FOREWORD

The global economy continued on its growth trajectory since the publication of our last Financial Stability Report. The growth experienced during the last year has been broad-based. During 2017, growth in the US picked up, China reported acceleration in growth for the first time in the last seven years, Eurozone posted a ten year high growth, and Emerging Economies grew at an accelerated rate for the second year in a row1. The consumer and business confidence stayed steady1, however, the path to full recovery remains complicated as geopolitical tensions and risks emanating from trade policies may overtake other financial risks.

Real GDP of Oman slightly contracted during 2017 because of planned cut in crude oil production following the OPEC+ deal. The resultant rise in oil prices, however, provided much needed relief to the economy. Both the current account and fiscal deficits showed marked improvement, while the nominal GDP firmed up during 2017. On back of higher than budgeted oil prices and benefits from the diversification policy, the economy is well poised for a rebound in 2018.

Following the slump in oil prices, Oman set off the process of fiscal adjustment along with other economic reforms including a renewed focus on diversification. The fiscal measures were calibrated to prevent turbulence in non-hydrocarbon and financial sectors. In the process of taking reforms in a measured way, Oman expanded its public debt. While the recent recovery in oil price is a welcome development, the downside risks from twin deficit, and oil price volatility remain. These risks, along with rising public debt, validate the efforts being exerted by the government to fast track the economic and fiscal reforms agenda.

Oman’s commitment to fixed exchange rate, backed by net reserves in excess of twice the currency in circulation, continues. Due to fixed exchange rate regime, Oman faced the impossible trinity as Federal Reserve Bank continued its march towards monetary policy normalization at a time when growth in Oman weakened. The policy rates in Oman also increased following the interest rate hike by the Fed. To dilute the impact of monetary tightening, of late CBO has adopted some countercyclical measures aimed at supporting bank credit and growth.

The banking sector in Oman has been showing remarkable resilience to the tightening of operating conditions since the severe oil price shock. Banks maintained sufficient capital buffers, remained fairly liquid, and posted decent profits. The credit growth slackened in sync with the economic growth, while the credit risk is well-contained. Our stress tests indicate low solvency and liquidity risks for the banking sector in the face of severe shocks.

Basel III implementation is on schedule, whereas, industry consultations on Bank Resolution Framework are underway. A new payment systems law has been promulgated that gives CBO a clear mandate to oversee and regulate all aspects of payment system. To further boost consumer confidence in the banking sector, we have plans to step up our focus on consumer protection and business conduct in the coming period.

Other than some sources of headwinds with potential of direct or spillover adverse effects that are mentioned earlier, we do not foresee any immediate threat to financial stability in Oman. During these challenging times, striking the right balance between financial stability and growth would continue to guide the policy making at CBO. While financial stability remains high on our agenda, I am pleased to note that we are on track in ensuring that financial constraints are not a drag on the growth or diversification drive.

Tahir Salim Al Amri
Executive President

1 World Economic Outlook and WEO Database April 2018 - IMF
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<td>ACH</td>
<td>Automated Clearing House</td>
</tr>
<tr>
<td>BCSB</td>
<td>Bank Credit and Statistical Bureau</td>
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<tr>
<td>BIS</td>
<td>Bank for International Settlement</td>
</tr>
<tr>
<td>BSAs</td>
<td>Bilateral Swap Arrangements</td>
</tr>
<tr>
<td>CBO</td>
<td>Central Bank of Oman</td>
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<tr>
<td>CAR</td>
<td>Capital Adequacy Ratio</td>
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<tr>
<td>CCB</td>
<td>Capital Conservation Buffer</td>
</tr>
<tr>
<td>CCyCB</td>
<td>Counter-cyclical Capital Buffer</td>
</tr>
<tr>
<td>CET1</td>
<td>Common Equity Tier 1</td>
</tr>
<tr>
<td>CFA</td>
<td>Chartered Financial Analyst</td>
</tr>
<tr>
<td>CMA</td>
<td>Capital Market Authority</td>
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<tr>
<td>CRAR</td>
<td>Capital to Risk-weighted Assets Ratio</td>
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<td>CVA</td>
<td>Credit Valuation Adjustment</td>
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<td>D-SIBs</td>
<td>Domestic Systemically Important Banks</td>
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<td>ECC</td>
<td>Electronic Cheques Clearing</td>
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<td>ECL</td>
<td>Expected Credit Losses</td>
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<td>FLCs</td>
<td>Finance &amp; Leasing Companies</td>
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<tr>
<td>FRMF</td>
<td>Fraud Risk Management Framework</td>
</tr>
<tr>
<td>FRMS</td>
<td>Fraud Risk Management Systems</td>
</tr>
<tr>
<td>FSB</td>
<td>Financial Stability Board</td>
</tr>
<tr>
<td>FSI</td>
<td>Financial Stability Institute</td>
</tr>
<tr>
<td>FVTOCI</td>
<td>Fair Value Through Other Comprehensive Income</td>
</tr>
<tr>
<td>FVTPL</td>
<td>Fair Value Through Profit or Loss</td>
</tr>
<tr>
<td>GCC</td>
<td>Gulf Cooperation Council</td>
</tr>
<tr>
<td>G-SIB</td>
<td>Global Systemically Important Banks</td>
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<tr>
<td>GIPS</td>
<td>Global Investment Performance Standards</td>
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<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>GST</td>
<td>Good And Services Tax</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GHS</td>
<td>Governors and Heads of Supervision</td>
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<tr>
<td>GFSN</td>
<td>Global Financial Safety Net</td>
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<tr>
<td>HHI</td>
<td>Herfindahl-Hirschman Index</td>
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<td>HLA</td>
<td>Higher Loss Absorbency</td>
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<td>IBEs</td>
<td>Islamic Banking Entities</td>
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<td>IFRS</td>
<td>International Financial Reporting Standards</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>LCR</td>
<td>Liquidity Coverage Ratio</td>
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<tr>
<td>LNW</td>
<td>Local Net Worth</td>
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<td>MSM</td>
<td>Muscat Securities Market</td>
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<td>NBFI</td>
<td>Non-Banking Financial Institution</td>
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<tr>
<td>NEER</td>
<td>Nominal Effective Exchange Rate</td>
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<td>NPL</td>
<td>Non-Performing Loans</td>
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<td>NPSL</td>
<td>National Payments Systems Law</td>
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<td>NSFR</td>
<td>Net Stable Funding Ratio</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
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<td>OPEC</td>
<td>Organization of the Petroleum Exporting Countries</td>
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<td>PSE</td>
<td>Public Sector Enterprises</td>
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<td>RO</td>
<td>Rial Omani</td>
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<td>RFA</td>
<td>Regional Financing Arrangements</td>
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<td>RER</td>
<td>Real Exchange Rate</td>
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<tr>
<td>ROE</td>
<td>Return on Equity</td>
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<td>RTGS</td>
<td>Real Time Gross Settlement</td>
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<td>RWA</td>
<td>Risk Weighted Assets</td>
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<td>SGRF</td>
<td>State General Reserve Fund</td>
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<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>SMA</td>
<td>Separately Managed Account</td>
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<tr>
<td>SME</td>
<td>Small and Medium Enterprise</td>
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<tr>
<td>TLAC</td>
<td>Total Loss-Absorbing Capacity</td>
</tr>
<tr>
<td>US; USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
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FINANCIAL STABILITY ASSESSMENT OF OMAN

AN OVERVIEW

The Systemic Risk Survey Showed that Stakeholders’ Confidence in the Omani Macro-Financial System Continued to be Favorable

1. The Systemic Risk Survey conducted in 2018 revealed that majority of the respondents were ‘Fairly Confident’ regarding the macro financial system in Oman. Market-players’ perception of the continuation of systemic stability increased as compared to the previous survey conducted in 2016. Moreover, stakeholders continued to view unfavorable oil price movements as the factor with the greatest impact on the Omani macrofinancial system.

CBO Streamlined Some Regulatory Requirements

2. With the intention of enabling banks to facilitate economic growth and to streamline liquidity management, CBO has reduced the Tier 2 capital requirement from 3 per cent to 2 per cent, reducing the minimum total Capital Adequacy Ratio, excluding capital buffers, to 11 per cent. Moreover, banks are now allowed to include deposits from local banks as part of their deposit base to calculate lending ratio.

3. In line with the Basel III requirements, CBO withdrew the minimum 100 per cent risk weightage requirements imposed on exposures to other sovereigns and central banks. Moreover, CBO increased the aggregate overseas exposure limits (credit, placements and credit and placements together) from 50 to 75 per cent of local net worth of the banks and also increased the maturity mismatch limits for tenors of three or more months.

MACRO-FINANCIAL SCENARIO

A Notable Upsurge in Oil prices, Near-Term Outlook is Robust

4. Oil prices recovered rapidly starting from the second half of 2017, the sharp increase in oil prices since the latter half of 2017 provided much needed relief to the Omani economy. The oil price projection by IMF at US$ 62.3 a barrel for 2018 is well above the budgeted oil price of US$ 50 per barrel. This improves the economic outlook for 2018 with both the budget and current account deficit expected to be lower than what was estimated.

Growth Recovered, and Likely to Get Stronger in the Medium-Term

5. A significant surge in oil prices led Oman to rebound from the contractionary phase. The nominal GDP grew by 8.7 per cent in 2017, recovering from an acute contraction during the previous two years, with contribution coming from both hydrocarbon and non-hydrocarbon sectors. As per IMF’s projection, nominal GDP is expected to grow at higher pace of 11.2 per cent in 2018.

6. Due to planned output cuts following the OPEC+ agreement, the real GDP of Oman declined marginally by 0.3 per cent in 2017. However, the economy is projected to bounce back in 2018 and accelerate further in 2019 and outperform the other GCC countries (IMF’s World Economic Outlook, April 2018).
Inflation Remained Moderate Despite an Uptick in Headline and Consumer Inflation

7. The headline inflation inched up to 1.6 per cent during 2017 from 1.1 per cent during 2016 mainly due to the upsurge in oil and other commodity prices. The demand factors of inflation in the economy continued to remain largely muted during 2017, while on the supply side, the sources of inflation became stronger in Oman as imported inflation remained prominent among them.

Twin Deficit Continued, However, Consolidation Efforts Progressed

8. The fiscal deficit declined from RO 5.3 billion in 2016 to RO 3.7 billion in 2017. It is budgeted to further decrease to RO 3 billion in 2018. Moreover, fiscal deficit as a percentage of GDP declined from 20.6 per cent in 2016 to 13.5 per cent in 2017 and is budgeted to drop further to 9.4 per cent in 2018.

9. The government debt to GDP ratio increased sharply from a low of 4.9 per cent in 2014 to 31.1 per cent during 2016 and further to 39.9 per cent in 2017, while the external government debt to GDP ratio grew from 1.9 per cent to 20.1 per cent and further to 31.8 per cent during this period. However, consolidation efforts are in progress as the government managed to reduce its spending by 4.9 per cent in 2017 and 5.8 per cent in 2016.

FINANCIAL INSTITUTIONS

BANKS

The Banking Sector Continues to Dominate the Financial Landscape in Oman. Rating Agencies Downgraded Oman’s Sovereign Rating Primarily Due to the Fiscal and Balance of Payment Effects of Lower Oil Prices

10. Banks continued to be the prime financiers for both corporate and household sectors. Within the banking sector, domestic banks remained the leading players. The banking sector also continued to serve as the backbone of the payment and settlement infrastructure.

11. The downgrade of Oman’s sovereign rating had an adverse impact on the credit rating of domestic banks operating in Oman as the rating agencies factored in the declining ability of the government to support the banking sector. However, the banking sector continued to display resilience and all banks maintained sufficient capital buffers in line with both Basel III and CBO requirements.

Policy and Overnight Rates Increased in Line with the Fed Fund Rate. Sluggish Economic Growth and Rising Interest Rates may Continue to Test the Banking Sector Resilience

12. Following the Fed’s lead, CBO’s policy rates (repo rate) increased to 1.95 per cent in December 2017 from 1.19 per cent in December 2016. Similarly, interbank overnight interest rates also increased to 1.26 per cent in December 2017 from 0.47 per cent in December 2016.

13. The average interest rates on RO deposits increased to 1.67 per cent in December 2017 up from 1.49 per cent a year ago. Similarly, average lending rates on RO loans also increased to 5.20 per cent during December 2017 as compared to 5.08 per cent during December 2016.
Total Assets of the Banks Continued to Grow, However, the Deceleration in the Growth of the Banks’ Assets that was Initiated in 2015 Persisted during 2017. Banking Sector Assets are Primarily Concentrated in their Lending Portfolio

14. The Total Assets (net) of the banking sector in Oman grew at a slower pace in 2017 to RO 30.7 billion (Gross Assets: RO 31.5 billion) registering a growth of 5.4 per cent during the year as compared to 6.1 per cent in 2016. The slowdown in asset growth was expected given the challenging macroeconomic conditions faced by Oman. However, the banks operating in Oman may be set for solid growth over the next several years on the back of diversification of the economy under Tanfeedh program, some countercyclical measures adopted by CBO during 2018, and the recovery in oil prices.

Real Estate Exposure Could Be a Potential Source of Vulnerability, While Strong Lending Standards and Stiff Prudential Norms Keep the Household Indebtedness in Check

15. The household indebtedness relative to GDP has risen during the past few years due to decline in GDP. Nevertheless, household debt to income ratio remained broadly unchanged and compares well with that in the OECD countries.

16. Banks in Oman have substantial direct and indirect exposure to the real estate sector. The total real estate exposure of the banking sector is about 30 per cent of the total lending portfolio. This is considered large as weakening in the real estate market could expose the banking sector to considerable risks. However, at present there are no significant signs of stress in the Omani real estate market.

Asset Quality of Banks Continued to be Strong as Both Gross and Net NPL Ratios Remained at Low Levels. Due Attention is, However, Warranted to Monitor and Manage the Rising Trend in Special Mentioned Loans

17. At the end of 2017, the total stock of NPLs was RO 440 million or 1.88 per cent [2016: 1.78 per cent] of the gross loans suggesting good asset quality. Banks have adequate provisions and their loan portfolio is well covered against expected losses as evident from net NPL ratio of only 0.7 per cent at the end of 2017 (0.60 per cent at the end of 2016).

18. The special mention loans increased by RO 477 million or 37 per cent (2016: RO 297 million) reaching RO 1.8 billion or around 7.5 per cent of gross loans of the banks by the end of the year 2017.

Banks Remained Fairly Liquid, without any Signs of Serious Strain – Liquidity Conditions Improved as Lending Growth Declined while Deposit Growth Picked up and External Sources Tapped

19. The banks comfortably maintained the cash reserve requirements without any significant signs of strains. During 2017, the lending and deposits of the banking sector grew by around 6.4 (10.1 per cent in 2016) and 5.6 (5.2 per cent in 2016) per cent, respectively. The lending ratio of the banking sector in December 2017 was at 79.9 per cent which is well within CBO’s prescribed limit of 87.5 per cent. Moreover, Liquidity Coverage Ratio stood at 216% and Net Stable Funding Ratio at 116 per cent both being well above the regulatory requirements of 80 and 100 per cent, respectively.
20. During 2017, Oman tapped international markets through a multi-tranche USD 5 billion Eurobonds issue followed by a USD 2 billion international Sukuk issue. In 2018, Oman raised another USD 6.5 billion through Eurobonds. This external borrowing along with higher oil revenues further eased up liquidity conditions in the market.

Sizeable Public Sector Deposits Expose the Banks to Concentration Risk. However, Banks Remained Resilient to Deposit Runoff

21. Banks operating in Oman have low reliance on wholesale markets. Government deposits, however, remained an important source of funding for the banks. The high level of public sector deposits combined with the reduced cash-flows of the government in the wake of dwindling oil revenues could pose a covert yet potent risk of significant withdrawal of deposits from the banking sector. However, the risk of withdrawal is not imminent as the government resorted to borrowing from domestic and international markets besides drawing down on its buffers to finance the budget deficit.

22. The latest stress tests also show that the banks operating in Oman remained fairly resilient to the assumed deposit runoffs.

Concentration in the Banking Sector was Moderately High. Sectoral Credit Concentration also Remained High. D-SIBS Framework and Bank Resolution Framework Would Help Deal with the Systemically Important Banks

23. In Oman, loans are heavily concentrated in the personal loan segment with a share of 41 per cent in total loans. Nevertheless, the NPLs in this segment are low with an NPL ratio of 1.87 per cent. The Herfindahl-Hirschman Index (HHI) showed that the Omani banking sector is moderately concentrated. The concentration level in Oman is in line with the peer group of GCC countries. The top five (three) banks continues to form about 77 per cent (60 per cent) of total banking sector assets.

24. To deal with the risks emanating from the presence of large institutions, CBO had issued guidelines to identify, supervise, and regulate Domestic Systemically Important Banks. Moreover, as a part of the preparedness to amicably resolve the systemically important banks, CBO has drafted a Resolution Framework that is in the advanced stages of finalization.

The Solvency of the Banking Sector Remained Robust. Despite Challenging Operating Conditions, Banks Managed to Improve Profitability

25. The benchmark Capital to Risk-weighted Assets Ratio (CRAR) of the banking sector remained healthy at 17.4 per cent at the end of December 2017 as compared to 16.7 per cent a year ago.

26. Despite significant headwinds, the banking operations continued to be profitable and banks’ pre-tax profit rose to RO 452 million in 2017 from RO 438 million in 2016.

Islamic Banking Showed Strong Growth. The Sector as a Whole is Gaining Systemic Importance

27. At the end of 2017, the Islamic banking assets formed 12.1 per cent (Dec 2016: 10.3 per cent) of the total banking sector assets. With a compound annual growth rate of 24 per cent, total assets
held by Islamic banks and the Islamic banking windows of conventional banks in December 2017 exceeded RO 3.8 billion.

28. Islamic banking entities (IBEs) recorded remarkable improvement in profitability. The aggregate pre-tax profits of IBEs during 2017 increased to RO 20.3 million (2016: RO 13.6 million; 2015: RO 1.6 million).

NON-BANK FINANCIAL INSTITUTIONS (NBFIs)

NBFIs Continue to Provide Vital Financial Services, However, Credit Granting NBFIs Remained a Small Fraction of the Financial Sector

29. The total assets of Finance & Leasing Companies (FLCs) were less than four per cent of the financial sector assets. In terms of asset size, FLCs and Insurance companies remained the leading players in the NBFIs sector accounting for over 45 per cent and 51 per cent of the total NBFIs assets, respectively.

30. The NPL ratio of FLCs increased to 8 per cent at the end of 2017 from 5 per cent at the end of the previous year.

31. The metrics for the insurance sector show that, Oman is relatively underinsured and as such there is ample space for the growth of the sector.

PAYMENT AND SETTLEMENT SYSTEMS

The National Payment Systems Law Promulgated

32. In early 2018, the National Payments Systems Law (NPSL) was promulgated. It provides a comprehensive legal framework that was set with the objective to modernize and strengthen the Sultanate’s payment infrastructure to ensure that all payment services are executed in a safe, secure and efficient manner. The need for NPSL was emphasized due to the rapid developments in the banking sector generally and more specifically in the payments operations.

Turnover in Both Volume and Value in the Payment and Settlement Systems Continued. Concentration Levels were Moderate Throughout 2017

33. Aggregate volumes in the payment and settlement systems reached 68.7 million transactions, increasing by 22 per cent. Aggregate values witnessed an increase of 5.10 per cent from the previous year to reach RO 181.60 billion.

STRESS TESTING OF THE BANKING SECTOR

Despite Challenging Macroeconomic Conditions, Banks Remained Resilient to Stressed Scenarios

34. The stress tests show that the Capital to Risk-weighted Assets Ratio (CRAR) of domestic banks would drop from 17.7 per cent as at the end of December 2017 to 13.4 per cent when banks are subjected to a battery of severe stress events. Furthermore, the domestic banks would be able to absorb losses of 3.2 times the current NPLs before compromising CBO’s required CRAR.
Banks Remain in a Relatively Good Liquidity Position vis-à-vis International Benchmarks

35. When assessed with respect to the international benchmarks (of one business week or five days), domestic banks were found to be in a comfortable position to face the liquidity shocks under the assumed stress scenarios. At the end of December 2017, domestic banks would be able to sustain a liquidity shock for an average of 5 days using cash, CBO balances, and securities.
Chapter I

Macro-Financial Outlook

The economic rebound, driven by recovery in oil prices and higher non-oil activities, provided further support to the financial sector in Oman. The deceleration in growth of bank credit, however, reflected lagged impact of economic slowdown. Interest rates in the Sultanate further increased following the tightening of monetary conditions in the USA. Inflationary conditions remained supportive of growth, despite some uptick in retail inflation. The fixed exchange rate, which served as an efficient nominal anchor, did not witness any pressure during the year. The improvement in balance of payments resulted in lower drawdown of foreign reserves during 2017 as compared to the previous year. The economy has already resumed nominal growth and going forward, higher oil and non-oil activities are likely to foster real growth also. Overall, the macroeconomic outlook for Oman appears to be robust over short-term, although some downside risks may emanate over the medium-term due to external factors.

I. Global Developments

Growth Gained Strength

1.1 The strong investment and uptick in cyclical trade activities provided further strength to the global growth momentum (Graph 1.1). The sustained robust investment spending in advanced countries along with reversal of declining investment trend in the emerging markets and developing countries remained the main driver of global growth during 2017 (Graph 1.2). The accommodative monetary policy in conjunction with robust outlook improved business environment and led to higher investment in advanced countries (Graph 1.2). Overall financial conditions also remained accommodative, despite intermittent volatility in equity markets and some hardening of bond yields, and supported investment activities. At the same time, acceleration in private consumption and a resurgent external demand augmented investment activities and conditioned growth in emerging markets and developing economies. The global trade witnessed a strong rebound in 2017 from the cyclical downturn, reflecting robust demand on account of investment and private consumption (Graph 1.3a & b). The emerging markets and developing economies registered more pronounced growth in global trade during 2017.
1.2 The world output growth is estimated at 3.8 per cent for 2017, about 0.6 percentage point higher than that in 2016. The growth for advanced economies edged up to 2.3 per cent in 2017 from 1.7 per cent in 2016. The Euro Area also witnessed a steep uptick in growth by 0.5 percentage point to 2.3 per cent in 2017. The growth for emerging market and developing economies also significantly improved by 0.4 percentage point to 4.8 per cent in 2017.

