurance Firms will be required to apply IFRS 17 for their annual accounting periods starting 1<sup>st</sup> January 2022.

The CBB on 15<sup>th</sup> October 2019, informed the market that it would like all insurance firms to fully appraise and prepare themselves on the changes of the requirements of IFRS 17 "Insurance Contract" and ensure that they are ready to adapt to the new requirements of the standard. The CBB is very keen to implement this standard efficiently with all Insurance firms operating in the Kingdom of Bahrain by 1<sup>st</sup> January 2022.

Therefore, the CBB requested all Insurance firms to follow the following phases:

# First Phase: Evaluation

All Insurance firms are required to conduct a thorough gap analysis in respect to the operational and financial impact(s) of implementation of IFRS 17. The report on gap analysis should be submitted to the CBB not later than 31<sup>st</sup> May 2020.

# Second Phase: Preparation and Design

All Insurance Firms are required to prepare a detailed action plan on how to implement the requirements of IFRS 17, taking into consideration the gap analysis prepared in the first phase, which should be approved by the Board of Directors and submitted to the CBB not later than 30<sup>th</sup> September 2020. This plan should include, but is not limited to, the internal rules and processes that will be designed to cope with the implementation of IFRS 17 in respect to its accounts, financial statements and other requirements.

# Final Phase: Implementation

Insurance firms should initiate the implementation of the new standard and prepare its accounts, financial statements and other requirements in parallel to the required accounts and financial statements with the evaluation of the impact of implementation on a semi-annual basis starting end of June 2021.

# Chapter 7

# **Non-Bank Financial Institutions**

Key Highlights# of Investment# of MoneyInvestment BusinessesMoney ChangersMoney ChangersBusinessesChangersAssetsPurchaseSale5019BD 337.0 mn8,333.5 bn9,328.1 bn

- ▶ Total assets of Investment Businesses increased by 7.3%
- ▶ Profits of Category 1 Investment Businesses increased by 21.5%.
- ▶ 60% of all currency transactions of money changers were in GCC currencies for Q2 2019.

# 7.1 Overview

This chapter highlights the overall performance of the non-banking financial industry in Bahrain by looking at two main segments: Investment businesses and money changers. The non-banking financial institutions in Bahrain are less complex relative to the size and complexity of the Bahraini banking system, but it plays an important role in meeting different needs for financial intermediation.

Chapter 7 covers the period between end-December 2018 and end-June 2019, unless otherwise indicated.

A significant number of investment businesses and money changers have established their presence in Bahrain. As of June 2019, there are a total of 50 investment business firms and 19 money changer organizations licensed and registered in the Kingdom.

Investment firms can be further broken-down into:

- 20 Category 1 firms,
- 14 Category 2 firms, and
- 16 Category 3 firms.<sup>8</sup>

### 7.2 Investment Businesses

In June 2019, total assets increased by 7.3% to BD 337.0 million from BD 313.9 million in December 2018. This increase is due to an increase in total liabilities by BD 21.8 million (29.1%) over the same

<sup>&</sup>lt;sup>8</sup> Category 1 firms may undertake any regulated investment service, as listed below: a) Dealing in financial instruments as principal; b) Dealing in financial instruments as agent; c) Arranging deals in financial instruments; d) Managing financial instruments; e) Safeguarding financial instruments (i.e. a custodian); f) Advising on financial instruments.

g) Operating a collective investment undertaking (i.e. an operator).

Category 2 firms may undertake the same regulated services except "a)".

Category 3 firms may only undertake "c)" and "f)".

period. Also, total equity slightly declined by 1.2% in June 2019. Total assets for investment businesses peaked in June 2015 reaching BD 628.8 million, but since the beginning of 2016 have stabilized around BD 330 million (Chart 7-1).

Table 7-1: IB Total Assets by Category

BD '000	Total A	Total Assets		abilities	Total Equity			
	Q4 2018	Q2 2019	Q4 2018	Q2 2019	Q4 2018	Q2 2019		
Category 1	266,276.6	289,296.7	63,678.0	82,907.4	202,598.6	202,491.9		
Category 2	40,081.3	40,299.8	9,027.1	11,472.8	31,054.3	28,523.4		
Category 3	7,582.5	7,399.6	2,094.1	2,204.2	5,508.6	5,195.4		
Total	313,940.4	336,996.1	74,799.2	96,584.5	239,161.4	236,210.6		

Source: CBB.

Chart 7-1: IB Total Assets by Time Period



Source: CBB.

# 7.2.1 Assets Under Management

Between December 2018 and June 2019, total assets under management increased by 7.9% from BD 7,424.9 million to BD 8,011.6 million. Assets under management of residents slightly declined by 0.3% from BD 5,900.2 million in December 2018 to 5,883.3 million in June 2019. Non-residents' asset under management recorded a substantial increase of BD 599.0 million (39.3%) over the same period.

Table 7-2: Assets under Management

BD '000	Q4 2018	Q2 2019	% Change
AUM - Residents	5,900,220.6	5,883,327.0	(0.3)
AUM – Non Residents	1,524,671.7	2,123,696.8	39.3
Total AUM	7,424,892.4	8,011,644.6	7.9

Source: CBB.

# 7.2.2 Profitability

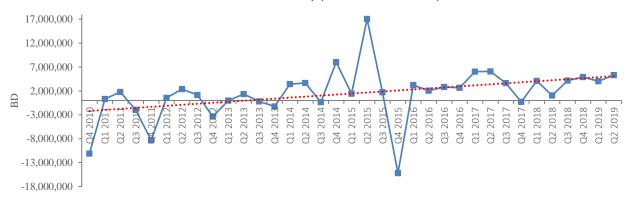
Profits of category 1 investment businesses increased by 21.5% from BD 2.89 million in December 2018 to 3.51 in June 2019. While category 2 profits decreased by 6.6% from BD 1.78 million in December 2018 to BD 1.66 million in June 2019. Also, category 3 profits declined by 36.4% over the same period.

Table 7-3: IB Profitability by Category

BD '000	Q4 2018	Q2 2019	% Change
Category 1	2,892.8	3,514.2	21.5
Category 2	1,780.9	1,664.0	(6.6)
Category 3	213.2	135.6	(36.4)
Total	4,886.8	5,313.8	8.7

Between December 2010 and December 2015, profitability of overall investment businesses was very volatile between profits and losses. Since December 2016, investment businesses' profitability has always been positive with more stability than previous years, with the exception of December 2017. Chart 7-2 displays that overall profitability of investment business has been on a positive trend since December 2010. The second quarter of 2019 has been the most profitable quarter for investment businesses over the last two years.

Chart 7-2: IB Profitability (Q4 2010 – Q2 2019)



Source: CBB.

# 7.3 Money changers

Between July 2018 and June 2019, money changers' purchase of foreign currencies amounted to 8,333.5 billion, while the sale of foreign currencies was recorded at 9,328.1 billion for the year. The month with the highest purchase and sale of currency was July, with sale of currencies surpassing one billion.

Table 7-3: Money Changers Total Turnover (Jul. 2018-Jun. 2019)

000's	Purchase	Sale
Jul. 2018	936,874.1	1,018,618.3
Aug. 2018	798,652.0	841,515.6
Sep. 2018	291,338.6	841,841.1
Oct. 2018	783,579.5	837,539.5
Nov. 2018	666,110.1	690,892.8
Dec 2018	282,543.2	300,227.6
Jan. 2019	871,665.8	904,887.7
Feb. 2019	643,830.8	669,113.4
Mar. 2019	791,714.6	823,580.6
Apr. 2019	730,856.8	767,475.6
May 2019	725,469.3	785,491.4
Jun. 2019	810,882.7	846,912.8
Total	8,333,517.5	9,328,096.4

Source: CBB.

The lowest month for purchase and sale of currencies for 2018 was December. Sale of currencies in December was 300 billion, less than half of any other month (Table 7-3).

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Chart 7-4: Time series of Money Changers Total Turnover

Source: CBB.

For the second quarter of 2019, money changers' purchase and sale of currencies stood at 2,267.2 billion and 2,399.9 billion, respectively. A breakdown of Money Changers turnover indicates that USD recorded the highest YoY increase in sales with 32.6%. The largest decline in sales was the "Asian" currency group with 14.2%. As for purchases, the top YoY increase is also "USD" with 34.6%. The largest decline for purchases was also the "Asian" currencies with 18.5%.

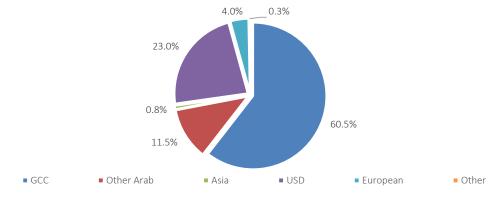
Table 7-4: MC Turnover by Currency Group

000's		Purchase			Sale			
	Q2 2018	Q4 2018	Q2 2019	Q2 2018	Q4 2018	Q2 2019		
GCC	1,502,400.1	1,194,295.8	1,414,755.0	1,482,140.6	1,206,181.2	1,409,263.8		
Other Arab	219,523.8	119,083.8	202,931.9	355,257.0	189,902.1	333,029.3		
Asia	20,850.5	11,035.9	16,990.5	21,895.2	12,125.0	18,776.3		
USD	397,409.2	304,693.5	535,022.1	404,690.1	307,834.0	536,557.1		
European	95,442.3	100,514.9	90,499.8	100,132.6	109,913.2	95,119.1		
Other	1,999.8	2,609.0	7,009.6	2,137.2	2,704.6	7,134.3		
Total	2,237,625.7	1,732,232.9	2,267,208.8	2,366,252.6	1,828,660.0	2,399,879.8		

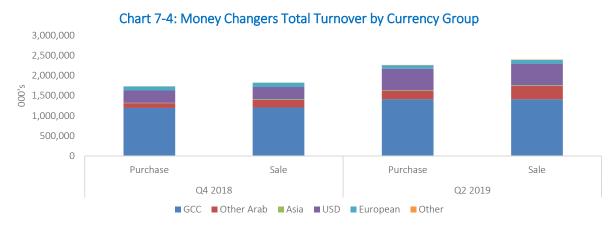
Source: CBB.

For the second quarter of 2019, 60% of all purchase and sale of currencies were in GCC currencies. The U.S. dollar is the second most exchanged currency with 23.0% of total purchase and sale of currencies.

Chart 7-3: Money Changers Currency Group Purchase & Sale, Q2 2019 (% of Total)



Source: CBB.



# 7.4 Challenges & Risks in Non-Banking Financial Institutions

The raise of artificial Intelligence and the digitization of information has encouraged Asset Managers and money changers to reconsider the conventional way of doing business. The usage of artificial intelligence in such sectors has given prominence to new forms of providing services through online platforms, examples of which is the Robo or digital advisory provided by the investment business firms and online remittance services provided by money changers.

The emergence of such services, offering cheaper services for more efficiency and less likelihood for errors and miscalculations, has increased competition and encouraged more companies to consider increasing their investments in technology. Funding technology and coping with the rapid changes in technology solutions is a challenge for companies working in both sectors.

Another side of the use of technology that needs to be considered is the increasing digitization of a wide range of sensitive client data that needs to be handled by companies. Such companies need to be more diligent in how information is handled, with the main threats being misappropriation of information and cybercrimes. The CBB's issuance of cyber security standards is a positive step that has set minimum standards for managing cyber security risk. However, the dynamic nature of cyber threats requires a high degree of proactive thinking by companies, making it important to either employ professionals with unique insights or outsource to service providers.

# 7.5 Developments in Regulation and Initiatives

On 28th March 2019, the CBB has issued the Digital Financial Advice Module as part of CBB Rulebook Volume 4 on Investment Business Licenses, and introduced amendments to the Risk Management Module in relation to cyber security risk.

Further, the CBB is considering the below regulatory development initiatives, and is expecting to issue the same for industry consultation during 2019:

- 1. Revision to large exposure rules and introduction of related party transaction limits.
- 2. Introduction if remuneration claw back rules under the High-Level Controls Module of CBB Rulebook Volume 4.
- 3. Enhancement to the rules pertaining to custodians in CBB Rulebook Volume 4.
- **4.** Enhancement of guidance notes for filling the Quarterly Prudential Report of Investment Business Licensees.

# Chapter 8

# **Capital Markets**



- ▶ Increase in the Bahrain All Share & decrease in Islamic Index.
- ▶ YoY increase of 14.7% in market capitalization with 53.3% of the capitalization in commercial banks.
- ► Commercial banks had the highest volume and value of shares traded and also number of transactions traded.
- ▶ Bahrainis represented 46% of the shares bought and 61% of shares sold for the first half of 2019.
- ▶ Increase in corporate profitability and decrease in leverage.

# 8.1 Overview

This chapter provides an overview of the capital markets sector in the Kingdom of Bahrain. Furthermore, this chapter will provide statistical insights as to the performance of the mainboard market operated by Bahrain Bourse as a Self-Regulatory Organization (SRO) as well as relevant data on the issuance of securities and activities pertaining to takeovers, mergers and acquisitions in Bahrain.

In 2002 Bahrain expanded and centralized the scope of the financial sector regulatory supervision to encompass capital markets under the CBB's Capital Markets Supervision Directorate (CMSD) supervisory umbrella. Henceforth, with the inception of the integrated regulator approach referred to as the "Single Regulatory Model", the CBB became responsible for Bahrain's capital markets with a combination of rule and principle based regulatory framework.

As at June 2019, Bahrain Bourse recorded a total listing of 44 Companies, 17 Mutual funds and 14 Bonds and Sukuk. Commercial banks sector represents the highest value in traded shares by scoring 69.8% of total value traded. The largest 5 companies in terms of market capitalization are AUB, NBB, BATELCO, ALBH and BBK which accounted for 61.4% of the total market.

# 8.2 Bahrain Bourse

# 8.2.1 All Share Index and Islamic Index Overview

# Increase in market index

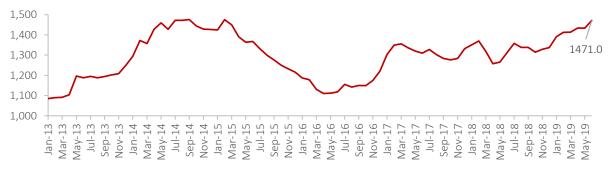
As of June 2019, Bahrain All Share Index grew by 133.7 points since December 2018 and witnessed a YoY growth of 12.2%, an increase of 160.0 points (Table 8-1). Observing this period, the index was at its lowest in January 2019 with 1,391.4 points and began to rise subsequently to reach 1,471.0 points in June 2019 which is the highest record since January 2019 and the highest record for the index since February 2015 (Chart 8-1). On a month-on-month basis, the index increased the most by 37.5 points (2.6%) form 1,433.5 in May 2019 to 1,471.0 in June 2019.

Table 8-1: Key Indicators of Bahrain Bourse

Indicator	2013	2014	2015	2016	2017	2018	Jun. 2019
All Share Index	1,248.9	1,426.6	1,215.9	1,220.5	1,331.7	1,337.3	1,471.0
Highest	1,248.9	1,476.0	1,474.8	1,220.5	1,356.0	1,369.9	1,471.0
Lowest	1,085.9	1,294.3	1,215.9	1,110.5	1,276.7	1,257.9	1,391.4
Market Cap (BD, million)	6,963.0	8,327.1	7,199.9	7,248.2	8,146.3	8,198.5	9,220.1
Total Value (BD, million)	225.9	269.1	110.0	124.5	211.3	323.8	173.6
Total Volume (million)	1,867.8	1,126.1	515.6	734.4	1,129.8	1,441.1	682.2
No. of Transactions	14,197	16,211	11,248	10,592	19,440	19,225	11,261
No. of Companies Listed	47	47	46	44	43	44	44

Source: Bahrain Bourse.

Chart 8-1: Bahrain All-Share Index, Jan. 2013 - Jun. 2019



Source: Bahrain Bourse.

As for the sector indices, the commercial Banks sector index recorded the highest YoY increase of 29.0%, reaching 3,380.4 points in June 2019 which is a new record high for the commercial banks sector index. This increase was caused by a jump in index points during January and February 2019. It is followed by services sector with an increase of 19.1% while industrial sector witnessed the greatest decline of 336.7 points (33.1%).

