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Table of Contents

Table of Contents.....	i
List of Tables.....	iii
List of Charts.....	iv
Preface	1
Executive Summary.....	3
Part I:	7
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.....	11
1.3 Recent Trends in the Global Economy.....	11
2. Developments in Bahrain's Financial and non-Financial Sector	22
2.1 Overview.....	22
2.2 Bahrain's Banking sector	23
2.3 Monetary indicators	30
2.4 The Bahraini Households Sector.....	31
Part II:	37
Performance of the Banking Sector	37
3. Conventional Banks	38
3.1 Overview.....	38
3.2 Conventional Retail Banks	39
3.3 Conventional Wholesale Banks	44
3.4 Overall Assessment of the Conventional Banking Sector.....	49
4. Islamic Banks	50
4.1 Overview.....	50
4.2 Islamic Retail Banks	51
4.3 Islamic Wholesale Banks.....	56
4.4 Overall Assessment of the Islamic Banking Sector	60

Part III:	61
Developments in the Equity Market and Payment Systems	61
5. Performance of Equity Market	62
5.1 Bahrain Market Trends	62
5.2 GCC Market Trends	67
5.3 Overall assessment of the equity market	68
6. Payments and Settlements Systems	69
6.1 Overview	69
6.2 Retail Payments	70
6.2.1 Cheques and paper based instruments	70
6.2.2 E-Payment systems	71
6.3 Wholesale Payments	72
7. Cyber Risk	76
7.1 Overview	76
7.2 Cyber Risk and Financial Stability	76
7.3 Initiatives undertaken by leading Central Banks to fight Cyber Crime	81
7.4 GCC Initiatives	84
7.5 Initiatives undertaken by the Central Bank of Bahrain to fight Cyber Crime	85
Annex:	87
Financial Soundness Indicators	87

List of Tables

Table 2-1: Evolution of the size of the Banking sector in Bahrain	24
Table 2-2: Personal Loans Breakdown.....	32
Table 2-3: Business Loans By Sector	34
Table 3-1 Capital Provisions Ratios for Local Conventional Retail Banks	39
Table 3-2: NPL Figures for Conventional Retail Banks	39
Table 3-3: Conventional Retail Banks' Impaired Loan Ratios by Sector	40
Table 3-4: Distribution of Local Conventional Retail Banks' Lending (% total loans)	41
Table 3-5: Distribution of Overseas Conventional Retail Banks' Lending (% total loans)	42
Table 3-6: Profitability of Retail Banks (%)	43
Table 3-7: Retail Banks' Liquidity Profile (%)	43
Table 3-9: Capital Provisions Ratios for Local Conventional Wholesale Banks.....	44
Table 3-10: NPL Figures for Conventional Wholesale Banks	44
Table 3-11: Conventional Wholesale Banks' Impaired Loan Ratios by Sector.....	45
Table 3-12: Distribution of Conventional Local Wholesale Banks' Lending (% total Loans)	46
Table 3-13: Distribution of Conventional Overseas Wholesale Banks' Lending	47
Table 3-14: Profitability of Wholesale Banks (%).....	48
Table 4-1 Capital Provisions Ratios for Islamic Retail Banks.....	51
Table 4-2: NPF Figures for Islamic Retail Banks	51
Table 4-3: Islamic Retail Banks' NPF Ratios by Sector (% of gross facilities per sector)	52
Table 4-4: Distribution of Islamic Retail Banks' Lending by Economic Activity (% of total facilities)	53
Table 4-5: Distribution of Islamic Retail Banks' Lending by Islamic Instrument (% of total facilities)	54
Table 4-6: Profitability of Islamic Retail Banks (%)	54
Table 4-7: Liquidity Measures for Islamic Retail Banks.....	55
Table 4-9 Capital Provisions Ratios for Islamic Wholesale Banks	56
Table 4-10: NPF Figures for Islamic Wholesale Banks	56
Table 4-11: Islamic Wholesale Banks' NPF Ratios by Sector.....	57
Table 4-12: Distribution of Islamic Wholesale Banks' Lending by Economic Activity (% total facilities)	58
Table 4-13: Distribution of Islamic Wholesale Banks' Lending by Islamic Instrument (% of total facilities)	59
Table 4-14: Profitability of Islamic Wholesale Banks (%).....	60
Table 4-15: Liquidity Measures for Islamic Wholesale Banks.....	60
Table 5-1: Market Capitalization on the Bahrain Bourse.....	63
Table 5-2: Price-Earnings Multiples	64
Table 5-3: Sectoral Distribution of Shares Traded by Value (% of all shares traded)	65
Table 5-4: Sectoral Distribution of Shares Traded by Volume (% of all shares traded)	65
Table 5-5: Number of Transactions by Sector	66
Table 5-6: Stock Market Indices in GCC counties	67

List of Charts

Chart 1-1: Real GDP Growth in Selected Europeans countries (Quarterly%) Seasonally Adjusted	12
Chart 1-2: Real GDP Growth in Advanced Economies (Quarterly%)	13
Chart 1-3: Quaterly Real GDP Growth in BRIICS (Quarterly%)*	14
Chart 1-4: Real GDP Growth in GCC Countries (Annual percent change).....	15
Chart 1-5: Yields on 10 Year Sovereign Bonds	16
Chart 1-6: Five Year Spreads on Credit Default Swaps	17
Chart 1-7: Global Equity Market Indices (Re-indexed to January 2008).....	17
Chart 2-1: Retail Banks' Assets (BD million).....	25
Chart 2-2: Categorization of Retail Banks' Assets (BD million)	25
Chart 2-3: Retail Banks' Assets (%) by	26
Chart 2-4: Retail Banks' Assets (%) by Geographical Classification (Nov2014).....	26
Chart 2-5: Retail Banks' Assets (%) by	26
Chart 2-6: Wholesale Banks' Assets (USD Billion).....	27
Chart 2-7: Wholesale Banks' Assets (USD Billion).....	27
Chart 2-8: Wholesale Banks Assets by: Geographical Classification (2007)	28
Chart 2-9: Wholesale Banks Assets by: Geographical Classification (Nov.2014).....	28
Chart 2-10: Wholesale Banks Assets by.....	28
Chart 2-11: Credit to Private Sector.....	29
Chart 2-12: Loans to General Government.....	29
Chart 2-13: Total Deposits and total Domestic Credit (BD Million)	29
Chart 2-14: Money Supply (BD Billion) from May 2013 to October 2015	30
Chart 2-15: Monthly Inflation in 2013-2014 (CPI%*).....	30
Chart 2-16: Personal Loans and Advances (Volume and % of GDP)	31
Chart 2-17: Growth Rate of Total Personal Loans and Advances (%)	32
Chart 2-18: Personal Loans Breakdown (October 2015)	33
Chart 2-19: Retail Banks- Average Interest Rates on Personal Loans (%).....	33
Chart 2-20:: Business Loans and Advances (Volume and % of GDP)	34
Chart 2-21: Business Loans by Sector October 2015	35
Chart 2-22:: Retail Banks- Average Interest Rates on Business Loans (%).....	35
Chart 3-1: Conventinoal Retail Banks' Impaired Loans by Sector	40
Chart 3-2: Distribution of Conventional Local Retail Banks' Lending (% of total loans)	41
Chart 3-3: Distribution of Conventional Overseas Retail Bank's Lending (% of toal loans)	42
Chart 3-4: Conventional Wholesale Banks' Impaired Loans by Sector	45
Chart 3-5: Distribution of Conventional Local Wholesale Banks' Lending (% of total loans)	46
Chart 3-6: Distribution of Overseas Wholesale Banks' Lending (%)	48
Chart 4-1:Islamic Retail Bank's NPF's by Sector (% of gross facilities per sector)	52
Chart 4-2:Distribution of Islamic Retail Bank's Lending by Economic Activity (% of total facilities)	53
Chart 4-3:Distribution of Islamic Retail Bank's Lending by Islamic Instrument (% of total facilities)	54
Chart 4-4: Islamic Wholesale Bank's NPF's by Sector	57
Chart 4-5: Distribution of Islamic Wholesale Banks's Lending	58
Chart 4-6: Distribution of Islamic Wholesale Bank's Lending by Islamic Instrument (% of total facilities)	59
Chart 5-1: Recent Trends in the Bahrain All-Share Index, December 2013-December 2015.	62
Chart 5-2: Bahrain All-Share Index, December 2012-December 2014	63
Chart 5-3: Market Capitalisation by Sector, Dec 2015.....	64
Chart 5-4: Sectoral Distribution of Shares Traded by Value (% of all shares traded) in December 2015.....	65
Chart 5-5: Sectoral Distribution of Shares Traded by Volume (% of all shares traded) in December 2015	66
Chart 5-6: GCC Indices December 2014 – December 2015	67
Chart 6-1: ACS System- Average Daily Volume and Value of Payments Processed, Dec 2014 – Dec 2015	71
Chart 6-2: Number and Value of ATM Transactions, Dec 2014 – Dec 2015	72
Chart 6-3: RTGS System- Average Daily Volume and Value of Payments Processed, Dec 2014 – Dec 2015.....	73
Chart 6-4: Interbank and Customer Transactions, Daily Volume and Value, Dec 2014 – Dec 2015.....	73
Chart 7-1:Top 5 types of Economic Crime Experienced by the Financial Services Sector	78
Chart 7-2: Top 15 Countries found to Have Most Cybercrime	79
Chart 7-3 : Proportion of respondents highlighting operational/cyber risk as a key concern	82

Preface

A key objective of the 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, CBB attaches utmost importance in fostering the soundness and stability of the financial system. CBB recognizes that financial stability is critical to maintaining Bahrain's position as a regional financial centre and ensuring that the sector continues to contribute significantly to growth, employment and development in Bahrain.

Financial stability can be defined as a situation where the financial system is able to function prudently, efficiently and uninterrupted, even in the face of adverse shocks.

This objective is the primary responsibility of CBB's Financial Stability Directorate, 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 Financial Stability Directorate (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 crystallize into systemic financial turbulence.

The FSR is prepared regularly for the CBB management, reviewing recent trends and identifying areas of concern which require supervisory and policy attention. Financial Soundness Indicators (FSIs) are used to monitor the financial sector on a continuous basis.

This new edition of the FSR is organized into seven chapters divided into three parts part as follows:

- Part I: looks at national and international developments:
 - Chapter 1 reviews recent international financial developments.
 - Chapter 2 examines the recent developments in Bahrain's financial sector and the household sector.
- Part II: looks at the developments in the banking sector:
 - Chapter 3 evaluates the financial condition and performance of conventional banks
 - Chapter 4 evaluates the financial condition and performance of Islamic banks.
- Part III: looks at the developments in equity market and payment and settlement systems.

- Chapter 5 reviews recent trends on the equity market.
- Chapter 6 focuses on stability issues relating to the payment and settlement systems.
- Chapter 7 focuses on cyber risks and cybersecurity issues in relation to financial stability

Unless indicated otherwise, Chapter 3 and Chapter 4 of the report analyzes data covering the period between end-March 2015 and end-September 2015.

Executive Summary

Global Macro Financial Environment Overview

The global economy has shown weaker-than-expected performance in the second half of 2015 and recovery remains a challenge in many economies. Despite large scale of quantitative easing programs in most advanced economies, global economic recovery is still weak and the global economy has not returned to a sustainable path to recovery. The weaker growth coincides with the further slowdown in growth in emerging markets. Growth in advanced economies and emerging markets is projected to decline for the fifth year in a row.

In the US, economic conditions have improved remarkably throughout 2015 driven by dynamism of the retail sector, which recorded a strong demand as consumer confidence improved and unemployment rate dropped to 5.1%. Recovery was supported by a fall in oil price and the appreciation of the US dollar. In the Euro area, some countries have shown signs of recovery. Japan's economy declined in the first half of 2015 as high public debt inherited from the past continued to create major macroeconomic and fiscal challenges in addition to net exports and consumption falling short of expectations due to slowing demand from China and other Asian markets. In emerging market economies, lower potential growth is the dominating factor. The MENA region, as an important bloc of the world economy, has shown growth, but at a rate that was lower than expected.

Despite the trouble in the MENA region and the drop in oil prices, the member states of the GCC have been on a stable growth path. The ongoing economic performance in GCC countries is currently facing the challenge of declining oil price, which will impact the authorities' spending power.

The Non-Financial Sector Overview

Bahrain has emerged as a regional financial center. This has been essential to the development of its economy and the financial sector has come to play a significant role in economic activity and employment creation. The insurance industry has progressed well during the past few years, which has grown into a regional hub. Insurance contribution increased remarkably from over the decade. The boom in Islamic banking and Islamic financial services make Bahrain a very attractive destination for Islamic finance.

The Bahraini banking sector is still performing well and represented around 16 % of GDP in 2014. The assets of the retail banking sector rose from BD 18.6 billion in 2007 to BD 30.4 billion in the third quarter of 2015. Wholesale banking assets stood at USD 109.5 billion as of end of September 2015.

Retail banking total assets continued growing to reach BD 30.7 billion in October 2015. This increase in retail banking assets was driven by domestic assets which contributed to 53.1% of total assets at October 2015.

Outstanding personal loans used as a proxy for household borrowing shows that the household debt increased throughout the period from November 2014 to May 2015. Personal loans as a percentage of GDP increased steadily until October 2015 and so did outstanding business loans.

Conventional Banks

The financial soundness indicators show that conventional retail and wholesale banks did not experience any significant deterioration in their capital positions. Capital adequacy ratios for conventional retail banks increased to reach 18.7% in September 2015 compared to 17.6 in March 2015. Capital adequacy ratio for locally-incorporated wholesale banks decreased from 21.5% to 19.6% over the same period. Loan delinquencies have remained for conventional retail banks at 3.6% and for wholesale banks decreased to 5.7% at end of September 2015. Loan concentration remains for conventional retail and wholesale banks despite some decrease in some sectors.

As at end-Sept 2015, return-on-assets (ROA) remained at 1.2% for conventional retail banks between September 2014 and September 2015. Return-on-equity (ROE) for locally-incorporated retail banks was 10.5% in September 2015 compared to 11.3% in September 2014. ROA for the conventional wholesale banking sector was at 0.4% in September 2015, a decrease from the 0.7% in September 2014. ROE for local wholesale banks decreased from 4.4% to 2.5% over the same period. For conventional retail banks and wholesale banks liquid assets as proportion of total assets increased to 26.3% and 20.8% respectively over the same period.

Islamic Banks

The financial soundness indicators show that capital positions decreased for Islamic retail and Islamic wholesale banks. The capital adequacy ratio of Islamic retail and Islamic wholesale banks decreased to 15.6% and 19.5% respectively in September 2015.

Non-performing facilities (NPFs) for Islamic retail banks increased to 11.7% in September 2015 from 11.0% in March 2015. For Islamic wholesale banks, NPFs remained unchanged at 4.7% over the same period. Facilities concentration has remained almost the same for retail Islamic banks while it slightly increased for wholesale Islamic banks.

The earnings picture looks the same for Islamic retail with ROA unchanged at 0.4% in September 2015 and ROE decreasing from 3.9% in September 2014 to 3.2% in September 2015. ROA and ROE for wholesale Islamic banks decreased to a -0.1% and -0.7% over the same period, indicating negative earnings. Moreover, Islamic retail liquidity position was relatively unchanged with the liquid asset decreasing for Islamic retail to 11.2% and increasing for Islamic Wholesale to reach 19.9%.

Performance of Equity Markets

A look at *year-on-year* data shows that the Bahrain All Share Index decreased by 210.6 points (14.7%) between December 2014 and December 2015. Market capitalization of the Bahrain Bourse stood at BD 7.1 billion. This level of market capitalization is 3.2% lower than the level attained in June 2015 and 13.5% lower *year-on-year*. The price-earnings ratio (P-E ratio) for the stock market stood at 8.85, a decrease from the 10.41 attained last year in December 2014 and the 9.83 in June 2015.

The bulk of the value of shares traded in December 2015 was the Commercial Banks sector whose traded shares (by value) represented 75.5% of total shares traded up from 45.1% in June 2015.

The GCC equity markets tumbled in 2015 amid low oil price. The price of a barrel of oil collapsed from \$105.8 in June 2014 to a five-year low at \$37.0 in December 2015. As a result, all GCC indices recorded negative rates compared to December 2014.

Payments and Settlement System

The various components of Bahrain's payments and settlement framework continue to function efficiently. The payment system in Bahrain can be classified as retail and wholesale payments. Retail payments include cheques, credit transfers, and debit and credit card transactions. Wholesale payments refer to the real time gross settlement system to process inter-bank payments.

By end of December 2015, the average daily volume of cheques processed through the Automated Cheque Clearing System (ACS) had a year-on-year decrease of 0.8% and the average daily value of cheques had a year-on-year increase of 1.6%. The number of withdrawal transactions processed through the ATM Clearing System had a year-on-year growth of 14.8% and in value terms the withdrawals processed had a year-on-year growth was 14.6%. The average daily volume of transfers decreased by 28.7% year-on-year. In value terms, the average daily value of transfers had a 21.1 % year-on-year increase.

Cyber Risk

Cyber Risk has recently been classified as a main threat to financial stability by several central banks by causing disruptions to the infrastructure of financial institutions. The number of cybercrimes reported each year is constantly increasing and the methods used by hackers are evolving with every technological innovation in the financial sector. According to The Global Economic Crime Survey, 49% of the banking, capital markets and investment management segment were victims to economic crime in 2014, in addition to 45% from the Financial Services segment compared to 36% from Insurance and 34% from across all other industries.

The US and UK conducted a joint exercise in November 2015 to enhance the action and immediate response to any cyber-attack in the financial sectors of both nations. The Bank of

England launched a vulnerability testing framework to closely examine the financial system's infrastructure and improve the readiness and resilience to cybercrime.

There have been a number of IT Security related initiatives undertaken on a GCC level to ensure the cooperation of the GCC states in combating cybercrimes and sharing experiences in this matter. An IT Security Taskforce exists with the objective of addressing all IT-Security concerns between GCC central banks and monetary agencies. The Central Bank of Bahrain was also a leader in the region to adopt the necessary measures to ensure the soundness and stability of Bahrain's Financial Sector. The Technology Risk Management Security Team (TRMST) was established to address the main IT and Cyber Security related matters and take the necessary actions accordingly.

Part I:

Developments in the International and Domestic Financial Markets

1. Developments in the International Financial Markets

Chapter

1

Key Points

- Since June 2015, the global economy hasn't returned to a sustainable path to recovery.
- Political tensions continue to impact the global economic growth and recovery.
- Depreciation of the renminbi in August 2015 has increased the volatility of financial markets and added further global risk aversion.
- The International Monetary Fund approved the yuan to be added to its elite basket of reserve.
- The U.S. dollar continued to appreciate against many major and emerging market currencies amid divergent monetary policy expectations.
- The future adjustment in monetary policies by major developed countries, particularly QE, remains an important risk factor for global growth and financial stability.

1.1 Overview

Since June 2015, the global economy has shown weaker-than-expected performance and recovery remains a challenge in many economies. Despite the large scale of quantitative easing programs in most advanced economies, global economic recovery is still weak and fragile and the global economy has not returned to a sustainable path to recovery. Weaker growth coincides with the further slowdown in growth in emerging markets, and weak recovery in advanced economies. Growth in advanced economies and emerging markets is projected to decline for the fifth year in a row. Furthermore, the uncertainty prior to the normalization of monetary policy by the US Federal Reserve has also created some tensions and fears in emerging economies. All these issues have amplified volatility in global financial markets generating additional challenges for emerging markets and developing economies.

as well. During the previous six months, the global economic and financial condition was marked by some important events in advanced countries and emerging market economies. These events could be summarized as follow:

- In the US, economic conditions have improved remarkably throughout 2015 driven by the retail sector, which recorded a strong demand as consumer confidence improved and unemployment rate dropped to 5.1%. Recovery was supported by a fall in oil price and the appreciation of the US dollar. Furthermore, the US real estate market has recently shown signs of recovery in both volume and price and the US economy have witnessed an upsurge in home sales and non-residential investments. Regarding the monetary policy, the Federal Reserve has already normalized the US monetary policy by ending its asset purchasing program known as Quantitative Easing. Hence, the Fed prepared for a smooth exit from the unconventional monetary policies to a conventional one by increasing interest rates from 0.25% to 0.5% in December.
- In the Euro area, some countries - notably peripheral countries - have shown signs of recovery. For example Italy, after a long period of recession, has finally recorded a positive growth rate during the first and second quarter of 2015. Spain, Ireland and Portugal have also realized positive growth rates within the same period. The depreciation of the single currency along with the drop of oil price have boosted exports activities and improved the trade balance for peripheral countries. The German economy, the largest European economy and most important Europe's growth engine, contracted despite the recovery in other euro countries. To sum-up, growth among EU countries remains disproportionate and the gaps in economic performance remain large. Facing the pressure, the ECB continues injecting more liquidity in the economy and pledges to implement further structural reforms to support the Eurozone economy
- Japan's economy declined in the first half of 2015 as high public debt inherited from the past continued to create major macroeconomic and fiscal challenges in addition to net exports and consumption falling short of expectations due to slowing demand from China and other Asian markets. However in the second half of 2015, growth in Japan picked up to positive figures.

- In emerging market economies, lower potential growth is the dominating factor. For these economies as a whole, potential growth was revised down in 2015 by the IMF. Weaker exports, lower commodity prices and political uncertainty are the principal reasons explaining the shrinking of their economies. China devalued the renminbi to maintain its competitiveness and growth, which resulted in financial market volatility. India has recovered from its relative slump; thanks in part to effective policies and a renewal of confidence. Growth rate reached 7.5% in the first quarter of 2015 and is expected to remain at that level. (OECD, 2015). In contrast, uncertain investment prospects and low oil revenues in Russia had already lowered growth, and the crisis has made growth prospects worsen leaving the Russian economy in recession. Uncertain prospects and low investment are also weighing on growth in Brazil and the country has been in recession for the 6th consecutive quarter since Q2/2014.
- The MENA region, as an important bloc of the world economy, has recorded a positive sign of recovery but growth rate was lower than expected. This is mainly due to the political and economic turmoil in the MENA region, notably in Libya, Yemen, Iraq and Syria, which destabilized the region as a whole. While the sharp decrease in oil prices raised some challenges for oil-exporting countries, it improved the trade and fiscal balance of MENA oil importing countries.
- GCC countries are a central bloc of the MENA region; they have recorded good economic performances boosted by large infrastructure projects and improvement in non-oil sector growth despite challenges faced due to declining oil prices. This performance has strengthened the positions of GCC banks which remain well capitalized and profitable.
- In Bahrain, banks remain quite profitable and well capitalized, and their reported non-performing loan ratios remain low. However, the recent sharp drop in the prices of oil and some other commodities, should it become persistent, will weigh on the overall GCC economy.

In the following section, the recent trends in the global economy are analyzed and the evolution of major financial and economic indicators during the previous six months is looked at.

1.2 Global Macro-financial Environment

After a short period of prosperity, the global economic and financial conditions have weakened and potential growth rates are being revised downward by major international organizations, i.e. the IMF and OECD. This new trend has affected the global demand and made the full recovery a challenging task for some advanced economies. The slowdown of economic activity and the persistence of uncertainty have raised downside risks.

Financial market sentiment remained positive with high equity prices, and spreads on Credit Default Swaps have continued to decline and yields on 10 Year Sovereign Bonds remain low relative to historical norms. However, global risk appetite increased, but market volatility was generally moderate and under controls.

1.3 Recent Trends in the Global Economy

A. Economic Performance

Since June 2015, global economic growth has remained moderate and uneven across countries and regions as well. This is mainly due to a weak financial sector performance and a modest pace of recovery in advanced economies. Moreover, with the normalization of the US monetary policy, the global outlook became vulnerable, fragile and uncertain. During 2015, the International Monetary Fund revised many times its outlook to the global economy.

Across major advanced economies, the recovery was strongest in the US, prompting the gradual removal of monetary policy stimulus. Similarly, the Australian, Japanese and UK economies had shown courageous signs of recovery during the recent period.

In contrast, the recovery in Europe remains fragile. Economic activity in the Euro area has stalled since the second quarter with weaknesses in some Euro economies and increased geopolitical tensions. Concerns about the very low level of inflation and the medium-term growth outlook have led the ECB to step up its further unconventional monetary policy stimulus by injecting exceptional liquidity.

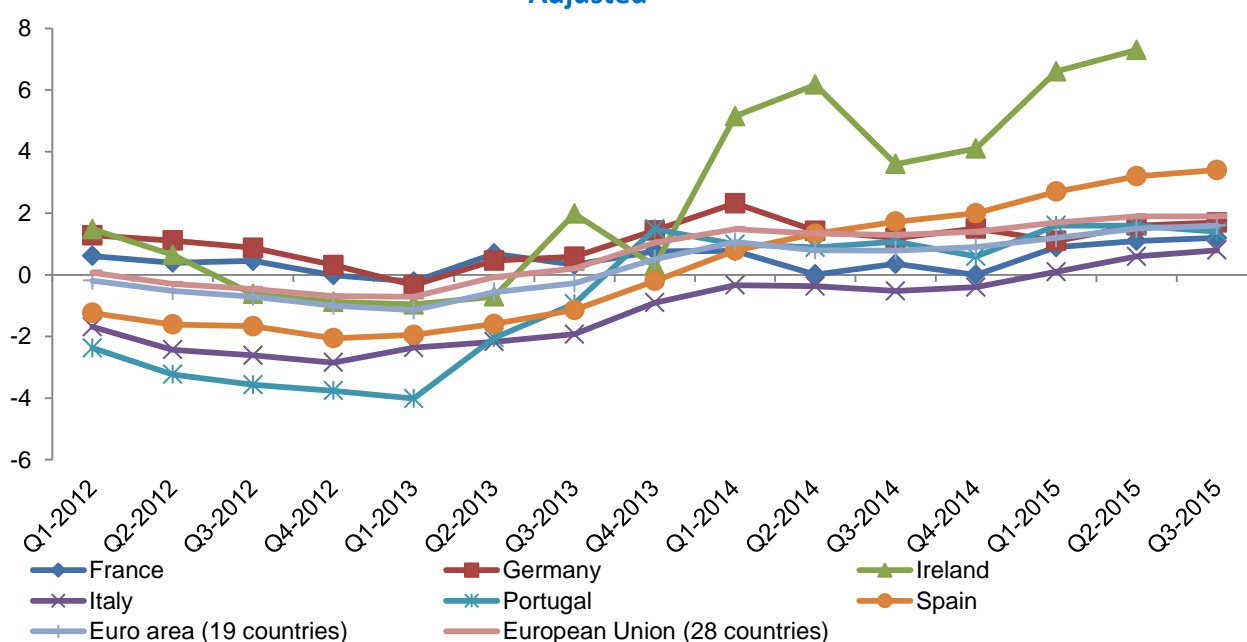
The recent OECD's data shows that since the fourth quarters of 2013, the Euro Area (19 countries) has been experiencing a positive and continuous growth. In the third quarter of 2015, Euro Area (19 countries) has achieved a growth by 1.6% the highest level since the past seven quarters. Similarly, the Eurozone (28 countries) had achieved 1.9% of growth in the third quarter of 2015. This level is the highest since 2009. The risks surrounding the economic outlook for the Euro Area are evaluated to be on the downside as the risk of deflation weigh on the growth of the Euro Area. To further boost the Eurozone economic recovery, the European Central Bank announced a variety of new easing actions for the Euro

Area including: forward guidance that policy rates will remain at present or lower levels for an extended period of time; a negative deposit rate at the European central bank; operations to support bank lending to households (excluding residential mortgages) and non-financial corporations; and plans to explore purchases of asset-backed securities.

At a country level, the PIIGS (Portugal, Ireland, Italy, Greece and Spain) countries appear to be the best performer of 2015 since the European debt crisis. Ireland has surprisingly achieved the best performance as GDP growth reached 7.3% in the second quarter of 2015. The level is the highest since the onset of the financial crisis and it shows a very courageous sign of recovery and the dynamism of the Irish economic performance. Spain has also shown a continuous positive path of recovery as growth rate reached 3.4% in the third quarter of 2015. Portugal has also achieved continuous positive growth during all the year 2015 and growth rate was 1.4% in the third quarter. Italy has finally realized a positive growth for all the three quarters of 2015 after a long period of recession.

It is concluded from the OECD's figures that some of the PIIGS economies have finally had positive growth rates since the beginning of the year and have left the recession and their economies have finally recovered from the previous crises. Regarding the two most important economic powers in the Eurozone; France has realized a positive growth by 1.2% in the third quarter of 2015; the highest since a long time. Germany, the largest economy in the Eurozone has experienced a moderate economic activity with GDP growth standing at 1.7 % in the third quarter of 2015.

Chart 1-1: Real GDP Growth in Selected Europeans countries (Quarterly%) Seasonally Adjusted*



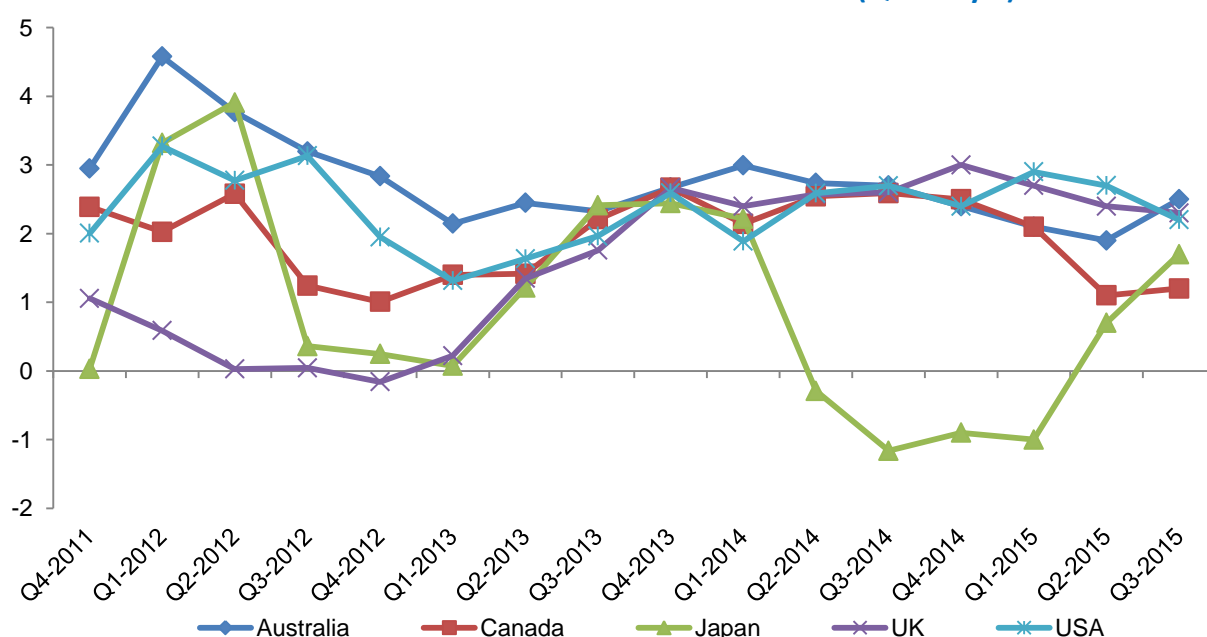
Growth rate compared to the same quarter of previous year, seasonally adjusted

Source: OECD Quarterly National Accounts

Regarding non-European countries (Chart 1-2), the economic conditions improved slightly, especially in the USA, which recorded a positive GDP growth of 2.2% in the third quarter of 2015, lower than its level of the first quarter where growth rate stood at the level of 2.9%. Despite the slowdown, the US economic activity has remained robust thanks to strong private consumption and business investment along with a continued progress in the labour market and the housing sector. The external conditions for the United States economy are expected to improve, but only slightly, as foreign demand from major trade partners is expected to remain relatively weak.

In the UK, GDP grew by 2.3% in the third quarter of 2015, supported by The Bank of England quantitative easing programs. Recently, the Monetary Policy Committee (MPC) indicated that as the economic conditions improved and that Bank Rate was likely to rise only progressively and to a level below its pre-crisis average. For Japan, after an outstanding performance in end-2013 and a 2.2% of GDP growth realised in the first quarter of 2014, the country fell unexpectedly into recession in the third and fourth quarter of 2014 and the growth rate was also negative in the first quarter of 2015 (-1%). In the middle of 2015, the Japanese economy has witnessed an outstanding performance and growth rate moved recession to 0.7% in the second quarter of 2015 and then to 1.7% in the third quarter.