1.3 The USA rebounded quickly from the downturn and recorded an accelerated growth of 2.3 per cent in 2017 as compared to 1.5 per cent in 2016. The USA is expected to sustain an almost same level of growth in 2018 on the back of expansionary fiscal policy. The unemployment rate in the USA has also been on the downward trajectory and reached to a historical low of 4.1 per cent in December 2017. The Federal Reserve hiked the interest rates three times in 2017 (25 basis points each time) on back of strengthening economic activity, and it is expected to continue with hiking interest rates in 2018 also. With rising interest rates in the USA, the capital flows to emerging markets have come under pressure and further hikes are likely to exacerbate such pressure. At the same time, a rise in interest rates of USA has been transmitted to the countries having a currency peg with US dollar, adversely impacting the economic activities.

1.4 Oman’s major trading partners outside the GCC region viz. China and India also recorded robust growth during 2017 (Graph 1.4), albeit the latter witnessed some moderation in growth due to one-off factors, i.e., withdrawal of large denomination currency notes and implementation of good and services tax (GST). The revival in exports propelled the growth in China, while private consumption

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1 International Monetary Fund (2018), World Economic Outlook, April-2018
remained the main growth driver in India. The near-term outlook for growth in China and India appears quite robust, which would be positive for oil and non-oil exports of Oman.

**An Uptick in Headline Inflation**

1.5 The headline inflation inched up mainly due to the upsurge in oil and other commodity prices. The average oil prices jumped by 23.3 per cent, while non-fuel commodity prices increased by 6.8 per cent during 2017. The core inflation, however, continued to be subdued, although with some uptick in some advanced countries reflecting the faster closing of output gap. The average inflation, based on consumer prices, rose to 1.7 per cent in advanced economies during 2017 from 0.8 per cent in 2016. The IMF has projected the average oil prices to increase by 18.0 per cent to US$ 62.3 a barrel during 2018, while non-fuel commodity prices are projected to move upward by 5.6 per cent during the year. Further increase in oil and non-oil commodity prices is expected to push headline inflation upward globally in 2018. The price situation in Oman will also be impacted by a further surge in commodity prices.

**Financial Conditions Accommodative, but Vulnerabilities Building Up**

1.6 International financial markets continued to function smoothly and supportive of recovery in global growth during 2017. The accommodative monetary policies pursued in advanced countries and expansionary fiscal policy in the USA facilitated financial markets to gain further traction. The persistent low interest rate environment in association with benign volatility encourage higher financial risk taking and leveraging by investors. The long-term sovereign bond yields continued to remain low, despite an uptick in inflation in several jurisdictions. The 10 year USA treasury yield declined by 5 basis points from 2.45 per cent at the end of 2016 to 2.40 per cent at the end of 2017. The low level of long-term yields contributed to stretched valuations across the asset classes, albeit degree varied. Equity markets exhibited further exuberance during the year both in advanced economies and emerging markets & developing economies. S&P 500 Index recorded an appreciation of 21.8 per cent during 2017, while Global Dow Index provided an annual return of 21.9 per cent. Nikkei Index increased by 19.1 per cent, but Shanghai Composite index appreciated by a lower of 6.6 per cent in 2017. The performance of the foreign exchange markets remained mixed with several major currencies (such as Euro, British Pound, Chinese Yuan, Indian Rupee, Korean Won, Canadian Dollar) appreciating during 2017, while few other major currencies such as US Dollar and Japanese Yen experienced depreciation. The prolonged accommodative financial conditions along with low volatility, however, led to excessive risk taking and stretched valuations across asset classes, eventually contributing to accentuated vulnerabilities. On the top of that easy monetary policy is likely to give way to tightening sooner than expected with inflation catching up across major economies.

**Robust Growth Outlook With Risks Balanced in the Near-Term**

1.7 The accommodative monetary policy in Euro area and expansionary fiscal policy in the USA would continue to foster investment and private consumption spending in advanced countries during the near-term. The recovery in commodity prices along with a pick-up in activities in India from one-off two events is likely to continue the growth in emerging markets and developing economies on course. The outlook for the near-term global growth appears robust, backed by further strengthening of recovery in emerging markets and developing economies and sustaining of current momentum in advanced economies.
The world growth is projected to edge up to 3.9 per cent in 2018 from 3.8 per cent during 2017, with growth in advanced economies moving up to 2.5 per cent from 2.3 per cent and that in emerging markets and developing economies edging up to 4.9 per cent from 4.8 per cent during this period. While risks to the outlook appear to be broadly balanced in the short-term, the likely challenges emanating from the potential rapid tightening of financial conditions, a reversal in pro-cyclical policies in advanced countries, growing restrictions on international trade, and geopolitical tensions in the Middle East could undermine the growth outlook over the medium-term.

II. Domestic Macroeconomic Developments

Growth Scenario

Growth Recovered, and Likely to Get Stronger in the Near-Term

1.8 The growth in gross domestic product (GDP) is pivotal for gaining resilience by financial markets and banking sector and foster macroeconomic and financial stability in the economy. The strong growth also enables the creation of sufficient cushions to weather the impact of any intermittent external shocks on the domestic economy. The broad-based growth, which Oman has been striving for through boosting diversification, reduces dependence on the oil sector and insulates the economy from vagaries of oil prices. A significant surge in oil prices from the low of early 2016 led Oman to rebound from the contractionary phase, contributing directly and indirectly to economic activities. Although the share of oil-sector in value addition declined over the years, inter-linkages between oil and non-oil sector continued to remain significant with a considerable dependence of latter on the former. Thus, the public policy needs to expedite initiatives and programs to accelerate private sector participation and reduce dependence on oil sector to promote sustainable growth over the medium to long run.

1.9 The nominal GDP grew by 8.7 per cent in 2017, recovering from an acute contraction in the previous two years, with contribution coming from both hydrocarbon and non-hydrocarbon sectors. As alluded to earlier, the oil sector accounted for a large share in the nominal growth during 2017, but the contribution of the non-oil sector also improved. As per IMF’s projection, nominal GDP is expected to grow by 11.2 per cent in 2018, before witnessing a decelerating growth of 3.7 per cent in 2019. According to WEO April 2018, IMF has expected the average oil price at US$ 62.3 a barrel in 2018 (significantly up
from US$ 52.8 in 2017 and US$ 50.3 a barrel projected in October 2017), and US$ 58.2 per barrel in 2019. Notably, Oman is projected to grow in nominal terms higher than the GCC countries average both in 2018 and 2019.

1.10 The real output got a setback in GCC countries, including Oman, due to the implementation of an agreement between OPEC and Non-OPEC countries to cut production for clearing a global supply glut. The real GDP of Oman is projected to decline marginally by 0.3 per cent in 2017 as against robust growth exhibited during the preceding two years (Graph 1.7). Despite the extension of agreement until the end of 2018, the real growth in Oman is projected to bounce back in 2018 and accelerate further in 2019. In comparison with GCC block, Oman fared better in real growth during the recent past and is expected to outperform in the near-term also (Graph 1.7). The increase in gas output with Khazzan gas field coming in full stream and accentuated economic activities in the non-oil sector are anticipated to condition strong real growth over the near-term. Nonetheless, increase in productivity would be key to sustain the course of robust real growth over medium to long-run, which would require technological improvement and human skills up-gradation.

1.11 As per the latest available data, the investment to GDP ratio jumped considerably during the years 2015 and 2016 (Graph 1.8). The upward movement in the investment ratio was largely driven by downward swings in the denominator (GDP) and hence, may not be construed as improvement in investment activities. Investment to GDP ratio is projected to decline somewhat in 2017, which is again attributed mainly to improvement in GDP. In fact, the level of investment, in absolute terms, remained more or less static in the last few years. The Government and other concerned authorities are making concerted efforts to improve the business environment and attract higher private investment to boost diversification in the economy. Nonetheless, a closer scrutiny suggests that more tangible policy efforts are needed urgently to create conducive environment to attract private investment, especially from foreign investors. The gross domestic savings plunged substantially during the period 2015-2016 on account of both government divestments and fall in household savings, reflecting the contraction in the economy. IMF has, however, projected a sharp improvement in domestic savings in 2017 and 2018, possibly considering a strong uptick in growth.
Price Stability

An Uptick in Consumer Inflation, but Remained Within the Limit

1.12 Imported inflation remains one of the major determinants of inflation in Oman due to the currency peg and a large dependence on imports of goods and services. The increase in production cost of imports of goods and services get entrenched into domestic inflation, while exchange rate pass-through also impacts the price level in Oman. Since Rial Omani is pegged to US dollar, appreciation/depreciation of US$ vis-à-vis currencies of trading partners of Oman (especially exporting countries) affects the domestic price level to the extent of pass-through. Transmission of monetary conditions prevailing in the USA due to the currency peg also has a bearing on the price situation in Oman. The retail inflation in Oman inched up to 1.6 per cent in 2017 from 1.1 per cent during 2016. It could be seen that inflation in Oman remained very closely aligned to that in advanced countries over the last few years (Graph 1.9).

1.13 The demand conditions in the economy continued to remain largely muted during 2017 (Table 1). The growth in money supply (M2) accelerated to 4.2 per cent in 2017 from a benign increase of 1.8 per cent in 2016, reflecting pick-up in non-oil activities. The overall real growth, however, turned negative in 2017 mainly on account of cut in oil production. Expat workers in the Sultanate increased only marginally during 2017, suggesting subdued demand from this source. On the supply side, the sources of inflation became stronger in Oman, and imported inflation remained prominent among them as reflected by depreciation in the exchange rate and surge in non-fuel commodity prices. The nominal effective exchange rate (NEER) depreciated by 6.6 per cent in December 2017 over the level a year ago, implying higher cost for imported goods and services. International non-fuel commodity prices surged by 6.8 per cent in 2017, impacting the price level in Oman due to its dependence on imports from outside for non-fuel commodities. The overall impact of exchange rate depreciation and the surge in commodity prices on inflationary conditions in Oman could be seen through imports price which increased by 28.6 per cent in 2017.

Table 1: Drivers of Inflation (% change)

<table>
<thead>
<tr>
<th>Drivers</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand side</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Growth</td>
<td>1.2</td>
<td>4.7</td>
<td>5.4</td>
<td>-0.3</td>
</tr>
<tr>
<td>Broad Money</td>
<td>15.3</td>
<td>10.0</td>
<td>1.8</td>
<td>4.2</td>
</tr>
<tr>
<td>Expats workers</td>
<td>2.8</td>
<td>8.3</td>
<td>9.2</td>
<td>0.4*</td>
</tr>
</tbody>
</table>
Oil Sector

A Notable Upsurge in Oil Prices, and Near-Term Outlook Robust

1.14 Oil-sector continued to remain the mainstay of Omani economy, notwithstanding deceleration in its share in overall economic activities over the last few years. The agreement between OPEC and Non-OPEC oil producers to cut oil production, which came into effect starting 2017, cleared the global supply glut to a large extent. Oman also effected a cut in production of crude oil following the above-mentioned agreement, and accordingly, the crude oil production declined by 3.6 per cent to 354 million barrels during 2017. The drop in supply from Venezuela has been much more than the target under the aforementioned agreement. The withdrawal of USA from Iran nuclear deal has created uncertainty about a substantial chunk of oil supply in the near future.

1.15 Oil prices recovered rapidly starting the second half of 2017, reflecting the elimination of excess supply and resurgence of robust demand (Graph 1.10). The global oil market rebalanced with demand for oil exceeding supply of oil and resulted in a net deficit in 2017 (Graph 1.11). The sharp upturn in oil prices since the latter half of 2017 provided much needed relief and helped Oman in coming out of contraction as well as in furthering fiscal consolidation. IMF has projected the average oil price at US$ 62.3 a barrel for 2018, however, oil has been trading between US$ 75-80 a barrel in the recent past mainly due to evolving supply uncertainty from few sources (Graph 1.10). Notwithstanding uncertainty surrounding the recent surge, the average oil prices are anticipated to rule above US$ 60 a barrel in 2018 and 2019 with upside risks outweighing downside risks.

### Supply side

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NEER</td>
<td>-6.6</td>
<td>2.0</td>
<td>3.5</td>
<td>5.6</td>
<td>-6.6</td>
<td>-6.6</td>
</tr>
<tr>
<td>Non-fuel commodity prices</td>
<td>-17.6</td>
<td>-1.5</td>
<td>6.8</td>
<td>-3.9</td>
<td>-17.6</td>
<td>-17.6</td>
</tr>
<tr>
<td>Import prices</td>
<td>-26.9</td>
<td>28.6</td>
<td>9.6</td>
<td>-35.5</td>
<td>9.6</td>
<td>-35.5</td>
</tr>
</tbody>
</table>

*Only in private sector
Interest Rates and Exchange Rate

Interest Rates Moved Upward

1.16 The currency peg arrangement with the US dollar allows automatic transmission of monetary conditions prevailing in the USA to Oman. The increase in interest rates in the USA, following the onset of normalization of monetary policy starting December 2015, led to a hardening of interest rates in Oman also (Graph 1.12). Although overnight interest rate of Oman deviates from Fed Fund rate intermittently mainly due to evolving domestic liquidity conditions, it moved in line with Fed Fund rate closely in 2017. The lending rates and deposit rates also hardened in the recent past with average RO lending rate edging up from 5.08 per cent in December 2016 to 5.20 per cent in December 2017 and the average RO deposit rate moving up to 1.67 per cent from 1.49 per cent during this period (Graph 1.13).

1.17 Although the currency peg provides a credible nominal anchor for the Sultanate, interest rate movements are not found to be in sync with the business cycle at times. For example, the recent hardening of interest rates in Oman does not behave well with the current conditions in the economy.

1.18 The real exchange rate (RER) for Oman and other GCC countries is displayed in (Graph 1.14). The currencies across GCC countries witnessed real depreciation in 2017, albeit marginal in case of Oman. The real depreciation would result in a decline in purchasing power and hence, lower demand for imports and consumption. Moreover, foreign investors may demand higher interest rate on Rial Omani denominated assets as a compensation for fall in purchasing power. The nominal effective exchange rate (NEER) also depreciated by about 6.6 per cent in December 2017 over the level a year ago, suggesting imports becoming costly.
**Fiscal Balance**

**Fiscal Consolidation Progressed**

1.19 The deterioration in the fiscal balance in conjunction with current account deficit posed a serious challenge to the macroeconomic stability, especially in the backdrop of limited external buffers. The Government, however, displayed commitment and pursued fiscal measures to deal with the situation and bring back stability. Fiscal measures targeted both rationalization of spending, despite limited scope available due to high level of committed expenditure (spending on wages and interest payments), and augmentation of non-oil revenues. Due to the consolidation efforts and recovery in oil prices, the fiscal deficit declined from RO 5,300 million in 2016 to RO 3,760 million in 2017, and it is further budgeted to decrease to RO 3,000 in 2018 (Graph 1.15). Fiscal deficit as a proportion to GDP also declined from 20.6 per cent in 2016 to 13.5 per cent in 2017 and budgeted to drop further to 9.4 per cent in 2018.

1.20 The Government spending dropped by 4.9 per cent in 2017 as against 5.8 per cent in 2016. During 2017, the cut in government spending was effected across both current and capital expenditure. The spending on participation and other expenses (including subsidies), however, increased by 6.2 per cent, which was mainly attributed to the introduction of a new targeted fuel subsidy scheme. At an aggregate level, non-hydrocarbon expenditure dropped by 3.3 per cent during 2017, whereas spending on oil and gas production reduced by 13.4 per cent during 2017. On the revenue front, there was an uptick of 11.9 per cent mainly on account of a steep jump in oil revenue by 28.2 per cent, albeit other current receipts (including taxes) also edged up by 2.8 per cent. During 2018 Budget, the higher allocation for oil production & gas production and capital spending for civil works led to increase in total expenditure by 1.8 per cent over actual in 2017. On the other hand, 2018 Budget estimates aggregate revenues to grow at a robust rate of 11.6 per cent over actual in 2017 on account of anticipated surge in oil revenue and a significant jump in other current receipts (including taxes) considering higher non-oil economic activities.

1.21 The non-oil fiscal deficit, which resonates to the structural deficit to a large extent because of oil revenue being predominant and highly volatile, displays realistic fiscal position. It is evident that non-oil fiscal deficit also displayed improvement, reflecting the impact of the reform measures (Graph 1.16). The non-hydrocarbon fiscal deficit as a percentage of GDP dropped from 36.9 per cent in 2015 to 32.6 per cent during 2016 and further to 29.2 per cent in 2017.
1.22 The elevated fiscal deficit witnessed since 2015 has been largely financed through debt along with using some drawdown of foreign assets. As part of a well-calibrated strategy, a large part of the debt was raised from international markets so that domestic private sector investment is not crowded out. Consequently, the government debt to GDP ratio increased sharply from a low of 4.9 per cent in 2014 to 31.1 per cent during 2016 and further to 39.9 per cent in 2017, while at the same time the external government debt to GDP ratio jumped from 1.9 per cent to 20.1 per cent and further to 31.8 per cent during this period (Graph 1.17). A well thought-out strategy to raise government debt through long-term maturity, however, helped in containing risks emanating from high debt level. There is a need to contain increasing government debt level before sustainability concerns become profound and towards this end, a more credible approach would be to reduce the non-oil fiscal deficit.

**Current Account**

**Deficit Reduced but Continued to be Elevated**

1.23 Oman has been confronted with twin deficits problem, i.e. deficit in fiscal and current accounts since 2015. The current account, however, recorded improvement with deficit declining during 2017 mainly on the back of a recovery in oil prices and improving growth of non-oil exports (Graph 1.18). The fiscal consolidation also helped in lowering the current account deficit as a reduction in fiscal deficit had a salutary effect on containing imports of goods and services (Graph 1.19). An empirical exercise also establishes the positive impact of fiscal account balance on the current account balance, which means that decline in fiscal deficit leads to lowering of imports (Box 1.1).
1.24 The trade balance, after deteriorating during the last two years 2015 and 2016, improved to RO 3,370 million in 2017, reflecting a surge in oil prices and robust growth in non-oil exports (Graph 1.20). The evolving geopolitical dynamics also appear to have helped non-oil exports of Oman. Non-oil exports have responded positively to the increase in global demand as well as to the concerted policy efforts undertaken to promote diversification. Although Oman pursues a currency peg arrangement, the exchange rate channel impacts the non-oil exports through US dollar that is the pegging currency for Rial Omani. On the contrary, merchandise imports are sensitive to the domestic demand (i.e. growth in the economy), but not impacted by the exchange rate channel, suggesting their price inelastic characteristic (Box 1.2). Therefore, imports substitution may be promoted to reduce dependence on imports in the Sultanate. Another major component under the current account of Oman is workers’ remittances, which have also moderated to RO 3,774 million in 2017 from RO 3,965 million during 2016. The lower remittances in 2017 could be a result of economic slowdown and increasing proportion of nationals in the workforce.

1.25 The capital inflows financed the major portion of current account deficit and drawdown on foreign assets was resorted to finance the remaining part. Net capital inflows amounted to RO 3,481 million in 2017 as compared to RO 1,614 million in the previous year. As equity inflows remained subdued, it was debt inflows, especially government borrowing abroad, that provided the necessary funding to the current account deficit and provided support to the currency peg arrangement. Nonetheless, the external government debt has mounted significantly reaching to RO 8,898 million at the end of December 2017. Consequently, Oman’s net external buffers have witnessed depletion (Graph 1.21). The external government debt to gross foreign exchange reserves increased to 70 per cent in 2017 from 36 per cent in 2016 and 6 per cent in 2015. Public policy must continue to focus on reducing non-oil current account deficit so that recovery in oil prices could be used to strengthen country’s external buffers.

Money and Credit

A Deceleration in Credit Growth Persists, However; Prospects Positive

1.26 Growth in bank credit continued to traverse on the downward spiral and decelerated to 6.4 per cent in 2017 from
Box 1.1
Twin Deficits Phenomenon in Oman- An Empirical Investigation

The imbalances in the fiscal and current accounts have been attracting an accentuated attention in the policy circles over several decades due to their implications for macroeconomic stability. Nonetheless, the twin deficits hypothesis came into more prominence in the 1980s when a steep jump in federal budget deficits was accompanied with a sharp deterioration in current account balance in USA (Bartolini and Lahiri, 2006). The argument made in this regard was that a wider fiscal deficit incurred by the US government, following Keynesian model to encounter cyclical downturn in the economy, led to higher current account deficit. The twin deficits phenomenon has come to the forefront once again in the recent years and academicians and public policy practitioners have been debating on this topic extensively with several countries experiencing the large fiscal and current account deficits. As per the twin deficits hypothesis, the imbalance in the fiscal account is one of the main drivers of current account imbalance. The causality running from fiscal imbalance to current account imbalance can be drawn from the national income identity and also through exchange rate channel. As per the national income identity, any increase in fiscal deficit by higher government spending or cutting in taxes results in higher domestic demand which is met by an increase in imports of goods and services until Ricardian equivalence holds true, eventually leading to wider current account deficit. On the other hand, appreciation/depreciation in exchange rate adversely/favorably impacts the trade balance, affecting the current account balance accordingly.