Table 8-2: Bahrain All Share Index by Sector

	2013	2014	2015	2016	2017	2018	Jun. 2019
Commercial Banks	2,456.4	2,721.2	2,461.8	2,481.8	2,772.6	2,769.8	3,380.4
Investment	650.7	842.1	613.8	686.2	680.2	669.9	706.8
Insurance	1,876.3	1,844.7	1,653.6	1,585.6	1,645.8	1,619.9	1,394.1
Services	1,206.8	1,386.0	1,361.7	1,248.9	1,078.6	1,216.3	1,364.5
Industrial	842.5	830.9	606.1	524.3	986.5	960.8	680.4
Hotels & Tourism	3.279.9	3.687.6	3.779.2	3.237.5	2.940.3	2.677.7	2.491.1

Source: Bahrain Bourse.

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Chart 8-2: Sector Indices, Jan. 2013 – Jun. 2019

Source: Bahrain Bourse.

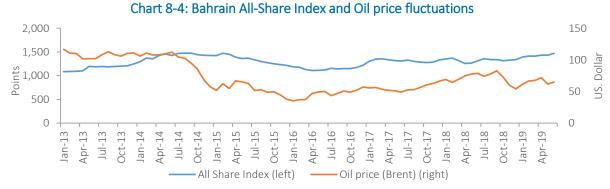
In September 2015, Bahrain Bourse launched the Bahrain Islamic Index. It was the first Islamic finance index in the region, and 13 Shariah compliant companies are included within the index as of June 2019, Since its inception, most movements in Bahrain Islamic Index have mirrored that of the Bahrain All-Share Index albeit with different volatilities. YoY data demonstrates that the Bahrain Islamic Index decreased by 200.1 points (20.9%) between June 2018 and June 2019 reaching 757.9 points (Chart 8-3).

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Chart 8-3: Bahrain Islamic Index, Sep. 2015 – Jun. 2019

Source: Bahrain Bourse.

With Bahrain being an oil exporting country, it is significant to analyse the relationship between oil prices and the stock prices. Bahrain All-Share Index and the oil prices had a moderate, positive correlation at 0.58 and is evident from the movements of the prices in the chart below.



Source: Bahrain Bourse and the World Bank.

# 8.2.2 Bahrain Bourse Trading Statistics

# Increase in market capitalization

As at end-June 2019, market capitalization of the Bahrain Bourse stood at BD 9.2 billion (Table 8-3). This level of market capitalization is 12.5% higher than the level attained in December 2018 and 14.7% higher YoY.

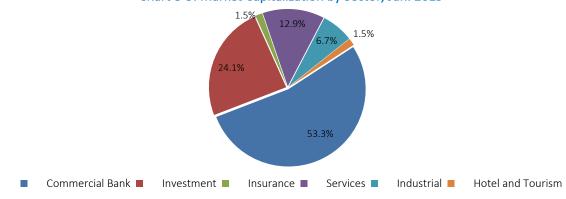
Table 8-3: Market Capitalization on the Bahrain Bourse

Sector (BD)	Jun. 2018	Dec. 2018	Jun. 2019	Dec. 2018 - Jun. 2019 (% Change)	Jun. 2018 - Jun. 2019 (% Change)
Commercial Banks	3,729,239,933	3,942,889,860	4,915,617,725	24.7	31.8
Investment	2,133,404,982	2,100,716,781	2,226,630,609	6.0	4.4
Insurance	167,672,100	156,708,100	134,862,450	(13.9)	(19.6)
Services	923,341,428	979,887,367	1,188,451,242	21.3	28.7
Industrial	919,378,298	868,556,113	615,051,138	(29.2)	(33.1)
<b>Hotel and Tourism</b>	164,461,880	149,772,214	139,503,757	(6.9)	(15.2)
Total	8,037,498,621	8,198,530,435	9,220,116,921	12.5	14.7

Source: Bahrain Bourse.

A breakdown of market capitalization by sector indicates that the commercial banks sector recorded the highest year-on-year increase in market capitalization (31.8%) followed by services (28.7%). The industrial sector scored the highest decline among other market capitalization sectors with a 33.1% decrease.

Chart 8-5: Market Capitalization by Sector, Jun. 2019



Source: Bahrain Bourse.

Ahli United Bank is the largest company in terms of Market Capitalization and contributes to 30.8% of the total market capitalization as of June 2019. National Bank of Bahrain has the second largest share of Market Capitalization of 11.1% and it is followed by Bahrain Telecommunication Company (BATELCO), Aluminium Bahrain (ALBH) and Bank of Bahrain and Kuwait (BBK) each with 6.5% of total market capitalization respectively.

Table 8-4: Largest 5 Companies by Market Capitalization as of June 2019

Company	Market Capitalization (BHD)	% from Total Market
Ahli United Bank (AUB)	2,838,234,394	30.8
National Bank of Bahrain (NBB)	1,018,573,105	11.1
Bahrain Telecommunication Company (BATELCO)	602,078,400	6.5
Aluminium Bahrain (ALBH)	599,240,000	6.5
Bank of Bahrain and Kuwait (BBK)	599,163,986	6.5
Total	5,657,289,885	61.4

Source: Bahrain Bourse.

BBK 6.50% ALBH 6.50% AUB 30.78% NBB 11.05%

Chart 8-6: Largest 5 companies by Market Capitalization as of June 2019

Source: Bahrain Bourse.

The bulk of the value of shares traded as of June 2019 was in the commercial banks sector whose traded shares (by value) represented 69.8% of total value, which is a significant increase to what was attained in June 2018 (Table 8-5).

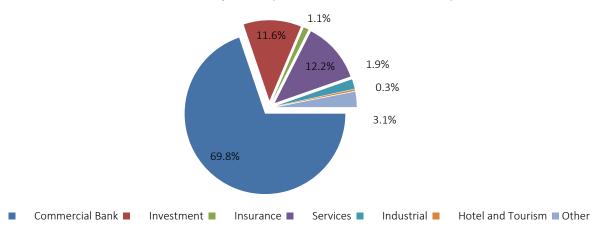
Table 8-5: Value of Shares Traded by Sector (% of Value of all shares traded)

Sector	Jan. 2018 - Jun. 2018	Jul. 2018 - Dec. 2018	Jan. 2019 - Jun. 2019
Commercial banks	52.0	52.1	69.8
Investment	22.2	36.0	11.6
Insurance	0.5	0.4	1.1
Services	12.7	6.6	12.2
Industrial	9.3	3.7	1.9
Hotel and Tourism	0.3	0.2	0.3

Source: Bahrain Bourse.

The services sector represents the second greatest level at 12.2% of the total value of shares traded in June 2019, which is a slight decrease to the levels recorded in the same period last year. Investors interest in hotel and tourism and insurance sectors were the least during June 2019 whose traded shares by value represented only 0.3% and 1.1% respectively of total traded shares.

Chart 8-7: Value of Shares Traded by Sector (% of Value of all shares traded) as of June 2019\*



<sup>\*</sup> Other sector includes Closed companies and IPOs. Source: Bahrain Bourse.

On an annual basis, the value of shares traded showed an improvement in all months except February and May. The greatest YoY growth was in June where the value of shares traded increased by BD 20.7 million (164.0%), while February recorded the greatest decline in value of shares traded (24.0%).

40,000,000 30,000,000 20,000,000 10,000,000 January February March April May June **■** 2018 **■** 2019

Chart 8-8: Value of Shares Traded YoY Comparison

Source: Bahrain Bourse.

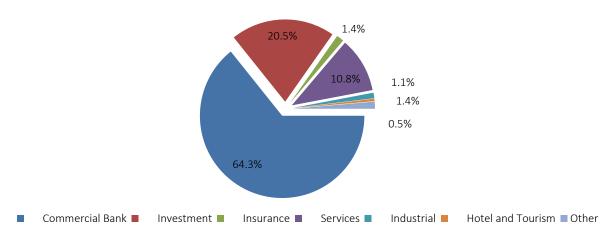
The bulk of the volume of shares traded in June 2019 was also in the commercial banks sector representing 64.3% of the total volume of shares traded, followed by the investment sector at 20.5%. The lowest level was attained by the hotel and tourism sector at 0.5% (Table 8-6).

Table 8-6: Volume of Shares Traded by Sector (% of Volume of all shares traded)

Sector	Jan. 2018 - Jun. 2018	Jul. 2018 - Dec. 2018	Jan. 2019 - Jun. 2019
Commercial banks	54.0	60.2	64.3
Investment	28.0	31.2	20.5
Insurance	0.5	0.8	1.4
Services	11.0	5.8	10.8
Industrial	2.8	1.5	1.1
Hotel and Tourism	0.1	0.1	0.5

Source: Bahrain Bourse.

Chart 8-9: Volume of Shares traded by Sector (% of Volume of all shares traded) as of June 2019\*



<sup>\*</sup> Other sector includes Closed companies and IPOs

Source: Bahrain Bourse.

The YoY comparison of the volume of shares traded indicated that June had the greatest increase in volume of 67.5% while the greatest decrease in volume on a yearly basis was in the month of February (44.6%).

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150,000,000
50,000,000

January February March April May June

Chart 8-10: Volume of Shares Traded YoY comparison

Source: Bahrain Bourse.

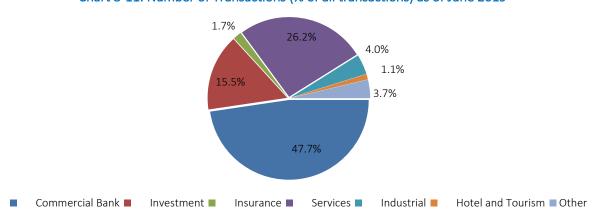
The majority of the number of transactions as of June 2019 (11,261 transactions) was attained by the commercial banks sector at 5,367 transactions (47.7% of all transactions), followed by the services sector at 2,950 transactions (26.2%), and the investment sector at 1,749 transactions (15.5%) (Table 8-7).

Table 8-7: Number of Transactions by Sector

		•	
Sector	Jan. 2018 - Jun. 2018	Jul. 2018 - Dec. 2018	Jan. 2019 - Jun. 2019
Commercial banks	3,488	5,115	5,367
Investment	2,241	2,009	1,749
Insurance	62	45	194
Services	2,758	1,897	2,950
Industrial	736	491	456
Hotel and Tourism	72	86	123
Closed	2	3	1
IPO	-	220	421
Total Market	9,359	9,866	11,261

Source: Bahrain Bourse.

Chart 8-11: Number of Transactions (% of all transactions) as of June 2019\*



\*Other sector includes Closed companies and IPOs.

Source: Bahrain Bourse.

The number of transactions increased on a YoY basis for all months except January. The highest number of transactions was in June, increasing by 631 transactions (57.2%), followed by April with an increase of 47.4%.

2,500
2,000
1,500
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500

January February March April May June

2018 2019

Source: Bahrain Bourse.

# Trading by Nationality

As of June 2019, Non-Bahraini nationals contributed to 54% of the value of shares bought while Bahraini nationals contributed to 46%. For sell transactions, Bahraini nationals comprised 61% of the total value of shares sold.

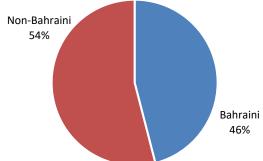
Table 8-8: Value of Transactions by Nationality (in BHD)

	Jan. 2018 -	Jun. 2018	Jul 2018-[	Dec. 2018	Jan2019-J	un. 2019
	Bahraini	Non-Bahraini	Bahraini	Non-Bahraini	Bahraini	Non-Bahraini
Buy	82,425,035	45,451,460	120,636,206	75,320,087	79,826,811	93,789,426
Sell	85,762,085	42,114,411	68,603,921	127,352,371	106,382,370	67,224,867

Source: Bahrain Bourse.

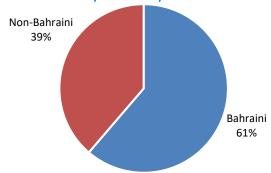
Chart 8-13: Share of Trading value of Buy transactions by nationality as of June 2019

Non-Bahraini



Source: Bahrain Bourse.

Chart 8-14: Share of Trading value of Sell transactions by nationality as of June 2019



Source: Bahrain Bourse.

# GCC Indices recover

The GCC equity markets recovered with majority of the GCC indices recording positive rates compared to June 2018, with only Muscat Securities Market Index experiencing a decrease in points. The highest increase was recorded by Kuwait All-Share Index when compared to June 2018, followed by Qatar Exchange Index with an increase of 15.9%.

Table 8-9: Stock Market Indices in GCC counties

Index	Jun. 2018	Dec.2018	Jun.2019	Dec. 2018 – Jun. 2019 (%)	Jun. 2018 – Jun. 2019 (%)
Bahrain All Share Index	1,311.0	1,337.3	1,471.0	10.0	12.2
Tadawul All Share Index	8,314.2	7,826.7	8,821.8	12.7	6.1
Kuwait All Share Index	5,438.7	5,652.3	6,732.8	19.1	23.8
Qatar Exchange Index	9,024.0	10,229.0	10,455.7	2.2	15.9
Dubai Financial Market General Index	2,821.0	2,529.8	2,658.6	5.1	(5.8)
Abu Dhabi Exchange General Index	4,560.0	4,915.1	4,980.0	1.3	9.2
Muscat Securities Market Index 30	4,571.8	4,323.7	3,884.9	(10.1)	(15.0)

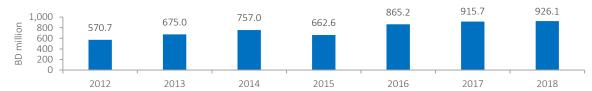
Sources: Bahrain Bourse, Saudi Stock Exchange (Tadawul), Boursa Kuwait, Qatar Stock Exchange, Dubai Financial Market, Abu Dhabi Securities Exchange and Muscat Securities Market.

# 8.3 Market Resilience

# Increase in corporate profitability

The overall profitability of the Bahraini stock market slightly increased by 1.1% to BD 926.1 million in 2018 from BD 915.7 million in 2017. Return on assets remained stable at 1.6% in 2018, while return on equity slightly decreased to 9.2% in 2018 compared to 9.5% in 2017.

Chart 8-15: Stock Market Net Income



Source: Bahrain Bourse.

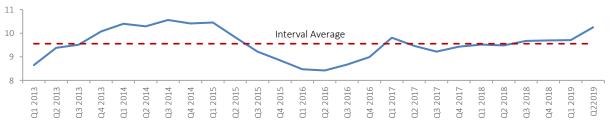
As at June 2019, half of the sectors experienced progress in their P-E ratio compared to June 2018. Commercial banks, Industrial, and Hotel and Tourism sectors increased by 19.0%, 7.0%, and 47.7% respectively while Investment, Insurance and Services sectors dropped by 3.5%, 45.6% and 6.0% respectively. The total market P/E ratio in June 2019 was at 10.3, a bit higher than the 6-year average (Chart 8-16) (Table 8-10).

Table 8-10: Price-Earnings Multiples

		•	
Sector	Jun. 2018	Dec. 2018	Jun. 2019
Commercial banks	9.4	10.0	11.2
Investment	8.5	8.3	8.2
Insurance	21.5	20.0	11.7
Services	11.7	12.4	11.0
Industrial	9.3	8.8	10.0
Hotel and Tourism	10.7	9.7	15.8
Total Market	9.5	9.7	10.3

Source: Bahrain Bourse.

Chart 8-16: Total Market Price-Earnings Multiples



Source: Bahrain Bourse.

# Corporate leverage decreased

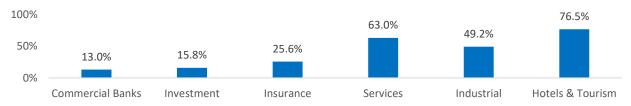
The overall equity-to-assets ratio increased to 17.6% in 2018. Most sectors contributed to the increase with the hotel and tourism sector having the highest increase. The commercial banks and investment sectors have the lowest equity/assets ratio due to the high leverage nature of the sectors (Chart 8-17 & 8-18).

Chart 8-17: Total Equity to Total Assets (%)



Source: Bahrain Bourse.

Chart 8-18: Total Equity/Total Assets by Sector



Source: Bahrain Bourse.

# 8.4 Capital Market Activities

During the first half of 2019, the Bahrain All Share Index closed the year higher by 10% at 1,433.52 with a market capitalization of BHD 9.2 billion (BHD 8.0 billion for the end of June 2018), while the Bahrain Islamic Index fell by 8%. The value traded on Bahrain Bourse listed companies was BHD 174 million over 11,261 transactions during the first six months of the year, which is higher by 36% compared to the same period in 2018.

