

FINANCIAL SECTOR IN OMAN

DEVELOPMENTS, ISSUES AND PROSPECTS

EDITORS

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كلية الدراسات المصرفية والمالية
College of Banking and Financial Studies

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**College of Banking and Financial Studies
Sultanate of Oman**

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Developments, Issues and Prospects**

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Editors

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**College of Banking and Financial Studies
Sultanate of Oman**



His Majesty Sultan Qaboos Bin Said

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CBFS vision is to become a leading institution for higher education in Banking and Finance in the region.

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ABOUT CBFS

The College of Banking and Financial Studies (CBFS) is an apex government organisation for educating, training and conducting research in the banking and financial services sector in Oman. It was established in 1983 by a Royal Decree. CBFS operates under the supervision of the Central Bank of Oman and is supported by the commercial banks operating in the Sultanate of Oman. Over the past 35 years, CBFS growth has been supported by various Royal decrees that have enabled the College to diversify and broaden the services provided for the banking and finance industry. CBFS offers a broad range of Diploma, Bachelor's and Master's programmes, in areas related to Business Administration, Accounting, Auditing, Finance and Banking, in partnership with Strathclyde Business School and the University of Bradford. Driven by the desire to cater for local needs, CBFS launched its own Bachelor's degree programmes in 2014-15. CBFS provides professional certifications and conducts customized and open training courses in banking and finance related areas. CBFS has developed a research culture at the College, supports applied research and encourages consultancy activities. CBFS contributes to the national economy and provides support in building sustainable capacity within the community.

FOREWORD

The financial sector plays a vital role in the growth and development of an economy. A sound financial system underpins economic prosperity of a nation. It generates local savings and channels them towards productive investments through financial markets and intermediaries. A resilient, transparent and smooth-functioning financial sector contributes to financial stability, job creation and economic diversification. There is no doubt that the financial sector is a powerful engine behind economic growth. The overall economic landscape in Oman has been constantly improving over the years as a result of progressive governmental plans, policies and strong regulations. From this background, the editors have selected the most useful theme for the second volume of an edited book, titled "Financial Sector in Oman: Developments, Issues, and Prospects."

This edited book draws substantially on the experience of Omani financial sector developments in recent times. All fifteen chapters, under seven main themes, are highly relevant and contemporary to the present context.

I take this opportunity to appreciate the considerable effort of the editors and contributors of this book for sharing their scholarly thoughts. I am sure that the book will serve as an authoritative source of information on financial sector developments, emerging issues and future directions, as well as being a comprehensive reference publication for regulators, policy and decision makers, students and researchers.

I would like to acknowledge and thank the College of Banking and Financial Studies for taking the initiative to generate and transfer the new body of knowledge related to the financial sector in Oman. Such initiative will certainly help in effective planning and developing prudent strategies for various stakeholders. I certainly hope that the insightful ideas of this book will receive widespread acceptance in the community. This is the best way to bring collaboration between academia and industry.

I look forward to seeing many more such scholarly publications by the College in the near future.

Abdulrahman Ibrahim Al Balushi

Chairman of CBFS Board of Directors, and
Vice President for Corporate Services at Central Bank of Oman

PREFACE

The financial sector is the lifeline of economic growth of a nation. It creates prosperity that can be shared throughout society. Financial institutions, markets, instruments and regulatory bodies are the four important constituents of financial sectors. A solid and well-functioning financial sector is a powerful engine behind economic growth. In this background, there is a need to understand market dynamics in this fast changing economic scenario. In this book, an attempt has been made by the editors to bring together contributions, in the form of chapters, from both academics and practitioners in the financial sector.

The book aims to explicitly expound achievements, strategic issues, challenges and changing scenarios in the financial sector in Oman. The book has been classified into seven main themes, namely, macro economy, financial markets and instruments, financial institutions and intermediaries, financial sector regulations, behavioural finance, information technology and business intelligence, and human resources. The book consists of fifteen insightful scientific papers under the main themes. These papers were selected after a double blind review process. The chapters are authored by twenty-six scholars and practitioners across the globe. We certainly hope that this book contributes to business education by means of research, critical and theoretical reviews of issues in the financial sector in Oman. The chapters of the book have been indexed by EBSCO host research database and are available for open access from the College website.

The College of Banking and Financial Studies as part of its strategic goal, promotes research and encourages scholarly activities at the College. The College successfully launched the first volume of an edited book on the banking sector in Oman, in 2017, under its knowledge transfer initiative. The first volume has evoked positive response from both academia and industry. This is the second volume published by the College, with a theme of the financial sector in Oman. In this volume we have tried to cover various emerging issues like FDI, Public Debt, Islamic Finance, NBFC, Insurance, SMEs, Social Entrepreneurship, Banking Law, Euro Issues, Investors Behaviour, FINTECH, Cloud Computing, Business Intelligence and HR in the Financial Sector. The new body of knowledge introduced and developed by the authors in these chapters will certainly help to address some critical issues in the financial sector in Oman.

We express our heartfelt gratitude to all the authors for sharing their invaluable thoughts by way of chapters in this edited book. We also extend our thanks to all the reviewers of the chapters of the book for their constructive feedback and to all those who have given their support in bringing this project to fruition. We hope the scholarly contributions of this book enrich your knowledge and ideas of the Omani financial sector.

The Editors

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Chapter 1

DECIPHERING THE NEED FOR EURO ISSUES: LESSONS FROM OMAN

Tamanna Dalwai and Syeeda Shafiya Mohammadi

ABSTRACT

Recently Oman's commercial banks have resorted to issuing foreign currency borrowings in the form of euro issues. This has led to investments in bonds from diverse foreign investors. The foreign currency borrowings thereby change the dynamics of the capital structure which includes equity, debt and further debt in the form of foreign currency borrowings. Banks are in nature highly leveraged firms and investors require maximum returns. Thereby, the motivations of issuing euro issues should be known to benefit the stakeholders. Trade-off theory and pecking order theory are two major capital structure theories that have been widely discussed in the existing literature. Several studies have carried out investigations to provide empirical evidence in favor of the theories. The two-fold objectives of this chapter are to examine the merits and demerits associated to foreign currency borrowing and investigate the determinants of leverage at commercial banks of Oman in light of the two theories. Data was collected for a period of five years, from 2012 to 2016 and analysed through ordinary least squares regression. This study provides no evidence in support of the two theories. However, a negative relationship between size and leverage extends some support to the pecking order theory.

Keywords: *Euro Issues, Trade-Off theory, Pecking Order theory, Leverage, Profitability*

1. INTRODUCTION

In 2016, Bank Muscat issued a \$500 million, five-year Euro Medium Term Note (EMTN) which was over-subscribed by almost three times (Times of Oman, 2016). Similarly, National Bank of Oman issued a \$600 million, five-year Euro Medium Term Note issued under tap. Under a tap, the bank issued \$500 million in October 2014, and another \$100 million in 2016 (Oman Tribune, 2016). This form of debt, also termed as foreign currency borrowing, attracted a diverse range of investors from Europe, Asia, the Middle East and North Africa (MENA) region. The trend also continues internationally. More recently, on 10th May 2017, General Electric issued the largest euro bond issue, worth \$8.7 billion (Vossos, 2017). There have been several international players such as Groenje (Slovenia white goods company), Kelloggs Co. (US breakfast cereal company), Repsol SA (Spanish Oil company) and others who have entered the euro bond issues market. So why do corporations resort to foreign currency borrowing as part of the capital structure?

Recent years have seen tremendous increase in international bond issues (Guscina et al., 2014). This trend has been as a result of demand and supply factors. Guscina et al., (2014) discusses the main reason for issuing international bond issues as the need for resources which were not easily available in local markets. International bonds are an attractive financing option as they satisfy the significant development needs, fund budgets, or provide the flexibility to borrow at non-concessional terms.

Corporations seek a capital structure that maximizes firm value, which in turn would lead to accessing various forms of external financing that includes issuing equity or debt. A debt issue requires commitment to pay interest and principal, irrespective of the profits it generates. A debt does not dilute a shareholder's ownership interest and its related interest helps to lower taxation. An equity issue dilutes share ownership, control and earnings but is relatively less risky than debt. The cost of equity is higher than the cost of debt. Trade-off theory and pecking order theory are two popular capital structure theories that are widely researched. Pecking order theory suggests that firms finance new investments, first by undistributed earnings, low risks debt and lastly, resort to equity (Myers and Majluf, 1984). This hierarchy is largely the result of information asymmetry between the firm and potential investors, which may lead to rejection of profitable investment opportunities due to the costs associated with external financing. Trade-off theory, on the other hand, is the optimal capital structure that is reached through the trading off of costs and benefits associated with debt and equity (Myers, 1984). The benefits derived by the tax shield are off-set by the financial distress costs, thereby leading to an optimal capital structure.

Hence, in light of the recent euro issues phenomenon observed in some of the local commercial banks of Oman and the theoretical foundations underpinning the capital structure, this chapter sets out to investigate two major objectives. The first aim is to examine the advantages and disadvantage associated with foreign currency bonds issue. The second aim is to empirically investigate the determinants of leverage in Oman's commercial banks. The chapter is organized as follows: section 2 discusses the definition and types of euro issues; section 3 presents the advantages and disadvantages of euro issues; section 4 presents the theories and related literature to capital structure; section 5 highlights the methodology used for the second objective of this study; section 6 discusses the results and lastly, section 7 provides the conclusion and future recommendations of the chapter.

2. DEFINITION AND TYPES OF EURO ISSUES / EUROBOND

This section provides an insight into the understanding of euro issues. What is understood by the term Euro Issue? Euro Issue is generally an inaccurate name and often builds confusion. From the word, one would think either about the European stock markets or the European currency, the euro. However, Euro Issue does not relate to Europe or euro currency. The term "Euro" classifies and refers to the worldwide issue of the bonds. Therefore, euro issues or euro bonds are consequently, bonds that are issued in foreign currency apart from the currency of the country where they are issued (Wehliye, 2014). Euro issue is an exchanging commodity (buying and selling) with a minimum maturity of 2 years. Commodities

are denominated in foreign currency, more often in U.S. dollars and are recorded on trades outside the country of origin.

The most general resources of funds that are utilized under Euro issues are American Depository Receipts (ADR), Global Depository Receipts (GDR), and Foreign Currency Convertible Bonds (FCCB) among others (Efinancemanagement, 2013). In the case of Global Depository Receipts, the organizations are authorized to issue equity shares and organizations may keep them in the custody of provincial custodian. However, upon direction from a provincial custodian bank, an overseas depository bank issues securities in the nature of GDR for the overseas market towards shares kept under local custodian bank.

GDRs can be traded in numerous share markets that are referred to as Capital markets which are regarded for negotiable certificates (Investopedia, 2017). American depository receipt (ADR's) commonly trades in the U.S and represents a specified number of shares in a foreign agency. Just as with normal stock, buying and selling of ADR's stocks are traded in American markets, and are issued/sponsored within the U.S. by means of a bank or a brokerage. Non-U.S. organizations additionally benefit from ADRs as it makes it simpler to attract American investors. An ADR holder does not require transacting in foreign currencies because ADRs trade in U.S. dollars and are recognized by means of U.S. Settlement structures (Shriber, 2017). The shares of maximum overseas organizations that trade inside the U.S. markets are traded as American Depository Receipts (ADRs). These stocks are issued by U.S depository banks (Securities Exchange Commission, 2007).

Foreign currency convertible bonds (FCCBs) are a special category of bonds. FCCBs maintain all features of a convertible bond, making it very attractive to both the investors and the issuers. These bonds are issued in a currency other than the issuer's local currency, mostly in foreign currency. A convertible bond is a mix between debts and an equity instrument. It acts like a bond by making consistent coupon and major installments. However, it offers an option to convert such bonds into equity shares either by the company or foreign investor (KP, 2015).

3. ADVANTAGES AND DISADVANTAGES OF EURO ISSUES

This section provides the advantages and disadvantages related to foreign currency borrowings that provide support for the first objective of this study. The advantage of euro issues are discussed as follows (Efinancemanagement, 2013):

- i. Euro issue operates in the cheapest source of foreign currency funds for the organization, excluding risks in exchange particularly for organizations that have outside money receivables.
- ii. Euro issues provide a bigger market and global access to reserves and may prompt simple, bigger volume financing, which might be complicated from local sources. It offers and creates numerous new opportunities for the organizations in new markets.
- iii. Organizations increase global introduction and can improve liquidity for its shares.

- iv. Euro bonds will quicken financial development, diminish destitution and would be useful for the nation's economy if the acquired assets are spent on infrastructure projects that offer a more prominent degree for income expansion and job openings.
- v. Euro issues benefits in lower coupon rates with longer maturities.
- vi. It helps to gain higher returns on investments and provide a competitive advantage in interest rates.
- vii. It is a way for companies to obtain financing in an economy where financing is hard to obtain. Issuing Euro bonds gives companies wider access to the international market which they may normally not be able to access (Wehliye, 2014).

The disadvantages related to Euro Issues are discussed below (Efinancemanagement, 2013):

- i. Although euro issues are typically accessible at lower costs, organizations which do not have sufficient receivables may run cash trade chance and perhaps need to bring about supporting costs, which may end up being higher than the cost saved.
- ii. Not all organizations can benefit funds by means of euro issues.
- iii. Organizations may need to dilute their stake if their issues are equity or convertible bonds.
- iv. Although it is possible to get the full advantages of these bond issues, it will depend upon how the Government uses the returns of the bond. There is a constant risk that these bonds continue to pay for unaccounted items (Wehliye, 2014).

4. THEORIES RELATED TO CAPITAL STRUCTURE AND EXISTING LITERATURE

This section highlights the major theories related to capital structure and the various empirical researches that are conducted to support the same. The evolution of capital structure theories first commenced with the optimal capital structure theory by Modigliani and Miller in 1958. Under the assumption of an efficient capital market, the capital structure is irrelevant to firm value. The use of debt or equity in the capital structure of a company does not affect the profitability of the firm, assuming that there are no transaction costs, no taxes and individuals can borrow at the same rate as corporations (Modigliani and Miller, 1958). Thus, the value of a levered firm is the same as an unlevered firm. In 1963, the authors proposed a new version of the theory as a response to the criticism of the irrelevant theory. The modified theory assumed that with taxes, leverage can help reduce tax payments, thus creating more value for the firm (Modigliani and Miller, 1963). Companies will then benefit through tax shields offered, by taking more debt in the capital structure rather than internal capital. The revised theory was unrealistic and also discarded as debt financing is considered conditional on the presence of certain equity limitations (Baxter, 1967) and in practice empirical evidence supported that debt is only a fraction of the total firm value (Kim, 1978).

Baxter (1967) suggested that the missing element in the Modigliani and Miller framework was the bankruptcy risk, which is a consequence of debt financing. Bankruptcy

costs include liquidation and financial distress costs that would reduce the firm value. Thus, trade off theory argues that a levered firm will reach maximum firm value when the gain from tax shield is offset by the cost of financial distress (Myers, 2001).

In contrast to the trade-off theory, Donaldson (1961) postulated the pecking order theory later confirmed by (Myers and Majluf, (1984), according to which, a firm's decision on financing is based on a choice of order of capital. Due to information asymmetries, the firm would first finance through retained earnings, followed by short-term debt to long-term debt, then by debt over equity.

The pecking order theory implies a negative relationship between profitability and leverage, as highly profitable firms are expected to use less debt as compared to those that are not so profitable (Vasiliou et al., 2009). Existing literature has extended mixed results in favor or against the pecking order theory. In support of the theory, a significant negative relationship was found between debt/asset ratio and profitability (Kester, 1986; Friend and Lang, 1988). Similarly, the studies by Rajan and Zingales (1995) and Wald (1999) were extended to the markets of the USA, UK and Japan; this, too, suggested a significant negative relationship between profitability and debt/asset ratio. An inverse relationship was also confirmed in Greece by Vasiliou et. al. (2005), in Pakistan by Qureshi (2009) and in China by Tong and Green (2005). Some of the extant literature also finds no support for the pecking order theory (Brennan, and Kraus, 1987; Vilasuso and Minkler, 2001).

The trade-off theory was tested and found to be applicable in some of the extant literature, due to the positive relationship exhibited between leverage and profitability (Allen, 1993; Ravid and Sarig, 1991; Blazenko, 1987; Baskin, 1989; Ross, 1977). Fama and French (2002) concluded that both the pecking order theory and trade off theory have different implications. The trade off theory was proven through large equity issues by low leverage firms, and the pecking order theory by the result of the negative relationship between profitability and leverage. Similarly, Graham and Harvey, (2001) concluded consistence with both theories, based on the survey results of US Chief Officers.

5. METHODOLOGY

Section 5 of this chapter presents the methodology used in the empirical analysis of determinants of leverage related to the second objective. This section has two sub-sections that discuss: sampling and data collection; model specification and data specification.

5.1 SAMPLE AND COLLECTION OF DATA

The sample for this study includes seven local commercial banks from Oman: Bank Muscat, National Bank of Oman, Oman Arab Bank, Bank Sohar, HSBC Oman, Bank Dhofar and Ahli Bank. The study of the banking sector is consistent with other research (Jouida and Hallara, 2015; Gropp and Heider, 2010). Data was collected for a five year period as advocated by previous literature (Bhagat and Bolton, 2008; Yermack, 1996), from 2012 to 2016, which includes 35 firm year observations. The information for the variables is mainly extracted from

the annual reports available on the bank websites. All financial variables are converted to US dollars and book values are used. Balanced panel data is observed in the research, which provides the advantages of degree of freedom, informative data, and reduced collinearity among variables (Gujarati, 2003).

The relationship between leverage, profitability, size and growth is tested using multivariate regression. The data is analysed using pooled ordinary least squares regression (OLS) processed through the statistical package of STATA 11.

5.2 MODEL SPECIFICATION AND DEFINITION OF VARIABLES

This research adopts the model used by (Qureshi, (2009); Tong and Green, (2005). The following equation is regressed to test trade-off versus the pecking order theory:

$$\text{Leverage}_{ti} = a_1 + a_2 \text{ROA}_{(t)i} + a_3 \text{ROA}_{(t-1)i} + a_4 \text{Size}_{(t-1)i} + a_5 \text{Growth}_{(t)i} + \varepsilon$$

Where,

Leverage _{ti} =	Leverage of bank <i>i</i> at the end of year <i>t</i>
ROA _{(t)i} =	Return on Assets of bank <i>i</i> at the end of year <i>t</i>
ROA _{(t-1)i} =	Return on Assets of bank <i>i</i> at the end of year <i>t-1</i>
Size _{(t-1)i} =	Size of bank <i>i</i> at the end of year <i>t-1</i>
Growth _{(t)i} =	Growth rate of bank <i>i</i> during year <i>t</i>
ε =	Error term

The definition of variables as prescribed in existing literature and used in the current study is presented in Table 1 below:

Table 1: Definition of variables used in this study

Variable	Formula	Related literature
Leverage	Total Liabilities/ Total Assets	Ramadan and Ramadan (2015); Black et al., (2014); Hillier et. al. (2013); Qureshi (2009); Tong and Green (2005); Rajan and Zingales (1995)
ROA	Profit from operations/ Total Assets	Rouf (2015); Qureshi (2009); Tong and Green (2005)
Size	Log (total invested capital at the year-end)	Qureshi (2009); Tong and Green (2005)
Growth	Total Assets in year (t)/ Total assets in year (t-1)	Qureshi (2009); Tong and Green (2005)

Source: Prepared by the Authors

Fama and French (2002) advocated that common variables are used to determine leverage under the pecking order and trade-off theories. Under trade-off theory, leverage and profitability reflect a positive relationship. This theory argues that firms with low

profitability have low shareholder returns, thereby an increase in leverage poses bankruptcy risk and cost of borrowing, which further reduces the shareholder returns. If such a firm is given an opportunity of a positive NPV investment they would not resort to external finance, especially leverage. In contrast, under the pecking order theory, leverage and profitability exhibit a negative relationship. Thus, a firm with low profitability but with an opportunity of a positive NPV investment would first resort to internal finance, followed by external funds if there is shortage.

Control variables used in this study include firm size and growth. Trade-off theory proposes a positive relationship between firm size and leverage. It is argued that agency cost of debt will be lower for large firms due to the economies of scale in bankruptcy (Bradbury and Lloyd, 1994). Rajan and Zingales (1995), however, suggest that larger firm are complex in nature, thereby reflecting higher cost of information asymmetries and creating hindrances in raising external finance. Therefore, the pecking order theory reflects a negative relationship between firm size and leverage. Growth rate is associated with higher bankruptcy risk, resulting in a negative relationship with leverage suggested by trade-off theory and the inverse by the pecking order theory (Baskin, 1989).

6. EMPIRICAL RESULTS

This section discusses empirical results derived from the STATA software for the second objective of the study. The descriptive statistics are presented in Table 2. The mean of the dependent variable leverage is at 0.863 for the commercial banks of Oman. Leverage is minimum 0.825 and max 0.916 thereby having less variation as observed by the standard deviation. This also further suggests that banks are highly leveraged firms as compared to other non-financial firms (Ingves, 2014). The profitability measure of ROA reflects a mean of 1.4 percent. This is comparable to its neighboring country, the UAE, average of 1.5 percent (Central Bank of UAE, 2015) and to the GCC average of 1.4 percent (UAE Banks Federation, 2017). The growth and size have a mean score of 1.15 and 5.94 respectively and also exhibit wide variation between the minimum and maximum values.

Table 2: Descriptive Analysis

Variable	Obs	Mean	Std. Dev.	Min	Max
Leverage	35	.863	.022	.825	.916
ROA _t	35	.014	.005	.003	.022
ROA _(t-1)	35	.014	.005	.003	.022
Growth	35	1.15	.252	.863	2.49
Size	35	5.94	.277	5.57	6.60

Source: Prepared by the Authors

Pairwise correlation between variables is presented in Table 3. A negative correlation is exhibited between leverage and ROA but this is not significant. Similarly, growth and lagged ROA have a positive and negative insignificant correlation respectively with leverage. Leverage and size exhibit a strong and significant negative correlation. This seems more consistent with the pecking order theory, which states that large sized firms have information asymmetries, making it difficult to raise external finance.

Table 3: Pairwise Correlation

Variables	Leverage	ROA _t	Growth	Size	ROA _(t-1)
Leverage	1.000				
ROA_t	-0.283 (0.099)	1.000			
Growth	0.212 (0.222)	-0.206 (0.236)	1.000		
Size	-0.651* (0.000)	0.133 (0.446)	-0.116 (0.508)	1.000	
ROA_(t-1)	-0.198 (0.254)	0.649* (0.000)	0.237 (0.169)	0.135 (0.439)	1.000

*Significance of pvalue at: *1%, **5%, ***10% respectively. Detailed definitions of measurement methods given in section 5.2*

Source: Prepared by the Authors

Table 4: Regression Analysis for model on determinants of leverage

Variable	Leverage	
	1	2
constant	1.146*** (-17.31)	1.138*** (-17.58)
ROA_t	-0.594 (-0.70)	-
ROA_(t-1)	-0.233 (-0.27)	-0.674 (-1.16)
Growth	0.0108 -0.8	0.0155 -1.31
Size	-0.0479*** (-4.51)	-0.0477*** (-4.54)
N	35	35

R-squared	0.4741	0.4655
F-Statistics	6.76	9
Heteroskedasticity	18.56	13.31
Skewness	7.42	5.98
Kurtosis	0.13	0.01
<i>Significance of pvalue at:***1%, **5%, *10% respectively. Detailed definitions of measurement methods given in section 5.2. N= Number of observations</i>		

Source: Prepared by the Authors

The regression analysis for determinants of leverage model is presented in Table 4. Prior to running the regression analysis, all the assumptions were verified. There was no collinearity issue observed through the multicollinearity test, as the VIF score was below 10 for all the variables (Gujarati, 2003). Results are not displayed, for the purpose of brevity. The assumption on homoscedasticity is also met as the test on heteroskedasticity is insignificant and rejected. This is reflected in Table 4. The model suffers from non-normality, as reflected by the Shapiro-Wilk normality of residuals test (not shown, for the purpose of brevity). The model has no omitted variables, as observed through the ovtest. As most of the assumptions are successfully met, the ordinary least squares pooled regression is performed for determinants of leverage.

As can be seen in Table 4, the model explains more than 47 percent of variation in leverage. Current and lagged ROA has a negative but insignificant relationship with leverage. This finding is inconsistent with the results reported by previous literature (Qureshi, 2009; Tong and Green, 2005). Growth has a positive but insignificant relationship with leverage. Size is the only variable that has a negative and shows significant relationship with leverage, which is consistent for some of the sectors observed in the research by Qureshi (2009). This finding is consistent with the prediction of the pecking order theory. Overall, it might be concluded with the results that except for size, profitability or growth are not considered as determinants of leverage. There is no empirical evidence to suggest consistency with trade-off or pecking order theories as found in extant literature (Qureshi, 2009; Tong and Green, 2005, Fama and French, 2002). The subsequent section presents the overall conclusion for this chapter.