The empirical studies, however, suggests mixed results with some concluding significant impact of the fiscal deficit on current account deficit while some finding such impact weak or non-existence. Bluedorn, John, and Leigh, Daniel (2010) find fiscal consolidation raising current account balance in case of OECD countries over the period 1978-2009. On the other hand, Kim and Roubini (2008) conclude that a decline in the budget deficit raises the current account deficit in the USA. In the GCC region, Merza et. al (2012) empirically find that the causality runs from the current account balance to the fiscal balance and not from latter to former in case of Kuwait.

Since Oman is also grappling with twin deficits since 2015, an empirical investigation of the relationship between fiscal balance and current account balance becomes eminent to draw some policy inferences. The annual data from 1981 to 2017 has been used in the empirical exercise and the main variables used are the fiscal balance to GDP ratio and current account balance to GDP ratio. The US dollar exchange rate has also been considered as a control variable in the study. As all variables are found to be stationary, the simple VAR and OLS to estimate the relationship. The results of VAR Granger causality, furnished in (Table 1.1.1) below, establish one-way causality running from fiscal balance to current account balance.

Table 1.1.1: VAR Granger Causality Tests
Sample: 1981-2017
(Lag selection 2 based on AIC)

<table>
<thead>
<tr>
<th>Dependent variable: Current Account Balance</th>
<th>Excluded Chi-sq</th>
<th>df</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Balance</td>
<td>6.523</td>
<td>2</td>
<td>0.038</td>
</tr>
<tr>
<td>Exchange Rate ($)</td>
<td>2.434</td>
<td>2</td>
<td>0.296</td>
</tr>
<tr>
<td>All</td>
<td>7.132</td>
<td>4</td>
<td>0.129</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependent variable: Fiscal Balance</th>
<th>Excluded Chi-sq</th>
<th>df</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Account Balance</td>
<td>1.100</td>
<td>2</td>
<td>0.576</td>
</tr>
<tr>
<td>Exchange Rate ($)</td>
<td>1.427</td>
<td>2</td>
<td>0.489</td>
</tr>
<tr>
<td>All</td>
<td>2.077</td>
<td>4</td>
<td>0.721</td>
</tr>
</tbody>
</table>
The coefficient of fiscal balance in the regression on the current account balance is found positive and statistically significant, suggesting that a wider fiscal deficit leads to higher current account deficit in Oman (Table 1.1.2). At the same time, the impact of the exchange rate is also positive and statistically significant. However, these results suggest that imports may not be sensitive to exchange rate changes and accordingly, appreciation leads to higher value of imports because of cost push.

### Table 1.1.2: Estimates of Parameters

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>OLS</th>
<th>FMOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>p-value</td>
</tr>
<tr>
<td>Fiscal Balance</td>
<td>1.402***</td>
<td>0.000</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>0.230**</td>
<td>0.048</td>
</tr>
<tr>
<td>Constant</td>
<td>-11.956</td>
<td>0.262</td>
</tr>
</tbody>
</table>

*Note: ***,, **, and * denotes significance at 1 percent, 5 percent and 10 percent confidence level, respectively.

The above empirical investigation establishes that fiscal balance impacts the current account balance in Oman, which means that higher fiscal deficit would result in wider current account deficit. Therefore, the current account deficit could be contained by pursuing fiscal consolidation. At the same time, containing both fiscal deficit and current account deficit are essential for ensuring macroeconomic stability.

**References:**

Financial Stability Report - 2018

Chapter I

Imported inflation remains the major driver of inflationary conditions in a small open economy like Oman. Furthermore, a fixed exchange rate system results in an automatic transmission of monetary conditions that prevail in the country of anchor currency. Hence, the Central Bank in a small open economy with a fixed exchange rate had to jettison monetary policy independence. One channel of imported inflation is exchange rate pass-through (ERPT), i.e. transmission of exchange rate changes to domestic currency import prices and subsequently to final consumer prices. However, the extent of such impact on consumer inflation would depend on the degree of pass-through, which may vary across countries reflecting various domestic market conditions. Furthermore, ERPT also depends on the strength of direct and indirect channels (former pertains to the imported price of final consumer goods and the latter to the imported price of intermediate goods). Generally, it has been observed that ERPT is quick through the direct channel but takes time through an indirect channel as a long process is involved in pass-through from intermediate prices to producer prices and further to consumer prices. Moreover, the producers may not pass-through entire impact of the exchange rate to consumers depending on the market structure and other factors.

There is a vast strand of empirical literature on ERPT with respect to advanced and emerging market economies and some studies have found incomplete pass-through. In a seminal work, Dornbusch (1987) attributes lower ERPT to the imperfect competition wherein firms adjust their markup in response to an exchange rate shock. Obstfeld and Rogoff (2000) justify lower pass-through mainly due to trade costs such as transport costs or trade barriers. Several recent empirical studies have also found time-varying nature of ERPT (e.g. McCarthy, 2007, Patra, et al., 2018, etc.). A shift in the composition of imports from high ERTP sectors to lower ERTP sectors has also been found contributing to declining in ERPT (e.g. Campa and Goldberg; 2005; Di Mauro et al., 2008). Ozyurt (2016) also find a clear evidence for the degree of ERPT declining over the past two decades in the euro area. Beirne and Bijserbosch (2009) estimate average ERPT for central and eastern European countries at 0.6 using cointegrated VAR, 0.76 for fixed exchange countries and 0.48 for flexible exchange rate regime countries and 0.5 using the impulse response.

Oman depends on imports to a large extent for domestic demand for consumption and investment. The merchandise imports as the percentage of GDP increased from 26.2 percent in 2012 to 37.1 percent during 2017. At the same time, Oman is an open economy with an exchange rate pegged to US dollar and hence, monetary conditions (including interest rate environment) prevailing in the USA gets transmitted automatically to Oman. Accordingly, imported inflation remains the key driver of the inflationary situation in Oman and one of the channels is exchange rate pass-through. Although Oman’s exchange rate is fixed, the movements in the anchor currency, i.e. US dollar vis-à-vis currencies of Oman’s trading partners impact the domestic currency import prices and inflationary conditions. It could be seen that consumer price index (CPI) and nominal effective exchange rate (NEER) of Oman moves largely in the same directions, suggesting some association among them (Graph 1.2.1).

In the above backdrop, the exchange rate pass-through (ERPT) to consumer inflation has been estimated for Oman. The monthly data from January 2010 to December 2017 is used in the empirical exercise. The variables considered are CPI, NEER, Money Supply (M2), and oil prices. Since the objective is to estimate the impact of NEER on CPI, other variables (M2 and Oil prices) are used as control variables. Furthermore, all variables are used in log form so that coefficients estimated are elasticities. The variables are found to
be stationary in their first difference and cointegration tests established the existence of a cointegrating relationship with normalizing on CPI. Therefore, the cointegration model (Fully Modified Least Squares methodology and Johansen’s methodology) are used to estimate the long-run relationship. The results of the long-run relationship are established in Table 1.2.1 below.

Table 1.2.1: Long-Run Estimates
(Sample period: January 2010 to December 2017)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Fully Modified Least Squares (FMLS)</th>
<th>Johansen’s Maximum Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>Standard Errors</td>
</tr>
<tr>
<td>NEER</td>
<td>-0.303**</td>
<td>0.117</td>
</tr>
<tr>
<td>Oil_Price</td>
<td>0.024**</td>
<td>0.010</td>
</tr>
<tr>
<td>M2</td>
<td>0.238***</td>
<td>0.020</td>
</tr>
<tr>
<td>C</td>
<td>3.641***</td>
<td>0.447</td>
</tr>
</tbody>
</table>

Note: ***, **, and * denotes significance at 1 percent, 5 percent and 10 percent confidence level, respectively.

Fully Modified Ordinary Least Square (FMOLS) methodology provides robust and reliable estimates for small sample size as this technique modifies least squares to account for serial correlation effects and test for the endogeneity. However, Johansen’s cointegration has also been used to validate the results. As per the results of FMOLS model, ERPT for Oman is found 0.30, which means that one percent decline in NEER increases 0.30 percent inflation. On the other hand, the results of Johansen’s cointegration indicate ERPT at 0.70, higher than that provided by FMOLS. The estimate of ERPT by Johansen’s model is, however, very close to the estimate of pass-through at 0.76 provided by Beirne and Bijserbosch (2009) for fixed exchange countries (Bulgaria, Estonia, Latvia, and Lithuania). But the estimate of ERPT as per FMOLS is close to the ratio of merchandise trade to GDP in Oman.

Select References:


10.1 per cent in the preceding year. The gap between credit growth and deposits growth, however, narrowed, suggesting improvement in domestic liquidity condition (Graph 1.22). The major contribution to the growth of bank credit during 2017 emanated from the private sector. Growth in bank credit is expected to turn around in the future on back of upsurge in both oil and non-oil activities.

1.27 The fixed exchange rate arrangement leads to automatic transmission of monetary conditions prevailing in the USA to Oman. The growth in money supply largely follows the trends in the growth of money supply in USA (Graph 1.23). The money supply (M2) grew by 4.2 per cent to RO 16.1 billion in 2017 largely on account of credit expansion. On the other hand, the drawdown on foreign assets led to a decline in the reserve money (i.e. base money) by 7.3 per cent to about RO 3.8 billion at the end of 2017. The gross foreign assets of the Central Bank of Oman dropped to RO 6.2 billion in 2017 from about RO 7.8 billion in 2016.

**Domestic Financial Markets**

*Subdued Activities*

1.28 The financial markets in the Sultanate are not well developed, although policy efforts are attempted to create a conducive environment for scaling up activities across financial markets. The fiscal deficit since 2015 embodied several challenges for the public policy; however, it provided an opportunity to develop domestic debt market. Accordingly, a part of the debt was also floated domestically aimed at the development of the sovereign bonds markets, among others. It is pertinent to mention that the development of sovereign bonds market generally acts as a precursor to the development of corporate bonds market, as the former provides a risk-free yield curve as a benchmark for price discovery in the latter.
1.29 Although international financial markets generally gained further momentum, the activities in Muscat Securities Market (MSM) remained muted during the year 2017. MSM 30 Index recorded an annual decline of 11.8 per cent in 2017, as a result of sluggish sentiment reflecting lagged impact of economic slowdown afflicted by low oil prices (Graph 1.24). The market capitalization of MSM, however, improved by 3.8 per cent during 2017 on account of increased number of listed companies. The total trading turnover and daily trading turnover in MSM also rose by 3.5 per cent and 3.1 per cent, respectively, during the year 2017, implying improved liquidity in the market (Graph 1.25). The major push to the uptick in trading turnover in MSM emanated from a steep jump in trading turnover in bonds, which is a notable feature keeping in view the importance of bonds market in facilitating the non-bank sources of financing for accelerating economic activities in the Sultanate.

1.30 The sharp contraction in economic activities during 2015 and 2016 continued to have a bearing on the equity market in the Sultanate during 2017, despite rebounding of the economy. At the same time, interest rates in the Sultanate increased in the recent past, largely reflecting monetary conditions prevailing in the USA, which will adversely impact the asset prices including bonds and shares. Nonetheless, improved growth potential on the back of accelerated diversification activities would be positive for the asset prices in the Sultanate.
The banking sector of Oman continued to display resilience as all banks maintained sufficient capital buffers in line with both Basel III and CBO requirements. Despite some slowdown in line with the muted non-hydrocarbon growth during 2017, the banking Sector remained on the growth trajectory. Amid the prevailing operating conditions and a growing credit portfolio, asset quality of the banking sector remained sound and banks posted decent profits during the year. Going forward, upward pressure on funding costs and likely increase in provision may put some pressure on banks’ profitability. The policy and overnight rates increased in line with the Fed Fund Rate. Banks remain fairly liquid with both Liquidity Coverage Ratio and Net Stable Funding Ratio above the regulatory requirements. To dilute the impact of monetary tightening, CBO adopted some countercyclical measures at supporting bank credit and growth. Increase in oil price is a welcome development for the financial sector, nevertheless, striking the right balance between financial stability and growth would continue to guide the CBO policy making during these challenging times. The volatility in oil prices, twin deficit and uncertain geopolitical situation are of some concern, however, we do not foresee any immediate threat to financial stability in Oman.

**BANKING SECTOR IN OMAN**

**Banks Continue to Dominate the Omani Financial Sector**

2.1. The credit granting financial institutions in Oman comprise 18 commercial banks (including two Islamic banks), six finance & leasing companies and two development finance institutions. The financial sector in Oman is dominated by the banking sector as other segments of the financial intermediation are still at the incipient stage (Graph 2.1). Accordingly, the banks remain the main conduit for the financial intermediation between savers and investors in Oman and also take the center stage of the payment and settlements system.

Major Rating Agencies Cut the Sovereign Rating of Oman. However, Of Late Some Improvement in Economic Conditions Support the Financial Stability in Oman

2.2. Major credit rating agencies have taken decisive actions on Oman’s sovereign rating
mainly based on the fiscal and balance of payment effects of lower oil prices. The rating decisions have also impacted the credit rating of the domestic banks operating in Oman as the rating agencies factor in the declining ability of the government to support the banking sector.

2.3. Notwithstanding the recent rating decisions, it has now been four years since the slump in oil prices begun and throughout this period the banking sector in Oman has shown remarkable resilience to the severe oil price shock. The real GDP of Oman declined slightly during 2017 because of the decision to limit crude oil production following the OPEC+ deal implemented since January 2017. However, the economy is now showing signs of improvement as that deal helped prop up oil prices. The higher oil prices resulted in not only an improvement in total government revenues by RO 900 million in 2017 as compared to previous years but also helped decrease the current account deficit.

2.4. As the economy is picking up, the banking sector of Oman remained resilient and its ability to withstand adverse shocks continued to be strong. Capital positions of the banks are well above the current regulatory minimums and are assessed to be sufficient to withstand plausible shocks.

2.5. The profits of the banks picked up during 2017 and the profitability is assessed to be adequate to help boost their capital besides returning a fair yield to the equity holders.

2.6. The growth in credit moderated but the credit offtake remained healthy vis-à-vis economic growth. The asset quality of the banking sector is very good and compares well to the other jurisdictions in the region (Box 2.1: Non-performing Loans in GCC).

2.7. A range of financial stability risks remain as more needs to be done on the fiscal management amid persistent twin deficit, the short-term risks to the stability of the banking sector remained muted as evident from the development in the banking stability indicators (Box 2.2).

2.8. While a host of regulatory measures have kept the banks robust, rationalization of various regulatory limits by CBO in first quarter of 2018 aimed at striking a balance between growth and stability are expected to help the banking sector continue to expand and facilitate the real sector.

2.9. Going forward, changing dynamics including rising interest rates and changing nature of the business environment may put some pressure on the profitability and asset quality of the banking sector. Nevertheless, the stress tests confirm the strength of the banking sector as the banks remain resilient to a battery of stringent liquidity and solvency stress scenarios. Even in a very severe scenario whereby we increase the NPLs by over 3.2 times of the existing NPLs, the banks on average remain solvent. More details on Stress Testing of banks operating in Oman are covered in Chapter IV.

CBO Tightens Monetary Policy following the Fed’s Lead. Slower Economic Growth and Rising Interest Rates may Continue to Test the Banking Sector Resilience

2.10. Despite weak non-hydrocarbon growth and low inflation, CBO tightened its monetary policy stance following the hike in policy rates by the US Federal Reserve because of the fixed exchange rates against the US dollar. While some investors might be relieved at the end of the era of predictable and low interest rates, for banks higher volatility and rising interest rates may pose a challenge. The low interest rates that persisted since the onset of global financial crisis until 2016 created the conditions for more risk taking by the banking sector. The credit portfolio amassed during such periods may be
Elevated level of Non-Performing Loans (NPLs) not only affect the banks but also have an adverse effect on financial stability and long-run economic growth of a country as rising volume of NPLs may adversely affect the credit supply to the real sector. It is estimated that, NPL ratio of higher than 10% leads to a decline in credit growth by 4%. Besides, large volume of non-performing loans also hampers transmission of monetary policy. It is, therefore, imperative to keep a tab on the NPLs in the banking sector.

Besides the bank specific factors, macroeconomic factors may also contribute to the escalation of NPLs. It is documented that the NPLs move in line with the economic cycle, that is, they increase in challenging economic times while they decline as the economy picks up. The GCC economies, which are dependent on hydrocarbon to varying degree, have been adversely affected by the slump in crude oil prices that started in 2014. Although, the governments of these countries took several measures including external borrowing to shield their respective economies from the adverse impact of decline in oil prices, nevertheless, the GDP in the GCC countries declined sharply due to the direct and indirect impact of depressed oil prices. In this backdrop, the purpose of this note is to give a brief account of the trend in NPLs of the banking sector in GCC countries.

The NPL ratios of the six GCC countries are plotted in Graph 2.1.1. It is evident from the graph that despite several similarities in the economic structure, there is significant variation in the NPL ratios within these countries. Saudi Arabia, Qatar, and Oman are at one end of the spectrum with a NPL ratio of less than 2 per cent, while UAE and Bahrain are at the other extreme with NPL ratio of about 6 per cent.

Similarly, the NPL ratio of the GCC countries followed different paths in the period following the onset of the challenging economic conditions. Although the credit growth declined in Oman in 2017, the NPL ratio of the banking sector remained below 2 per cent since 2014 (2.04% in 2013). Similarly, in Qatar and Saudi Arabia, the NPL ratio remained below 2 per cent despite stressed conditions.

In Kuwait, the NPL ratio declined from 2.9 per cent in 2013 to 2.4 per cent in 2017. This improvement in the NPL ratio is remarkable as it declined primarily due to a decline in absolute level of NPLs while the growth in the denominator (credit) declined during this period.

On other hand, NPL ratio of retail banks of Bahrain increased sharply from 3.8 per cent in December 2014 to 5.7 per cent in March 2017. The increase in NPLs stemmed from several sectors including manufacturing, mining, agriculture, construction, and transport. Besides, increasing NPLs, the declining credit growth further exacerbated the NPL ratio.

NPLs in the GCC banking sector in general, and in Omani banking sector in particular, appear to be low and largely unaffected by the challenging economic conditions faced by the economies since 2014. Nevertheless, considering that NPLs are usually a lagging indicator of asset quality, the uptick in NPLs and NPL ratio remain likely due to the prevalent operating conditions and less accommodative financial conditions. The policy makers should, therefore, need to remain vigilant about the developments in the asset quality of the banking sector.

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2 Mersch, 2016, “Banks adapting to the new normal: Striking a balance between prudence and pragmatism”, speech 19-09-16

3 DeNederlandsche Bank, 2016, Financial Stability Report
Box- 2.2
Banking Stability Index

Methodology

To create composite Banking Stability Index, we selected a battery of supporting indicators, transformed those indicators into indices and then finally into a composite Banking Stability Index.

The indicators include Credit Growth, Private Credit-to-Non-oil GDP Gap, and Private Credit/Non-Oil GDP Ratio for ‘Credit Growth Index’; Gross NPL ratio, Net NPL Ratio and Coverage Ratio for ‘Asset Quality Index’; CRAR, Core Capital to Risk-Weighted Asset Ratio and Balance & Off-balance Sheet Items to Total Capital Ratio for ‘Solvency Index’; ROA and ROE for ‘Profitability Index’; Prime Assets to Total Assets and Loan to Customer Deposit Ratio for ‘Liquidity Index’; and Government Deposits to Total Deposits and Household debt to Total Credit for ‘Concentration Index’. Finally, all these indices are combined into one composite Banking Stability Index using equal weights.

Following Dijkman (2015), to transform the data series into indices, we used ‘Means-of-Order Statistics’. In this technique, the data series with ‘n’ observations are ranked from ‘1’ to ‘n’ in a way that higher rank corresponds to lower risk to the financial stability. The rank of a specific observation determines the score that it receives, we calibrate the scores from ‘0’ (highest risk to stability) to ‘5’ (lowest risk to stability). For a sample size ‘n’ an observation with rank ‘r’ gets a score of:

\[
\text{Score} = 5 \times \left( \frac{r-1}{n-1} \right)
\]

The first ranking observation (highest risk to stability) thus receives a score of ‘0’ while the highest-ranking observation receives a score of ‘5’. The main advantage of means-of-order statistics is that, it is less sensitive to the distributional properties; therefore, normality assumption regarding the data series is not required.

Results

The banking stability map shows that the stability of the banking sector remained intact despite prevailing operating conditions. The slight deterioration in some of the indicators was nearly offset by improvement in the others. However, on balance, the banking stability index was almost unchanged as the banking sector remained well capitalized, profitable, and fairly liquid with low infection ratio.

The banking sector was able to register growth although the rate of credit growth declined. The decline in the credit growth in sync with the economic growth helped lower the private credit-to-non-oil GDP gap during 2017. Similarly, the credit-to-GDP ratio also declined during the year.

The asset quality indicators slightly deteriorated as the gross and net NPL ratio inched up, while the coverage ratio marginally declined from earlier levels. The Solvency index advanced on back of higher core and total capital adequacy ratios. The absolute pre-tax earnings of the banking sector improved while the ROE slightly decreased. The profitability index, therefore, marginally declined.

The Liquidity index weakened because of higher loans to customer deposits ratio. Nevertheless, on a positive note, liquid assets to total assets ratio improved during the year. While the overall banking sector stability remained intact and the outlook for the economy remains positive for 2018, the asset quality needs to be carefully monitored because of the prevailing macroeconomic conditions in Oman and abroad.

Reference:
vulnerable during the conditions marked with monetary policy tightening, tax increases and spending cuts. Banks are exposed to the increase in interest rate in multiple ways. The low interest rates in the past for a protracted period fueled the prices across a broad range of asset classes. As the interest rates are moving up towards the historically normal levels, there could be a sizable correction in asset prices in the medium term especially if the increase in interest rates are not accompanied by strong growth. Moreover, in the short term, rising interest rates usually cause interest paid on funding to increase more sharply than interest earnings on credit that can hit the profitability of the banks.