The Commercial Banks Sector Index (the largest sector with 53% weight of the total market capitalization) was the highest gaining sector recording a gain of 22% for the first half of the year. The sector gain was mainly due to a rise of 25% on Ahli United Bank (AUB), which is the largest listed company by market capitalization (31% of the total market capitalization) and the highest traded stock on Bahrain Bourse (60% of the total value traded on BHB). Adding to the sector's gain was an 8% price rise of National Bank of Bahrain (NBB) shares, which is the second largest company listed by market capitalization. On the other side of the spectrum, the Industrial Sector witnessed the largest decline amongst the sectors by falling 29%, primarily due to a 30% drop Aluminium Bahrain (ALBH) shares (the fourth largest listed company in terms of market capitalization).

During the first half of the year, Esterad Investment Co. (ESTERAD) was the highest gainer for the year with a massive increase of 62% followed by Bahrain Telecommunications Co. (BATELCO) which rose by 29%. A total of 14 listed companies closed higher during the first half, and 19 companies' prices decreased, out of the laggards seven companies lost 24% or more of their value. Foreign investors activity in Bahrain Bourse increased as both the buying and selling values traded increased compared

with the same period in 2018. The bought value by foreigners compromised 54%, while the sold value made up 39% of the total market. The foreigners were net buyers by BHD 26.6 million, while locals were net sellers by the same amount.

# 8.4.1 Offering of Securities

As of the first half of 2019, the CBB issued its no objection to the issuance of 44 private offering documents after ensuring the completeness of all the information and details as per the CBB Law, Rules and Regulations. The total value of issuances reached USD 9.3 billion. (Chart 8-19 & 8-20).

40 29 30 15 20 10 0 0 0 0 0 0 **Public Debt** Governmental M & A **Public Equity** Rights Issue Private Structured Offers Offers Placement **Products** (Bonds & (Equity & Debt) Sukuks)

Chart 8-19: Number of Capital Market Activities

Source: CBB.



Chart 8-20: Total Issuance Value

Source: CBB.

# 8.4.2 Issuance of Shares in Bahrain Car Parks Company B.S.C ("Car Parks") in respect of a Whitewash Transaction with Bahrain Real Estate Investment Company (Edamah) B.S.C. (c)

Car Parks issued 40,000,000 new ordinary shares at a price of 150 fils per share in favor of Edamah on 20<sup>th</sup> June 2019 as consideration for a 99 years automatically renewable usufruct right in the Terminal car park building located in Adliya ("Transaction").

Upon completion of the Transaction, the usufruct right in the Terminal Building was registered to Car Parks with the Survey and Land Registration Bureau and Edamah gained a controlling interest of 36.26% in the issued and paid up capital of Car Parks.

# 8.5 Risks & Challenges in Capital Markets

The significance of cybersecurity risk on capital markets cannot be overlooked, given the developing landscape of the global markets, which decrees that regulators and capital market service providers

must remain prudent, progressive, and vigilant to minimize such risks. In this regard, the CBB; through the requirements stipulated under Module of CBB Rulebook Volume 6 requires Licensees to have in place a well-designed Disaster Recovery Plan. It must also maintain at all times a plan of action (referred to as a business continuity plan) that sets out the procedures and establishes the systems necessary to restore fair, orderly and transparent operations, in the event of any disruption to the operations of the market.

Moreover, the regulatory framework for capital markets recognizes the significance of cybersecurity in the area of operating an equity crowdfunding platform and requires such operators to ensure that cyber-security includes the conduct of an IT security penetration test semi-annually by an independent consultant (discussed in part III of the report). In addition, Capital Markets licensees are mandated to maintain relevant systems in place for mitigating and managing operational and other risks.

The FinTech solution are increasingly affecting the Capital Markets, these changes are being reflected on different areas including: the core infrastructure that connects investors/clients with the intermediaries through block chain technologies, post-trade and settlement digitization and innovative technology driven business models. These FinTech driven changes will lead to reduction in overall risks due to further transparency and reduction of systematic risk. In order to effectively reduce risks related to use of FinTech solutions, the CBB is working towards further entertaining the regulatory framework pertaining to data security, legal framework of data usage, creating robust compliance and regulatory reporting and increasing partnership between financial institutions, FinTech services providers and the regulator. Another key area of focus for the CBB is Regulatory Technology (RegTech) which could be used to regulate the FinTech in the Capital Markets.

Among the shared goals of the CBB and the Bahrain Bourse at the moment is to increase liquidity and the number of investors in the market. Such an increase would mean a greater amount of due diligence and responsibility for the CBB as it aims to ensure that all stakeholders involved are aware and adhering to the rules and regulations. Meanwhile, listed companies are also aiming to increase liquidity and trading in their own shares by cross listing in multiple exchanges. Consequently, such initiatives bring about their own set of regulatory risks that the CBB tackles.

As of 2019, 9 of the 44 listed companies on Bahrain Bourse were cross-listed outside of Bahrain, leading to challenges faced by the CBB in maintaining the cross-listed companies' compliance with the capital market regulations of Bahrain. The CBB is utilizing the IOSCO MMoU and the MoU between regulators of the financial markets in the Gulf Cooperation Council States in requesting assistance in relation to cross-listed companies. Concurrently, Bahrain Bourse is in the process of issuing its new listing rules and listing guidelines which will tackle aspects of the cross-listing rules.

Due to the limited number of capital market service providers, conflict of interest issues arises when certain capital market service providers offer multiple services to a single client. As such, the CBB requires the capital market service providers to act with a high level of due diligence, provide comprehensive disclosures and detailed declarations.

It is important that the Buy-and-Hold/Passive Investment investor mentality is tackled, through the provision of tools which gives the investors a clear view of market activity. Bahrain Bourse is in collaboration with market information companies, such as Bloomberg, Thompson Reuters etc., to distribute data packages which include facilities relating to real-time market coverage, historical and end-of-day data, etc.

# 8.6 Developments in Regulation and Initiatives

In addition to the participation in joint work meetings of the GCC that aim to harmonize the rules and regulations for the Capital markets in the GCC. During the year 2018, the CBB's CMSD endeavoured to develop and complete the capital markets regulatory and legal frameworks, including Volume 6 of the CBB Rulebook, its main objectives being to enhance transparency, develop the capital markets, and protect investors. The following section will shed light on the activities that took place in the areas of policy, regulation and market infrastructure in 2019:

# 8.6.1 Policy and Regulatory Developments

- Clearing, Settlement and Central Depository Rules: Bahrain Clear (BHC) Clearing, Settlement and Central Depository Rules are being finalised in cooperation with consultants and the CBB.
- Financial and Administrative Sanctions: The CMSD's regulatory mandate is to set and enforce high quality capital market industry standards, protect investors and strengthen market integrity while supporting a stimulating capital markets' ecosystem. The Investigation and Enforcement ("IE") team within the CMSD assumes responsibility to ensure effective enforcement of the CBB regulatory requirements with an objective to achieve fairness, transparency, investor protection and safeguard public interests in the Kingdom of Bahrain. In line with the CMSD's objective to develop a transparent regulatory environment, the CMSD produced the third issue of its Compliance & Enforcement Annual Report covering the year 2018; which provides a comparative overview of CMSD's efforts in 2016-2018 to identify and address non-compliances, negligence or misconduct, by accounting for all market participants in order to enact the word of the law, safeguard the interests of all stakeholders and ensure a stimulating environment within which the needs of members, investors and the regulator are met.
- AUP for Testing Compliance with AML Module: As part of the CBB's objective to establish industry leading practices, the CBB issued the Agreed Upon Procedures ("AUP") for testing compliance with the Anti-Money Laundering and Combating Financial Crime ("AML") Module of CBB Rulebook Volume 6 on 16<sup>th</sup> January 2019. The CBB is continuously working on updating the AUP to ensure the best international practices from the Financial Action Task Force regarding AML is applied.
- Crypto-Assets Module: In line with its initiative to continuously enhance its regulatory framework to be able to fit the financial sector's developments, the CBB issued the amended Crypto-Assets ("CRA") Module under Volume 6 of the CBB Rulebook on 19<sup>th</sup> April 2019. This regulatory framework covers rules for the licensing and supervision of crypto-asset exchanges and other crypto-asset services including trading, dealing, advisory and portfolio management in accepted crypto-assets as principal, agent or custodian.
- Short Selling and Giving Securities on Loan: Complementing the legislative and regulatory framework for the capital markets sector and in accordance with the requirements of the CBB Law in general and Article (92) in particular, the CBB issued Resolution No. (23) of 2019 for the Issuance of Regulations in respect of Short Selling and Giving Securities on Loan, published on 21<sup>st</sup> March 2019. The regulation aims to improve the efficiency of the capital markets in the Kingdom by promoting new investment and trading strategies through diversification of investment instruments which shall result in better price discovery, enhanced liquidity and attracting new sophisticated investors.

# 8.6.2 The Capital Markets Supervision Directorate's Upcoming Initiatives

- Press Release Pertaining to Financial Statements of listed companies: The CMSD has proposed new requirements for the publication of press releases that cover financial results of public listed shareholding companies. A template was drafted to standardize the content of press releases amongst listed companies, and ensure that companies report to their shareholders in an objective and unbiased perspective. The template requirements include material information that reflect the main outcomes of the financial statement. The proposed requirements were open for consultation, as the template was shared with the listed shareholding companies for their feedback. The remarks have been collected and replied to. The CMSD is currently finalizing the said requirements to cater for the industry's comments.
- Tick Size: Bahrain Bourse started implementing a new tick size classification starting on May 2019. The old tick classification was composed of several categories where each category had a corresponding tick size in the currency it was trading (BHD/USD). The new method has only one category for stock prices and the tick size for the BHD listed equity securities is BHD 0.001 or 1 Bahraini Fils, while for the USD listed equity securities the tick size is \$0.001 or 0.1 US Cent. This is on a trial period until the end of 2019, and Bahrain Bourse would analyse the effect of the new tick size on the market.
- Offering of Securities ("OFS") Module Updates and Amendments: The CMSD is currently drafting updates and amendments to the OFS Module of Volume 6 of the CBB Rulebook, to be in line with international best practice regarding the offering and issuing of securities in and from the Kingdom of Bahrain.
- Takeovers, Mergers and Acquisitions ("TMA") Module Updates and Amendments: In order to ensure adherence to international best practice, and to continue to ensure investor protection and to further enhance the regulatory framework for the capital markets sector in the Kingdom of Bahrain, the CMSD is in the process of issuing comprehensive amendments and updates to the TMA Module of Volume 6 of the CBB Rulebook.
- Treasury Shares Resolution: Further to Article (93) of the Central Bank of Bahrain and Financial Institutions Law, the CMSD is currently in the process of introducing a resolution to regulate the purchase and sale of listed companies' treasury shares and the permitted uses for these shares.
- Training and Competency Module: The CMSD in cooperation with the CBB's Regulatory Policy
  Unit is finalising a new Training and Competency ("TC") Module as part of the CBB Rulebook
  Volume 6. The Module aims at presenting requirements that have to be met by capital markets
  licensees with respect to training and competency of individuals undertaking controlled
  functions.

# 8.6.3 Investor Protection Initiatives

• Alerts posted on the CBB's Website: As part of the CBB's objective to maintain a transparent, fair and efficient capital market for ensuring investor protection, the CBB's CMSD has published three alerts on the CBB's website during the second quarter of 2019, warning consumers against dealing with unlicensed financial institutions and market intermediaries. These warnings are a result of complaints received by the CMSD from the public and the issuance of such aims to further enhance investor protection and safeguard public interests.

# Part IV:

Developments in the Payment Systems, FinTech, and Cyber Security



# Chapter 9

# FMI, Payment and Settlement Systems

	Key Highlights					
RTGS Daily avg. (Vol.) 176	RTGS Daily avg. (Val.) BD 338.4 mn	SSSS Aggregate (Vol.)	SSSS Aggregate (Val.) BD 2.62 bn	ATM Daily avg. (Vol.) 57,161	ATM Daily avg. (Val.) BD 5.3 mn	
BCTS Daily avg. (Vol.) 12,133	BCTS Daily avg. (Val.) BD 36.3 mn	Fawri+ Daily avg. (Vol.) 8,592	Fawri+ Daily avg. (Val.) 982,609	Fawri Daily avg. (Vol.) 27,471	Fawri Daily avg. (Val.) BD 50.3 mn	

- ► The Financial Market Infrastructures (FMIs), Payment and Settlement Systems in the Kingdom of Bahrain continue to function safely and efficiently.
- Oversight on FMIs, Payment and Settlement Systems is of the primal tools that ensures stability of the financial system and efficiency of payment transactions.
- ► FMIs and Payments have undergone crucial changes from the standpoint of products complexity and a range of payment products offered in recent years.

### 9.1 Overview

FMIs, Payment and Settlement Systems are central to the smooth operations of the financial sector and the efficient functioning of the overall economy. Therefore, the safety, efficiency, resiliency and reliability of FMIs, Payment and Settlement Systems is important for the evaluation of risks to financial stability. FMIs, Payment and Settlement Systems are a crucial part of the financial infrastructure of a country. Bahrain's FMIs, Payment and Settlement Systems Framework continues to function safely, securely and efficiently.

The current Financial Market Infrastructure in the Kingdom of Bahrain comprises of five main components: i) the Real Time Gross Settlement System (RTGS); ii) the Scripless Securities Settlement System (SSSS); iii) the ATM Clearing System (ATM); iv) the Bahrain Cheque Truncation System (BCTS) and v) the Electronic Fund Transfer System (EFTS) including the Electronic Bill Presentment and Payment (EBPP) System.

Since the launch of the EFTS in 2015 by the Benefit Company, which has been overseen by the CBB, there has been increasing numbers of EFTS service providers reaching a total of twenty-five (25) participants as of Sunday, 30<sup>th</sup> June, 2019. The CBB assess the EFTS in terms of compliance with the requirements set by the Principles for Financial Market Infrastructures (PFMI) and CBB's Directives.

Bahrain's position in the financial services sector will enable it to become a strategic leader in international financial technology as it provides many of the features that will support the development of a supportive environment for financial technology, including a CBB regulator, innovative human

capital, and an advanced ICT infrastructure. The CBB operates and manages the national payment and settlement systems in the Kingdom of Bahrain.

This chapter describes recent trends in the FMIs, Payment and Settlement Systems.

# 9.2 Real Time Gross Settlement System (RTGS)

The CBB operates a Real Time Gross Settlement (RTGS) System where all Inter-Bank payments are processed and settled in real time on-line mode which went live on the 14<sup>th</sup> of June, 2007. The RTGS System provides for Payment and Settlement of Customer transactions as a value addition.

The RTGS System enables the Banks to have real time information on, for example, account balances, used and available intra-day credit, queue status, transaction status etc. The RTGS System is multi-currency capable and based on Straight Through Processing (STP). The number of direct participants in the RTGS are twenty-eight (28) participants including the CBB (CBB).

The daily average volume of Bank transfers from 1<sup>st</sup> January, 2019 to 30<sup>th</sup> June, 2019 (first half of 2019) have decreased by 3.3% to 176 transfers compared to 182 transfers for the period from 1<sup>st</sup> July, 2018 to 31<sup>st</sup> December, 2018 (second half of 2018). Furthermore, the daily average volume of Bank transfers for 1<sup>st</sup> January, 2019 to 30<sup>th</sup> June, 2019 have remained the same being 176 transfers when compared to 1<sup>st</sup> January, 2018 to 30<sup>th</sup> June, 2018 (first half of 2018).

As the daily average volume of Bank transfers through the RTGS have decreased. However, the value of those transfers have increased in the first half of 2019 by 12.0% when compared to the second half of 2018 from BD302.1 million to BD338.4 million. Moreover, the daily average value of Bank transfers for the first half of 2019 has also increased by 6.3% from BD318.4 million to BD338.4 million when compared to the first half of 2018.