7. CONCLUSION

This final conclusion of the chapter is presented in this section. This chapter investigated two major objectives related to examining the merits and demerits of issuing foreign currency borrowings and empirically finding the determinants of leverage for the commercial banks of Oman. The trade-off theory and pecking order theory were the premise on which the empirical objective was investigated for the capital structure. The trade-off theory argues that a firm with debt in its capital structure has maximum value when the benefits of tax shield are offset with the associated bankruptcy costs. The pecking order theory only suggests the

order in which finance is procured or invested, whereby internal source of finance is followed by debt and then equity issue is used.

Recently, commercial banks in Oman have gained access to funds in foreign markets through the euro issues. This kind of foreign currency borrowing may take the form of American Depository Receipts (ADR), Global Depository Receipts (GDR), and Foreign Currency Convertible Bonds (FCCB). Borrowing through euro issues provides the advantages of greater accessibility to global markets, liquidity of shares, higher returns on investment, lower coupon rates and longer maturities. They do, however, come with certain challenges of not necessarily being able to reduce costs, dilution of stake or not being accessible as an option for companies that do not meet the regulatory requirements.

This study also provides evidence on bank size being a determinant for leverage. Size has exhibited a negative relationship with leverage, suggesting consistency with the pecking order theory. Profitability and growth have no significant relationship with leverage. The results of this objective are inconsistent with the findings of Qureshi (2009) and Tong and Green (2005), who were able to argue in favor of the pecking order theory. Thus, analysis of the commercial of banks in Oman sheds no light on the empirical debate of trade off versus pecking order theories.

The research suffers from the limitation of only including a few commercial banks and one country. Future study can be extended to more firm years, include all banks within Oman and also the GCC region. The study can further differentiate between determinants of domestic and foreign currency borrowing.

REFERENCES

- Allen, D. E. (1993). The pecking order hypothesis: Australian evidence. *Applied Financial Economics* , 3, 101-112.
- Baskin, J. B. (1989). An empirical investigation of the pecking order hypothesis. *Financial Management* , 18, 26-35.
- Baxter, N. (1967). Leverage, Risk of Ruin and the Cost of Capital. *The Journal of Finance* , 22 (3), 393-403.
- Bhagat, S. A. (2008). Corporate Governance And Firm Performance. *Journal of Corporate Finance* , 14 (3), 257-273.
- Black, B. D. (2014). Methods for multicountry studies of corporate governance: Evidence from the BRIKT countries. *Journal of Econometrics* , 183, 230-240.
- Blazenko, G. W. (1987). Managerial preference, asymmetric information, and financial structure. *Journal of Finance* , 42, 839-862.
- Bradbury, M. A. (1994). An estimate of the direct costs of bankruptcy in New Zealand. *Asia-Pacific Journal of Management* , 11, 103-111.

- BRENNAN, M. A. (1987). Efficient financing under asymmetric information. *Journal of Finance*, 42, 1222-1243.
- Central Bank of UAE. (2015). Financial Stability Report 2015. Retrieved 06 29, 2017, from Central Bank of UAE:
<https://www.centralbank.ae/pdf/reports/FinancialStabilityReport2015.pdf>
- Donaldson, G. (1961). Corporate debt capacity: a study of corporate debt capacity. Division of Research, Harvard School of Business Administration, Boston.
- eFinance Management. (2013, 07). Euro Issues. Retrieved 06 25, 2017, from eFinanceManagement: <http://www.goodreturns.in/classroom/2013/07/what-are-foreign-currency-convertib-191192.html>
- Fama, E. F. (2002). Testing trade-off and pecking order predictions about dividends and debt. *Review of Financial Studies*, 15, 1-33.
- Friend, I. A. (1988). An empirical test of the impact of managerial self-interest on corporate capital structure. *Journal of Finance*, 43, 271-281.
- Graham, J. R. (2001). The theory and practise of corporate finance: evidence from the field. *Journal of Financial Economics*, 60, 187-243.
- Gropp, R. A. (2010). The Determinants of Bank Capital Structure. *Review of Finance*, 14 (4), 587-622.
- Gujarati, D. (2003). *Basic Econometrics*, 5th Edition. New York: McGraw Hill/Irwin.
- Guscina, A. P. (2014). First-Time International Bond Issuance—New Opportunities and Emerging Risks. International Monetary Fund, Washington, United States of America.
- Hillier, D. R. (2013). *Corporate Finance (Second European Edition ed.)*. McGraw-Hill.
- Ingves, S. (2014, 02 25-27). Banking on Leverage. Retrieved 06 30, 2017, from Bank for International Settlements: <http://www.bis.org/speeches/sp140226.htm>
- Investopedia. (2017). Global Depositary Receipt - GDR. Retrieved March 25, 2017, from Investopedia: <http://www.investopedia.com/terms/g/gdr.asp>
- Jouida, S. A. (2015). Capital structure and regulatory capital of French banks. 4th World Conference on Business, Economics and Management, WCBEM. 26, pp. 892-902. *Procedia Economics and Finance*.
- Kester, W. (1986). Capital and ownership structure: a comparison of United States and Japanese manufacturing corporations. *Financial Management*, 15, 5-16.
- Kim, E. (1978). A Mean-Variance Theory of optimal Capital Structure and Corporate Debt Capacity. *The Journal of Finance*, 33 (1), 45-63.
- KP, S. (2015). What are Foreign Currency Convertible Bonds (FCCBs)? Retrieved 06 24, 2017, from My investment ideas: <https://myinvestmentideas.com/2015/09/what-are-foreign-currency-convertible-bonds-fcbs/>

- Modigliani, F. A. (1963). Corporate income taxes and the cost of capital: a correction. *The American Economic Review* , 53, 433-443.
- Modigliani, F. A. (1958). *The Cost of Capital, Corporation Finance and the Theory of Investment*. *The American Economic Review* , 48, 261-297.
- Myers, C. S. (2001). Capital Structure. *Journal of Economic Perspectives* , 15 (2), 81-102.
- Myers, S. C. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics* , 13, 187-221.
- Myers, S. C. (1984). The Capital Structure Puzzle. *Journal of Finance* , 39, 575-592.
- Oman Tribune. (2016, 11 08). NBO holds talks with banks for new bond issue. Retrieved 05 22, 2017, from Oman Tribune: <http://omantribune.com/details/17675/>
- Qureshi, M. A. (2009). Does pecking order theory explain leverage behaviour in Pakistan? *Applied Financial Economics* , 19 (17), 1365-1370.
- Rajan, R. A. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance* , 50, 1421-60.

Chapter 2

INTERNATIONAL PRACTICES AND SITUATING PUBLIC DEBT MANAGEMENT IN OMAN

Bilal Ahmad Pandow

ABSTRACT

A significant amount of work is being undertaken globally on the measurements of public sector debt to enhance its sustainability. Although adoption of standards is likely to take time, a few applications are gradually being accepted internationally. In this chapter an attempt has been made to measure the sustainability of Oman's public debt and provide a framework based on international practices, to review and propose policy options for the Central Bank of Oman (CBO) and Ministry of Finance (MOF). The Financial Affairs Council (FAC) and the MOF are the two apex authorities responsible for all financial matters in Oman. The FAC is composed of the MOF and representatives from the CBO and the Capital Market Authority (CMA). The MOF proposes financial policies to the FAC related to regulations for adoption and also monitors their implementation. Also, the MOF has authority to borrow on behalf of the Government and keep records of the government's financial transactions. Specifications such as the purpose and limits of borrowing and objectives of debt management strategy are not spelled out clearly and the reporting of debt management activities is not mandated. In addition, there is no Public Debt Act in Oman. The main objective of this paper is to analyze the global scenario of and solutions for public debt management, current challenges and debt market development in order to identify relevant policy options for the authorities in the Sultanate of Oman.

Keywords: *Public debt management, Central Bank of Oman, Primary market, Debt to GDP ratio*

1. INTRODUCTION

Oman is classified by the World Bank as an upper middle income developing country, with, in 2015, a GDP of U.S. \$16,910 per capita on a nominal basis. The IMF projects that Oman's nominal GDP per capita on a PPP basis will be U.S. \$44,470 in 2017. The production and export of crude oil and natural gas is the principal activity of the Omani economy, contributing 28.2 percent of nominal GDP in the first nine months of 2016 and 36 percent of nominal GDP in 2015. As such, the performance of the petroleum industry may directly affect industries that are tangential to, or reliant on, the petroleum industry, as well as having more indirect effects on the economy as a whole, such as reductions in consumer purchasing power or mobility. In addition, petroleum activities are the principal source of government revenues (approximately 74.3 percent of total government revenues in 2016) and, therefore, indirectly affect the performance of the non-oil sectors of the economy through their effect

on Government allocation of its expenditure in those sectors. As a result, fluctuations in the price of oil are the major contributing factor to Oman's economic performance. The economy's vulnerability to oil price movements as well as the finite nature of oil reserves have led the Government of Oman to exploit significant gas reserves, to promote investment in the non-oil and gas sectors of the economy.

When the income of a government is insufficient to meet its expenses, the government of that country borrows money either within the country or abroad and such borrowing creates public debt. The public debt is different from private debt as it consists of the obligations of individuals, business firms, and nongovernmental organizations. Obligations of governments, particularly those evidenced by securities, are to pay certain sums to the holders at some future time.

The debt owed by national governments is usually referred to as the national debt and is thus eminent from the public debt of state and local government bodies. In the United States, bonds issued by the states and local governments are known as municipals. In the United Kingdom, debt or loans incurred by local authorities are referred to as corporation, or county, loans, thus distinguishing them from central government debt, which is frequently referred to simply as funds. In the past, paper money was frequently regarded in the United States as a portion of the public debt, but in more recent years, money has been regarded as a distinct type of obligation, in part because paper money is usually no longer payable in gold, silver, or other specific items of intrinsic value.

Public debt is an obligation of a government; and, although individuals are called upon in their capacity as taxpayers to provide funds for payment of interest and principal on the debt, their own property cannot be attached to meet the obligations if the government fails to do so. Similarly, government property normally cannot be seized to meet these obligations. With sovereign governments, the debt holders can take only such legal action to enforce payment as the governments themselves prescribe.

1. Forms of public debt can be classified in a number of different ways
2. Maturity: as short term or long term
3. Issuer: Direct obligations, contingent obligations, or revenue obligation
4. Location of the debt: Internal or external
5. Marketability: Negotiable securities (marketable) or nonnegotiable securities.

2. SIGNIFICANCE OF PUBLIC DEBT MANAGEMENT

Public debt management is the process of establishing and executing a strategy for managing the government's debt in order to raise the required amount of funding, pursuing its cost and risk objectives, and meeting any other public debt management goals the government may have set, such as developing and maintaining an efficient and liquid market for government securities.

Each government faces a strategy concerning debt management objectives, its preferred risk tolerance and how to establish sound governance for public debt management. On many of these issues, there is increasing convergence in the global debt management community on what are considered prudent sovereign debt management practices that can also reduce vulnerability to contagion and financial shocks.

These include:

1. Clear objectives for debt management
2. Evaluation of risks against cost considerations
3. Separation and coordination of debt and monetary management objectives and accountabilities
4. Limit on debt expansion
5. Development of a sound institutional structure and policies for reducing risk, clear delegation of responsibilities and associated accountabilities among government agencies involved in debt management

The size and complexity of a government's debt portfolio can often generate substantial risk to the government's balance sheet and to the country's financial stability. Sound debt structures help governments reduce their exposure to interest rate, currency and other risks.

Developing the market for government securities can also help to stimulate the development of domestic markets for private securities. For example, in Japan the development of the secondary market for government securities is considered to be an important objective for debt management because this market, by virtue of being low credit risk, serves as the foundation for domestic financial markets, and is by far the most actively traded segment of the domestic bond and debenture market.

In all of the countries studied, the legal authority to borrow in the name of the central government rests with the parliament or congressional legislative body. However, practices differ with respect to the delegation of borrowing power from the parliament to debt managers. In most of the countries, legislation has been enacted authorizing the Ministry of Finance to borrow on behalf of the government. In some others, that power has been delegated to the Council of Ministers (the Cabinet), and in case of India, power lies directly with the central bank. Whether the delegation is to the Council of Ministers, the Ministry, or Minister of Finance, seems to be more of a formality that recognizes country conventions regarding the decision making within the government than a practical matter.

Another example of a legislative debt ceiling is the one used by Poland. Poland has inserted into its constitution a requirement that total government debt, augmented by the amount of anticipated disbursements on guarantees, is not allowed to exceed 60 percent of GDP; the debt limit stipulated by the Maastricht treaty. Denmark and the U.S. are examples of other countries that also have legislative limits on the stock of debt outstanding.

Four countries (Ireland, Portugal, Sweden, and the U.K.), all highly developed and with well-functioning domestic capital markets, have created separate debt agencies for the

management of the central government debt. However, in other countries there are ongoing discussions about the merits of such an agency. One argument, which is often mentioned in favor of a separate agency, is that it provides for more focused debt management policy, in part because there is a top management whose main responsibility is debt management, not fiscal or monetary policy, and thus has the time to focus on debt management issues. When debt management is part of the Ministry of Finance or central bank, there is a risk that debt management policy could be a secondary consideration. This focus fosters professionalism and gives debt management staff attention from top management. However, as noted by some countries at the Outreach conference, if one goes down this path, the introduction of a separate debt agency should be accompanied by strong internal governance, accountability, and transparency mechanisms to ensure that the agency performs as expected, and is held accountable for its decisions.

In particular, the debt manager should carefully assess and manage the risks associated with foreign currency and short-term or floating-rate debt, and ensure there is sufficient access to cash to avoid the risk of not being able to honor financial obligations when they fall due.

Besides, the US and other major nations now run record budget deficits, which are likely to continue for decades to come, amid rising public leverage ratios approaching levels last seen in World War II; which according to Salsman, (2017) is a matter of grave concern, with the need for a re-examining of the public debt history, theory and practice.

3. LITERATURE REVIEW

In a study by Chiu and Lee (2017) the results show evidence of the different debt-growth nexus under the different degrees of country risk. Under a high-risk environment, a country's economic growth is harmed by raising its public debt. The negative effects public debt has on economic growth become weak under low political and financial-risk environments, while an increase in public debt could help to stimulate economic growth under low composite and economic risk environments.

It has also been shown by the research by Debortoli, Nunes and Yared (2017) how the optimal time-consistent maturity structure is nearly flat because reducing average borrowing costs is quantitatively more important for welfare than reducing fiscal policy volatility. Thus, under lack of commitment, the government actively manages its debt positions and can approximate optimal policy by confining its debt instruments to consoles.

There are also studies conducted on how institution quality, through the international governance index, impacts pilling of public debt in seventeen states of the Middle East and North African region. The results have shown that three governance indicators impact the public debt of the region. These are political stability and absence of violence index, regulatory quality index and rule of law index (Tarek and Ahmed, 2017).

The positive response of the primary surplus to changes in debt also shows that the U. S. fiscal policy is satisfying an intertemporal budget constraint (Bohn, 1998); while the

relationship between public debt and GDP growth varies significantly by period and country (Herndon *et al.*, 2014).

Also, there is some evidence of nonlinearity with higher levels of initial debt having a proportionately larger negative effect on subsequent growth. Analysis of the components of growth suggests that the adverse effect largely reflects a slowdown in labor productivity growth, mainly due to reduced investment and slower growth of capital stock (Kumar and Woo, 2010).

The panel of 16 OECD countries has, over several decades, investigated the effects of government debts and deficits on long-term interest rates. In simple static specifications, a one-percentage-point increase in the primary deficit relative to GDP increases contemporaneous long-term interest rates by about 10 basis points. The effect of debt on interest rates is non-linear: only for countries with above-average levels of debt does an increase in debt affect the interest rate. World fiscal policy is also important: an increase in total OECD-government borrowing increases each country's interest rates. However, domestic fiscal policy continues to affect domestic interest rates even after controlling for worldwide debts and deficits (Ardagna, *et al.*, 2007).

There has also been a study conducted on the evolution of debt-to-GDP ratios across country groups for several decades, focusing on episodes of debt spikes and reversals, and a pattern of negative correlation between debt and growth (Abbas, 2010).

Since the start of the financial crisis, industrial countries' public debt levels have increased dramatically and are set to continue rising for the foreseeable future. A number of countries face the prospect of large and rising future costs related to the ageing of their populations. There are projections of public debt ratios that suggest the path pursued by fiscal authorities in a number of industrial countries is unsustainable. Drastic measures are necessary to check the rapid growth of current and future liabilities of governments and reduce their adverse consequences for long-term growth and monetary stability (Cecchetti, 2010).

A study by Jaimovich and Panizza (2010) found that industrial countries showed a clear trend, with debt increasing from 45% to 60% of GDP over the period under observation.

Additional findings by Panizza and Presbitero (2014) indicate that there is no evidence that public debt has a causal effect on economic growth. This is important, given that the negative correlation between debt and growth is sometimes used to justify policies that assume that debt has a negative causal effect on economic growth.

4. METHODOLOGY

The debt sustainability in this study was measured on the basis of Gross Domestic Product (GDP), export incomes, and fiscal revenue. In this study, the total debt of the government of Oman is also studied and analyzed. The following ratio is employed to assess the public debt situation in Oman.

- *Ratio of Public debt over GDP:* The debt over GDP ratio is the ratio between Oman's government debt and its gross domestic product. A low debt-to-GDP ratio indicates an economy that produces and sells goods and services sufficient to pay back debts without incurring further debt. The reason for using this ratio is that the GDP ratios allow the pointers to be tuned with the size of the economy
- *Ratio of Public debt over Exports:* The public debt to export ratio is used to calculate Oman's total amount of debt in comparison to its total amount of exports. This is an important way for countries like the Sultanate of Oman to measure their independent sustainability. The percentage will assist the country to determine its growth rate. Also, the export income ratios indicate whether the country can be projected to generate adequate foreign exchange to meet its external debt requirements in the future;
- *Ratio of Public debt over Revenue:* The public debt to revenue ratio calculated Oman's total amount of debt in comparison to its total fiscal revenue. The revenue ratios also measure the government's ability to muster domestic means to return debt.

In addition, the paper analyzes the domestic and external public debt position of Oman's government. The most applicable measure of repayment ability depends on the restrictions that are the most binding for a specific country. Ratios of debt stock relative to repayment capacity measures indicate the burden represented by the upcoming commitments of a country and thus reflect long-term risks to credit worthiness, while the time line of debt-service ratios indicates the probability and possible timing of fluidity problems.

5. SITUATING PUBLIC DEBT IN OMAN

In February 2016, SandP downgraded Oman's long-term foreign and local currency sovereign credit rating to BBB- from BBB+, with a stable outlook. Also, in May 2016, Moody's downgraded Oman's long-term issuer rating to Baa1 from A3, with a stable outlook.

Further, in a report by Moody's Investors Service (March 2017) Oman's Baa1 rating with a stable outlook reflected its high wealth levels and a still comparatively strong government balance sheet, when balanced against credit challenges, including its heavy reliance on the oil and gas sector.

In the report, A Moody's Senior Credit Officer, Steffen Dyck mentions, "Although we expect government debt to rise to 40% of GDP by 2018 from less than 5% at the start of the oil price shock, Oman's fiscal buffers will support the country through its process of fiscal and external adjustment."

For 2016-2020, Moody's forecasts real GDP growth in Oman of around 2.1% per year on average; which is significantly lower than the 3.8% average annual growth seen between 2011 and 2015. This forecast is based on Moody's expectation of only limited increases in oil

and gas production and the dampening effect from ongoing fiscal consolidation on non-oil real GDP growth.

Moody's expects Oman's 2017 fiscal deficit to narrow substantially to OMR3.1 billion (\$8.1 billion, 11.4% of GDP) from an estimated OMR5.0 billion (\$13.0 billion, 20.1% of GDP) in 2016, with fiscal deficits continuing to decline gradually over the following years.

While Gulf Cooperation Council (GCC) countries are well-positioned on average to withstand external payment pressures, Bahrain and Oman are more exposed, due to their low levels of foreign exchange reserves and large current account deficits, (Moody's Investors Service, 2017). A current account surplus of close to 18% of GDP on average across GCC countries from 2005-2014 shifted to a deficit of -3.4% in 2016, up from -0.6% in 2015.

In 2016, Oman had the highest current account deficit among GCC countries, which Moody's estimates at 20.1% of GDP, and the highest external breakeven oil price at \$78.4 per barrel, according to the International Monetary Fund (IMF). Bahrain and Saudi Arabia registered moderate current account deficits of around 3.3-3.4% of GDP, while Qatar's was much smaller at -0.5%, according to Moody's estimates.

The Central Bank of Oman in its Bi-Monthly Publication Special Issue mentions that preliminary calculations suggest that actual fiscal deficit for the fiscal year 2016 is expected to reach RO 5.3 billion, an increase of 60% of the deficit estimated in the budget, which is considered the highest deficit level in the history of the General Budget. The increase in deficit is caused by several factors, including decline in the actual achieved oil price (from \$45 estimated in the budget to the actual \$39), and a decrease in the achievement of a number of articles of non-oil revenues clauses, along with increased general spending on the budget estimates.

Despite the severity of the challenges faced by the budget, the government has been able to provide the necessary funding for spending, by relying heavily on external borrowing so that domestic liquidity can be made available for the financing needs of the private sector in the country. International bonds worth \$4 billion were issued, together with collective commercial loans worth \$5 billion, export proxy guarantee loans worth \$2 billion and Islamic *Sukuk* worth half a billion US dollars.

Borrowing from foreign and domestic financial institutions and issuing *Sukuk* and development bonds and treasury bills formed 72% of the required funding, while the remaining 28% was covered by the reserves. Rising deficits during the years 2015 and 2016 gave rise to the volume of the State's general debt to the GDP by the end of 2016, to 29%, which means debt service rates will rise successively in the coming years.

In accordance with a report 'Developing Debt Market in Oman: A Road Map' by the Economic Research and Statistics Department, the Central Bank of Oman states that the amount required to be borrowed by the Government is determined by the magnitude of the budget deficit. Given the size of budget deficit, either the Treasury department or the central bank, on behalf of the government, conducts primary auctions, manages public debt in terms of timing of issuance, magnitude, type of auction, mode of payment and

settlement and maturity of debt based on well-established debt management practices. Often the central bank works as a front and/or middle office while back office functions are retained by the Treasury. The secondary market transactions are generally put through stock exchanges, although over-the-counter transactions are also allowed in many jurisdictions. Moreover, central banks generally act as a depository for public debt issued in domestic currency and thereby facilitate the issuance of domestic public debt in demat form. Besides outright transactions, government securities are also used as collateral in case of inter-bank transactions, as well as transactions with the central bank. As stakeholders are many, there is a need for a Public Debt Act and guidelines should be well codified with clear responsibilities vested with respective authorities.

The Financial Affairs Council (FAC) and the Ministry of Finance (MOF) are the two apex authorities responsible for all financial matters in Oman. The FAC is composed of MOF and representatives from the Central Bank of Oman (CBO) and the Capital Market Authority (CMA). The MOF proposes to the FAC financial policies related to regulations for adoption and also monitors their implementation. According to the Royal Decree 39/96, the MOF has authority to borrow on behalf of the government and keeps records of the government's financial transactions. The decree does not specify the purpose and limits of borrowing or objectives of debt management strategy. Reporting of debt management activities is not mandated. There is no Public Debt Act in Oman.

According to the Banking Law of 2000, the CBO can borrow funds on behalf of the Sultanate provided the loans are guaranteed by the Government. To meet temporary cash flow needs of the Government, the CBO can provide it with short-term credit by way of overdraft up to a limit. The amount of such an overdraft limit from the CBO, together with outstanding Treasury Bills issued on behalf of the Government, should not exceed 10 percent of budgeted current revenues and needs to be repaid within 90 days. Public debt management is entrusted to the Treasury department of the MOF. There are two separate units for debt issues, one for external debt and the other for domestic debt. The external debt office (Loan Department) performs both front and back office functions. The domestic debt office is known as the Treasury Department and mainly performs back office functions. The front office functions for domestic debt are performed by the CBO as an agency of the Government, as specified in a memorandum of understanding. A committee of MOF and CBO officials is supposed to meet regularly for the issuance of Treasury Bills and once every quarter, for the issuance of development bonds (DBs). The CBO conducts auctions of Treasury Bills and DBs and keeps a registry of Treasury Bills. Issuance of Treasury Bills has been discontinued since 2005, due to improved fiscal position of the Government. Before every auction of development bonds, the CBO publishes the terms of each issue. As soon as the auctions are over, the CBO transfers the registry of development bonds to the Muscat Clearing and Depository Co. (MCDC) Vide Royal Decree No.82/98, February 25, 1998; formerly called the Muscat Depository and Securities Registration Company (MDSRC).