The Slowdown in Economy Constricted Asset Growth of the Banking Sector but it Remained in Sync with the Non-Oil GDP Growth

2.11. The Omani banking sector continued on its growth trajectory as Total Assets (net) of the banking sector grew to RO 30.7 billion (Gross Assets RO 31.5 billion) by the end of 2017 thus registering a growth of 5.4 per cent during the year (Graph 2.2). The deceleration in the growth of the banks’ assets that initiated in 2016 persisted during 2017, however, deceleration in growth is not unexpected considering the challenging macroeconomic conditions faced by Oman and banks’ need to adjust to the new normals of dampened economic growth amid oil prices being still under the break-even level and tightening of the monetary policy. However, it is expected that, the banks operating in Oman may set for solid growth over the next several years on the back of diversification of the economy under Tanfeedh program and countercyclical measures adopted by CBO during 2018. Similarly, recovery in oil prices and operationalization of Khazzan phase 1 with estimated gas production of 1 billion cubic feet per day is expected to give some boost to the economy and thus to the banking sector.

Banking Sector Assets are Primarily Concentrated in their Lending Portfolio. Credit Growth Decelerates.

2.12. Lending formed about 75 per cent of the total assets of the banking sector while the Investments had a share of 10 per cent at the end of 2017. The earning assets thus constituted about 85 per cent of the total asset base of the banking sector (Graph 2.3). Cash and balances held with the Central Bank were about 8 per cent of total assets suggesting adequate deployment of assets in non-earning but highly liquid category.
2.13. The tell tales of slowdown in credit growth that we highlighted in our previous report materialized during 2017. The growth in bank credit decelerated as the lending portfolio of the banks registered a 6.4 per cent growth during 2017 as compared to a growth rate of 10.1 per cent in 2016. Notwithstanding the deceleration in the credit growth, the growth in the assets was primarily propelled by increase in the credit by RO 1.4 billion and increase in investment in securities by over RO 500 million during 2017 (Graph 2.4). Although to finance the budget deficit, the government used a judicious mix of domestic and foreign funding from a variety of sources including sizeable eurobond issues, there are some early signs of crowding out of the private sector credit as the investment in government securities increased by RO 450 million during 2017 and the investments in foreign securities increased by RO 238 million, while the growth in private sector credit declined as compared to the previous year’s. Nevertheless, the increase in investment in government and foreign securities could also be attributed to the lack of demand of credit by the domestic private sector. Notwithstanding the decline in the growth rate of private sector credit, the increase in the lending was primarily driven by lending to the private sector as it accounted for almost 90 per cent of the growth in credit during 2017.

2.14. The lending to SMEs slightly increased in absolute terms but the credit allocation to this sector remained a very small part (3.4 per cent of gross loans) of the lending portfolio. SMEs are usually considered as an effective conduit to provide employment, therefore, in the backdrop of limited capacity of the government to absorb job seekers amid the drive to create more job opportunities in the private sector it is imperative that the banks fully support this segment.

The Private Sector Credit to GDP Ratio Rises. Nevertheless, it is not a Sign of Excessive Credit Growth as the Ratio Increased due to a Sluggish Non-oil GDP Growth while Credit Growth also Decelerated.

2.15. Despite a slowdown in the credit offtake, the year on year growth in private sector credit (2017: 6.5%; 2016: 10.1%) outpaced the growth in non-oil GDP (3.9 per cent) during 2017. Resultantly, ‘Private Credit to Non-Oil GDP’ ratio also rose marginally to 102.7 per cent (2016 : 100.2 per cent) while remaining close to its past trend (Graph 2.5). Besides household debt, credit to the productive sectors of the economy has also shown robust growth that may, going forward, help accelerate the non-oil GDP growth. When the leverage is high then
the increasing levels of debt may exacerbate the risks associated with leveraging. However, in case of Oman where the existing debt levels are moderate, an increase in credit may help stabilize the short-term growth. Nevertheless, if such pace of expansion continues independent of the commensurate activities in real sector, vulnerabilities may arise.

2.16. As a result of moderation in the credit growth and pick up in nominal GDP growth during 2017, the Private Sector Credit to GDP Gap (Private Sector Credit to GDP Ratio minus Trend of Private Sector Credit to GDP Ratio) decreased during the period. This confirms our earlier assertion that there are no credible signs of build-up of system-wide risks. Moreover, uncertainties surrounding the economic growth of the region add a further question mark to the growth prospects of the banking sector in the short term. These factors give credence to the recent changes in regulatory limits made by CBO to counter the inevitable monetary tightening in order to support bank credit (Graph 2.6).

**CREDIT RISK**

*Although Slowdown of the Economy has Limited Credit Growth, Credit Risk Still Dominates the Risk Profile of the Banks.*

2.17. The banking sector has done well in growing credit portfolio to RO 23.5 billion at the end of 2017 by continuing to seize lending opportunities even in a difficult economic environment. Nevertheless, the credit growth that was in double digits until 2016 decreased to 6.4 per cent in 2017. This development was expected amid rising interest rates and challenging macroeconomic conditions and this growth rate is aligned with the non-oil GDP growth rates.

2.18. Majority of the banking sector loans come from lending to the private sector which is about 90 per cent of the lending portfolio. Moreover, majority (about 86 per cent) of the total loans of the banking sector continued to be in local currency, which is considered less risky than foreign currency lending because of the absence of forex risk and fixed interest rates (Graph 2.7). Most (97 per cent) of foreign currency loan come from the public and private non-financial corporations with minimal exposure from households. Although their magnitude is relatively small, during the present rising interest rate environment, the foreign currency denominated loans require heightened risk management, as most of these loans are variable rate loans and thus may negatively affect the debt burden of the borrowers and pose a risk in the event of rise
in interest rates. Given the rise in interest rate, the banks may aim to improve their risk management function to better identify, measure, monitor, and manage the credit risk arising out of changes in the interest rates.

2.19. About 90.8 per cent of the banks’ risk weighted assets continued to be in the form of credit risk weighted assets followed by operational risk weighted assets which constitute about 6.8 per cent of the total risk weighted assets, whereas, the banks market risk weighted assets continued to form the lowest portion of the total risk weighted assets which was approximately 2.4 per cent (Graph 2.8). Despite their smaller share in the total risk weighted assets, the quantum of market risk weighted assets should not be taken as a reflection of their intensity because market risks are by nature volatile and recent financial crisis has highlighted their significance.

Macro- and Micro-prudential Measures Keep the Downside Risks on Credit Portfolio at Bay

2.20. The prudential measures adopted by CBO over the years have ensured that the lending standards remained strong even during the periods of low interest rates. Various regulatory limits including those on debt burden and sectoral concentration have helped avoid build-up of macro-financial concerns. These regulatory measures ensured healthy household and corporate balance sheets and sound risk profile of the banks’ credit portfolio.

Lending by Foreign Banks Moderated – Variable Rate Foreign Currency Loans may Intensify the Credit Risk Although They have Lower Historical Delinquency

2.21. The banking sector of Oman is dominated by the domestic banks. Foreign banks are a relatively small segment in Oman and account for only 6 per cent of the total banking sector assets. Notwithstanding their size, the foreign banks continued to maintain lending growth at par with the local banks for most of the period during the past decade (Graph 2.9). However, during 2017 the lending portfolio of foreign banks contracted by 4.9 per cent whereas domestic banks registered a 7.1 per cent growth in lending. The decline in credit by the foreign banks could be because of their global strategy as some foreign banks are in the process of rebalancing their portfolios. (See Box 2.3 for Role of Foreign Banks in Oman)

1 The kink in foreign banks’ lending growth is due to merger of OIB and HSBC, whereby the new entity was incorporated as a domestic bank.
2.22. The share of foreign currency loans was about 14 per cent of the lending portfolio as of 31-Dec-2017. While foreign currency loans do not play an important role for the household credit, their share in business loans remained high at about 25 per cent (Graph 2.10). During the present rising interest rate environment, the foreign currency denominated loans require intensified risk management, as most of these loans are variable rate loans and thus may negatively affect the debt burden of the borrowers and pose a risk in the event of rise in interest rates or appreciation of the foreign currency. On a positive note, foreign currency loans have a lower incidence of default as compared to RO denominated loans.

2.23. The low interest rate environment in the past had helped the real estate prices to rise while the steady demand for the rental property had kept the rental yields attractive for the property owners. However, of late there are indications that the price momentum on the real estate market has slowed. Anecdotal evidence and industry reports suggest that the property rents declined by over 20% on average during the last two years. However, latest trends suggest that after continual fall, the rental markets in Oman may now be bottoming out.

2.24. Banks in Oman have substantial direct and indirect exposure to the real estate sector. However, the real estate exposure of the banks in Oman are in line with their counterparts in other GCC countries both in terms of real estate credit to GDP and real estate credit to total credit\(^2\). The total real estate exposure of the banking sector is about 30 per cent of total lending portfolio which is considered large (Graph 2.11) as a weakening\(^3\) in the real estate market could expose the banking sector to considerable risks. Although, at present there are no significant signs of stress in the Omani real estate market. However, sizable exposures signify that a shift in the investors’ sentiments, decline in rents or higher vacancy rates for built-to-rent real estate may rapidly jeopardize the exposure of the banking sector. Therefore, conditions in real estate market remain an area to be watched.

\(^2\) Using either of the measures, Oman was third placed within the 6 Gulf Cooperation Countries.

\(^3\) There is some anecdotal evidence of higher vacancy rates and falling rentals in Muscat. http://timesofoman.com/article/107075/Oman/Rents-to-drop-by-at-least-7-per-cent-in-2017:-Cluttons
Box 2.3

The Role of Foreign Banks in Oman

Introduction:
Foreign banks operating in Oman have contributed towards the growth of the Omami banking sector, especially in the early years of the development of banking in Oman. At present, the total number of commercial banks operating in Oman are 18 of which 9 are foreign banks.

Deposit and Credit Concentration:
Around 94 per cent of the lending portfolio of the banking sector comes from domestic banks, whereas foreign banks have a share of 6 per cent (Graph 2.3.1). Moreover, the lending portfolio of foreign banks grew at a slower rate than that of the domestic banks. The average credit growth rate of foreign banks between 2014 and 2017 was 4.9 per cent, while the domestic banks grew on average by 9.7 per cent during this period.

In terms of asset composition, on average domestic banks lending portfolio was 73 per cent of their total assets during 2014 to 2017, while foreign banks lending portfolio formed about 60 per cent of their assets. Domestic banks are therefore, more active in lending market. Private sector lending forms majority of the lending portfolio for both local and foreign banks.

Domestic banks hold majority of the deposits with a share of 94 per cent (Graph 2.3.2). Between 2014 and 2017, the deposits of the domestic banks grew at an average rate of 6.6 per cent, while the deposits of foreign banks increased by an average growth rate of 0.8 per cent during this period.

Profitability:
The domestic banks outperform foreign banks in terms of the profitability ratios. The average Return on Assets (ROA) of foreign and domestic banks from the year 2014 to 2017 was 0.78 and 1.56 per cent, respectively. While, average Return on Equity (ROE) was 4.11 and 11.15 per cent, respectively (Graph 2.3.3).

1 Throughout this section average growth is calculated as Compound Average Growth Rate between 2014 and 2017.
**Solvency:**

Both domestic and foreign banks maintained adequate capital buffers exceeding both the Basel III norms and CBO requirements between 2014 and 2017. (Graph 2.3.4). On average from the year 2014 to 2017, the Capital to Risk Weighted Assets (CRAR) of foreign banks were 19.6 per cent as compared to 16.51 per cent for domestic banks. The foreign banks boast higher CRAR as they are relatively less active in lending and acquiring other earning assets.

**Asset quality:**

Despite the prevailing operating conditions and a growing credit portfolio, the asset quality of both foreign and local banks operating in Oman remained sound. However, the NPL ratio of foreign banks steadily increased during 2017 (Graph 2.3.5). Given that foreign banks form only 5 per cent of the total lending portfolio, higher NPLs ratio does not materially impact the NPL ratio of the banking sector.

NPLs of both domestic and foreign banks are adequately covered by (specific) provisions of over 60 per cent of total NPLs. However, foreign banks witnessed a significant fall in their coverage ratio from 85 per cent in 2015 to 62 per cent in 2017, mainly due to the increase in its NPLs.

**Conclusion:**

Foreign banks had played an important role in the development of the Omani banking sector. However, at present despite presence of a large number of foreign banks in Oman, their share in the banking sector activity (assets, deposits, credit) is small and declining. The small portfolio of foreign banks bodes well from financial stability point of view as it lessens the risk of contagion from abroad. However, presence of active foreign banks in a country can bring in a range of benefits including easier access to external finance, help in international trade, and better management technologies.
Strong Lending Standards and Stiff Prudential Norms Keep the Household Indebtedness in Check

2.25. In Oman, historically low NPL ratios for the household lending portfolio indicate high level of credit quality. Regulatory measures and stringent lending standards have contributed to the relatively low risk profile of the household lending portfolio. The lending to households form a major part (Dec 2017: 41 per cent share) of the lending portfolio of the banks. The household indebtedness relative to GDP has risen during the past few years because of decline in GDP, however, household debt to income ratio\(^4\) remained broadly unchanged and compares well with that in the OECD countries (Graph 2.12).

2.26. A reasonable level of household indebtedness bodes well for the financial stability as high indebtedness increases the vulnerability of households to adverse macroeconomic shocks. While there remains a risk that some households may experience financial stress in the event of a negative shock, fixed interest rates on personal loans and prudent limits on debt burden (repayments as a percentage of income) would ensure that the impact of such shocks remain limited.

Business Finance Remain in Good Shape

2.27. Despite the muted non-oil GDP growth, overall lending to business remains in good shape. While there may be transient cashflow issues for some businesses, the business sector is well placed to service its debt. The balance sheet of non-financial corporates remained strong with low debt burden while their earnings remained steady precluding any short-term risks to the financial stability.

Asset Quality Indicators Remained Satisfactory –Deterioration in Operating Conditions or Volatility in Oil Price Remain a Source of Vulnerability

2.28. As highlighted earlier, sound regulatory measures and strong lending standards have helped banks expand their lending portfolio while keeping the risks low. This is particularly remarkable as the portfolio that grew during low interest rates continued to remain performing even during stressed times marked by low oil prices, massive contraction in GDP and more recently increasing interest rates. Overall, while rising somewhat recently, non-performing loans remain at low levels indicating that the overall quality of lending portfolio of banks remains high.

2.29. During 2017, the level of NPLs (net of reserve interest) of the banking sector increased by RO 48 million as compared to an increase of RO 45 million during 2016. The total stock of NPLs thus rose to RO 440 million or 1.88 per cent [2016: 1.78 per cent] of the gross loans. The net NPLs also increased

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\(^4\) This ratio is overstated as only salary income of households is used while income from investments in financial / real assets is not taken into account.
by RO 37 million during 2017, while the net NPL ratio was 0.7 per cent at the end of 2017 slightly above from 0.6 per cent at the end of 2016 (Graph 2.13). Despite slight increase, the NPL ratios remained in line with their past trend and close to that of some other countries in the region.

2.30. The existing loan portfolio of the banks is well covered against expected losses through adequate provisions with coverage ratio (provisions to NPLs) of 63 per cent (136 per cent including general provisions) (Graph 2.14).

2.31. The asset quality indicators are expected to remain solid although the weak operating conditions, muted non-oil GDP growth, rising interest rates and new taxes may test the resilience of some borrowers and NPLs in some sectors that depend on fiscal spending like construction and real estate may marginally inch up.

Special Mention Loans are on the Rise. This Raises Concerns about the Potential Deterioration of Asset Quality

2.32. After a slight decline during the previous year, the restructured loans in the banking sector increased by over RO 107 million during 2017. At the end of 2017, the performing restructured loans were 1.2 per cent of the gross loans (Graph 2.15). The special mentioned loans of the banks more than doubled during last three years (2014-17). During 2017, the banks special mention loans increased by RO 477 million or 37 per cent (2016: RO 297 million) reaching RO 1,768 million by the end of the year. Resultantly at the end of 2017, the special mention loans formed around 7.5 per cent of gross loans of the banks (Graph 2.16).
2.33. Special mentioned loans are potential problem loans with risks of a downgrade to the NPL category if remedial actions are not taken or remain unsuccessful. Hence, given the growth and volume of special mentioned loans, due attention is warranted to monitor and manage the rising trend in special mentioned loans to keep them from slipping to NPLs.

*Market Risk*

2.34. The heightened levels of uncertainty caused by concerns over the governments’ fiscal position, mounting public debt and negative economic growth prospects seem to have affected the market sentiments as well. However, the contribution of market risk remains trivial in the overall risk profile of banks when measured in terms of current practices of calculating risk-weighted assets. Nevertheless, other than the stand alone considerations, the market and credit risks may interact to reinforce each other and may result in substantial losses if not managed jointly (Graph 2.8).

*The Market Interest Rates Rose Following Policy Shift by the US – Rising Interest Rates to Test the Resilience of Both the Banks and the Borrowers*

2.35. Fed increased its policy rates twice during 2017 as it continued to transition from crisis-management monetary policy to the normal regime. Fed is expected to further normalize the interest rates during 2018. CBO followed the monetary policy lead of the Fed and as a result the interest rates in Oman also increased in tandem with the Fed policy rates. CBO’s policy rates (repo rate) increased to 1.95 per cent in December 2017 from 1.19 per cent in December 2016. Similarly interbank overnight interest rates also increased to 1.26 per cent in December 2017 from 0.47 per cent in December 2016 (Graph 2.17).

2.36. The rising policy rates have also been passed through to the retail deposit and lending rates to some extent. The average interest rates on RO deposits of conventional banks increased to 1.67 per cent in December 2017 up from 1.49 per cent a year ago. Similarly, average lending rates on RO loans

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5 Throughout this section, risk weighted assets (RWA) are limited to RWA under Pillar-I of Basel II capital accord, that is, interest rate risk in banking book is explicitly excluded from the analysis.

6 BCBS (2009), “Findings on the interaction of market and credit risk”, BIS WP. 16
of conventional banks also increased to 5.20 per cent during December 2017 as compared to 5.08 per cent during December 2016. As Oman maintains a fixed exchange rate with the US$, any further increase in the interest rate by the Federal Reserve would push up the interest rates in Oman.

2.37. The interest rate normalization that is being followed by Fed makes the banks vulnerable to a host of risks. A sharp increase in interest rates could be detrimental to the banks as hike in interest rates affect both their balance sheets and income statements. The rising interest rates affect the asset valuation because of the higher discount rates. Rise in interest rates also increases the funding costs before an increase in interest revenues is realised. This is especially true when a large share of loans are given at fixed interest rates and banks have few options (like foreign currency loans) to lend at variable interest rates.

2.38. Rising interest rates also affect the credit risk of the banks by affecting the valuation of borrowers’ balance sheets and their repayment capacity. Banks should, therefore, actively analyse the risks as interest rates in Oman are on rise with the normalization of US monetary policy. The rising interest rates might put pressure on the bottom line of the banks. However, the stress testing exercise shows that the interest rate risk in banks is within reasonable bounds if they face a 200 basis point adverse movement in interest rates (please refer to Chapter IV for more detail on stress testing of the banking sector).

MSM 30 Index Remained in Red because of a Range of Domestic and International Factors – Banks Should Remain Cautious of the Conditions while Taking Market Exposures

2.39. During 2017 MSM 30 index fell by 12 per cent (Graph 2.18). A range of factors including oil prices being below the break-even level, heightened funding costs, some tightening of liquidity conditions which comes from the issuance of government bonds and bills, concerns over government finances, and political tensions in the region contributed to lackluster stock market performance. The improvement in some economic indicators during the second half of 2017 appear to have brought some calm to the market sentiments as the MSM index lost only 0.4% during that period. Considering the uncertainty and volatility in the market, the banks should remain watchful of their exposures in the equity market.

Modest Equity Exposures Keep the Banks Insulated from any Adverse Movements in MSM. However, Monitoring of the Banks Indirect Exposure to the Stock Market is Required

2.40. The banks’ investment in the domestic equity market was around RO 100 million at the end of December 2017. Exposure of banks to the MSM thus remain small at 2 per cent of regulatory capital and less than 0.4 per cent, of risk weighted

7 MSM Index is a price index, therefore, these returns reflect only capital gains and exclude any dividends.
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assets (Graph 2.19). Due to the small market exposure, the banks remained well protected from any shocks or increased in volatility in the MSM. However, banks should remain cognizant of their indirect exposure to the stock market in the form of lending for the purchase of or against listed securities. Moreover, weak stock market performance is indicative of tougher operating conditions for the business which may also affect the quality of banks’ credit portfolio.

**Foreign Exchange Risk Remains Under Control as Banks Had Limited Exposure in Non-Pegged Currencies Which Kept the Foreign Exchange Risk under Control**

2.41. Since the onset of oil price slump, the USD is being traded at a forward premium against RO (12 months forward rate as of 31-Dec-17: 0.3914). Conversely, the implied yield on RO has increased significantly. This makes it less attractive to hold RO as compared to USD. However, these concerns are not yet reflected in the banks’ foreign exchange exposures which continued to remain low.

2.42. CBO regulations allow for foreign exchange exposure of up to 40 per cent of banks’ capital. In comparison to this benchmark, the forex exposure was about 15 per cent of Tier-1 capital at the end of 2017. Since Omani Riyal (and currencies of some other GCC countries) is pegged to USD, exposures in USD (and other currencies pegged to USD) do not entail any foreign exchange risk. The effective foreign exchange exposure, i.e. exposure in non-USD and other non-pegged currencies for banks remained even much lower at 0.8 per cent of their tier-1 capital (Graph 2.20). The gap between foreign currency assets and liabilities slightly widened but remained small (RO 900 million) at the end of 2017, reflecting continued faith of market participants in the currency peg (Graph 2.21).