Table 9-1: RTGS Bank Transfers Daily Average Volume and Value

RTGS	Daily Average Volume	Daily Average Value (BD million)
1st Jan. 2016 - 30th Jun. 2016	288	226.2
1st Jul. 2016 - 31st Dec. 2016	227	259.3
1st Jan. 2017 - 30th Jun. 2017	190	268.9
1st Jul. 2017 - 31st Dec. 2018	174	318.7
1 <sup>st</sup> Jan. 2018 - 30 <sup>th</sup> Jun. 2018	176	318.4
1st Jul. 2018 - 31st Dec. 2018	182	302.1
1st Jan. 2019 - 30th Jun. 2019	176	338.4

Source: CBB.

# 9.3 Scripless Securities Settlement System (SSSS)

The CBB operates and oversees Scripless Securities Settlement System (SSSS) that provides the Depository and Settlement Services for holdings and transactions in Government Securities including Treasury Bills (T-Bills), Governments Bonds and Islamic Securities (Sukuk). Moreover, the SSSS went live on the 14<sup>th</sup> of June, 2007 along with the RTGS System.

The number of direct participants are twenty-eight (28) participants and indirect participants are thirty-one (31) members in the SSSS.

The volume of issues for 1<sup>st</sup> January, 2019 to 30<sup>th</sup> June, 2019 decreased compared to 1<sup>st</sup> July, 2018 to 31<sup>st</sup> December, 2018 by 4.3% from 46 issues to 44 issues. Moreover, the volume of issues has decreased in the first half of 2019 by 2.2% compared to the first half of 2018 from 45 issues to 44 issues.

The aggregate value of issues for the first half of 2019 decreased by 6.8% from BD2.81 billion in second half of 2018 to BD2.62billion. Additionally, the aggregate value of issues for the first half of 2019 decreased when compared to the first half of 2018 by 12.4% from BD2.99 billion to BD2.62 billion.

Table 9-2: SSSS Aggregate Volume and Value<sup>9</sup>

SSSS	Aggregate Volume	Aggregate Value (BD billion)
1 <sup>st</sup> Jan. 2016 - 30 <sup>th</sup> Jun. 2016	41	2.65
1st Jul. 2016 - 31st Dec. 2016	43	3.06
1 <sup>st</sup> Jan. 2017 - 30 <sup>th</sup> Jun. 2017	38	2.44
1 <sup>st</sup> Jul. 2017 - 31 <sup>st</sup> Dec. 2018	51	4.43
1 <sup>st</sup> Jan. 2018 - 30 <sup>th</sup> Jun. 2018	45	2.99
1st Jul. 2018 - 31st Dec. 2018	46	2.81
1 <sup>st</sup> Jan. 2019 - 30 <sup>th</sup> Jun. 2019	44	2.62

Source: CBB.

The volume of issues did not pose problems to the System's processing capacity and the risk of significant participant's failure is minimised due to executing and settling in Real Time Gross Settlement System (RTGS).

The SSSS continued to operate smoothly and efficiently for the period from  $1^{st}$  January, 2019 to  $30^{th}$  June, 2019.

# 9.4 ATM Clearing System (ATM)

ATM clearing is based on a Deferred Net Settlement (DNS) system. The Benefit Company (BENEFIT) in Bahrain receives and processes all the ATM transactions. The GCC net, a leased line network across the GCC countries, provides for the communication backbone for the transmission of all the ATM transactions and settlement related electronic messages (source: BENEFIT website).

The daily average volume of ATM transactions for the 1<sup>st</sup> January, 2019 to 30<sup>th</sup> June, 2019, increased by 7.0% to 57,161 transactions per day compared to 53,416 transactions per day for 1<sup>st</sup> July, 2018 to 31<sup>th</sup> December 2018. In addition, the daily average volume of ATM transaction increased by 10.0% when comparing the two periods 1<sup>st</sup> January, 2019 to 30<sup>th</sup> June, 2019 with 1<sup>st</sup> January, 2018 to 30<sup>th</sup> June, 2018.

The daily average value of ATM transactions for the first half of 2019 increased by 6.1% from BD5.0 million in the second half of 2018 to 5.3 million. Furthermore, the daily average value of ATM transactions for the first half of 2019 also increased by 6.3% compared to the first half of 2018.

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<sup>&</sup>lt;sup>9</sup> Revised Figures as per the latest Report received from the Banking Services Directorate (BKS).

Table 9-3: ATM Transactions Daily Average and Volume

ATM Transitions	Daily Average Volume	Daily Average Value (BD million)
1st Jan. 2016 - 30th Jun. 2016	34,143	3.4
1st Jul. 2016 - 31st Dec. 2016	39,242	3.8
1st Jan. 2017 - 30th Jun. 2017	44,951	4.4
1 <sup>st</sup> Jul. 2017 - 31 <sup>st</sup> Dec. 2018	46,549	4.4
1st Jan. 2018 - 30th Jun. 2018	51,948	5.0
1 <sup>st</sup> Jul. 2018 - 31 <sup>st</sup> Dec. 2018	53,416	5.0
1st Jan. 2019 - 30th Jun. 2019	57,161	5.3

Source: BENEFIT.

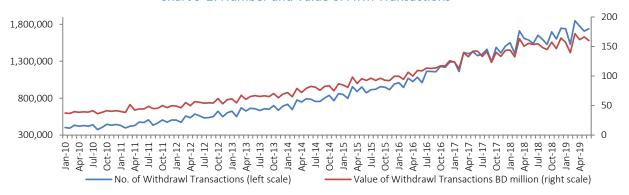
Overall, there is an upward trend in both the value and the volume of ATM transactions (Chart 9-2). For the first half of 2019, the highest value of withdrawals was witnessed in March 2019 at BD 171.8 million and the lowest value of withdrawals was in February 2019 at BD 139.4 million. The highest volume of transactions over the first six months of 2019 was in March with 1,848,834 transactions and February 2019 had the lowest volume of transactions over the same period with 1,530,691.

Chart 9-1: Number and Value of ATM Transactions, July 2018- June 2019



Source: BENEFIT.

Chart 9-2: Number and Value of ATM Transactions



Source: BENEFIT.

#### 9.5 Bahrain Cheque Truncation System (BCTS)

Cheques are seen as one of the most popular instruments in use among Retail Customers and Corporate Customers. As part of the CBB vision to replace the paper based Automated Cheque Clearing System operated by the CBB, the Bahrain Cheque Truncation System (BCTS) commenced its operations in cooperation with the BENEFIT Company (BENEFIT) on the 13<sup>th</sup> May, 2012. The launch of the BCTS was a milestone to the Bahraini financial sector which raised efficiency and Customer satisfaction. Under the BCTS, cheques presented for payment will be scanned at the Bank where the Customer deposits his/her

cheque(s) and the electronic images and payment information, instead of the physical cheque, will be transmitted to the BCTS Clearing House.

The main feature of the BCTS is the increasing efficiency and speed of the cheque clearing as it facilitates Bank Customers to have their cheques cleared and obtain their funds on the same day or maximum by the next working day in addition to providing Customers with a more secure and convenient service. The BCTS is operated by BENEFIT and overseen by CBB (CBB).

The number of participants in the BCTS are twenty-seven (27) participants. The daily average volume of cheques for the first half of 2019 decreased by 4.6% when compared to the second half of 2018 from 12,712 cheques to 12,133 cheques. In addition, the daily average volume of cheques decreased by 5.4% from 12,827 cheques for the first half of 2018 to 12,133 cheques.

Furthermore, the daily average value of cheques decreased in the first half of 2019 by 2.9% when compared to the first half of 2018 from BD37.4 million to BD36.3 million. Moreover, the daily average value of cheques for the first half of 2019 decreased by 6.9% from BD39.0 million for the first half of 2018 to BD36.3 million.

Table 9-4: BCTS Daily Average Volume and Value

BCTS	Daily Average Volume	Daily Average Value (BD million)
1 <sup>st</sup> Jan. 2016 - 30 <sup>th</sup> Jun. 2016	13,320	41.6
1 <sup>st</sup> Jul. 2016 - 31 <sup>st</sup> Dec. 2016	13,432	40.0
1 <sup>st</sup> Jan. 2017 - 30 <sup>th</sup> Jun. 2017	13,326	41.1
1 <sup>st</sup> Jul. 2017 - 31 <sup>st</sup> Dec. 2018	13,294	40.0
1 <sup>st</sup> Jan. 2018 - 30 <sup>th</sup> Jun. 2018	12,827	39.0
1 <sup>st</sup> Jul. 2018 - 31 <sup>st</sup> Dec. 2018	12,712	37.4
1 <sup>st</sup> Jan. 2019 - 30 <sup>th</sup> Jun. 2019	12,133	36.3

Source: BENEFIT.

The BCTS continued to operate smoothly and efficiently for the period from 1<sup>st</sup> January, 2019 to 30<sup>th</sup> June, 2019. Charts 9-3 and 9-4 show the volume and value of returned cheques as a percentage of the total volume and value. Between Q1 2017 and Q2 2019, returned cheques ranged between 3.0% to 3.4% as a percentage of total volume and 2.7% to 5.6% as a percentage of total value.

Chart 9-3: Volume of Cheques and % of Returned Cheques



Source: BENEFIT.

Chart 9-4: Value of Cheques and % of Returned Cheques (BD million)



Source: BENEFIT.

## 9.6 Electronic Fund Transfer System (EFTS) including Electronic Bill Presentment and Payment (EBPP) System

With the introduction of International Bank Account Number (IBAN) in January, 2012, transfers were easier and less time consuming for both Customers and Banks nevertheless, secured and more convenient. It was perceived that further uses of the IBAN can be utilised. Therefore, the Electronic Fund Transfer System (EFTS) was launched on the 5<sup>th</sup> of November, 2015, whereas Electronic Bill Presentment and Payment (EBPP) System was launched on the 3<sup>rd</sup> of October, 2016, operated by the Benefit Company (BENEFIT) and overseen by the CBB. The EFTS including EBPP is an electronic system that interconnects all Retail Banks in Bahrain with each other and major billers in the Kingdom of Bahrain in order to enhance the efficiency of fund transfers and bill payments promoting a more proactive and forward-thinking Banking sector.

The Kingdom of Bahrain took a step forward in line with the global trend of going cashless by introducing the EFTS that enabled electronic fund transfers within Bahrain with three options: Fawri+ Fawri, and Fawateer. Fawri+, Fawri and Fawateer provide fund transfers and real-time bill payments offering the public easier access, faster processes and virtually no mistakes. The number of participants offering outward EFTS Services has reached twenty-five (25) participants.

Chart 9-5 shows an overall increasing trend in the monthly transfers in Fawri, Fawri, plus and Fawateer. The total amounts of Fawri transfers for the first half of 2019, reached BD 6,235.2 million compared to BD 5,389.8 million for the first half of 2019. The value of Fawri+ transfers also increased from BD 71.6 million for the first half of 2018 to BD 177.9 million for the first half of 2019. In addition, the value of Fawateer payments increased from BD 60.9 million for the first half of 2018 to BD 109.9 million for the first half in2019. The surge in Fawri+ transfers in 2018 and 2019 is due to the increasing popularity and convenience in going cashless along with the compatibility with digital wallets.

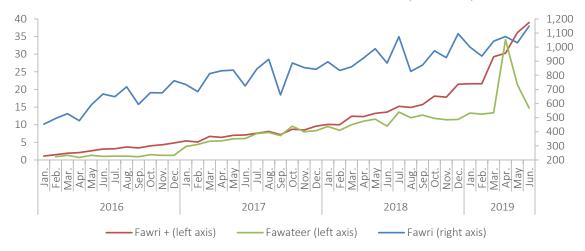


Chart 9-5: EFTS Fawri, Fawri+, and Fawateer Value (BD million)

Source: BENEFIT.

The daily average volume of Fawri+ transfers for the first half of 2019 increased significantly by 155.4% when compared to the second half of 2018 from 3,364 transfers to 8,592 transfers. Furthermore, the daily average volume of Fawri+ transfers for 1<sup>st</sup> January, 2019 to 30<sup>th</sup> June, 2019 further increased by 352.2% from 1,900 transfers to 8,592 transfers when compared to 1<sup>st</sup> January, 2018 to 30<sup>th</sup> June, 2018 (first half of 2018).

In addition, the daily average value of Fawri+ transfers increased by 75.0% from BD561,336 to BD982,609 for this period when compared to 1<sup>st</sup> July, 2018 to 31<sup>st</sup> December, 2018. Moreover, the daily average value of Fawri+ transfers for 1<sup>st</sup> January, 2019 to 30<sup>th</sup> June, 2019 increased by 148.9% from BD394,737 to BD982,609 when compared to 1<sup>st</sup> January, 2018 to 30<sup>th</sup> June, 2018.

Table 9-5: EFTS Fawri+ Daily Average Volume and Value<sup>10</sup>

EFTS: Fawri+	Daily Average Volume	Daily Average Value (BD)
1st Jan. 2016 - 30th Jun. 2016	229	67,064
1st Jul. 2016 - 31st Dec. 2016	488	127,777
1 <sup>st</sup> Jan. 2017 - 30 <sup>th</sup> Jun. 2017	840	208,990
1 <sup>st</sup> Jul. 2018 - 31 <sup>st</sup> Dec. 2018	1,194	270,492
1st Jan. 2018 - 30th Jun. 2018	1,900	394,737
1 <sup>st</sup> Jul. 2018 - 31 <sup>st</sup> Dec. 2018	3,364	561,336
1st Jan. 2019 - 30th Jun. 2019	8,592	982,609

Source: BENEFIT.

The daily average volume of Fawri transfers for the first half of 2019 increased by 10.9% when compared to the second half of 2018 from 24,776 transfers to 27,471 transfers. Moreover, the daily average volume of Fawri transfers for 1<sup>st</sup> January, 2019 to 30<sup>th</sup> June, 2019 increased by 23.3% from 22,273 transfers to 27,471 transfers when compared to 1<sup>st</sup> January, 2018 to 30<sup>th</sup> June, 2018.

Table 9-6: EFTS Fawri Daily Average Volume and Value 11

EFTS: Fawri	Daily Average Volume	Daily Average Value (BD million)
1 <sup>st</sup> Jan. 2016 - 30 <sup>th</sup> Jun. 2016	8,584	25.1
1 <sup>st</sup> Jul. 2016 - 31 <sup>st</sup> Dec. 2016	12,528	34.3
1 <sup>st</sup> Jan. 2017 - 30 <sup>th</sup> Jun. 2017	19,271	37.0
1 <sup>st</sup> Jul. 2018 - 31 <sup>st</sup> Dec. 2018	20,912	40.7
1 <sup>st</sup> Jan. 2018 - 30 <sup>th</sup> Jun. 2018	22,273	43.1
1 <sup>st</sup> Jul. 2018 - 31 <sup>st</sup> Dec. 2018	24,776	46.9
1 <sup>st</sup> Jan. 2019 - 30 <sup>th</sup> Jun. 2019	27,471	50.3

Source: BENEFIT.

In addition, the daily average value of Fawri transfers increased by 7.2% from BD46.9 million to BD50.3 million when compared to 1<sup>st</sup> July, 2018 to 31<sup>st</sup> December, 2018. Furthermore, the daily average value of Fawri transfers for 1<sup>st</sup> January, 2019 to 30<sup>th</sup> June, 2019 increased by 16.7% from BD43.1 million to BD50.3 million when compared to 1<sup>st</sup> January, 2018 to 30<sup>th</sup> June, 2018 (first half of 2018).

Table 9-7: EBPP Fawateer Daily Average Volume and Value<sup>12</sup>

EBPP: Fawateer	Daily Average Volume	Daily Average Value (BD)
1 <sup>st</sup> Jul. 2016 - 31 <sup>st</sup> Dec. 2016	358	38,827
1 <sup>st</sup> Jan. 2017 - 30 <sup>th</sup> Jun. 2017	3,056	171,006
1 <sup>st</sup> Jul. 2018 - 31 <sup>st</sup> Dec. 2018	3,756	261,160
1st Jan. 2018 - 30th Jun. 2018	4,410	332,296
1 <sup>st</sup> Jul. 2018 - 31 <sup>st</sup> Dec. 2018	4,712	396,627
1 <sup>st</sup> Jan. 2019 - 30 <sup>th</sup> Jun. 2019	5,208	607,336

Source: BENEFIT.

<sup>&</sup>lt;sup>10</sup> Revised Figures (based on Settled Transactions only) as per the latest Report received from BENEFIT.

<sup>11</sup> Revised Figures (based on Settled Transactions only) as per the latest Report received from BENEFIT.