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



* Growth rate compared to the same quarter of previous year, seasonally adjusted

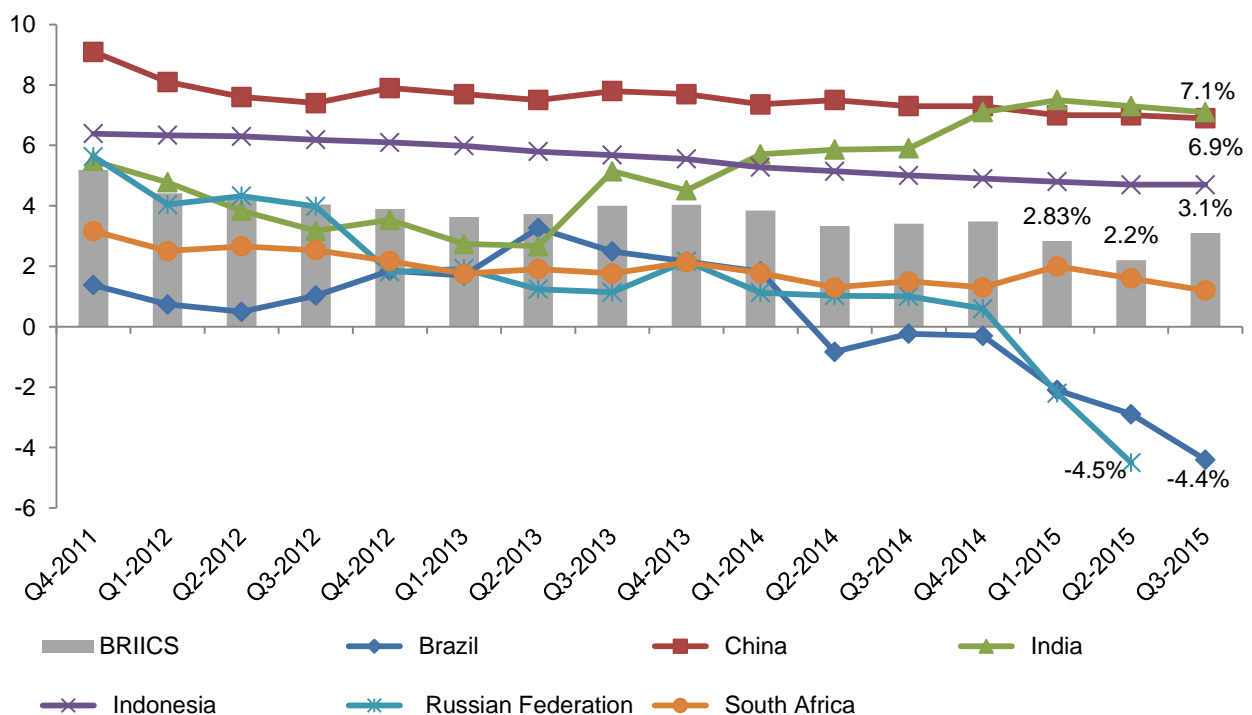
Source: OECD Quarterly National Accounts

As for emerging economies (Chart 1-3), they have experienced a fairly broad-based slowdown since the first quarter of 2014. In the third quarter of 2015, the BRICS countries' (Brazil, Russia, India, China, and South Africa) growth was positive (3.1%) but it is far from its previous levels (10.8% in 2007). The Russian economy has witnessed slowdown in economic

activities and realised a negative growth rate since the beginning of 2015 reaching the level of -4.5% at the second quarter of 2015. This is mainly due the political tension and high spending in military equipment along with the drop of oil price that heavily weighed on its and economy. Similarly, Brazil's economic performance slowed in all the three quarters of 2015 as it fell into recession for the six consecutive quarter reaching the critical level of -4.4% in Q3/2015.

The Indian economy continues to perform well and it recorded 7.1% growth in the third quarter of 2015. In China, the interactions among the ongoing correction in real estate markets, the highly indebted local governments, and the financial sector continue to pose a significant downside risk. Moreover, the depreciation of the renminbi in august 2015 has increased the volatility of financial market volatility and added further global risk aversion. The depreciation of the Chinese currency has weakened emerging market currencies including all the BRIICS currencies. It is worth mentioning that the International Monetary Fund has decided to add the yuan to its elite basket of reserve.

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

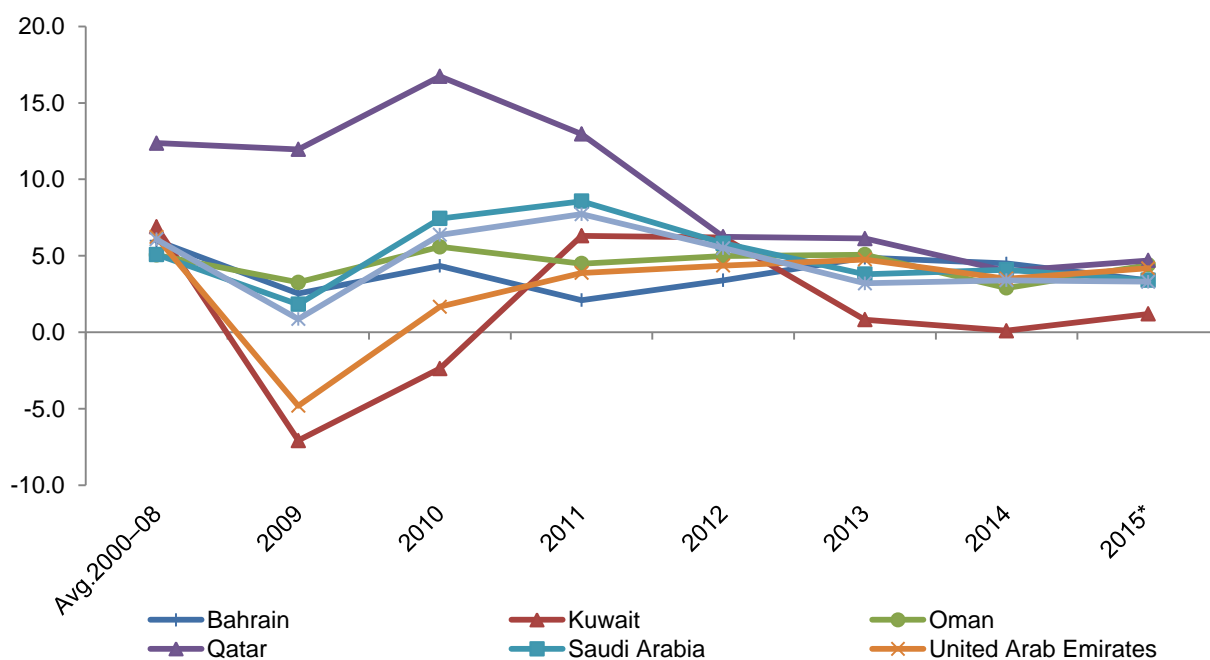


*Growth rate compared to the same quarter of previous year, seasonally adjusted

Source: OECD Quarterly National Accounts

Despite the continuing uncertainty in the global economy, the GCC economies experienced growth at a level of 3.4% in 2014. The projections for 2015 and 2016 show that the regional economy will continue to grow at moderate rates of 3.3% and 2.8% respectively. At the individual country level, Bahrain experienced the highest growth rate at 4.5% followed KSA at 4.1%, Qatar at 4.0%, then UAE at 3.5% and Oman at 2.9% and finally Kuwait grew by 0.1% in 2014.

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



*Denotes forecast.

Source: IMF MENAP Regional Economic Outlook, October 2014.

Despite the trouble in the MENA region and the drop in oil prices, the member states of the GCC have been on a stable growth path. The ongoing economic performance in GCC countries is currently facing the challenge of declining oil price, which will impact the authorities' spending power. However, the foreign reserves accumulated during the past few years are expected to be used to mitigate some of the impact on growth due to significant losses of oil revenues.

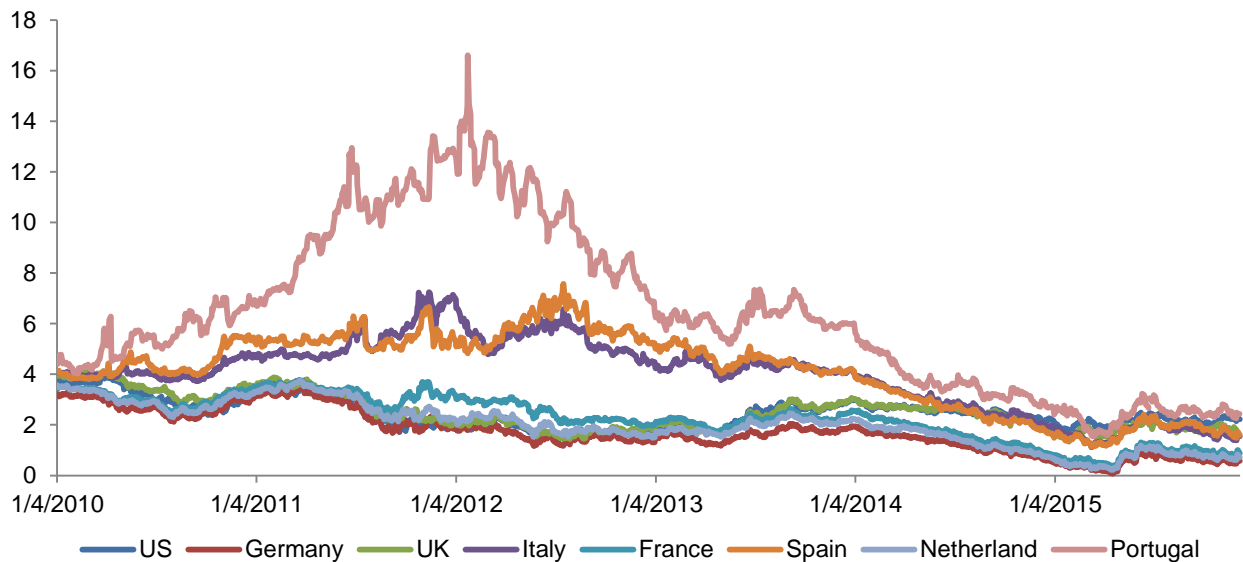
B. Financial Markets

Chart 1-5 highlights the change in yields on ten-year sovereign bonds in some European countries and the US. The graph clearly shows the reaction of the market following the decision of The Federal Open Market Committee to taper the pace of its asset purchases early summer 2013. Sovereign bond yields rose and this has triggered market volatility and caused depreciation of some currencies, notably those of emerging market economies.

During the first semester of 2015, yields decreased to historical levels. As illustrated in chart 1-5, at a ten-year maturity, Spanish and Italian government bond yields have fallen to their lowest level in Euro Area history, while yields on Portuguese bonds have fallen to pre-crisis levels. Spreads on yields of ten-year bonds over the Bund have fallen to four-year lows for Portugal, and three-year lows for Spain and Italy. The fall in yield is the result of the highly accommodative monetary policy (quantitative easing program) by major central banks that

have calmed the volatility of stock market and reduced the systemic risk. The recent actions by the central banks and policymakers have narrowed modestly the spreads on euro area periphery government bonds. Low yield reflects a subdued inflation expectations and the outlook for modest economic growth in most economies. However, during the second semester of 2015, government bond yields have increased slightly for all the European countries, but they remained low as compared to their levels during the period 2010-2013.

Chart 1-5: Yields on 10 Year Sovereign Bonds

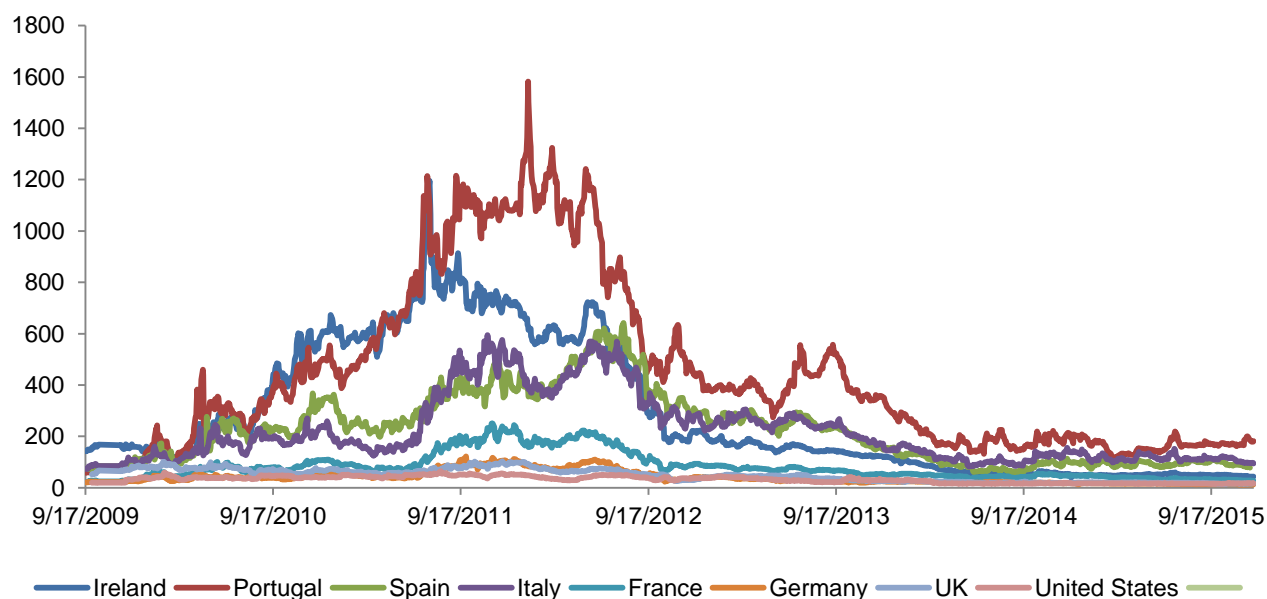


Source: Bloomberg

CDS spreads are a fundamental metric of default risk. Broadly, a higher spread on the CDS implies a greater risk of default for the reference entity. Chart 1-6 provides information as to how financial markets perceive the risk of default on corporate and sovereign debt. It illustrates spreads on five-year CDS in some European countries and the US since 2009.

Prior to the crisis, CDS spreads were low for all of the referenced countries, showing that investors placed low probabilities on these countries defaulting on their debt. The policy measures launched by the European Central Bank have declined the financing cost and increased liquidity and profitability of banks. After a short increase during the third quarter of 2013, spreads on Credit Default Swaps for peripheral euro area countries have continued to fall over the last few months following a rapid rise in US long-term interest rates. Their levels now are well below the peaks observed in 2011 and 2012 (see chart 1-6). Yet risk premia remain neighboring to the levels reached during the financial turmoil of 2008. This will recover financing conditions for many banks and deposit flows will stabilize. Furthermore, the average five-years CDS spreads declined considerably (Chart 1-6) in most advanced economies. In the US, UK, Germany and France spreads on Credit Default Swaps remained low since 2009 despite public debt levels that are comparable to or above those of southern Euro Area member states.

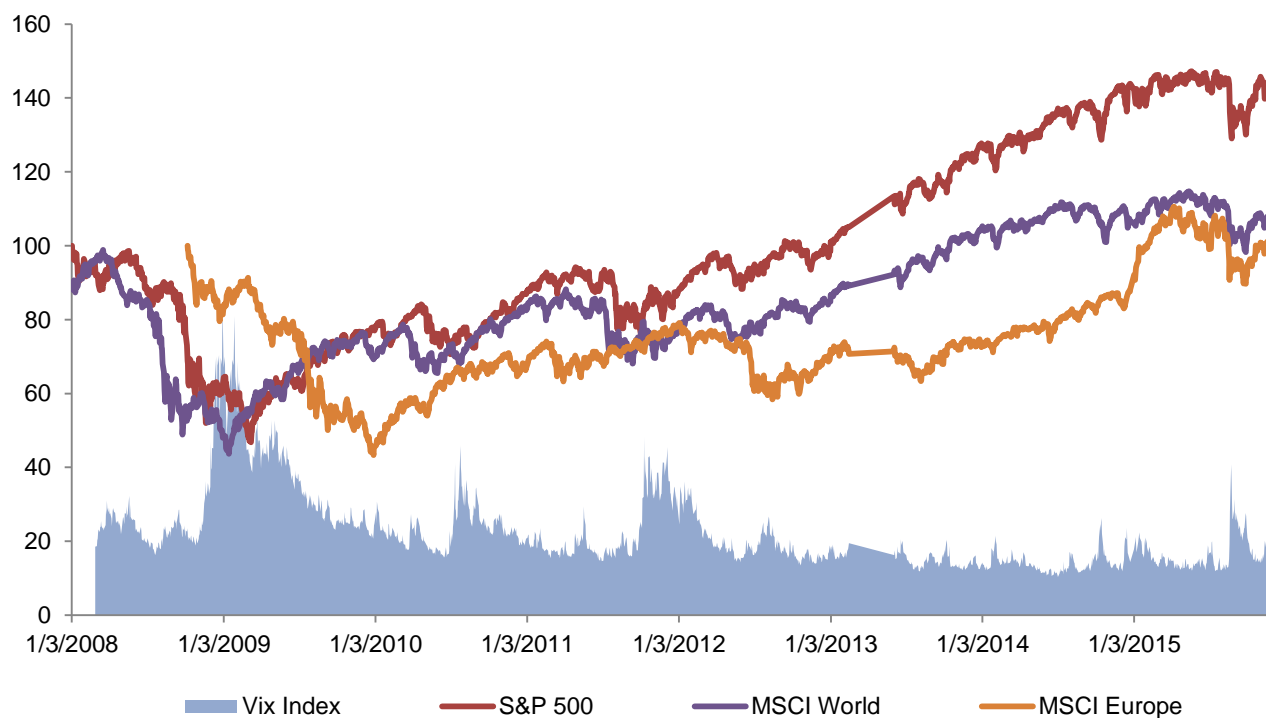
Chart 1-6: Five Year Spreads on Credit Default Swaps



Source: Bloomberg

Regarding global equity markets, chart 1-7 shows that following a period of uncertain sentiments during the summer 2013; optimism returned to global equity markets. This is due to exceptional policy measures and quantitative easing programs undertaken in some advanced economies that had an immediate impact on equity markets.

Chart 1-7: Global Equity Market Indices (Re-indexed to January 2008)



Source: Bloomberg

C. Volatility of the major currencies

The modest economic performance of the Eurozone economy and persistent uncertainty on the future of Greece within the Euro area have added some pressure on the European single currency. Furthermore, the geo-political concerns in Russia-Ukraine have also weighed on the power of the Euro. As a result, all these factors have devaluated the value of the single currency against its most important competitor. The Euro currency continued to show depreciation from July 2015 to December 2015, it fell to its lowest level against the US Dollar (USD) in over 11 years hitting a low so far of 1.056 on the interbank market. From July to December 2015, the Euro lost 1.68% of its value against the US Dollar as it moved from \$ 1.20 to \$ 1.10 in this period (chart 1.8). Even after this depreciation, the Euro faced a high degree of volatility in the ensuing months. In the midst of July, the Euro was priced at \$ 1.11 but despite the small recovery, there was a downward trend observed in the next few days. The Euro dropped to \$ 1.08 on 19 July 2015, however, soon after there was recovery accompanied with drops resulting in a high degree of volatility. The Euro continued to fluctuate mainly upwards against the US Dollar till it reached the same low level of July in November. This happened very rapidly when the Euro lost 5% of its value in a period of two weeks starting from the last week of October 2015. After this rapid decline, there was a gradual downward trend which hit its lowest point since April 2015 at a price of \$ 1.058.

There was subsequent fluctuation in the price of the Pound versus the Euro which led to a local trough price of 1.34 in the midst of October 2015. Steady recovery during the subsequent weeks led to a local peak price of 1.43 just a month afterwards. However, the Pound lost that position and ended up trading between 1.37 and 1.38 in December 2015.

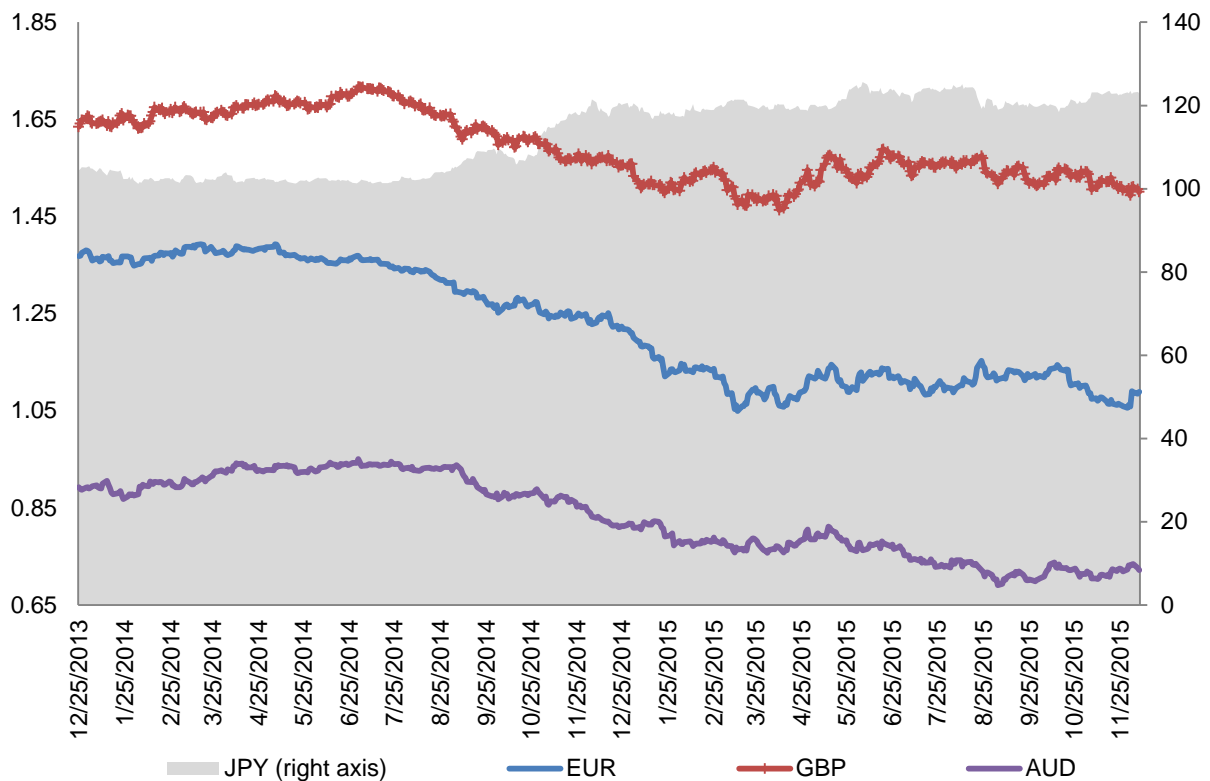
There was however a comeback in the strength of the Yen versus the US Dollar with rates dipping to below 120 on 9th July 2015. Despite a high degree of volatility in the next few months, the Yen staged several comebacks returning to positions near the 188 mark in August 2015 and October 2015. However, after the latter mark, there was mostly a weakening trend in November 2015 culminating at a price of 123.4 in the midst of November 2015. The next few weeks were again volatile and the yen returned to the 120 mark in December 2015.

Finally, Australian dollar depreciated slightly during the first six months in 2015. It was traded at US\$ 0.81 in January 2015, and after much volatility went down to US\$ 0.77 in June 2015. Hovering around the 0.77 mark, the Australian dollar saw a period of significant decline in phases leading to a low of 0.69 on September 6 2015. After weeks of volatile upward and downward trends, the currency seems to have stabilized within 2% of the 0.72 mark. At the close of November 2015, it was at this mark and December 2015 saw recovery followed by weakening on a 203 day recurring cycle. The Australian dollar had not dropped

below 80 US cents since mid-2009 and the Australian National Bank expects it to fall further in 2016. Although that may not be likely given that the Australian economy is forecasted to grow moderately, chances are that the currency will most likely be traded in the 0.70-0.75 region.

To conclude, the stronger US dollar is the result of a mixture of factors including relative interest rates, balance of trade, and perceived safe-haven status.

Chart 1-8: Various Currencies against the US Dollar



Source: Bloomberg

D. The Eurozone economy and the persistence of low inflation

Recent data reveals that the Euro area's financial markets have slightly improved during the past few months especially for peripheral countries. Data also reveal the strengthening of bank balance sheets in Europe. The recent Euro area economic and financial performance was supported by thoughtful efforts for driving economic recovery, progress with structural reforms in fragile Euro area economies, and the continuous guidance of the European Central Bank.

Chart 1-9: Overall inflation in the euro area (HICP)



Source: European Commission (Eurostat) and European Central Bank data

Thereafter, inflation returned to the positive zone in April 2015 climbing upwards nearing 0.5%; however, it was not sustained for long. In September, inflation again dipped to below zero; however, recovery was quicker this time and inflation returned to between 0.15% and 0.25 in October 2015 which remained the same in November 2015.

The Eurozone is now obviously diverging from many advanced economies notably the US and UK where inflation remains positive and closes to target. One of the reasons explaining the low inflation environment in Europe is the strong preference of economic agents for holding money and government bonds rather than financial or real assets. The persistence of very low inflation and weak economic growth has pushed the ECB to purchase Eurozone government bonds to minimize the risk of a slide into deflation. According to the October World Economic Outlook, the Eurozone inflation rate is expected to remain substantially below the ECB's price stability objective through at least 2019.

To conclude, risks to the Euro area persist. Banking systems continue to face financial stress and the regional economy continues facing various challenges especially: high unemployment and price declines in some countries that could increase the real burden of debt service. All these problems associated with the global uncertainty may lead the European banks to face new challenges and new risks, which suggests that an improved situation does not mean the end of the crisis and uncertainty. Moreover, as we described previously, Europe's (17 and 27 countries) GDP growth remains low and high unemployment continue to weigh negatively on the global financial market. The weak economic performance in Europe, combined with potentially a period of low interest rates and continued weak market growth remain key concerns in European and international markets.

Moreover, the fiscal imbalances in PIIGS countries remain unsustainably high, with the prospect of painful deleveraging persisting for a number of years. Ensuring sustainable economic growth is the only path to restore confidence of investors, but until now it remains the principal challenge for European policymakers.

2. Developments in Bahrain's Financial and non-Financial Sector

Chapter

2

Key Points

- The volume of credit regains momentum and reached BD 7,490 million in October 2015.
- The Bahraini financial sector performed effectively with no major financial stability concerns.
- The wholesale banking sector has witnessed a drop in its total assets from USD 196.3 billion in 2007 to USD108.6 million as of end October 2015.
- Household debt ratio increased.
- Business debt ratio remained stable.

2.1 Overview

The aim of this chapter is to assess the recent development of the Bahraini financial sector during the past few months assess whether the local banking and financial sector remains resilient since our last evaluation (June 2015). The assessment of financial stability 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.

The financial condition and performance of financial institutions therefore 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 construction and real estate sector receives special attention because this sector is usually highly sensitive to developments in macroeconomic conditions and financial institutions in Bahrain have direct and indirect exposures to the sector.

2.2 Bahrain's Banking sector

Over the past decades, Bahrain emerged as a major regional financial center. This has been essential to the development of its economy and the financial sector has come to play a significant role in economic activity and employment creation.

In November 2015, the banking sector in Bahrain was made up of 103 banks, categorized as follows:

- 28 retail banks (including 6 Islamic retail banks); 13 locally incorporated and 15 branches of foreign banks
- 75 wholesale banks (including 19 Islamic wholesale banks)

There are also 300 non-banking financial institutions operating in Bahrain, including investment business firms, insurance companies (including Takaful and Re-Takaful firms), and specialized licenses.

The insurance industry has progressed effectively during the past few years, which has grown into a regional hub. Insurance contribution increased from 1.9% to 2.5% of GDP over the decade. Particularly strong growth over the last five years has been in medical insurance (which now accounts for 15% of total premiums). Long-term insurance (life and savings products) has also grown rapidly. The insurance market in Bahrain now comprises 25 locally-incorporated firms and 11 overseas firms carrying out insurance, reinsurance, takaful and retakaful. These institutions offer all basic and modern insurance services such as medical and health insurance, long-term insurance (life and savings products). The expansion in the takaful sector (Sharia compliant insurance) has been particularly impressive, with gross contributions rising from \$5 million in 2001 to more \$110 million in 2013.

In Bahrain, the 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, Liquidity Management Centre and Islamic International Rating Agency, and the Bahrain Institute of Banking and Finance. In 2014, the Global Islamic Finance Report (GIFR) reveals that Bahrain was ranked fourth over 40 countries by Islamic Finance Country Index (IFCI).

2.2.1 The size of the banking sector

Bahrain's banking sector represented 13.5 times of GDP in 2007. Despite the global financial turmoil, the size remained large and amounted to 11.5 times of GDP from 2008

until 2010. In 2013, the size of the banking sector fell by almost 50% to become 5.9 times of GDP.

According to the table below, the wholesale banking sector has witnessed the largest drop moving from 8.1 times of GDP in 2010 to 3.2 in the fourth quarter of 2014 and to 3.23 times of GDP in Q3/2015. Further, Table 2-1 shows that the size of the retail banking sector decreased slightly during the same period and it recorded an increase in the third quarter of 2015 to become 2.39 times the GDP.

Despite the contraction in the banking size, the Bahraini financial and banking sector are still performing well and represents around 16.6% of GDP in 2014 (CIO 2014 National Accounts). There are no major or minor effects of the drop of the overall size of the banking sector in the economy of Bahrain. This shows that the weight of wholesale banks in Bahrain is less compared to domestic banks and that retail banks in Bahrain are the main driver of financial sector growth in the Kingdom.

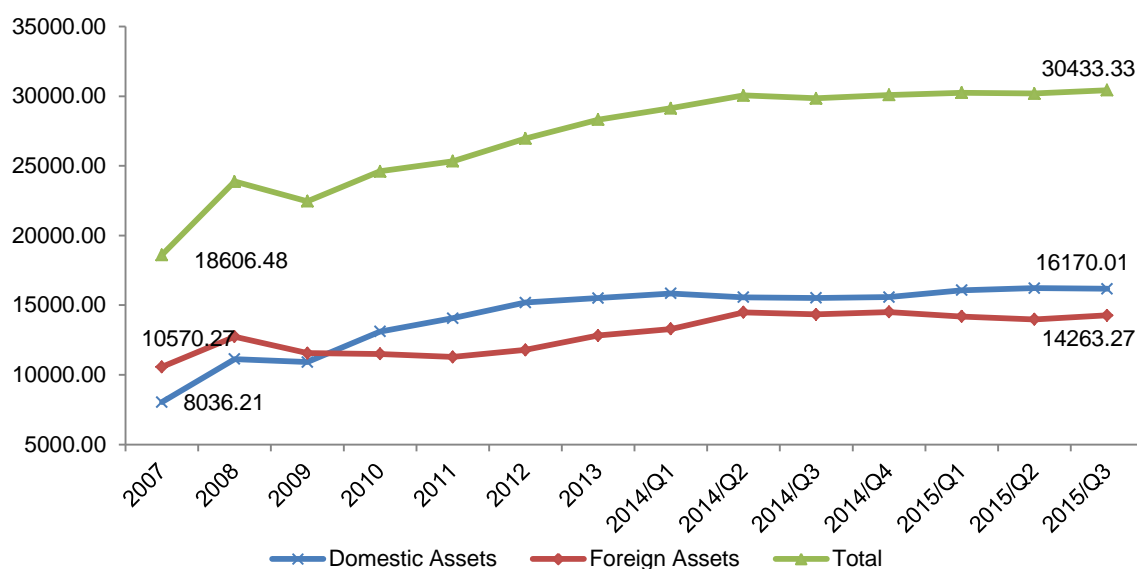
**Table 2-1: Evolution of the size of the Banking sector in Bahrain
since 2007**

	2007	2010	2011	2012	2013/Q4	2014/Q4	2015/Q3
Size of the Banking sector (times GDP)	13.4	11.5	6.8	6.9	5.9	5.6	5.6
Consolidated Balance Sheet of Retail Sector (USD billion)	49.5	65.4	67.3	71.7	75.3	80.0	80.9
As times of GDP	2.69	3.38	2.32	2.47	2.3	2.36	2.39
Consolidated Balance Sheet of Wholesale Sector (USD billion)	196.3	157.7	129.0	127	116.7	109.3	109.5
As times of GDP	10.7	8.1	4.5	4.4	3.6	3.2	3.2

Source: CBB Statistical Bulletin

Bahrain's financial sector has faced a number of shocks over the past seven years from the sub-prime crisis to the recent political events. The banking sector managed to perform well despite these financial, social and economic shocks. In Bahrain, the retail banking sector has continued to expand. The assets of the retail banking sector rose from BD 18.6 billion in 2007 to BD 30.43 billion in the third quarter of 2015 (see Chart 2-1).