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8 This holds true if the peg is assumed to be credible, despite the dwindling oil prices Oman and other GCC countries have reiterated that the peg will be maintained.
LIQUIDITY RISK

Banks Remained Fairly Liquid, without Any Signs of Serious Strain – Liquidity Conditions Improved as Lending Growth Declined while Deposit Growth Rate Picked up and External Sources Tapped

2.43. Following the fall in the oil prices in 2014, the liquidity of the banking sector came under strain. The relatively slow growth of deposits compared to the expansion of credit at that time led to some concerns regarding liquidity. However, lately the conditions have considerably improved after external borrowing, recovery in oil prices, regulatory changes and increase in deposit growth rate along with a moderation in lending growth rates.

2.44. The banks on average comfortably maintained the cash reserve requirements without significant signs of strains. The excess cash reserves, over and above the required reserves, maintained by banks averaged about RO 590 million9 during 2017 as compared to RO 480 million during 2016 (Graph 2.22).

2.45. During 2017, Oman tapped international markets through a multi-tranche USD 5 billion Eurobonds issue followed by a USD 2 billion international Sukuk issue. In 2018, Oman raised another USD 6.5 billion through Eurobonds. All international bond issues of Oman witnessed strong investor interest that manifested in the form of heavy oversubscription. As a result, despite rating downgrade, Oman successfully raised the required funds at competitive rates. The Eurobond issues made up for the lost inflows from oil revenues and subsided the liquidity concerns. This combined with considerable improvement in oil prices, slowdown in credit offtake further eased up the funding conditions in the market.

2.46. The stress test results indicate a fair level of resilience of the Oman’s banking sector to varying degrees of liquidity shocks. Under stressed scenario, domestic banks can sustain the outflows of deposits for more than 5 days using their own liquid assets.

The Banking Sector Deposit Growth was Slightly Less than the Credit Growth. Lending Ratio Remained within Prescribed Limits.

2.47. During 2017, the lending and deposits of the banking sector grew by around 6.4 and 5.6 per cent, respectively. Whereas, during the previous year the lending growth was 10.1 per cent, while deposit growth was 5.2 per cent. Hence, the growth gap during 2017 (credit less deposit growth) nearly dried up.

2.48. At the end of December 2017, the credit-to-deposit ratio marginally increased to 109 per cent (Dec 2016: 108 per cent). The current credit to deposit ratio of the banks is close to their counterparts in other GCC countries (Graph 2.23). Despite a slight increase, the current level of credit-to-deposit

9 It may be noted that these cash reserves are in addition to the banks’ investments in Government Development Bonds and Sukuk.
ratio is not considered high as banks in Oman traditionally rely on more stable sources of funding, that is, deposits and capital, while wholesale funding remained limited at 7 per cent of total funding base (Graph 2.24).

2.49. It may be noted that the credit-to-deposit ratio ignores capital that is an important source of funding. The lending ratio (loans excluding Government soft loans to eligible deposits plus capital) of the banking sector in December 2017 was 79.9 per cent (Dec 2016: 79.1 per cent) which is well within the limit of 87.5 per cent prescribed by CBO. This indicates that banks can extend additional credit of about RO 1.9 billion against the existing funding base without breaching the prudential limits imposed by CBO.

**Persistent Customer Funding Gap Contribute to the Vulnerability despite Modest Wholesale Funding.**

2.50. Banks in Oman have traditionally low reliance on wholesale markets. Government deposits, however, remained an important source of funding for the banks. Due to continued reliance on public sector deposits, higher credit growth as compared to deposit growth, the customer funding gap, that is the gap between customer loans and deposits, increased to about RO 8.8 billion at the end of 2017 as compared to RO 8.2 billion at the end of 2016. Funding gap as a percentage of loans comes out to be about 44 per cent. This high funding gap is suggestive of the banks’ vulnerability emanating from their peculiar funding structure (Graph 2.25).

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10 Excluding Government, Public Sector Enterprises and Financial Institutions
Banks are Exposed to Concentration Risk in Deposits. Rating Downgrade may Affect the Banks’ External Funding Costs.

2.51. About two-third of the deposits placed in the banks come from the private sector. However, as of December 2017, Government and Public Sector Enterprises (PSEs) jointly contributed the other 34 per cent share of the total banking sector deposits. Given the strained government cash flows, the level of deposits in the banking sector contributed by the public sector is considered to be a source of vulnerability because of the risk of significant withdrawals to meet budgetary needs. However, the risk of withdrawal is not imminent as the government resorted to borrowing from domestic and international markets besides drawing down on its buffers to finance the budget deficit. While individual banks exhibit varying degree of resilience to the deposit withdrawal by the government, on average the liquid assets (excluding interbank assets) of banking sector almost cover the public sector deposits (Graph 2.26).

2.52. During 2017 and 2018, major credit rating agencies downgraded Oman’s sovereign ratings (S&P BB; Moody’s: Baa3; Fitch to BBB-). This rating downgrade may affect the external funding costs for Omani banks. It is therefore important that the banks’ funding base is diversified in terms of varied counterparties.

Various Metrics Show that Overall Banks Remain Resilient to Potential Domestic Liquidity Shocks

2.53. The composition of banks’ funding has been stable over the years and banks remain resilient to any potential domestic liquidity shocks, with both their Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) well above the regulatory requirements. The LCR, which measures banks’ resilience against short term liquidity stress, was 216 per cent in December 2017 against the required minimum of 80%. The NSFR, which is a ratio of the available stable funding relative to the amount of required stable funding, was 116% in December 2017. There was no minimum requirement for NSFR in 2017 as its implementation starts from 2018 with a minimum requirement of 100 per cent. The latest stress tests also show that the banks operating in Oman remained fairly resilient to the assumed deposit runoffs (See Chapter IV for details).

COMPETITION, CONCENTRATION AND INTERCONNECTEDNESS

Banking Sector Concentration Remained Moderately High – D-SIBS Framework and Bank Resolution Framework Help Deal with the Systemically Important Banks

2.54. Using the commonly accepted measure of market concentration known as the Herfindahl-Hirschman Index (HHI), it is noticed that the Omani banking sector is moderately concentrated\(^{11}\). The concentration

\(^{11}\) As HHI is computed as sum of squared market shares of all banks, we use total assets of banks to calculate HHI. US Department of Justice and Federal Trade Commission classify HHI values between 0.15 and 0.25 as moderately concentrated markets.

\(^{12}\) We measure HHI using Total Assets of the banks.
level in Oman is in line with the peer group of GCC countries, however, it is much higher than that in advanced economies; such as the European Union (Graph 2.27).

2.55. When concentration is measured in terms of share of a few banks in the total banking sector assets, we get similar results. The top five (three) banks continues to form about 77 per cent (60 per cent) of total banking sector assets (Graph 2.28). Due to the relatively smaller market size, higher concentration levels in banking sector is not surprising. Nevertheless, in Oman the concentration is in sounder and stronger institutions which somewhat diminish the consequences of concentration. In order to deal with the risks emanating from the presence of large institutions, CBO had issued guidelines to identify, supervise, and regulate Domestic Systemically Important Banks. Moreover, as a part of the preparedness to amicably resolve the systemically important banks, CBO has drafted a Resolution Framework that is in the advanced stages of finalization.

Credit Remained Concentrated Heavily in Personal Loan Segment –Simultaneous Default by Top Five Borrowers would Wipe out One-third of Banks’ Capital

2.56. The concentration of similar risk exposures, or concentration of exposures in particular sectors or clients lead to risks that are systemic in nature.

2.57. In Oman, the loans are heavily concentrated in the personal loan segment with a share of 41 per cent in total loans (Graph 2.29). Given the structure of the economy, this type of credit concentration is unavoidable, however, the high quantum of the banks’ exposure to the consumer segment, having potential of volatile performance, could be a
source of concern as it might spell a situation of debt overhang and likely onset of default during economic downturns. Presently, however, the Personal Loan segment has been performing well with an NPL ratio of under two per cent. To the extent that banks properly evaluate and consider the credit risk inherent in this segment, it should not be an immediate source of vulnerability. However household credit may deteriorate quickly in an adverse scenario characterized by an interest rate hike, lower growth, higher unemployment, or inflation. Therefore, it must be made sure that this risk is not underestimated.

2.58. Construction sector is the distant second user of bank finance with an 11.2 per cent share in total lending and NPL ratio of 2.6 per cent. The banks should also be watchful about this sector as it is sensitive to economic downturns and hence a spillover effect into other segments could be witnessed. Banks should also aim to diversify their lending portfolio further in order to minimize sectoral risks.

2.59. Manufacturing has a share of 6.8 per cent in total bank credit. Manufacturing is one of the priority sectors for diversification and thus going forward it is likely to gain a higher share in bank credit. The NPLs of this sector remain elevated with NPL ratio of 2.7 per cent, therefore, banks should take caution while taking exposures to this sector.

2.60. The lending to the top five borrowing groups was over RO 1.6 billion and constitutes about 7.2 per cent of the lending portfolio of the banking sector as of December 2017 (Graph 2.30). It may however, be noted that these borrowers are well diversified groups and are among the largest companies in the country, therefore, the chances of simultaneous default by all of the companies within a group or all groups at the same time is only a remote possibility.

SOLVENCY AND PROFITABILITY

2.61. The capital buffers of the Omani banking sector have historically been high. During recent years, banks have further strengthened their capital base. Capital to Risk-weighted Assets Ratio (CRAR) of the banks was 17.4 per cent at the end of December 2017 as compared to 16.7 per cent a year ago. The composition of capital suggests that banks mostly have high quality capital with tier-1 capital forming over 90 per cent of the total capital base. The Tier 1 capital ratio (the ratio of tier 1 capital to risk-weighted assets) of the banks was 13.2 per cent in December 2017 which was nearly sufficient to meet regulatory capital requirements of 13.25 per cent. Tier 1 capital of the banks increased by RO 517 million or 11 per cent during 2017 (Graph 2.31). Healthy profits contributed to strengthen the capital as both profit retention

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13 To avoid debt-overhang like situations, CBO has set prudent limits on consumer financing linking the aggregate loan limits to the repayment capacity (income) of borrowers.
and additional tier-1 instruments were used to build up the capital base.

2.62. The risk weights do not take into consideration systemic risks and credit concentrations while capital ratios do not fully account the interest rate risk in the banking books and imbalances in the real sector (for example formation of asset price bubbles). Thus, in the current conditions, the strength of the banks’ capital may be overestimated as large correction to asset prices during monetary policy normalization and significant rise in impaired loans may weaken the banks resilience.

2.63. To partially offset the drawbacks of the capital ratios, we supplement our analysis with stress testing and leverage ratio. The leverage ratio is invariant to the riskiness of assets and it is calculated as “Tier-1 capital” to “non-risk-weighted on- and off-balance sheet exposure”. The leverage ratio of the banking sector was 13 per cent at the end of 2017 as against the minimum Basel III requirement of 3 per cent. The stress testing exercise shows that the banking system stands quite solvent through adequate level of capital and thus remains resilient to various stressed scenarios. Even when, severe credit and market shocks are applied, the banks remain solvent with a comfortable level of system-wide CRAR of above the regulatory requirements.

Despite Persistent Headwinds Including the Prevalent Operating Conditions, Rising Funding Costs and Increase in Staff Costs, the Banking Sector Still Managed to Improve its Profitability

2.64. Despite significant headwinds, the banking operations continued to be characterized by a positive trend during 2017, as banks’ pre-tax profit rose to RO 452 million from RO 438 million in 2016. Although the administrative costs increased during the year, the profitability was helped by the improvement in net interest income and fee & other income. It appears that the market participants recognize banks’ resilience, therefore, the funding costs remained somewhat checked even in the rising interest rate environment.

2.65. The profitability ratios, ROA and ROE, of the banks remained steady at 1.5 per cent (2016: 1.4 per cent) and 9.9 per cent (2016: 10.5 per cent) respectively despite a marginal decrease in NIM from 2.76 per cent during 2016 to 2.5 per cent in 2017 (Graph 2.32)\(^\text{14}\).

\(^{14}\) Throughout this section, profitability ratios are calculated using pretax figures and include Islamic banking data.
2.66. Interest income remained dominant (80 per cent) in the total revenues of the banks, whereas, non-interest sources contributed only 20 per cent to the revenues of the banks. Moreover, within the interest income, interest earned on advances formed the lion’s share with about 90 per cent contribution. This skewed position reflects that there is a scope to diversify sources of income.

2.67. Major portion of banks’ non-interest expenses stem from the staff and administration costs with a share of 57 per cent in the total non-interest expenses. This suggests that there is a scope for improving operational efficiency to arrest the staff and administrative costs (Graph 2.33).

2.68. Sluggish economic growth and rising interest rates may negatively affect the borrowers which may increase the NPLs and provisioning requirements. Low credit growth, and higher provisions along with higher operating costs due to employment creation expectations from the banks may bring the profitability of the sector under pressure.

ISLAMIC BANKING

Islamic Banking Continued to Make Impressive Inroads. The Sector as a Whole is Gaining Systemic Importance.

2.69. Islamic banking set off in Oman in December 2012. In a relatively short period of time, it has achieved remarkable growth since its inception in Oman and continued to make significant inroads in the market share during 2017. At the end of 2017, the Islamic banking assets formed 12.1 per cent (Dec 2016: 10.3 per cent) of the total banking sector assets. With a compound annual growth rate of 24 per cent, total assets held by Islamic banks and the Islamic banking windows of conventional banks in December 2017 exceeded RO 3.8 billion. This compares well with the foreign banks, which despite a long presence had total assets of RO 1.8 billion in December 2017 (Dec 2016: RO 1.9 billion). The total financing by Islamic banking entities stood at RO 3 billion which is about 13 per cent of the total banking sector financing. (Graph 2.34).

2.70. Islamic banking entities (IBEs) recorded remarkable improvement in profitability for the second year in a row. The aggregate pre-tax profits of IBEs during 2017 increased to RO 20.3 million (2016: RO 13.6 million; 2015: RO 1.6 million).
2.71. As the sector matures, it is expected to improve its bottom-line while continuing to gain market share. Due to fast paced growth, the Islamic banking sector as a whole is gaining systemic importance, however, it still does not pose a systemic risk at the moment.

**NON-BANKING FINANCIAL INSTITUTIONS**

**NBFI Continue to Provide Vital Financial Services –Risk of Contagion or Regulatory Arbitrage from NBFI Remains Negligible**

2.72. Banking sector usually faces a stricter regulatory regime as compared to the non-banking financial sector. Resultantly, some lending may shift to the non-banking financial institutions. Nevertheless, in Oman, credit granting NBFI are duly regulated by CBO and remained a small fraction of the financial sector. The risk of regulatory arbitrage, therefore, remains limited as the so-called ‘shadow banking sector’ is less than 4 per cent of the financial sector in terms of assets. Although banks provide a larger portion of funding to Finance & Leasing Companies (FLCs), the contagion risks remained limited as the exposure of banks to the FLCs forms only a few per cent of banks’ balance sheet.

Moreover, despite tighter regulatory norms for the banks there is no evidence of any significant migration of lending activity from banks to the FLCs as the assets of the FLCs slightly contracted during 2017.

2.73. Consequently, without exposing financial system to any large or systemic risk, Non-Bank Financial Institutions (NBFI) continued to play an important role in the financial sector by providing supplemental financial services like financing various niche markets, provision of insurance, asset management services, remittances and currency exchange services. Presence of NBFI may thus help improve the efficiency and reach of the financial sector as they complement and compete with commercial banks. Deep and broad financial markets made available with the presence of NBFI along with commercial banks offer synergies that foster economic growth.

2.74. In terms of asset size, the Finance and Leasing Companies (FLCs) and Insurance companies remained the leading players in the NBFI sector accounting for over 45 per cent and 51 per cent of the total NBFI assets, respectively (Graph 2.35).

2.75. Mutual Funds provide not only options of diversified and professionally managed investment for small investors but also avenues of financial link with the other countries through portfolio investment. At the end of 2017, 19 mutual funds were operated

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in Oman with a combined Net Asset value of RO 208 million (Graph 2.36). The small base suggests that the overall mutual fund market in Oman remains small.

**FINANCE AND LEASING COMPANIES**

*The FLCs Sector Stagnates in the Wake of Muted Economic Growth – Lending Remains the Leading Segment of the Asset Portfolio of the FLCs.*

2.76. The economic slowdown and growth of Islamic banking appear to be taking a toll on the growths of FLCs. The total assets of FLCs declined by about 2 per cent during 2017 as compared to a growth rate of 4.6 per cent during 2016 and 2.8 per cent during 2015.

2.77. The net credit portfolio at the end of 2017 was RO 1,020 million (2016 : RO 1,028 million). The financing portfolio of FLCs thus registered a decrease of about one per cent during 2017 (2016: 3.8 per cent increase; 2015: 11 per cent increase). The lending growth of the FLCs declined with the decline in the growth rate of economic activities. Financing continued to have a leading share in the assets of FLCs. At the end of December 2017, the net financing constituted over 95 per cent of total assets of FLCs suggesting efficient deployment of assets. FLCs have been active in lending to SMEs. Business finance was about 61 per cent of the financing portfolio of FLCs, while SMEs received about 60% of the total business finance. Financing to households was about 39 per cent of the total credit extended by FLCs (Graph 2.37).

2.78. FLCs usually provide asset based financing, which is also the forte of Islamic banking entities (IBEs). With the growth of Islamic banking, FLCs are facing stronger competition from the banking sector. Considering that IBEs and FLCs are vying for similar financing classes, some consolidation among these financiers may provide value to the shareholders.

**Sharp Increase in NPLs Amid Declining Lending – Credit Risk Needs to Close Monitoring**

2.79. The NPLs of FLCs increased by RO 32 million during 2017, while the lending slightly declined. Resultantly, the NPL ratio increased to 8 per cent at the end of 2017 from 5 per cent at the end of previous year. Likewise, the net NPL ratio (without accounting for general provisions) increased to 5.7 per at the end of 2017 cent from 2.4 per
cent in 2016 (Graph 2.38). The NPLs ratio of FLCs that was already much higher than that of the banking sector increased sharply during 2017, validating our concerns shown in the previous report about the risk of downgrade of credit quality of the FLCs during the economic downturns. Considering that the operating conditions are still challenging and that FLCs are exposed to SMEs which are vulnerable during challenging economic conditions, we reiterate our recommendation that FLCs should gear up their credit analysis, monitoring and risk management practices to keep the credit risk within manageable limits.

Reliance on Bank Funding Remained a Key Risk – Increasing Cost of Funds along with Higher Provisions Reflect Ongoing Headwinds on Profitability

2.80. During 2016, FLCs were allowed to raise shorter term deposits (six-month term deposits instead of one year) from corporates to help them diversify their sources of funding. However, FLCs continued to count primarily on bank borrowing and capital to fund their operations and did not mobilize any significant amount of deposits following the regulatory change.

2.81. At the end of December 2017, bank borrowing constituted 62.7 per cent (2016: 63.4 per cent) of the balance sheet of FLCs. The long term bank funding has declined rapidly during the last two years. At the end of 2017, the long-term bank funding was to 19 pre cent (2015: 47 pre cent) of total bank funding, while the share of short term bank borrowing was 81 per cent as compared to 53 per cent in 2015 (Graph 2.39). Considering the rising interest rates, heavy reliance on short term bank borrowing continued to expose FLCs to the cost and availability of bank funding. Moreover, because of the interconnectedness with banks, shocks from banks may be transmitted to FLCs.

2.82. The earnings of FLCs marginally declined during 2017. However, amid a sharp rise in NPLs and increasing funding costs, FLCs still managed to post decent earnings. In line with the rising interest rates, the interest earned on financing witnessed an increase but this increase could not fully offset the increase in funding costs. Moreover, operating expenses (notably the staff costs) also increased during the year. Pre-tax profit of FLCs was RO 34.1 million during 2017 as compared to 35.3 million during the previous year. Similarly, the profitability indicators,
ROA and ROE, also slightly declined during 2017 but remained healthy at 3.2 per cent (2016: 3.3 per cent) and 12.3 per cent (2016: 13.6 per cent) respectively (Graph 2.40). Going forward, the increasing funding cost, declining margins, and increasing NPLs may put pressure on the profitability of the FLCs and they may find it increasingly challenging to maintain the level of profitability unless they make concerted changes in their business model.

INSURANCE SECTOR

Rising Interest Rates Bode Well for Insurance Sector, while, Slower Economic Growth May Weigh Negatively for the Growth of the Sector.

2.83. The insurance sector, in particular, life insurance segment usually have long term liabilities and relatively shorter term assets. The presence of duration gap, that is, mismatches in the maturity or assets and liabilities make the sector vulnerable to interest rate risk. Because of the presence of this duration gap, an increase in interest rates bode well for the insurance sector. Whereas, slower economic growth decelerates the growth of the sector. On balance, moderation in economic growth, smaller addition to the stock of vehicles, and shelving of some non-essential projects may weigh negatively on the growth of the sector.

2.84. The metrics for the insurance sector show that, Oman is relatively underinsured and as such there is ample space for the growth of the sector. Insurance penetration, defined as the ratio of insurance premiums to GDP, was about 1.6 per cent which is comparable to that of GCC countries but remains much lower than the global average of 6.5 per cent. Likewise, Insurance Density, which is per head insurance premium, is about RO 100 (2016: RO 99) per person as compared to the GCC average of RO 141 and global average of RO 252 per head (Graph 2.41). Both of these indicators are suggestive of the potential available to cater to the underserved and unserved market segments. The upside potential suggests that despite some slowdown in economic activity, the long term growth prospects for the insurance sector remain optimistic as the growth can pick up with an increase in product awareness.