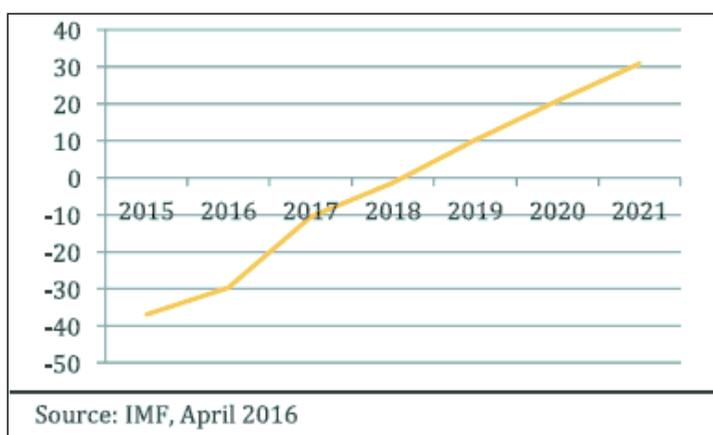
According to Article 26 of the Banking Law, 2000, the CBO can issue its own securities to conduct monetary operations. Currently, the CBO is issuing 28-day CBO CDs on a weekly basis to mop-up excess liquidity from the system. The CBO CDs are eligible as collateral for

inter-bank repo as well as for repo transactions with the CBO. The CBO is the clearing house and central depository for the CDs.

The share of medium and long-term loans in the total public debt increased steadily from 36.4 percent in 2005 to nearly 75 percent in 2009. Public debt to GDP ratio declined from 8.6 percent in 2005 to 4.2 percent in 2008, before rising to 5.7 percent in 2009. Improvement in the overall fiscal balance, following a steady increase in crude oil prices in the global markets, contributed to the decline in debt-GDP ratio during recent years.

Oman's National Government Debt reached 6.5 USD billion in Dec 2015, compared with 4.0 USD billion in 2014 and was at a record low at 2.5 USD billion in Dec 2008. The Central Bank of Oman provides Government Debt in local currency.

Figure 1: IMF Forecast of Oman's Net Government Debt (%)



According to the CBO, Oman's Net government debt position to the GCC countries remains manageable. However, the IMF forecasts, as can be seen in Figure 1, are that the trend will deteriorate further in the coming years. It calls for a significant reduction in current spending, an increase in oil prices in the short to medium term, strengthening of the institutions and a restructuring of the economy in the long term.

Protracted low oil prices also continue to weigh on Oman's economy. The OPEC agreement to cut oil production in 2017 and the government's ongoing commitment to austerity are likely to further depress growth. Fiscal and current account deficits remain large, and Oman is increasingly resorting to external borrowing to finance its deficits. However, growth is expected to pick up in 2018 as Oman pins hopes for its economic diversification plan on the fisheries and tourism sectors, according to a report by the World Bank titled GCC: Economic Outlook- (April 2017).

Real GDP growth in Oman is estimated to have slowed down to 2.2% in 2016 from 5.7% in 2015, according to official Omani estimates. Non-hydrocarbon GDP growth is estimated to have dropped to 2% in 2016 from 7% in 2015 as public spending declined, with knock-on effects on investment and consumption. Hydrocarbon GDP growth nearly halved in 2016, falling from 4.2% in 2015 to 2.4% in 2016.

Overall real GDP growth is projected to slow down further in 2017 to just under 1%, owing to the agreement reached with OPEC producers to cut oil production until June 2017 and the dampening effects of government spending cuts on business sentiment and private consumption. The 2017 planned budget cut spending by 8%, leading to a budgeted deficit of 10.6% of GDP. However, with further delays in consolidation efforts, the budget deficit could reach 13.9% in 2017. Monetary policy will remain tight as interest rates continue to rise. Owing to the increase in electricity tariffs and higher global food prices, inflation is expected to inch up to 1.4%.

6. RESULTS AND DISCUSSION

The Ministry of Finance is the only institution entitled to borrow on behalf of the Government of Oman. Municipalities are not permitted to borrow. The Government of Oman intends to establish a debt management office in the coming years in order to manage its rising debt levels. Table 1, below, sets out the debt of the Government of Oman as at 31 December for each of the seven years ending 31 December 2016.

Table 1: Debt of the Oman Government

As on 31 December (OMR millions, except percent)							
	2010	2011	2012	2013	2014	2015	2016
Government domestic debt (OMR million)	330.0	480.0	630.0	830.0	930.0	2,540.1	2,436.0
Per cent. of Annual GDP	1.5%	1.8%	2.1%	2.8%	3.0%	9.4%	10.5%
Government external debt (OMR million)	806.2	767.3	730.5	656.1	595.7	901.3	5,161.7
Per cent. of Annual GDP	3.6%	2.9%	2.5%	2.2%	1.9%	3.3%	22.2%
Total government debt	1,136.2	1,247.3	1,360.5	1,486.1	1,525.7	3,441.4	7,597.7
Per cent. of Annual GDP	5.0%	4.8%	4.6%	4.9%	4.9%	12.7%	32.6%
Annual GDP	22,547.6	26,122.0	29,353.3	30,061.3	31,450.8	27,013.1	23,301.9⁽¹⁾

⁽¹⁾On an annualized basis.

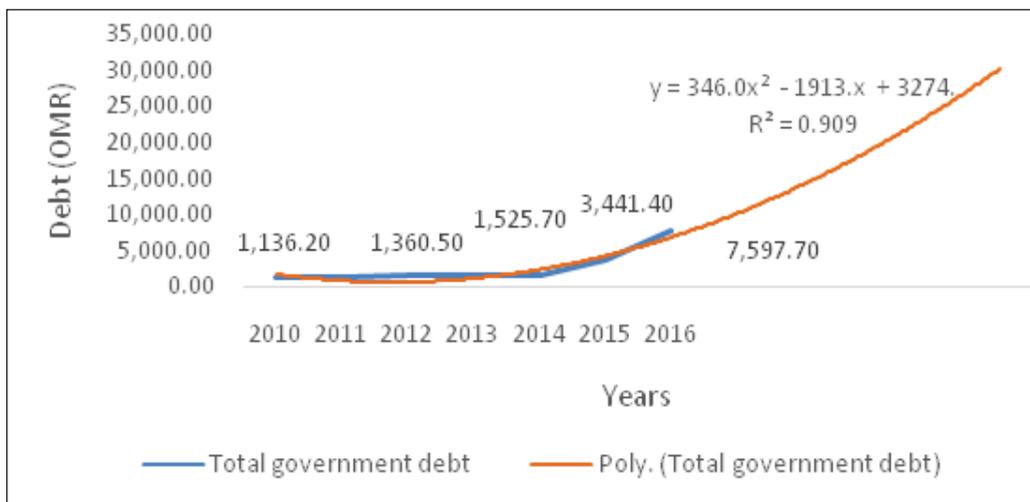
Source: Central Bank of Oman and Ministry of Finance

The tendency of the government debt in the coming years is expected to shoot up and based on the past data, the future projection expects the total government debt to cross the 35,000 OMR millions in near future. It has been indicated that legislators should follow a sustainable fiscal policy (Baharumshah, Soon and Lau, 2017). Based on the figures in Table 1, the trend for the next couple of years can be seen in the graph in Figure 2. 1 The trend is based on the past data. Future projections are calculated from the following equation:

$$Y=346.03X^2-1913.3X+3274.8$$

$$R^2= 0.9094$$

Figure 2: Total Government Debt



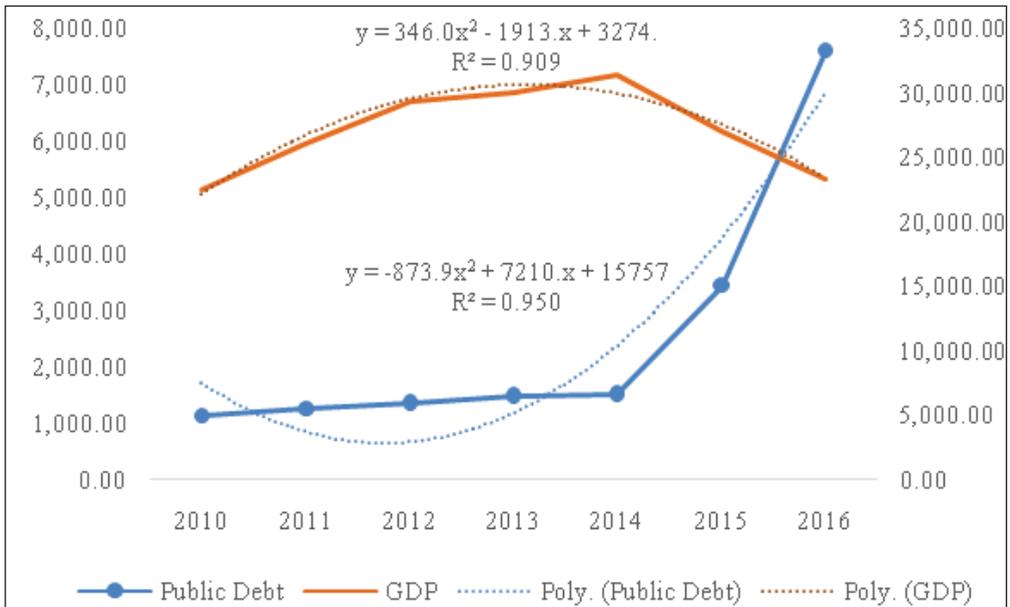
Source: Compiled by the Author

Table 2: Ratio of Public debt over GDP

Year	2010	2011	2012	2013	2014	2015	2016
Public Debt	1,136.20	1,247.30	1,360.50	1,486.10	1,525.70	3,441.40	7,597.70
GDP	22,547.60	26,122.00	29,353.30	30,061.30	31,450.80	27,013.10	23,301.90
Percentage Govt. Debt to Annual GDP	5.00%	4.80%	4.60%	4.90%	4.90%	12.70%	32.60%

Sources: Central Bank of Oman and Ministry of Finance

From Table 2 it can be seen that the public debt to GDP ratio has increased from 5 percent in 2010 to almost 33% in 2016, which is a matter of concern for the Oman government. The future projection can be seen in Figure 2, above based on trend line equations; although there has been no evidence for a generally appropriate threshold effect in the association between public debt and economic growth. Notwithstanding the threshold, there has been a substantially negative effect of the increased growth in public debt. (Chudik, Mohaddes, Pesaran and Raissi, 2017).

Figure 3: Public Debt to GDP

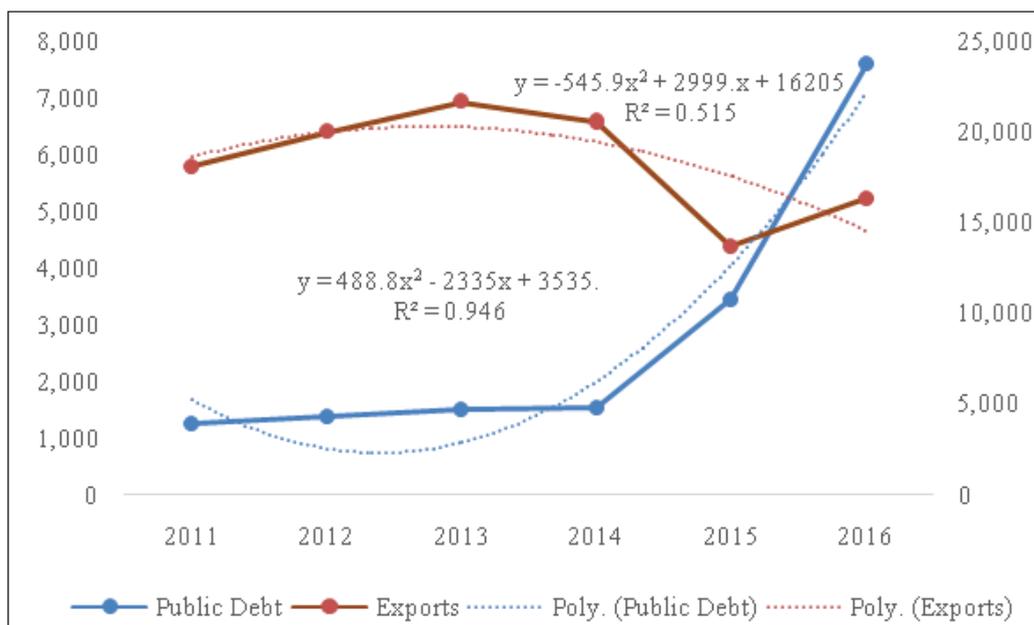
Source: Compiled by the Author

Although there has been a drop in exports, in 2016 the country managed to raise these to the comparable level of 2011. The worrying factor is the ratio of public debt over exports, which has grown significantly since the year 2011 from 6.89% to almost 47% in 2016. The present level of the public debt, which is at OMR 7,597 millions and exports at OMR 16,367 millions is not healthy at all and needs to be reduced to a sustainable level. This can be achieved either by increasing the exports or decreasing the public debt. The trend lines based on the past data shown in Figure 3, above, are also not favorable.

Table 3: Ratio of Public debt over Exports

Year	2011	2012	2013	2014	2015	2016
Public Debt	1,247	1,361	1,486	1,526	3,441	7,597.70
Exports	18,107	20,047	21,697	20,596	13,721	16,367
Percentage Public debt to Exports	6.89%	6.79%	6.85%	7.41%	25.08%	46.42%

Sources: Central Bank of Oman and Ministry of Finance

Figure 4: Public Deb to Exports

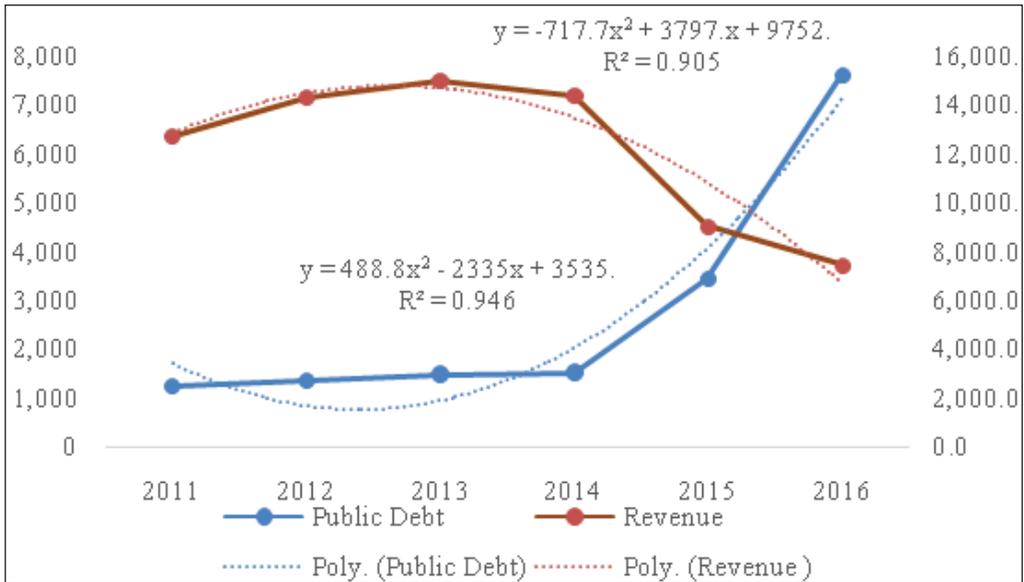
Source: Compiled by the Author

Similarly, the ratio of public debt over government revenue has soared from a single digit i.e almost 9%, to 102%, which is not usual and indicates the inorganic growth that the public debt has achieved over the government revenue. This is unsustainable and the figures can be observed in Table 4 and Figure 4. The government of Oman has to think of ways to increase revenue to bring down its debt to revenue ratio.

Table 4: Ratio of Public debt over Revenue

Year	2011	2012	2013	2014	2015	2016
Public Debt	1,247	1,361	1,486	1,526	3,441	7,597.70
Revenue	12,720.2	14,345.8	14,998.8	14,419.6	9,015.9	7,448.5
Percentage Public debt to Revenue	9.80%	9.49%	9.91%	10.58%	38.17%	102.00%

Sources: Central Bank of Oman and Ministry of Finance

Figure 5: Public Debt to Revenue

Source: Compiled by the Author

The primary sources of domestic government debt are GDBs, Treasury Bills and *Sukuk*. All these instruments are issued in Omani Rials. In 2015, the government issued a *Sukuk* of OMR 250 million at a rate of 3.5 per cent. profit rate per annum and in July 2016, it issued a *Sukuk* of OMR 192 million at a rate of 3.5 percent profit rate per annum. The amount of treasury bills outstanding was OMR 306 million as of 31 December 2016 compared with 465 million on 31 December 2015. The following Table (5) sets out the government of Oman's domestic debt profile as at 31 December, for each of the seven years ending 31 December 2016. According to Ostry, Ghosh and Espinoza, (2015) where countries hold plenty of fiscal space, administrations should not follow strategies that are meant to reduce the debt. As an alternative the government should allow the debt ratio to decline through growth and resourceful revenues, breathing with the debt otherwise.

Table 5: Oman's Government Domestic Debt

As on 31 December(OMR millions)							
End of Period	2010	2011	2012	2013	2014	2015	2016*
Total government domestic debt	330	480	630	830	930	2,540.10	2,436.00
GDBs⁽¹⁾	330	480	630	830	930	1,325.10	1,630
<i>Sukuk</i>⁽¹⁾	—	—	—	—	—	250	250
Loans from local banks⁽²⁾	—	—	—	—	—	500	250
Treasury Bills⁽³⁾	—	—	—	—	—	465	306

*Preliminary Source: Central Bank of Oman and Ministry of Finance

Note: all instruments issued in local currency

- (1) GDBs and *Sukuk* may be held by non-residents. Full amount of GDB issued is included here.
- (2) Corresponds to a loan from Bank Muscat contracted in 2015 and due in 2017
- (3) Treasury bills are held only by commercial banks Sources: Central Bank of Oman and Ministry of Finance

Oman's total external debt as at 31 December 2016 was approximately OMR 5.16 billion, compared to OMR 901.3 million as at 31 December 2015, mostly denominated in U.S. Dollars. The increase from 2015 is primarily the result of an increase in commercial loans and bonds of OMR 4.16 billion, including the U.S.\$4 billion issuance of the 3.625 per cent. notes due in 2021, the 4.750 per cent. notes due in 2026 and the U.S.\$4 billion pre-export financing secured by PDO. Most of Oman's external debt is medium-term debt (more than one year to maturity and less than seven years to maturity). Oman's external debt is composed of commercial loans, export credits, loans from development institutions, *Sukuk* and short term loans. Table 6 below shows Oman's external debt as at 31 December for each of the six years ending 31 December 2015 and as at 31 December 2016.

Table 6: Oman Government External Debt

As on 31 December(OMR millions)							
End of Period	2010	2011	2012	2013	2014	2015	2016
Total external debt	806.2	767.3	730.5	656.1	595.7	901.3	5,161.7
Export credits	241.5	234.1	222.8	185.1	148.9	102.9	675.1
Loans from development Institutions	439.1	407.6	382.1	345.4	321.2	289.1	325.6
Commercial loans and bonds	125.6	125.6	125.6	125.6	125.6	509.3	3,584.6
<i>Sukuk</i>	0.0	0.0	0.0	0.0	0.0	0.0	192.1
Short term loans	0.0	0.0	0.0	0.0	0.0	0.0	384.3

Source: Central Bank of Oman and Ministry of Finance

In addition, in the second quarter of 2016 the Government of Oman, represented by the Ministry of Finance, entered into a bilateral short-term loan to the amount of U.S. \$1 billion, with the Industrial and Commercial Bank of China Ltd; to be repaid in May 2017. Also, as observed by Schclarek (2004), in a study of 59 emerging nations from 1970 to 2002, a significant inverse correlation existed between external debt and economic growth.

6.1 REGRESSION ANALYSIS

The results of a regression analysis of the above mentioned data of annual GDP and total government debt of the Sultanate of Oman are shown below in Table 7.

Table 7: Descriptive Statistics

	Mean	Std. Deviation
Public Debt	2776.45	2500.368088
GDP	27883.73333	2982.626051
Exports	18422.5	2983.761904
Revenue	12158.13333	3173.001716

Source: Prepared by the Author

The value of R, as can be seen in Table 8, standing at 0.99 and at 1% significance level shows the strong linear relationship between revenue, GDP, exports and public debt. It also shows the relevance of the model taking annual government revenue, exports and GDP as a causal variable that has an impact on the outcome variable, which, in this case, is the total government debt of Oman.

Table 8: Regression analysis

Model 1			
R	R Square	Adjusted R Square	Durbin-Watson
			Sig. F Change
0.997424	0.994854	0.987135	2.631165
a. Predictors: (Constant), Revenue, GDP, Exports			
b. Dependent Variable: Public Debt			

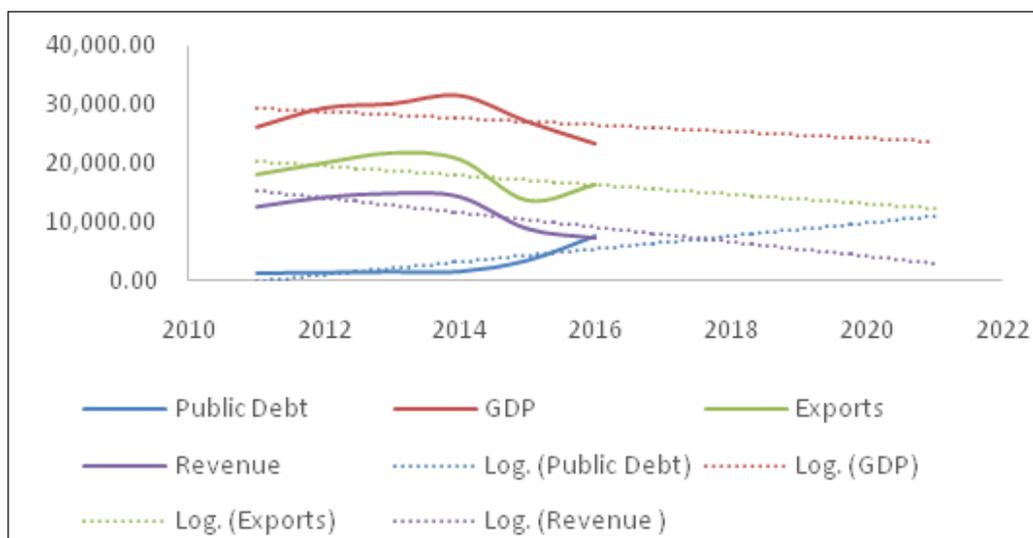
Source: Prepared by the Author

An analysis of the correlation between three variables has shown that there is an inverse relationship between the public debt and GDP, exports and government revenue, which also signifies the above made analysis.

Table 9: Table Correlation

	<i>Public Debt</i>	<i>GDP</i>	<i>Exports</i>	<i>Revenue</i>
Public Debt	1			
GDP	-0.7865	1		
Exports	-0.58438	0.704286	1	
Revenue	-0.88854	0.862051	0.888268	1

Source: Prepared by the Author

Figure 6: Comparative Analysis

Source: Compiled by the Author

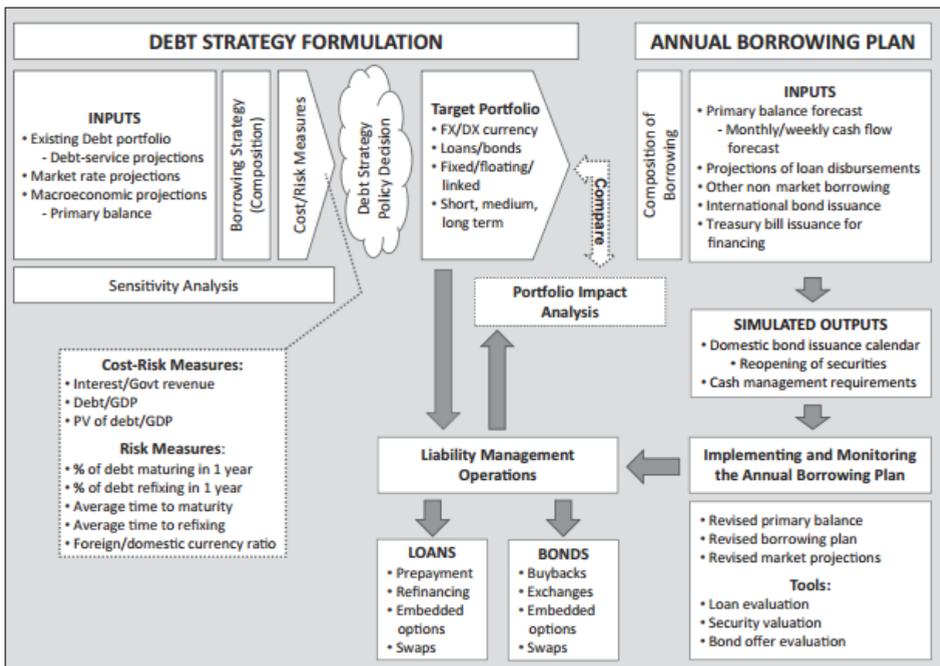
Figure 6 shows how the annual GDP moves in tandem with the total government debt. The annual GDP is drawn against the predicted annual GDP.