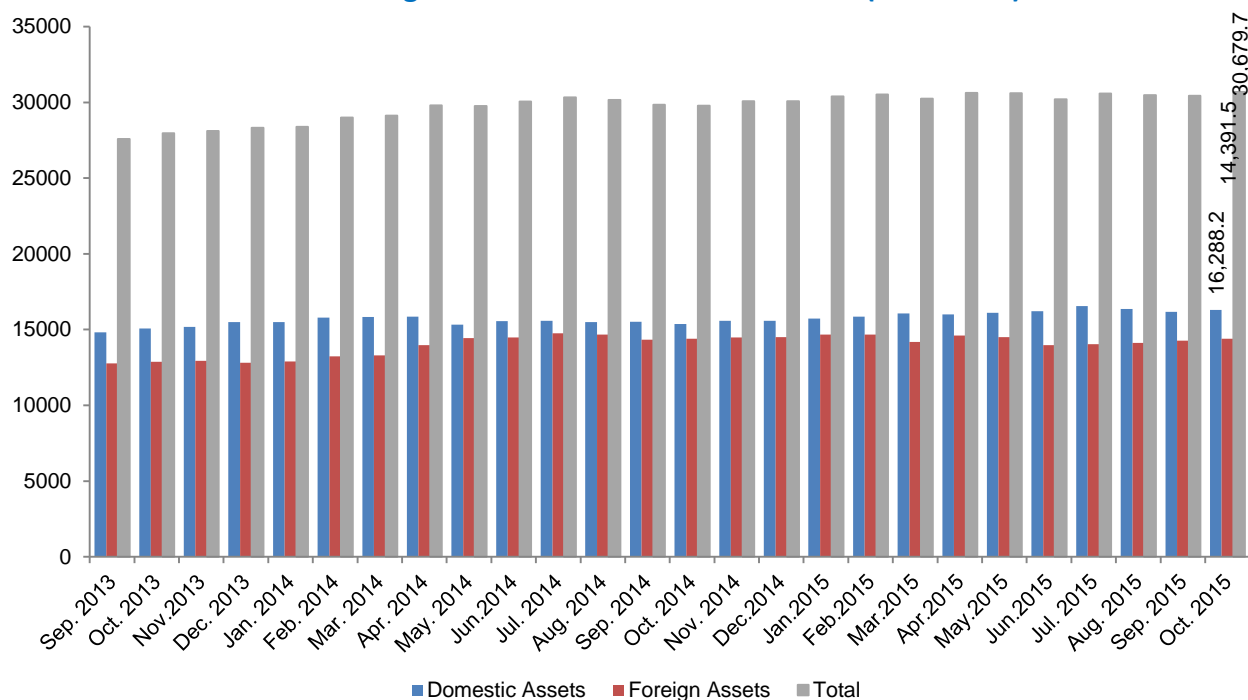
Chart 2-1: Retail Banks' Assets (BD million)



Source: Central Bank of Bahrain

It is worth mentioning that despite the global uncertainty and the troubles in MENA region, retail banking total assets continued growing since December 2012 moving from BD 26.9 billion to BD 27.5 billion as of end-September 2013 to reach BD 30.67 billion in October 2015 (see Chart 2-2). This increase in retail banking assets was driven by domestic assets which contributed to 53.1% of total assets at October 2015, up from 46.2% at end-September 2013.

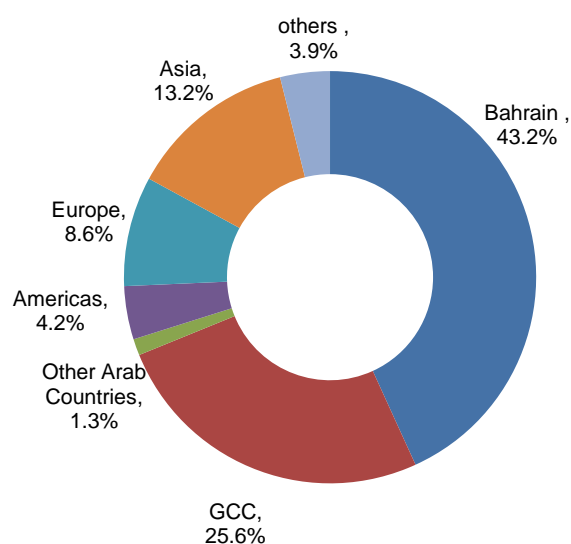
Chart 2-2: Categorization of Retail Banks' Assets (BD million)



Source: Central Bank of Bahrain

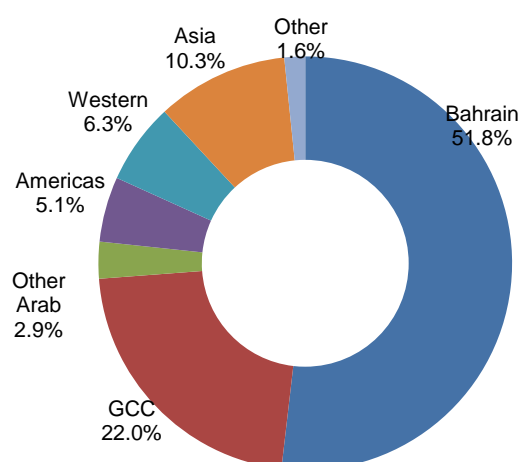
According to the charts below, it is crucial to notice that half of the 47% of foreign assets are GCC assets (20.3%). The level of European and American contribution in retail banking remains almost stable during the past eight years (+11.83%). This shows that the retail-banking sector in Bahrain is lightly exposed to foreign risk from U.S and Europe.

Chart 2-3: Retail Banks' Assets (%) by Geographical Classification (2007)*



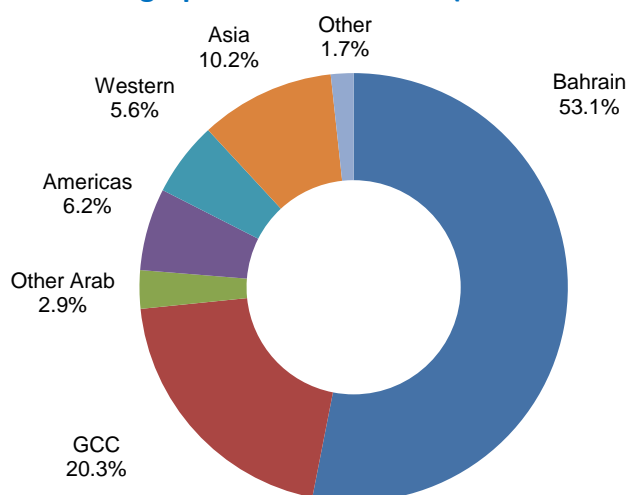
* For conventional and Islamic retail banks
Source: Central Bank of Bahrain

Chart 2-4: Retail Banks' Assets (%) by Geographical Classification (Nov2014)*



* For conventional and Islamic retail banks
Source: Central Bank of Bahrain

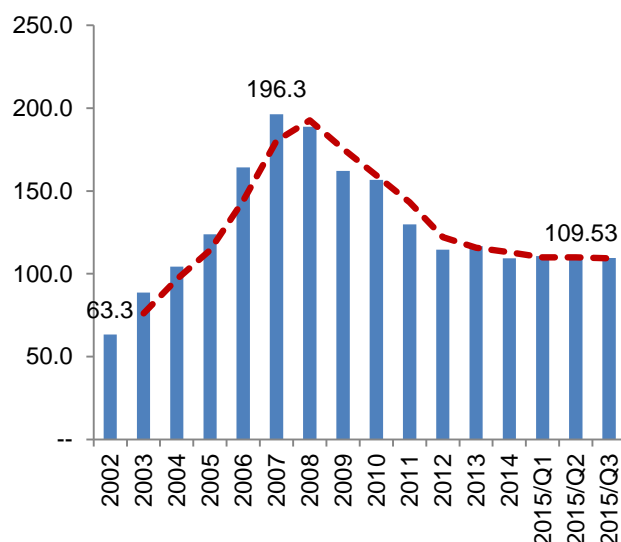
Chart 2-5: Retail Banks' Assets (%) by Geographical Classification (October 2015)*



* For conventional and Islamic retail banks
Source: Central Bank of Bahrain

In contrast to the retail banking sector, the wholesale banking sector has witnessed a drop in its total assets from USD 196.3 billion in 2007 to USD 114.6 billion in 2012; hence a decrease of 41.6 %. Despite an improvement in the volume of total assets in the wholesale banking sector during the six months of 2015, reaching a peak of USD 111 million in April 2015, the volume reached USD108.6 billion as of end October 2015 (See Charts 2-6 and 2-7).

Chart 2-6: Wholesale Banks' Assets (USD Billion)*

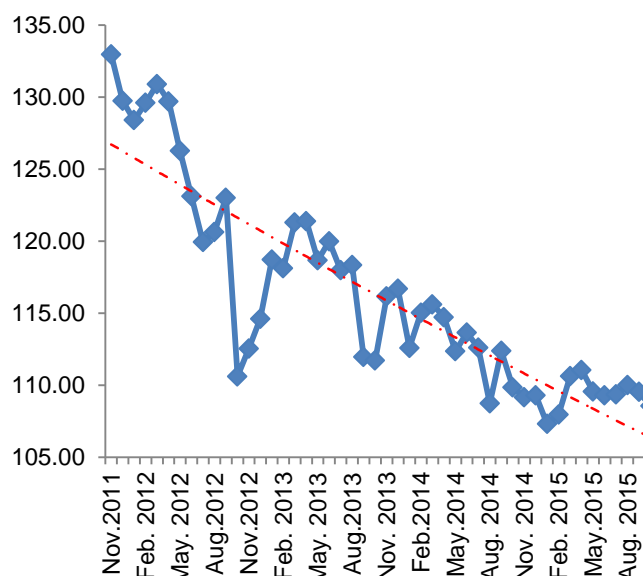


--- Moving average trendline

* For conventional and Islamic wholesale banks

Source: Central Bank of Bahrain

Chart 2-7: Wholesale Banks' Assets (USD Billion)*



--- Linear Trendline

* For conventional and Islamic wholesale banks

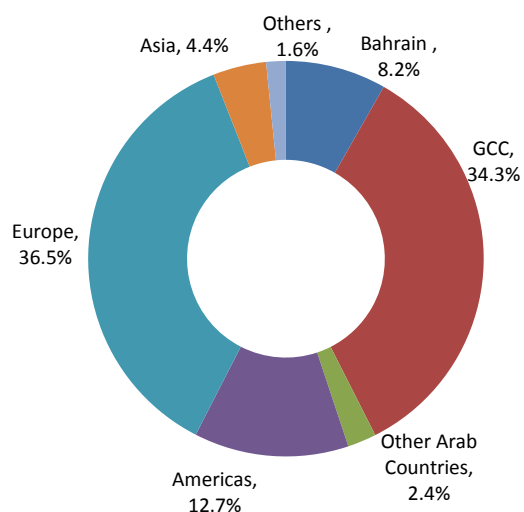
Source: Central Bank of Bahrain

Looking at wholesale banking assets by geographical classification, it is important to note that the most significant drop is recorded in the GCC area, which fell from 34% in 2007 to 32% at end-October 2015 (see Charts 2-8, 2-9 and 2-10).

According to the geographical classification of wholesale banks' assets, we can see the main evidences below:

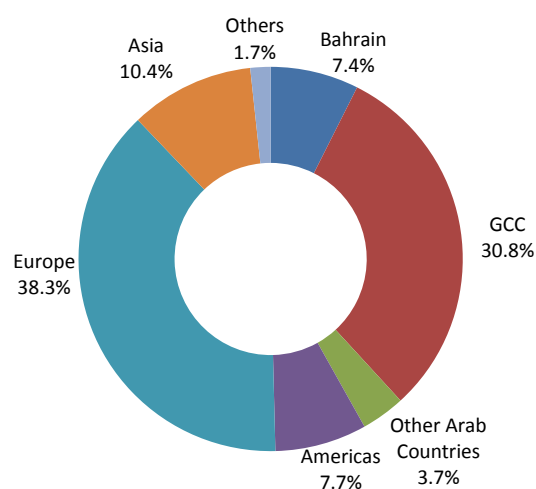
- The share of America's total assets decreased considerably since 2007 but it recently improved slightly to move to 8.7% in October 2015 from 7.7% of total assets in November 2014.
- The share of Europe's total assets is the most important share, and it almost remained stable during the past eight years.
- There is a further increase of Asian assets which moved from 4.4% from 2007, to 10.4% in 2011 and to 10.97% at end-October 2015.
- GCC total assets dropped significantly during the past few years, but they represent almost the third of the wholesale banking sector. It is worth mentioning that the share of GCC in total assets mildly increased during the recent period moving from 30.8% in November 2014 to 32.2% of total assets in end-October 2015.

Chart 2-8: Wholesale Banks Assets by: Geographical Classification (2007) *



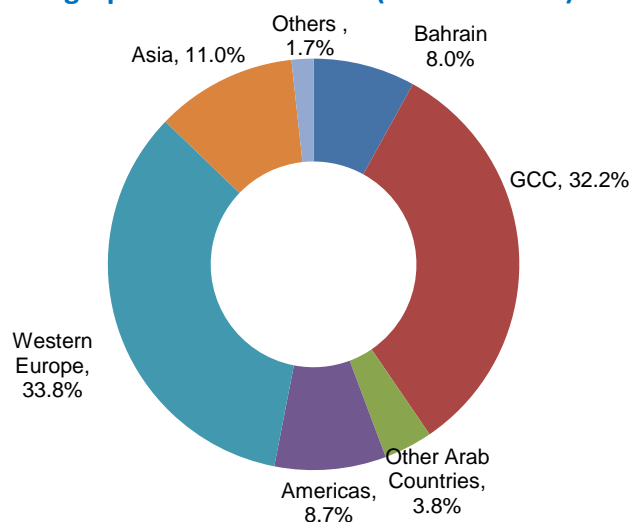
* For conventional and Islamic retail banks
Source: Central Bank of Bahrain

Chart 2-9: Wholesale Banks Assets by: Geographical Classification (Nov.2014)*



* For conventional and Islamic retail banks
Source: Central Bank of Bahrain

Chart 2-10: Wholesale Banks Assets by Geographical Classification (October 2015)*

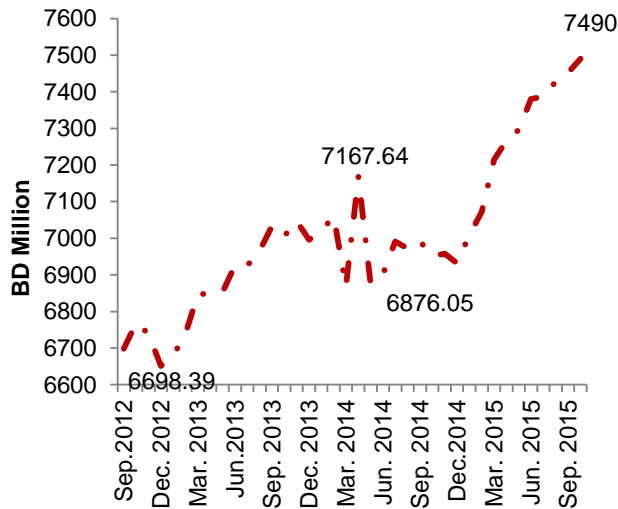


* For conventional and Islamic retail banks
Source: Central Bank of Bahrain

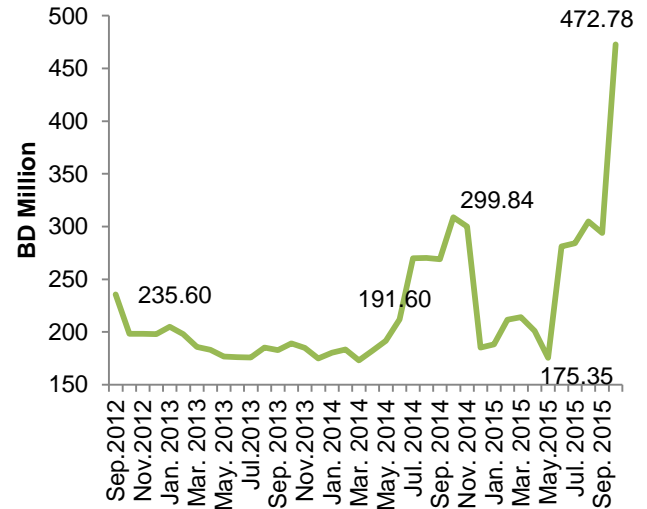
2.2.2 Credit Developments

After a sudden drop in May 2014, the volume of credit regained momentum and reached BD7,490 million in October 2015 (Chart 2-11). The high credit growth reveals the recovery of the economic activities and the restoration of confidence in the kingdom of Bahrain.

Regarding banks' lending to the general government, it increased significantly during the first three quarter of 2015, moving from BD175 million at end-May 2015 to reach BD472.78 million at end-October 2015.

Chart 2-11: Credit to Private Sector (BD Million)

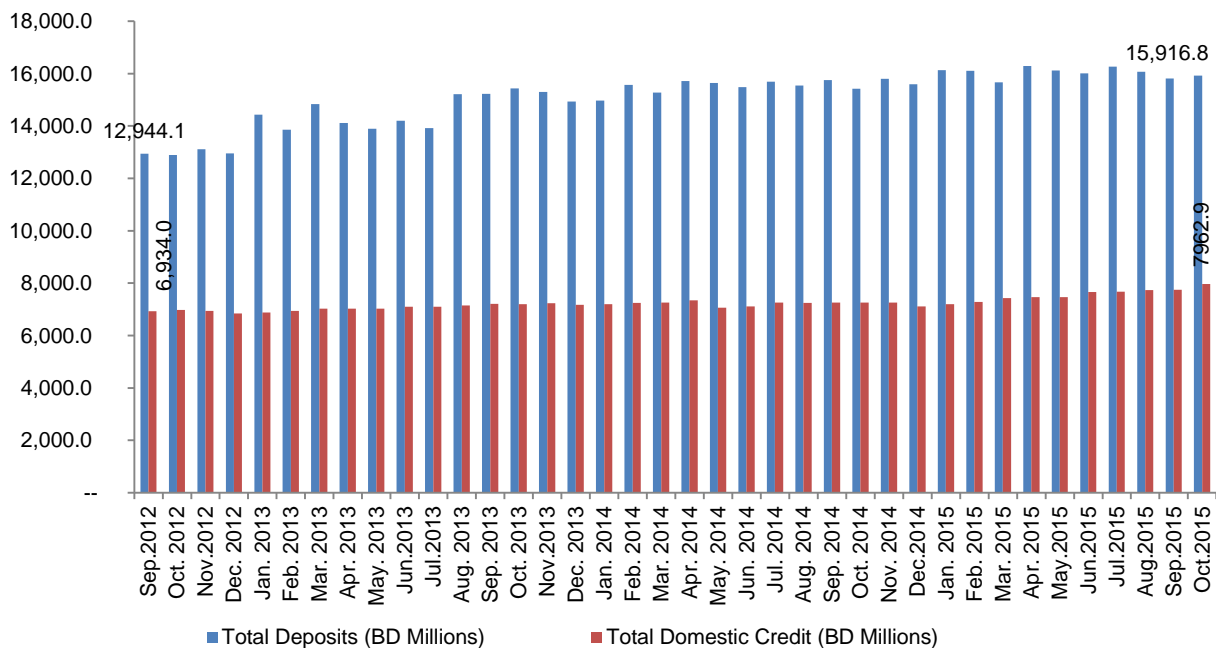
Source: Central Bank of Bahrain

Chart 2-12: Loans to General Government (BD Million)*

Source: Central Bank of Bahrain

*Excluding securities

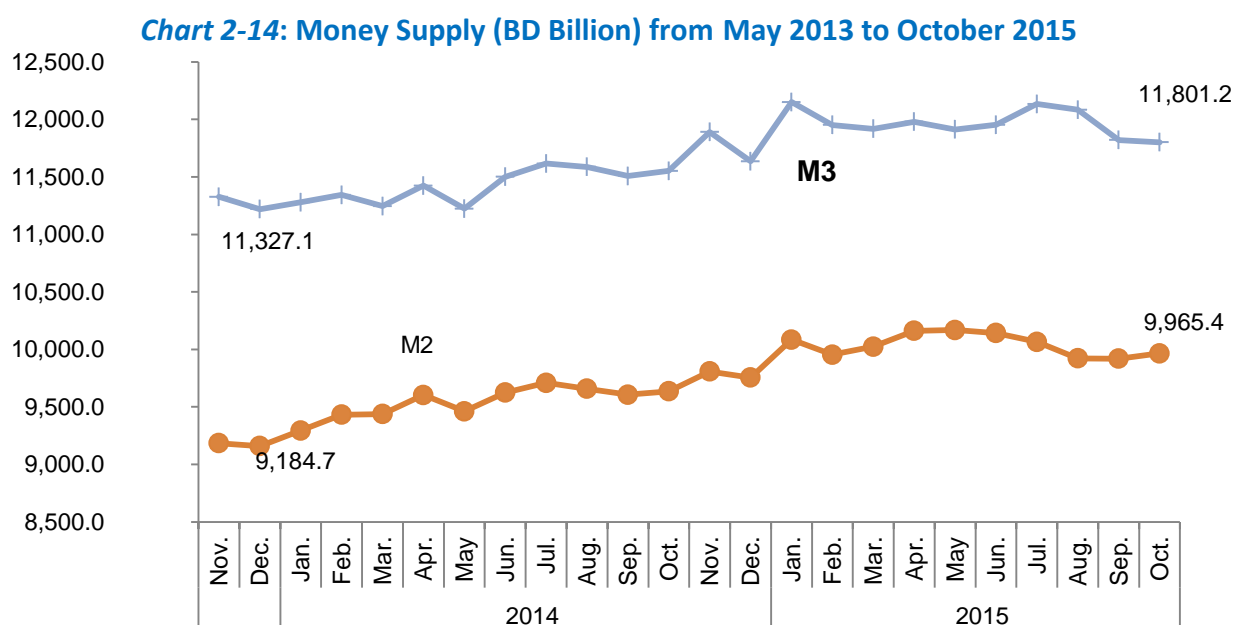
Total deposits reached BD15,916.8 million in October 2015, where 58.6% of the total represented local deposits. Interestingly, this was followed by an increase in total domestic credits which moved from BD 7,260 million in October 2014 to BD 7,962.9 million at end-October 2015 (chart 2-13). Despite the high availability of liquidity, total domestic Credit remains moderate in Bahrain; it represents only 60.8 % of GDP as of the third quarter of 2015.

Chart 2-13: Total Deposits and total Domestic Credit (BD Million)

Source: Central Bank of Bahrain

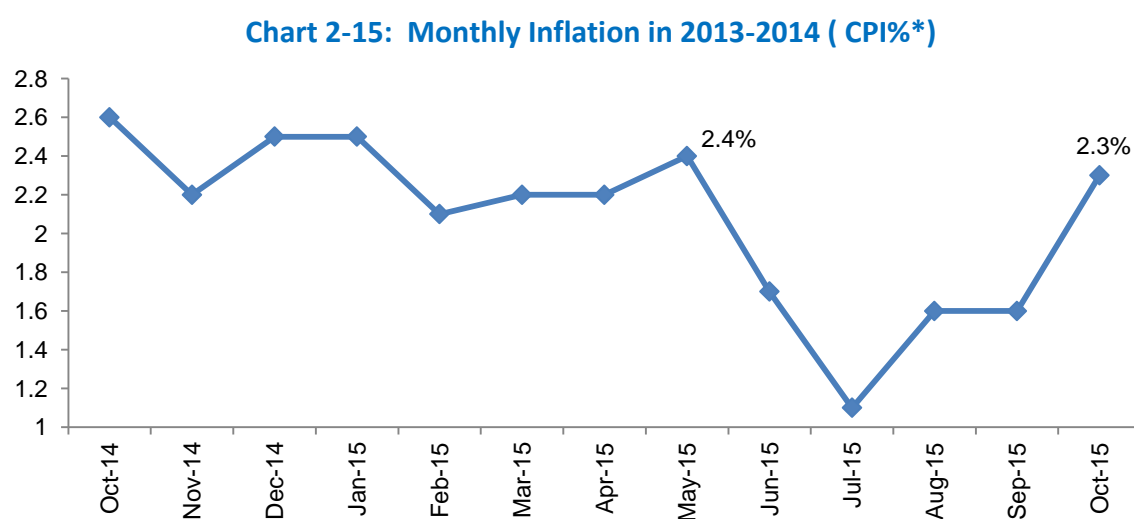
2.3 Monetary indicators

Money supply has continued to grow since the second quarter of 2013. M2 stood at BD 10,169 million in end-October 2015, 3.42% higher than its value of October 2014. M3 was BD 11,801 million in end-October 2015, 2.15% higher than in October 2014 (Chart 2-14).



Source: Central Bank of Bahrain

Generally speaking, the inflation rate in consumer prices has always been stable in Bahrain, with an average of 2% during the 2015 which is acceptable and moderate. According to CIO (2015), inflation moved from 2.4% in May 2015 to 2.3% in October 2015. The most important decreases come from the “food and beverage”, “transport”, and “miscellaneous goods and services” which decreased by 1.3%, 1.2%, and 0.7% respectively.



*Growth rate compared to the same month of previous year, seasonally adjusted

Source CIO Bahrain.

2.4 The Bahraini Households Sector

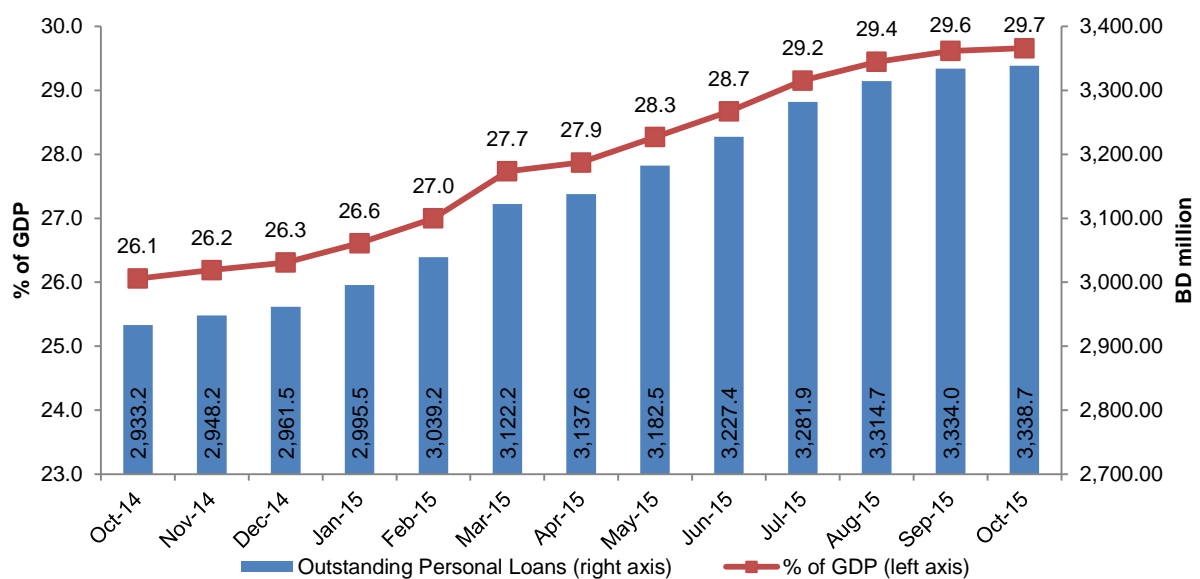
The household sector plays an important role in financial stability and the overall economy. The household sector can allocate funds to financial assets through bank deposits and securities, and to non financial assets from land and other fixed assets. It can also receive funds from financial and non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

2.4.1 Household Debt Ratio

Outstanding personal loans, used as a proxy for household borrowing, for the period shows that the household debt was increasing throughout the period between October 2014 and October 2015 (Chart 2-16).

Chart 2-16: Personal Loans and Advances (Volume and % of GDP)

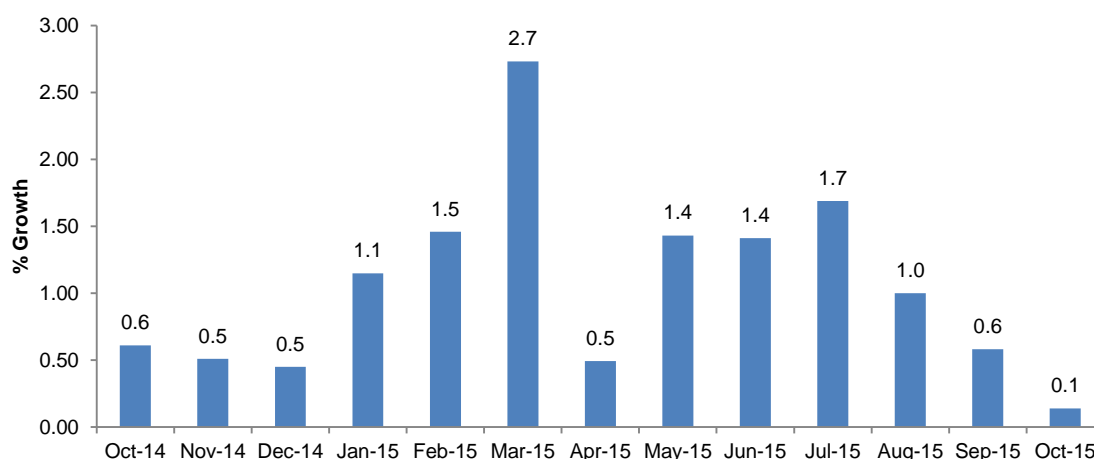


**Using 2014 GDP, provisional data*

Source: Central Bank of Bahrain

Personal loans as a percentage of GDP increased steadily from October 2014 to October 2015. Starting at 26.1% (BD 2,933.2 million) in October 2014 and capping at 29.6% in October 2015 (BD 3,338.7 million). This is due to an increase in outstanding personal loans throughout the seven month period. Year-on-year increases in outstanding personal loans ending in October 2015 was 13.8%. The increase from May 2015 until October 2015 was 4.9%. It has to be noted though that the growth in personal loans has been decreasing since July 2015 (Chart 2-17). The highest growth was in March 2015 of 2.7%.

Chart 2-17: Growth Rate of Total Personal Loans and Advances (%)



*Using 2014 GDP, provisional data

Source: Central Bank of Bahrain

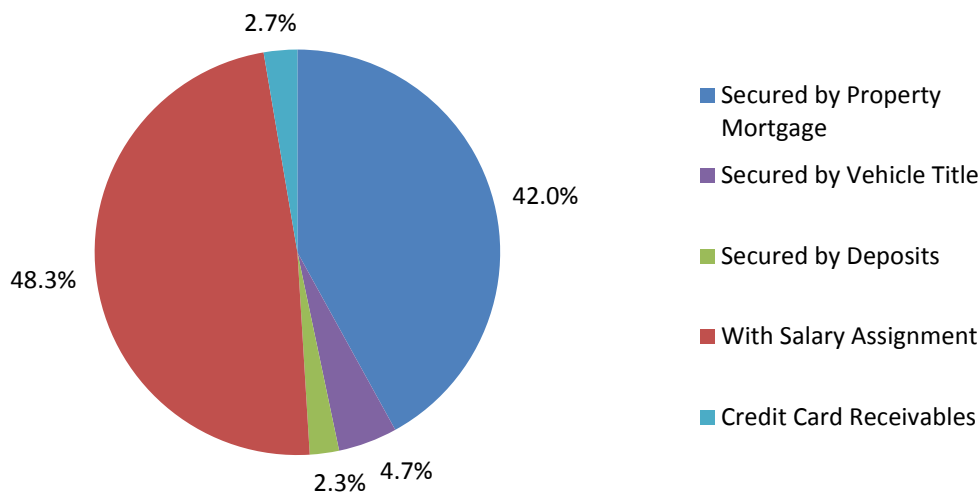
The growth in personal loans that occurred on a monthly basis were mainly due to an increase in personal loans secured by property mortgage as seen in Table 2-2. The two main contributors to personal loans as seen in chart 2-18 were personal loans secured by salary assignment which make around 48.3% of the total personal loans followed by personal loans secured by property mortgage which make around 42.0% of total personal loans as of end of October 2015.