 $<sup>^{12}</sup>$  Revised Figures (based on Settled Transactions only) as per the latest Report received from BENEFIT.

The daily average volume of Fawateer transfers for the first half of 2019 increased by 10.5% when compared to the second half of 2018 from 4,712 transfers to 5,208 transfers. Moreover, the daily average volume of Fawateer transfers for 1<sup>st</sup> January, 2019 to 30<sup>th</sup> June, 2019 increased by 18.1% from 4,410 transfers to 5,208 transfers when compared to 1<sup>st</sup> January, 2018 to 30<sup>th</sup> June, 2018.

In addition, the daily average value of Fawateer transfers increased by 53.1% from BD396,627 to BD607,336 when compared to 1<sup>st</sup> July, 2018 to 31<sup>st</sup> December, 2018. Furthermore, the daily average value of Fawateer transfers for 1<sup>st</sup> January, 2019 to 30<sup>th</sup> June, 2019 increased significantly by 82.8% from BD332,296 to BD607,336 when compared to 1<sup>st</sup> January, 2018 to 30<sup>th</sup> June, 2018 (first half of 2018).

The EFTS including EBPP continued to operate smoothly and efficiently from 1<sup>st</sup> January, 2019 to 30<sup>th</sup> June, 2019. The CBB (CBB) continued to assess the EFTS including EBPP in terms of compliance with the requirements set by the Principles for Financial Market Infrastructures (PFMI) and CBB's Directives.

# 10

### Fintech, Innovation and Financial Inclusion



- ▶ Bahrain's established financial services industry, its role as a leading Islamic finance hub, and the national drive for financial inclusion are supporting the growth of FinTech.
- ► CBB's FinTech is responsible for the approval process to participate in the Regulatory Sandbox and monitoring technical and regulatory developments in the FinTech field.
- ► Continues Fintech developments and within the Kingdom and the launch of a number of digital wallets were over the last year.
- ► The FSD conducted a financial Inclusion Survey was conducted to analyze customer appetite for retail deposit accounts in Bahrain along with payments statistics.

The Kingdom of Bahrain is an established financial hub in the Gulf Cooperation Council (GCC) and Middle East region. The Kingdom is repositioning itself to be a Financial Technology (FinTech) hub of the region combining conventional and Shariah compliant FinTech solutions. Offering low cost, convenient and instant payments, FinTech has been of great interest to the regulators that were posed with the challenges of regulating, overseeing and ensuring safety and efficiency of those new payment methods.

The Kingdom is embracing and encouraging digital transformation and the adoption of innovative technology, ultimately adding value and creating a more efficient financial services sector and achieving higher financial inclusion. The higher degree of financial inclusion enabled through FinTech provides countless benefits to the economy and plays a crucial role in the country's economic and social development. The CBB seeks to make the Kingdom of Bahrain a key player in FinTech through the availability of (1) innovative financial solutions, (2) highly qualified national talent in finance and banking, and (3) access to supportive policies.

The aim of the chapter is to show the recent trends and developments in the FinTech industry and Financial Inclusion within the Kingdom and highlight initiatives taken by the central bank and other industry players in in this field.

#### 10.1 FinTech Developments

The CBB has issued a series of measures to strengthen its position as a regional financial centre; including guidelines on the regulatory environment to ease the implementation of FinTech's solutions. Innovation and regulatory sandboxes play a vital role in harnessing the advancement of financial technology solutions to support financial inclusion. The CBB has announced a series of measures

towards consolidating its position as a regional financial hub and facilitating a number of FinTech initiatives.

The Kingdom of Bahrain achieved remarkable progress towards financial inclusion by putting in place a facilitating regulatory and policy environment through its financial regulator. Additionally, it stimulated competition in the financial sector by allowing banks and non-banks to innovate and expand access to financial services, which created an advanced and competitive space that has been accompanied with regulations to ensure responsible provision of financial services.

As part of the CBB's ongoing initiatives towards financial digital transformation and developments in digital financial services, the CBB announced the establishment of a dedicated FinTech & Innovation Unit in October 2017 to ensure an adequate regulatory framework is in place to adapt FinTech, which in turn will enhance the services provided to individual and corporate customers in the financial sector.

The FinTech Unit is responsible for 1) the approval process to participate in the Regulatory Sandbox 2) supervision of the activities and operations of the authorized Regulatory Sandbox companies' and 3) monitoring technical and regulatory developments in the FinTech field which will allow industry players to apply innovative products while maintaining the overall safety and soundness of the financial system. The FinTech Unit helps the development of the current ecosystem in place is to encourage growth in the FinTech industry and to attract more local, regional, and international FinTech firms to the Kingdom.

The sections below cover the latest FinTech developments and initiatives within the Kingdom.

#### 10.1.1 Regulatory Sandbox

The CBB has launched a regulatory sandbox in June 2017 that enables both local and international emerging businesses, financial technology companies as well as existing CBB licensees, to test their innovative ideas and create pioneering solutions for the financial services sector.<sup>13</sup> This initiative aims to attract FinTech companies from around the world to develop and expand their business in the Arabian Gulf and MENA Region, which will strengthen Bahrain's position as a centre of FinTech and financial innovation in the region.

The sandbox provides such authorized companies with the opportunity to test and experiment their innovative financial solutions freely. Additionally, the sandbox is open to CBB licensed companies to help develop ideas until they are commercially viable. The period allowed for this arrangement is nine months and may be extended if need be by an additional three months. The Sandbox focuses on three criteria items that include:

- 1. Innovation: The solution should be truly innovative or significantly different from existing offerings, or offer a new use for existing technologies.
- 2. Customer benefit: The solution should offer identifiable direct or indirect benefits to customers.

-

<sup>&</sup>lt;sup>13</sup> A Regulatory Sandbox (Sandbox) is a framework and process that facilitates the development of the FinTech industry in a calculated way. It is defined as a safe space in which businesses can test innovative products, services, business models and delivery mechanisms without immediately incurring all the normal regulatory and financial consequences of engaging in the activity in question.

3. Technical testing for existing solutions: In case of existing solutions, results of the technical testing must be made available to the CBB.

To date, the CBB has 35 companies testing their solutions within the Regulatory Sandbox, and 2 have graduated: one receiving a license as a capital market- crypto asset service —category 3 and one as a specialized license- ancillary service provider. The solutions being tested out in the sandbox range from digital banks, crypto platforms, crypto ATMs, open-banking solutions, payment services providers, and many more.

The Regulatory Sandbox framework was revised in August 2018, to replace the requirement to maintain an escrow account with having a segregated client money account.

#### 10.1.2 Crowdfunding

The CBB issued regulations for both equity and financing based crowdfunding activities, whereby the regulations accommodate for conventional as well as Shariah compliant crowdfunding transactions. Small and medium-sized companies in Bahrain and the region are able to raise conventional financing or Shariah-compliant financing through crowdfunding platforms. Companies operating an electronic equity/financing based crowdfunding platform must be licensed in Bahrain under the instructions depicted in Volume V of the CBB Rulebook. CBB anticipates that entrepreneurs will benefit from the global trend in crowdfunding, which provides a feasible alternative to bank financing. The CBB is particularly keen to ensure that the Kingdom has a leading spot in the crowdfunding market.

Bahraini entrepreneurs will benefit from the global crowdfunding trend, which provides a viable alternative to bank financing. In particular, the CBB is keen to see Bahrain dominate the Shariah compliant financing-based crowdfunding market in the region. The demand for Shariah compliant financing is already high and is expected to see it reflected in the crowdfunding market.

The Crowdfunding regulations were refined and enhanced in November 2018 to make them more enabling including reduction in minimum capital, including business-to-business and peer-to-business lending, and removal of certain restrictive conditions.

Some of the key highlights of the revised crowdfunding regulations by CBB are as follows:

- Minimum capital requirement for crowdfunding platform operators is BD 25,000.
- Only Person to Business (P2B) and Business to Business (B2B) lending / financing is permitted.
- These SMEs may be based in Bahrain or outside; however, in case of foreign SMEs the platform operators have to clearly mention the cross-border and jurisdictional risk financiers have to take.
- It is the responsibility of the lenders/financiers to perform their own creditworthiness assessment on borrowers/fundraisers.
- Crowdfunding platform operators have to comply with the CBB rules on Anti Money Laundering, Combating Financing of Terrorism (AML/CFT), and consumer protection.

#### 10.1.3 Open Banking

In December 2018, the introduction of open banking to Bahrain's banking sector was laid down by the CBB when it issued its open banking regulations which facilitate the provision of a variety of innovative services for bank customers. With that, Bahrain became the first country in the Middle East to adopt

open banking making access to financial information easier, faster, and tailored to the needs of customers. The open banking regulations mandated the adoption of open banking by all retail banks in the Kingdom by 30 June 2019.

The open banking regulation provides rules for the following:

- Account information services that permit customer access to aggregated bank account information through a single platform.
- Payment initiation services that allow licensed third parties to initiate payments on behalf of customers and permit seamless transfers between different accounts through a mobile-based application.

The FinTech & Innovation Unit prepared a study on Open Banking for the CBB on June 2018 which lead to the to the issuance of Open Banking regulations on December 2018 after collating feedback from the industry. The rules ensure that the CBB helps foster innovation, competition, and enhanced efficiency within the financial system keeping in view changing consumer trends. Open banking services will entail the provision of two broad categories of services: "Account information service platforms (AISP)" and "payment initiation service platforms (PISP)", which fall under "Ancillary Service Providers" of CBB Rulebook Volume 5.

Open banking allows third-party providers to develop APIs (Application Programming Interfaces) that can access a customer's bank and other financial accounts and present it in a way that is tailored to a customer's needs. For example, multiple bank accounts from multiple providers can be housed in one app, subjected to machine learning analysis, and made securely available to consumers on their mobile phones. With a high mobile phone penetration rates, Bahrain has the environment to test such solutions.

Open banking benefits customers by eliminating the need to conduct separate searches of different bank accounts through multiple portals and instead all relevant financial information can be aggregated on a single application platform. Banks, on the other hand, will benefit by competing to digitize their own services. The entrepreneurial and FinTech start-up ecosystem found in Bahrain, that encompasses accelerators, incubators, training programmes and funding schemes, can play a major part in Open Banking.

#### 10.1.4 Crypto Assets

On February 2019, the CBB issued comprehensive regulations that covers a range of activities related to crypto-assets allowing for the licensing and regulation of trading, dealing, advisory services, portfolio management services in accepted crypto-assets as principal, as agent, as custodian and as a crypto-asset exchange. The range of activities are covered under four licensed category types.

Crypto-assets operating under block chain distributed ledger systems have drawn much regulator attention globally, and the CBB rules are aimed at ensuring that the related activities are subject to comprehensive regulatory and supervisory measures. Bahrain recognizes that the market for crypto-assets is growing both in the Kingdom and globally. The regulations are part of the CBB's initiative to develop its FinTech eco system and to help mitigate against the risk of financial crime and illegal use of crypto-assets within or from Bahrain.

The CBB Crypto-asset rules deal with the rules for licensing, governance, minimum capital, control environment, risk management, AML/CFT, standards of business conduct, avoidance of conflicts of

interest, reporting, and cyber security for crypto-asset services. They also cover supervision and enforcement standards including those provided by a platform operator as a principal, agent, portfolio manager, adviser and as a custodian within or from the Kingdom of Bahrain.

In addition, for those licensed by the CBB as crypto-asset exchanges, the regulatory framework also contains rules relevant to order matching, pre and post trade transparency, measures to avoid market manipulation and market abuse, and conflicts of interest.

Recognizing the emerging nature of these activities and the risks involved, the CBB rules also specify, among other measures the following:

- Need for enhanced due diligence (EDD) when on boarding new clients;
- Requirements to ensure that no encrypted safe custody accounts or "wallets" are maintained that cannot be retrieved;
- A mandate to ensure that keyman risks are adequately managed including by having the necessary insurance covers;
- The clients are educated and given clear instructions for use of the safe custody wallets.

#### 10.1.5 E-Wallets

Bahrain's appetite for digital wallets is growing where significant steps have been made in realizing the nation's vision to become a technology pioneer. The Kingdom has been working towards a successful digital economy by building a proper ecosystem provides a network of connected entities form the CBB to banks, to telecommunication companies, to merchants and consumers. The growth in digital wallet usage is a global trend due to 1) simplicity by having one destination to makes transactions that are 2) quicker and easier.

With a high level of mobile penetration, service and retail industries in Bahrain are quickly embracing digital solutions to further improving customer experiences, making the future of e-wallets in Bahrain promising driving us towards cashless/cardless society. The use of wallets will change dramatically the way people interact with money, and will increase buying and spending due to easier payments, without neglecting the security aspect, and avoiding the hassle of cash withdrawals.

A number of digital wallets were launched in the Kingdom that allows users to make instant payments via smart phones and also facilitate the collection of payments electronically through debit and credit cards. Table 10-1 shows a list of all the digital wallets in Bahrain, along with their launch date and a description of what features they provide. In September 2019, BFC Group launched BFC Pay. The digital payroll solution enables employers to securely upload wages onto payroll cards or mobile wallets through an online portal or at any BFC Bahrain branch and designated cash deposit machines (CDMs).

To capture the success of digital wallets in Bahrain, the volume and value of transactions through these digital solutions s provided in Table 10-2. The volume and value of transactions through e-Wallets was gradually increasing over the past year. The total volume increased from 165,869 transactions in June 2018 to 1.4 million transactions in June 2019 (733.6% increase), as well as an increase in the value from BD 2.8 million to BD 66.0 million (2259.8% increase) over the same period. The volume of transactions through Benefit Pay increased dramatically year-on year from 11,835 in June 2018 to 806,177 in June 2019, along with an increase in the value of transactions from BD 0.7 million to BD 55.2 million during the same period.

Table 10-1: Digital Wallets and Features in the Kingdom

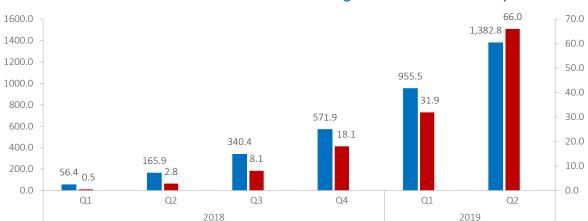
Wallet	Launch	Table 10-1: Digital Wallets and Feature  Description	Features
b-wallet	January 2018	Bahrain's digital services provider, Batelco partnered with Arab Financial Services (AFS), to introduce a digital mobile wallet and payment solution for customers in the Kingdom. The digital mobile wallet app enables quick and secure payments through a smartphone app. The user can scan the QR Code available at different merchants to make payment.	<ul> <li>Add money into a user's account using any debit card issued in Bahrain.</li> <li>Send and receive money between b-wallet accounts.</li> <li>Request money from another b-wallet account.</li> <li>Make payments to merchants.</li> <li>Pay with your smartphone using QR code.</li> <li>Available Offers.</li> </ul>
Benefit Pay	May 2017	Benefit Pay is an app that works using QR code scanning Technology by allowing users to make safe and secure payments. The service provides a one-time step to add a card and/or bank account and then enables the customer to scan a QR code from the merchant app and enters proper authentication to complete the transaction. Benefit Pay also allows for peer-to-peer transactions.	<ul> <li>Make Payments to Merchants.</li> <li>Payments using Credit cards through the mobile App payments or websites.</li> <li>P2P transfers through Fawri+.</li> <li>Bill payments through Fawateer.</li> <li>Pay with your smartphone using QR code.</li> <li>Available Offers.</li> </ul>
Max Wallet	July 2017	Max Wallet is a virtual wallet allowing customers to pay for their purchases using their mobile device without presenting their physical credit cards and paying with a smartphone using QR code. The payment solutions have been launched via a collaboration between BBK and CrediMax to focus on providing more services and payment options.	<ul> <li>Transferring money and sharing payments with friends and family.</li> <li>Make purchase payments to merchants.</li> <li>Pay with your smartphone using QR code.</li> <li>Available Offers.</li> </ul>
Viva Cash	March 2018	Viva Bahrain launched Viva Cash, a new application offering consumers secure and convenient a digital mobile wallet for payments. Viva partnered with Sadad Bahrain, licensed and regulated by the CBB. VIVA Cash is a mobile wallet that can be used to pay your day to day expenses.	<ul> <li>Add money to VIVA Cash account.</li> <li>Send Money to friends and Family.</li> <li>Pay post-paid bills &amp; recharge prepaid Lines.</li> <li>Send money internationally.</li> <li>Shop at participating merchants.</li> <li>Pay with your smartphone using QR code.</li> <li>Make purchase payments to merchants.</li> <li>Available Offers.</li> </ul>
BFC Pay	September 2019	Launched in partnership with UnionPay International (UPI). The BFC Payments App offers BFC Pay payroll employees a platform to access salary wallet and the BFC Pay Card. Features of the BFC Payments App that employees can benefit from.	<ul> <li>View account balance anytime, anywhere on their BFC Payments e-wallet.</li> <li>Transfer money to other BFC Payments e-wallets instantly from their BFC Pay Card or their BFC Payments e-wallet.</li> <li>Request and receive money from other BFC Payments e-wallets.</li> <li>Remittance services.</li> <li>Top up own/other BFC Payments e-wallets or BFC Pay cards instantly from their bank account.</li> </ul>

Source: www.batelco.com, www.credimax.com, www.benefit.bh, /www.viva.com.bh, and www.bfcpayments.com.