Empirical studies conducted have shown evidence of the different debt-growth connection under the different degrees of nation risk. Under a high-risk environment, a nation's economic growth is damaged by balancing its public debt. The negative effects public debt has on economic growth develops weak under low political and financial-risk settings, while an upsurge in public debt could help to encourage economic growth under low compound and economic risk settings. Also, the variances of nations' income and debt intensities lead national risks to have dissimilar effects on the debt-growth connection, proposing that a nation should borrow appropriately, based on its existing risk settings, while enlightening economic enactment (Chiu, et al., 2017).

6.2 EXPLORING NEW MODELS

Globally there are plenty of tools available for the debt management and financial analysis provided by many internationally renowned players in the field. One of the tools that Oman could possibly explore is the Commonwealth Secretariat Public Debt Analytical Tool (CS-PDAT) which is a specialized middle office/ front office decision support system, designed to allow policy makers to manage public debt by having a focus on price and risk. The tool is built on an integrated structure for the growth and application of a debt management policy and enables debt administrators to progress and measure the costs and risks of substitute borrowing approaches (see Figure 7).

Figure 7: Debt Strategy Formulation



Source: Commonwealth Secretariat OECD

The tool also permits policy makers to implement and observe their desired policy through the integration of debt management, improvement of an annual borrowing plan, including an issuance calendar and liability management processes (for example, buybacks, exchanges, embedded options, restructuring, and swaps).

The tool gives policy makers the ability to carry out a range of explorations, from basic to advanced, on the entire public debt collection. It focuses on the costs and risks associated with different borrowing strategies under different scenarios for analyzing substitute policies. Various market risks and refinancing risks are comprehensively analyzed through the application of the CS-PDAT system.

Once the desired strategy is selected, CS-PDAT allows the debt manager to implement the strategy through the development of an annual borrowing plan, including the simulation of an issuance calendar for government securities. For the development of the domestic debt market, the system specifically supports the building up of benchmark bonds through re-openings of existing securities.

For implementing a specific strategy within CS-PDAT, various debt management operations, such as buy-backs, exchanges, prepayment, pre-financing, swaps, and the application of implanted choices, can be analyzed through its impact on the portfolio. Such liability management operations can also be included as part of the annual borrowing plan for comprehensive debt management planning. The system will also trigger the need for certain liability management operations based on any limits on refinancing risk stipulated by the debt manager. Finally, the system incorporates lending strategies and operations to allow a holistic analysis of any debt management strategy within an asset-liability risk management framework.

7. CONCLUSIONS

The Public Debt Management in Oman should encompass the main financial obligations over which the government exercises control. At the same time, debt managers, fiscal policy advisors, and the central bank of Oman should share an understanding of the objectives of debt management, fiscal and monetary policies, given the interdependencies between their different policy instruments. Debt managers should convey to fiscal authorities their views on the costs and risks associated with government financing requirements and debt levels.

There should also be a separation of debt management and monetary policy objectives and accountabilities. The debt management, fiscal, and monetary authorities should share information on the government's current and future liquidity needs. The allocation of responsibilities among the ministry of finance, the central bank of Oman, or a separate debt management agency, for debt management policy advice, and for undertaking primary debt issues, secondary market arrangements, depository facilities, and clearing and settlement arrangements for trade in government securities, should be publicly disclosed.

In addition, the significant aspects of debt management operations should be publicly disclosed. The public should be provided with information on the past, current, and projected budgetary activity, including its financing and the consolidated financial position of the government. The legal framework should clarify the authority to borrow and to issue new debt, invest, and undertake transactions on the behalf of the government of Oman. The organizational framework for debt management should be well specified; and ensure that mandates and roles are well articulated.

Furthermore, risks of government losses from inadequate operational controls should be managed according to sound business practices, including well-articulated responsibilities

for staff, clear monitoring and control policies and reporting arrangements. Sound business recovery procedures should be in place to mitigate the risk that debt management activities might be severely disrupted by natural disasters or social unrest.

A framework should be developed to enable debt managers to identify and manage the trade-offs between expected cost and risk in the government debt portfolio. To assess risk, debt managers should regularly conduct stress tests of the debt portfolio, on the basis of the economic and financial shocks to which the government and the country in general are potentially exposed. The government of Oman should strive to achieve a broad investor base for its domestic and foreign obligations, with due regard to cost and risk, and should treat investors equitably.

REFERENCES

- Abbas, S. M., Belhocine, N., ElGanainy, A. A., and Horton, M. (2010). A historical public debt database.
- Ardagna, S., Caselli, F., and Lane, T. (2007). Fiscal discipline and the cost of public debt service: some estimates for OECD countries. *The BE Journal of Macroeconomics*, 7(1), 28.
- Baharumshah, A. Z., Soon, S. V., and Lau, E. (2017). Fiscal sustainability in an emerging market economy: When does public debt turn bad?. *Journal of Policy Modeling*, 39(1), 99-113.
- Bohn, H. (1998). The behavior of US public debt and deficits. *The Quarterly Journal of economics*, 113(3), 949-963.
- Cecchetti, S. G., Mohanty, M. S., and Zampolli, F. (2010). The future of public debt: prospects and implications.
- Central Bank of Oman (2011). Discussion Paper on Developing Debt Market in Oman: A Road Map
- Central Bank of Oman (2017). Bi-Monthly Publication of the Central Bank of Oman. March 2017. Vol.42
- Chudik, A., Mohaddes, K., Pesaran, M. H., and Raissi, M. (2017). Is there a debt-threshold effect on output growth?. *Review of Economics and Statistics*, 99(1), 135-150.
- Chiu, Y. B., and Lee, C. C. (2017). On the impact of public debt on economic growth: does country risk matter?. *Contemporary Economic Policy*.
- Debortoli, D., Nunes, R., and Yared, P. (2017). Optimal time-consistent government debt maturity. *The Quarterly Journal of Economics*, 132(1), 55-102.
- Herndon, T., Ash, M., and Pollin, R. (2014). Does high public debt consistently stifle economic growth? A critique of Reinhart and Rogoff. *Cambridge journal of economics*, 38(2), 257-279.
- Jaimovich, D., and Panizza, U. (2010). Public debt around the world: a new data set of central government debt. *Applied Economics Letters*, 17(1), 19-24.

Kumar, M., and Woo, J. (2010). Public debt and growth.

Moody's Investors Service (2017). Oman's Baa1 rating balances high wealth and government net asset position against challenges from high oil dependence. 23 Mar 2017. Retrieved from: https://www.moody.com/research/Moodys-Omans-Baa1-rating-balances-high-wealth-and-government-net--PR_363975

Moody's Investors Service (2017). Sovereigns -- Gulf Cooperation Council: Currency Risks Still Low on Average, But Rising in Oman and Bahrain. 15 Mar 2017. Retrieved from: https://www.moody.com/research/Moodys-Currency-risks-rising-in-Oman-and-Bahrain-but-remain--PR_363470

Ostry, M. J. D., Ghosh, M. A. R., and Espinoza, R. A. (2015). When should public debt be reduced?. International Monetary Fund.

Panizza, U., and Presbitero, A. F. (2014). Public debt and economic growth: is there a causal effect?. *Journal of Macroeconomics*, 41, 21-41.

Salsman, R. M. (2017). *The Political Economy of Public Debt: Three Centuries of Theory and Evidence*. Edward Elgar Publishing.

Schclarek, A. (2004). Debt and economic growth in developing and industrial countries. Lund University Department of Economics Working Paper, 2005, 34.

Tarek, B. A., and Ahmed, Z. (2017). Governance and public debt accumulation: Quantitative analysis in MENA countries. *Economic Analysis and Policy*, 56, 1-13.

Chapter 3

SUKUK EXPERIENCE IN INITIAL YEARS OF ISLAMIC BANKING IN THE SULTANATE OF OMAN: OPPORTUNITIES AND CHALLENGES

R. Narasimhan and M. Khairul Emran

ABSTRACT

The emergence of Sukuk has created a viable alternative funding and investment instrument which has a universal appeal. It also provides Sharia conscious entities a viable instrument to either utilise or invest. Although still in its formative years and a late entry to the Islamic Banking industry, a few examples of Sukuk have already been set up in the Sultanate of Oman. In this context, this paper attempts to introduce some related concepts in Sukuk and describe the Sukuk experience in the initial years of Islamic Banking in Oman. This paper also attempts to suggest the potential of Sukuk in the Omani market setting as well its opportunities and challenges.

Keywords: *Sukuk, Islamic Banking, Sultanate of Oman*

1. INTRODUCTION

Sukuk, which is commonly referred to as Sharia-compliant bonds, are investment or capital market instruments which give the holders the proportionate rights of the underlying assets being offered by the issuer. The rights include entitlement to receive profit from the asset utility or sale. The Central Bank of Oman defines Sukuk (plural of Sakk) as certificates with each Sakk representing a proportional undivided ownership right in tangible assets, a pool of predominantly tangible assets, or a business venture whereby these assets may be in a specific project or investment activity in accordance with Sharia rules and principles.

Sukuk is an alternative to conventional bonds as a Sharia-compliant instrument for raising funds from the capital market. It is not only a Sharia compliant option for businesses, companies or even Governments in seeking funding but also as a growing need within the investment community seeking a Sharia-compliant avenue to allocate funds to meet each portfolio investment requirements. Sukuk has been utilized in many sectors thus far with Government being a large issuer of Sukuk to finance budgetary needs. Another common use raised through Sukuk is for funding large asset-based infrastructures or projects which have generally fit with Sharia compliant requirements, allowing the investment instrument to be offered to a wider investment community both in conventional and Sharia compliant space.

Why Sukuk?

Sukuk is gaining prominence as an alternative source of funding, particularly for large-scale, long-term projects. It also offers the ability to tap a wider investor base in both conventional and Sharia-compliant investors. The instrument can provide competitive pricing vis-à-vis conventional bond with strong demand of Sukuk. Additionally, Sukuk promotes good business practice as it avoids interest, uncertainties, over-leveraging and speculation, and is backed by real economic activities. It also promotes ethical and fairness through greater governance and transparency.

2. OVERALL SUKUK MARKET OVERVIEW

Sukuk is the Arabic name for financial certificates, which means “legal instrument, deed, check” in Arabic. The Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI), (2008), defines Sukuk as being “certificates of equal value, representing after closing subscription, receipt of the value of the certificates and putting it to use as planned; a common title to shares and rights in tangible assets, usufructs and services, or equity of a given project or equity of a special investment activity”.

Sukuk is structured to comply with Sharia or the Islamic law. It is a financial instrument that enables organizations to raise capital in a Sharia-compliant manner, whilst at the same time expanding investor base and offering investment opportunities to a wider group of investors.

Some may argue that Sukuk may not share the same qualities of a bond. It is best described not as debt but as trust in certain Sharia-compliant assets. Elements of interest (riba), uncertainty (gharar) and gambling (maisir) are eliminated in Sukuk. The revenue shares of the assets are paid regularly by the issuer and at the maturity date the principal is substituted by the sale price of asset ownership. Information regarding the use of the Sukuk proceeds is given to the Sukuk holder to eliminate the elements of speculation and uncertainty in the transaction.

There are several characteristics of Sukuk that are key success factors of being accepted by corporations. Generally, Sukuk represents ownership shares in assets that bring profits or revenues, like leased assets, or commercial or industrial enterprises, or investment vehicles that may include a number of projects. Sukuk has its own unique benefits and features. It is a tradable Sharia-compliant capital market product that provides a medium to long-term fixed or variable rates of return. Issuers of Sukuk can benefit from the untapped liquidity in the Islamic financing and capital market space, hence new sources of funds.

In some ways, Sukuk and conventional bonds are quite similar. From an investor's standpoint, both offer a fixed rate of return at periodic intervals, can be traded on the secondary market (except if the underlying asset of the sukuk is a debt), and will be redeemed at a certain date. However, the underlying financial transactions of Sukuk and conventional

bonds are not the same. A conventional bond is an interest-bearing debt with the issuer contractually obliged to pay. In contrast, Sukuk represents a share in an underlying asset where Sukuk holders are entitled to receive the profit or usufructs generated from such assets, as well as the proceeds from the asset sale.

Sukuk's unique attributes can also be a 'double edged sword'. The requirement to have assets either backed or based may be a stumbling block for certain entities.

Sukuk has different structures and different risk and return characteristics, with Salam Sukuk corresponding to bills, Ijarah Sukuk to floating rate notes and Mudaraba Sukuk to fixed return bonds. Sukuk must conform to the principles of Sharia or Islamic law, but behaviour in terms of pricing and returns will be determined by the market.

On the other hand, bonds are securities in the form of a debt that will be paid back before a certain date, termed the date of maturity, in addition to interest (on this debt). In short, a bond is a debt security in which borrowed money is repaid along with interest at a fixed rate.

Sukuk are financial fixed income certificates that are permissible within the provisions of Sharia as they are raised on trading in, or construction of, specific and identifiable assets (rather than being interest bearing). We can therefore see the basic difference between bonds and Sukuk. Bonds are a proof of debt, whereas Sukuk is a proof of ownership. In summary, the comparison of Sukuk and bonds are as follows:

Table 1: Comparison between Sukuk and Conventional Bonds

Sukuk	Conventional Bond
Sukuk holders claim an undivided beneficial ownership in the underlying assets. Consequently, Sukuk holders are entitled to share in the revenues generated by the underlying assets as well as being entitled to share in the proceeds of the realization of the assets.	A bond is a contractual debt obligation whereby the issuer is contractually obliged to pay to bondholders, on certain specified dates, interest and principal.
The underlying contract for a sukuk issuance is a permissible contract (i.e. lease). There are 14 categories defined by AAOIFI.	In a bond, the core relationship is a loan of money, which implies a contract whose subject is purely earning money on money (Riba).
The underlying asset monetized in a sukuk issuance must be permissible under Sharia both in nature and use e.g. a truck would always be an eligible asset but not its lease to a distillery.	Bonds can be issued to finance almost any purpose which is legal in its jurisdiction.

Sukuk	Conventional Bond
Asset related expenses may attach to sukuk holders.	Bondholders are not concerned with asset related expenses.
Notwithstanding creditworthiness, Sukuk prices depend on the market value of the underlying asset.	Bonds depend solely on the credit worthiness of the issuer.
The sale of Sukuk represents a sale of a share of an asset.	The sale of a bond is the sale of a debt.

Source: Compiled by the Authors

Table 2: A Comparative Analysis between Sukuk and Bond

Critical Factors	Sukuk	Bond
Credit Risk	Risk of asset (Asset-backed) Risk of obligor (Asset-based)	Risk of issuer (General obligation)
Periodic Payment	Specified pool of assets	General pool of assets
Marketability	High (accepted widely)	High
Pricing	Market demand & supply	Market demand & supply
Buying / Selling	Conventional trading platform	Conventional trading platform

Source: Compiled by the Authors

After more than two decades since it was first introduced commercially, Sukuk is now recognized globally with its universal appeal, strong captive demand from Islamic financial institutions and high profile debut issuances from sovereign states such as the United Kingdom, Hong Kong, Luxembourg and South Africa. Although overall market size is still modest and niche, reaching its highest issuance level in 2012 at USD137 billion, the Sukuk market relies heavily on government issuances to prop up the market. Nevertheless, more and more corporations are tapping the Sukuk market to take advantage of strong demand for Sharia-compliant investment. Based on Thomson Reuters' data and estimates, 63% of total Sukuk issuances last year were corporate Sukuk, mostly from Islamic banks in the wake of the Basel III requirement to enhance capital. At the end of 2016, global Sukuk outstanding stood at USD349.1 billion.

In the secondary market, there is less activity, due to the buy-and-hold mentality of most Sukuk investors. This is mainly due to avoidance of reinvestment risk and more so due to the low supply and high demand for Sukuk, as it is particularly hard for Sharia-sensitive investors and Islamic financial institutions to find available Sharia-compliant investments.

The Sukuk market is expected to continue to be of significance for Sharia-sensitive investors, given the limited options available.

3. SUKUK STRUCTURES

Introduction of Sukuk in Islamic finance provides an alternative option for funding and investment in the market. Furthermore, Sukuk has a wider audience as it is not limited to the Islamic market. Sukuk also plays an important role in the mobilization of untapped funds, since a large amount of the Islamic funds is inactive in the economy. It will hugely contribute to the enhancement of more infrastructural developments in many economies where issuing Sukuk could provide capital for development projects.

The most common types of Sukuk are Murabaha, Mudarabah, Ijarah, Salam and Istisna'a. There are also other diversified and mixed assets of Sukuk that emerged in the market, such as hybrid Sukuk, where the underlying pool of assets can comprise of Murabaha and Ijarah, as well as Istisna'a.

The primary condition for the issuance of Sukuk is the existence of assets on the balance sheet of the issuing entity that wants to mobilize its financial resources. However, identification of suitable assets is the first important step in the process of issuing Sukuk certificates. AAOIFI has issued Sharia standards for different types of Sukuk, where some of these Sukuk are classified as tradable and others as non-tradable, based on the type and characteristics of the issued Sukuk. The common types of investment Sukuk in regard to the issuances and trading are as follows:

3.1 SUKUK MUSHARAKAH

These are certificates of equal value issued with the purpose of using the mobilized funds for establishing a new project. This is very similar to the Mudarabah contract and is widely used in equity financing. The structure of Musharakah requires two parties to provide financing to the projects and in case of loss, both parties will lose in proportion to the size of their investment. Musharaka Sukuk are used to mobilise funds for establishing a new project, developing an existing one or financing a business activity on the basis of partnership contracts. The certificate holders become the owners of the project or the assets of the activity as per their respective shares. These Musharaka certificates can be treated as negotiable instruments and can be bought and sold in the secondary market.

3.2 SUKUK BAI BITHAMAN AJIL (BBA)

These are certificates of contract of sale and purchase transaction for assets financing on a deferred and instalment basis with a pre-agreed payment period. The sale price will include a profit margin. Sukuk BBA is not a bond because a bond shows the debt. Sukuk BBA is an obligation that shows the financial obligation as a receivable paper. It is created upon

an accelerated Murabaha principal plus the profit payment from the obligor; the Certificate/Sukuk Holders receive the remaining sukuk principal and any accrued profit.

3.3 SUKUK MURABAHA

These are certificates of equal value issued for the purpose of financing the purchase of commodities. The Murabaha technique (cost-plus financing) is one of the most widely used instruments for Islamic short-term financing. It is based on the traditional notion of purchase finance. Its structure is relatively straightforward and is based on declared mark-up integrated into the selling price with a deferred payment. The Islamic financial institution purchases and takes title of the necessary equipment or goods from a third party, and sells the equipment or goods to its customer at cost, plus a reasonable profit. Murabaha Sukuk cannot be legally traded at the secondary market, as the certificates represent a debt owing from the subsequent buyer of the commodity to the Sukuk holders and such trading in debt on a deferred basis is not permitted by Sharia.

3.4 SUKUK ISTISNA'A

Istisna'a sukuk are certificates that carry equal value and are issued with the aim of mobilising the funds required for producing products that are owned by the certificate holders. The issuer of these certificates is the manufacturer (supplier/seller), the subscribers are the buyers of the intended product, while the funds realised from subscription are the cost of the product. The certificate holders own the product and are entitled to the sale price of the certificates or the sale price of the product sold, on the basis of a parallel Istisna'a, if any. Istisna'a Sukuk are quite useful for financing large infrastructure projects. The suitability of Istisna'a for financial intermediation is based on the permissibility for the contractor in Istisna'a to enter into a parallel Istisna'a contract with a subcontractor. Thus, a financial institution may undertake the construction of a facility for a deferred price, and sub contract the actual construction to a specialised firm.

Sharia prohibits the sale of these debt certificates to a third party at any price other than their face value. Clearly such certificates cannot be traded in the secondary market.

3.5 SUKUK IJARAH

These are Sukuk that represent ownership of equal shares in a rented real estate or the usufruct of the real estate. These Sukuk give their owners the right to own the real estate, receive the rent and dispose of their Sukuk in a manner that does not affect the right of the lessee, i.e. they are tradable. The holders of such Sukuk bear all cost of maintenance of and damage to the real estate.

Ijarah sukuk are the securities representing ownership of well-defined existing and known assets tied up to a lease contract, rental of which is the return payable to sukuk

holders. Payment of Ijarah rentals can be unrelated to the period of taking usufruct by the lessee. It can be made before the beginning of the lease period, during or after the period, as the parties may mutually decide. This flexibility can be used to evolve different forms of contract and sukuk that may serve different purposes of the issuers and holders.

3.6 SUKUK MUDARABAH

These are certificates that represent projects or activities managed on the basis of Mudarabah. This is an agreement made between a party who provides the capital and another party (an entrepreneur), to enable the entrepreneur to carry out business projects, which will be on a profit sharing basis, according to pre-determined, agreed ratios (participation or trust financing). In the case of losses, the losses are born by the provider of the funds only.

3.7 HYBRID SUKUK

Considering that Sukuk issuance and trading are important means of investment and taking into account the various demands of investors, a more diversified Sukuk – hybrid or mixed asset Sukuk – emerged in the market. In a hybrid Sukuk, the underlying pool of assets can comprise of Istisna'a, Murabaha receivables as well as Ijara. Having a portfolio of assets comprising of different classes allows for a greater mobilization of funds. However, as Murabaha and Istisna'a contracts cannot be traded on secondary markets as securitised instruments, at least 51 percent of the pool in a hybrid Sukuk must comprise of Sukuk tradable in the market, such as an Ijara Sukuk. As Murabaha and Istisna'a receivables are part of the pool, the return on these certificates can only be a pre-determined fixed rate of return.

In 2015, Murabaha structure dominated the Sukuk market with 32.8% of total issuances where it is widely used in Malaysia, the largest Sukuk market globally, albeit dominated by local currency issuances. However, such debt-based structure has attracted criticism, with past experience in conventional debt instruments causing structural financial instability. The type of Sukuk structures being adopted has now shifted towards more risk-sharing concepts of Ijarah, Wakalah, Mudarabah and Musyarakah structures, with hybrid structures for lesser hard assets requirement gaining popularity.

4. OMAN SUKUK MARKET

Although fairly recent in the Sukuk market, a few diversified Sukuk issuances have come out of Oman, ranging from corporations, sovereign and retail Sukuk. Oman's first Sukuk experience was a corporate Sukuk adopting an Ijarah structure – Tilal Sukuk. The Sukuk was issued in 2013 almost immediately after the introduction and Royal decree of the Islamic Banking Regulatory Framework in late 2012.

Subsequently, the first and anticipated Oman Sovereign Sukuk entered the market with a debut issuance of a 5-year OMR250 million, which was offered through a competitive bidding process. The structure is similar to that of Ijarah, but unlike the typical trust arrangements, the Sukuk adopts an agency arrangement.

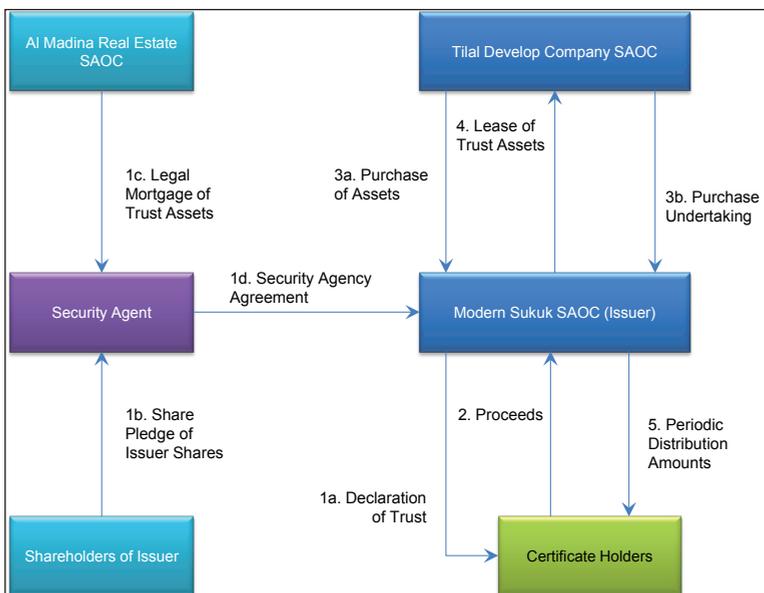
To foster the Sukuk development, in April 2016 the Capital Market Authority of Oman issued Oman's Sukuk Regulation, via a Royal decree. The regulation was timely and welcomed by market players to provide clear guidance, foundation and legislation certainty to incentivize the Omani market in considering Sukuk as a viable funding and investment option.