Table 2-2: Personal Loans Breakdown

BD million	2015									
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Total	2,995.5	3,039.2	3,122.2	3,137.6	3,182.5	3,227.4	3,281.9	3,314.7	3,334.0	3,338.7
Secured by Property Mortgage	990.9	1,052.1	1,076.4	1,018.4	1,021.2	1,028.2	1,026.3	1,032.7	1,052.9	1,056.3
Secured by Vehicle Title	118.3	118.7	119.1	118.7	116.9	118.4	121.8	124.8	119.2	118.7
Secured by Deposits	68.1	71.7	75.6	73.9	76.8	78.0	79.6	80.9	62.8	58.7
With Salary Assignment	1,131.3	1,132.1	1,150.2	1,152.5	1,170.4	1,187.2	1,198.0	1,207.8	1,213.1	1,215.3
Credit Card Receivables	68.0	71.1	64.6	62.7	65.5	64.7	63.5	65.7	67.3	67.2

Source: Central Bank of Bahrain

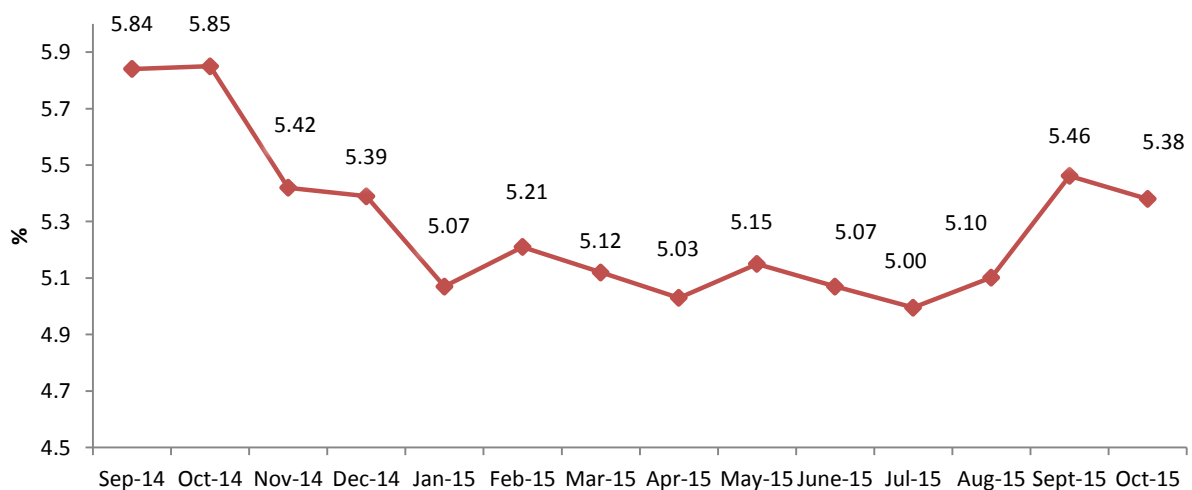
Chart 2-18: Personal Loans Breakdown (October 2015)



Source: Central Bank of Bahrain

Interest rates on personal loans reached its peak at 5.85% in October 2014 (Chart 2-19). The rates then decreased and fluctuated throughout the next months reaching the lowest of 5.00% in July 2015 and then increasing until it reached 8% in October 2015. Interest rates on secured and unsecured loans were constant throughout this period.

Chart 2-19: Retail Banks- Average Interest Rates on Personal Loans (%)

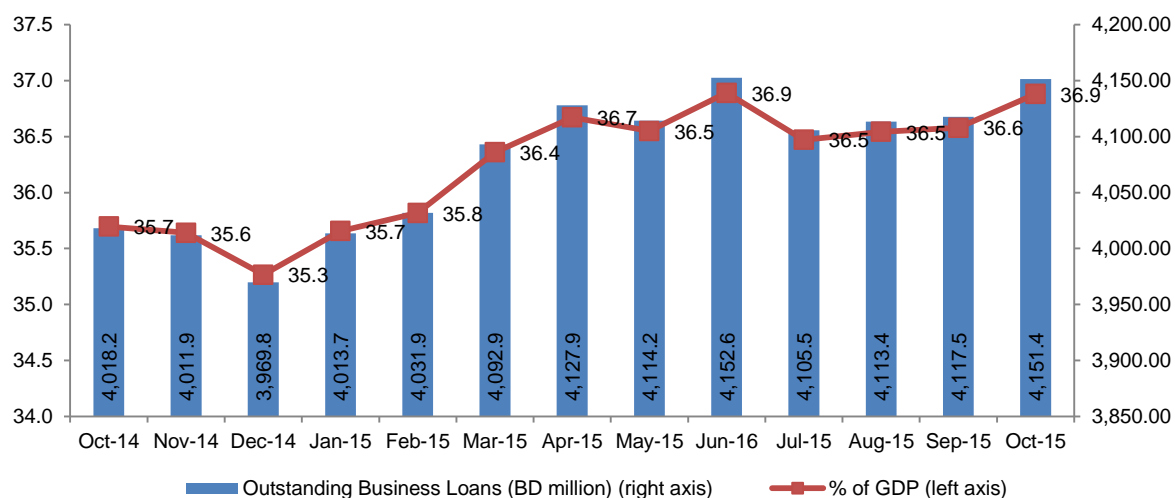


Source: Central Bank of Bahrain

2.4.2 The Bahraini Corporate Sector

Business loans and advances have seen a drop from November to December and then rose from December to April 2015 before a slight decline in May 2015 (Chart 2-19). Outstanding business loans increased from 35.7% in October 2014 to 36.6% in October 2015.

Chart 2-20:: Business Loans and Advances (Volume and % of GDP)



Source: Central Bank of Bahrain

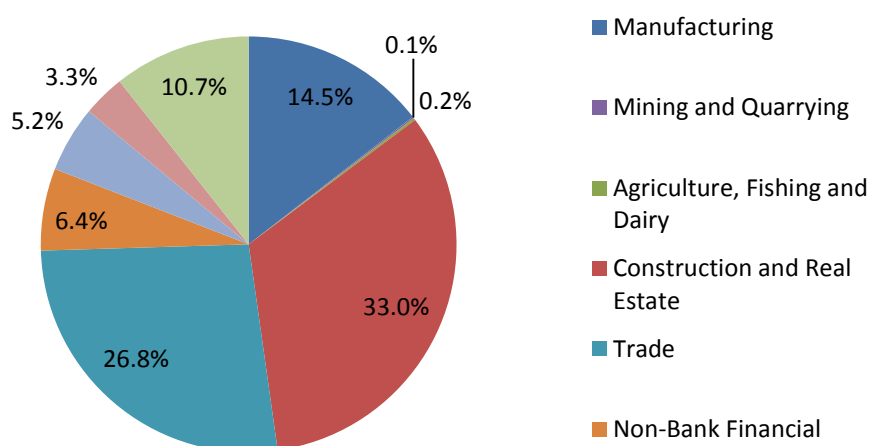
For the past few months, the main contributor to the increase in Business loans was the loans to the trade sector. Construction and real estate also contributed to some of the increases in business loans that happened earlier this year (Table 2-3). The biggest contributors to business loans are the construction and real estate sector (33.0%) followed by Trade (26.8%) and then manufacturing (14.5%) (Chart 2-21).

Table 2-3: Business Loans By Sector

Sectors	2015									
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Total	4,013.7	4,031.9	4,092.9	4,127.9	4,114.2	4,152.6	4,105.5	4,113.4	4,117.5	4,151.4
Manufacturing	539.5	587.0	577.2	590.6	576.8	593.1	589.0	594.7	588.3	598.1
Mining and Quarrying	11.1	8.1	7.9	8.2	5.7	5.9	5.0	4.9	5.2	5.0
Agriculture, Fishing and Dairy	8.5	8.2	8.0	8.1	8.3	8.7	9.4	9.8	7.8	7.2
Construction and Real Estate	1,346.1	1,321.1	1,340.9	1,378.0	1,387.5	1,396.4	1,361.8	1,357.5	1,356.4	1,361.5
Trade	1,044.4	1,034.9	1,052.2	1,054.9	1,058.1	1,079.0	1,057.4	1,065.3	1,076.5	1,104.2
Non-Bank Financial	274.0	262.9	272.6	268.1	267.0	261.4	259.2	256.1	256.0	263.5
Transportation & Communication	219.1	218.8	225.9	228.2	225.9	215.8	218.2	211.2	213.5	212.7
Hotels & Restaurants	130.5	132.5	130.3	127.9	127.6	125.3	123.9	121.4	137.6	135.5
Other Sectors	440.6	458.4	477.9	464.0	457.3	467.0	481.5	492.5	476.2	463.6

Source: Central Bank of Bahrain

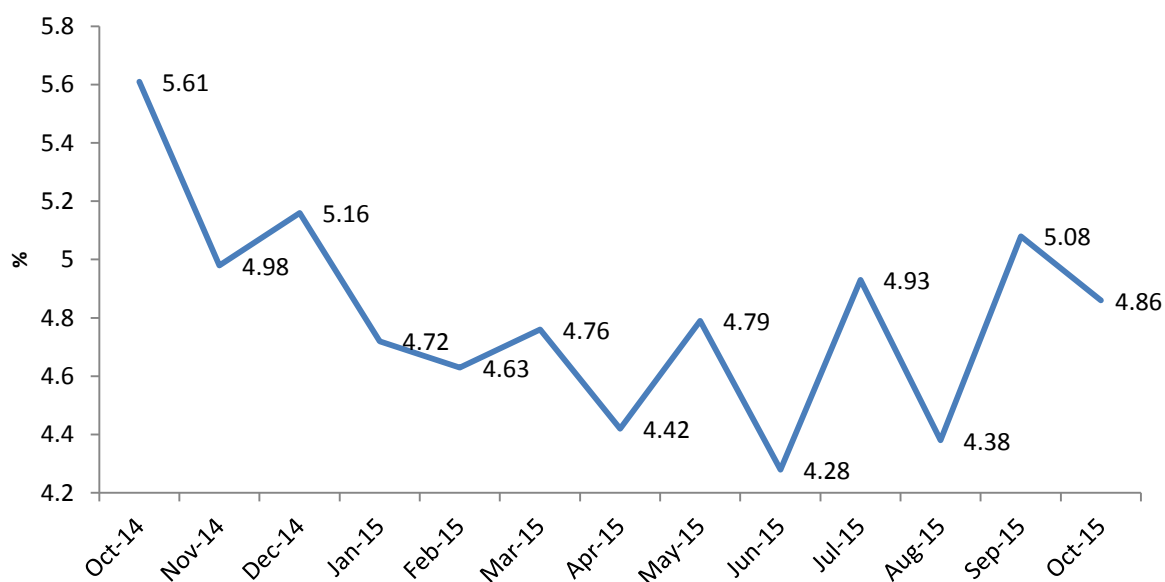
Chart 2-21: Business Loans by Sector October 2015



Source: Central Bank of Bahrain

Average interest rates on business loans fluctuated throughout the nine months. It was at its peak in October 2014 at 5.61% and then reached its lowest rate in June 2015 at 4.42% (Chart 2-22).

Chart 2-22: Retail Banks- Average Interest Rates on Business Loans (%)



Source: Central Bank of Bahrain

2.5 Overall assessment of the Bahraini Financial sector and non-Financial Sector

Indicators presented show that the Bahraini banking sector has performed well during the year 2015. Bank loans grew with expectation that there will be growth in the coming year. Overall funding conditions and demand for loans has shown an increase in Bahrain and is monitored despite the global uncertainty and weak economic condition in emerging markets.

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.

In the following chapters, the performance of the Bahraini banking sector (retail, wholesale, conventional and Islamic) will be analysed in, Bahrain Bourse, as well as the developments in e-payment activities during the previous semester.

Part II:

Performance of the Banking Sector

3. Conventional Banks

Chapter 3

Key Points

- An increase in capital positions of conventional retail banks and decrease for conventional wholesale banks.
- Non-performing loans (NPLs) for conventional retail banks increased while NPLs for conventional wholesale banks decreased.
- Loan portfolios in conventional retail and wholesale banks remain concentrated despite the decrease in some sectors.
- Stable earnings for conventional retail banks and a decrease for conventional wholesale banks.
- Decrease in liquidity for conventional retail banks and conventional wholesale banks.

3.1 Overview

This chapter analyses the banking sector under the following categories: conventional retail banks (section 3.2), conventional wholesale banks (section 3.3). Section 3.4 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), as at end-March 2015 and compared with end-September 2015.

This chapter offers macroprudential analysis of the conventional banking sector based on a set of selected Financial Soundness Indicators (FSIs).¹

Annex 1 presents selected *Financial Soundness Indicators* (FSIs) for the different banking segments. Annex 2 presents selected graphs showing the development of selected indicators over time.

¹ This chapter does not contain a section 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 Systemically-Important Banks (SIB's).

3.2 Conventional Retail Banks

Increase in capital adequacy²

Capital adequacy ratios for conventional retail banks increased from 17.6% in March 2015 to 18.7% in September 2015. The core capital ratio (ratio of Tier 1 capital to risk-weighted assets) showed an increase from 15.6% in March 2015 to 16.9% in September 2015. The leverage ratio (ratio of assets over capital) showed a slight decrease of 0.6% from 8.0% in March 2015 to 7.4% in September 2015. The ratio of non-performing loans (NPLs) net provisions to capital increased to reach 7.9% in September 2015 from 7.5% in March 2015.

Table 3-1 Capital Provisions Ratios for Local Conventional Retail Banks

Indicator	Mar. 2015	Sep. 2015
Capital Adequacy Ratio	17.6	18.7
Tier 1 Capital Adequacy Ratio	15.6	16.9
Leverage (assets/capital)(times)	8.0	7.4
NPLs net of provisions to capital	7.5	7.9

Source: Central Bank of Bahrain

Slight increases in non-performing loans

Non-performing loans slightly increased from 3.5% in March 2015 to 3.6% in September 2015. The specific provisions as a proportion of NPLs showed a decrease to 52.3% in September 2015 from 55.6% in March 2015. The net NPLs of net loans increased from 1.6% in March 2015 to 1.8% in September 2015. For *local retail banks*, the NPLs slightly increased to 4.4% in September 2015. For *overseas retail banks*, the NPLs increased to 2.1% in September 2015.

Table 3-2: NPL Figures for Conventional Retail Banks

Indicator	Mar. 2015	Sep. 2015
NPL's (% Gross)	3.5	3.6
NPL's Local Banks (% Gross)	4.3	4.4
NPL's Overseas Banks (% Gross)	1.8	2.1
Specific provisions (% of NPLs) *	55.6	52.3
Net NPL's (% of net loans)	1.6	1.8

Source: Central Bank of Bahrain

* Specific provisions as a percentage of NPL's are calculated as specific provisions divided by gross impaired loans minus interest in suspense.

Available data on the sectoral breakdown of impaired loans³ shows most sectors experiencing an increase in impairment, while some experience a decrease and others

² The capital adequacy ratio relates total capital to risk-weighted assets. The discussion excludes overseas retail banks, which do not have prescribed capital levels or ratios.

³ Impaired loans include NPLs on which payments of interest or repayments of principal are 90 or more days past due and all loans and advances on which specific provisions have been made.

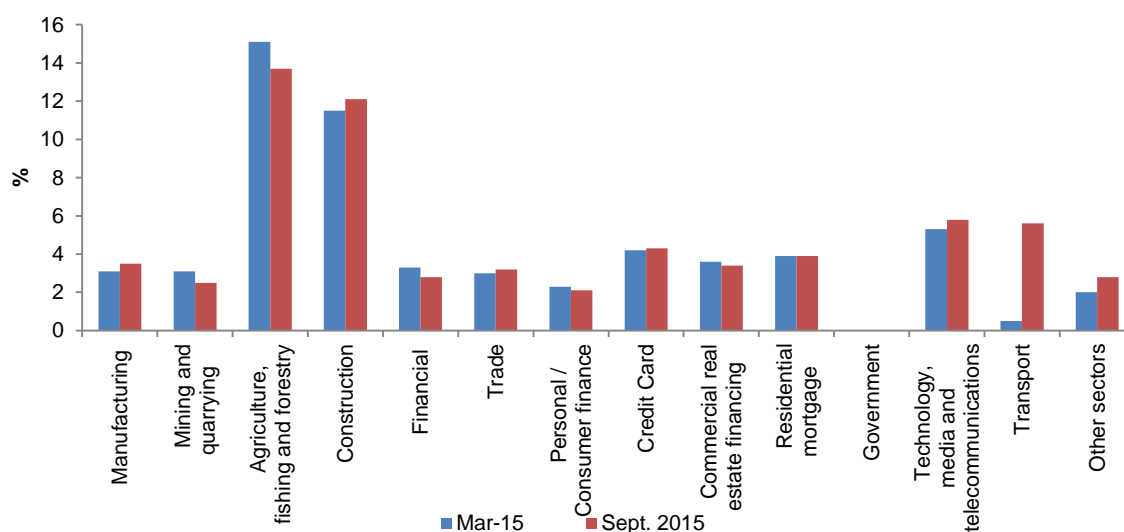
remaining unchanged (Table 3-3 and Chart 3-1). The highest increase was in “transport” by 5.1% and the highest decrease was in “agriculture, fishing and forestry” by 1.4%.

Table 3-3: Conventional Retail Banks’ Impaired Loan Ratios by Sector
(% of gross loans per sector)

	Mar. 2015	Sep. 2015	Change
Manufacturing	3.1	3.5	0.4
Mining and quarrying	3.1	2.5	(0.6)
Agriculture, fishing and forestry	15.1	13.7	(1.4)
Construction	11.5	12.1	0.6
Financial	3.3	2.8	(0.5)
Trade	3.0	3.2	0.2
Personal / Consumer finance	2.3	2.1	(0.2)
Credit Card	4.2	4.3	0.1
Commercial real estate financing	3.9	3.4	(0.5)
Residential mortgage	3.9	3.9	0.0
Government	0.0	0.0	0.0
Technology, media and telecommunications	5.3	5.8	0.5
Transport	0.5	5.6	5.1
Other sectors	2.0	2.8	0.8

Source: Central Bank of Bahrain

Chart 3-1: Conventional Retail Banks’ Impaired Loans by Sector
(% of gross loans per sector)



Source: Central Bank of Bahrain

Loan portfolios remain concentrated

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 19.2% of total loans in September 2015, an increase from the 18.7% in March 2015. The “manufacturing” sector represented 13.4% of total loans up from 12.5% followed by the “personal/consumer finance” sector at 12.3% of total loans over the same period.

The top two recipient sectors “commercial real estate financing” and “others”⁴ jointly represented 33.4% of loans in September 2015, an increase from the 32.3% in March 2015. Exposure to real estate/ construction was 34.9% of total lending in September 2015, a decrease from the 35.1% registered in March 2015.

Table 3-4: Distribution of Local Conventional Retail Banks’ Lending (% total loans)*

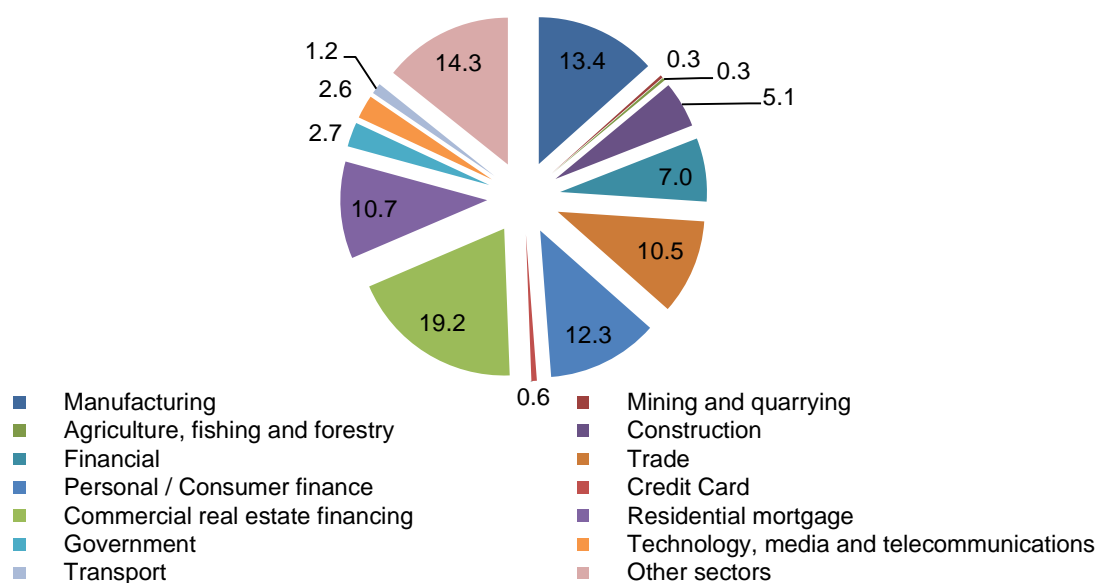
	Mar. 2015	Sep. 2015	Change
Manufacturing	12.5	13.4	0.9
Mining and quarrying	0.1	0.3	0.2
Agriculture, fishing and forestry	0.3	0.3	0.0
Construction	2.3	5.1	2.8
Financial	8.1	7.0	(1.1)
Trade	10.7	10.5	(0.2)
Personal / Consumer finance	12.3	12.3	0.0
Credit Card	0.6	0.6	0.0
Commercial real estate financing	18.7	19.2	0.5
Residential mortgage	11.1	10.7	(0.4)
Government	1.9	2.7	0.8
Technology, media and telecommunications	3.2	2.6	(0.6)
Transport	1.6	1.2	(0.4)
Other sectors	13.6	14.3	0.7
Top two recipient sectors	32.3	33.4	1.1
Real Estate/ Construction Exposure**	35.1	34.9	(0.2)

Source: Central Bank of Bahrain

*Figures may not add to a hundred due to rounding

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

Chart 3-2: Distribution of Conventional Local Retail Banks’ Lending (% of total loans)



Source: Central Bank of Bahrain

⁴ The “others sectors” category includes sectors such as “private banking”, “services”, “tourism”, and “utilities”.

The numbers as of end-March 2015 continue to show high concentration of risk for *overseas retail banks* (Table 3-5 and Chart 3-3). The top recipient of loans was the “Manufacturing” sector with 17.0% of total loans in September 2015, a decrease from the 18.2% in March 2015.

Table 3-5: Distribution of Overseas Conventional Retail Banks’ Lending (% total loans)*

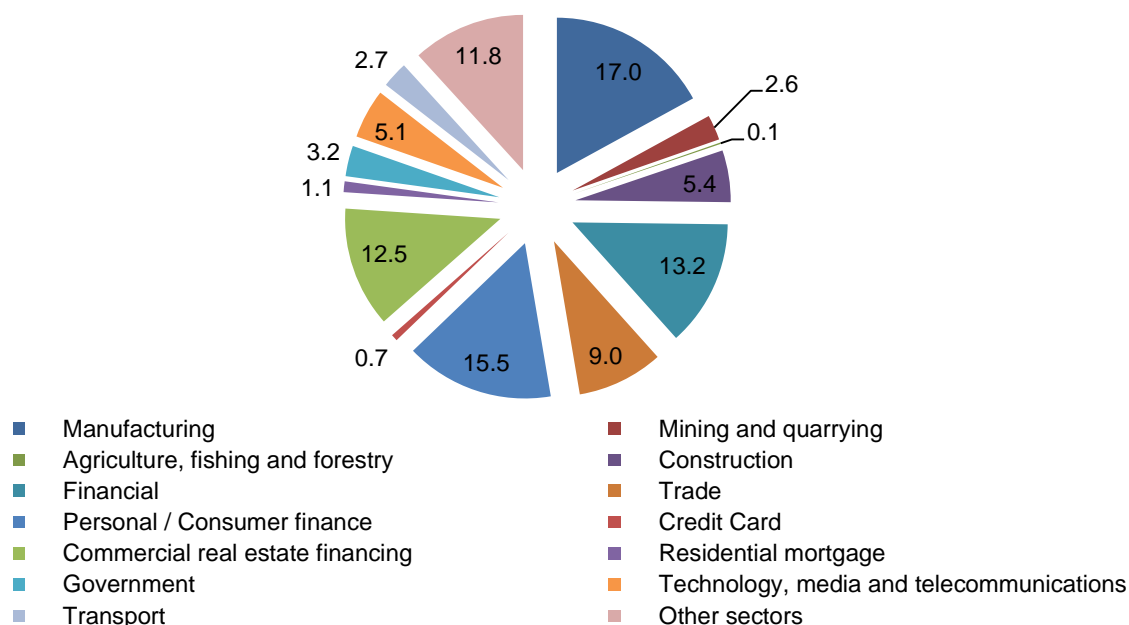
	Mar. 2015	Sept. 2015	Change
Manufacturing	18.2	17.0	(1.1)
Mining and quarrying	2.5	2.6	0.1
Agriculture, fishing and forestry	0.2	0.1	(0.1)
Construction	5.5	5.4	(0.1)
Financial	12.9	13.2	0.3
Trade	9.6	9.0	(0.6)
Personal / Consumer finance	15.9	15.5	(0.4)
Credit Card	0.7	0.7	0.0
Commercial real estate financing	10.2	12.5	2.4
Residential mortgage	1.1	1.1	0.0
Government	2.6	3.2	0.6
Technology, media and telecommunications	5.6	5.1	(0.5)
Transport	2.9	2.7	(0.2)
Other sectors	12.2	11.8	(0.6)
Top two recipient sectors	34.1	32.5	(1.5)
Real Estate/ Construction Exposure**	16.8	19.1	2.3

Source: Central Bank of Bahrain

*Figures may not add to a hundred due to rounding

** Real Estate/ Construction exposure is the share of the Construction, Commercial real estate financing and Residential Mortgages sectors of total lending.

Chart 3-3: Distribution of Conventional Overseas Retail Bank’s Lending (% of total loans)



Source: Central Bank of Bahrain

The top two recipients of loans (“manufacturing” and “personnel/Consumer finance”) jointly accounted for 32.5% of total loans. Exposure to real estate/ construction was 19.1% of total lending in September 2015, an increase from the 16.8% in March 2015.

Increase in retail bank profitability

As at end-September 2015, return-on-assets (ROA) remained the same at 1.2%. ROA for *locally-incorporated banks* increased from 1.1% in September 2014 to 1.3% in September 2015. For *overseas banks*, ROA decreased from 1.4% in 2014 to 1.1% in September 2015. Return-on-equity (ROE)⁵ for *locally-incorporated banks* decreased from 11.3% in September 2014 to 10.5% in September 2015.

Net interest income (as a % of total income) increased from 71.4% in September 2014 to 71.9% in September 2015. On the other hand, operating expenses as a proportion of total income decreased from 43.1% in September 2014 to 42.9% in September 2015.

Table 3-6: Profitability of Retail Banks (%)

	Sep. 2014	Sep. 2015
ROA *	1.2	1.2
ROA Locally Incorporated Banks	1.1	1.3
ROA Overseas Banks	1.4	1.1
ROE**	11.3	10.5
Net interest income (% total income)	71.4	71.9
Operating expenses (% total income)	43.1	42.9

Source: Central Bank of Bahrain

*ROA = ratio of net income to assets

**ROE = ratio of net income to tier 1 capital (for locally incorporated banks only)

Liquidity position stabilized

Between March 2015 and September 2015, bank deposits decreased while non-bank deposits increased for retail banks. Bank deposits decreased to 20.4% in September 2015. Non-bank deposits increased to 79.6% over the same period. The overall loan-deposit ratio for the segment increased from 69.6% in March 2015 to 72.2% in September 2015. Liquid assets as a proportion of total assets decreased over the period of March 2015 to September 2015 to reach 26.3%, respectively. Similarly, liquid assets as a proportion of the short-term liabilities presented a decrease from 40.9% to 40.2% over this period.

Table 3-7: Retail Banks' Liquidity Profile (%)

	Mar. 2015	Sep. 2015
Liquid Asset Ratio	26.7	26.3
Loan-Deposit Ratio	69.6	72.2
Non-Bank Deposits as a % of total deposits	78.2	79.6

Source: Central Bank of Bahrain.

⁵ We define equity in ROE as net profit over Tier 1 Capital.

3.3 Conventional Wholesale Banks

Decrease in capital adequacy⁶

As at end-September 2015, the regulatory capital adequacy ratio for locally-incorporated wholesale banks was 19.6%, a decrease from the 21.5% registered in March 2015. The core capital ratio (ratio of Tier 1 capital to risk-weighted assets) decreased to 17.9% in September 2015 from the 19.1% registered in March 2015. On the other hand, the leverage ratio (ratio of assets over capital) showed a decrease of 2.1% from the 8.7% registered in March 2015 to 6.6% in September 2015. The ratio of non-performing loans (NPLs) net of provisions to capital increased from 2.3% in March 2015 to 3.7% over the same period which is attributed to the increase in non-performing loans.

Table 3-8: Capital Provisions Ratios for Local Conventional Wholesale Banks

Indicator	Mar. 2015	Sep. 2015
Capital Adequacy Ratio (%)	21.5	19.6
Tier 1 Capital Adequacy Ratio (%)	19.1	17.9
Leverage (assets/capital)(times)	8.7	6.6
NPLs net of provisions to capital (%)	2.3	3.7

Source: Central Bank of Bahrain

Decrease in non-performing loans of wholesale banks

As at end-September 2015, loans classified as non-performing decreased to 5.7%. The NPLs of *Locally-incorporated wholesale banks* decreased to reach 3.4%. Similarly, *overseas wholesale banks* witnessed an increase in NPLs from 7.9% to 8.0% over the same period. Specific provisions as a proportion of NPLs witnessed a decrease from 70.5% in March 2015 to 65.8% in September 2015. The net NPLs as of total loans increased from 1.9% in March 2015 to 2.3% in September 2015.

Table 3-9: NPL Figures for Conventional Wholesale Banks

Indicator	Mar. 2015	Sep. 2015
NPL's (% Gross)	6.0	5.7
<i>NPL's Local Banks</i>	4.0	3.4
<i>NPL's Overseas Banks</i>	7.9	8.0
Specific provisions (% of NPLs) *	70.5	65.8
Net NPLs (% of net loans)	1.9	2.3

Source: Central Bank of Bahrain

* Specific provisions as a percentage of NPL's are calculated as specific provisions divided by gross impaired loans minus interest in suspense.

⁶ The capital adequacy ratio relates total capital to risk-weighted assets. The discussion excludes overseas wholesale banks, which do not have prescribed capital levels or ratios.

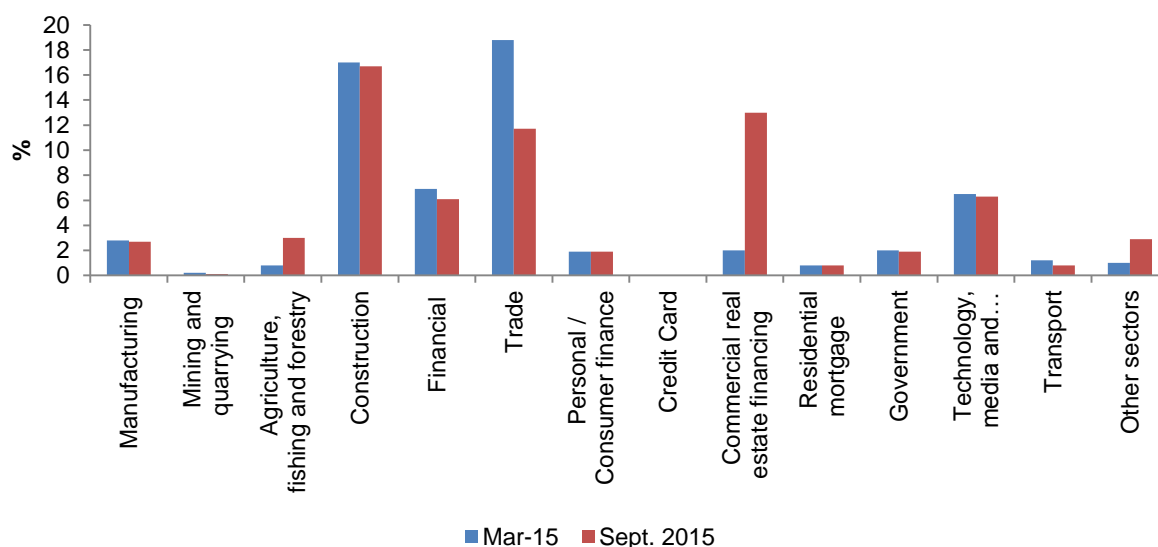
Available data on the sectoral breakdown of impaired loans shows that impairment in the “Construction” was the highest between all sectors at 16.7% followed by the “Commercial real estate financing” sector with an impairment of 13.0%. The biggest increases were in the “Commercial real estate financing” sector which increased by 11% followed by “Agriculture, fishing and forestry” and “Other Sectors” which increased by 2.2% and 1.9% respectively. The largest decrease in impairment were found in the “Trade” sector which decreased by 7.1%.