17 In this section profitability ratios are calculated using pretax figures.
Motor and Medical Insurance Lead the Premium Collection – High Retention and Loss Ratios Calls for Stringent Risk Management

2.85. The premium collected by insurance companies registered a small increase during 2017. The gross premiums reached RO 455 million in 2017 from RO 454 million in previous year. The general (non-life) insurance sector continued to be the dominant segment in the insurance business with a share of about 86 per cent in gross premiums. Within this segment, the motor insurance leads the premium collection with a share of about 34 per cent, followed by medical insurance with a 30 per cent share (Graph 2.42).

2.86. On average, the insurers retained about 57 per cent of the risk while transferred the rest to the re-insurers. However, for motor insurance, the insurance companies retained about 86 per cent of premium (and proportionally higher risks) and for Individual Life, the retention ratio was 70 per cent.

2.87. The net claims paid against motor insurance constituted about 54 per cent of the claims paid by the insurance companies. Higher claims along with higher retention ratio implies that the net loss ratio (net claims / net premiums) for motor insurance also remained high at 68 per cent. That is, 68 per cent of the premiums earned by underwriting the motor risks were paid back in the form of claims. Similarly, Medical Insurance also have a high retention ratio along with high loss ratio (80 per cent) (Graph 2.43). The loss ratio of Liability Insurance was the highest (82 per cent). However, as this segment forms a small share (2.3 per cent of gross premiums) of insurance business, the net claims paid against liability insurance were only about 1.9 per cent of the claims paid by the insurance companies during 2017.

2.88. A cyclone (Mekunu) that made landfall in Oman in 2018 may bump up the insurance claims and put pressure on the profitability of the insurance sector.

MONEY EXCHANGE COMPANIES

Money Exchange Companies Continued to Play an Important Role in Retail Money Exchange and Remittance Business – Their Business Pose Limited Systemic Risk, while, Substantial Operational Risk Exists

2.89. Money exchange companies continued to play an important role in the business of remittances and currency exchange. Their efficient operations, flexible working hours and reasonable pricing ensures that the (home) remittance transactions are routed through formal, documented, and regulated channels.
instead of informal value transfer system like hundi / hawala.

2.90. During 2017, money exchange companies handled about 12.8 million transactions (2016: 11.8 million) worth about RO 3.7 billion as compared to RO 3.5 billion during 2016 (Graph 2.44). The high volume of transactions handled by the exchange companies and extensive interactions with customers give rise to significant operational risk. However, the size of individual companies and nature of their business means that they do not pose systemic risk to the financial system in Oman.
The continually evolving financial sector calls for reassessing the rationale, mechanisms and modalities of its regulation. An unseemly regulatory regime may be disruptive, may act as an impediment to growth, and may stifle financial innovation. Financial regulators ought to consider that regulations do not lead to a culture of ‘box ticking’ by regulated entities. Instead, regulators can ensure encouragement to meet objectives behind regulations and, henceforward, the ultimate desired outcome. Financial regulators in the Sultanate of Oman have made substantial developments during the year. Some of these inroads displayed responsiveness to market conditions. On the local front, a new National Payments Systems Law was promulgated, substantial modifications in the regulations were introduced by CBO in an effort to boost economic growth, a Master Circular on “Fraud Risk Management” was also issued, and Capital Market Authority (CMA) issued the Real Estate Investment Funds Regulations. Moreover, the first Agricultural Insurance policy was launched, State General Reserve Fund announced raising its local investments, and adoption of the Global Investment Performance Standards (GIPS). Oman is also on schedule with adoption and implementation of Basel III and IFRS9. Moreover, the Payment and Settlements Systems in Oman remained robust while showing slight differences compared to previous year. Further, the year marked finalization of Basel III, the Basel Committee issued enhancements to Disclosure Frameworks, Central Bank Governors welcomed the new code of conduct for the global currency market, the Bank of International Settlements reactivated the Financial Stability Institute (FSI) Advisory Board, and finally, the IMF has announced its intentions for a fund toolkit reform.

DEVELOPMENTS IN OMAN’S FINANCIAL SECTOR:

a) The National Payment Systems Law (NPSL) Promulgated

3.1 On February 20, 2018, His Majesty issued Royal Decree No 8/2018 promulgating the National Payments Systems Law (NPSL). The NPSL is among a raft of initiatives in various stages of development with the objective to modernize and strengthen the Sultanate’s payment infrastructure. The need for NPSL was emphasized due to the rapid developments in the banking sector generally and more specifically in the payment operations. The necessity to introduce the NPSL was also due to the responsibility of the CBO in ensuring that all payment services are provided in a safe, secure and efficient manner.

3.2 The NPSL provides a comprehensive legal framework and addresses all the aspects related to the payments system in a holistic manner and assigns clear powers to CBO to oversee, regulate and supervise all matters relating to the NPSL.

3.3 It assures conclusiveness of transactions executed through payment systems, to protect the interests of the payer and payee as users of electronic payment system. Additionally, it defines the obligations of participants, operators, and providers of payment services. It also allows non-banks to function as a Payment System Provider/Operator alongside banks. Moreover,
it permits development of innovations on payment services such as mobile payments, while describing the legal consequences that apply in case of non-compliance.

3.4 CBO is currently working on drafting the secondary regulations in collaboration with the Ministry of Legal Affairs.

3.5 Presently, CBO operates and ensures stability of all four existing systems: the Real Time Gross Settlement System (RTGS), Automated Clearing House (ACH), Electronic Cheques Clearing (ECC), and OmanNet Switch.

b) CBO Issues Five Circulars to Relax Capital and Credit Exposure Rules in an Effort to Boost Economic Growth:

3.6 A sizable package of regulatory reforms for commercial banks operating in the Sultanate was announced in March 2018. CBO has issued a number of regulatory amendments, with the aspiration to make Oman’s financial sector a more stimulating business environment. It is anticipated that the new prudential limits would strengthen the capacity of banks and enhance their ability to continue providing liquidity and credit to the real sector. Therefore, the new measures are also expected to stimulate economic growth. All changes were effective from April 2018.

Capital Adequacy Ratio under Basel III

3.7 The former requirement of banks’ Capital Adequacy Ratio (CAR) set the minimum CAR at 12 per cent of risk weighted assets together with minimum Common Equity Tier1 (CET 1) and Tier 1 ratios of 7 per cent and 9 per cent, respectively. The CBO reduced the Tier 2 capital from 3 per cent to 2 per cent. Thus, reducing the minimum total CAR to 11 per cent of risk weighted assets. It is noteworthy that the CET1 ratio, Tier 1 ratio and Capital Buffers remain unchanged. The total capital requirements including CCB are 12.875 per cent for 2018 and 13.5 per cent for 2019. The change is expected to increase the banks’ lending capacity and reflect favorably on overall credit growth.

Lending Ratio- Treatment of Local Inter-Bank Transactions

3.8 With the objective to increase banks’ ability to lend and to encourage the interbank market, CBO decided to expand the deposit base by including local banks’ deposits under the current allowed rate of 87.5 per cent. This new treatment allows inter-bank positions to be reckoned for lending ratio purposes. Accordingly, commercial banks are to include borrowings/placements (if any) from other commercial banks in their deposit base and reduce lendings / placements (if any) with other commercial banks from the deposit base. This step is expected to provide greater liquidity and enhance overall credit growth.

Revision of Risk Weights

3.9 In line with Basel guidelines, CBO decided to withdraw the minimum 100 per cent risk requirements imposed on exposures to other sovereigns and central banks regardless of their credit rating. CBO, however, recommended banks to have appropriate policies and operational controls on country/sovereign exposures and to remain focused on productive deployment of funds domestically.

Maturities of Assets and Liabilities (MAL)

3.10 With a view to give banks more flexibility to utilize credit lines available to them with their foreign and local correspondents at a reasonable cost and to enable the banks to manage their liquidity gaps more efficiently, CBO decided to increase the prudential limit for all currencies from 15 per cent to 20 per cent of the cumulative liabilities (outflows) for three-to-six months duration and to 25 per cent of the cumulative liabilities (outflows) for six-to-nine and nine-to-twelve months buckets.
3.11 CBO has relaxed the aggregate overseas exposure limits from 50 per cent to 75 per cent of Local Net Worth (LNW) of the banks to provide more flexibility to banks in managing their excess funds, correspondence banking relationships, and diversification of income streams. It is expected that this change would also provide greater flexibility to the banks which involved in arranging overseas borrowings for temporary placements of such funds until the disbursements for projects takes place. Though this relaxation may result in some outflow of funds, however, banks’ borrowings from abroad pending deployment in local market would get subsumed under it.

3.12 Frauds act as a threat to public trust, alongside the fact that they can impair confidence in the banking system. CBO issued a consolidated and updated Master Circular on Fraud Risk Management to all licensed banks in December 2017. Covering among others, fraud risk management framework, policy and systems besides operational, procedural, control, review follow-up and reporting requirements.

3.13 The significance of CBO’s efforts stem from the unremitting challenges linked with the continuous technological innovations and developments. From this stance, greater responsibility has been cast on the Board and Senior Management of banks to effectively introduce an anti-fraud culture in their environments and to manage fraud risk by attuning internal policies, procedures, processes, and technologies in line with emerging developments and technological innovations.

3.14 CBO advocates that a resilient and well-functioning internal control framework is the strongest deterrence against frauds. Banks have, thus, been mandated to put in place an effective Fraud Risk Management Framework (FRMF) which broadly should consist of a Fraud Risk Management Policy and Fraud Risk Management Systems (FRMS). Ideally, the FRMF should be regarded as a separate function and accordingly a dedicated department/unit can be created for this matter.

3.15 The Boards of banks are mandated with the responsibility to frame the Fraud Risk Management Policy on significant aspects of the bank’s functioning. On the whole, the Policy should clearly outline the objective, operational structure and the responsibilities of the Audit Committee and the Chief Executive Officer. It should also delineate situations linked to the definition of fraud and the respective actions and roles that are to be taken to prevent occurrence and steps to be followed in case of detection. The responsibilities of various stakeholders must be clearly defined. Further, the policy should be reviewed regularly to identify possible gaps and keep the Policy updated.

3.16 Additionally, the Board has the fiduciary responsibility to put in place the appropriate FRMS by introducing effective anti-fraud measures to ensure quick detection of any case. It should ensure an immediate comprehensive investigation in case of fraud, taking into consideration that no conflict of interest will occur. Moreover, precautionary efforts must be put towards pre and post reference checks of new hires.

3.17 Furthermore, in order to ensure a safe and secured banking environment, banks were advised to have appropriate fraud alerts in place. Customer education awareness on an ongoing basis has also been identified as one
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of the essential tools of fraud deterrence. CBO advocates that customers’ attention should be drawn to the possible threats and they should be advised to follow security precautions/practices in safeguarding their accounts/details passwords/cheque books etc.

3.18 CBO advances banks to assess the efficiency of its entire FRMF, at least annually. The instructions to banks came into effect since January 1, 2018. Notably, suggestions that were received from CBO by the Oman Banks Association have been duly considered before finalization of the Master Circular on ‘Fraud Risk Management’.

d) Capital Market Authority (CMA) Issues Real Estate Investment Funds Regulation

3.19 As part of the business and finance sectors contribution to the National Economic Diversification Programme “Tanfeedh”, the CMA has issued the Real Estate Investment Funds Regulation. The regulation was a culmination of efforts exerted to improve the business environment and stimulate the real estate sector.

3.20 The issuance of the regulation is aimed towards creating a financing instrument for a large segment of the community to avail real estate investment and to attract more foreign funds for the benefit and stimulation of the real estate sector. The real estate investment funds will become available for the public by offering part of the capital for subscription as the fund’s units would be traded on the Muscat Securities Market (MSM). This is a step that further activates the role of the capital market in supporting the national economy.

3.21 The regulation sets the minimum capital of real estate investment funds at RO 10 million. Foreign investment is open up to 100 per cent but will be obligated to offer not less than 40 per cent of the capital to the public.

3.22 Moreover, the funds that offer their units for public subscription and the special purpose vehicle, should distribute not less than 90 per cent of the annual profits to the holders of its units. The regulation also mandates that investment of the fund is directed towards existing income generating properties such as properties of commercial nature which could be either residential, industrial or tourist but not in vacant plots. Additionally, with the aim to encourage internal investment, 75 per cent of a fund’s assets should be from the Sultanate. The regulation also provides for Sharia compatible real estate investment funds to expand the base of participation of the community. Furthermore, the regulation specified that funds would be exempt from taxes as per the income tax law.

3.23 In conjunction with CMA’s new ruling, the Ministry of Housing had earlier issued a Ministerial Decision regulating ownership of properties in the Sultanate.

e) Launch of Agricultural Insurance Policy

3.24 The agricultural sector in the Sultanate is considered a significant source of national economy. This necessitates support by all stakeholders including provision of a conducive environment that would increase its contribution to GDP. In this backdrop, agricultural insurance was initiated in October 2017 in Oman. It was a result of collaborative efforts by representatives from the Capital Market Authority, the Ministry of Agriculture and Fisheries, Oman Chamber of Commerce and Industry, and Oman Re-insurance Company.

3.25 The application of agricultural insurance is to be unrolled over three phases. The first phase will focus on the vegetables and fruit crops of the protected agricultural houses. The second phase will extend insurance cover for livestock and poultry, while the third stage is intended for palm trees and honey bees.
3.26 The minimum insurance for any agricultural insurance policy is RO 75. All major risks associated with cultivation, including natural fire, lightning, flood, landslide, storm, hailstorm, cyclone, typhoon, tempest and hurricane are covered under the scheme. Further, damage due to pests is covered only when it affects a large area. However, losses to farmers due to drought and areas frequently affected by strong winds are not covered under the scheme.

3.27 The significance of this type of insurance lies in the fact that it contributes to providing a safe investment environment for agricultural and animal wealth through providing insurance coverage that protects farmers from various types of risks and maintains good levels of production. By providing the insurance coverage needed to face the risks that may occur in the agricultural sector, in turn, a greater sense of stability and reassurance will be developed. This as well would reduce the reliance on Government compensation in the event of any disasters. The policy is expected to encourage farmers to develop products and plant crops and encourage new farmers to enter this field.

3.28 Currently, four insurance companies—National Life and General Insurance, Dhofar insurance, Al Madina Takaful and Arabia Falcon Insurance Company—are offering insurance cover for farmers and the insurance schemes are reinsured with Oman Reinsurance.

3.29 The next stage calls for evaluation and resolution of any complaints that may arise from the implementation of this new insurance.

f) State General Reserve Fund (SGRF) Raises Local Investments to 10%

3.30 Despite its investment policy for overseas investment portfolio allocation across several investment markets, SGRF raised its local investment from 2% up to 10%. The Fund invests in a range of promising sectors such as health & nutrition, real estate, technology, and financial sector among others. The executive management has now, greater powers in making investment decisions, in line with market analysis and study. As well as other sources and principles that the fund relies on while making investment decisions related to any market.

3.31 The coming period is to witness the launch of a new fund, Oman’s Fund for Investment in Infrastructure, which intends to raise international capital through offering investment in local infrastructure, logistics, and ports.

3.32 The Sultanate’s major sovereign wealth fund (SGRF) has announced the adoption of the Global Investment Performance Standards (GIPS). Adopting these standards indicates the Fund’s commitment to use industry leading performance calculation and presentation standards for the reporting.

3.33 The GIPS standards are universal, voluntary standards based on the fundamental principles of full disclosure and fair representation of investment performance.

3.34 The standards are based on “the fundamental principles of full disclosure and fair representation of investment performance results,” according to the Chartered Financial Analyst (CFA) Institute. The GIPS standards consist of:

- The Provisions of the GIPS standards, which includes information on compliance fundamentals, input data, calculation methodology, composite construction, disclosure, presentation and reporting, real estate, private equity, and wrap fee/separately managed account (SMA) portfolios.
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- The GIPS Valuation Principles
- The GIPS Advertising Guidelines Verification
- A GIPS Glossary Appendix containing sample compliant presentations, advertisements, and list of composite descriptions.

3.35 This most recent edition of the GIPS was approved in 2010 and became effective in January 2011.

3.36 The GIPS standards are currently adopted in 41 countries and recognized around the world for their credibility, integrity, scope, uniformity, and enabling direct comparability of a firm’s track record.

3.37 SGRF is one of the leaders among Sovereign Wealth Funds in adopting these globally recognized rigorous standards.

**h) Adoption of IFRS 9:**

3.38 CBO has issued a circular on implementation of IFRS 9. The detailed guidelines issued by CBO mandates banks and FLCs operating in the Sultanate to comply with the International Accounting Standards Board guidance on accounting for financial instruments. The IFRS 9 is a principle-based accounting standard and compliance will raise the governance standards within the Omani banking sector. Banks and FLCs are expected to ensure high quality implementation that results in reliable measurement of capital and augments market discipline through greater transparency. Banks are encouraged to start by performing a gap assessment with the guidelines in this regard.


**Classification of Financial Instruments**

3.40 The new classification model for financial assets is more principles-based than the requirements under IAS 39 Financial Instruments. Financial assets are classified according to their contractual cash flow characteristics and the business models under which they are held. Additionally, instruments will be classified either at amortized cost, the newly established measurement category Fair Value through Other Comprehensive Income (FVOCI) or Fair Value Through Profit or Loss (FVTPL).

**Impairment of Financial Assets**

3.41 The impairment requirements in the new standard, IFRS 9 Financial Instruments, are based on an expected credit loss model and replace the IAS 39 Financial Instruments: Recognition and Measurement incurred loss model.

3.42 The expected credit loss model applies to debt instruments recorded at amortized cost or at fair value through other comprehensive income. Entities are required to recognize an allowance for either 12-month or lifetime expected credit losses (ECLs), depending on whether there has been a significant increase in credit risk since initial recognition. The measurement of ECLs reflects a probability-weighted outcome, the time value of money and the best available forward-looking information.

3.43 The effect of the new requirements will be to require larger loss allowances for banks and similar financial institutions and for investors in debt securities. On transition, this will reduce equity and have an impact on regulatory capital.
Disclosure and reporting requirements

3.44 Finally, CBO circular urges banks and FLCs to endeavor complying with the disclosure and fair value measurement requirements in letter and spirit and in accordance with requirements laid out in IFRS 7 and IFRS 13. Banks and FLCs are also required to prepare pro forma financial statements, which are subject to be reviewed by auditors.

i) Basel III Implementation Status:

Capital Standards:

3.45 In line with Basel III requirements, CBO had issued guidelines on Regulatory Capital and Composition of Capital Disclosure Requirements back in November 2013. Under the guidelines, the minimum Common Equity Tier 1 ratio, Tier 1 capital ratio and total Capital Adequacy ratio are 7 per cent (BIS 4.5 per cent), 9 per cent (BIS 6 per cent) and 11 per cent (BIS 8 per cent) of risk weighted assets, respectively.

Capital Buffers:

3.46 As part of the regulatory reform in the Capital Adequacy Ratio (CAR) under Basel III, licensed banks in the Sultanate are were required to maintain Capital Conservation Buffer (CCB) of 1.25 per cent in 2017 (2.5 per cent when fully phased-in by 2019). The total capital requirements including the CCB would increase to 13.5 per cent when fully phased-in from 2019.

3.47 The actual CAR of the banking sector stood at 17.4 per cent (excluding specialized banks) as at December 31, 2017.

3.48 CBO issued guidelines on counter-cyclical capital buffer (CCyCB) of up to 2.5 per cent of risk weighted assets. A host of indicators, including Credit-to-GDP gap (using various definitions/ aggregation of credit and GDP) as primary guide, are used to determine if there is excessive credit growth that may lead to build-up of system-wide risks and whether presence of such growth justifies activation of countercyclical capital buffers. As of January 1, 2017, the maximum countercyclical capital, if activated was 1.25 per cent and it would range from 0 per cent to 1.875 per cent in 2018.

Systemic Capital Surcharge:

3.49 The framework to identify and regulate D-SIBs in Oman was concluded in January 2015. According to the framework, banks are ranked by their systemic importance using an indicators based approach and are placed in five buckets based on their systemic importance within the banking sector. The framework allows for systemic capital surcharge of up to 3.5 per cent. D-SIBs are required to meet Higher Loss Absorbency (HLA) capital surcharge in the form of additional Common Equity Tier 1 (CET1). This additional CET1 requirement is an extension of capital conservation buffer. This regulatory requirement follows bucketing approach, with level of capital surcharge increasing with the systemic importance of the bank as determined by the composite systemic score. For Bank Muscat, which is designated as a D-SIB in Oman, a systemic capital surcharge of one per cent of risk weighted assets was decided. The systemic capital surcharge is being implemented in three installments. The first phase of 40 basis points of surcharge as a percentage of risk weighted assets has been activated from 1st of January 2017, whereas, with effect from January 2018, the systemic capital surcharge is 0.7 per cent and it will fully phase-in by January 2019.

Leverage Ratio:

3.50 Basel III standards place a limit on the size of on- and off- balance sheet activities that banks can assume relative to their capital
base. This was aimed at controlling the build-up of unwarranted leverage in the banking system. CBO, therefore, advised licensed banks to submit their quarterly returns in the standardized format as of quarter end September 2017.

**Liquidity Standards:**

3.51 In line with Basel III requirements, CBO mandated adherence to a minimum short-term Liquidity Coverage Ratio (LCR) of 60 per cent to withstand a 30-day crisis; applicable from January 1, 2015. The LCR standard raises by 10 per cent every year to reach a minimum required level of 100 per cent by January 1, 2019. Licensed banks in the Sultanate comply with this requirement effortlessly as at December 21, 2017, the system-wide LCR (excluding specialized banks) stood at 215.9 per cent.

3.52 Further, banks are required from January 1, 2018, to maintain a longer-term Net Stable Funding Ratio (NSFR) at 100 per cent. The NSFR at the consolidated level (barring specialized banks) stood at 116.2 per cent as on December 31, 2017.