Key features of the new regulation include issue of Sukuk through a local special or specific purpose limited liability company (SPC) with a lesser setup capital requirement, rather than a joint-stock company, which requires higher minimum paid-up capital. In addition to registration at the Ministry of Commerce and Industry, the SPC needs to be granted a special license by the Capital Market Authority of Oman. Apart from standalone issuance the regulation also provides the setup of a program which provides flexibility for regular and quicker issuance when market conditions are favourable. It is expected that further provisions into the regulations will be introduced in the future to encourage development of Oman's Sukuk market.

5. TILAL IJARAH SUKUK

Tilal Sukuk was the first Sukuk introduced to the Omani market, even before the Sukuk regulatory framework was issued. It was a collaborative effort between the business of the Al Madina Group, which is developing a mall in Muscat, and Bank Nizwa, the first Islamic bank in Oman. Through Al Madina's Investment and Financial Services, the Sukuk was offered as an asset lease-back investment in a mall known as Muscat Grand Mall. The Sukuk was privately placed to investors.

Figure 1: Schematic on the Tilal Sukuk Structure



Source: Tilal Development Company Offering Circular dated 30 October 2013.

A special purpose company (SPC) is set up as an entity with the sole purpose of holding the asset in trust. This is common in all Sukuk structures and usually such entities are bankruptcy remote to separate them from the originating company seeking the funding, in case of insolvency. In this case, Tilal Development Company, the real estate developer, is the originating company, while the SPC is the Modern Sukuk Company and also the issuer of the Sukuk.

The Sukuk adopts an Ijarah structure or a sale and leaseback. The SPC buys the asset, i.e. the Muscat Grand Mall (phase 1), from the originating company and upon issuance of Sukuk, leases the asset back to the company. This allows the SPC to receive income to pay to Sukuk investors while the originating company will receive the funding from the sale of the asset to SPC. Ijarah structure is accepted globally by Sharia scholars.

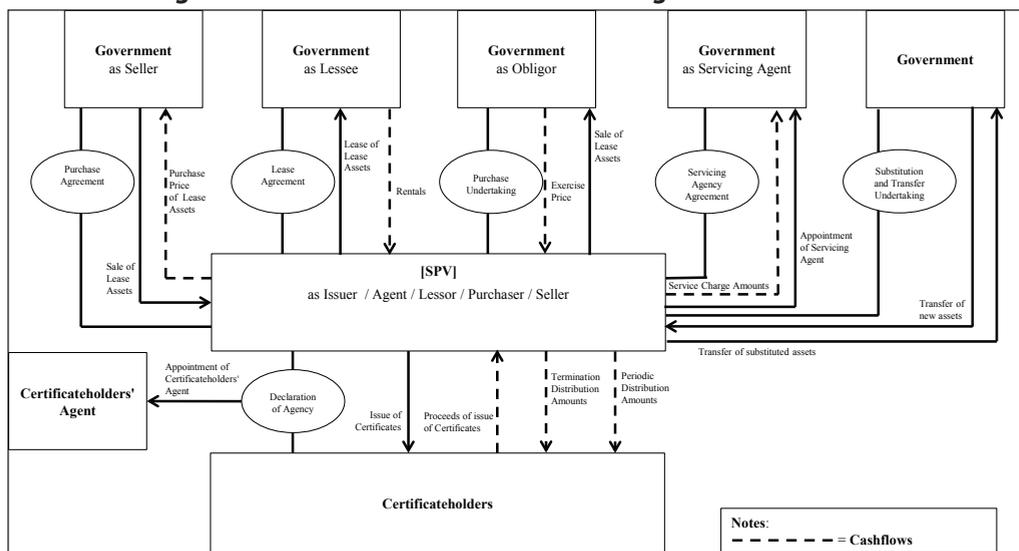
The response to Tilal Sukuk, although made on private placement, was well received. The issue size of OMR50 million at 5% per annum for 5 years was fully subscribed and most banks subscribing to the Sukuk had no problems in selling down the Sukuk in the secondary market.

6. FIRST OMANI SOVEREIGN SUKUK

The Oman Government had invited financial institutions to submit proposals to its proposed first Omani Sovereign Sukuk issuance in 2014, with an initial indicative amount of OMR200 million for a tenor of 5 years. The main objective of the Sukuk issuance was to support the development of the Omani capital market by creating a benchmark Sukuk and providing an investment avenue for Islamic financial institutions, funds and Takaful to deploy excess funds.

The first Omani Sovereign Sukuk issuance in November 2015 was a success, invoking a favourable response from both conventional and Sharia-compliant institutions. It was oversubscribed by 1.7 times and the issuance was increased to OMR250 million. It was also the first time in Oman for a debt capital market issuance to be priced via book-building uniform price auction. The Sukuk was listed on the Muscat Securities Market.

Figure 2: Schematic of First Omani Sovereign Sukuk structure:



Source: Oman Sovereign Sukuk SAOC Prospectus dated 3 November 2015.

The Sukuk was issued via a local joint stock SPC under Oman Sovereign Sukuk SAOC and adopts an agency arrangement. The Sukuk uses an Ijarah structure backed by commercial development land in Duqm, Oman.

Subsequently, in July 2016 a 6-year USD500 million agreement was successfully issued under the same arrangement and structure, through private placement to sophisticated investors.

Other Notable Sukuk from Oman:

- First Multicurrency Sukuk - MB Holding Sukuk
- Inaugural International Sukuk – USD 2.0 billion, Oman Sovereign Sukuk
- First Retail Sukuk - Meethaq Sukuk

7. OPPORTUNITIES IN OMAN'S SUKUK MARKET

Oman Sukuk market has great potential, with the Islamic Banking in Oman seeing robust growth and presence. Oman Sukuk market will open up more avenues for either domestic or international investors to invest in Oman and its capital market. As Oman is on the path of economic diversification, institutions and corporations can benefit from a vibrant domestic Sukuk market for funding needs. Oman can learn and take stock from experiences in other more developed markets, for best practices as well as avoiding missteps.

8. CHALLENGES FACING OMAN'S SUKUK MARKET

Oman's capital market is still developing. Shares remain the dominant instrument in the market, with other instruments including Sukuk still relatively small. Additionally, advance Sukuk structures other than Ijarah have not been clearly tested in Oman, where acceptability will be a challenge. With use of Commodity Murabaha not allowed under the Islamic Banking Regulatory Framework, options of structure varieties are limited. Although this may encourage innovation of new structures, it would require a paradigm change and support from all market players.

Other challenges include pricing, where there is still a lack of pricing guidance curve for bonds and Sukuk, and lack of Sharia compliant tools for Liquidity Management of Islamic Banks.

Despite the encouraging growth and development of the Sukuk market it seems that there are many controversial issues that need prompt solutions in order to sustain the development of the market. This requires close cooperation among financial experts and Sharia scholars on one hand, and more interaction among Sharia boards on the other. The focus of the Islamic capital market shall not be only on how to raise funds and be acceptable to international financial institutions, although these are valid and well needed objectives, but also to be Sharia compliant, first and foremost. This will also help in the growth of real economy and socio-economic development of the society.

The challenge that lies ahead is in the area of financial instruments and product innovation in the Islamic capital market in general and the Sukuk market in particular. It is true that the Sukuk structures are now, to some extent, diversified. For instance, Sukuk based on Ijarah, Musharakah, Mudarabah and hybrid Sukuk already exist, based on the combination of Ijarah with Istisna'a or the combination of Ijarah with Istisna'a and Murabaha. However, more instruments are needed and existing products need to be refined, as some Sukuk structures are still debated and contested.

A key development within the Islamic capital market products and their acceptance into the global financial system is the increased use of credit ratings in Sukuk. However, almost all conventional rating agencies are using conventional methodologies to rate Islamic financial instruments, including Sukuk, despite the acknowledgement of these rating agencies that Islamic financial institutions and instruments have their own characteristics.

A properly functioning financial market depends on the enforceability of the contracts concerned. The governing laws of most Sukuk contracts in the market forming these transactions are governed by conventional laws, which at the same time must not contradict with Sharia principles. There could be some arbitrary differences that may need to be addressed, to avoid the creation of issues in the future.

9. CONCLUSION

Although entering late into the market, Oman has made great strides in the development of the Islamic capital market. Within a short period of time, several diversified Sukuk have been established. It is anticipated that there will be more Sukuk to come from Oman, particularly with the strong growth of Islamic banking in the country, which has now reached 11% of local total banking assets, a remarkable growth achievement. Nonetheless, the Oman Sukuk Market is still in its infancy, but with continual support from the government, regulators and market players the market it has great potential to be a viable instrument to the Omani economy.

End Note: *This article was contributed by the authors in their personal capacity. The views expressed in this article are the authors' own and do not reflect the view of Bank Nizwa SAOG.*

REFERENCES

- Accounting and Auditing Organisation for Islamic Financial Institutions. (2010). Shari'a Standards for Islamic Financial Institutions.
- Bank Negara Malaysia. (2017). 2016 Global Sukuk Market: A Record Year for Corporate Issuance. Retrieved from <http://www.mifc.com>
- Capital Market Authority Oman. (2016). Sukuk Regulation.
- Central Bank of Oman. (2012). Islamic Banking Regulatory Framework.

Ministry of Finance Sultanate of Oman. (2015). Prospectus Debut Sovereign Sukuk Issuance of OMR250.0 million Due 2020.

Thomsan Reuters. (2016). Fifth Annual Sukuk Perceptions & Forecast Study 2017. Retrieved from <https://www.zawya.com/mena/en/ifg-publications>

Tilal Development Company. (2013). Offering Circular of OMR50 million Trust Certificates (Sukuk Al Ijarah) Due 2018.

Chapter 4

STRATEGIC ISSUES AND CHALLENGES OF NON BANKING FINANCE COMPANIES IN OMAN

Rajagopal Shankaranarayana

ABSTRACT

A multi-faceted financial system that includes non-bank financial institutions can protect economics from financial shocks and enable speedy recovery when these shocks happen. Non-Banking Financial Institutions provide multiple alternatives to transform an economy's savings into capital investment. Non-bank financial companies (NBFCs) offer most sorts of banking services such as loans and credit facilities, discounting services e.g. discounting of instruments. However, they are typically not allowed to take deposits from the general public and have to find other means of funding their operations such as issuing debt instruments. In this context, this paper attempts to explain the role of financing companies operating in Oman in financial leasing and hire purchase activities to promote their products for different customer segments, in order to provide appropriate service by identifying customer needs.

Keywords: *Growth/Developments, Industry trend, Issues, Concerns, Challenges, Strategies, Future Scenarios and prospects.*

1. INTRODUCTION

A Non-bank financial institution (NBFI) is a financial institution that does not have a full banking license, but deals with Investments, Mutual funds, Insurance companies and stock market brokering. In Oman Stock brokers and Insurance companies are governed by Capital market Authorities. NBFIs facilitate bank-related financial services, such as investment, risk pooling, contractual savings, and market brokering. Alan Greenspan (1999) has identified the role of NBFIs in strengthening an economy, as they provide “multiple alternatives to transform an economy’s savings into capital investment act as backup facilities should the primary form of intermediation fail”.

Non-Banking Finance Companies (NBFCs), are financial companies registered under the companies act and perform only lending functions to the public. They cannot accept deposits from the public, unlike banks. NBFCs are an offshoot of the banking sector but with less loan documentation and speed of decision making, when compared to banks, which helps them to survive in a competitive economy. Those customers who cannot comply with banking formalities end up with NBFCs for their credit facilities. NBFCs are regulated by Central Bank of Oman.

Economic growth of any nation depends on its financial sector. Money supplies, credit facilities, issue of guarantees and Trade Finance transactions are normally handled by banks. The financial sector includes banks, Non-Banking Finance Companies and financial instruments, which are controlled by a regulatory body, namely the Central Bank of the country. Banks in general have a good capital base, with certain sets of rules, regulations and policies for accepting deposits and lending money to the commercial sector and individuals.

Operations of NBFIs are often still covered under a country's banking regulations. As per the Central Bank of Oman, the country's financial system constitutes the banking sector and the non-banking financial sector, which includes financing, companies, exchange companies, securities companies and insurance companies. The financing companies represent companies operating in the financial leasing and hire purchase activities in Oman. Capital Market Authorities in Oman regulate insurance companies and companies dealing in the securities market.

2. ROLE OF NBFIS IN FINANCIAL SYSTEM

NBFIs supplement banks by providing the infrastructure to allocate surplus resources to individuals and companies with deficits. Additionally, NBFIs also introduces competition in the provision of financial services. While banks may offer a set of financial services as a packaged deal, NBFIs unbundle and tailor these services to meet the needs of specific clients. Additionally, individual NBFIs may specialize in one particular sector and develop an informational advantage. Through the process of unbundling, targeting, and specializing, NBFIs enhances competition within the financial services industry.

NBFCs offer most sorts of banking services, such as loans and credit facilities, private education funding and other obligations. These institutions also provide bill discounting services and loans for insurance covering assets.

3. PRESENT STATUS OF NBFCS IN OMAN

Non-banking finance and leasing companies in Oman play the role of financial intermediaries serving distinct segments of the financial services market. They generally have a well-defined business profile, serving a specific market niche. The retail vehicle financing business continues to be the most competitive segment of the market, apart from SME equipment finance. There are currently six Finance and Leasing Companies, (FLCs) with a branch network of 43, all operating in Oman. FLCs mainly operate in three market segments, namely, retail financing where the funding is provided to individual customers, mainly for purchase of vehicles and electronic goods; equipment leasing where finance is extended to Small and Medium Enterprises (SMEs) for expansion, replacement and modernization requirements; and finally for factoring and working capital needs of SMEs for domestic as well as cross-border trade or for the execution of projects usually against the assignment of receivables. (CBO Annual report 2016).

The six Non-Banking Finance Companies (NBFCs), normally referred to as Finance and Leasing Companies (FLCs), presently operating in Oman are:

- Muscat Finance (MFCI)
- Al Omaniya Financial Services (AOFS)
- Oman Orix Leasing Company (ORXL)
- United Finance Company (UFCI)
- Taageer Finance Company (TFCI)
- National Finance Company (NFCI)

These operate under the license and regulation of the Central Bank of Oman (CBO). Generally, the corporate segment of the NBFCs, which deals with Small and Medium Enterprises (SMEs) and other corporate entities, provides finance for purchase or acquisition of commercial equipment and vehicles used by them for their business operations. The finance and retail segment of NBFCs offer finance for purchase of cars and consumer loans.

Muscat Finance, was the first NBFC in the Sultanate of Oman, established in October 1987. It pioneered the concept of Hire Purchase and Leasing and started vehicle financing, enabling a significant retail and corporate penetration of vehicle financing. Later, it ventured into heavy consumer goods Financing and Equipment Leasing. It also pioneered the concept of Debt Factoring in the Sultanate and the Middle East in 1996.

The National Finance Company was established as a joint stock company in 1987, National Finance was originally registered as Capital Leasing Company LLC in September 1987 and became a full-fledged public limited company in December 1998.

Oman Orix Leasing Company SAOG (OOLC) was incorporated in 1994 as a joint venture between reputable local and foreign financial institutions, including International Finance Corporation, a member of the World Bank group. It was listed on the Muscat Securities Market in August 1994 and commercial operations started in October 1994.

Al Omaniya Financial Services (AOFS) was incorporated in 1997 by a group of corporate houses led by Bank Muscat to take over its retail asset business. Over the years, as a Non-Banking Financial Institution, the company has established a strong market presence with efficient systems and processes and has surpassed many significant milestones. It continues to demonstrate excellence in its business strategies, as a leading player in the country, offering a comprehensive range of financial products and services.

The United Finance Company (SAOG) was established in 1997. The company offers a wide range of financing products, corporate deposits and loans for insurance cover of assets. The company covers an individual's life for partners in loan accounts, through a group insurance scheme up to the age of 65 years. Over the years, the company has established a niche market for itself in small and medium enterprises financing. It has always believed in applying creativity to its work, with the approach that if the product doesn't exist create it, if it

can be bettered, change it. By following this approach, the company has earned a reputation as a finance company that can be counted on to deliver, offering customised solutions in corporate finance or crafting a perfect deal for the customer - a finance company with a refreshingly different approach.

Taageer Finance Company (SAOG) was established in 2000 and started its business operations in September 2001. It is the youngest and one of the leading Non-Banking Finance Companies operating in Oman, under license from the Central Bank to provide financial services to retail and corporate customers.

A comparative analysis of finances of six NBFs is drawn from respective annual reports of 2016 and furnished below:

Table No 1: Comparative finances for the year ended December 2016

Amount in RO- 000's							
	UFC	AOFS	MFC	NFC	OOLC	TFC	Total
Capital	32,630	26,786	26,672	27,113	25,104	25,359	163,664
Net worth	45,466	62,878	38,391	45,655	38,720	36,402	267,512
Bank Borrowings	56,205	186,893	77,450	131,626	131,733	104,756	688,663
Bonds / Debt / Deposits	13,353	13,945	29,257	15,858	6,750	7,052	86,215
Total Borrowings	69,558	200,838	106,707	147,484	138,483	111,808	774,878
Trade Creditors & Other Liabilities	4,602	12,159	8,617	6,081	5,058	7,754	44,271
Total Outside Liabilities	74,160	212,997	115,324	153,565	143,541	119,562	819,149
Total Equity & Liabilities	119,626	275,875	153,715	199,220	182,261	155,964	1,086,661
Finance Income	11,590	17,569	13,710	17,211	17,015	12,579	89,674
Interest Expense	2,629	6,256	4,072	5,062	5,408	4,093	27,520
Net Interest Income	8,961	11,313	9,638	12,149	11,607	8,486	62,154
Other Income	913	1,394	705	1,100	1,457	1,344	6,913
Total Operating Income	9,874	12,707	10,343	13,249	13,064	9,830	69,067

Admin & Staff Expenses	3,521	4,671	3,435	4,497	4,238	3,801	24,163
Depreciation	121	163	50	168	135	154	791
Total Operating Expenses	3,642	4,834	3,485	4,665	4,373	3,955	24,954
Operating Profit	6,232	7,873	6,858	8,584	8,691	5,875	44,113
Provision for Impairment	936	1,601	1,294	1,371	2,686	882	8,770
Profit before tax	5,296	6,272	5,564	7,213	6,005	4,993	35,343
Net Profit	4,505	5,311	5,138	6,349	5,531	4,474	31,308
Fixed Assets	2,612	1,200	47	1,755	466	348	6,428
Finance Debtors	114,549	238,895	149,858	192,529	179,914	152,264	1,028,009
Gross Debtors	120,250	247,618	166,088	204,541	190,487	160,391	1,089,375
Total Assets	119,626	275,875	153,715	199,220	182,261	155,964	1,086,661
Cumulative Prov. for Impairment	5,701	8,723	16,230	12,012	10,573	8,127	61,366
Gross NPL's	11,561	2,350	15,680	12,010	9,779	8,599	59,979

Source: Compiled by the Author

4. GROWTH/DEVELOPMENTS

Some research suggests a high correlation between financial development and economic growth. Generally, a market-based financial system has better-developed NBFIs than a bank-based system, which is conducive for economic growth (Wikipedia).

At the macro level, the fortunes of the leasing sector are linked to the state of the economy. At the micro level, the performance of the sector is dependent on consumer spending and the level of business activity, especially for the small and medium scale enterprises. Like the banking sector, the leasing sector is also governed by the Central Bank of Oman. While the banks focus on medium to large scale businesses and projects for lending, the leasing sector targets the medium to small scale business enterprises and individuals. In the retail segment, banks in Oman can lend only up to 40% of their total loans. Most of the commercial banks are very close to this target. This leaves the field open for the NBFC sector.

4.1 INDUSTRY TREND

The initiation of various infrastructure projects by Oman's government triggered plenty of economic activities and employment generation through the trickledown effect. Increase in oil prices, good growth in government budget, softening of interest rates and other positive factors provided the necessary impetus for growth opportunities.

Even though NBFCs witnessed a recession during 2009-2010 and again, a sluggish market from the middle of 2015, due to the downward trend in international oil prices, they have shown stable growth over the years.

Overall performance of the NBFCs presented strong growth, despite the challenges they faced during the last two decades. A review of the sector's financial performance from 2000 to December 2016, showed a strong growth throughout these years; as indicated in the Table below.

Table No 2: Overall financial performance of NBFCs in Oman

Particulars	Amount in RO - Millions				
	2000	2005	2010	2015	2016
Total Assets	168.621	258.914	530.022	1037.362	1086.661
Gross finance debtors	148.069	219.742	476.43	990.554	1027.134
Net profit	4.508	7.707	15.673	31.968	31.308
Bank borrowings	92.201	113.447	265.029	640.088	688.663

Source: CBO Annual report

Total assets of FLCs recoded an increase of RO 49.3 million, or 4.8 percent, and stood at RO 1,086.7 million at the end of December 2016, compared to RO 1,037.4 million in 2015. The gross financing portfolio registered a growth rate of 3.8 per cent (2015: 11per cent) during 2016. Total outstanding credit (net of provisions) in the form of hire purchase credit and lease financing stood at RO 1,028 million at the end of 2016. The lending growth of the FLCs has fallen with the decline in the growth rate of economy.

Gross nonperforming loans (NPLs) of FLCs increased by RO 9.7 million during 2016 and stood at RO 59.2 million at the end of the year, an increase of 19.6 percent as compared to RO 49.5 million in the previous year. Gross NPLs at the end of 2016 constituted 5.4 percent of the gross loan portfolio of FLCs. The growth of NPLs outpaced the credit growth; as a result, the NPL ratio increased to 5 per cent at the end of 2016, from 4.3 per cent at the end 2015.

Likewise, at the end of 2016, the net NPL ratio (without accounting for general

provisions) increased to 2.9 per cent from 2.15 per cent in 2015. The NPL ratio of FLCs remained much higher than that of the banking sector. (CBO Financial stability report, 2017).

The FLCs continued to count primarily on bank borrowing and capital to fund their operations. At the end of 2016, bank borrowing constituted 63.4 per cent (2015: 61.7 per cent) of the balance sheet of FLCs. Borrowings from banks and other financial institutions rose to RO 688.7 million, comprising the primary source of funding for FLCs.

However, there is a marked change in the composition of bank borrowing. At the end of 2016, the long-term bank funding declined to 23 per cent (2015: 47 per cent) of total bank funding, while the share of short term bank borrowing increased to 77 per cent, compared to 53 per cent in 2015. 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 quickly transmitted to FLCs.

Recently, CBO allowed FLCs to raise six months term deposits from corporates. This was expected to help them diversify their sources of funding. However, FLCs could not mobilize much deposit from this source.

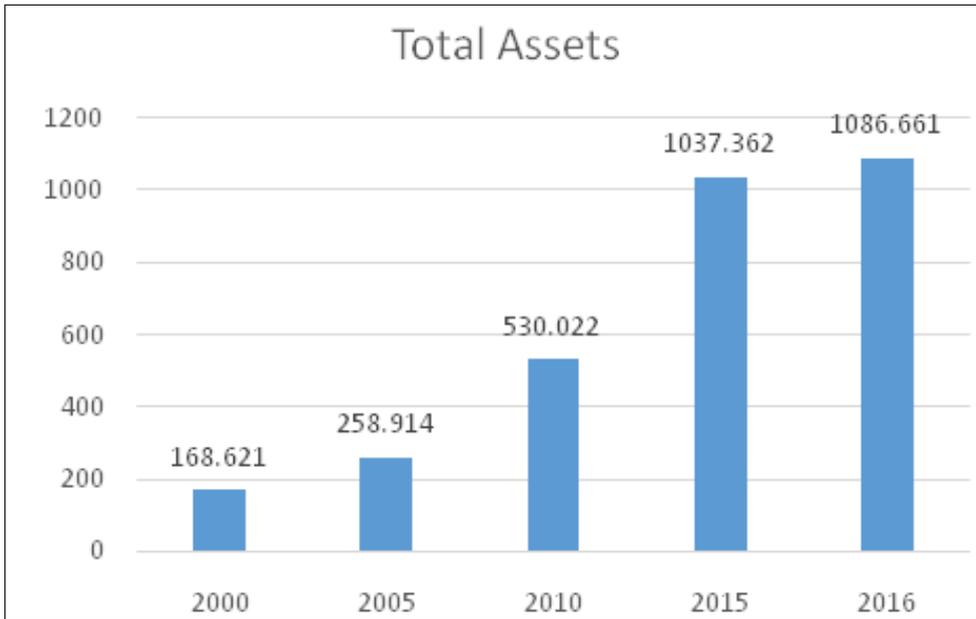
The consolidated capital and reserve base of FLCs increased to RO 267.5 million at the end of 2016, compared to RO 251.2 million at the end of the previous year. Net profit of FLCs after provisions and taxes remained fairly stable, at RO 31.3 million in 2016, compared to RO 32 million in 2015. The weighted average rate of interest per annum charged on lending by FLCs witnessed a marginal drop to 8.8 percent per annum during 2016, compared to 8.9 percent during the previous year.