Table 3-10: Conventional Wholesale Banks’ Impaired Loan Ratios by Sector
(% of gross loans to sector)

	Mar. 2015	Sep. 2015	Change %
Manufacturing	2.8	2.7	(0.1)
Mining and quarrying	0.2	0.1	(0.1)
Agriculture, fishing and forestry	0.8	3.0	2.2
Construction	17.0	16.7	(0.3)
Financial	6.9	6.1	(0.8)
Trade	18.8	11.7	(7.1)
Personal / Consumer finance	1.9	1.9	0.0
Credit Card	0.0	0.0	0.0
Commercial real estate financing	2.0	13.0	11.0
Residential mortgage	0.8	0.8	0.0
Government	2.0	1.9	(0.1)
Technology, media and telecommunications	6.5	6.3	(0.2)
Transport	1.2	0.8	(0.4)
Other sectors	1.0	2.9	1.9

Source: Central Bank of Bahrain

Chart 3-4: Conventional Wholesale Banks’ Impaired Loans by Sector
(% of gross loans to sector)



Source: Central Bank of Bahrain

Loan portfolios remains concentrated despite decreases in some sectors

An examination of lending patterns as at end-September 2015 shows that for *locally-incorporated wholesale banks*, the top recipient of loans remained the “Manufacturing” sector, which accounted for 25.6% of total loans in September 2015 representing a decrease from the 27.4% in March 2015 (Table 3-10 and Chart 3-5).

Table 3-11: Distribution of Conventional Local Wholesale Banks’ Lending (% total Loans)*

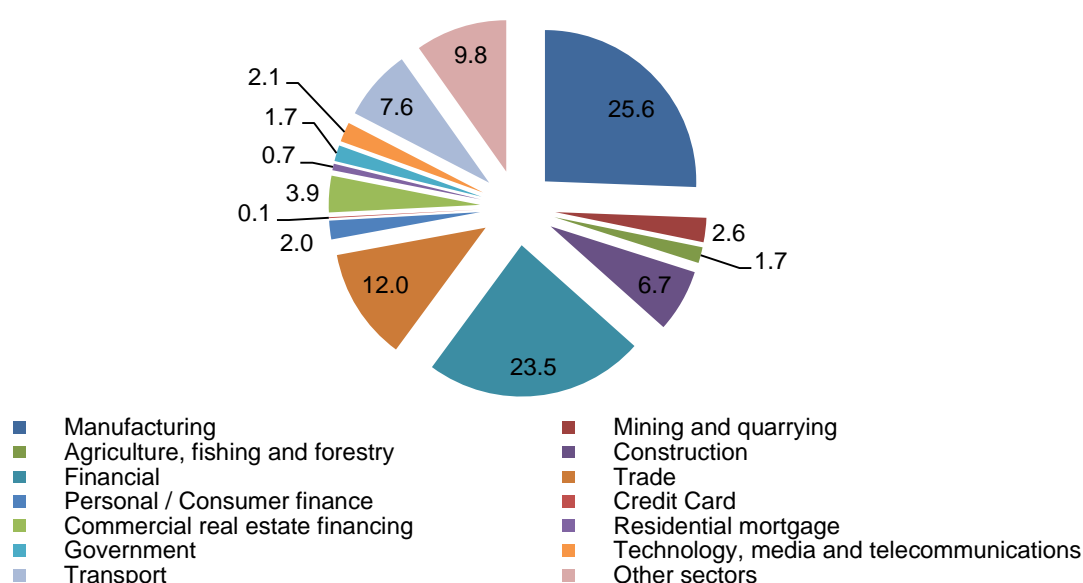
	Mar. 2015	Sep. 2015	Change
Manufacturing	27.4	25.6	(1.8)
Mining and quarrying	3.0	2.6	(0.4)
Agriculture, fishing and forestry	2.0	1.7	(0.3)
Construction	7.5	6.7	(0.8)
Financial	21.6	23.5	1.9
Trade	11.1	12.0	0.9
Personal / Consumer finance	2.1	2.0	(0.1)
Credit Card	0.1	0.1	0.0
Commercial real estate financing	2.4	3.9	1.5
Residential mortgage	0.7	0.7	0.0
Government	1.5	1.7	0.2
Technology, media and telecommunications	2.1	2.1	0.0
Transport	7.7	7.6	(0.1)
Other sectors	10.8	9.8	(1.0)
Top two recipient sectors	49.0	49.1	0.1
Real Estate/ Construction Exposure**	10.6	11.3	0.7

Source: Central Bank of Bahrain

*Figures may not add to a hundred due to rounding

** Real Estate/ Construction exposure is the share of the Construction, Commercial real estate financing and Residential Mortgages sectors of total lending.

Chart 3-5: Distribution of Conventional Local Wholesale Banks’ Lending (% of total loans)



Source: Central Bank of Bahrain

Also, the top two sectors (“manufacturing” and “financial”) accounted for 49.1% of total lending in September 2015 while real estate/ construction exposure increased to 11.3% from 10.6%.

In *overseas wholesale banks*, the top recipient of loans in September 2015 was the “Other” sector, with 24.7% of total loans which was also the same concentration in March 2015 (Table 3-11 and Chart 3-6). The top 2 sectors (financial and other) jointly represented 47.8% in March 2015. Real estate/construction exposure decreased from 13.0% in March 2015 to 12.4% in September 2015.

**Table 3-12: Distribution of Conventional Overseas Wholesale Banks’ Lending
(% total Loans)***

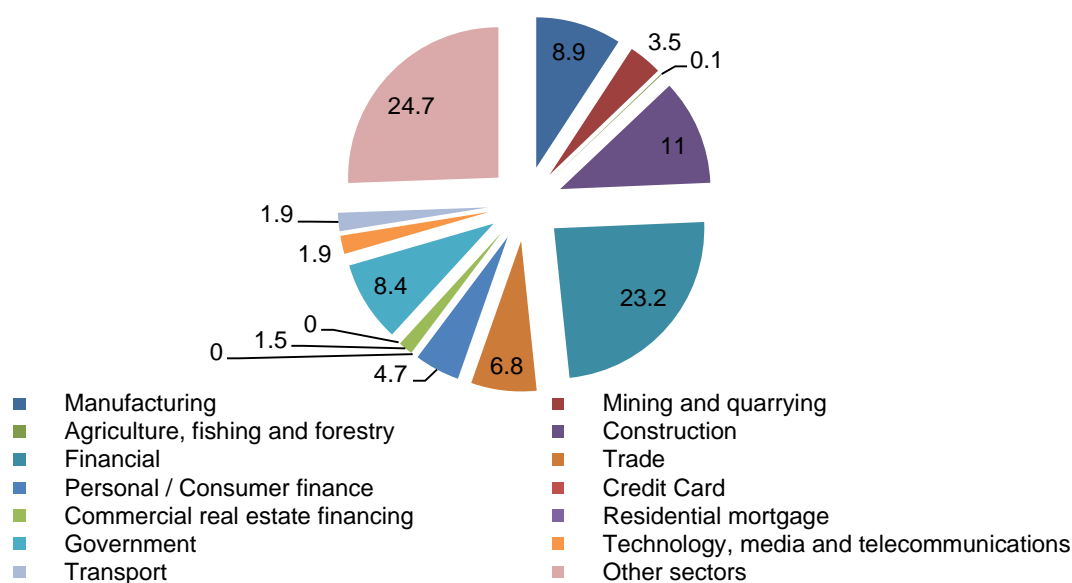
	March 2015	Sept. 2015	Change
Manufacturing	9.4	8.9	(0.5)
Mining and quarrying	3.3	3.5	0.2
Agriculture, fishing and forestry	0.1	0.1	0.0
Construction	11.8	11.0	(0.8)
Financial	24.5	23.2	(1.3)
Trade	6.1	6.8	0.7
Personal / Consumer finance	4.5	4.7	0.2
Credit Card	0.0	0.0	0.0
Commercial real estate financing	1.2	1.5	0.3
Residential mortgage	0.0	0.0	0.0
Government	8.5	8.4	(0.1)
Technology, media and telecommunications	2.3	1.9	(0.4)
Transport	3.5	5.4	1.9
Other sectors	24.7	24.7	0.0
Top two recipient sectors	49.2	47.8	(1.4)
Real Estate/ Construction Exposure**	13.0	12.4	(0.6)

Source: Central Bank of Bahrain

*Figures may not add to a hundred due to rounding

** Real Estate/ Construction exposure is the share of the Construction, Commercial real estate financing and Residential Mortgages sectors of total lending.

Chart 3-6: Distribution of Overseas Wholesale Banks' Lending (%)



Source: Central Bank of Bahrain

Decreased earnings for wholesale banks

ROA for the conventional wholesale banking sector was at 0.4% in September 2015, a decrease from the 0.7% in September 2014. The ROA for *local wholesale banks* decreased from 0.6% to 0.3% over the same period. ROA for overseas wholesale banks decreased from 0.8% to 0.5% over the same period.

ROE for *local wholesale banks* decreased from 4.4% to 2.5%. Net interest income as a proportion of total income increased from 58.9% to 81.1% in September 2015. Operating expenses as a proportion of total income showed an increase from 49.5% in September 2014 to 63.2% in September 2015.

Table 3-13: Profitability of Wholesale Banks (%)

	Sep. 2014	Sep. 2015
ROA *	0.7	0.4
ROA Locally Incorporated Banks	0.6	0.3
ROA Overseas Banks	0.8	0.5
ROE **	4.4	2.5
Net interest income (% total income)	58.9	81.1
Operating expenses (% total income)	49.5	63.2

Source: Central Bank of Bahrain

*ROA = ratio of net income to assets

**ROE = ratio of net income to tier 1 capital (for locally incorporated banks only)

Liquidity position declines

As at end-September 2015, the overall loan-deposit ratio for conventional wholesale banks stood at 64.6%, a decrease from the 63.3% in March 2015. The loan deposit ratio for *local wholesale banks* increased to 67.1% in September from the 66.5% in March 2015. Over the same period, the loan deposit ratio for *overseas wholesale* bank increased from 60.5% to 62.2%. Liquid assets for wholesale banks as a proportion of total assets decreased to 20.8% in September 2015 from 24.9% in March 2015. *Locally incorporated wholesale banks* had a liquid asset ratio of 31.0% in September 2015 a decrease from the 37.1% in March 2015. Overseas wholesale banks had a ratio of 10.1%, lower than the 12.3% registered in March 2015. Liquid assets as a proportion of short-term liabilities decreased to 30.5% in September 2015 from 39.7% in March 2015. Lastly, the deposits from non-bank sources as a proportion of total deposits remained unchanged at 45.8% as well as bank deposits at 54.2% over the same period.

3.4 Overall Assessment of the Conventional Banking Sector

The financial soundness indicators show that conventional retail banks witnessed an increase in capital adequacy ratio while conventional wholesale sectors witnessed a decrease in capital positions. Capital adequacy ratios for conventional retail banks increased to 18.7% in September 2015. Capital adequacy ratio for conventional wholesale banks was 19.6%. Non-performing loans have shown a slight increase between periods of March 2015 to September 2015 from 3.5% to 3.6%, for conventional retail banks. As for conventional wholesale banks, loans classified as non-performing were at 5.7% in September 2015 compared to 6.0% in March 2015. Loan concentration remains high for conventional retail and wholesale banks despite some decreases in some sectors.

As at end-September 2015, return-on-assets (ROA) remained unchanged for conventional retail banks and decreased for conventional wholesale banks to stand at 1.2% and 0.4% respectively. Return-on-equity (ROE) for *local retail banks* decreased from 11.3% in September 2014 to 10.5% in September 2015. ROE for *local wholesale banks* decreased from 4.4% to 2.5% over the same period. For conventional retail banks, liquid assets as a proportion of total assets decreased over the period of March 2015 to September 2015 to reach 26.3%. Liquid assets for wholesale banks as a proportion of total assets decreased to 20.8% in September 2015 from 24.7% in March 2015.

4. Islamic Banks

Chapter

4

Key Points

- Capital positions for Islamic banks decreased for Islamic retail and wholesale banks.
- Increase in non-performing facilities (NPFs) for Islamic retail banks while NPF's for Islamic wholesale banks remained unchanged.
- Concentration of facilities for both Islamic retail banks and Islamic wholesale Banks continues.
- Earnings remained positive for Islamic retail banks while it became negative for Islamic wholesale banks.
- Liquidity positions deteriorated for Islamic retail and Islamic wholesale banks.

4.1 Overview

This chapter analyzes the banking sector under the following categories: Islamic retail banks (section 4-2) and Islamic wholesale banks (section 4-3). Section 4.4 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), as at end-March 2015 and compared with end-September 2015.

This chapter offers macroprudential analysis of the Islamic banking sector based on a set of selected Financial Soundness Indicators (FSIs).⁷

Annex1 presents selected *Financial Soundness Indicators* (FSIs) for the different banking segments. Annex 2 presents selected graphs showing the development of selected indicators over time.

⁷This chapter does not contain a section 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 Systemically-Important Banks (SIB's).

4.2 Islamic Retail Banks

Decrease in capital positions

The capital adequacy ratio of Islamic retail banks decreased from 16.1% in March 2015 to 15.6% in September 2015. Tier 1 capital also decreased from 13.9% in March 2015 to 13.6% in September 2015.

Table 4-1 Capital Provisions Ratios for Islamic Retail Banks

Indicator	Mar. 2015	Sep. 2015
Capital Adequacy Ratio	16.1%	15.6%
Tier 1 Capital Adequacy Ratio	13.9%	13.6%
NPFs net of provisions to capital	19.7%	23.8%

Source: Central Bank of Bahrain

The ratio of non-performing facilities (NPFs) net of provisions to capital increased from 19.7% to 23.8% for the same period.

Increase in non-performing facilities

Non-performing facilities (NPFs) increased to 11.7% in September 2015, compared to 11.0% in March 2015. Specific Provisoining decreased from 42.3% in March 2015 to 36.8% in September 2015.

Table4-2: NPF Figures for Islamic Retail Banks

Indicator	Mar. 2015	Sep. 2015
NPFs (% Gross)	11.0	11.7
Specific Provisions (% of NPFs)	42.3	36.8

Source: Central Bank of Bahrain

A look at the non-performing facilities by sector indicates that the “Manufacturing” sector exceeded the “Construction” sector with the highest impairment of 25.4% in September 2015 (7.4% increase between March 2015 and September 2015) followed by “Construction” and “Agriculture, fishing and forestry” with 21.5% and 17.9% respectively.

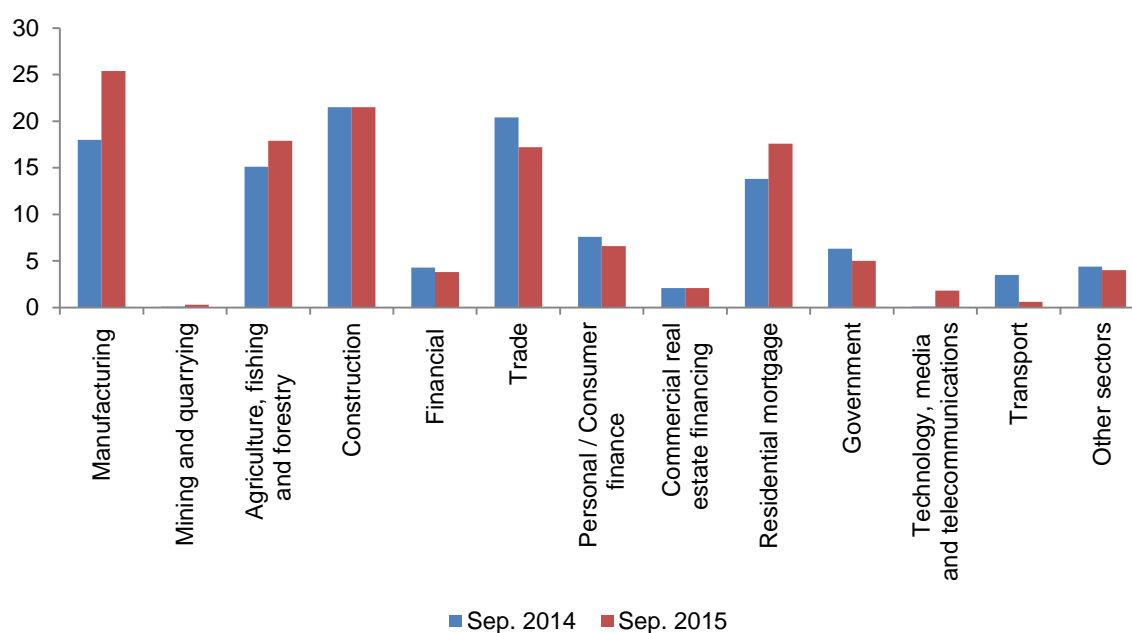
The biggest declines in NPF’s by sector was in the “Trade” Sector with a 3.2% decrease in NPFs from March 2015 to September 2015. The biggest increase in NPF’s was the “Manufacturing” sector with an increase of 7.4%.

Table 4-3: Islamic Retail Banks' NPF Ratios by Sector (% of gross facilities per sector)

	Mar. 2015	Sep. 2015	Change
Manufacturing	18.0	25.4	7.4
Mining and quarrying	0.1	0.3	0.2
Agriculture, fishing and forestry	15.1	17.9	2.8
Construction	21.5	21.5	0
Financial	4.3	3.8	(0.5)
Trade	20.4	17.2	(3.2)
Personal / Consumer finance	7.6	6.6	(1)
Credit Card	2.1	2.1	0
Commercial real estate financing	13.8	17.6	3.8
Residential mortgage	6.3	5.0	(1.3)
Government	0.1	1.8	1.7
Technology, media and telecommunications	3.5	0.6	(2.9)
Transport	4.4	4.0	(0.4)
Other sectors	4.4	4.1	(0.3)

Source: Central Bank of Bahrain

Chart 4-1: Islamic Retail Bank's NPF's by Sector (% of gross facilities per sector)



Source: Central Bank of Bahrain

No significant change in asset concentration (loan portfolio)

There have been no significant changes in the asset concentration. At the end of September 2015, the top recipient of financing was "Personal / Consumer finance" at 21.6% up from 19.9% in March 2015. The top two recipients of financing ("Personal / Consumer finance" and "Commercial real estate financing") accounted for 36.1 of total facilities extended compared to 35.4% for the top two sectors in March 2015. Moreover, the share of "Financial" sector declined from 9.8% in March 2015 to 7.1% in September 2015.

Table 4-4: Distribution of Islamic Retail Banks' Lending by Economic Activity (% of total facilities)*

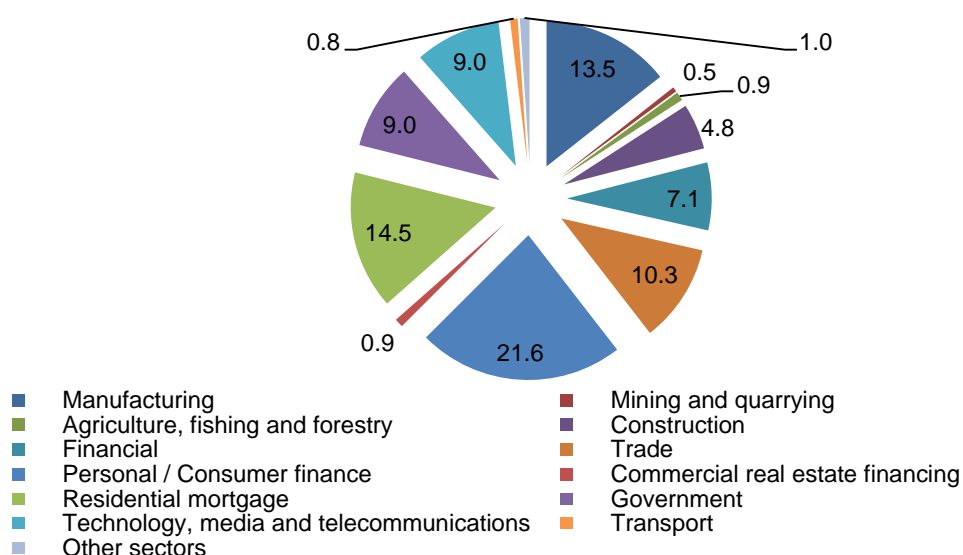
	Mar. 2015	Sep. 2015	Change
Manufacturing	14.3	13.5	(0.8)
Mining and quarrying	0.5	0.5	(0.0)
Agriculture, fishing and forestry	1.0	0.9	(0.1)
Construction	5.1	4.8	(0.3)
Financial	9.8	7.1	(2.7)
Trade	10.4	10.3	(0.1)
Personal / Consumer finance	19.9	21.6	1.7
Credit Card	0.7	0.9	0.2
Commercial real estate financing	15.5	14.5	(1.0)
Residential mortgage	8.0	9.0	1.0
Government	6.3	9.0	2.7
Technology, media and telecommunications	1.3	0.8	(0.5)
Transport	1.0	1.0	0.0
Other sectors	6.0	6.0	0.0
Top two recipient sectors	35.4	36.1	0.7
Real Estate/ Construction Exposure**	28.6	28.4	(0.2)

Source: Central Bank of Bahrain

*Figures may not add to a hundred due to rounding

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

On the other hand, "Real Estate/ Construction" exposure decreased slightly from 28.6% in March 2015 to 28.4% in September 2015.

Chart 4-2: Distribution of Islamic Retail Bank's Lending by Economic Activity (% of total facilities)

Source: Central Bank of Bahrain

Lending distribution by Islamic instrument remained nearly unchanged over the past quarter. At the end of September 2015, the top recipient of finance was “Murabaha” at 70.2% in September 2015 down from 70.4% in March 2015. This was followed by “Ijarah” which increased from 18.6% to 18.9% in September 2015.

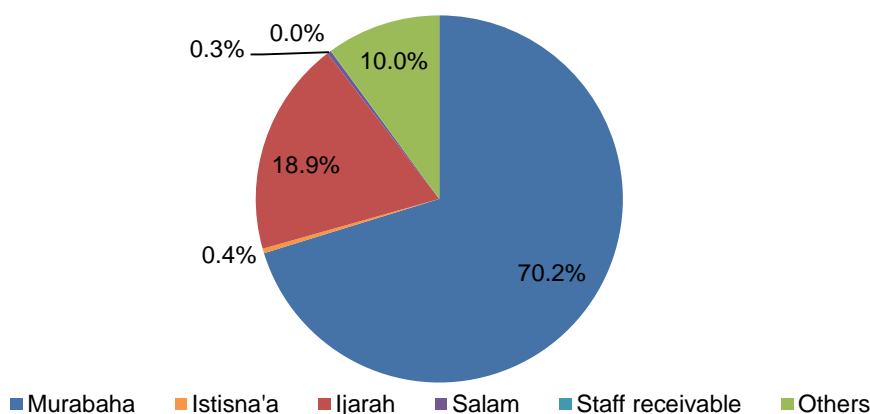
Table 4-5: Distribution of Islamic Retail Banks’ Lending by Islamic Instrument (% of total facilities)*

	Mar. 2015	Sep. 2015	Change
Murabaha	70.4	70.2	-0.2
Istisna'a	0.4	0.4	0.0
Ijarah	18.6	18.9	0.3
Salam	0.6	0.3	-0.3
Staff receivable	0.0	0.0	0.0
Others	10.0	10.0	0.0

Source: Central Bank of Bahrain

*Figures may not add to a hundred due to rounding

Chart 4-3: Distribution of Islamic Retail Bank’s Lending by Islamic Instrument (% of total facilities)



Source: Central Bank of Bahrain

No major change in earnings

The return on assets (ROA) for Islamic retail banks remained the same at 0.4% in September 2015 compared to September 2014. Return on equity (ROE) decreased from 3.9% to 3.2% for the same period.

Table 4-6: Profitability of Islamic Retail Banks (%)

	Sep. 2014	Sep. 2015
ROA*	0.4	0.4
ROE**	3.9	3.2
Operating expenses (% total operating income)	78.7	74.6

Source: Central Bank of Bahrain

* ROA = ratio of net income to assets

**ROE = ratio of net income to tier 1 capital

Slight decrease in liquidity

The volume of liquid assets available to Islamic retail banks decreased from 13.4% of total assets in March 2015 to 11.2% in September 2015. The ratio of total facilities to deposits decreased from 77.4% in March 2015 to 75.4% in September 2015.

Table 4-7: Liquidity Measures for Islamic Retail Banks

Indicator	Mar. 2015	Sep. 2015
Liquid Assets (% of total assets)	13.4	11.2
Facilities – deposits ratio (%)	77.4	75.4

Source: Central Bank of Bahrain

4.3 Islamic Wholesale Banks

Decline in capital positions

As at end-September 2015, the CAR for Islamic wholesale banks decreased from 20.5% in March 2015 to 19.5% in September 2015. Tier1 capital similarly decreased from 20.2% to 19.2% over the same period. The ratio of NPFs net of provisions to capital also decreased from 3.0 to 2.6% .

Table 4-8 Capital Provisions Ratios for Islamic Wholesale Banks

Indicator	Mar. 2015	Sep. 2015
Capital Adequacy Ratio	20.5	19.5
Tier 1 Capital Adequacy Ratio	20.2	19.2
NPFs net of provisions to capital	3.0	2.6

Source: Central Bank of Bahrain

Stable non-performing facilities (NPFs)

As of end-September 2015, NPFs for Islamic wholesale banks remained the same at 4.7% in September 2015 compared to March 2015. Provisioning for NPF's increased from 76.4% to 79.4% over the same period.

Table 4-9: NPF Figures for Islamic Wholesale Banks

Indicator	Mar. 2015	Sep. 2015
NPFs (% Gross)	4.7	4.7
Specific Provisioning (% of NPFs)	76.6	79.4

Source: Central Bank of Bahrain

The sector with the highest impairment was the “Technology, media and telecommunications” sector with 54.3% in September 2015, down from the 55.2% in March 2015. This was followed by the “Transport” and “Agriculture, fishing and forestry” sectors.

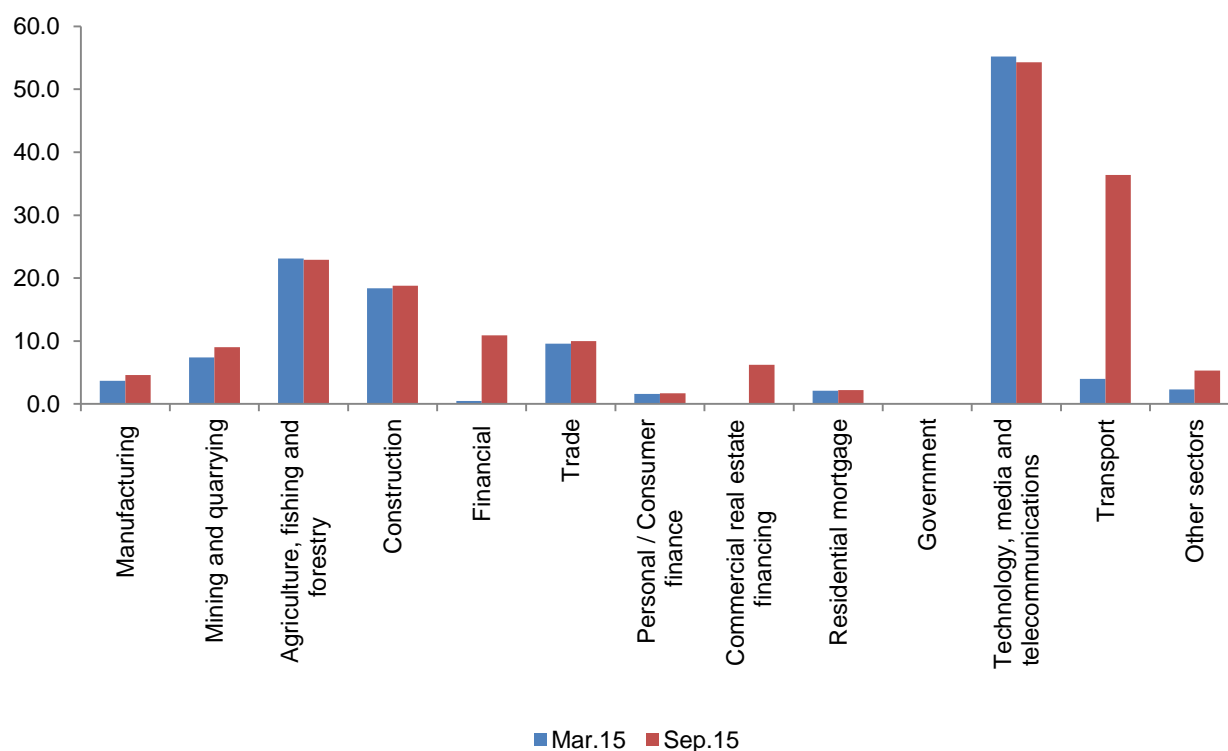
Available data on the sectoral breakdown of non-performing facilities shows that the biggest drop was in the Financial, Agriculture fishing and forestry sector with a decrease of 2.8% from 13.4% in March 2015 to 10.9% in September 2015. The biggest increase was in the “transport” sector with an increase of 30.8%.

Table 4-10: Islamic Wholesale Banks' NPF Ratios by Sector
(% of gross facilities per sector)

	Mar. 2015	Sep. 2015	Change
Manufacturing	3.7	4.6	0.9
Mining and quarrying	7.4	9.0	1.6
Agriculture, fishing and forestry	23.1	22.9	(0.2)
Construction	18.4	18.8	0.4
Financial	13.4	10.9	(2.8)
Trade	9.6	10.0	0.4
Personal / Consumer finance	1.6	1.7	0.1
Commercial real estate financing	2.1	6.2	4.1
Residential mortgage	1.5	2.2	0.7
Government	0.0	0.0	0.0
Technology, media and telecommunications	55.2	54.3	(0.9)
Transport	5.6	36.4	30.8
Other sectors	8.4	5.3	2.8

Source: Central Bank of Bahrain

Chart 4-4: Islamic Wholesale Bank's NPF's by Sector
(% of gross facilities per sector)



Source: Central Bank of Bahrain

Asset concentration remains high in some sectors

At end-September 2015, the “manufacturing” sector remained the top recipient of financing from Islamic wholesale banks, at 24.0%, surpassing “construction” at 17.3%. The financial Sector which increased from 8.8% in March 2015 to 9.2% in September 2015.

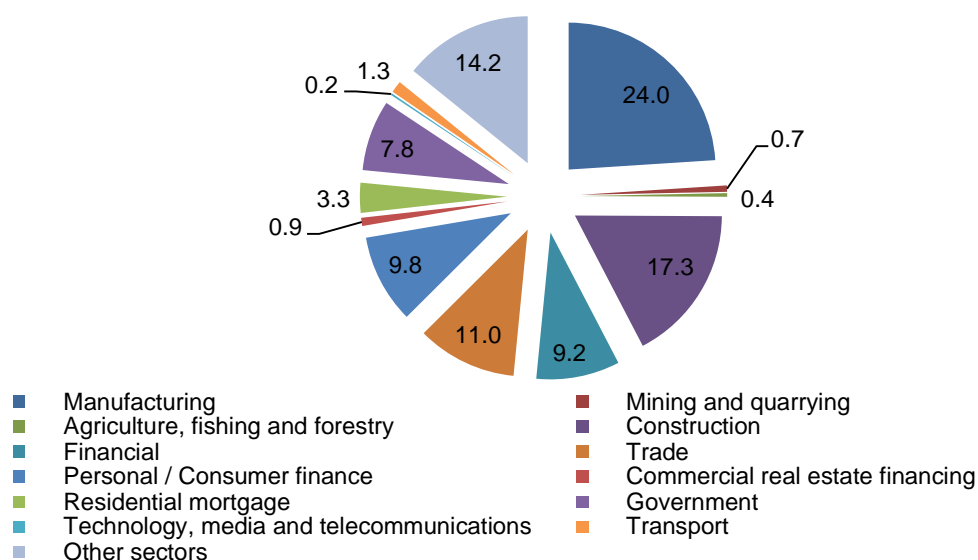
Table 4-11: Distribution of Islamic Wholesale Banks' Lending by Economic Activity (% total facilities)*

	Mar. 2015	Sep. 2015	Change
Manufacturing	25.5	24.0	(1.5)
Mining and quarrying	0.8	0.7	(0.1)
Agriculture, fishing and forestry	0.5	0.4	(0.1)
Construction	16.9	17.3	0.4
Financial	8.8	9.2	0.4
Trade	11.6	11.0	(0.6)
Personal / Consumer finance	9.7	9.8	0.1
Commercial real estate financing	1.6	0.9	(0.7)
Residential mortgage	2.4	3.3	0.9
Government	7.6	7.8	0.2
Technology, media and telecommunications	0.2	0.2	0.0
Transport	1.2	1.3	0.1
Other sectors	13.2	14.2	1.0
Top two recipient sectors	42.4	41.2	(1.2)
Real Estate/ Construction Exposure**	20.8	21.4	0.6

Source: Central Bank of Bahrain

*Figures may not add to a hundred due to rounding

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

Chart 4-5: Distribution of Islamic Wholesale Banks's Lending (% of total facilities)

Source: Central Bank of Bahrain

The top two recipient sectors in September 2015 ("Manufacturing" and "other sectors") jointly represented 41.2% of total financing, down from 42.4% in March 2015. Real estate/construction exposure increased to 21.4% in September 2015 from 20.8% in March 2015.