**INTERNATIONAL DEVELOPMENTS:**

**j) Finalizing Basel III Reforms:**

3.53 The Group of Central Bank Governors and Heads of Supervision (GHOS), the oversight body of the Basel Committee on Banking Supervision, the Committee has endorsed the outstanding Basel III post-crisis regulatory reforms. This finalization completes the global reform of the regulatory structure, which initially was triggered following the onset of the financial crisis.

3.54 The press release and announcements by the FSB post the completion of work publicized that these latest G20 reforms confirm that all fault lines which caused the global financial crisis have been addressed. It is expected that a reduction in unnecessary variability in risk weighted assets and improvements in comparability and transparency of banks’ risk-based capital ratios will follow.

3.55 The reforms endorsed by the GHOS include the following elements:

- a revised standardized approach for credit risk, which will improve the robustness and risk sensitivity of the existing approach;
- revisions to the internal ratings-based approach for credit risk, where the use of the most advanced internally modelled approaches for low-default portfolios will be limited;
- revisions to the credit valuation adjustment (CVA) framework, including the removal of the internally modelled approach and the introduction of a revised standardized approach;
- a revised standardized approach for operational risk, which will replace the existing standardized approaches and the advanced measurement approaches;
- revisions to the measurement of the leverage ratio and a leverage ratio buffer for global systemically important banks (G-SIBs), which will take the form of a Tier 1 capital buffer set at 50 per cent of a G-SIB’s risk-weighted capital buffer; and
- an aggregate output floor, which will ensure that banks’ risk-weighted assets (RWAs) generated by internal models are no lower than 72.5 per cent of RWAs as calculated by the Basel III framework’s standardized approaches. Banks will also be required to disclose their RWAs based on these standardized approaches.

(FSB 2018)
3.56 Having completed the Basel III regulatory reform agenda, the focus is, presently, turning towards ensuring the standards are implemented in a consistent matter. This is to be achieved through FSB’s Regulatory Consistency Assessment Programme.

3.57 The revised standards are effective from 1 January 2022 and are to be phased in over five years. The Committee has established a programme to evaluate its post-crisis reforms and will actively participate in the Financial Stability Board’s efforts to evaluate the effects of reforms.

**k) The Basel Committee Issues Enhancements to the Pillar 3 Disclosure Framework**

3.58 Pillar 3 disclosure requirements, the consolidated and enhanced framework, was issued by the Basel Committee on Banking Supervision. That marked the completion of the second phase of the committee’s review of the Pillar 3 disclosure framework.

3.59 The purpose behind Pillar 3 disclosure framework is to encourage market discipline through adequate disclosure requirements. The improvements added in the standard incorporate feedback from Pillar 3 preparers and users obtained from public consultation conducted in March 2016. The changes contain three main elements:

- All existing Basel Committee disclosure requirements were consolidated into the framework,

- A “dashboard” of banks’ significant prudential metrics was introduced and a new disclosure requirement that records prudent valuation adjustments by banks; and

- Updates that reflect ongoing reforms to the regulatory framework, such as the total loss-absorbing capacity (TLAC) regime for globally systemically important banks and the revised market risk framework published by the Committee in January 2016.

3.60 The new disclosure requirements will be implemented in phases. In the case when the implementation for a requirement depends on that of another policy, the date is aligned with the date of that framework. The implementation date for existing disclosure requirements consolidated under the standard was set for December 2017.

**l) New Code of Conduct for Currency Markets**

3.61 A new code of conduct has been introduced by Central Bank Governance for the global currency market. The Global Foreign Exchange Committee will monitor the implementation of the Code in the future.

3.62 The international collaborative initiative between central banks and private market participants was completed over a period of two years. It covers centric areas including ethics, governance, compliance, execution, confirmation and settlement, risk management, and information-sharing.

3.63 The Code is intended to supplement local legal frameworks through identification of global best practices and processes. It, therefore, does not levy any requirements to substitute for regulation. Still, members of central bank sponsored foreign exchange committees will be expected to abide by conditions set in the code.

3.64 The Bank of International Settlement relies on the code to support high ethical standards and a fair, transparent currency market. Central Bank Governors have reassured market participants the importance of advancing their practices in line with the Code of Conduct for Currency Markets. They were invited to establish commitment through using the Statement of Commitment that was
made publicly available. The private sector was also invited to raise awareness of the Code and to make their processes supportive of its adoption.

m) Reactivation of Financial Stability Institute (FSI) Advisory Board at the BIS

3.65 The mandate of the FSI at the BIS is to support international financial sector authorities to solidify their financial systems. Its strategy to attain closer relations with central banks and financial supervisory bodies was renewed at the beginning of 2017. As a part of the strategy, the BIS has decided to reactivate the FSI Advisory Board.

3.66 The Advisory Board was originated in 1998 but its operations were ceased a while later. It is trusted that the advisory board will offer strategic advice for the FSI to remain responsive to its main stakeholders varying needs. To ascertain constructive variability within the advisory board, the group of members will be from central bank governors, heads of financial sector supervision and chairs of standard-setting bodies and regional supervisory groups.

3.67 The reactivation of the FSI Advisory Board emphasizes on the BIS’s commitment towards its supportive role as the efforts to assure implementation of international financial regulatory standards stand intensified.

n) IMF Executive Board Discusses Fund Toolkit Reform

3.68 Discussions at the Executive Board of the International Monetary Fund (IMF) during the past year have been on proposals to reform the Fund’s lending toolkit. The increasing demand for liquidity, due to the global uncertainty calls for further enhancements to the liquidity support by the global financial safety net (GFSN).

3.69 Executive Directors noted that although the recent restructurings to the GFSN have helped address the challenges of a more volatile and interconnected global economy, the current GFSN still provides uneven coverage. Many countries do not have reliable access to standing Bilateral Swap Arrangements (BSAs) or Regional Financing Arrangements (RFAs), while very few take advantage of the new Fund instruments available on a precautionary basis. At the same time, while reserves provide an important line of defense, some countries may be relying excessively on them for self-insurance. Meanwhile, coordination among different layers of the GFSN leaves room for improvement. Noting the Fund’s central role in ensuring a strong, effective GFSN, Directors broadly agreed that the Fund could help contribute to filling some of these gaps.

3.70 To enhance further the Fund’s toolkit for crisis prevention, the IMF’s board has considered revisiting the existing toolkit and introducing new instruments. At the outset, it is believed that the toolkit could be enhanced by: establishing a new facility for precautionary financing that would provide a ‘standing’ liquidity backstop to members with strong fundamentals and policies for use when hit by liquidity shocks; and adjusting the existing toolkit to maintain cohesion. Any change to the Fund toolkit would need to take into account the tradeoffs between reducing stigma and containing moral hazard, while simultaneously safeguarding Fund resources.

3.71 A Fund policy monitoring instrument could improve the cohesion of the global safety net. As the GFSN has expanded and become more multi-layered, there is a need to improve cooperation across the different layers to unlock financing and signal commitment to reforms. Creating a policy monitoring instrument that is available to all Fund members could help in this regard.
3.72 National Payment Systems (NPS) are integral to CBO’s financial stability objectives. Hence, the best internationally accepted standards have been adopted for setting up and operating the payment systems. The NPS vision is considered a partner in Oman’s economic development and growth through creating an efficient and secure Payment and Settlement System, being a key component in the financial system.

3.73 The economic activity is gauged through electronic means for its transactions, thereby showcasing a rising trend and giving signal to a deviation from cash based economy.

3.74 The components of NPS are: RTGS which caters to high value low volume transactions, ACH for low value high volume, ECC for clearing the cheques through cheque images, OmanNet Switch for processing ATM/POS transactions with debit cards issued by banks and the real time fund transfer through the medium of mobile with a mobile number under the MpClear payment system.

3.75 MpClear is a recent development in the payments system that was launched in July 2017 to enhance the payment structure in Oman even further. The MpClear system

References:


promises interoperability, unified switching and clearing service between various mobile banking systems, thereby promoting enhanced efficiency and security of mobile payments. CBO is also engaged in cross border coordination, with other GCC countries, to implement and facilitate the GCC RTGS payment system. This is to streamline cross border payments, thereby addressing the concerns and challenges of transfers through the customary banking model. The project is due for completion by first quarter of 2019.

**Aggregate Value & Volume:**

*Aggregate Values and Volumes Increase Albeit at a Slower Pace than the Previous Years’*

3.76 Aggregate volumes in the payment and settlement systems increased to 68.7 million transactions in 2017 from 55.9 million transactions in 2016 – an increase equal to 22.9 per cent (Graph 3.1). This is relatively low when compared to last year’s growth of 47.5 per cent or the average aggregate volumes growth rate of about 27 per cent since 2012. The slower growth rate was due largely to the decrease in “Automated Clearing House (ACH) transactions” which dropped by 10.5 per cent to reach 4.3 million in 2017 from 4.8 million in 2016.

3.77 Aggregate values, on the other hand, witnessed an increase of 5.1 per cent from the previous year; increasing from RO 172.8 billion in 2016 to RO 181.6 billion in 2017 (Graph 3.1). The RTGS led this increase with a total value of RO 158.8 billion and accounted for 87.5 per cent of the aggregate values in the system. ECC ranked second with a value of RO 16.7 billion (9.2 per cent), followed by OmanNet with a value of RO 3.3 billion.

**RTGS vs. Retail in the Payment and Settlement Systems**

*RTGS and Retail Volumes and Values Increased in 2017 - Increase in Retail Payments Suggested a Move Towards a Cashless Society*

3.78 In RTGS, the volumes and values both increased from the previous year by 16.4 per cent and 5.9 per cent, respectively (Graph 3.2). RTGS volume increased from 497 thousand (daily average 1,363) in 2016 to 579 thousand (daily average 1,585) in 2017, while RTGS value in 2017 reached RO 158.8 billion (daily average RO 435 million) from RO 150 billion (daily average RO 411 million); an increase of 5.9 per cent.
3.79 Aggregate volumes in retail payment systems during the year increased by 23 per cent reaching 68.1 million transactions in 2017 from 55.4 million transactions in 2016. Its values also increased by RO 2.9 million to reach RO 22.8 billion (Graph 3.3).

**Modes of Payment**

*Increase in ECC, ACH, and Accessibility of OmanNet Reflected a Safer and more Efficient Payment System in Oman*

3.80 Out of the retail system, Electronic Cheques Clearing (ECC) continued to lead payments operated by CBO with a total value of RO 16.68 billion in 2017. This is an increase of 0.15 per cent from RO 16.66 billion in 2016 (Graph 3.4 and Graph 3.5). As the routine practice of moving paper-cheques decreases and more cheques are now being transferred electronically, the payment systems provides for a more secure medium that is efficient and drives down the overall cost.

3.81 OmanNet payments followed ECC with a value of RO 3.3 billion and a rise in growth rate from the previous year of 11.3 per cent. For the banks operating in Oman, the OmanNet Switch provides a gateway to the other switches in GCC countries. OmanNet has already established links with Kuwait (KNET), Bahrain (BENEFIT), Qatar (NAPS), United Arab Emirates (UAE Switch). A separate link with Saudi Arabia (SPAN) will be operationalized in a short time.

3.82 Automated Clearing House (ACH) displayed the least values among all three modes of payments operated by CBO with a total value of RO 2.8 billion, and at the same time, held the lowest growth rate of -11.4 per cent in 2017. It is noteworthy to mention, CBO has undertaken the initiative of implementing the redesigned ACH System for retail payments, currently to become based
on a web technology empowered by powerful security standards. It consists of direct credit and direct debit transactions, coupled with Mandate Management System (MMS) for direct debit transactions, the Wages Protection System (WPS) module in collaboration with the Ministry of Manpower (MOMP), Electronic Bill Presentment & Payment (EBPP), and the Dispute Management System (DMS). The redesigned system attempts to ensure efficiency for the multiple credit and debit transactions.

3.83 In terms of number of transactions, OmanNet led the three modes of payments with a growth rate of 28.1 per cent in 2017 as transactions reached 59.2 million compared to 46.2 million transactions in 2016. The increasing usage of this electronic platform is justifiable, given the convenience of cashless transactions, alongside, the discounts offered by retailers for online purchases. On the bank’s part, this trend helps in maintaining lower operational cost by reducing the number of visitors for cash related transactions.

3.84 ECC was second in the list with a total number of transactions of 4.6 million and a growth rate of 5.6 per cent followed by ACH at 4.3 million transactions and a negative growth rate of 10.52 per cent in 2017. Typically, the increase in the usage of ECC, ACH and OmanNet reflects the quality of financial infrastructure in the country and the level of technological development in the financial system of an economy. The wider-spread availability of these modes and as consumers rely more on electronic transactions, enhancements in the efficiency and safety of the overall financial system will follow.

**Stability of the System**

**Daily Aggregate Clearing Balances**

*Ample Liquidity in the System Continues – Minimum Closing Daily Balance Increases.*

3.85 During the current year aggregate closing balance averaged around RO 1.4 billion. This is a decrease of about 7.3 per cent from the previous year’s RO 1.5 billion. Minimum daily closing balance reached RO 1.1 billion on December 04, 2017, an increase of 2.6 per cent from the previous year when the minimum were RO 1.03 billion (Graph 3.6). On the other hand, the maximum daily closing balance for the year reached RO 1.7 billion on March 28, 2017. This is a 52.9 per cent decrease from the previous year when the maximum hovered around RO 3.5 billion. Volatility of the daily closing balance in 2016 between the two ranges was about RO 0.6 billion in comparison to last year’s variance of RO 2.5 billion.

**Liquidity Concentration (HHI) in Payment System**

*Concentration Levels Continued to Moderate Throughout 2017 – Daily Average Remained Moderate on the HHI.*

3.86 During the year, the daily average Hefindahl–Hirchman Index (liquidity concentration levels) remained moderate at 0.11. The trend of moderate concentration in the system continued throughout year 2017 with average concentration levels in the first
quarter reaching 0.12, second quarter 0.13, third quarter 0.11 and the last quarter at 0.10. However, maximum concentration of daily closing balance decreased from 0.49, in the previous year, to 0.21 during 2017 (Graph 3.7). Significantly, increasing concentration in the system carries undesirable implications and indicates improper management of funds. From the stance of payment systems stability; it demands attention especially when one bank carries the bulk within the concentrated amount.

**Daily Payment Concentration**

**Daily Payment Concentration Levels Continue to Remain Moderate and are Decreasing.**

3.87 The average daily payment concentration in the system continued to remain moderate at 0.18 (Graph 3.8) albeit a decrease from 0.22 in the previous year. The index ranged from a minimum of 0.00 to a maximum of 1.00. The maximum daily payment concentration during the year took place on Tuesday, April 25, 2017 when only two banks made a total payment of RO 80.9 million in the system. Though the range is substantial, it is only in 41 instances during the year that the Index was above 0.25 in comparisons to 92 times in 2016, indicating a decreasing trend in daily payment concentration.

**Shares in Payment System Activities**

**High Concentration Level of the Top Three Banks Could Be a Source of Growing Vulnerability Worth Careful Assessment**

3.88 One bank leads the payments activity with a total share of about 27 per cent of the entire system (Graph 3.9). Concentration in payment system activities of the top four banks accounted for 62.20 per cent in 2017 in comparison to 59.43 per cent in 2016. This increasing concentration level of the top four banks in addition to only one bank capturing
27 per cent share in payment system activities is worth careful assessment. The Node Risk Index (NRI) of the banks further illustrated this feature as it ranged between 0.001 - 0.2663 during the year. This indicates that if the largest bank in the system faces any disruption in its operations, it has the potential to adversely affect 27 per cent of the payment system.

**Transactions in Cheques**

**Majority of Cheques Continued to be Processed in 24 Hours - Insufficient Fund Continued to be the Leading Reason of Unpaid Cheques**

3.89 Total number of cheques cleared during the year increased to 4.64 million from the previous year of 4.44 million (Graph 3.10). This is an increase of 4.53 per cent and a total of 201,093 more cheques cleared in the system. The majority of cheques continued, as in the previous quarters, to be processed in 24 hours (T+1) after the cheques being presented in the system. Number of cheques using the special clearing facility, which requires only 2 hours further decreased to only 1,401 from 1,432 in the previous year.

3.90 During 2017, the number of bounced cheques reached 436,022. This is an increase of 16.87 per cent over previous year (Graph 3.11). Insufficient Funds remained the leading reason for unpaid cheques (77.24 per cent), followed by Account Closed/Frozen/Transferred (10 per cent), and then MICR Encoding errors (2.4 per cent).
The systemic risk survey gathered feedback from a range of stakeholders from the financial sector including the Central Bank of Oman, the Capital Market Authority, banks, finance & leasing companies, and brokerage firms.

The results show an overall increase in confidence in the financial system and an improvement in the perception of likelihood of the occurrence of high impact events. Further, the confidence of the respondents in financial stability improved in the 2018 survey, while unfavorable oil prices and liquidity concerns were perceived as the greatest threat to the financial stability in Oman.


87 per cent of the respondents believed that the likelihood of a high impact event occurring in Oman’s Macro financial system in the short term is “Medium,” “Low”, or “Very low”, as compared to 62.5 per cent when the survey was previously conducted in 2016. Moreover, in the 2018 survey 13 per cent (2016 : 37.5 per cent) of the respondents think that there is “High” or “Very High” probability of a high impact event in the macro financial system the short term (Graph 3.1.1).

Similarly, in the long term (1-3 years), around 84 percent of the participants believed that the chances of a high impact event occurring in Oman’s Macro financial system is either “Medium,” “Low,” or “Very Low,” as compared to 46 percent in 2016 (Graph 3.1.2).

When asked if their perception regarding the probability of the occurrence of a high impact event in Oman in the short term changed over the last 6 months, around 90 per cent of the participants reported that their perception remained “Unchanged” or “Decreased”. Whereas in the long term, 38 per cent reported a decrease and 33 per cent reported no change in their perception about the probability of the occurrence of a high impact event in the long run.

Confidence Level of Respondent-Stakeholders in the Omani Macro-Financial System Remains High

The confidence in the stability of Oman’s macro financial system remained high with 79 per cent (2016: 63 per cent) of the respondents being “Very Confident”, or “Fairly Confident” about the stability of Oman’s macro-financial system. None of the respondents lacked confidence in the stability of macro-financial system of Oman (Graph 3.1.3).

Perception of the Continuation of Systemic Stability Improves

When asked about the change in confidence in the stability of macro-financial system of Oman over the past 6 months, 37 per cent (2016: 0 per cent) of the respondents reported “Increased” confidence, while 50 per cent (2016 : 61 per cent) reported “Unchanged” confidence, while only 13 per cent (2016 : 39 per cent) reported a decline in their confidence in the current 2018 survey. Hence, the level of confidence of the
respondents in the stability of Oman macro-financial landscape appears to be improving with improvement in macroeconomic fundamentals (Graph 3.1.4).

Graph 3.1.3
Confidence in Stability of Oman’s Macro-financial System

<table>
<thead>
<tr>
<th>Risk Rank</th>
<th>Type of Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unfavorable oil price Movement</td>
</tr>
<tr>
<td>2</td>
<td>Deterioration in Oman’s overall economic outlook</td>
</tr>
<tr>
<td>3</td>
<td>Crystallization of operational risk</td>
</tr>
<tr>
<td>4</td>
<td>Performance of Corporate sector</td>
</tr>
<tr>
<td>5</td>
<td>Rise in Loan Losses at banks</td>
</tr>
</tbody>
</table>

Greatest Impact = Rank 1

Respondents View “Unfavorable Oil Price Movements” as the Factor With the Greatest Impact on the Omani Macro Financial System.

The participants were asked to rank the risks with the greatest impact on the Omani macro financial system. Majority of the participants viewed that “unfavorable oil price movement” was the main risk (same as the survey conducted in 2016), while the second most significant risk is the “Deterioration in Oman’s Overall Economic Outlook” (also same as in 2016). Moreover, “Crystallization of Operational Risks (e.g. cyber-attacks, terrorism, frauds, natural disaster, social unrest etc.)” was viewed to be the third most significant risk while “Performance of Corporate Sector” and the “Rise in Loan Losses” at banks were ranked fourth and fifth, respectively (Table 3.1.1).

A comparison of the potential distress points between 2018 and 2016 of the top 5 major risks indicates that stakeholders continue to perceive macroeconomic risks as more pressing even as the global and Omani economy shows signs of recovery.

Participants were also asked to list any other factors that would have a significant impact on the Omani macro financial system and responses revealed the following three factors:

1. “Political instability in the Gulf and Middle East region;”
2. “Demographics - increasing population at working age, increased levels of youth unemployment;”
3. “The decline in productivity of the global economy;”
BOX 3.2

The Expedition of Blockchain in the Sultanate of Oman

Blockchain, or distributed ledger technology, is expected to give rise to a new era of the internet, even more transformative and value based to the extent that it threatens to dispense away the standard constructs. At its core, it can offer an implausible amount of resilience, making it creatively dependable and attractive. It can offer a new generation of decentralized services and software applications.

Oman’s First Blockchain Symposium

The Sultanate of Oman has demonstrated a clear interest in using blockchain technology in its digitalization efforts. To promote the adoption and implementation of blockchain, Oman’s first Blockchain symposium (6-9 November 2017) was organized by a high-profile group of government bodies namely: the Ministry of Foreign Affairs (MoFA), which teamed up with the Ministry of Commerce and Industry (MoCI), Ministry of Information (MoI), Central Bank of Oman (CBO), Capital Market Authority (CMA), Information Technology Authority (ITA), State General Reserve Fund (SGRF), and Oman Medical Specialty Board (OMSB).