Decrease in long term bank funding and more short term funding in rising interest rate environment are unfavourable cues; higher funding costs and declining financing rates may weigh on profitability.

The decline in earnings was primarily on account of the higher cost of borrowing from the banks.

Declining yield on financing due to heightened competition also contributed to decrease in profitability.

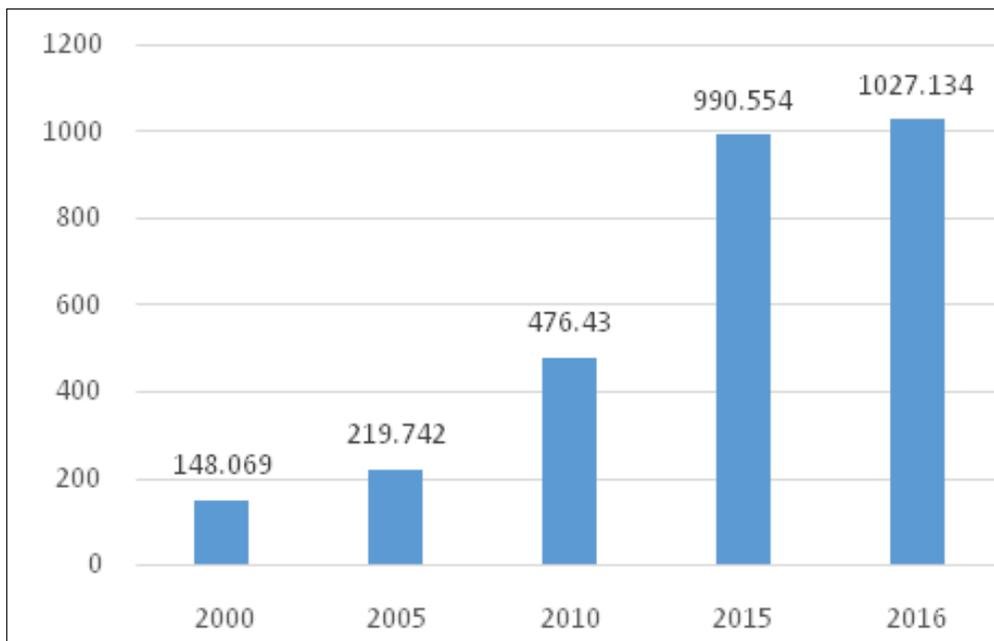
Total Assets of the NBFC sector including gross loans and advances exceeded the RO1 billion mark, touching RO 1.087 billion. Total Assets increased from RO 168.621 million as at December 31, 2000 to RO 1,086.661 million as at December 31, 2016, a growth of 644.44 per cent over a period of nearly two decades, with all six companies witnessing strong growth in this area on the asset side of the balance sheet.

Figure No 1: Total Assets of NBFCs Sector

Source: Compiled by the Author

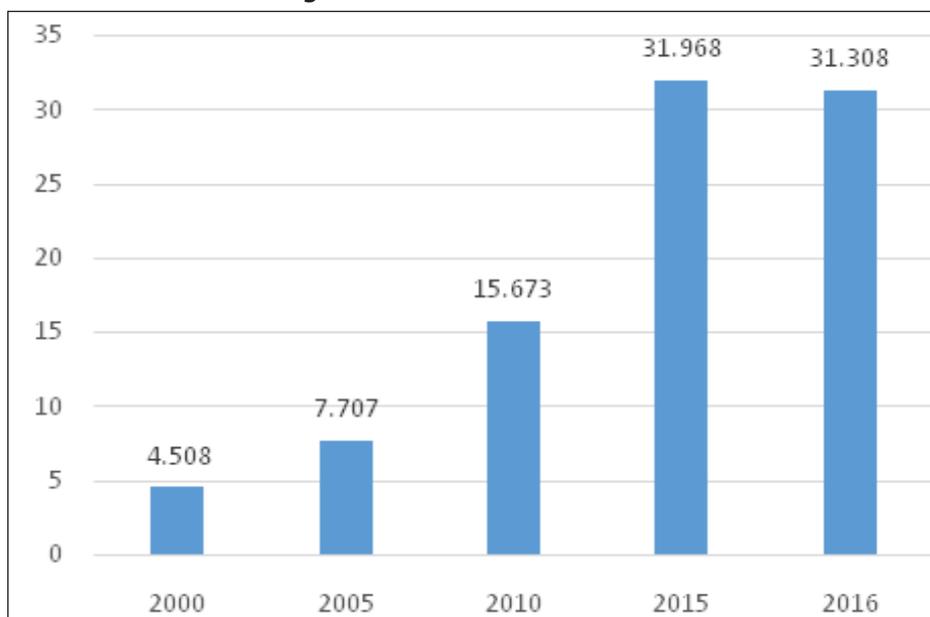
FLCs do not accept checking or demand deposits, therefore, they do not need to carry large cash balances or liquid assets. Consequently, they can employ a larger proportion of their assets in financing or other earning assets. Financing, therefore, continued to have a dominant share in the assets of FLCs. At the end of December 2016, the net financing constituted about 95 per cent of total assets of FLCs, suggesting efficient deployment of assets. Currently, with a share of 65 per cent, financing to businesses has declined from the previous years, when it was 68 per cent of the total financing provided by FLCs. Financing to households was about 35 per cent (2015: 32 per cent) of the total credit extended by FLCs (Financial Stability report of CBO – 2017).

Total gross finance debtors, a major part of total assets of the NBFCs, increased from RO 148.069 million on December 31, 2000 to RO 1,027.134 million by December 31, 2016; a growth of 693.69 per cent over a period of nearly two decades, with all six companies witnessing strong growth in this area post 2005. Year 2016 showed a drop in gross finance debtors' growth due to declined oil prices, since NBFCs adopted a selective approach to grow its loan portfolio, with emphasis on maintaining asset quality.

Figure No 2: Gross Finance Debtors of NBFC sector

Source: Compiled by the Author

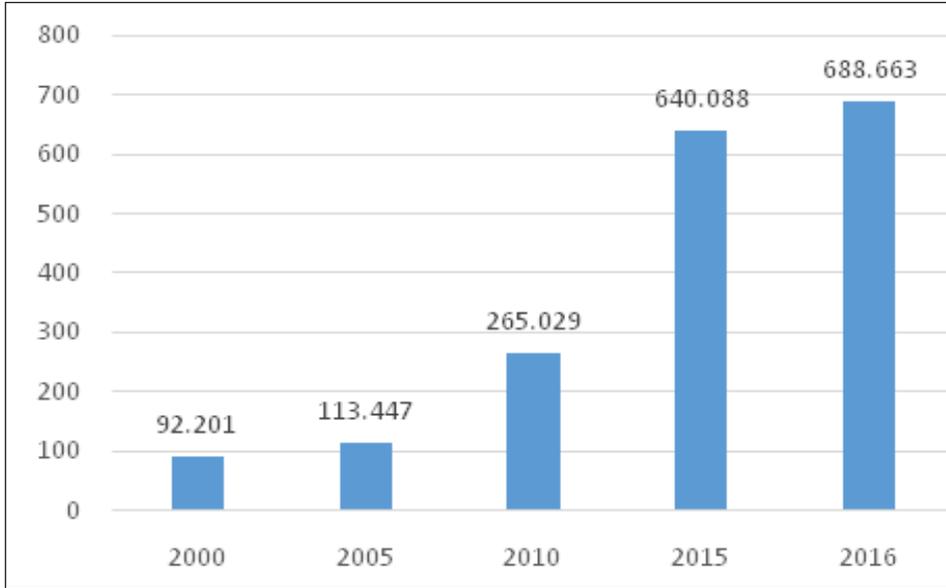
Net profit for the NBFC sector gradually increased from RO 4.508 million in 2000 to RO 31.968 million in 2015 and slightly declined to RO 31.308 million by the end of 2016, due to the declining market situation.

Figure No. 3: Net Profit of NBFC s

Source: Compiled by the Author

NBFCs borrow from banks as they cannot accept deposits beyond prescribed limits. Total bank borrowings amounted to RO 688.663 million at the end of 2016; up from RO 92,201 million in the year 2000.

Figure No. 4: Net Profit Bank Borrowings of NBFC sector



Source: Compiled by the Author

NBFCs in the Sultanate, which have been hit hard by tightening liquidity conditions were able to maintain profitability and post moderate growth in the year 2016.

All six NBFCs in Oman posted moderate growth in 2016. The earnings of FLCs marginally declined during the year. FLCs posted a pre-tax profit of RO 35.3 million during 2016, compared to 36.4 million during the previous year. Similarly, the profitability indicators, ROA and ROE, also slightly declined, but remained healthy at 3.3 per cent (2015: 3.7 per cent) and 13.6 per cent (2015: 14.6 per cent), respectively.

The decline in earnings was primarily on account of the higher cost of borrowing from the banks. Moreover, declining yield on financing due to heightened competition also contributed to a decrease in profitability.

Additionally, the finance sector was dominated with merger talks of National Finance and Oman Orix Leasing Company. The National Finance Company and Oman Orix Leasing Company boards jointly decided to merger of both leasing firms and CBO has approved the same.

5. ISSUES

A multi-faceted financial system that includes NBFIs can protect economies from financial shocks and enable speedy recovery when these shocks happen. NBFIs provide “multiple alternatives to transform an economy’s savings into capital investment, serve as

backup facilities should the primary form of intermediation fail.”

However, in the absence of effective financial regulations, NBFIs can exacerbate the fragility of the financial system. Due to increased competition, established lenders are often reluctant to include NBFIs into existing credit-information sharing arrangements. Additionally, NBFIs often lack the technological capabilities necessary to participate in information sharing networks. In general, NBFIs also contribute less information to credit-reporting agencies than do banks (Wikipedia).

6. CONCERNS

Oman, along with other oil dependent Gulf Cooperation Council economies, has been hit by a downturn due to low oil prices since 2015. Government projects that were a major economy and job driver fell, while payments stalled and in a direct response, companies froze recruitment. This was followed by restructuring in companies and staff numbers declining significantly.

Moreover, the business customers of FLCs are mainly from the SME sector, which is more vulnerable to economic downturns. FLCs should, therefore, improve their credit analysis, monitoring and risk management practices to keep the credit risk within manageable limits.

Companies in Oman are making the mistake of cutting staffing costs during a recession, instead of retaining skilled staff to counter the economic situation with innovation. This is rather a time of opportunities to eliminate waste that was produced to renew a sense of urgency to be more productive and also to make fundamental changes for continuous economic growth. A lay-off strategy is counterproductive.

Recent data from the National Centre for Statistical Information showed that there has been a steep decline in the number of small enterprises, 31.2 per cent, in the first quarter of 2017. The number of educated expatriates has also declined from the country's workforce. It is said that companies need to take risks and diversify, as there are still many opportunities available in the country.

7. CHALLENGES

Overall financial performance of the NBFC sector presented strong growth, despite the challenges faced due to some of the regulatory changes that came into effect during 2016. Among them was enforcement of a requirement for leasing companies to increase their paid up share capital to RO 25 million progressively over three years by the end of December 2016.

Despite increased competition, coupled with regulatory changes that capped profit margins, were already stressed due to falling lending rates, the sector managed to overcome the challenges, with the support of increased government spending, a growing population with a demography characterised by a large youth segment, an increase in disposable income as a result of the minimum wage increase and a debt friendly environment with a sustained period of low interest rates.

Due to pressure on lending rates because of increasing competition from Islamic Banking Institutions, higher funding costs because of the increase in policy rates, and potential increase in provisions, the FLCs may find it increasingly challenging to maintain the level of profitability unless they make concerted changes in their business model.

Heavy reliance on short term bank borrowing continues to expose NBFCs to the cost and availability of bank funding. Moreover, because of the interconnectedness with banks, shocks from banks may be quickly transmitted to NBFCs.

With the continuation of government spending and increase in demand for capital goods, the sector appears to be set to achieve reasonable growth. In retrospect, risks that can affect the growth are the uncertainty of oil prices falling and remaining at low levels for longer than anticipated periods, resulting in slower growth and any further changes in regulations that may affect business strategies, at least in the short term.

NBFCs business also depends upon small and medium enterprise companies taking on challenges. Companies need to stop fearing taking risks and failing. Most companies today are living with that fear and are unable to develop in such economic circumstances. They are waiting for good times to return. What they fail to see are the opportunities that are present.

Anyone can run a profitable business when the economy is booming, but only a person with a well-planned strategy and who is willing to take risks can prosper in challenging times.

8. STRATEGIC DIRECTIONS

In November 2017 the government proactively issued diversification plans in which more than 120 projects in the non-oil and gas sector were highlighted by Tanfeedh, the National Plan for Economic Diversification. Experts advised that the companies focus on cash flow and cost management, use lean techniques and their existing staff to help them diversify and innovate.

Experts also suggested that the focus must be on productivity and companies must launch productivity management programs that access employee productivity, giving them the right incentives for their performance. A demanding economic situation calls for leaders to take up challenges and move forward, instead of sitting back and waiting for good times to return.

NBFCs business opportunities would grow if small and medium enterprise companies start considering changing their business approach, by focusing on opportunities, which would not have otherwise been possible if times. The government is making efforts to diversify and so must companies and individuals.

9. FUTURE SCENARIOS

The financial system is being sustained through various forms of quantitative easing by the central banks worldwide. However, oil producing economies in the Middle East and

North Africa (MENA) are running large trade surpluses and are opening up to investments. Oman's GDP continued growing from 2012 till 2015 due to higher than budgeted crude oil prices, reserves and budget surpluses of earlier years, although the GDP has declined from mid-2015 due to drop in international oil prices.

Growth, however, is expected to continue in the next few years. Although oil and gas development remains a priority for the Government of Oman, the initiatives taken by the country to increase the GDP's contribution from the non-oil segment, together with its economic diversification program, provides immense opportunities for the country's financial institutions.

The non-banking finance companies sector witnessed a challenging year in 2016 as the tightening of liquidity in the market raised the cost of short-term funding for financial institutions and also raised the fears about a sharp increase in interest rates amidst the prevailing economic environment. There will be additional stress on the NBFCs to sustain earnings and profitability with the increase in non-performing assets, shortage of talent and increase in staffing costs. The stress on the net margin of NBFCs due to the liquidity crunch in the local market and the consequent increase in the cost of funds, coupled with the increase in FED rates is another major cause for concern. Lower oil prices and budget deficits will impose significant challenges during the year 2017. Only companies with a sustainable business model, emphasis on higher efficiency, risk diversification, prudence and innovation will succeed in the long run.

The medium term fundamentals of the economy remain strong, with a resilient banking system, stable exchange rate, sufficient foreign exchange reserves, adequate physical infrastructure, and foreign investment policy pursued by the government.

Some NBFCs are contemplating launching a digital platform to market their products in both B2B and B2C and have plans to enter the credit card business, acting as insurance agents.

10. PROSPECTS

Oman's government has to start spending on new projects to increase demand for capital goods, to enable the NBFC sector to achieve some more years of reasonable growth. If the oil prices stabilize above the budgeted level for longer than anticipated, results can see a bounce back in economic growth. However, the uncertainty of falling oil prices and remaining low levels may slow growth and any further changes in regulations may affect business strategies, at least in the short term. NBFCs that are able to enhance operating efficiencies through concerted changes in their business model and cost control and are able to find ways to diversify their funding options at relatively lower costs will emerge stronger.

15. CONCLUDING REMARKS

Although oil and gas development remains a priority for the government of Oman, the initiatives taken by the country to increase the non-oil segment's contribution to the

GDP through its economic diversification program provide immense opportunities for the financial institutions in the country. Oil prices rose to an acceptable level above the budgeted price towards the end of 2017. Overall, the Oman government had proactively issued diversification plans in November 2016, where more than 120 projects in the non-oil and gas sector were highlighted for Economic Diversification. With the continuation of government spending and increase in demand for capital goods, the NBFC sector appears to be set to achieve some more years of reasonable growth.

REFERENCES

- About Non-bank financial institution. Retrieved from https://en.wikipedia.org/wiki/Non-bank_financial_institution
- Alan Greenspan (1999). Do efficient financial markets mitigate crises?. Retrieved from https://en.wikipedia.org/wiki/Non-bank_financial_institution#cite_note-5
- Ayisha Zia (2012). Leasing Sector of Oman. Retrieved from: <http://content.argaam.com.s3-eu-west-1.amazonaws.com/af088759-b56d-429c-a4f9-4715fc900209.pdf>
- Central Bank of Oman Annual Report (2016)
- Financial Stability Report of Central bank of Oman (2017)
- Historical Annual Reports of Al Omania Financial Services Company. Retrieved from: <http://www.aofsoman.com/index.php>
- Historical Annual Report of Muscat Finance Company. Retrieved from: <https://www.mfcoman.com/profile/>
- Historical Annual Report of National Finance Company. Retrieved from: <http://www.nationalfinance.co.om/>
- Historical Annual Report of Oman Orix Leasing Company. Retrieved from: <http://omanorix.com/corporateinfo.aspx>
- Historical Annual Report of Taageer Finance Company. Retrieved from: <http://www.taageer.com/about-us/>
- Historical Annual Report of United Finance Company. Retrieved from: <http://www.ufcoman.com/index.php>
- NBO (2015). Non-Banking Financial Companies perform well amid challenges. Business Today March 3, 2015. Retrieved from: <http://www.businesstoday.co.om/Issues/Swimming-against-the-current/Non-Banking-Financial-Companies-perform-well-amid-challenges>
- Syed Haitham Hasan (2017). Don't rush into firing staff, firms in Oman advised. Times of Oman May 24, 2017 Retrieved from: <http://timesofoman.com/article/109794/Oman/Omanisation/don039t-rush-into-firing-staff-firms-in-oman-advised>.

Chapter 5

COMPARING THE EFFICIENCY OF NATIONAL AND FOREIGN HEALTH INSURERS IN OMAN

Dharmendra Singh, Nikola Stakic and Bashir Ahmed Fida

ABSTRACT

The objective of this paper is to study the insurance market of Oman and to analyze the performance of health insurance companies by measuring their technical efficiencies from 2013-2016. Data Envelopment Analysis (DEA) methodology was employed to estimate technical efficiency of health insurers operating in Oman and a one-way ANOVA was used to compare the average efficiency of national and foreign health insurance companies in Oman. The study found that growth of insurance is modest and the sector has a bright future. The CAGR of insurance density in Oman was 4.1% from 2008 to 2016. Efficiency figures of health insurance companies indicate that there is scope for improvement. National companies like Al Ahlia insurance, Vision insurance, and Oman United insurance are displaying critical performances regarding technical efficiency. However, results of ANOVA show that there is no difference between the average efficiency of national and foreign health insurance companies. This is the first ever study based on efficiency measurement of health insurers in Oman.

Keywords: Health insurers, DEA, Technical Efficiency, Oman

1. INTRODUCTION

Oman's insurance market is modest and growing at a slow but robust pace. The contribution of the insurance sector to Oman's economy is increasing consistently. The contribution of the insurance sector in GDP was 0.9 % in 2008, which increased to 1.8% in 2016, showing a steadily growing insurance market. However, the rate of growth is too slow as compared to global benchmarks. The picture of insurance growth in the entire Gulf Cooperation Council (GCC) region is modest; motor insurance is the most dominant type of insurance across the GCC. The reason for the growth in motor insurance is due to mandatory third party insurance for all motor owners. Similarly, health insurance is also doing well across all GCC countries, as most of the expatriates living in the GCC countries are covered by health insurance, which is mandatory according to labor laws of these countries. In the entire region, the share of life insurance has been meager as compared to a 56% share of life insurance business worldwide. Lack of awareness and promotion, the presence of social welfare schemes and Islamic beliefs which do not match the conventional concept of life insurance are the major factors contributing to a low market share of life insurance business.

The insurance penetration, defined as the percentage of total insurance premiums to the GDP of that country is one of the key metrics which decides the growth prospects of

this sector. The insurance penetration ratio of the Middle East and African nations (MENA) is only a quarter of the global average, whereas the per capita income in the MENA region as a whole is similar to the global average. Similarly, Insurance Density, which is defined as the ratio of insurance premium to the population size of a country is OMR141 for the GCC countries as compared to the global average of OMR 252. The low insurance penetration ratio, low insurance density, and high per capita income level give an immense growth opportunity to the insurance sector (Swiss Re Economic Research & Consulting, 2015).

Regarding insurance penetration, Oman is ranked at third place in the GCC, behind Bahrain and the UAE. Oman is a small country primarily dependent on oil export. Due to oil price correction the country has experienced various fiscal austerity measures and a steep decline in business activities, especially in the construction sector. Oman's GDP growth was 3.6% in 2015 and over 2% in 2016, whereas it was as high as 7.1% in 2012. Despite volatile macroeconomic drivers, the insurance sector has shown a relatively robust performance, growing at a compounded annual growth rate (CAGR) of 11% since 2009. Much of this growth has been due to the sharp expansion in the health insurance with a CAGR of 32% from 2009 to 2015, due to rising public awareness and government initiatives to boost healthcare infrastructure. As a result, health insurance has grown from a market share of 8% in 2009 to 23% in 2015. Life and non-life segments (excluding health) grew at a relatively modest CAGR of 5% and 8%, respectively (Ernst & Young, 2017).

The growth and success of insurance as a whole are highly significant for the economic development of Oman. The importance of insurance was realized in 2007 when cyclone 'Gonu' damaged property worth approximately OMR 3.5 billion, out of which only OMR 245 million was insured. Health insurance being the leader regarding growth is one of the important topics to research. The significant and steady growth of health insurance in Oman has motivated us to measure the efficiency of health insurance firms. The present study attempts to evaluate the performance of health insurance companies regarding efficiency and also to overview the current situation of the insurance sector in Oman.

2. LITERATURE REVIEW

In the existing literature, there are numerous studies based on technical and cost efficiency of insurance companies. Most of these studies are based on developed countries; few studies are also based on emerging economies like China, India and regional blocks. There are two ways to measure efficiency: the parametric method and non-parametric method. In the literature, the two commonly used parametric methods are Stochastic Frontier Approach (SFA) and Distribution Free Approach (DFA). Data Envelopment Analysis (DEA) is the most popular nonparametric method used for efficiency measurement.

Hao and Chou (2005) assessed the translog cost function for 26 Taiwan life insurance companies using 23 years of data from 1977 to 1999. They implemented a distribution-free approach (DFA) model to estimate inefficiency of the life insurers. The study reveals that inefficiency relates to market share, product diversification, and scale efficiency.

Cummins et al. (1996) evaluated the performance of Italian insurers, including life and general insurers, from 1985 to 1993. They used the DEA and Malmquist index to measure

the efficiency of 94 Italian companies by considering administrative salaries, equity capital as input variables and life insurance benefits, changes in reserves and invested assets as outputs. The results suggest that there is no significant change in the efficiency of Italian insurers and efficiency ranged from 22% to 30% during the sample period.

Yang (2006) applied the DEA model to assess the production performance and investment performance of the Canadian life and health insurance industry. The author selected labor expenses, capital, general operating expenses, claims incurred and equity as the inputs and two outputs premium underwritten and net income to evaluate the production performance. Chen et al., (2009) evaluated the efficiency of life insurers operating in China and compared foreign firms with domestic firms. They concluded that there is no significant difference between foreign life insurers and domestic insurers and that domestic giants still dominate the market.

Al Amri et al., (2012) investigated the technical efficiency of insurance companies operating in the GCC region and concluded that the insurers of GCC are moderately efficient with high dispersion in the efficiency scores. The authors used DEA methodology and Malmquist Productivity Index with a sample of 39 insurance firms in the region.

Barros et al., (2014) worked on efficiency determinants of Angolan insurance companies using the DEA output-oriented model between 2003 and 2012. The authors used the DEA model to considering operating costs, number of employees, wages and capital as four input variables and in place of output, variables like claims paid, premiums earned and ceded reinsurance were selected. The findings suggests that older insurance companies with Portuguese origins tend to be more efficient.

Al Amri (2015) applied DEA methodology on the Takaful insurance firms of the GCC region to analyze their technical, purely technical, cost and allocative efficiency. The indicative findings were that Takaful insurance firms are technically efficient and firms of the UAE and Qatar scored the highest technical efficiency compared to other countries. Saudi Arabia and the UAE are the most cost-efficient among the GCC countries.

Tone and Sahoo (2005) applied the DEA model to study the performance of the Life Insurance Corporation of India over a period of 19 years. The results showed a substantial dispersion in the cost efficiency scores of LIC over the period of study. Sinha (2007) evaluated the efficiency changes in the life insurance business of India for the period 2003-2005 using the Malmquist total factor productivity index. On the basis of the technical efficiency score of the sample life insurers, it was found that private insurance companies of India are far behind the public giant LIC.