Lending distribution by Islamic instrument shows that at the end of September 2015, the top recipient of finance was “Murabaha” at 90.5%.

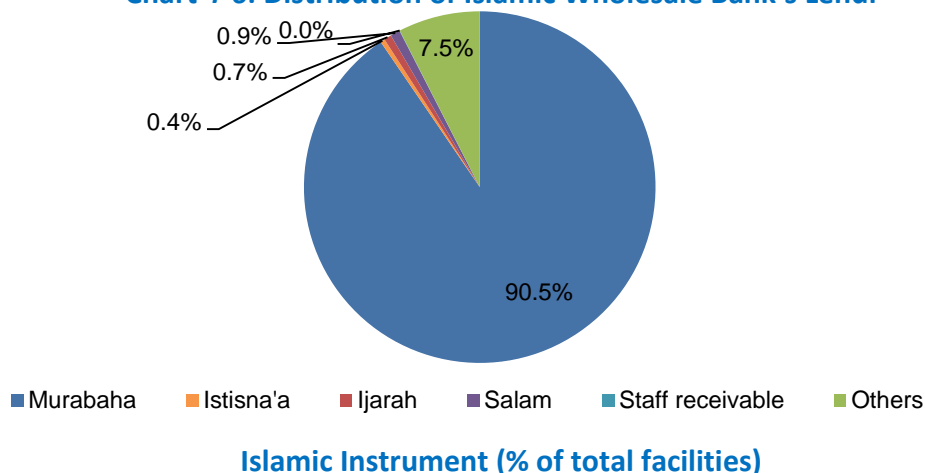
Table 4-12: Distribution of Islamic Wholesale Banks’ Lending by Islamic Instrument (% of total facilities)*

	Mar. 2015	Sep. 2015	Change
Murabaha	90.6	90.5	(0.1)
Istisna'a	0.3	0.4	0.1
Ijarah	0.3	0.7	0.4
Salam	1.0	0.9	(0.1)
Staff receivable	0.0	0.0	0.0
Others	7.8	7.5	(0.3)

Source: Central Bank of Bahrain

*Figures may not add to a hundred due to rounding

Chart 4-6: Distribution of Islamic Wholesale Bank’s Lendi



Source: Central Bank of Bahrain

Decrease in earnings

The earnings performance of Islamic wholesale banks declined over the period from September 2014 to September 2015. Return on assets (ROA) decreased from 0.5 % in September 2014 to -0.1% in September 2015. Return on equity (ROE) decreased from 3.5% to -0.7% in September 2015.

Also, operating expenses (as % of total income) increased from 59.6% in September 2014 to 63.3% in September 2015.

Table 4-13: Profitability of Islamic Wholesale Banks (%)

	Sep. 2014	Sep. 2015
ROA*	0.5	-0.1
ROE**	3.5	-0.7
Operating expenses (% total operating income)	59.6	63.3

Source: Central Bank of Bahrain

* ROA = ratio of net income to assets

**ROE = ratio of net income to tier 1 capital

Liquidity position improves slightly

As of end-September 2015, liquid assets of Islamic wholesale banks represented 19.9% of total assets, 0.4% higher than the 19.5% registered in March 2015. On the other hand, the facilities deposit ratio decreased from 63.3% to 60.9% in September 2015.

Table 4-14: Liquidity Measures for Islamic Wholesale Banks

Indicator	Mar. 2015	Sep. 2015
Liquid assets (% of total)	19.5	19.9
Facilities-deposit ratio	63.3	60.9

Source: Central Bank of Bahrain

4.4 Overall Assessment of the Islamic Banking Sector

The financial soundness indicators show that Islamic retail banks and wholesale banks' capital positions decreased during the period between March 2015 and September 2015 reaching 15.6% and 19.5% respectively.

Non-performing facilities increased for Islamic retail while it remained unchanged for Islamic wholesale to reach 11.7% and 4.7% respectively. Facilities concentration has decreased in some sectors while increasing in others in retail Islamic banks and wholesale Islamic banks.

The earnings picture remains positive for Islamic retail banks while ROE and ROA turned negative for Islamic wholesale banks.

Islamic retail banks experienced some changes in its liquidity position as the liquid asset ratio and facilities to deposits ratio decreased. Islamic wholesale's liquidity positions showed an increase in liquid assets while facilities to deposit ratio decreased.

Part III:

Developments in the Equity Market and Payment Systems

5. Performance of Equity Market

Chapter

5

Key Points

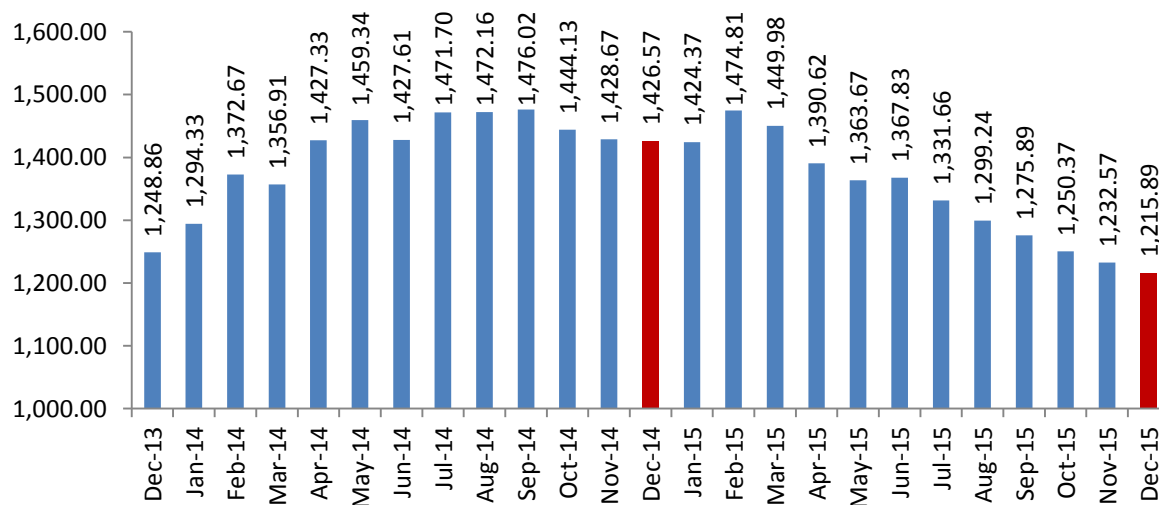
- Decrease in the Bahrain All Share index
- Year-on-year decline in market capitalization
- Year-on-year decline in price-earnings ratio
- GCC indices decline amid decreasing oil price

5.1 Bahrain Market Trends

Decrease in market index

A look at *year-on-year* data shows that the Bahrain All Share Index decreased by 210.6 points (14.7%) between December 2014 and December 2015 (Chart 5-1). The index had its highest point in 2015 in February when it was at 1,474.8 points. However, the index started gradually decreasing from February onwards until it reached its two year low in December 2015 at 1,215.8 points. With oil prices expected to remain low in 2016 and higher interest rates, the index is unlikely to make big gains over the short to medium term.

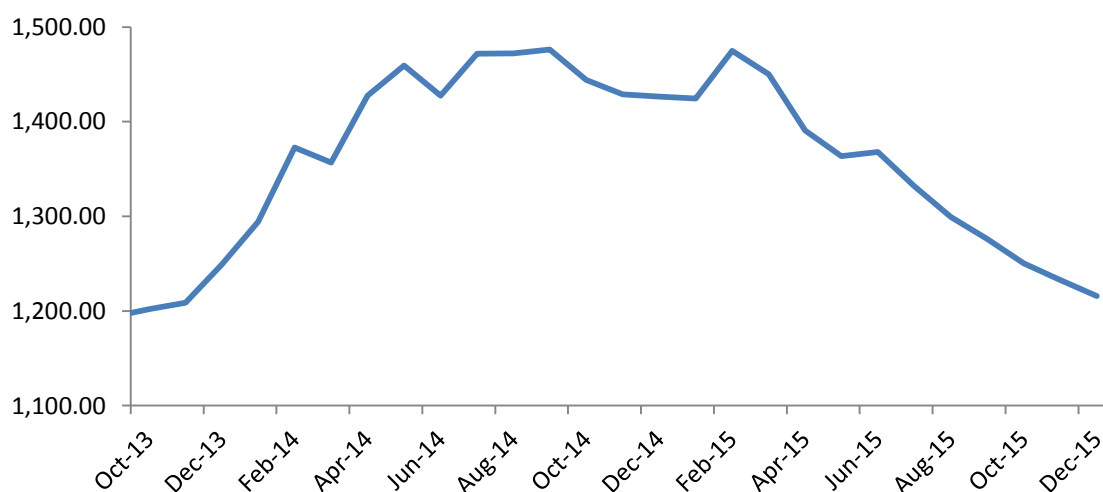
Chart 5-1: Recent Trends in the Bahrain All-Share Index, December 2013-December 2015.



Source of Data: Bahrain Bourse

Looking at the overall performance of the Bahrain All Share index for the past two years (Chart 5-2), the index has performed positively from October 2013 to May 2014. The index remained above 1,400 points with minor fluctuation levels between June 2014 and February 2015. However, the index experienced gradual decreases afterwards until it reached its two year low in December 2015.

Chart 5-2: Bahrain All-Share Index, December 2012-December 2014



Source of Data: Bahrain Bourse

Decrease in market capitalization

As at end-December 2015, market capitalization of the Bahrain Bourse stood at BD 7.1 billion (Table 5-1). This level of market capitalization is 3.2% lower than the level attained in June 2014 and 13.5% lower *year-on-year*.

Table 5-1: Market Capitalization on the Bahrain Bourse

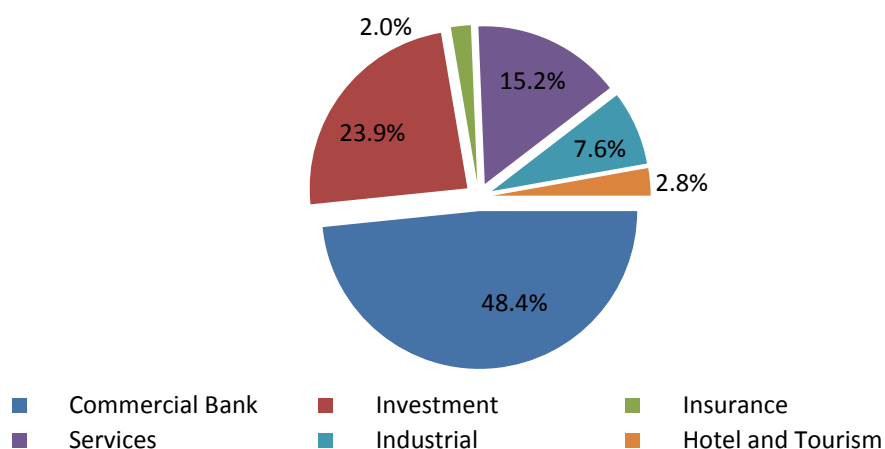
Sector	Dec. 2014	Jun. 2015	Dec. 2015	(BD)	
				Dec. 2014- Jun. 2015 (% Change)	Dec. 2014- Dec. 2015 (% Change)
Commercial banks	3,793,805,442	3,664,820,365	3,483,477,135	-3.4%	-8.2%
Investment	2,295,082,815	2,121,193,355	1,723,042,243	-7.6%	-24.9%
Insurance	163,878,591	161,883,489	146,903,190	-1.2%	-10.4%
Services	1,125,569,854	1,156,482,718	1,096,383,238	2.7%	-2.6%
Industrial	751,120,639	730,756,917	547,911,644	-2.7%	-27.1%
Hotel and Tourism	197,610,963	223,467,892	202,190,375	13.1%	2.3%
Total	8,327,068,303	8,058,604,736	7,199,907,825	-3.2%	-13.5%

Source: Bahrain Bourse

A breakdown of market capitalization by sector indicates that Industrial recorded the highest *year-on-year* decline in market capitalization (27.1%) followed by Investment

(24.9%) and Insurance (10.4%). The Hotel and Tourism was the only sector that recorded positive (2.3%) year on year growth in market capitalization.

Chart 5-3: Market Capitalisation by Sector, Dec 2015



Source: Bahrain Bourse

Decrease in price-earnings ratios

As December 2015, the price-earnings ratio (P-E ratio) for the stock market stood at 8.85, a decrease from the 10.41 attained last year in December 2014 and the 9.83 in June 2015. The Industrial sector witnessed the highest decline in the P-E ratio between December 2014 and December 2015 followed by the Investment sector. All other sectors experienced declines in their p/e ratio compared to December 2014.

Table 5-2: Price-Earnings Multiples

Sector	Dec. 2014	Jun. 2015	Dec. 2015
Commercial banks	10.63	11.11	10.55
Investment	9.47	8.24	6.88
Insurance	9.50	9.65	8.74
Services	12.87	11.52	10.92
Industrial	9.22	7.43	5.57
Hotel and Tourism	12.26	11.84	10.63
Total Market	10.41	9.83	8.85

Source: Bahrain Bourse

The bulk of the value of shares traded in December 2015 was the “Commercial banks” sector whose traded shares (by value) represented 75.5% of total shares traded up from 45.1% in June 2015. The “Services” sector represented 12.7% of the total value of shares traded in December 2015, down from 45.9% in June 2015 (Table 5-3).

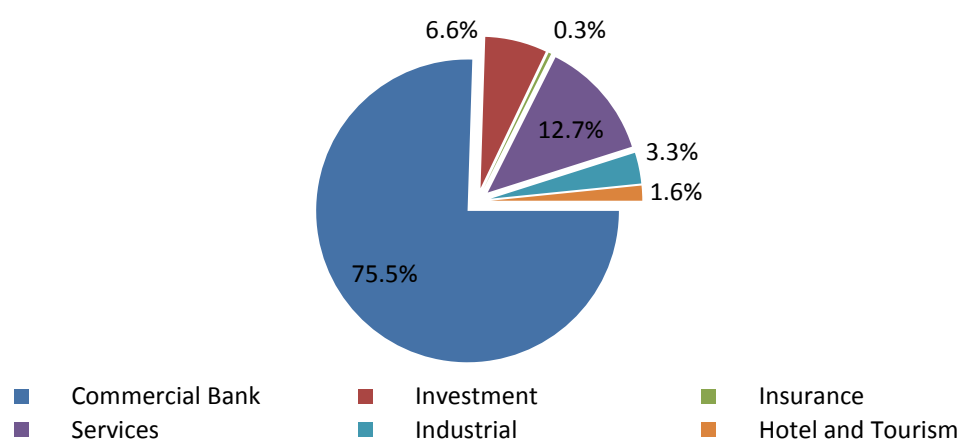
Table 5-3: Sectoral Distribution of Shares Traded by Value (% of all shares traded)

Sector	Dec.2014	Jun. 2015	Dec. 2015
Commercial banks	42.0	45.1	75.5
Investment	0.0	1.3	6.6
Insurance	0.0	0.8	0.3
Services	47.7	45.9	12.7
Industrial	6.0	6.6	3.3
Hotel and Tourism	2.4	0.3	1.6

**Figures may not add to a hundred due to rounding*

Source: Bahrain Bourse

Chart 5-4: Sectoral Distribution of Shares Traded by Value (% of all shares traded) in December 2015



Source: Bahrain Bourse

The bulk of the volume of shares traded in December 2015 was the “Commercial banks” sector representing 84.7% of the total volume of shares traded, followed by the “Services” sector at 6.9%. The lowest level was attained by the “Insurance” sector at 0.3%, down from 0.8% in June 2015. The volume of shares traded of the commercial banks was at 73.4% in June 2015 while the Services sector was at 19.9%.

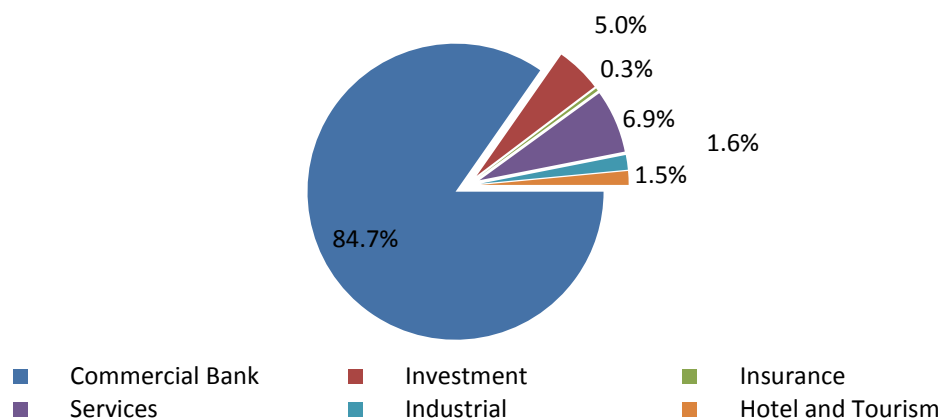
Table 5-4: Sectoral Distribution of Shares Traded by Volume (% of all shares traded)

Sector	Dec.2014	Jun. 2015	Dec. 2015
Commercial banks	53.6	73.4	84.7
Investment	1.8	2.0	5.0
Insurance	0.1	0.8	0.3
Services	40.2	19.9	6.9
Industrial	3.1	3.6	1.6
Hotel and Tourism	1.1	0.3	1.5

**Figures may not add to a hundred due to rounding*

Source: Bahrain Bourse

Chart 5-5: Sectoral Distribution of Shares Traded by Volume (% of all shares traded) in December 2015



Source: Bahrain Bourse

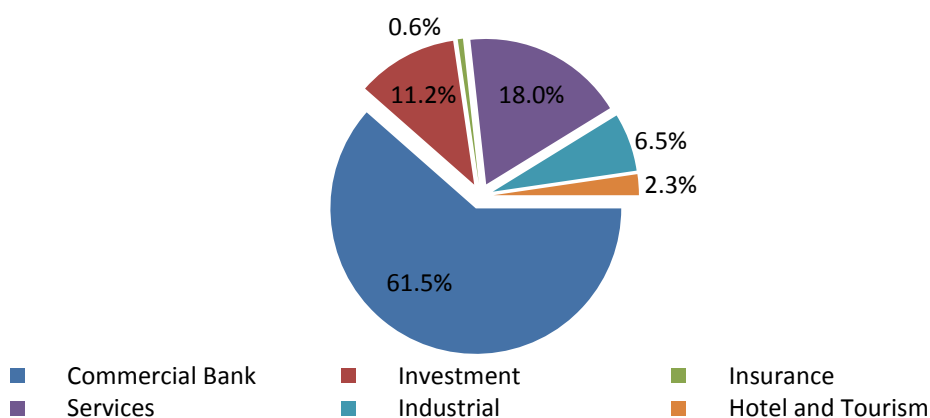
The majority of the number of transactions in December 2015 (1,036 transactions and a 19.6% increase compared to June 2015) was attained by the “Commercial banks” sector at 637 transactions (61.5% of all transactions), followed by the “Services” sector at 186 transactions (18%) and the “Investment” sector at 116 transactions (11.2%). Similarly, in June 2015, the highest number of transactions was recorded for the commercial sector at 399 transactions, followed by the services sector at 216 transactions and the industrial sector at 157 transactions (Table 5-5).

Table 5-5: Number of Transactions by Sector

	Dec.2014	Jun. 2015	Dec. 2015
Commercial Banks	494	399	637
Investment	48	48	116
Insurance	3	25	6
Services	346	216	186
Industrial	140	157	67
Hotels and Tourism	31	21	24
Total	1,062	866	1,036

Source: Bahrain Bourse

Chart 5-6: Sectoral Distribution of Number of Transactions Traded (% of all transactions traded) in December 2015

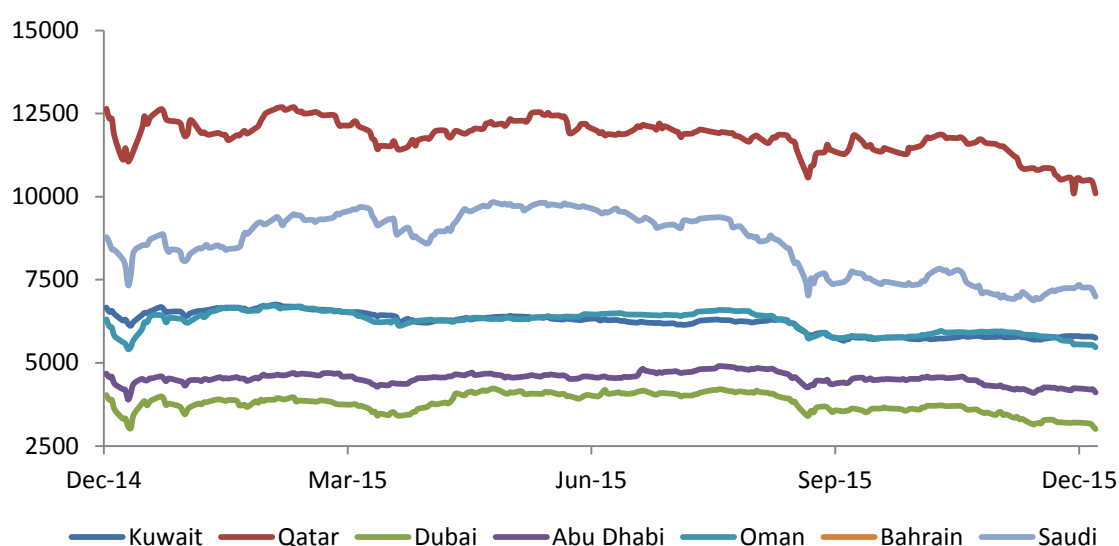


Source: Bahrain Bourse

5.2 GCC Market Trends

The GCC equity markets tumbled in 2015 amid low oil price. The price of a barrel of oil collapsed from \$105.8 in June 2014 to a five-year low at \$37.0 in December 2015. As a result, all GCC indices recorded negative rates compared to December 2014. The highest decrease was experienced by the Dubai Financial Market Index, which decreased by 18.2 percent compared to the level attained in December last year. On the other hand, the Omani Index (Muscat Securities Market Index 30) recorded the lowest decrease (8.23 percent) compared to other GCC equity markets over the same time period.

Chart 5-7: GCC Indices December 2014 – December 2015



Sources: Bloomberg

With oil prices expected to remain low in 2016, the GCC equity markets are forecasted to slowdown this year. However, many economists believe that the GCC countries have built up strong reserves over the years to support fiscal spending and keep the economies strong, in spite of declining oil prices.

Table 5-6: Stock Market Indices in GCC counties

Index	Dec-2014*	June 2015	Dec-2015	June 2015- December 2015 (%)	Dec 2014- Dec 2015 (%)
Bahrain All Share Index	1,403.2	1,426.5	1,215.8	-14.8%	-13.4%
Tadawul All Share Index	8,410.9	9,693.5	7,293.7	-24.8%	-13.3%
Kuwait Market Index	6,562.7	6,285.1	5,803.3	-7.7%	-11.6%
Qatar Exchange Index	12,339.8	13,696.9	10,535.0	-23.1%	-14.6%
Dubai Financial Market Index	3,882.9	3,941.7	3,174.3	-19.5%	-18.2%
Abu Dhabi Index	4,582.9	4,561.3	4,198.8	-0.5%	-8.4%
Muscat Securities Market Index 30	6,059.1	6,411.1	5,557.7	-13.3%	-8.3%

*December 1st, or latest available. Sources: Stock Exchange of Each Country

5.3 Overall assessment of the equity market

The performance of the Bahrain All Share Index was affected by the global oil supply glut and the subsequent low oil price. The index decreased by 14.7%, the market capitalization decreased by 13.5%, and the p/e ratio dropped from 10.4 in December 2014 to 8.8 in December 2015.

Moreover, the indices of the GCC equity markets have been temporarily decreasing given the decline in oil price. Markets in the GCC are very sensitive to oil price fluctuations. The oil price has reached a five-year low in December 2015, hovering around \$37 per barrel. The overall market conditions should improve over the medium term, however, propped up by government spending on various projects.

6. Payments and Settlements Systems

Chapter 6

Key Points

- The various components of Bahrain's payments and settlement framework continue to function efficiently.
- Retail payments include cheques, credit transfers, and debit and credit card transactions.
- Year-on-year decrease in the volume and increase in value of cheques processed through the ACS.
- Year-on-year rise in value and the number of ATM withdrawals.
- Year-on-year increase in volume and value of transfers through the RTGS.

6.1 Overview

Payments and settlement systems are central to the smooth operation of the financial sector and the efficient functioning of the economy at large. Not only do they facilitate trade in goods and services, they are also critical for transactions in financial assets. Hence, disruptions to payment systems have the capacity to transmit shocks and trigger widespread financial and economic disturbances. Therefore, an assessment of the safety and soundness of payment and settlement systems is important for the evaluation of risks to financial stability.

The current payments and settlement infrastructure in Bahrain comprises of five main components: i) the Real Time Gross Settlement System (RTGS); ii) the Automated Cheque Clearing System (ACS); iii) the ATM clearing system; iv) the Scriptless Securities Settlement System (SSSS); and v) the clearing, settlement and depository system for the Bahrain Bourse. Bahrain's payments and settlement framework continue to function efficiently. The RTGS in particular remains a robust framework for processing retail and wholesale payments in Bahrain. The launch of the ACS was a milestone to the Bahraini financial sector which raised efficiency and customer services. This section describes recent trends in the retail and wholesale payments system.

6.2 Retail Payments

In the Kingdom of Bahrain, households can carry out their cash and non-cash transactions with a wide range of instruments of payment. Cash payment instruments are basically based on paper money and coins. It is the most popular instrument in Bahrain and it is based on face-to-face or hand-on-hand operation. Non-cash payment instruments include: cheques, credit transfer, debit transfer and debit and credit cards. In this section we show the evolution of retail payment transactions based on paper money and e-payment channels.

6.2.1 Cheques and paper based instruments

Cheques are seen as the most popular instrument in use among non-banks in all types of payments. With the increasing usage of electronic means of payments, in particular debit cards and credit cards, the use of cheques in the Kingdom of Bahrain decreased drastically. Cheques are still used for retail and large-value payments in virtually all the national payments systems in the Kingdom and remain the principal instrument for large-value payments.

In 2013, the CBB has decided to improve the use of cheques in order to reduce their related risks. Therefore, it launched a new cheque clearing system based on the electronic transmission of images and payment information. The new procedure replaced the common paper-based procedure on May 2012. The Bahrain Cheque Truncation System (BCTS) was commenced in cooperation with the BENEFIT Company (BENEFIT) which also operates Bahrain's ATM service and point-of-sale systems. The Automated cheque clearing system (ACS) replaced the old paper based cheque clearing system in Bahrain. The main feature of the ACS is that it speeds up the clearing process and customers could process cheques on the same day.

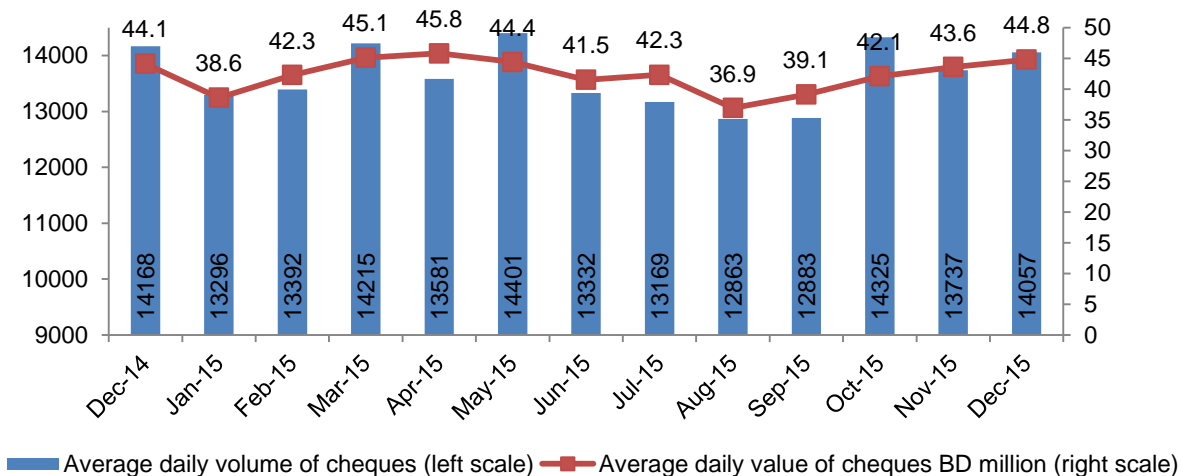
Year on year decrease in average daily volume and increase in value of cheques through ACS

In the period between June 2015 and December 2015, the average daily volume of cheques processed through the Automated Cheque Clearing System (ACS) increased by 5.4% from BD 13,332 to BD 14,057 (year-on-year decrease of 0.8%) (Chart 6-1). The average daily value of cheques increased by around 8.0% from BD 41.5 million in June 2015 to BD 44.8 million in December 2015 (year-on-year increase of 1.6%).

The average daily volume kept fluctuating from December 2014 until December 2015; however the biggest increase was by 11.2% in October 2015. The average daily volume reached its peak in May 2015 at 14,401 average daily transactions.

The average daily value of cheques was mostly growing between August 2015 and December 2015. The highest value of cheques cleared was seen in April 2015 by BD 45.8 million whereas the lowest value of cleared cheques occurred in August 2015 by BD 36.9 million. It has to be noted that cheques are now cleared in the Bahrain Cheque Truncation System (BCTS), which went live on 13th May, 2012 and there is no cap on the value of cheques cleared in the BCTS.