The event pooled international and local expertise, case studies and working papers with focus on the benefits of blockchain technology. The symposium proposed to raise awareness and recognition of the technology, and explore the unprecedented opportunities to create value in the overall development and growth rate of the Sultanate whether that be through employing blockchain in the governmental services, attracting foreign investment, or recognizing and employing its opportunities with the Omani youth, possibly through small and medium-sized enterprises.

First Blockchain Company and Club

During Oman’s Blockchain symposium, SGRF announced establishment of Blockchain Solutions and Services Co (BSS). The company - as a state-funded government initiative will develop the requisite infrastructure to support the nationwide adoption of blockchain.

Another significant announcement was the establishment of a Blockchain Club designed to bring together tech-savvy institutions and individuals under one roof to “compare notes and share knowledge” (Al-Murshidi, 2017) on Blockchain related topics. Membership to the club is free of charge and is open to anyone interested in the technology. The Blockchain Club works towards injecting momentum and awareness for the Omani society about Blockchain as a step headed for continued future digital transformation.

Further Developments:

A two-day Blockchain Oman conference, organized by Business Processes Outsourcing Services (BPOS) and supported by ITA took place in the first quarter of 2018. The conference’s main objective was to build on the most important outcomes of the symposium held in November 2017 and other steps taken after that. Strategies for blockchain implementation were displayed across various sectors. Further, the blockchain potential uses for government were identified paving a way to tailor pilot solutions for sustainable and productive use.

Over the past years, ITA has laid the foundation for digitally transforming the government. Examples are the technology foundation that has been created to secure the government network, the PKI infrastructure that provides a digital identity for everyone, and the cloud computing platform, all integrated into one platform. In fact, ITA is keen to embrace blockchain and has commenced work on its own internal blockchain based pilot project in areas of contracting to gain first-hand knowledge and experience in the technology.

Adoption of Blockchain in the Omani Financial Sector:

Bank Dhofar is among the first set of blockchain movers in the Middle East. This year, Bank Dhofar joined Ripple’s global enterprise blockchain network – RippleNet. Ripple is a leading blockchain solution provider intended to provide a global payments experience that is instant, frictionless, secure, and low-cost. Bank Dhofar earlier this year also joined the leading blockchain consortium BankChain.

One of the early adopters include Muscat Clearing and Depositary Company (MCD). The company is in final stages of implementing an electronic subscription system. The new system will be globally reachable, will have access to electronic transfers, and is expected to offer a wholly-advanced investment experience: starting with registration of a new investor account to receiving the dividends from equity investments, as well as, the disclosures and statements.

It is expected that the future of the world could be dominated by blockchain technologies. The Sultanate of Oman accepts that efficient infrastructure needs to be in place across diverse sectors to cope with this transition.
Box 3.3
CBO’s Role in Enhancing Financial Inclusion in the Sultanate of Oman

A considerable population of the world’s working-age adults still do not have an account at a formal financial institution. Financial inclusion efforts around the world seek to ensure that all households and businesses, regardless of income level, have access to and can effectively use the appropriate financial services they need to improve their lives. Being part of the financial system supports essential day-to-day transactions, safeguards savings, builds working capital and improves the overall welfare. It is a constructive route in the way of financing start-ups or small businesses and can help owners invest in assets that grow their businesses. Financial Inclusion is a notion that has, therefore, become a priority for policymakers and regulators globally.

The G20 has put forward its commitment to advance financial inclusion worldwide and has reaffirmed its commitment to implement the G20 High-Level Principles for Digital Financial Inclusion. On that same track, the World Bank Group has put forward an ambitious global goal to reach Universal Financial Access by 2020.

According to statistics by the World Bank Group, more than 55 countries have made commitments to financial inclusion, and more than 30 have either launched or are developing a national strategy on financial inclusion. It was noted that the countries which have put in place an enabling regulatory and policy environment have achieved the most progress toward financial inclusion. They have also encouraged competition in the financial services industry to allow for innovation that will expand access to financial services. However, allowing for this innovative and competitive space must be accompanied by appropriate regulations and consumer protection measures that will ensure responsible provision of financial services.

For the Central Bank of Oman (CBO), financial inclusion means that banking products and services are not only made available to all individuals and businesses, but also delivered in a responsible and sustainable way. CBO recognizes that the benefits of financial inclusion extend beyond individuals and are linked to Oman’s economic and social development and, therefore, it also plays a vital role in achieving financial stability.

The efforts exerted by CBO include guidelines to promote the geographical expansion of banking services to all regions and provinces of the Sultanate. To this end, banks which have opened branches in Musandam area have been exempted from licensing fees and the customary annual fees paid by banks for branches in other areas.

To attract even more segments of the Omani society into the banking system, CBO permitted the establishment of Islamic banks and Islamic windows of conventional banks. This was viewed as an encouraging step for potential banking customers who wanted to adhere to certain religious believes. Subsequently, 2013 witnessed the first Islamic bank in Oman. The share of Islamic Banking grew up to 12% of total assets of the banking sector by the end of 2017. Islamic banking helped attract faith-based customers and contributed to enhancing financial inclusion in the Sultanate.

Customers with special needs were also considered while drawing the image of an inclusive banking system. Directions by CBO were issued to take necessary steps to offer ‘Special Needs Customers’ all facilities they make require for having a comfortable and safe banking experience. The CBO has, in its directives, proposed various measures as to how that can be achieved including training and related awareness measures.

Protecting customers of financial institutions remains at the forefront at CBO. For that progress is undergoing to establish a new unit that will act as a single point of contact for receipt and resolution of complaints and inquiries from the public. Besides that, it will also work towards enhancing customer awareness on their rights and obligations while dealing with financial institutions.

Similarly, the Deposit Insurance Scheme is an integral part of the financial safety net, and is key

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to maintaining confidence and promoting financial stability and financial inclusion. It intends to boost confidence of customers in the banking sector by covering specific risks, thereby, encouraging small depositors to use banking services without fear of losing their deposits.

Membership to the scheme is mandatory for all licensed banks that receive deposits from customers. There are, accordingly, 17 member banks in this system. The system considers deposit to be eligible for compensation up to a maximum ceiling amount of RO 20,000 per customer per institution. The Omani banking sector is among the pioneers in the region in this domain as the first regulation of deposit insurance was introduced in 1995.

Acknowledging the significance of the contribution by small and medium enterprises (SMEs) in the national economy and the country’s development, CBO issued instructions to all banks operating in Oman to allocate a minimum of 5% of the loan portfolio of banks to finance SMEs in the Sultanate. The instructions included directives to create a unit in each local bank that is responsible for pursuing achievement of the specified targets. These targets are monitored through regular reports stating specified details on SME funding.

A robust Credit Information System is a prerequisite for a well-established and sustainable credit market in any economy. It reduces information asymmetries and helps financial inclusion. Like any other credit bureaus in other parts of the world, the Bank Credit & Statistical Bureau (BCSB) collects credit information of the borrowers (Individuals and Corporate) from member institutions. In return, BCSB provides a consolidated credit information report (CIR) to member institutions through BCSB System. Member institutions use such CIRs to make timely and informed decisions on the applications for various types of credit facilities by individuals and businesses. Notably, BCSB, established in 1978, is the primary functioning public credit information bureau operating in the Sultanate of Oman.

Further to its efforts in broadening the scope of the Omani banking system to become more inclusive and secured, CBO continues to take various steps in developing the financial system. Last year, CBO launched the mobile payment clearing system (MpClear) with intent to offer interoperability and a unified switching and clearing services between various mobile banking systems, thereby promoting enhanced efficiency and security of payments effected through mobile medium. Moreover, CBO has undertaken the initiative to implement a re-designed ACH system for retail payments, based on a web technology, and empowered by powerful security standards. Furthermore, this year, enhancements were incorporated in the Wages Protection System to roll-out a consolidated version of the wage files of workers’ pay transfers. It provides pre-requisite data for the Ministry of Manpower to create databases that document the details of wages payments in the public sector to ensure timeliness of payments. These developments in the banking sector have contributed significantly in promoting financial inclusion in the Sultanate.

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Chapter IV
STRESS TESTING OF THE BANKING SECTOR

Stress testing has been a useful forward looking technique used by the Central Bank of Oman which attempts to measure the sensitivity of banks to various shocks including those with a small probability of occurrence. The solvency stress test attempts to determine the impact of hypothetical shocks on banks’ capital adequacy ratio capturing the impact of credit, exchange rate, interest rate and contagion risks. The liquidity stress test aims to forecast the number of days that banks can survive a high and unexpected rate of daily withdrawals depending only on their liquid assets with the assumption that capital market and interbank market are not accessible for funding.

The results of solvency stress test conducted on the banks’ data at the end of December 2017 showed that Omani banking system is characterized by a high level of resilience towards stringent shocks. With an assumed sharp increase in gross NPLs ratio of the entire banking system from its current level of 1.8 per cent to 11.6 per cent under stress scenarios along with an assumed increase of interest rate by 200 basis points and depreciation of Omani Rial by 15 per cent. The exercise indicates that the average CRAR of the Omani banking system would remain slightly above the CBO required CRAR of 13.5 per cent. The liquidity stress test showed that all six domestic banks would be able to comfortably withstand a sudden sharp daily withdrawals for more than 5 days without a need to borrow from capital or interbank markets.

Bottoms Up Solvency Stress Testing

4.1. The financial positions of the banks at the end of December 2017 have been stress tested and the impact on the resilience of the banking system has been examined. CBO’s bottom up solvency stress test captures the concentration of exposures at the level of individual banks and linkages among them. The stress tests presented in this chapter focus on domestic banks as they form more than 95 per cent of the total banking assets. Scenarios and assumptions adopted in conducting the CBO’s solvency stress test are given in Box 4.1.

4.2. Under the assumed stress testing scenarios, the aggregate CRAR of domestic banks would drop from 17.7 per cent to 13.6 per cent which is slightly above CBO’s required CRAR of 13.5 percent. On an individual basis, five banks would drop below the CBO’s required CRAR, however, they still remain above the Basel III requirement of 10.5 percent (Graph 4.1). Further, the test showed that the contagion effect has negligible impact on the CRAR of the banks due to the minimal domestic interbank transactions.
4.3. Part of the stress testing analysis is to estimate the cost borne by the regulator to bail out the undercapitalized banks. Should the assumed stress scenarios materialize, injecting the undercapitalized banks would cost RO 165.4 million, which accounts for only 0.6% of Oman’s GDP (Graph 4.2).

Reverse Solvency Stress Testing

4.4. In the reverse stress test, the resilience of the banking system is assessed in a scenario of increasing Non-Performing loans (NPLs) by computing the level of maximum increase in NPLs the banks could withstand without compromising the minimum required capital adequacy ratio of 13.5 per cent. The test focus on local banks only.

4.5. The test shows that the current aggregate NPLs of all local banks should increase by 3.2 times before the CBO’s required CRAR of 13.5 per cent is breached. On individual basis, all local banks would be able to absorb at least the doubling of their current NPLs before breaching the CBO requirement of CRAR. The test confirms the results of bottom up stress testing in showing a good capacity of local banks to absorb a high increase in NPLs, (Graph 4.3).

Liquidity Stress Testing:

4.6. For the liquidity stress testing, the impact is shown for each bank in terms of the number of days it would be able to survive a liquidity drain without resorting to liquidity from outside (i.e., from other banks or the central bank). Assumptions underlying the liquidity stress testing are shown in Table 4.1.

Table 4.1
Assumptions underlying the Liquidity Stress Testing

<table>
<thead>
<tr>
<th>Item</th>
<th>Level of Shocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand deposits withdrawn per day</td>
<td></td>
</tr>
<tr>
<td>Domestic currency</td>
<td>5%</td>
</tr>
<tr>
<td>Foreign currency</td>
<td>5%</td>
</tr>
<tr>
<td>Time deposits withdrawn per day</td>
<td></td>
</tr>
<tr>
<td>Domestic currency</td>
<td>5%</td>
</tr>
<tr>
<td>Foreign currency</td>
<td>5%</td>
</tr>
<tr>
<td>Liquid assets: available in a day</td>
<td>90%</td>
</tr>
<tr>
<td>Other assets: available in a day</td>
<td>1%</td>
</tr>
<tr>
<td>Liquidity evaluated after (no. of days)</td>
<td>5 days</td>
</tr>
</tbody>
</table>

4.7. As of December 2017, under the liquidity shock scenarios, the banks continue to remain in a good liquidity position vis-à-vis international benchmarks. Their positions under stressed shocks continue to display a good level of ability to face the assumed bank run. The results show that, on average, the banking sector can survive for more than five working days of the assumed deposits run mainly due to adequate liquid assets.
that banks keep on their balance sheets. At bank level, six local banks would be able to sustain the liquidity shock for more than five days, while the other three banks can survive the stringent liquidity shocks between three to four days with their own liquid assets (Graph 4.4).

Banks Rating and Probability of Default:

4.8. Our stress testing analysis includes rating the banks based on a select set of financial soundness indicators as shown in Table 4.2. Weights are given to each indicator and banks are evaluated accordingly in both normal and stress times. The rating takes values from 1 (best rating) to 4 (worst rating). The assumptions of the weights and the ratings are used only for the purpose of stress testing exercise. Based on the data as of December 2017, the select indicators for domestic banks before and after shocks are provided in Table 4.3. These indicators illustrate the banks’ financial position at the baseline and stress scenarios.

**Table 4.2**

<table>
<thead>
<tr>
<th>Assumptions Used for Rating Banks</th>
<th>Threshold 1 (btwn 4&amp;3)</th>
<th>Threshold 2 (btwn 3&amp;2)</th>
<th>Threshold 3 (btwn 2&amp;1)</th>
<th>Weight per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Adequacy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total capital / RWA (CAR)</td>
<td>5</td>
<td>10.5</td>
<td>13.5</td>
<td>20</td>
</tr>
<tr>
<td><strong>Asset Quality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPLs (gross)/ total loans</td>
<td>25</td>
<td>15</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Provisions/NPLs</td>
<td>25</td>
<td>50</td>
<td>75</td>
<td>5</td>
</tr>
<tr>
<td>(NPLs-provisions)/capital</td>
<td>100</td>
<td>50</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>FX loans/total loans</td>
<td>60</td>
<td>40</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>RWA/total assets</td>
<td>75</td>
<td>50</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td><strong>Profitability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA (after-tax)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>ROE (after-tax)</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td><strong>Liquidity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquid assets/total assets</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>Liquid assets/short-term liabilities</td>
<td>30</td>
<td>40</td>
<td>50</td>
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<td><strong>Sensitivity to Market Risk</strong></td>
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<td>Net FX exposure / capital (abs.)</td>
<td>25</td>
<td>15</td>
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<tr>
<td><strong>Probability of failure</strong></td>
<td>30</td>
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*Assumptions of thresholds and weights are used only for the purpose of stress testing analysis.*
### Table 4.3
Before and After-Shock Banking Ratios

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<tr>
<th>Banks</th>
<th>DB1</th>
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<th>DB3</th>
<th>DB4</th>
<th>DB5</th>
<th>DB6</th>
<th>DB7</th>
<th>DB8</th>
<th>DB9</th>
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<td><strong>Capital Adequacy</strong></td>
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</tr>
<tr>
<td>Total capital / RWA (CAR)</td>
<td>19.4</td>
<td>17.3</td>
<td>17.5</td>
<td>15.4</td>
<td>16.8</td>
<td>16.6</td>
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<td>17.4</td>
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<tr>
<td>NPLs (gross)/ total loans</td>
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<td>2.0</td>
<td>1.6</td>
<td>1.7</td>
<td>2.5</td>
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<td>1.1</td>
<td>0.1</td>
<td>0.2</td>
<td>1.8</td>
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<td>Provisions/NPLs</td>
<td>148.7</td>
<td>135.8</td>
<td>162.4</td>
<td>156.4</td>
<td>100.4</td>
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<td>162.0</td>
<td>2,175.4</td>
<td>557.5</td>
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<td>-4.2</td>
<td>-5.1</td>
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<td>FX loans/total loans</td>
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<td>10.9</td>
<td>26.3</td>
<td>13.1</td>
<td>5.7</td>
<td>20.8</td>
<td>20.4</td>
<td>3.4</td>
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<tr>
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<td>82.1</td>
<td>98.7</td>
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<td>93.1</td>
<td>104.9</td>
<td>82.2</td>
<td>93.3</td>
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<td>ROA (after-tax)</td>
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<td>1.1</td>
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<td>Liquid assets/total assets</td>
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<td>35.8</td>
<td>14.0</td>
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<td>15.6</td>
<td>8.5</td>
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<td>16.1</td>
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<td>Liquid assets/short-term liabilities</td>
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<tr>
<td>Net FX exposure / capital</td>
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<td>17.8</td>
<td>11.8</td>
<td>-28.0</td>
<td>19.1</td>
<td>14.8</td>
<td>33.5</td>
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<tr>
<td>Z-score ((C/A+ROA/stdev(ROA))</td>
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<td>19.0</td>
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<td>21.3</td>
<td>21.0</td>
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<td><strong>Capital Adequacy</strong></td>
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<tr>
<td>Total capital / RWA (CAR)</td>
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<td>13.6</td>
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<td>11.9</td>
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<td>13.0</td>
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<td><strong>Asset Quality</strong></td>
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<tr>
<td>NPLs (gross)/ total loans</td>
<td>11.8</td>
<td>11.8</td>
<td>11.4</td>
<td>11.5</td>
<td>12.3</td>
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<td>11.0</td>
<td>10.1</td>
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<td>Provisions/NPLs</td>
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<td>65.8</td>
<td>60.4</td>
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<td>61.4</td>
<td>64.3</td>
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<td>(NPLs-provisions)/capital</td>
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<td>16.8</td>
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<td>24.4</td>
<td>23.2</td>
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<td>16.1</td>
<td>23.6</td>
<td>19.3</td>
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<td>FX loans/total loans</td>
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<td>26.3</td>
<td>13.1</td>
<td>5.7</td>
<td>20.8</td>
<td>20.4</td>
<td>3.4</td>
<td>2.1</td>
<td>13.9</td>
</tr>
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<td>RWA/total assets</td>
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<td>81.7</td>
<td>98.5</td>
<td>93.7</td>
<td>97.9</td>
<td>93.2</td>
<td>104.3</td>
<td>81.3</td>
<td>93.5</td>
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<td><strong>Profitability</strong></td>
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</tr>
<tr>
<td>ROA (after-tax)</td>
<td>0.0</td>
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<td>-0.4</td>
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<td>-3.2</td>
<td>-1.6</td>
<td>-11.8</td>
<td>-17.4</td>
<td>-1.7</td>
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<tr>
<td><strong>Liquidity</strong></td>
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<tr>
<td>Liquid assets/total assets</td>
<td>-0.2</td>
<td>0.9</td>
<td>15.6</td>
<td>0.4</td>
<td>-1.8</td>
<td>5.6</td>
<td>-1.9</td>
<td>-4.8</td>
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<td>1.4</td>
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<tr>
<td>Liquid assets/short-term liabilities</td>
<td>-0.5</td>
<td>3.1</td>
<td>38.7</td>
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<td>-5.3</td>
<td>31.6</td>
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<td><strong>Sensitivity to Market Risk</strong></td>
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<tr>
<td>Net FX exposure / capital</td>
<td>6.8</td>
<td>16.5</td>
<td>10.3</td>
<td>17.8</td>
<td>11.8</td>
<td>-28.0</td>
<td>19.1</td>
<td>14.8</td>
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</tr>
<tr>
<td>Z-score ((C/A+ROA/stdev(ROA))</td>
<td>46.8</td>
<td>21.5</td>
<td>13.9</td>
<td>19.3</td>
<td>13.9</td>
<td>13.0</td>
<td>40.3</td>
<td>9.1</td>
<td>4.4</td>
<td>...</td>
</tr>
</tbody>
</table>
4.9 The ratings of the banks, derived from the banking indicators for each banks before and after shocks shown in table 4.3, are plotted in *Graph 4.5*. The results show that, all domestic banks before shocks maintained high ratings between 1 and 2. After the assumed shocks, the banks’ rating are downgraded to between 2 and 3. Even with the stringent assumed shocks, banks are able to maintain a rating of 3 or above mainly due to their high level of capital and the prudential limits imposed by CBO.

4.10 In conjunction with assigning ratings to banks, the probability of default of banks before and after the stress shocks is also calculated. The probability of default is estimated according to the outcomes of the indicators of each bank and the weights given to each indicator. Before shocks, domestic banks have a probability of default of around 5 % due to their high capital base and the strong position of their other financial soundness indicators. After the shocks, all the banks would have a probability of default of less than 15 %, which still at the acceptable level *(Graph 4.6)*.

### Box 4.1

**Shock Levels for Solvency Stress Test (Bottom-up approach)**

<table>
<thead>
<tr>
<th>Type of Risk</th>
<th>Level of Shocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Risk</td>
<td>Proportional increase in NPLs by 10 per cent to the exiting performing loans for each bank. Additional amount of cash provisioning of 50 per cent of the new NPLS is required. The increased of provisioning requirements will reduce the value of the RWAs as well as the capital.</td>
</tr>
<tr>
<td>Interest rate Risk</td>
<td>200 basis points increase in the interest rate. Impact on the net interest income over a horizon of one year is considered including the losses resulting from decline in the value of bonds held by the commercial banks.</td>
</tr>
</tbody>
</table>
| Foreign Exchange Risk | 15 per cent depreciation in the Omani Rial against US Dollar:  
  ➢ Direct effect, depreciation will benefit banks that have long open position in foreign currency and hurt banks that have a short position in foreign currencies.  
  ➢ Indirect effect, 20 per cent of banks’ foreign currency loans become NPLs which require per cent of provisions for new NPLs. |
| Contagion Risk     | Direct impact on the capital of each banks if other banks default on all of their interbank borrowings. The contagion stress test is run in several iterations as the failure of a bank in first round may lead to failure in other banks in subsequent rounds |