Bawa and Ruchita (2011) applied DEA to evaluate the technical efficiency of health insurance companies in India. They studied ten general insurance companies using capital and labor as input variables and net premium as the output variable. It was discovered that technical efficiency of all the private sector companies is higher than that of public sector enterprises.

Bawa and Bhagat (2015) evaluated the efficiency of 13 life insurance companies operating in Punjab state of the Indian union. They considered 'number of agents' and 'number of offices' as input variables and 'net premium' and 'number of policies' as output

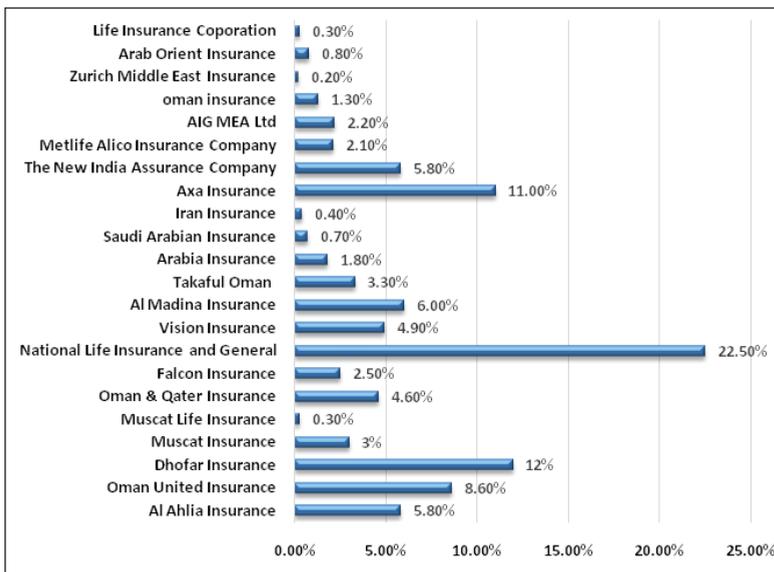
variables while applying the DEA model. Results of the study found that LIC is found to be efficient in all years and the average efficiency of life insurance companies was 55%.

The literature on measuring technical efficiency of insurance companies is not as rich as that for commercial banks. In the literature available most of the studies are from developed markets and emerging markets like Asia; most of them are based in China and Taiwan. There are a few studies on efficiency evaluation of companies from MENA and GCC regions as well, but according to the authors' knowledge, there is no study based on the insurance sector of Oman. The present study is significant and will add value to the existing literature as this will be the first study on efficiency measurement of national and foreign health insurers in Oman.

3. OVERVIEW OF OMAN'S INSURANCE SECTOR

The insurance sector of Oman has shown a robust performance despite the dwindling economic fundamental due to low oil prices. The gross direct premium from all types of insurance was OMR 208.28 million in 2008, and in 2016 it was OMR 450 million, which shows a compounded annual growth rate (CAGR) of 10.11 %. Motor insurance has initially dominated the insurance in Oman, but now health insurance is also a leading insurance category, with a CAGR of 32% from 2009 to 2015. Health insurance has grown from a market share of 8% in 2009 to 26% in 2016. Life and non-life segments (excluding health) grew at a relatively modest CAGR of 5% and 8%, respectively. There are 22 insurers operating in Oman, out of which 11 are conventional foreign insurers, nine conventional national insurers and two companies, Takaful Oman and Al Madina Insurance, operating on the Islamic concept of insurance known as Takaful insurance. The total share of Takaful insurance in Oman was 9.3% in 2016. The insurance market is regulated by the Capital Market Authority (CMA) which has recently issued a regulation that all national insurers must go public in the secondary market.

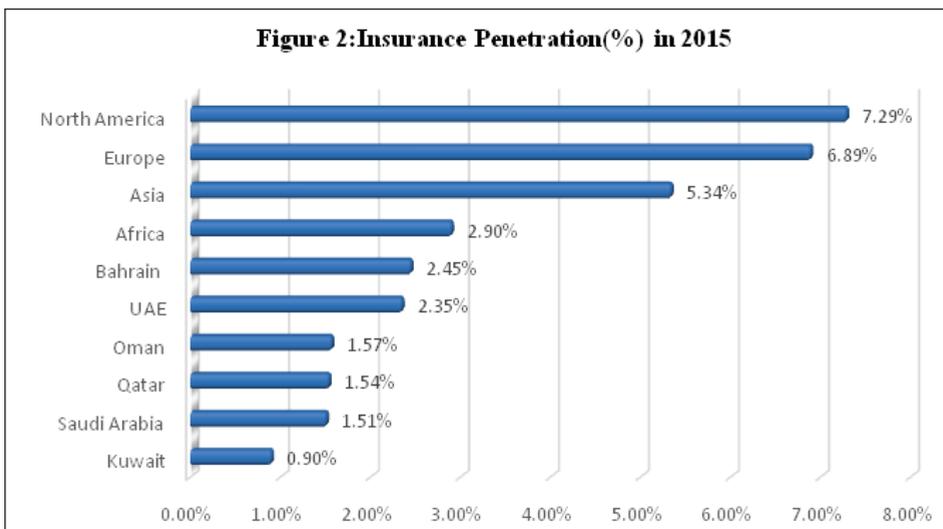
Figure 1 : Market Share of Insurers in Oman (2016)



Source: Insurance Market Index 2015-2016, Oman

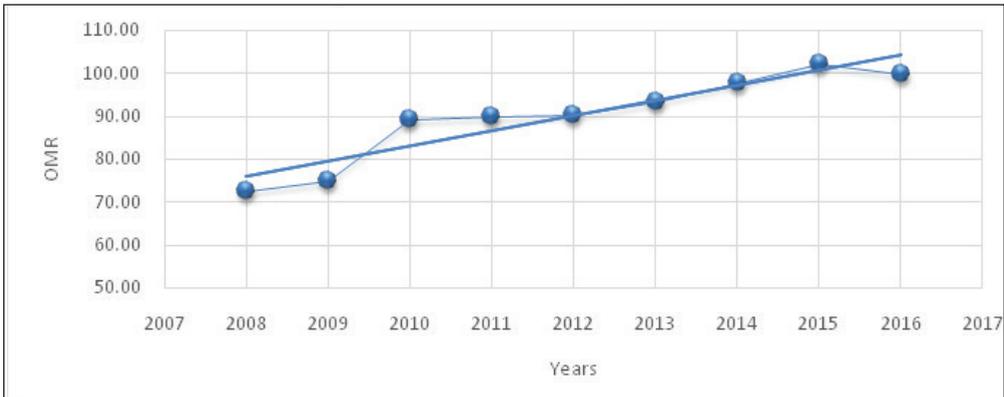
Figure 1 above represents the market share of insurers in Oman, which is based on the gross direct premium for the year 2016. The insurance market of Oman has been dominated by national insurers, whereas foreign insurers have also created their position. In 2016, the market share of foreign insurers regarding direct premium was 26.6 % and domestic insurers 73.4%. The Oman insurance sector is concentrated because at the top, eight insurers command 76.6% of the market share. The market is dominated by domestic players including National life insurance and general (22.5%) and Dhofar insurance (12%); from the foreign players Axa insurance (11%) and the new India assurance company (5.8%) are the leading players in Oman.

Figure 2 : Insurance Penetration (%) in 2015

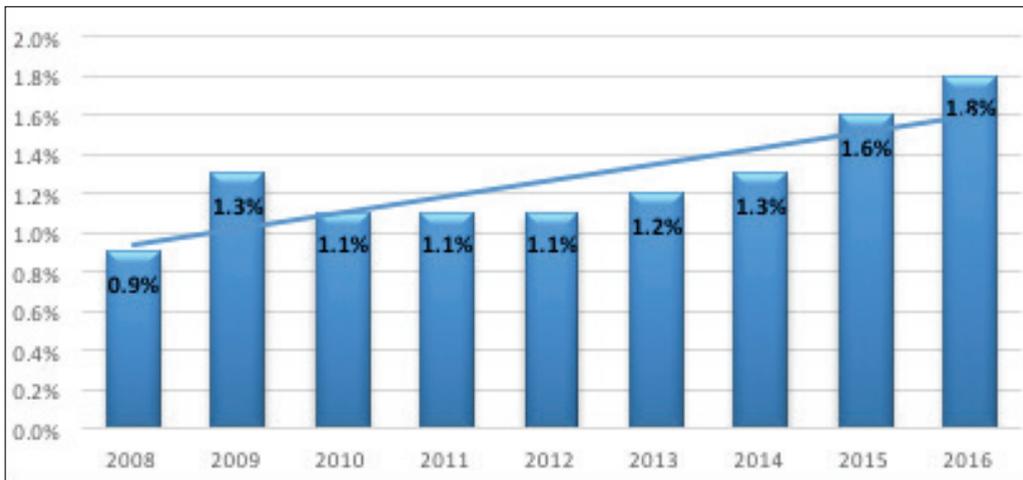


Source: Swiss Re World Insurance Report 2015

Figure 2, shown above, represents the insurance penetration of GCC countries and major blocks of Europe, North America, Asia, and Africa. Penetration rate indicates the level of development of an insurance sector in a country. Penetration rate is defined as the percentage of premium written to the GDP of that country in a particular year. It is evident that the insurance market of GCC is relatively underdeveloped, with an average penetration level of 1.72%, as compared to the global average of 6.5 %, 5.34% in Asia and 7.29% in North America. Within the GCC, Bahrain and the UAE are doing far better than Saudi Arabia, which is the biggest regarding area and oil export. The penetration level of 1.57% in Oman is satisfactory, but still, there is a big opportunity for players to expand.

Figure 3 : Insurance Density in Oman

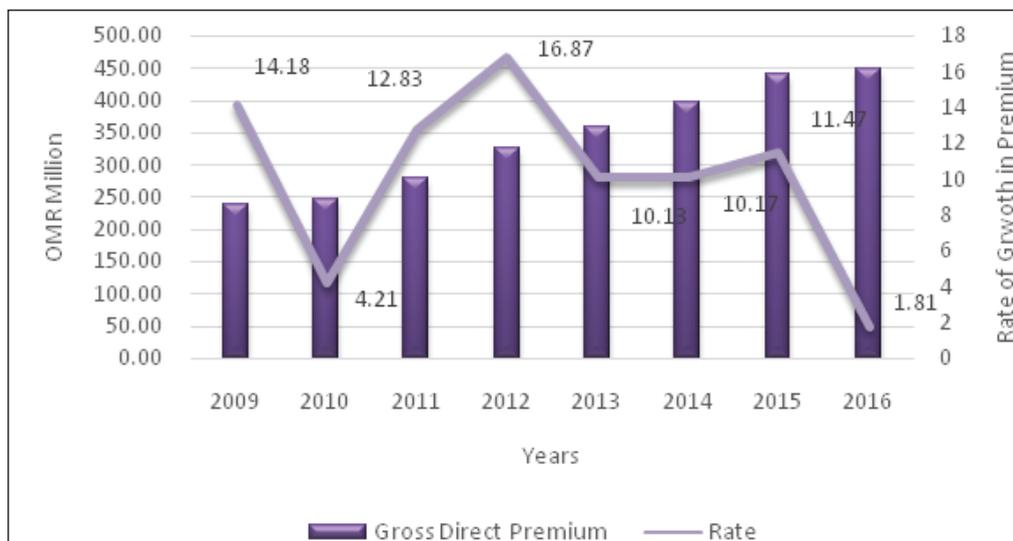
Source: CMA Annual Report 2016

Figure 4 : Insurance Penetration in Oman (%)

Source: CMA Annual Report 2016

Figures 3 and 4 above depict the insurance density and penetration in Oman from 2008 to 2016. Insurance penetration has consistently increased since 2012, and is also represented by the upward sloping linear trend line shown in the graph. Despite the drop in oil prices and increasing deficit in the government budget, growth in the insurance sector has been satisfactory during 2014 onwards. Insurance density is another parameter which measures the development of the insurance industry; it is calculated as the ratio of premium (in OMR) to the total population. There was a slight drop in insurance density from OMR 102 in 2015 to OMR 100 in 2016, whereas there was a consistent increase in density from 2008 onwards. The premium amount per unit of the population has grown in Oman, which indicates growth in the insurance sector. The CAGR of insurance density in Oman was 4.1% from 2008 to 2016.

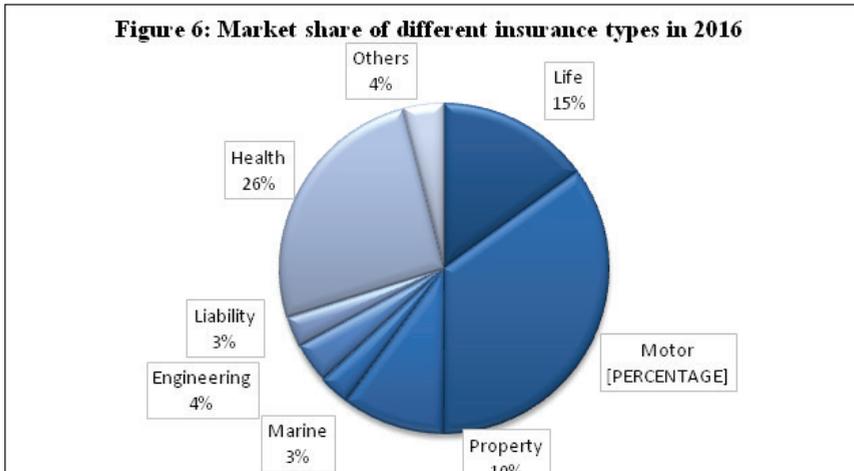
Figure 5 : Gross Direct Premium and Growth Rate



Source: Insurance Market Index 2015-2016, Oman

Figure 5 depicts the amount of gross direct premiums of insurance companies and the rate of growth in gross direct premiums from 2009 to 2016. It can be seen that the gross direct premium has increased each year from 2008 to 2016, although the growth rate has not been increasing continuously. The rate of increase fell from 14.18% (2009) to 4.21% (2010). There was a recovery in 2011 with an increase in growth rate of 12.83%. Oman experienced the highest growth rate in premiums during 2011 to 2012. The effect of the correction in oil prices can be seen as the growth rate dropped from 11.47% in 2015 to 1.81% in 2016. The dip in the growth rate can be attributed to the reduction in construction activities and in the sales of new cars, as the sector has witnessed a 13% drop in the gross direct premiums of motor insurance, 19% in group life insurance and 25% in engineering insurance business, as compared to 2015.

Figure 6 below shows the percentage break-up of the insurance market into various forms operating in Oman. Motor insurance has the biggest market share of 35%, followed by 26% share for health insurance, the total for these two being 62%. The life insurance share is 15%, which is the third highest, and shows why the position of life insurance in Oman is better than that of Saudi, Kuwait, and Qatar. Similarly, according to the ministry of manpower health insurance is also compulsory for all the employees. Governments in the GCC have enacted laws to establish or expand mandatory health coverage.

Figure 6 : Market share of different insurance types in 2016

Source: *Insurance Market Index 2015-2016, Oman*

Globally the share of a life segment is higher than a non-life segment, but in the GCC market the share of non-life is significantly higher than life business, except for the UAE which has the biggest share of life business compared to other GCC countries. The low share of life business can be the consequence of numerous government-sponsored welfare schemes, low customer awareness and cultural beliefs that are incompatible with the traditional concept of life insurance (E&Y, 2017).

4. DATA AND METHODOLOGY

The study has two objectives; the first is to review the overall status of Oman's insurance market, compared to that of the GCC and global market, by using metrics of insurance density and insurance penetration. The study is based on data collected from the insurance report of the CMA annual report 2016. The second objective of the paper is to evaluate the efficiency of national and foreign health insurance companies of Oman, based on the data collected from the Insurance market index reports of 2013-14 and 2015-2016.

The data for the health insurance companies were only available after 2013. None of the twenty two insurers operating in Oman were offering health insurance products. From data availability and products offered only 15 health insurance companies were selected for the study. Out of the 15 companies, eight national companies are Al Ahlia Insurance, Oman United Insurance, Dhofar Insurance, Muscat Life Insurance, Oman & Qatar Insurance, Falcon Insurance, National Life Insurance and General and Vision Insurance. The seven foreign companies are Arabia Insurance, Axa Insurance, The New India Assurance Company, Oman Insurance, Zurich Middle East Insurance, Arab Orient Insurance and Saudi Arabian Insurance.

4.1 DEA METHODOLOGY

Data Envelopment Analysis (DEA) was introduced by Charnes et al., (1978). This is a non-parametric technique used for measuring the efficiency of organizations like banks, hotels, and institutions by creating efficient frontiers with the help of given decision making units (DMUs). DEA methodology is a relative measure of efficiency where the efficiency score ranges between zero and one.

DAE has been effective and widely accepted in assessing the relative efficiency of insurance and other firms. According to DEA methodology the estimation of technical efficiency can be done in two ways, one as an input-oriented and other as an output oriented model. The objective of an input-oriented model is to minimize input for a given level of production, and for the output-oriented model the objective is to maximize output for a given level of input. The output oriented model is described below:

The linear programming form is as follows.

$$\text{Max } e = \frac{\sum_{j=1}^l u_j y_j}{\sum_{i=1}^k v_i x_i}$$

Subject to

$$\sum_{j=1}^l u_j y_j / \sum_{i=1}^k v_i x_i \leq 1$$

$$u_j, v_i \geq 0$$

$$j=1,2,\dots,l, \quad i=1,2,\dots,k$$

Here y_j and x_i are the positive output and input of the insurance companies and u_j and v_i are variable weights that would be determined by solving the problem. 'e' is the efficiency of the insurance companies. If it is equal to one that means the firm is deemed to be efficient. Otherwise, it is inefficient.

4.2 SELECTION OF INPUTS AND OUTPUTS

The results of DEA analysis largely depend on the right selection of input and output variables. In most of the studies, such as those by I Fenn et al. (2008), Eling and Huang (2011), Saad and Idris (2011), Elign and Luhnien (2010) input proxy were capital, number of employees and operating and administrative expenses. In studies by Gardner and Grace (1993), Fecher et al., (1993), Cummins et al., (1996) and Barros et al., (2014) output proxy were net premium, changes in reserves and net income. In the present study of efficiency measurement, the authors have considered administrative expenses and direct claims as the input variables, as in Yang's (2006) study. They have considered earned premium and number of policies as the output for the study, which is consistent with Bawa and Bhagat's study (2015).

5. EMPIRICAL ANALYSIS

Out of the 22 insurance companies operating in Oman, the study was conducted on 14 companies offering health insurance. Their technical efficiency was assessed for the years 2013 and 2014. Based on data availability, for the analysis 13 health insurance companies were chosen for the year 2015 and 2016.

5.1 EFFICIENCY SCORES FROM DEA

Table 1 shows technical efficiency scores of health insurance companies for the years 2013 and 2014. In 2013, three national and two foreign companies were found to be relatively efficient. The average efficiency score of national health insurers in 2013 was 0.68, whereas the average efficiency of foreign health insurers was found to be 0.69; so both foreign and national insurers are almost at the same level of the average industry efficiency, close to 0.685.

For 2014, the average efficiency of national health insurance companies was a low 0.36, and that of foreign health insurance was 0.65. Only one foreign company 'Zurich middle east insurance' was fully efficient. All the national insurers were in the category of technically inefficient.

Table 1: Technical Efficiency Scores of Health Insurance Companies for 2013-2014

	Domestic and Foreign Health Insurers	Technical Efficiency Scores	
		2013	2014
National Health Insurers	Al Ahlia Insurance	0.382	0.2
	Oman United Insurance	0.322	0.202
	Dhofar Insurance	1	0.705
	Muscat Life Insurance	1	0.578
	Oman & Qater Insurance	1	0.338
	Falcon Insurance	0.835	0.307
	National Life Insurance and General	0.444	0.288
	Vision Insurance	0.481	0.27
Foreign Health Insurers	Arabia Insurance	0.636	0.315
	Axa Insurance	0.662	0.945
	The New India Assurance Company	1	0.459
	Oman insurance	1	0.849
	Zurich Middle East Insurance	0.422	1
	Arab Orient Insurance	0.415	0.325

Source: Author's calculation

Table 2 displays the technical efficiency scores of health insurance companies for the years 2015 and 2016. The three foreign insurers, Saudi Arabian Insurance, Axa Insurance and Oman insurance, were performing better, compared to the previous two years, as all three were relatively efficient in 2015 and 2016. In all four years Oman insurance, a foreign company, proved to be the most efficient, with the highest average technical efficiency score of 0.96; followed by Axa insurance with an average technical efficiency score of 0.902. From data availability, Saudi Arabian insurance was relatively efficient in the years 2015 and 2016. Al Ahlia, Vision insurance, and Oman United insurance were the three insurance companies performing badly regarding technical efficiency.

Table 2: Technical Efficiency Scores of Health Insurance Companies for 2015-2016

	Domestic and Foreign Health Insurers	Technical Efficiency Scores	
		2015	2016
National Health Insurers	Oman United Insurance	0.737	0.699
	Dhofar Insurance	1	0.947
	Muscat Life Insurance	0.89	0.777
	Oman & Qater Insurance	0.701	0.643
	Falcon Insurance	1	0.819
	National Life Insurance and General	0.855	0.752
	Vision Insurance	0.652	0.461
Foreign Health Insurers	Arabia Insurance	0.886	0.619
	Saudi Arabian Insurance	1	1
	Axa Insurance	1	1
	The New India Assurance Company	0.789	0.743
	Oman insurance	1	1
	Arab Orient Insurance	0.867	0.364

Source: Author's calculation

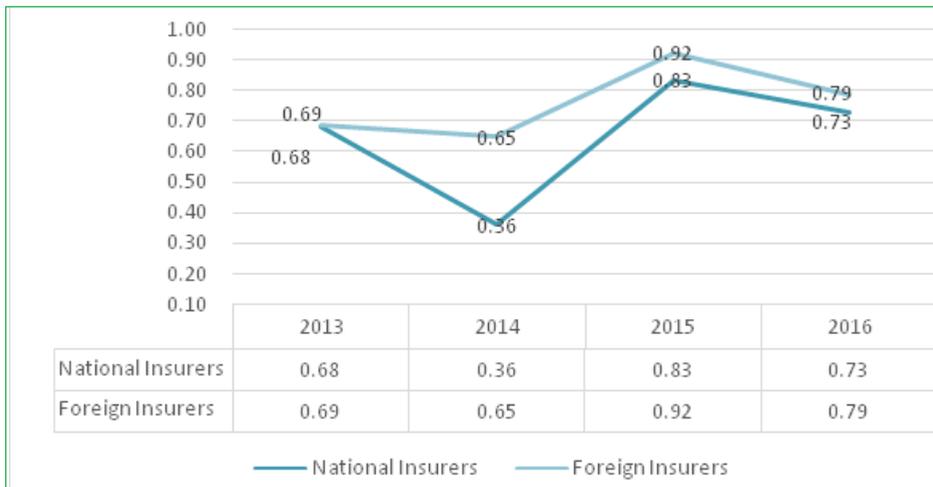
Table 3 displays the descriptive statistics on efficiency scores of health insurers from 2013 to 2016. The mean efficiency score of foreign insurers is slightly higher than that of national insurers, and there is a high dispersion in the scores of national insurers, compared to their counterpart, which is also evident from the values of the range. Efficiency scores for both the foreign and national insurers have negative skewness which is probably due to very low scores of companies like Al Ahlia insurance and Vision insurance companies.

Table 3: Descriptive Statistics of Efficiency scores

	Mean	Standard Deviation	Kurtosis	Skewness	Range	Minimum	Maximum	Sum
National Insurers	0.643	0.268	-1.29	-0.203	0.8	0.2	1	19.3
Foreign Insurers	0.762	0.256	-1.19	-0.628	0.69	0.315	1	18.3

Source: Author's calculation

In all the four years performance, foreign health insurance companies have proved to be more efficient than national health insurance companies. The Figure 7, which represents the average efficiencies of national health insurers and foreign health insurers also indicates the same information that foreign health insurers are performing slightly better than national insurers. The average efficiency of foreign firms was highest (92%) in 2015, and national firms also had the highest average efficiency (83%) in 2015. In 2014, there was a slight deviance in the average efficiency of national and foreign firms; apart from that they were approximately the same.

Figure 7 : Average Efficiency Scores

Source: Author's calculation

5.2 ONE WAY ANOVA

As it is evident from the graph that the average efficiency of foreign health insurers is always higher than national health insurers. To prove this statistically a one-way ANOVA was used. Table 4 shows results of the one-way ANOVA which was applied to investigate the statistical difference between the average technical efficiency scores of national health insurance companies and foreign health insurance companies. To prove that the null

hypothesis that average efficiency score of national health insurance companies is the same as average efficiency score, foreign health insurance companies, all were tested at 5% level of significance.