Chart 6-1: ACS System- Average Daily Volume and Value of Payments Processed, Dec 2014 – Dec 2015



Source: Central Bank of Bahrain

6.2.2 E-Payment systems

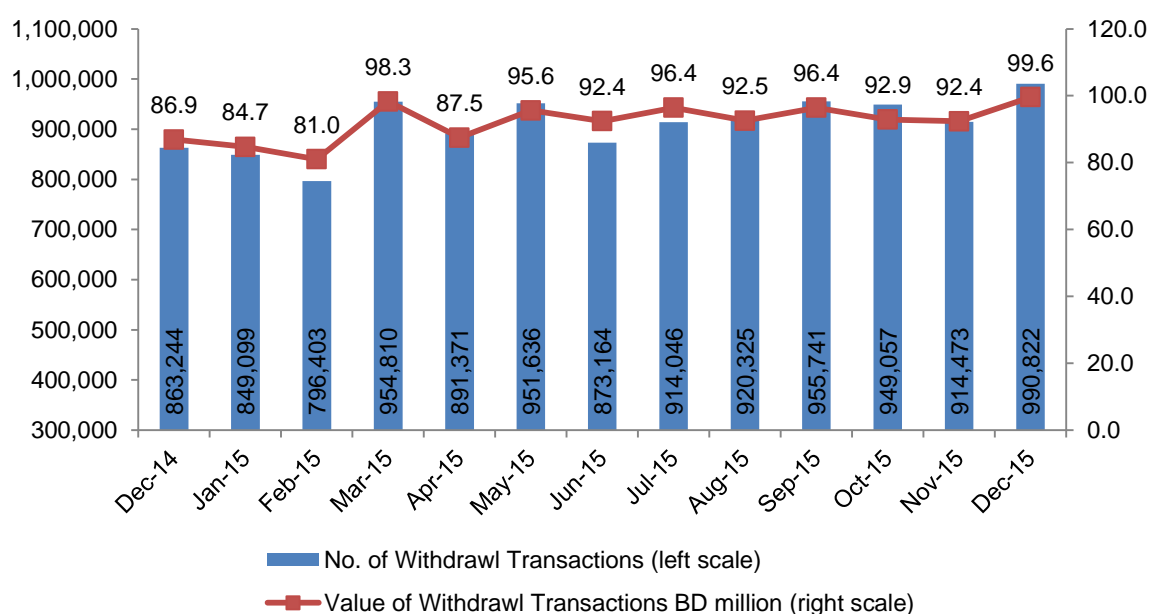
ATM clearing is based on a Deferred Net Settlement (DNS) system. The Benefit Company in Bahrain receives and processes all the ATM transactions. The GCC net, a leased line network across the GCC countries, provides for the communication backbone for the transmission of all the ATM transactions and settlement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

Year on year growth in number and value of ATM withdrawals

Between June 2015 and December 2015, the number of withdrawal transactions processed through the ATM Clearing System increased by 13.4% from 873,164 to 990,822 (year-on-year growth was 14.8%)(Chart 6-2). Similarly, in value terms, total withdrawals processed increased by 7.8% from BD 92.4 million to 99.6 million (year-on-year growth was 14.6%).

There have been minor up and down fluctuations in both the value and volume of transactions between June 2015 and December 2015. In that period December witnessed the highest number of ATM withdrawals with an increase of 8.3% from the previous month whereas the biggest decrease in the number of withdrawals took place in the month of November 2015 by almost 3.6%. Since June 2015, the highest value of withdrawals was witnessed was also in December 2015 by BD 99 million and the lowest value of withdrawals was in November 2015 by BD 92.4 million.

Chart 6-2: Number and Value of ATM Transactions, Dec 2014 – Dec 2015



Source: The Benefit Company

With the widespread use of internet and mobile services in Bahrain, another payment solution was introduced by banks. Nowadays, Bahraini household started paying their bill online (e-bill) with both internet and mobile bill. Moreover, the government of Bahrain encouraged the use of internet ICT tools in all the government services. It launched the e-government portal which includes the most important services. In addition to the development of e-banking and internet banking, a number of banks in Bahrain offer mobile banking services to their customers. The purpose is to receive regular information on their balances accounts and their current transactions.

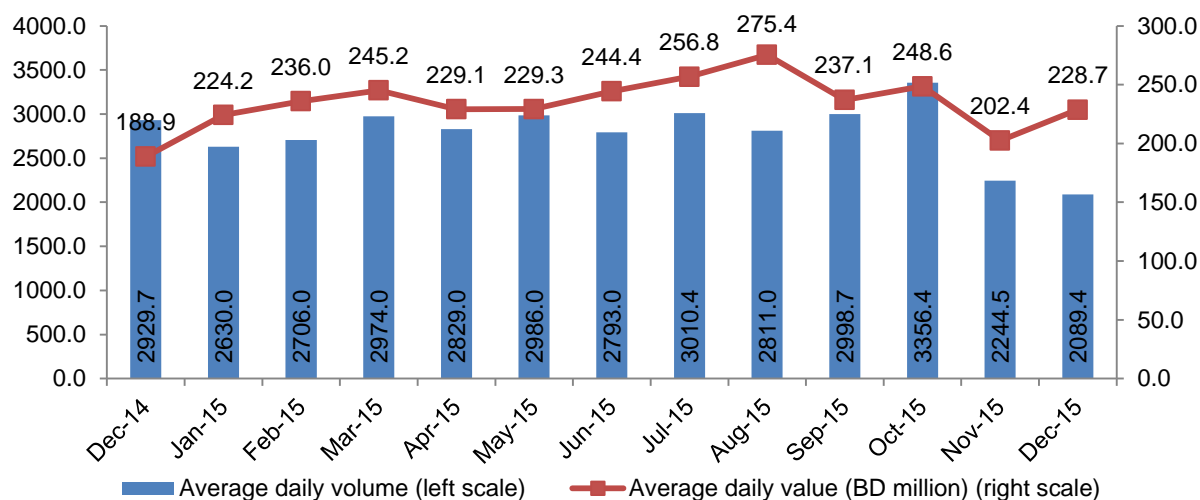
6.3 Wholesale Payments

Year on Year decrease in volume and increase in value of payments through RTGS

In Bahrain, wholesale transaction are made through the Real Time Gross Settlement (RTGS), which hinges on (real-time) which settles fund transfers, on solo basis when an order arises (without netting). The major difference is that it takes orders on spot rather than later. The RTGS is Bahrain's dedicated system for processing large-value, inter-bank payments. However, the RTGS also processes small-value retail payments for bank customers. The volume and value of payments passing through the RTGS system between June 2015 and December 2015 is seen in Chart 6-4 below.

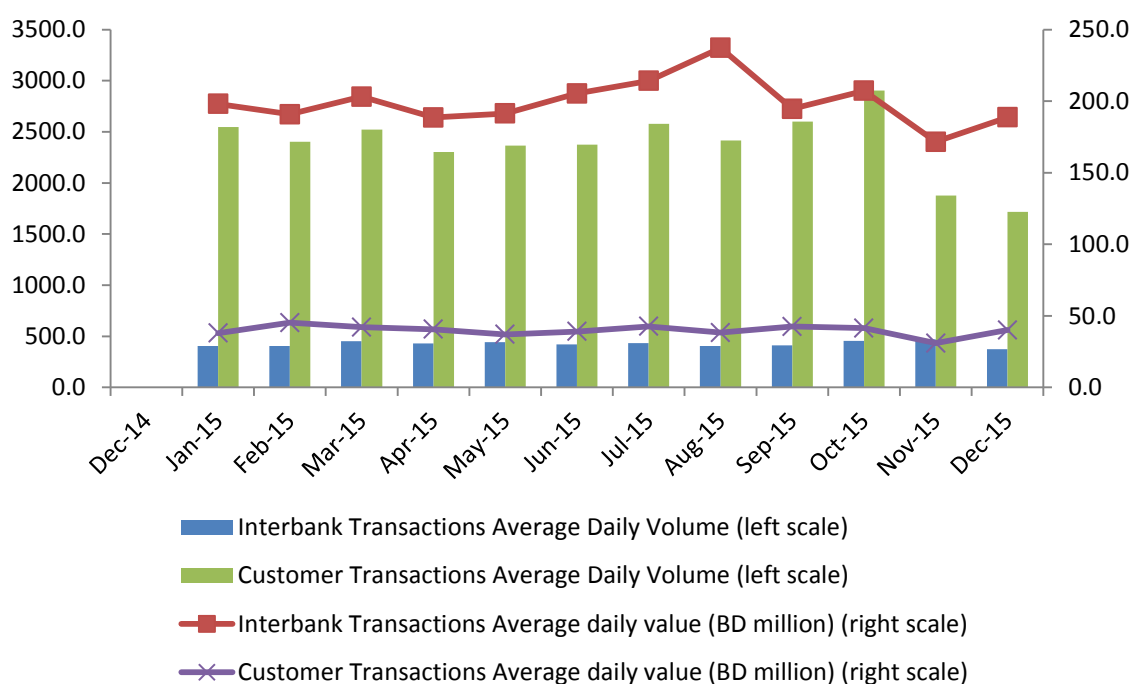
Between June 2015 and December 2015, the *average daily volume of transfers* decreased by 25.2% from 2,793.0 to 2,089.4 (28.7% year-on-year decrease). In value terms, the *average daily value of transfers* witnessed a 6.4% increase from BD 244.4 million in June 2015 to BD 228.7 million in December 2015 (21.1 % year-on-year increase).

Chart 6-3: RTGS System- Average Daily Volume and Value of Payments Processed, Dec 2014 – Dec 2015



Source: Central Bank of Bahrain

Chart 6-4: Interbank and Customer Transactions, Daily Volume and Value of Payments Processed, Dec 2014 – Dec 2015



The total value and volume of transfers is comprised of interbank and customer transactions. As seen in chart 6-4, the average daily volume of customer transactions is what makes the majority of the total average daily volume of payments processed (In December 2015, customer transactions made around 82.2% of total average daily volume of transfers). On the other hand, when it comes to the average daily value, interbank transactions make up the majority of the value of transfers (In December 2015, interbank transactions made around 82.5% of the total average daily value of transfers). Since the

contribution of interbank transactions in terms of value is larger than customer transactions, that explains how the total average daily volume of transfers can decrease, while the average daily value of transfers still increases.

Box 1: Emergence of Bitcoins

Bitcoin is a new generation of decentralized, peer-to-peer virtual currencies and was considered as the first implementation of a concept called “crypto-currency”. Bitcoin was introduced as open source software in 2009. An e-currency user can get Bitcoin by converting conventional currency at an exchange platform (Bit Floor), and then Bitcoin will be stored at an e-wallet to be exchanged for sending electronic units (currency) between participants (miners) to exchange for products and services (The total number of Bitcoin is not supposed to exceed 21 million).

One of the advantages of Bitcoin is its convertibility. In fact, Bitcoin’s holder can redeem e-currency into conventional fiat money or real *life* money whenever he wants. Bitcoin is controlled by all Bitcoin users across the world. Unlike fiat money, a monetary system under Bitcoin does not need a central bank or government. It is “denationalized” money. The Bitcoin’s supply is determined by an algorithm that allows computers around the world to set its value and its exchange rate against the other currencies and the real value of Bitcoin is determined by the market process. That means by the supply and demand. Demand for Bitcoin has been widening based on measures such as the number of Bitcoin wallets downloaded and the number of participants (miners) joining the digital currency universe.

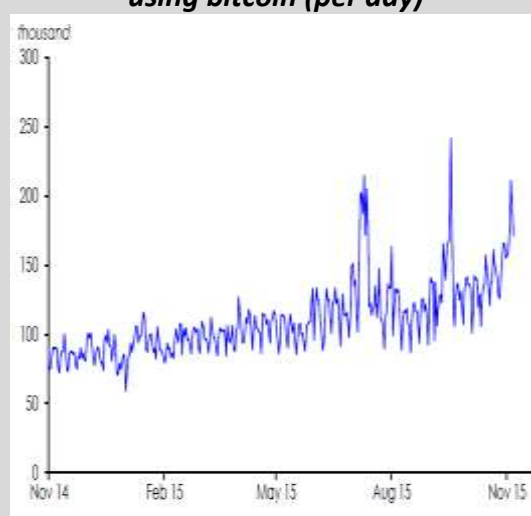
Despite the volatility of the price of Bitcoin (chart 1), the number of transactions using this digital currency increased continuously and considerably, reaching 150,000 transactions per day (chart 2).

Box 1 Chart 1 : Volatility of Bitcoin



Source : www.bitcoincharts.com, IIF.

Box 1 Chart2: Number of transactions using bitcoin (per day)



Source : www.bitcoincharts.com, IIF.

Bitcoin has received an unprecedented acceptability by the public because of its advantages which include low fees, low commission, convenience and feasibility. Another advantage of Bitcoin is its “traceability”. Transactions do not explicitly detect the payer and payee by name. Instead, a Bitcoin transaction transfers ownership from one Bitcoin address to another. All these advantageous make Bitcoin as a very attractive currency and a possible serious competitor to fiat money in countries with problem-plagued national currencies. Confidence in Bitcoins has grown after a US Senate committee described it as a “legitimate financial service” at a meeting in October 2013.

However, as a digital currency, Bitcoin is not subject to the control and supervision of the Central Banks. Therefore, it could be used for illegal or fraudulent purpose such as money laundering and in financing some illicit activity such as terrorism. According to the IMF, Bitcoin poses a serious threat to the economic stability of the foreign currency exchange. As Bitcoin falls outside the IMF’s legal framework, the IMF is unable to obtain those currencies directly and hence the IMF is “unable to intervene in the event that a private digital currency like Bitcoin is used to attack the value of a conventional currency through what is known as a “speculative attack.”

7. Cyber Risk

Chapter

7

Key Points

- Cyber Risk has recently been classified as a main threat to financial stability by several Central Banks by causing disruptions to the infrastructure of financial institutions.
- The industry's exponentially growing amount of data is becoming more valuable to cyber-attackers putting customers' personal and financial information at risk.
- Information security incidents around the world increased to 48%, equivalent to 117,339 attacks per day in 2013.

7.1 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. The Central Bank of Bahrain will therefore be addressing cyber risk as a recurrent chapter in its Financial Stability Report. The aim of the chapter is to actively spread awareness about Cyber Risk by warning the financial industry of the large operational, financial and security risks involved with cyber. The chapter will also present the latest initiatives undertaken by leading and regional central banks to address this issue.

7.2 Cyber Risk and Financial Stability

Due to the large implications that cybercrimes pose to the functioning of the global financial system, international organisations such as the IMF are calling for dedicated attention by central banks to address cyber security. Several Central Banks have recently classified Cyber risk as a main threat to financial stability by causing disruptions to critical functions in the financial system and eventually leading to larger threats to the real economy. Central Banks around the globe are actively spreading awareness about this emerging risk by warning the

industry of the large operational, financial and security risks involved with cyber threats. Earlier this year, The Federal Reserve Bank of Boston warned that Cyber security is a serious financial stability concern and that Cyber-attacks have the potential of causing lost trust in payment systems due to the possibility of a disruption or intrusion-taking place at any point in time. The number of cybercrimes reported each year is constantly increasing and the methods used by hackers are evolving with every technological innovation in the financial sector. The industry's exponentially growing amount of data is also becoming more valuable to cyber-attackers putting customers' personal and financial information at risk. According to The Global Economic Crime Survey⁸, 49% of the Banking, Capital Markets and Investment Management segment were victims to economic crime in 2014, in addition to 45% from the Financial Services segment compared to 36% from Insurance and 34% from across all other industries (as seen in Table 7-1).

Table7-1 Economic Crime Percentages Reported by Industry

<i>Banking, Capital Markets and Investment Management</i>	49%
<i>Retail and Consumer</i>	49%
<i>Communication</i>	48%
<i>Financial Services</i>	45%
<i>Hospitality and Leisure</i>	41%
<i>Government/ State</i>	41%
<i>Manufacturing</i>	36%
<i>Insurance</i>	36%
<i>Transportation/ Logistics</i>	34%
<i>Other</i>	34%
<i>Engineering/ Construction</i>	33%
<i>Energy, Utilities & Mining</i>	31%
<i>Entertainment and Media</i>	31%
<i>Aerospace and Defense</i>	28%
<i>Automotive</i>	28%
<i>Pharma and Life Sciences</i>	27%
<i>Chemicals</i>	27%
<i>Technology</i>	27%
<i>Professional Services</i>	20%

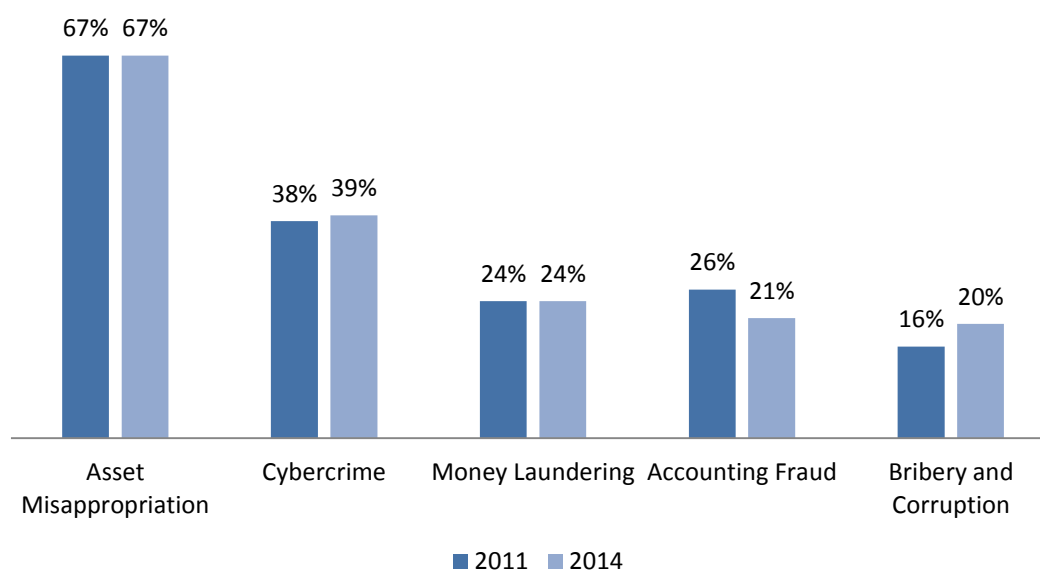
Source: PwC 2014 GEC Survey Results

Survey results have also revealed that aside from asset misrepresentation, cybercrime appears to be increasingly common in the financial sector and both risks were categorised as the Top 5 types of economic crimes experienced by the Financial Services Sector in the year 2014 (as depicted in Chart 7-1). One of the UK's lead chief executive officers also warned that cybercrimes have the potential of triggering the next global financial crisis by making main banks disappear. The number of reported cybercrimes has been on a

⁸ PwC's Global Economic Crime Survey

continuous rise. Information security incidents around the world increased to 48%, equivalent to 117,339 attacks per day in 2013, according to The Global State of Information Security Survey. Detected security incidents have also increased 66 percent year-on-year since 2009.

Chart 7-1: Top 5 types of Economic Crime Experienced by the Financial Services Sector

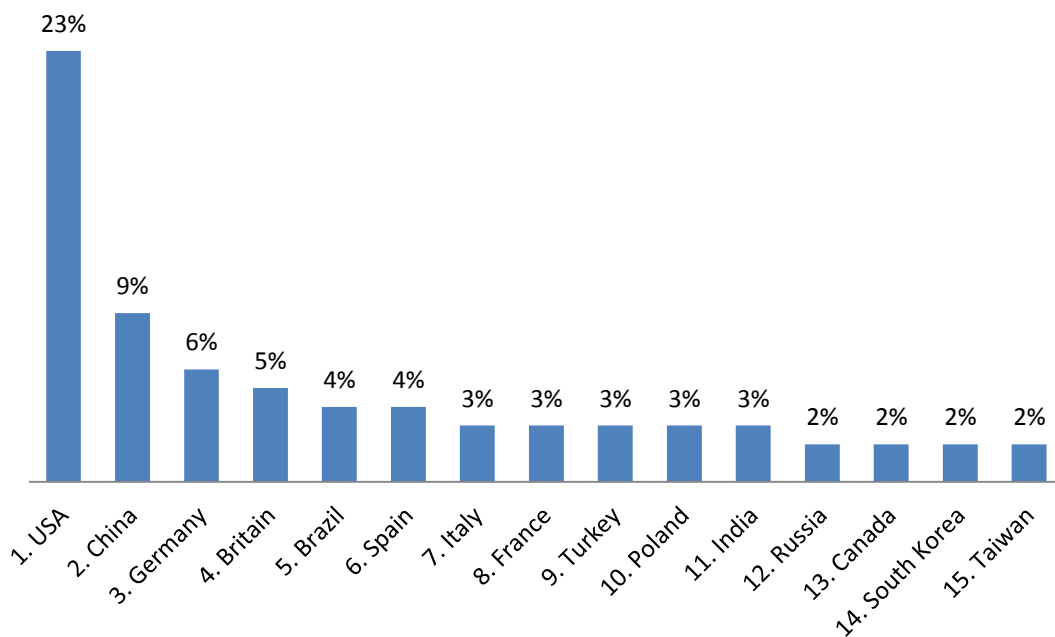


Source: PwC 2014 GEC Survey Results

Despite the fact that when financial institutions experience a cyber-attack, internal policies and procedures as well as IT Security defence systems are reviewed and updated accordingly, these measures will not minimise the re-occurrence of this risk. In fact, cybercrime is constantly growing and hackers are adopting new methods by tracing loopholes in the infrastructure of financial institutions. Some cybercrimes that occurred over the past two years involved the installation of hardware in retail banks branch systems to allow for the manipulation of transactions through mobile networks. Many attacks have targeted internet-banking interfaces to trick customers into revealing their personal and financial information through phishing scams and viruses. Even when it comes to credit and debit card fraud, hackers are constantly using new methods, which enable them to manipulate transactions. However, some of the biggest cybercrimes involved the leakage of data from within the financial institution itself. Morgan Stanley witnessed a large information security breach in the beginning of 2015 when one of its employees stole the data of more than 350,000 accounts. This stolen data was later sold to a cyber 'black market' online. America's largest bank was a victim of another cybercrime the year before when cyber criminals managed to access the information of 76m households and 7m small businesses. Financial institutions are therefore constantly advised to review their internal policies and have adequate measures in place to keep physical and computer-based data safe.

Statistics have shown that some countries are more vulnerable to cybercrimes than others. Figure 7-2 below shows the 15 countries with the highest rates of cybercrime according to Symantec where the USA and China appear to have the highest rankings of 23% and 9%. The high cybercrime rates at the USA were linked to the wide range of broadband connections that allow users to continue using the internet without being interrupted by slow internet connectivity. The landscape of cybercrime is also continuing to evolve along with the methods used in attacking the infrastructure of financial institutions. Some cybersecurity experts believe that there will be a rise in cybercrimes originating from Africa. This perception is due to a number of factors such as the new initiatives being undertaken by African governments to roll out broadband in the region. Industry experts have also communicated that cybercriminals and professional hackers are slowly moving to South Africa from Europe as a result of increased cooperation between law enforcement agencies in the EU⁹.

Chart 7-2: Top 15 Countries found to Have Most Cybercrime



Source: Symantec 2014

⁹ PwC, 2015.

Box 2: The DRIDEX Banking Trojan

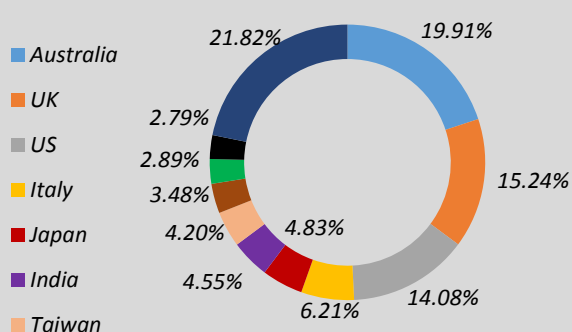
DRIDEX is a successor of the banking malware, CRIDEX, which was developed by cyber criminals originating from Eastern Europe. The main aim of this malware is to steal and exploit online banking data from banks. The main banks that were targeted by the skilled cyber criminals in the DRIDEX malware in 2014 and 2015 included the Bank of Scotland, Lloyds Bank, Danske Bank, Barclays, Kasikorn Bank, Santander and Triodos Bank. The estimated losses from global financial institutions in the UK alone were estimated at GBP 20 million. According to industry experts, computers can become infected with the DRIDEX malware when a user opens a word or excel document attached in an email which does not look suspicious. Users are tricked into opening the attachments because they tend to claim that they are invoices or accounting documents from a seemingly legitimate source. When the attachment is opened, it contains the malicious DRIDEX Macro Code. If the Macro Feature in Microsoft Office is enabled, this will allow the malware to be automatically downloaded on to the computer. According to Trendlabs Security Intelligence, once the DRIDEX download is complete, the malware begins to monitor e-banking related activities and steals information through methods such as form grabbing and screenshots.

Box 2 Table 1: Top Targets of the Spam Campaign

US	23%
UK	14%
France	14%
Australia	13%

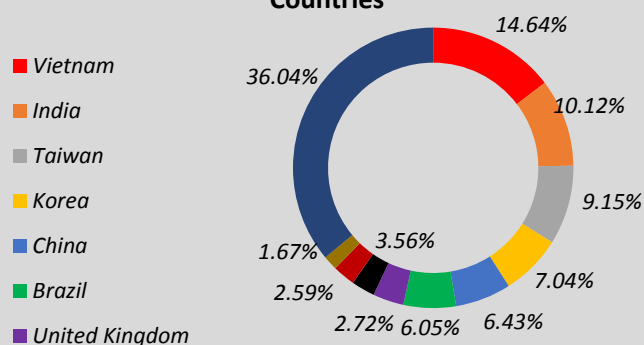
Source: Trendlabs Security Intelligence

Box 2 Chart 1: Top Affected Countries by DRIDEX



Source: Trendlabs Security Intelligence

Box 2 Chart 2 : Top DRIDEX Spam Sending Countries



Source: Trendlabs Security Intelligence

7.3 Initiatives undertaken by leading Central Banks to fight Cyber Crime

Several Central banks have recently incorporated Cyber Risk in their financial stability reports and a number of Central Bank Governors are continuing to address the growing threat and its impact on financial stability in public appearances, interviews and speeches. The Bank of England introduced Cyber Risk as a main risk in their Financial Stability Report in July 2015 and a number of surveys were conducted by the bank to understand the market's anticipation of this growing threat (a summary of the Bank of England's Systemic Risk Survey is shown in Box 2).

The Bank of England's Deputy Governor, Jon Cunliffe stated that The Bank of England is constantly trying to improve its stress tests to incorporate new threats and vulnerabilities to the financial system. Furthermore, The Bank of England is expected to initiate a cyber stress test as an exploratory scenario in their next issue of their Financial Stability Report. The Central Bank of Ireland also undertook a thematic assessment review of cyber security and other operational risks across the financial sector in 2015. The aim of the exercise was to examine the policies and procedures that each firm has in place to detect and prevent cyber security attacks. Through this exercise, The Central Bank of Ireland found that in the majority of firms, cyber security is considered to be the sole responsibility of the IT Department. However, it is believed that in order to achieve a resilient cyber culture throughout a firm, cyber security must be tackled through effective corporate governance in addition to an appropriate IT Security Management. Based on their findings, the Bank of Ireland issued a guideline of cyber security best practices to all firms along with a self-assessment questionnaire.

The US and UK conducted a joint exercise in November 2015 to enhance the action and immediate response to any cyber-attack in the financial sectors of both nations. This exercise was announced in 2015 by the British Prime Minister David Cameron and President of the USA, Barack Obama as part of an 'enhanced transatlantic engagement on cybersecurity'. This exercise and engagement stresses on the importance of taking serious measures to tackle cybersecurity given the interconnected nature of the global financial system. According to the statement published on HM Treasury and Chancellor of the Exchequer and First Secretary of State, the exercise was designed to improve the understanding of cybersecurity across the UK and US in three main areas: information sharing, incident response handling and public communications. The exercise mainly focused on improving the processes and methods used by both governments to spread awareness of cyber security to the financial sector. Both governments also shared the response mechanisms adopted at each country and introduced scenarios where coordinated response will be needed in the event of a future cyber-attack.

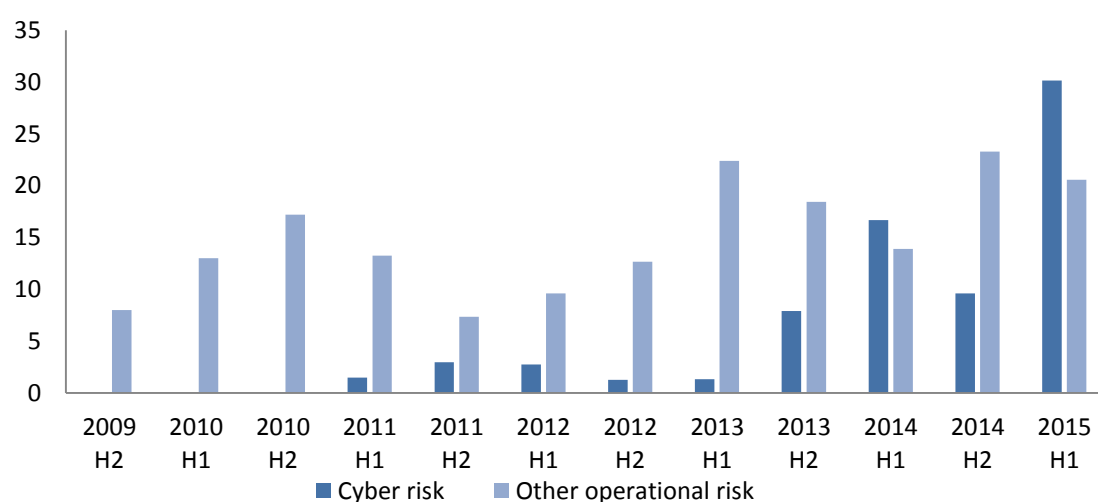
The Bank of England launched the CBEST Vulnerability Testing Framework based on the Financial Policy Committee's recommendation to the HM Treasury requesting regulators to closely examine the financial system's infrastructure and ensure that a sophisticated program is in place to improve the readiness and resilience to cybercrime. Since its launch, CBEST tests continued at the Bank of England where ten core financial institutions have

completed the test according to the December 2015 version of the Bank of England's Financial Stability Report.

The Bank of England also published the findings from its Waking Shark II that took place in November 2013 to test the information sharing and coordination of Wholesale Banks and other financial institutions in a simulated cyber-attack exercise (a successor of Waking Shark I held in 2011). The Securities Industry Business Continuity Management Group that designed a hypothetical scenario for which the communications between financial institutions and relevant agencies were examined. Based on the results of the Desktop exercise, the report identified areas that need to be improved in the future. One of the main findings of the report drew on the need for creating a single coordination body to manage the communication between institutions in the event of a disruption to cyber security and stressing on the need to coordinate communication with the entire sector.

In their July 2015 edition of the Financial Stability Report, the Bank of England shared the results of the survey they conducted to show the proportion of financial institutions highlighting cyber risk as a main concern. Chart 7-3 below shows how the UK financial market's perception of cyber risk evolved over the years where it now seems to have surpassed other operational risks. This therefore implies that as the financial market is expanding and experiencing innovations in banking operations and services, the industry is becoming more vulnerable to cyber threats.

Chart 7-3 : Proportion of respondents highlighting operational/cyber risk as a key concern (Bank of England Systemic Risk Survey)



Source: Bank of England Financial Stability Report July 2015

Box 3: The Financial Stability Oversight Council Annual Report 2015

The 2015 FSOC (Financial Stability Oversight Council) Annual Report classified Cyber Security as a potential emerging threat to US financial institutions. The report referred to the numerous cyber incidents experienced by US businesses over a year's course, which included large data breaches with exposed customer data and financial information. The report warned of the rising risks of cyber-attacks which financial institutions must be prepared to combat. Despite the continuous new technologies in cyber security, malicious cyber activity is still evolving and expected to cause a larger scale of disruption with higher operational costs than those experienced in the past. Therefore, financial institutions need to be prepared to detect and prevent cyber-attacks and minimize the associated financial and operational costs involved.

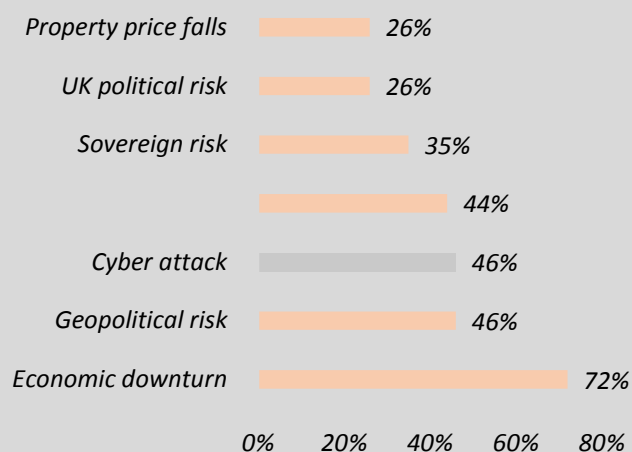
The FSOC Annual Report therefore highlighted some technical and administrative best practices to help mitigate the risk of future cyber threats. These best practices included:

- 1- Third Party Vendor Management: Due to the exponentially growing amount of data and the resulting need for third party vendors and cloud networks, a cyber-attack on a retailer's network draws on the importance of ensuring that adequate controls and policies are in place when it comes to sharing customer and financial data with a third party.
- 2- Administrative Access: Financial institutions are required to identify any administrative access granted to users that might be at the risk of being penetrated by cyber attackers. From a risk management perspective, administrative access should always be secured by layered authentication.
- 3- Recovery: Financial institutions should constantly update their contingency and recovery plans to ensure that the risk of cyber threats is taken into consideration and that the appropriate procedures are in place to resume operations in the least amount of downtime.