Period Volume Value (BD) 2018 Q1 56.438 474,199 165,869 2,795,996 Q3 340,411 8,070,273 04 571,939 18,072,712 2019 Q1 955,540 31,899,530 65,981,116 1.382.762 Q2

Table 10-2: Volume and Value of Transactions through e-Wallet and Mobile Payments

Source: CBB.



■ Total Value (BD million) (right)

■ Total Volume (thousands) (left)

Chart 10-1: Volume and Value of Transactions through e-Wallets and Mobile Payments

Source: CBB.

#### 10.1.6 Digital Financial Advice

The CBB issued on March 2019 the Directives on "Digital Financial Advice" (also known as "Roboadvice"). For the Bahraini financial services sector, this is an important step towards digitalization by through the power of intelligent automation (financial advice) by the use of algorithms in automated tools that use the logic and methodology applied by traditional financial advisors. The Digital Financial Advice regulations rules will enable:

- specialized Fintech firms planning to offer digital financial advice obtain a license to offer such services to investors.
- banks and investment firms to introduce such services with approvals from the CBB.

The new rules focus on providing safeguards and controls governing the use of algorithms or AI which are embedded in the software programs used in the digital advisory tools.

The CBB will continue to make progress in expanding the scope of role of digital financial services with a view to ensuring customers have access to smart services from banks and financial institutions. These rules are in line regulatory standards in leading financial centres and will help Bahrain maintain its position as a leading financial hub in the region.

#### 10.1.7 FinTech Bay

Bahrain FinTech Bay (BFB) is a FinTech ecosystem launched in February 2018 by The Bahrain Economic Development Board (EDB) and Singapore-based FinTech Consortium (FTC). BFB is dedicated to further develop and accelerate FinTech firms and drive innovation in Bahrain by bringing industry leaders and new entrants to (1) drive innovation, (2) create opportunities for growth and (3) foster the interaction

between players in the financial sector, investors, entrepreneurs, and government bodies. BFB provides co-working spaces and other shared infrastructure to attract FinTech start-ups to base themselves within the Kingdom.

#### 10.1.8 Benefit

The Bahrain Credit Reference Bureau (known as BENEFIT) stores, analyzes and categorizes credit information. It also provides innovative payment capabilities, information management solutions, and business process outsourcing services that add value to the financial sector and other stakeholders to manage their business effectively. The BENEFIT Company positions itself in being at the forefront of developing powerful tools for the banking and financial services sector to increase productivity, profitability and customer satisfaction.

The Central Bank also uses BENEFIT's credit data for statistical purposes and performs studies related to financial inclusion to support policy development. The Central Bank is also examining ways to further develop indicators related to financial inclusion, and strongly urges the strengthening of public-private cooperation to create a reinforcing environment for financial inclusion. The services that Benefit offers include:

- Automated Teller Machine (ATM)
- Point of Sale (POS):
- Bahrain Credit Reference Bureau
- Bahrain Cheque Truncation System
- Electronic Fund Transfer System (EFTS)
- Payment Gateway
- Internet Banking Shared Platform
- GCCNet Dispute Management System
- Direct Debit
- Tele Bill Payment through Mobile Phones
- Benefit FinTech Lab

#### 10.1.9 National e-KYC

In February 2019, The CBB along with Benefit and the IGA launched the new national Electronic Know Your Client (eKYC) Project, targeting retail banks, financial services providers, and money exchange networks. The Project provides an advanced state of the art electronic platform and a database for financial institutions to authenticate the identities of their clients and validate their information before granting financial services.

The Project also aspires to help FinTech companies offering financial and banking products using online applications, and facilitate the launch of their products and services. This is in compliance with CBB's instructions to encourage the financial sector to use financial services technology and in line with the guidance of the Economic Development Board (EDB) to promote FinTech.

BENEIT will provide financial institutions in Bahrain with a complete web portal allowing identity authentication, as well as mobile applications, thus enhancing the Kingdom's electronic systems in line with Bahrain's Vision 2030.

The eKYC Project provides unique features to BENEFIT clients, namely the promotion of digitalization, as well as user-friendly features, lower cost and less time and effort in collecting data under a single platform, in addition to providing data from reliable government sources and thus minimizing fraud.

#### 10.1.10 Small and Medium Enterprises Support

In addition to the microfinance institutions, the government continues to support micro, small and medium enterprise financing options through its support initiatives; Bahrain Development Bank, and Tamkeen, which constantly develops ways SMEs can obtain formal financing options suitable to the nature of the enterprises, in addition to providing various means of support. Formalizing SME funding through suitable funding channels in the financial system enables higher financial inclusion, and facilitates higher financial coverage. The crowdfunding initiatives taking place in the Kingdom will help SMEs and start-ups fill gaps in lending and move ahead with developing products and solution which is seen as a vital way both to encourage innovation and support our thriving ecosystem.

#### 10.1.11 Other Regulatory Framework Developments and Projects

As part of the Central Bank of Bahrain's ongoing initiatives towards financial digital transformation in the Kingdom and developments in digital financial services, the CBB has started pursuing the following projects:

- E-Dinar Project: The FinTech & Innovation Unit participated in the early stages of the CBB's e-Dinar project working group meetings.
- National Digital Transformation Strategy National Economic Strategy: The FinTech & Innovation Unit is involved in supporting the national digital transformation strategy and national economic strategy in cooperation with the EDB.

The CBB has also joined a number International Agreements and Recognitions:

- The CBB has joined the Global Financial Innovation Network (GFIN) network as part of the coordination group, which is the highest tier of membership.
- Abu Dhabi Global Market (ADGM) and CBB signed a MOU to promote and facilitate innovation in financial services in November 2018.
- CBB and MAS signed a MOU to foster innovation in financial services between the two countries in November 2018.'
- The CBB is also part of the GCC Secretariat Fintech Working Group, which aims at strengthening and collaborating on FinTech initiatives amongst the GCC.

The CBB is also has made efforts to enhance financial coverage and provide financial services by:

- 1. Conducting a study within the CBB to examine the Wage Protection System.
- 2. Granting licenses to two microfinance institutions, namely the Ebdaa Bank and the Family Bank (Microfinance Institutions).

#### 10.2 Financial Inclusion

Financial inclusion refers to individuals, irrespective of income level, and businesses having access to useful and affordable financial products and services to meet their needs (through transactions, payments, savings, credit and insurance). These products and services have to be delivered in a responsible and sustainable way.

In the recent years, policy-makers and regulators around the world have shown a strong interest in financial inclusion. The interest arises from the substantial importance of financial inclusion in facilitating access to financial services, creating jobs, and improving the standards of living and economic growth.

Financial inclusion efforts in Bahrain aim to ensure that all businesses and households, have access to and can efficiently use the suitable financial services they need to engage in day-to-day transactions. The CBB closely monitors developments in the areas of financial inclusion and their impact on domestic, regional and global levels and gathers relevant financial inclusion data. The CBB is taking a number of initiatives to further develop indicators related to financial inclusion by expanding (1) the scope of the data and (2) its frequency. The figures in Table 10-3 confirm Bahrain's continued efforts to achieve a higher level of financial inclusion within its financial sector by providing easy access to financial services.

Table 10-3: Financial Inclusion Figures for the Kingdom of Bahrain

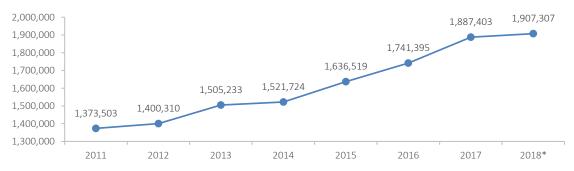
	2012	2013	2014	2015	2016	2017	2018*
Number of Banks**	28	27	27	27	27	26	29
Number of Branches	147	163	167	171	172	171	173
Number of Branches per 100,000 in population	12.2	13	12.7	12.5	12.1	11.4	11.5
Number of ATMs	462	471	452	458	461	453	479
Number of ATMs per 100,000 in population	38.2	37.6	34.4	33.4	32.4	30.2	31.9
Number of Accounts ***	1,400,310	1,505,233	1,521,724	1,636,519	1,741,395	1,887,403	1,907,307
Number of Accounts per 1,000 in population	1,158	1,201	1,158	1,194	1,223	1,257	1,269
Number of Internet/PC linked accounts	313,783	352,982	471,535	468,746	544,111	534,033	477,894
ATM Cards (thousands)	1,157.2	1,199.7	1,229.6	1,352.6	1,407.7	1,481.8	1,384.6
Debit Cards (thousands)	976.4	1,002.2	1,010.0	1,097.2	1,111.2	1,128.5	1,171.7
Credit Cards (thousands)	187.7	202.3	222	253.3	290.3	329.7	322.9
Population	1,208,964	1,253,191	1,314,562	1,370,322	1,423,726	1,501,116	1,503,091

<sup>\*</sup>Preliminary data

Source: CBB and IGA.

From 2012 to 2017, figures (table 10-3) show that access to finance measured by the number of Branches and ATM machines per 100,000 people within the Kingdom is large. In terms of bank branches per 100,000 people, Bahrain stands at 11.5 for 2018. As for the number of ATM machines per 100,000, Bahrain records 31.9 ATMs per 100,000 in population for 2018. The number of bank accounts within retail banks increased over the last 6 years from 1,400,310 in 2012 to 1,907,307 in 2018 demonstrating an increase of 36.2% (The 2018 increase in the number of retail bank accounts was 1.1%).

Chart 10-2: Number Accounts



Source: CBB.

<sup>\*\*</sup>Retail Banks only (Conventional and Islamic).

<sup>\*\*\*</sup>Includes saving deposits as they are used for payments in Bahrain.

POS machines accept different financial instruments, primarily debit and credit cards. POS terminals are seen as an essential part of financial inclusion. The increase in POS terminals and their utilities, combined with mobile POS and new age payment mechanisms helps in achieving higher financial inclusion. As of Q2 2019, there were 39,808 POS terminals in Bahrain with a 13.7% increase in terminals (4,798) than the number of terminals as of end 2018 (table 10-4). POS transactions in Bahrain have shown an increase in both in volume and value. As of Q2 2019, the total number of transactions performed using POS machines in Bahrain was 17,556,192 which is a 4.9% increase from Q1 2019 and a 21.7% Y-o-Y increase from Q2 2019. As for the total value of transactions, the total value of transactions performed using POS machines in Bahrain was BD 606.9 million which is 7.7% increase from Q1 2019 and a 15.4% Y-o-Y increase from Q2 2019.

Table 10-4: Point of Sale (POS) Transactions in Bahrain

		Vo	olume of transactions		Value of transactions (BD)			No. of
		Cards issued in Bahrain	Cards issued outside Bahrain	Total	Cards issued in Bahrain	Cards issued outside Bahrain	Total	POS terminals
2018		48,041,003	12,156,768	60,197,771	1,657,590,333	492,060,990	2,149,651,323	35,010
2018	Q1	11,076,351	2,817,562	13,893,913	376,905,427	16,095,954	493,001,381	30,693
	Q2	11,702,591	2,718,632	14,421,223	410,197,103	115,683,247	525,880,350	33,716
	Q3	12,208,043	3,325,473	15,533,516	416,585,390	127,371,212	543,956,603	33,716
	Q4	13,054,018	3,295,101	16,349,119	453,902,412	132,910,577	586,812,989	35,010
2019	Q1	13,061,184	3,672,738	16,733,922	426,189,837	136,900,589	563,090,426	37,356
	Q2	14,033,347	3,522,845	17,556,192	473,318,809	133,581,456	606,900,264	39,808

Source: CBB.

6,500,000

6,000,000

5,500,000

5,000,000

4,500,000

4,000,000

Chart 10-4 shows the monthly of POS transactions in terms of volume and value which can help identify any cyclicality in behaviour over the long run. The overall trend in increase in POS transactions shows that people prefer making direct payments to merchants through POS terminals instead of ATM/Cash withdrawals.

Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May Jun.

- 220,000,000
- 200,000,000
- 180,000,000
- 140,000,000
- 120,000,000

- Value (BD) (right)

2019

Chart 10-3: Monthly POS Transactions (Volume and Value)

Source: CBB.

As of Q2 2019, 20.1% of the volume of transactions and 22.0% of the value of transactions came from cards issued outside Bahrain compared to 18.8% and 22.0% in Q2 2018 respectively (Chart 10-4 and Chart 10-5).

2018

Volume

Chart 10-4: Volume of POS Transactions Q2 2019

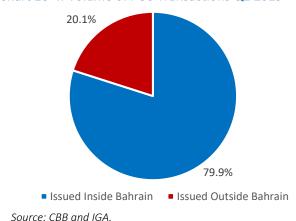
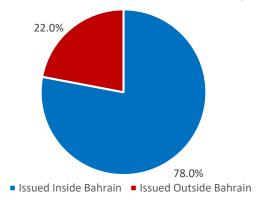


Chart 10-5: Value of POS Transactions Q2 2019



Source: CBB and IGA.

The financial services sector provides services to various categories of the Bahraini population. All payments made by the government, whether in the form of salaries, wages, social benefits or payments to service providers to government agencies, are through formal bank accounts. Women and young adults face no obstacles or any form of barrier preventing access from the financial sector. The government is also currently working on the development of a system that will formalize the wage distribution of foreign workers employed in the private sector. All private institutions will be obliged to pay salaries to their foreign employees through banks, with control of the payment mechanism to ensure that there is no breach of the obligations of companies towards workers.

Efforts have been made by the CBB to prioritize financial inclusion in terms of adopting and implementing a viable national strategy to 1) improving women's, SME, and young people's access to financial services 2) promoting the protection of consumers of financial services 3) improving and providing financial coverage data and statistics to support policy development, and 4) promoting awareness and financial education.

# Chapter 11

### **Cyber Security**



- Cyber risk is a threat to financial stability with increasing attacks on financial institution and central banks.
- ▶ Cyber-attacks against ICT systems have financial stability implications.
- ▶ The FSD issued a survey in June 2019 to all financing companies in Bahrain to evaluate the resilience and preparedness of the sector to cyber threats.
- ► The survey's scope covered: Governance & Leadership, Identification, Protection, Detection and Response & Recovery.

#### 11.1 Overview

Cyber risk is steadily evolving into a main threat to all industries. Its impact however on the financial services industry is growing into an individually recognised risk by all financial institutions. Given the innovations in information technology (IT) and financial institutions' increased reliance on IT channels, cyber security is no longer regarded as a technical issue but a main threat to the industry.

The CBB will therefore be addressing developments in cyber risk as a recurrent chapter in its Financial Stability Report. The aim of the chapter is to Highlight the different initiatives of the Central Bank and actively spread awareness about Cyber Risk by warning the financial industry of the large operational, financial and security risks involved with cyber security.

#### 11.2 The nature of cyber security risk and its impact on financial stability

Cyber risk has become a serious threat to financial stability over the past five years, which has resulted in recent attacks on financial institutions and central banks. An IMF paper (No. 19/15) published in September 2019 highlighted the emerging supervisory practices that are required to withstand the highly dynamic and rapidly changing cyber security landscape. The IMF paper also sheds light on the transmission channels through which cybersecurity risk can impact financial stability, as demonstrated in table 1 below.