Box 4: Bank of England's Systemic Risk Survey

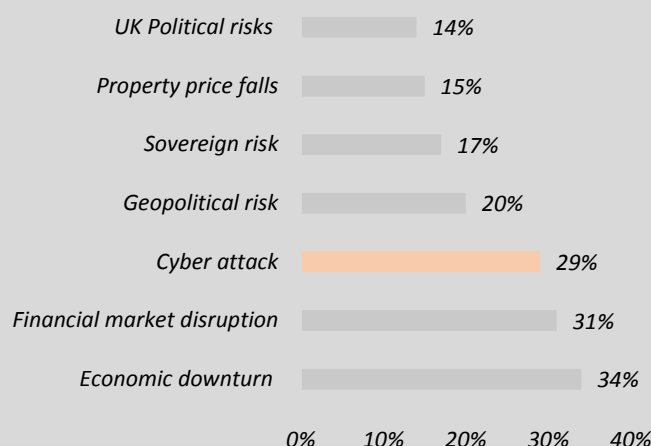
The Bank of England's Systemic Risk Survey released in December 2015 aimed at tracking and quantifying the UK Financial market's perception of risk. The survey respondents included a total of 68 participants UK banks, building societies, foreign banks, asset managers, hedge funds and insurers. The survey was conducted in September 2015 with a response rate of 92%. In the survey, the respondents were asked to list the most significant sources of risk to the UK financial system in their perspective (as shown in Box3 Chart 1 below). Cyber Risk and Geopolitical Risk were categorized as the second most significant risks in the financial system while the risk of an economic downturn. Respondents were also asked to identify which three risks of the five mentioned they identified in Box 3 Chart 1 would be the most difficult to manage. The top seven responses are thus shown in Box 3 Chart 2 below indicating that a Cyber-attack would be the third most challenging risk to manage for UK firms.

Box 4 Chart 1: Sources of Risk to the UK Financial System



Source: Bank of England

Box 4 Chart 2: Risks most challenging to manage as a firm



Source: Bank of England

7.4 GCC Initiatives

There have been a number of IT Security related initiatives undertaken on a GCC level to ensure the cooperation of the GCC states in combating cybercrimes and sharing experiences in this matter. An IT Security Taskforce currently exists with the objective of addressing all IT-Security concerns between GCC central banks and monetary agencies. Awareness is also being spread on a GCC level to ensure that the entire GCC financial sector and all relevant authorities are fully aware of the latest cyber security related trends, threats and vulnerabilities.

The second Information Security Conference for the Financial Sector was organized by the Central Bank of Qatar in November 2015. The conference discussed the main IT Security

challenges faced by the GCC financial sector as well as the Global Financial Services market. The main aim of the conference was to address methods by which the IT Security field can be improved in the GCC's financial sector by drawing from Global trends and experiences. Future plans and recommendations were also discussed to help protect the financial sector from all IT Security related risks, a large part being from Cyber Risk, and to preserve its confidentiality in compliance with provisions of law and according to the best prevailing regulations, international practices and standards. The conference speakers also shed light on the importance of financial stability and how it is considered as the most fundamental pillar of central banks and monetary agencies in the GCC. Overall, GCC central banks and monetary agencies are constantly trying to keep in line with the Cyber security industry's best practices and international standards.

7.5 Initiatives undertaken by the Central Bank of Bahrain to fight Cyber Crime

In line with the cyber security initiatives undertaken by leading Central Banks around the globe, the Central Bank of Bahrain was also a leader in the region to adopt the necessary measures to ensure the soundness and stability of Bahrain's Financial Sector. The Technology Risk Management Security Team (TRMST) was established by the Central Bank of Bahrain on 11 December 2013, chaired by the Director of the IT Directorate and whose members are from the Licensing & Policy Directorate, IT Directorate, Inspection Directorate and the Advisor of the Banking Sector. The Committee's main objectives are to address the main IT and Cyber Security related matters and take the necessary actions accordingly. The Committee is also required to agree on issues to be addressed by the CBB Guidelines/Rulebooks with regards to technology security measures for banks and financing companies providing E-Banking to their customers and for ancillary service licensees, processing any bank related transactions, including but not limited to card processing, card personalization and internet services.

The TRMST Committee has been active since its establishment in which it issued questionnaires to relevant licensees in 2014 regarding "outsourcing of services" in addition to the following consultations in May 2015, which are currently in the phase of internal discussion:

1. Amendments to Module OM (Operational Risk Management) by adding requirements related to ATM Physical Security after a study conducted on other jurisdictions requirements;
2. Amendments to Module OM by limiting the outsourcing of services that contain customer information to service providers inside Bahrain and licensed by the CBB. Licensees are also requested to list all of the services of such nature that are currently outsourced by banks and financing companies.

The TRMST Committee also studied E-Banking channels and found the need for the enhancement of the CBB's E-Banking related rules and regulations. The TRMST committee is currently working on developing the required E-Banking rules to ensure that

the operational and cyber related risks are minimized. The CBB's IT Security team therefore fulfils a vital function in the regulation of financial institutions in Bahrain. The responsibilities of the CBB are constantly expanding from managing banks and other financial institutions to overseeing retail banks and extended enterprises encompassing cloud networks, mobile devices and ensuring that the exponentially growing amount of data is safely stored and encrypted.

Annex:

Financial Soundness Indicators

Selected Graphs

Annex 1: Financial Soundness Indicators

Annex1 Table 1:
Selected Financial Soundness Indicators—Conventional Retail Banks

	(End of period)		
	Sep-14	Mar-15	Sep-15
Capital Adequacy			
Total capital adequacy ratio (%) *	18.6	17.6	18.7
Tier 1 capital adequacy ratio (%) *	15	15.6	16.9
Leverage (assets/capital)(times)*	8.3	8.0	7.4
Non-performing loans net provisions to capital ratio (%)*	8.9	7.5	7.9
Asset Quality			
Non-performing loans (% of gross loans)	3.8	3.5	3.6
Specific provisions (% of NPLs)	53.9	55.6	52.3
Net non-performing loans (% of net loans)	1.8	1.6	1.8
Loan concentration (share of top-2 sectors) (%)	30.8	30.3	31.6
Real Estate/ Construction exposure (%) **	29.9	29.1	29.6
Earnings			
ROA retail banks (%)	1.2	0.7	1.2
ROA Local Retail banks (%)	1.1	0.5	1.3
ROA Overseas Retail banks (%)	1.4	1.3	1.1
ROE Local Retail banks (%)***	11.3	4.4	10.5
Net interest income (% of gross income)	71.4	67.4	71.9
Net fees & commissions (% of gross income)	15.7	17.8	15.9
Operating expenses (% of gross income)	43.1	27.1	42.9
Liquidity			
Liquid assets (% of total assets)	16.8	26.6	26.3
Liquid assets (% of short-term liabilities)	37.4	40.9	40.2
Loan-deposit ratio (%)	65	69.6	72.2
Deposits from non-bank sources (% of total deposits)	73.9	78.2	79.6

* Locally-incorporated banks only

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

*** ROE is defined as net profit over Tier 1 Capital.

Source: Central Bank of Bahrain

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

	(End of period)		
	Sep-14	Mar-15	Sep-15
Capital Adequacy			
Total capital adequacy ratio (%) *	21.3	21.4	19.6
Tier 1 capital adequacy ratio (%) *	18.4	19.0	17.9
Leverage (assets/capital)(times)*	6.2	8.7	6.6
Non-performing loans net provisions to capital ratio (%)*	1.8	2.3	3.7
Asset Quality			
Non-performing loans (% of gross loans)	5.8	6.0	5.7
Specific provisions (% of NPLs)	72.6	70.6	65.8
Net non-performing loans (% of net loans)	1.7	1.9	2.1
Loan concentration (share of top-2 sectors) (%)	47.9	41.4	40.6
Real Estate/ Construction exposure (%) **	9.6	11.9	11.9
Earnings			
ROA retail banks (%)	0.7	0.2	0.4
ROA Local Wholesale banks (%)	0.6	0.3	0.3
ROA Overseas Wholesale banks (%)	0.8	0.1	0.5
ROE Local Wholesale banks (%)***	4.4	2.8	2.5
Net interest income (% of gross income)	58.3	52.9	81.1
Net fees & commissions (% of gross income)	26	56.6	32.1
Operating expenses (% of gross income)	49.5	60.2	63.2
Liquidity			
Liquid assets (% of total assets)	19.9	24.9	20.8
Liquid assets (% of short-term liabilities)	31.5	39.7	30.5
Loan-deposit ratio (%)	70.2	63.3	64.6
Deposits from non-bank sources (% of total deposits)	47.2	45.8	45.8

* Locally-incorporated banks only

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

*** ROE is defined as net profit over Tier 1 Capital.

Source: Central Bank of Bahrain

Annex1 Table 3:
Selected Financial Soundness Indicators—Islamic Retail Banks

	(End of period)		
	Sep-14	Mar-15	Sep-15
Capital Adequacy			
Total capital adequacy ratio (%) *	15.4	16.1	15.6
Tier 1 capital adequacy ratio (%) *	13.7	13.9	13.6
Leverage (assets/capital)(times)*	9.7	6.6	6.8
Non-performing facilities net provisions to capital ratio (%)*	36.4	19.7	23.8
Asset Quality			
Non-performing facilities(% of gross facilities)	12.6	11.0	11.7
Specific provisions (% of NPFs)	38.3	42.3	36.8
Net non-performing facilities (% of net facilities)	7.4	6.0	7.1
Facilities concentration (share of top-2 sectors) (%)	34.3	35.4	36.1
Real Estate/ Construction exposure (%) **	29	28.6	28.4
Earnings			
ROA (%)	0.4	0.1	0.4
ROE (%)***	3.9	1.0	3.2
Net income from own funds, current accounts and other banking activities (% of operating income)	73	69.7	64.7
Net income from jointly financed accounts and Mudarib fees (% of operating income)	18.6	20.4	23.5
Operating expenses (% of gross income)	78.7	72.8	74.6
Liquidity			
Liquid assets (% of total assets)	13.5	13.4	11.2
Facilities-deposit ratio (%)	81.3	77.4	75.4
Current accounts from non-banks (% of non-capital liabilities, excl. URIA)	24.8	24.9	26.5

* Locally-incorporated banks only

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

*** ROE is defined as net profit over Tier 1 Capital.

Source: Central Bank of Bahrain

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

	(End of period)		
	Sep-14	Mar-15	Sep-15
Capital Adequacy			
Total capital adequacy ratio (%) *	24.7	20.5	19.5
Tier 1 capital adequacy ratio (%) *	23.7	20.2	19.2
Leverage (assets/capital)(times)*	6.2	6.1	6.3
Non-performing facilities net provisions to capital ratio (%)*	3.6	3.0	2.6
Asset Quality			
Non-performing facilities(% of gross facilities)	5.1	4.7	4.7
Specific provisions (% of NPFs)	75.4	76.6	79.4
Net non-performing facilities (% of net facilities)	1.3	1.1	1.0
Facilities concentration (share of top-2 sectors) (%)	35.8	42.4	41.2
Real Estate/ Construction exposure (%) **	19.3	20.8	21.4
Earnings			
ROA (%)	0.2	0.2	-0.1
ROE (%)***	1.3	1.0	-0.7
Net income from own funds, current accounts and other banking activities (% of operating income)	66.4	61.9	56.7
Net income from jointly financed accounts and Mudarib fees (% of operating income)	32.2	37.8	42.2
Operating expenses (% of gross income)	59.8	61.5	63.3
Liquidity			
Liquid assets (% of total assets)	22.4	19.5	19.9
Facilities-deposit ratio (%)	67.2	63.3	60.9
Current accounts from non-banks (% of non-capital liabilities, excl. URIA)	42.1	40.1	40.6

* Locally-incorporated banks only

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

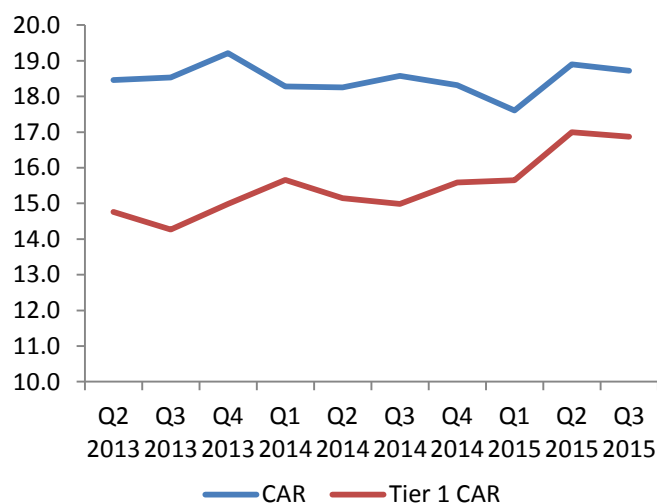
*** ROE is defined as net profit over Tier 1 Capital.

Source: Central Bank of Bahrain.

Annex 2: Selected Graphs

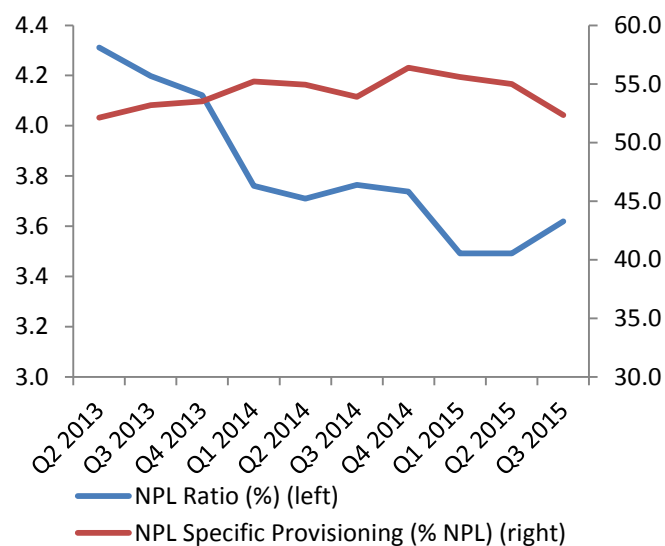
A. Conventional Retail

Annex 2 Graph 1: CAR



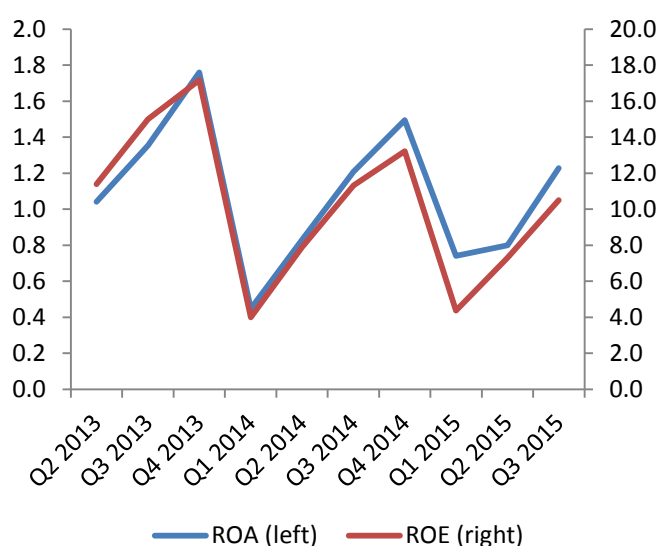
Source: Central Bank of Bahrain

Annex 2 Graph 2: NPL and Provisioning



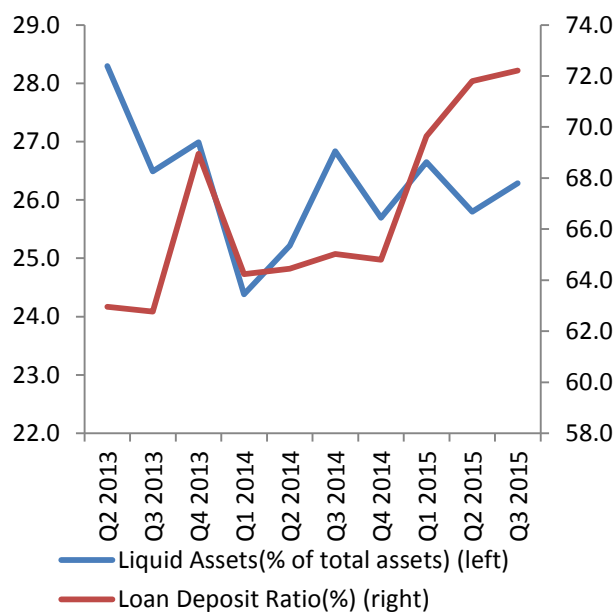
Source: Central Bank of Bahrain

Annex 2 Graph 3: Profitability



Source: Central Bank of Bahrain

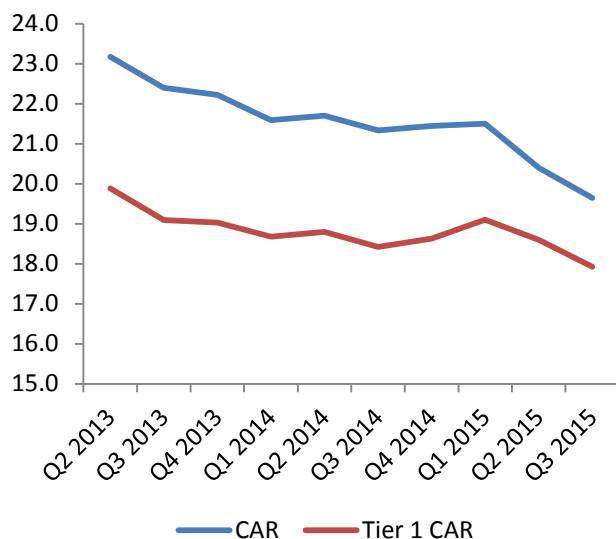
Annex 2 Graph 4: Liquidity



Source: Central Bank of Bahrain

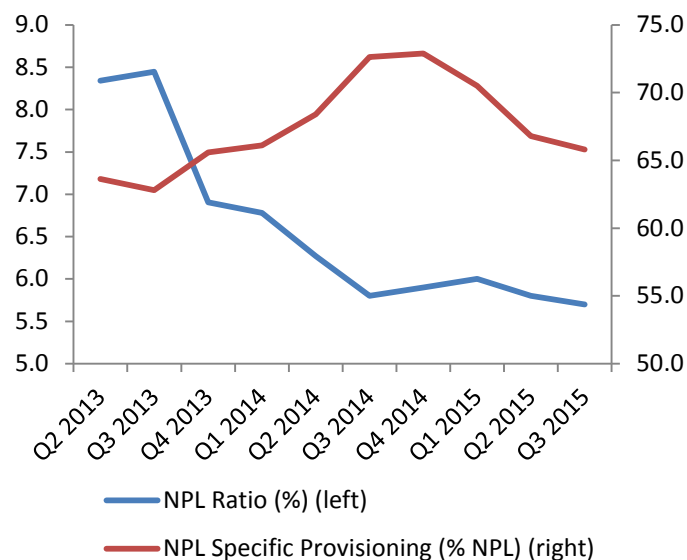
B. Conventional Wholesale

Annex 2 Graph 5: CAR



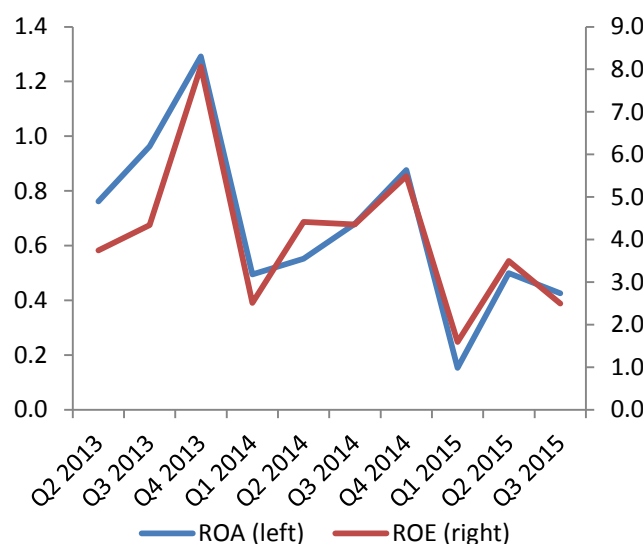
Source: Central Bank of Bahrain

Annex 2 Graph 6: NPL and Provisioning



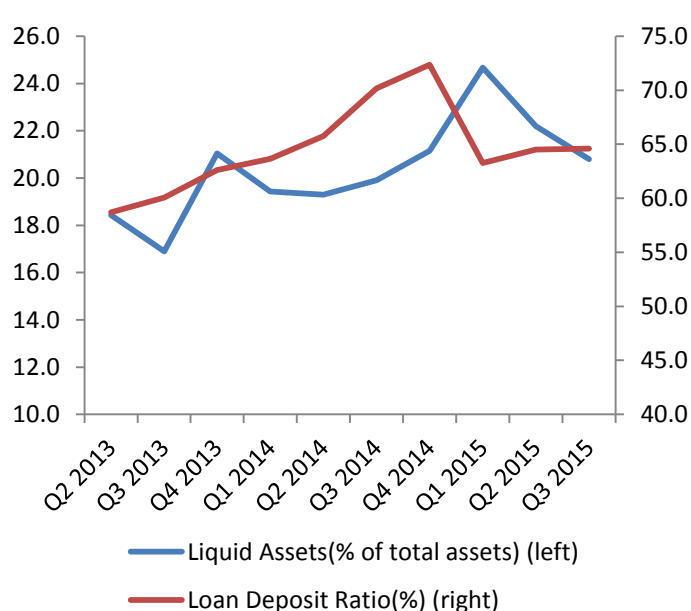
Source: Central Bank of Bahrain

Annex 2 Graph 7: Profitability



Source: Central Bank of Bahrain

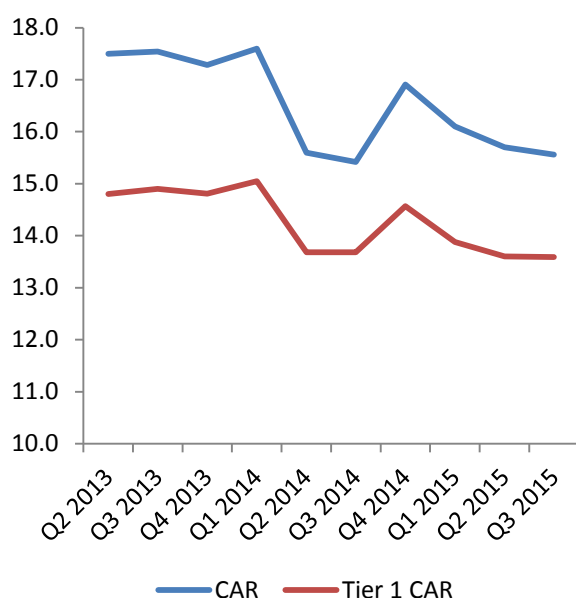
Annex 2 Graph 8: Liquidity



Source: Central Bank of Bahrain

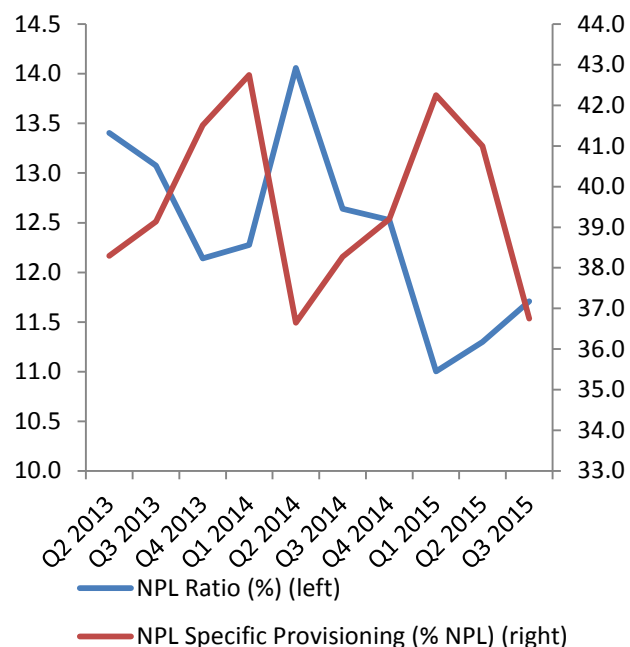
C. Islamic Retail

Annex 2 Graph 9: CAR



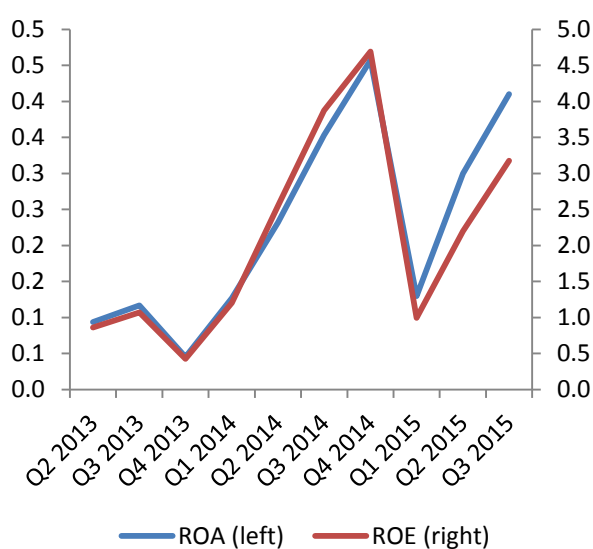
Source: Central Bank of Bahrain

Annex 2 Graph 10: NPL and Provisioning



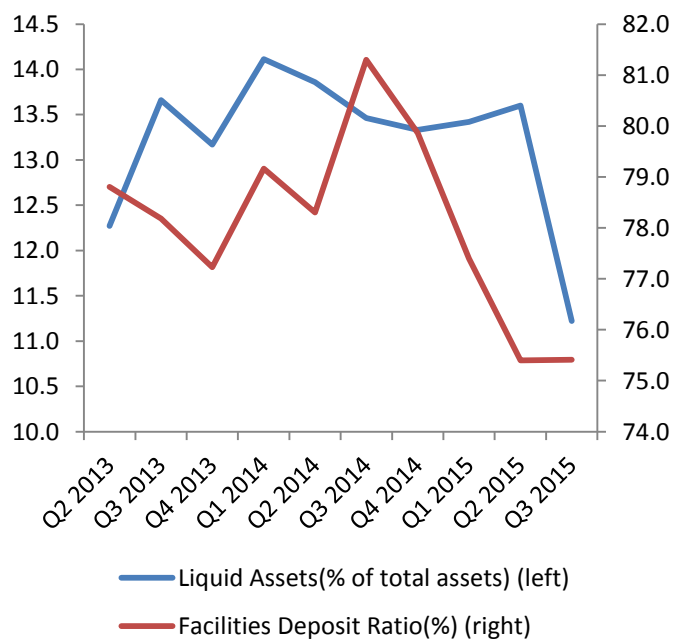
Source: Central Bank of Bahrain

Annex 2 Graph 11: Profitability



Source: Central Bank of Bahrain

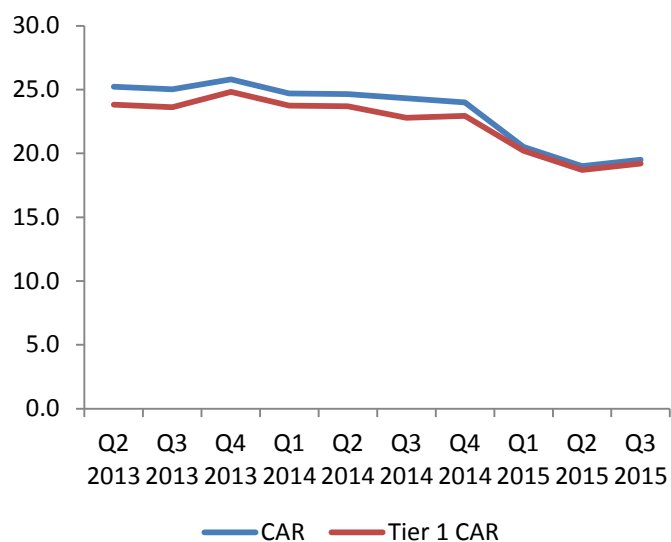
Annex 2 Graph 12: Liquidity



Source: Central Bank of Bahrain

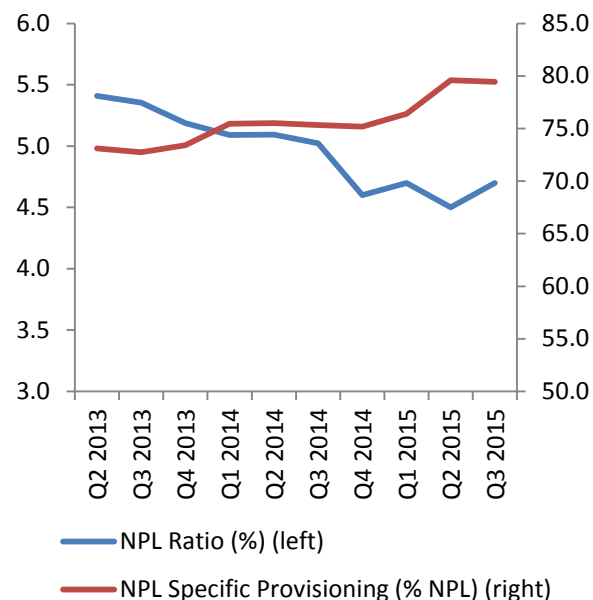
D. Islamic Wholesale

Annex 2 Graph 13: CAR



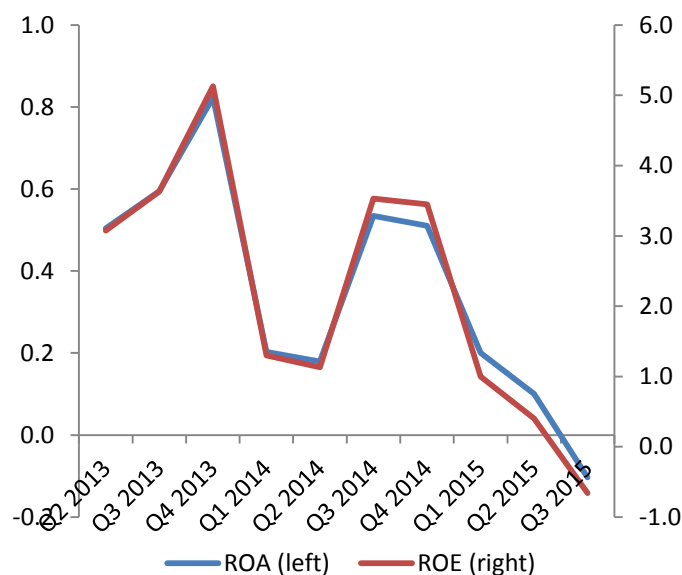
Source: Central Bank of Bahrain

Annex 2 Graph 14: NPL and Provisioning



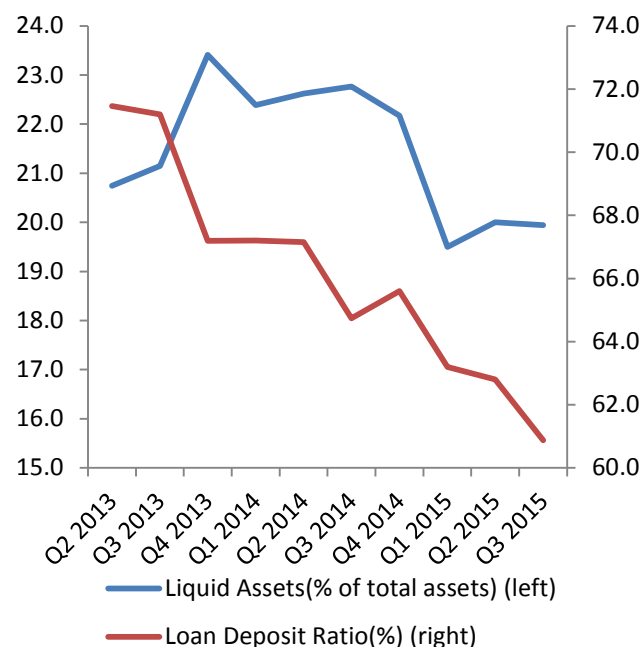
Source: Central Bank of Bahrain

Annex 2 Graph 15: Profitability



Source: Central Bank of Bahrain

Annex 2 Graph 16: Liquidity



Source: Central Bank of Bahrain