Table 11-1: Examples of Key Transmission	n Channels that can Impact Financial Stability
The Office of Financial Research of the US Department of the Treasury	Five steps were identified where a disruption to ICT could impact financial stability:  1- A cyber incident attempt 2- Defense fails 3- The incident creates shocks 4- Risk spreads through transmission channels 5- Financial stability is affected
Office of Financial Research (Office of Financial Research 2016, 2017)	The key transmission channels through which cybersecurity incidents can threaten financial stability are:  1- the lack of substitutability for a key service or utility  2- the loss of customers or market participants  3- the loss of data integrity as key transmission
The International Institute for Finance (Institute of International Finance, 2017)	Four key scenarios were identified that could harm financial stability:  1- Attack on payment systems 2- Integrity of data 3- Failure of wider infrastructure 4- Loss of confidence
The Bank of England and the UK Financial Conduct Authority (Bank of England 2018)	A discussion paper was published to generate debate about the expectations regulators and the wider public might have of the operational resilience of financial services institutions <i>j</i>

Source: IMF Paper No. 19/15

#### 11.3 CBB Cyber Security Survey

#### 11.3.1 Survey Scope & Objectives

As part of the CBB's continuous effort to track and assess the resilience of Bahrain's Financial Sector to cyber threats, the FSD issued a cyber-security related survey to all retail Banks in Bahrain in July 2018 which served both micro prudential and macro prudential objectives. The initial survey was replicated from the Bank of England's Cyber Resilience Questionnaire with the aim of establishing a good practice and serving as a self-assessment process for supervisors and executive management at banks to evaluate their readiness to cyber related risks. The questionnaire compared how well banks' risk management policies and procedures are aligned to their capabilities and whether or not they are adequate for the types of operational risk incidents and threats that they face. The survey was divided into five parts: Governance & Leadership, Identification, Protection, Detection, and Response & Recovery.

In February 2019, the FSD issued a second similar cyber-security related survey to all wholesale banks in Bahrain in order to fully evaluate and compare the resilience and preparedness of Bahrain's banking system (in its different segments) to cyber related threats.

The third and final stage of the study involved assessing the resilience financing companies. Therefore, in June 2019, the survey was issued to all financing companies with a 100% response rate. The following sections display the results of the survey.

#### 11.3.2 Key Survey Findings

The survey results drew upon some major findings which included the following:

#### 1- Governance & Leadership

- 100% of Financing Companies' cyber security strategy has been approved by the board and have cyber security roles aligned to their strategy.
- 75% of senior executives of Financing Companies understand their roles and responsibilities with regards to cyber security and their understanding has been validated while 25% have been informed and their understanding is assumed.
- All operational risk incidents and cyber related incidents are reported by 75% of the companies to the board while the remainder companies group all incidents into operational risk incidents.

#### 2- Identification

- All Financing Companies have effective risk management practices in place to address cyber security risks and are well documented and understood.
- 75% of companies measure the effectiveness of the implementation of the practices and regularly report it to the Board and the Senior Management while the remainder do not report.
- All financing companies have a process that identifies critical internal functions and have IT supporting the delivery of such processes which is annually verified.
- In addition, the sensitivity and integrity of the data security controls required for the delivery of the critical internal functions have been assessed and annually verified by all companies.
- 100% of financing companies have an established process for the identification of hardware and software vulnerabilities and the prioritization of critical vulnerabilities.

#### 3- Protection

- All financing companies implement, maintain and monitor effective physical access across the facilities and are also reviewed on a regular basis.
- 75% of companies have effective remote access which is reviewed regularly while 25% have no remote control access.
- All companies implement effective privileged user access rights and review it on an annual basis.
- 75% of companies provide all their staff with cyber security training and information is then collected on completion of the training while 25% provide training on an ad-hoc basis.
- 50% of companies provide additional training to higher risk staff and information is then collected on completion of the training while 25% do not collect information after the training and the rest do not provide additional training.

- 75% have a full and documented data loss prevention strategy while the remainder have a partial strategy that is aligned to critical data only.
- 25% encrypt all data while the majority only encrypt critical data.
- Majority backup all data on multiple formats while 25% back up only critical data.
- Half of the companies depend on self-verification of security capabilities of third party providers, 25% conduct an audit and 25% conduct no assessment.
- These assessments are carried out annually by 50% and less than annually by the rest.

#### 4- Detection

- All financing companies analyze all events to attribute attacker, methodology and potential impacts to critical functions and processes.
- 75% of the companies perform a regular vulnerability scanning and penetration testing agreed at board or senior executives level.
- Vulnerability scanning and penetration testing are undertaken between annually to monthly by all companies.
- All financing companies have 0% to 35% of their operational risk incidents be cyber security related over the past 6 months.

#### 5- Response & Recovery

- 75% of the financing companies do not buy cyber insurance and only 25% buy cyber-specific insurance.
- All financing companies have separate cyber incident response, disaster recovery and business continuity plans. These have been tested separately within the last 12 months and it is assumed that they can work collectively.
- All companies report all their critical breaches to customers and regulator.

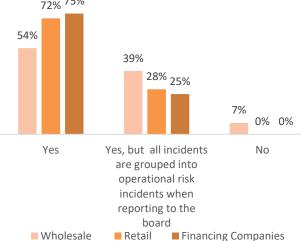
A comparison of the results between retail banks, wholesale banks, and financing companies is available in the charts below.

#### Chart 11-1: CBB Cyber Security Survey Results June 2019

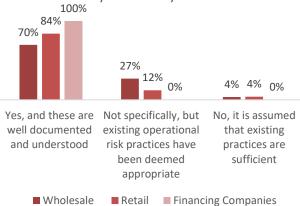
**1. Governance & Leadership:** Has your cyber security strategy been approved by the board?



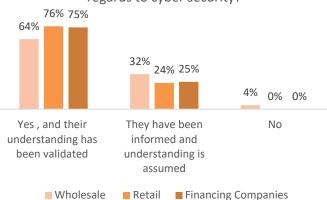
**3. Governance & Leadership:** Do you report all operational risk incidents and cyber related incidents to your Board? 72% 75%



**5. Identification:** Are effective risk management practices in place to address cyber security risks?



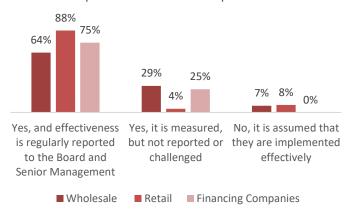
**2. Governance & Leadership:** Do senior executives understand their roles and responsibilities with regards to cyber security?



**4. Governance & Leadership:** Have cyber security roles within the organisation been aligned to the strategy?



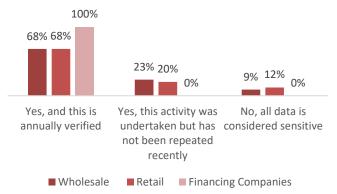
**6. Identification:** For whichever response to Q5, do you measure the effectiveness of the implementation of these practices?



**7. Identification:** Do you have a process to identify your critical internal functions?



**9. Identification:** Has the sensitivity and integrity of your data security controls, required for the delivery of critical internal functions, been assessed?



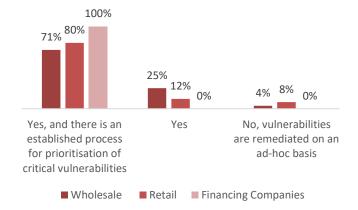
**11. Protection:** Are effective physical access controls implemented, maintained and monitored across your organisation's facilities?



**8. Identification:** Has all IT supporting the delivery of critical internal functions and processes been identified?



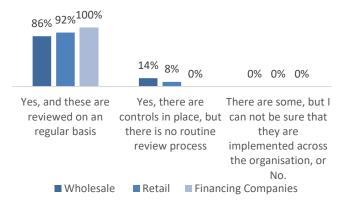
**10. Identification:** Are hardware and software vulnerabilities identified, documented and remediated?



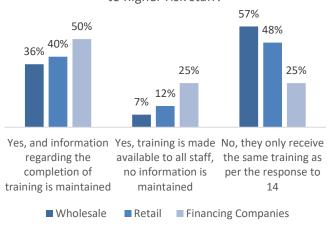
**12. Protection:** Are effective remote access controls implemented, maintained and monitored across your organisation's



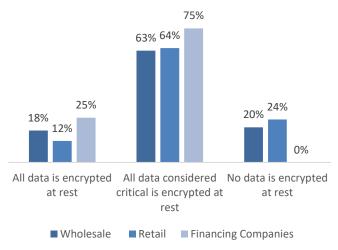
# **13. Protection:** Are effective privileged user access rights implemented, maintained and monitored across your organisation's facilities?



## **15. Protection:** Is additional training provided to higher risk staff?



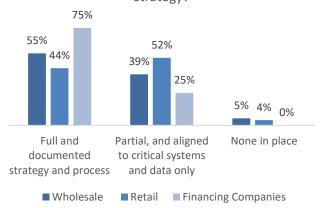
### **17. Protection:** Which option best describes how data is stored?



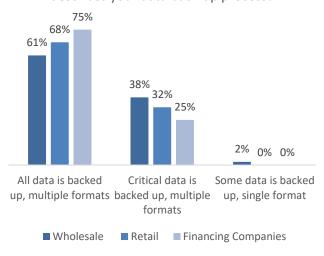
### **14. Protection:** Are all staff provided with cyber security training?



**16. Protection:** Which option best describes your data loss prevention strategy?



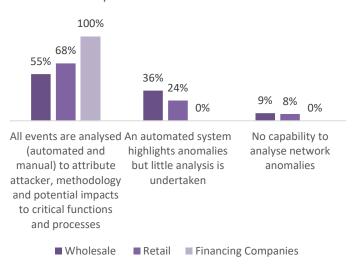
## **18. Protection:** Which option best describes your data back-up process?



## **19. Protection:** How do you assess third-party providers' security capabilities?



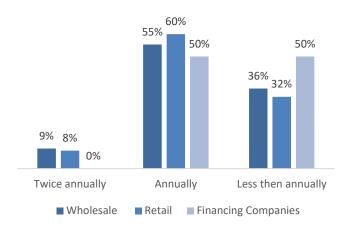
## **21. Detection:** Which option best describes your network detection and monitoring processes and controls?



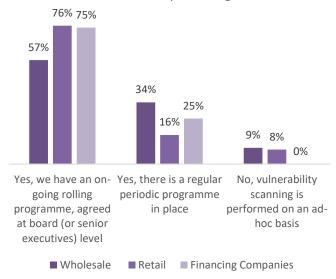
## **23. Detection:** Do you perform regular penetration testing?



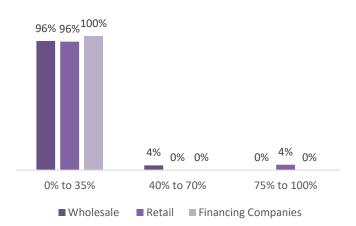
### **20. Protection:** How often are these assessments carried out?



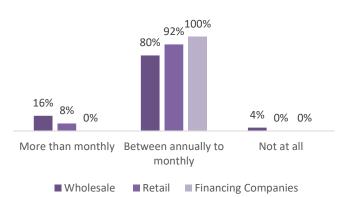
**22. Detection:** Do you perform regular vulnerability scanning?



**24. Detection:** Approximately what proportion of your organisation's operational risk incidents were cyber security related over the past 6 months?



**25. Detection:** Describe how frequently you undertake vulnerability scanning and penetration testing and ensure that both are effective.



**26. Response & Recovery:** Do you buy cyber insurance?



**27. Response & Recovery:** Do you have a documented and regularly tested response plan (business continuity, disaster recovery and/or cyber incident response)?



### **28. Response & Recovery:** Describe your data breach notification policy?



#### 11.4 CBB Cyber Security Initiatives and Regulatory Developments

The CBB continues to develop its regulations on cybersecurity in an effort to strengthen the cyber resilience of its financial institutions.

The CBB finalized its consultations in March 2019 for the Operational Risk Management Module in Volumes 1 and 2, which propose new requirements on cyber security measures for both conventional and Islamic banks. The consultation included a section on Cyber Security Risk Management which focuses on licensees preparing for the eventuality of cyber-attacks by having a cyber-attack response mechanism in place as part of the overall cyber risk strategy.

The licensee's business continuity plan must also be properly enhanced to account for all CBB requirements and must be regularly tested to ensure that the licensee is capable of dealing with cyberattacks that will trigger the business continuity plans. A licensee should take into account and document the relevant cyber security risks. In all matters concerning business continuity management, the licensee should also address cyber incident scenarios that could potentially affect its business activity, suppliers and service providers, the availability of supporting infrastructures. The adequate management of cyber security risks requires the augmentation of the licensee's existing IT risk management framework.

The CBB has further revised the chapters on cyber security measures in Volumes 1 and 2 and is planning to incorporate more requirements to be issued as second consultation. The proposed cyber security risk management framework is being amended to comprehensively manage the bank's cyber security risk and vulnerabilities by covering the following aspects:

- Role of the Board
- Role of Senior Management
- Cyber Security Strategy
- Cyber Security Risk Policy
- Approach, Tools, and Methodology
- Cyber Risk Identification and Assessments
- Prevention Controls
- Vulnerability Management
- Cyber Incident Detection and Management
- Recovery
- Cyber Security Insurance
- Training and Awareness

In February 2019, the CBB also included in its Crypto-Asset Module in Volume 6 for Specialized Licenses a number of regulations related to cyber security specifically covering, technology governance, technology standards, and cyber security risk management requirements. These regulations are in efforts to positioning Bahrain as a Fintech hub by addressing any risks arising from FinTech. Compliance with the CBB's new FinTech-related regulatory requirements allows financial service providers to consider and take into account the various risks that can arise from FinTech.

In April 2019, the CBB amended its regulation in Volume 4 of its rulebook on cybersecurity for Investment Firm licensees. In August 2019, the CBB also amended its regulation in Volume 3 on its rulebook on cybersecurity for Insurance licensees. Both Investment firm and Insurance licensees must establish clear ownership and management accountability for the risks associated with cyber-attacks. The licensees have to establish the related risk management processes corresponding to their size, nature of activities and risk profiles, and have cyber security measures as part of their IT security policy.

# Annex:

Financial Soundness Indicators and Selected Graphs

### **Annex 1: Financial Soundness Indicators**

Annex1 Table 1: Selected Financial Soundness Indicators—Overall Banking System

(End of period)

			end of period)
Indicator	Jun-18	Dec-18	Jun-19
Capital Adequacy			
CAR (%) *	19.2	18.9	19.0
Tier 1 CAR (%) *	17.8	17.6	17.7
Leverage (Assets/Capital) (Times) *	7.1	7.2	7.6
Asset Quality			
NPLs (% of Total Loans)	5.6	5.5	5.2
Specific Provisions (% of NPLs)	57.9	61.2	64.7
Loan Concentration (Share of Top Two Sectors) (%)	29.7	29.3	30.5
Real Estate/ Construction Exposure (%) **	25.2	25.8	25.3
Earnings			
ROA (%)	0.6	1.0	0.6
ROE (%) ***	4.0	6.7	3.9
Net Interest Income (% of Total Income) ****	59.6	67.3	58.4
Net Fees & Commissions (% of Total Income) ****	20.8	16.1	28.2
Operating Expenses (% of Total Income)	62.4	63.5	71.4
Liquidity			
Liquid Assets (% of Total Assets)	24.1	24.1	25.1
Loan-Deposit Ratio (%)	73.2	72.1	70.8

<sup>\*</sup> Locally-Incorporated Banks only.

Source: CBB.

<sup>\*\*</sup> Real Estate/ Construction exposure is calculated as the share of the construction, commercial real estate financing, and residential mortgages sectors of total lending.

<sup>\*\*\*</sup>ROE is defined as net profit over Tier 1 Capital.

<sup>\*\*\*\*</sup> Conventional Banks only.

Annex1 Table 2: Selected Financial Soundness Indicators—Conventional Retail Banks

Indicator	Jun-18	Dec-18	Jun-19
Capital Adequacy			
CAR (%) *	20.0	20.9	19.8
Tier 1 CAR (%) *	18.4	19.4	18.5
Leverage (assets/capital) (Times) *	6.7	6.4	7.0
Non-Performing Loans Net Provisions to Capital (%) *	6.6	5.8	6.3
Asset Quality			
NPLs (% of Total Loans)	5.8	5.5	5.5
Specific Provisions (% of NPLs)	54.3	63.8	66.0
Net NPL' (% of Net Loans)	2.8	2.1	2.0
Loan Concentration (Share of Top Two Sectors) (%)	33.9	33.1	33.8
Real Estate/ Construction Exposure (%) **	30.7	30.7	31.7
Earnings			
ROA (%)	0.8	1.5	0.9
ROA Local Banks (%)	1.1	2.1	1.1
ROA Overseas Banks (%)	0.2	0.4	0.5
ROE (%) ***	8.0	14.3	8.0
Net Interest Income (% of Total Income)	75.3	77.2	77.5
Net Fees & Commissions (% of Total Income)	11.7	11.7	10.4
Operating Expenses (% of Total Income)	50.7	51.6	42.9
Liquidity			
Liquid Assets (% of Total Assets)	33.9	32.9	35.9
Liquid Assets (% of Short-Term Liabilities)	42.7	41.3	44.9
Loan-Deposit Ratio (%)	69.6	69.6	67.9
Non-Bank Deposits (% of Total Deposits)	80.2	80.3	73.7

<sup>\*</sup> Locally-Incorporated Banks only.

<sup>\*\*</sup> Real Estate/ Construction exposure is calculated as the share of the construction, commercial real estate financing, and residential mortgages sectors of total lending.

<sup>\*\*\*</sup> ROE is defined as net profit over Tier 1 Capital (Locally-Incorporated Banks only). Source: CBB.

Annex1 Table 3: Selected Financial Soundness Indicators—Conventional Wholesale Banks

Indicator	Jun-18	Dec-18	End of period)  Jun-19
			Juli-13
Capital Adequacy			
CAR (%) *	18.4	18.1	19.4
Tier 1 CAR (%) *	17.4	17.3	18.5
Leverage (assets/capital) (Times) *	7.1	7.4	7.4
NPLs Net Provisions to Capital (%) *	4.9	6.2	4.3
Asset Quality			
NPLs (% of Total Loans)	5.3	5.7	5.3
Specific Provisions (% of NPLs)	66.6	67.9	74.3
Net NPL' (% of Net Loans)	1.9	1.9	1.4
Loan Concentration (Share of Top Two Sectors) (%)	37.7	39.0	38.7
Real Estate/ Construction Exposure (%) **	21.0	23.2	21.9
Earnings			
ROA (%)	0.4	0.7	0.6
ROA Local Banks (%)	0.2	0.1	0.5
ROA Overseas Banks (%)	0.7	1.3	0.6
ROE (%) ***	1.7	0.8	4.1
Net Interest Income (% of Total Income)	45.4	56.2	42.0
Net Fees & Commissions (% of Total Income)	34.2	22.5	34.7
Operating Expenses (% of Total Income)	67.5	68.0	54.6
Liquidity			
Liquid Assets (% of Total Assets)	21.9	23.0	20.9
Liquid Assets (% of Short-Term Liabilities)	27.7	29.0	26.2
Loan-Deposit Ratio (%)	65.8	64.2	63.4
Non-Bank Deposits (% of Total Deposits)	50.3	49.1	43.7

<sup>\*</sup> Locally-Incorporated Banks only.

<sup>\*\*</sup> Real Estate/ Construction exposure is calculated as the share of the construction, commercial real estate financing, and residential mortgages sectors of total lending.

<sup>\*\*\*</sup> ROE is defined as net profit over Tier 1 Capital (Locally-Incorporated Banks only). Source: CBB.

Annex1 Table 4: Selected Financial Soundness Indicators—Islamic Retail Banks

			(End of period)
Indicator	Jun-18	Dec-18	Jun-19
Capital Adequacy			
CAR (%)	18.1	17.6	17.3
Tier 1 CAR (%)	15.1	14.6	14.5
Leverage (Assets/Capital) (Times)	8.8	9.5	10.0
NPFs Net Provisions to Capital (%)	32.5	34.8	36.1
Asset Quality			
NPFs (% of Total Facilities)	10.4	9.5	9.5
Specific Provisions (% of NPFs)	43.5	38.6	38.0
Net NPFs (% of Net Facilities)	6.3	6.1	6.2
Facilities Concentration (Share of Top Two Sectors) (%)	32.8	31.9	32.4
Real Estate/ Construction Exposure (%) *	28.7	28.0	26.8
Earnings			
ROA (%)	0.3	0.6	0.3
ROE (%) **	2.5	6.8	3.9
Net Income from Own Funds, Current Accounts and Other Banking Activities (% of Operating Income)	56.0	59.7	53.5
Net income from Jointly Financed Accounts and Mudarib Fees (% of Operating Income)	42.2	39.2	45.0
Operating Expenses (% of Total Income)	77.5	78.5	73.3
Liquidity			
Liquid Assets (% of Total Assets)	14.5	14.1	17.7
Facility-Deposit Ratio (%)	92.1	94.8	95.9
Current Accounts from Non-Banks (% of Non-Capital Liabilities, excl. URIA)	26.9	23.4	25.7

<sup>\*</sup> Real Estate/ Construction exposure is calculated as the share of the construction, commercial real estate financing, and residential mortgages sectors of total lending.

Source: CBB.

<sup>\*\*</sup> ROE is defined as net profit over Tier 1 Capital.

A nnex1 Table 5:
Selected Financial Soundness Indicators—Islamic Wholesale Banks

Indicator	Jun-18	Dec-18	Jun-19
Capital Adequacy			
CAR (%)	20.2	18.1	18.0
Tier 1 CAR (%)	19.0	17.0	16.9
Leverage (Assets/Capital) (Times)	6.6	7.0	7.7
NPFs Net Provisions to Capital (%)	1.0	1.0	0.4
Asset Quality			
NPFs (% of Total Facilities)	1.8	1.3	1.1
Specific Provisions (% of NPFs)	85.3	79.6	91.7
Net NPFs (% of Net Facilities)	0.3	0.3	0.1
Facilities Concentration (Share of Top Two Sectors) (%)	34.9	43.7	46.6
Real Estate/ Construction Exposure (%) **	21.3	19.8	18.3
Earnings			
ROA (%)	0.6	1.0	0.4
ROE (%) ***	3.9	6.8	2.9
Net income from own funds, current accounts and other banking activities (% of operating income)	60.7	58.4	51.2
Net income from jointly financed accounts and Mudarib fees (% of operating income)	37.9	40.4	45.4
Operating expenses (% of total income)	66.2	70.9	71.2
Liquidity			
Liquid Assets (% of Total Assets)	13.4	12.6	17.2
Facility-Deposit Ratio (%)	80.4	75.2	73.0
Current Accounts from Non-Banks (% of Non-Capital Liabilities, excl. URIA)	42.5	40.5	40.3

<sup>\*</sup> Real Estate/ Construction exposure is calculated as the share of the construction, commercial real estate financing, and residential mortgages sectors of total lending.

Source: CBB.

<sup>\*\*</sup> ROE is defined as net profit over Tier 1 Capital.

### **Annex 2: Selected Graphs**

### A. Overall Banking Sector

Annex 2 Graph 1: CAR



Annex 2 Graph 3: Profitability

Source: CBB.

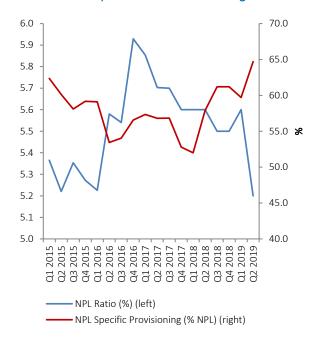
7.0 1.2 1.0 6.0 0.8 5.0 0.6 4.0 0.4 0.2 2.0 0.0 1.0 Q2 2016 Q1 2018 Q2 2018 Q3 2018 Q4 2018 Q3 2015 Q4 2015 Q1 2016 Q3 2016 Q4 2016 Q1 2017 Q2 2017 Q3 2017 Q4 2017

- ROE (%) (right)

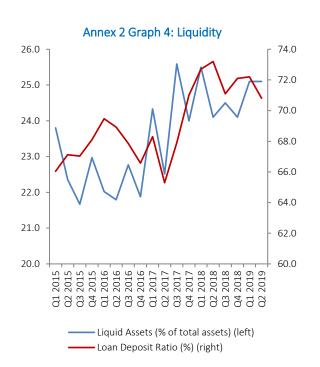
-ROA (%) (left)

Source: CBB.

Annex 2 Graph 2: NPLs and Provisioning



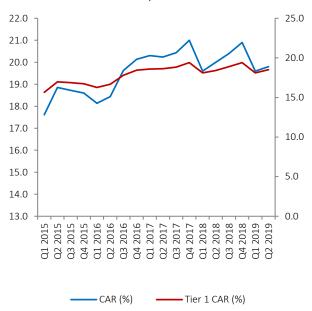
Source: CBB.



Source: CBB.

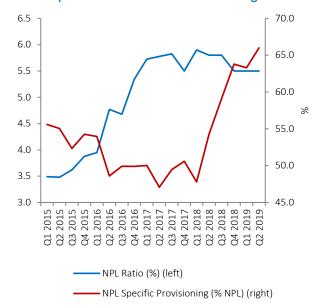
#### B. Conventional Retail

Annex 2 Graph 5: CR Banks' CAR



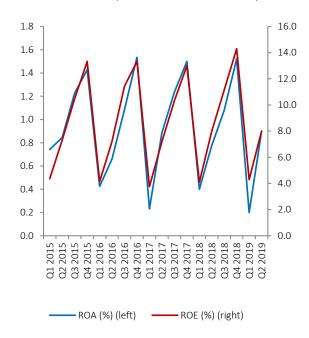
Source: CBB.

Annex 2 Graph 6: CR Banks' NPLs and Provisioning



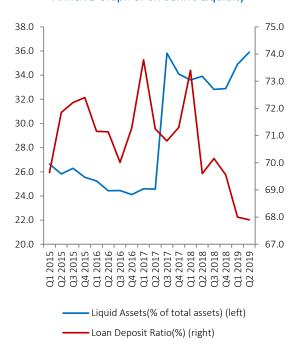
Source: CBB.

Annex 2 Graph 7: CR Banks' Profitability



Source: CBB.

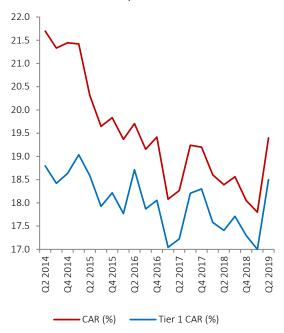
Annex 2 Graph 8: CR Bank's Liquidity



Source: CBB.

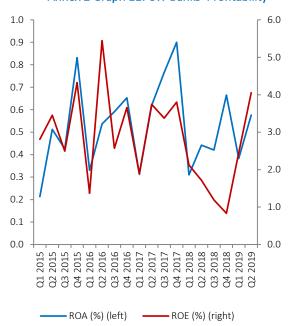
#### C. Conventional Wholesale

Annex 2 Graph 9: CW Banks' CAR



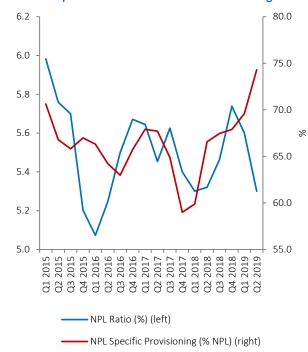
Source: CBB.

Annex 2 Graph 11: CW Banks' Profitability



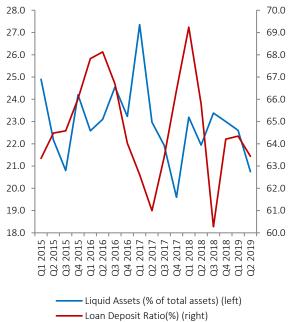
Source: CBB.

Annex 2 Graph 10: CW Banks' NPLs and Provisioning



Source: CBB.

Annex 2 Graph 12: CW Banks' Liquidity



Source: CBB.

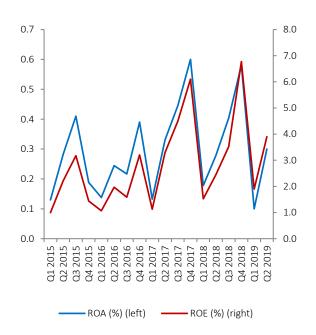
#### D. Islamic Retail

Annex 2 Graph 13: IR Bank's CAR



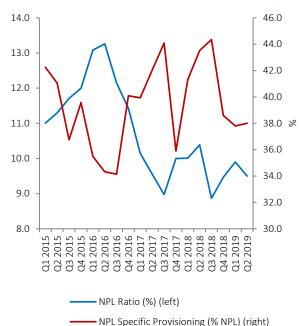
Source: CBB.

Annex 2 Graph 15: IR Bank's Profitability



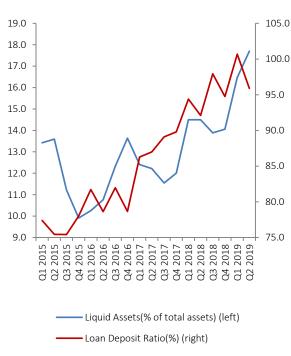
Source: CBB.

Annex 2 Graph 14: IR Banks' NPFs and Provisioning



Source: CBB.

Annex 2 Graph 16: IR Banks' Liquidity



Source: CBB.

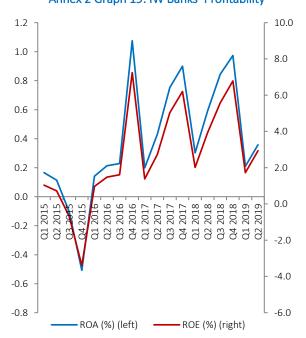
#### E. Islamic Wholesale

Annex 2 Graph 17: IW Banks' CAR



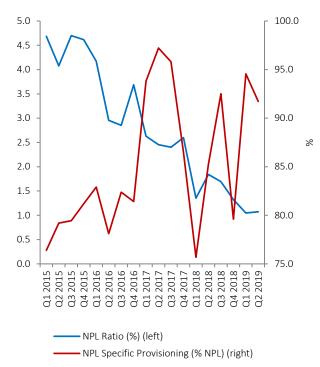
Source: CBB.

Annex 2 Graph 19: IW Banks' Profitability



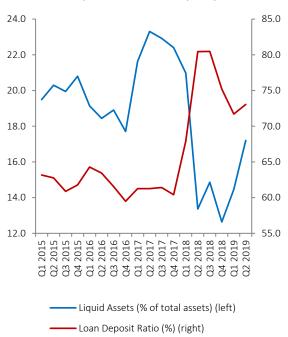
Source: CBB.

Annex 2 Graph 18: IW Banks' NPFs and Provisioning



Source: CBB.

Annex 2 Graph 20: IW Banks' Liquidity



Source: CBB.

### **List of Abbreviations**

Acronym	Description
ATM	ATM Clearing System
BCTS	Bahrain Cheque Truncation System
BENEFIT	The Benefit Company
BFB	Bahrain Fintech Bay
BSE	Bahrain Stock Exchange
CAR	Capital Adequacy Ratio
CBB	Central Bank of Bahrain
CMSD	Capital Markets Supervision Directorate
CRB	Conventional Retail
CW	Conventional Wholesale
DSIBs	Domestically Systemically Important Banks
EBPP	Electronic Bill Presentment and Payment System
EFTS	Electronic Fund Transfer System
EU	European Union
FinTech	Financial Technology
FSC	Financial Stability Committee
FSD	Financial Stability Directorate
FSIs	Financial Soundness Indicators
FSR	Financial Stability Report
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GP	Gross Premiums
IBAN	International Bank Account Number
IGA	Information and E-Government Authority
IMF	International Monetary Fund
IR	Islamic Retail
IW	Islamic Wholesale
JYP	Japanese Yen
LCR	Liquidity Coverage Ratio
NFA	Net Foreign Assets
NPW	Net Premiums Written
NPF	Non-performing Facilities
NPL	Non-performing Loans
NSFR	Net Stable Funding Ratio
P/E ratio	Price Earnings Ratio
PFMI	Principles for Financial Market Infrastructures
POS	Point of Sale
ROA	Return on Assets
ROE	Return on Equity
RTGS	Real Time Gross Settlement
RWA	Risk Weighted Assets
SMEs	Small Medium Enterprises
SSSS	Scripless Securities Settlement System
TRMST	Technology Risk Management Security Team

List of Acronyms 138