Table 4: ANOVA results on difference of average efficiency

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.190403	1	0.190403	2.75764	0.10281	4.026631
Within Groups	3.59038	52	0.069046			
Total	3.780783	53				

Source: Author's calculation

Since the p-value is more than 0.05(α) and value of calculated F statistics is less than the critical value of F, we accept the null hypothesis and conclude that there is no significant difference between the technical efficiency scores of national and foreign insurance companies.

5. CONCLUSION

This paper analyzed the insurance market of Oman and examined the performance of health insurance companies by measuring their technical efficiencies. For measuring technical efficiencies there are various alternatives available, but the authors have selected DEA, a non-parametric approach to measure technical efficiency, as the literature shows that DEA is the most commonly used technique. It was found that Oman's insurance market has been dominated by national insurers, as in 2016 the market share of foreign insurers regarding direct premium was just 26.6 % and national insurers 73.4%. Within the GCC, Bahrain and UAE are doing far better than Saudi Arabia, which is the biggest regarding population and oil exports. Compared to the GCC market the insurance penetration level of 1.57% in Oman is satisfactory, but there is still a significant opportunity for players to expand. The CAGR of insurance density in Oman was 4.1% from 2008 to 2016. Motor insurance and health insurance are two types which, combined, have a market share of 62%, and it is important to mention here that both are mandatory by law. Worldwide the share of life business is higher than general insurance, but in Oman and throughout the GCC and Oman it is poor, the share of life segment in Oman is only 15%. Therefore, there is a need to break the cultural barriers and to create awareness about the importance of life insurance on human life.

The results of efficiency evaluation of health insurance companies are not very promising. The average efficiency of foreign firms was highest (92%) in 2015, and national firms also had a high average efficiency of 83% in 2015. In the period of study, Oman insurance, a foreign company, proved to be the most efficient, with the highest average technical efficiency of 96% followed by Axa insurance with the average technical efficiency of 90.2%. However, Al Ahlia Insurance, Vision insurance, and Oman United insurance were

the three insurance companies performing badly regarding technical efficiency. The national firms showed 65% technical efficiency and foreign firms 76% efficiency during the period, which is a modest performance consistent to the findings of Al Amri et al., (2012). The mean value of efficiency scores of national and foreign insurers was tested for equality using one-way ANOVA, and it was found that there is no significant difference between the technical efficiency scores of national and foreign insurance companies.

The insurance sector in Oman saw a drop in premium collection in all forms of insurance from 2015 to 2016. The reason for this decline may be attributed to current oil price correction, growing fiscal deficit, and cuts in government spending. Low government spending has resulted in the postponement of public projects and decline in new vehicle registration. The insurance sector in Oman is also facing a lack of skilled Omani manpower, and that is also one of the core problems behind lack of awareness and expansion of insurance operations. The CMA and government seem to be committed to the development of a trained local workforce which can further help in creating awareness about insurance. The future of insurance looks bright as the penetration is low and the sector has immense growth potential. The new regulation for national insurers to go public will help in getting capital for expansion and the competition level between the players is high, which will benefit consumers and boost their confidence in the insurance market. This is the first ever study based on efficiency measurement of health insurers in Oman and therefore may contribute to the development of this sector.

REFERENCES

- Al-Amri, K., Gattoufi, S., and Al-Muharrami, S. (2012). Analyzing the technical efficiency of insurance companies in GCC. *The Journal of Risk Finance*, 13(4), 362-380.
- Al-Amri, K. (2015). Takaful insurance efficiency in the GCC countries. *Humanomics*, 31(3), 344-353.
- Barros C.P., Dumbo, S., and Wanke, P. (2014). Efficiency determinants and capacity issues in Angolan insurance companies. *South African Journal of Economics*, 82(3), 315-474.
- Bawa S.K. and Ruchita (2011). Efficiencies of health insurance business in India: An application of DEA. *American Journal of Social and Management Sciences*, 2(2), 237-247.
- Bawa S. K. and Bhagat N. (2015). Efficiency of Life insurance Companies Operating in Punjab. *Pacific Business Review International*, 7(9), 76-85.
- Charnes, A., Cooper, W.W and Rhodes, E. (1978). Measuring the efficiency of DMUs. *European Journal of Operational Research*, 2, 429-444.
- Chen, B., Powers, M.R. and Qiu, J. (2009). Life-insurance efficiency in China: a comparison of foreign and domestic firms. *China & World Economy*, 17(6), 43-63.
- Cummins, D., Turchetti, G., and Weiss, M. (1996). Productivity and Technical Efficiency in the Italian Insurance Industry. Working Paper, Wharton Financial Institution Centre,

University of Pennsylvania, Philadelphia.

- Cummins, J.D., Misas, M.R. and Zi, H. (2004). The effect of organizational structure on efficiency: evidence from the Spanish insurance industry. *Journal of Banking and Finance*, 28(12), 3113-3150.
- Eling, M., Luhnen, M., (2010). Efficiency in the International Insurance Industry: A Cross-country Comparison. *Journal of Banking and Finance*, 34(7), 1497-1509.
- Eling, M., and Huang, W. (2011). An efficiency comparison of the nonlife insurance industry in the BRIC countries. Working papers on Risk Management and Insurance no. 94. University of St. Gallen. Institute of Insurance Economics
- Fecher, F; Kessler, D, Perelman, S, and Pestleau, P (1993). Productive performance in the French insurance industry. *Journal of Productivity Analysis*, 4, 77-93.
- Fenn, P, Vencappa, D., Diacon, S., Klumpes, P., O'Brien, C., (2008). Market Structure and the Efficiency of European Insurance Companies: A Stochastic Frontier Analysis. *Journal of Banking and Finance*, 32 (1), 86–100.
- Gardner, L. A, and Grace, M. F (1993). X-efficiency in the U.S. Life Insurance Industry. *Journal of Banking and Finance*, 17, 497-510.
- Hao, J.C., and Chou, L.Y. (2005). The estimation of efficiency for life insurance industry: the case in Taiwan. *Journal of Asian Economics*, 16, 847-860.
- Mansor, S. A., and Radam, A., (2000). Productivity and Efficiency Performance of the Malaysian Life Insurance Industry. *Jurnal Ekonomi Malaysia*, 34, 93–105.
- Saad, N. M., and Idris, H. (2011). Efficiency of life insurance companies in Malaysia and Brunei: A comparative Analysis. *International Journal of Humanities and Social Science*, 1(3), 111-122.
- Sinha, P. R. (2007). Operating Efficiency of Life Insurance Companies: An Assurance Region Model. *Arth Vijana*, 49(4), 305-320.
- Tone, K. and Sahoo, B.K. (2005). Evaluating cost efficiency and returns to scale in the life insurance corporation of India using data envelopment analysis. *Socio-Economic Planning Sciences*, 39, 261-285.
- Yang, Z. (2006). A Two-Stage DEA Model to Evaluate the Overall Performance of Canadian Life and Health Insurance Companies. *Elsevier Mathematical and Computer Modelling*, 43, 910-919.
- http://www.swissre.com/media/news_releases/nr_20141125_insurance_outlook_2015.html
- [http://www.ey.com/Publication/vwLUAssets/ey-insurance-opportunities-in-the-middle-east/\\$FILE/ey-insurance-opportunities-in-the-middle-east.pdf](http://www.ey.com/Publication/vwLUAssets/ey-insurance-opportunities-in-the-middle-east/$FILE/ey-insurance-opportunities-in-the-middle-east.pdf)

Chapter 6

A STUDY OF FINANCIAL SOURCES AND INVESTMENT AVENUES FOR SMES IN OMAN

Anitha Ravikumar and Kanimozhi Viswanathan

ABSTRACT

Small and Medium Enterprises (SMEs) play a critical role in economies across the globe and in the Sultanate of Oman the government considers SMEs a priority sector. SMEs are important for economic growth because they boost up employment, uplift the standard of living of the people and eradicates poverty and hunger in the economy. The better the level of vibrancy of SMEs in the economy the better will be the growth. SMEs should be established in Oman because of the declining oil prices, decline in contribution of oil and gasoline revenues to the GDP of Oman and increasing unemployment rate among the young generation. This chapter explains avenues available for Omani entrepreneurs to invest in Oman and various financial and other supports available in Oman to start their own business.

Keywords: *SMEs, Oman Economy, Finance, Investments*

1. INTRODUCTION

Globally, Small and Medium Enterprises (SMEs) are considered to be the backbone of an economy and an essential source for economic growth (ROBU, 2013). Small and Medium Enterprises (SMEs) fuel the growth of economy and they are the key drivers of innovation, entrepreneurship and competition (Katua, 2014). SMEs have the potential to create employment opportunities and to expand the tax base (Katua, 2014). Small enterprises promote competitiveness, which brings in new products to the market (ROBU, 2013). There is a high correlation between the level of vibrancy of countries' SMEs and various factors such as the degree of unemployment, standard of living, economic well being of people, poverty and hunger (Katua, 2014).

The capability of the nation to create a conducive environment for SMEs enables SMEs to provide quality services and products at a low cost and also in quantities required for the market. This will in turn enhance the performance level and development level of the economy (ROBU, 2013). For an economy to survive during an economic downturn or recession, SMEs are essential because they remain innovative and adaptable (Katua, 2014). In terms of employment and number of companies, the economies across the world are dominated by SMEs but still the full potential of SMEs remains untapped which is due to various reasons including financial, legal and cultural (Katua, 2014).

2. NEED FOR THE STUDY

The Oman government is determined to tap the potential of young entrepreneurs to develop small and medium enterprises. In order to attain sufficiency, create job opportunities, and promote entrepreneurial and technological skill, the government has taken several measures which include financial and investment support for SMEs. In recent years, the Oman government has been keen to develop and strengthen the Small and Medium enterprises, to enhance economic diversification and employment generation (Oxford Business group, 2015). Oman's government interest in small and medium enterprises and the necessity for economic diversification in Oman necessitated the need for this study.

This study envisages the government's focus on the developing and strengthening of small and medium enterprises in Oman. It also elaborates on the government's initiative to assist young entrepreneurs by means of an available source of finance, and other investment opportunities for new start-ups. (Oxford Business group, 2016). This study will enable Omani youth to understand the need for SMEs in Oman. Further, it will instil an entrepreneurial spirit among Omani youth by creating awareness about various avenues to invest in and various financial and other supports available in Oman to start their own business.

3. OBJECTIVES OF THE STUDY

- a) To understand the need for SMEs and their contribution to the economy of Oman
- b) To identify the various financial sources / assistance available for SMEs in Oman
- c) To find various SME avenues for investment in Oman

4. RESEARCH METHODOLOGY

This study is based on a literature review and secondary data collected from a range of sources: journal articles, reliable websites and books. Secondary data were collected to understand the classification of Micro, Small and Medium Enterprises (MSMEs) in Oman, the need for SMEs in Oman, various SME avenues for investment in Oman and also to identify the various forms of financial assistance available for SMEs in Oman.

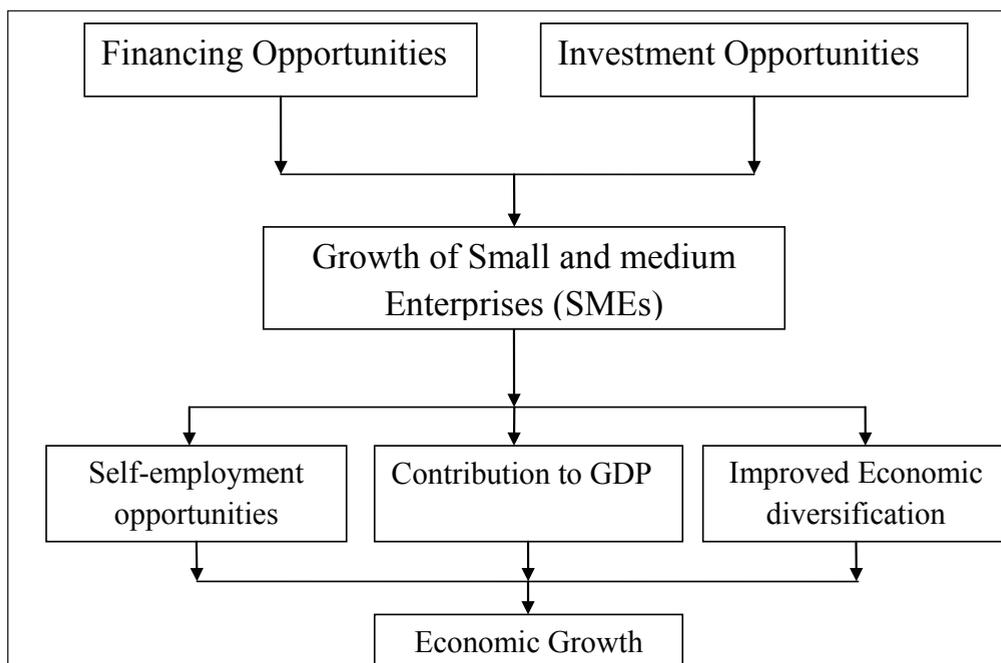
5. DEFINITION OF SMES IN OMAN

Small and Medium Enterprises (SMEs) in the Sultanate of Oman are defined by the Ministry of Commerce and Industry (MoCI). The definition and classification of SMEs is based on the size of workforce and annual sales. A micro enterprise is one which has 1 to 5 workers and has annual sales of less than OMR100,000. A small enterprise is one with 6 to 25 workers and annual sales between OMR 100,000 to 500,000. A medium enterprise is one which

has 26 to 99 workers with annual sales of more than OMR500,000 but less than 3,000,000 (Pourmohammadi, 2016). According to Redha Juma Mohammed Ali Al Saleh, vice-chairman at the Oman Chamber of Commerce and Industry (OCCI), this classification of SMEs will help to enhance coordination among various bodies that deal with SMEs, as each authority defined SMEs differently prior to this classification (Pourmohammadi, 2016).

Prior to this classification the SMEs in the Sultanate followed a similar type of classification from 2012 till 2016, which was given by MoCI. It classified micro enterprises as those which had fewer than five workers and annual sales of less than OMR 25,000. An enterprise with 5 to 9 workers and annual sales between OMR 25,000 to OMR 250,000 was classified as small. A medium enterprise was one which had 10 to 99 workers and annual sales between OMR 250,000 and OMR 1,500,000. The 2016 classification was introduced in order to better focus on and allocate resources to SMEs and to enhance credit flow, along with providing effective and efficient training and guidance to SMEs. This was the first definition of SMEs in the Sultanate of Oman to be based on employment and annual sales turnover of the enterprise, inline with international benchmarks. Earlier SMEs were defined only based on the number of employees; the sales turnover criteria were not considered (Khan, MOCI Revises definition of SMEs, 2012).

6. CONCEPTUAL FRAMEWORK



Source : Prepared by the authors

The conceptual framework explains how economic growth is related to growth of Small and Medium enterprises. In an economy the growth of SMEs is based on various

investment and finance opportunities. Growth of SMEs will lead to better self-employment, improved economic diversification and SMEs will contribute to the nation's GDP. High level of employment, improved economic diversification and higher contribution to GDP leads to economic growth.

Finance and investment opportunities act as a catalyst for setting up SMES. Strong, vibrant and diverse SMEs will not only add value to the economy, they will also benefit the society, through better prices and better competition (Hussein, 2016).

The government has created a conducive environment for the development of SMEs in Oman. Through the establishment of new SMEs the government agencies, banks and educational institutions are contributing to promotion of self-employment opportunities. These institutions have identified 6 industrial and commercial investment opportunities and 9 manufacturing opportunities. (OER Bureau, 2015).

In the light of the above investment opportunities, government agencies and banks are funding the SMEs through various concessional loans, incentives, land/ space for budding entrepreneurs. (Oxford Business group, 2015)

Economic growth depends on several factors. Opportunity for investment and necessary financing are the lifeline for any new start ups, especially the SMEs. The real growth of an economy lies not only with the growth of large industries but the growth of SMEs as well. (Al Bulushi and Bagum, 2017). To achieve the growth, Omani youth are empowered to be self-employed and to create job opportunities by starting SMEs. (Riyami, 2014). The small scale enterprises could generate more employment. The SME could employ up to 99 workers. A significant increase in new employment created out of SMEs is expected to contribute to GDP between 15% and 20% (Mahrouqi, 2014).

A. Financing opportunities

The SME owners or new entrepreneurs with viable projects can seek finance from commercial banks. The government encourages commercial banks to provide soft loans extending financial guarantees and interest subsidies through development banks (AlBarwani, 2014).

B. Investment opportunities

The Al Raffd fund has been created to provide finance to young, budding entrepreneurs to start businesses in areas like tourism, manufacturing, the service industry and seasonal agriculture (Mahrouqi, 2014).

C. Growth of SMEs

Although the contribution of SME to GDP is low compared to other sectors, SMEs are expected to contribute more in the years to come. The government of Oman is highly ambitious and has estimated growth rate of SMEs to be between 13-14%. The SMEs' contribution to the total GDP is expected to grow to about 16-20% in the next few years (Mahrouqi, 2014).

D. Self-employment opportunity

It is imperative that building an entrepreneurial attitude among the youth is the key for development of SMEs. It is an opportunity for young entrepreneurs to invest and contribute to job creation. The government has taken several initiatives to introduce an entrepreneurial curriculum in universities to encourage the young Omanis to create jobs by starting a new enterprise (Riyami, 2014).

E. Contribution to GDP

The government is pragmatic about the growth and development of SMEs in the coming years. It is continuously encouraging young entrepreneurs and provides support in terms of technical and financial support, training, marketing and investment, thus resulting in an increase in the share of GDP (Riyami, 2014).

F. Improved economic diversification

SMEs act as the backbone for the diversification of the economy. The Sultanate of Oman has taken all the necessary steps in developing economic sectors in order to diversify the economy in line with the economic diversification policy. The government has also taken several initiatives to diversify the economy in order to reduce its heavy dependence on oil and gas sector (Al-Lawati, 2017).

G. Economic growth

SMEs are the engines of growth in any country and Oman is not an exception to this. The development of SMEs in Oman will see a growth in the future by generating 50,000 jobs annually. SMEs expected contribution to GDP growth is 16 -20% annually for the next 5 years (AlBarwani, 2014).

7. NEED FOR SMES IN OMAN

The Sultanate of Oman is one of the Gulf countries which depends heavily on oil to finance its economy.

Table 1: Youth unemployment rate (Ages: 15 to 24 years)

Year	Unemployment rate (%)
2010	45.46
2011	44.81
2012	44.63
2013	44.69
2014	45.29
2015	48.52
2016	50.77

Source: <http://www.cbo-oman.org/>

The younger generation comprises more than 50 per cent of the Sultanate of Oman's population. The population of Oman is growing rapidly and the country needs to create a minimum of 50,000 jobs each year to reduce unemployment (Bureau, 2015). From Table 1, it can be inferred that the unemployment rate among youth is increasing year by year, hence Oman's government has to take effective measures to lower the level of unemployment among young people by creating various avenues for employment or opportunities of self-employment. An increase in unemployment affects the economic growth of any nation, hence Oman's government needs to create other avenues for increasing the employment of Omani youth.

Table 2: Overall Unemployment rate

Year	Unemployment rate (%)
2010	18.31
2011	18.21
2012	17.92
2013	17.43
2014	16.9
2015	17.25
2016	17.52

Source: <http://www.cbo-oman.org/>

From Table 2, it can be concluded that there were no remarkable fluctuations in the overall unemployment rate in Oman from 2010 to 2016. Since 2014 the overall unemployment rate has been on the uptrend, which is not good for the economy, requiring government action to take measures to bring down the level of unemployment.

Table 3: Oman's Oil and gas revenue (% of GDP)

Year	Oil revenue (%)	Gasoline revenue (%)
2010	33.76	5.5
2011	40.08	5.05
2012	36.11	4.02
2013	34.42	4.16
2014	27.97	2.14

Source: <http://www.cbo-oman.org/>

From Table 3, it can be interpreted that the contribution of oil and gasoline revenue to the GDP of Oman is declining. Dependence on oil and gas revenues will make Oman's economy unstable. Hence, alternative revenues are required for the government to have a stable and growing economy. For Oman to achieve stable and better economic growth, economic diversification is essential this is possible through the development of SMEs.

Declining oil prices, increasing unemployment rate among the young generation, decline in contribution of oil and gas revenues to the GDP of Oman are various reasons which validate the need for growth and establishment of SMEs in the Sultanate of Oman.

Small and medium enterprises (SMEs) play an important role in all economies, even in Oman, where SMEs' critical role is the priority sector for the government. SMEs are required in Oman to boost self-employment opportunities among its youth and to improve economic diversification (OER Bureau, 2015). According to the Public Authority for SME Development (PASMED), 90 percent of the firms in Oman are SMEs, operating in a range of different sectors (Times of Oman Editor, 2014).

The contribution of SMEs to the GDP in developed economies is higher than in Oman, where their contribution to the GDP is significantly low (OER Bureau, 2015). In developed economies contribution of SMEs to GDP is 50-55 percent and the workforce is between 50-60 percent, whereas in Oman the contribution of SMEs to GDP is 15-20 percent and the workforce is between 15-20 percent. The government sector in Oman has limited employment opportunities for its citizens and Oman's economy is highly dependent on its finite hydrocarbon sector, hence in order to have a stable economy and to reduce the unemployment rate, SMEs growth is essential for Oman (OER Bureau, 2015).

About 50 percent of the population in Oman is are young people, and with an estimated rate (15%) of population growth, the government has to create a minimum of 50000 jobs per annum in order to reduce unemployment. Hence, SMEs became necessary, as they play a vital role in helping young Omanis to start their own businesses rather than seeking employment (OER Bureau, 2015).

As the large corporations in Oman have grown, they have made an incremental investment in technology and equipment in order to improve productivity, hence the employment created by these corporations is not proportionately equal to the amount of capital invested. As a result fewer jobs have been created for additional Omani Riyals invested, thus SMEs become drivers for employment generation (Times of Oman Editor, 2014).

SMEs play a major role in employment generation, alleviating poverty and driving innovation in the economy; they expand the tax base of the nation through their revenue streams and thereby contributes to the nation's GDP and growth (Magd and McCoy, 2014).

8. NEED FOR FINANCIAL ASSISTANCE TO SMES IN OMAN

Younger and smaller SMEs in Oman face many challenges and as per the UK's Mowgli Foundation, in Oman, less than two out of three small enterprises, survive for two years and less than a third reach four-years (Times of Oman Editor, 2014). SMEs fail because they are weak and are unable to handle difficulties. They have difficulty in attracting and retaining good management and most of the entrepreneurs who start SMEs are not the best managers. SMEs also have problems in availing loans, due to their weak financial position and cannot access equity markets for finance. Various entry barriers, delayed payments, government regulations, lack of good management, and innovativeness, as well as an inability to invest in technology are some of the reasons for failure of SMEs in Oman (Times of Oman Editor, 2014).

The productivity of SMEs can be greatly increased through finance. Investments help in access to technology which can help SMEs to expand their business and ensure their competitiveness (ROBU, 2013).

Access to long term loans at cheaper rates can make SMEs successful as it enables the entrepreneurs to pay back the loans easily. Reliance solely on short term loans does not support successful functioning of SMEs. Short term loans are provided by the government in order to enable easy start up of SMEs, but without long term loans they are not effective for SMEs. In Oman the SMEs are at the beginning stage of the growth curve and at this juncture only through high level of support from government, can they be successful. Even though the contribution of Oman's SMEs to its GDP is low-it helps to remove unemployment and enables economic diversification (Al Bulushi and Bagum, 2017).

9. INVESTMENT AVENUES AVAILABLE IN OMAN

Trade across the globe is very attractive in Oman because of the location advantage of its port. Omanis engage in manufacturing activities and export their products to the United States. The tourist industry is another sector which remains profitable in Oman and is considered as an attractive avenue for SME investments. The government of Oman has taken various excellent measures to strengthen and support the SMEs (Al Bulushi and Bagum, 2017).

There are several investment opportunities available for people who wish to start their own business. Some of the investment options which are more popular in Oman are given below:

- a) **Tourism:** The tourism industry is one of the most celebrated sectors in Oman. In spite of falling oil prices, this sector is growing very strongly. According to the National centre for Statistics and Information, there was an increase of 17 percent in the number of travellers visiting Oman until the end of December 2016. (ONA, 2017). The Government is planning to open up the tourism sector in the near future and this will provide direct and indirect employment to many areas of business, including hotels, restaurants, car rental, guide services, event management, photography, children's entertainment and desert safaris.
- b) **Construction:** The construction industry of Oman recorded an annual growth rate of 9.4% during the years 2012 to 2016. The Sultanate of Oman's construction industry is set to grow rapidly in the coming years, especially as the government is giving more importance to the establishment of transport, energy and utilities infrastructure and housing facilities. The construction industry provides opportunities to people in areas including engineering, painting, steel work, plumbing, manpower and concrete supply (Clare, 2017).
- c) **Automobile industry:** In order to achieve Oman's economic diversification goal, the development of an auto industry will be significant in achieving such a goal. In view of position in the Middle East, Oman is making efforts to become an attractive destination for alternative investment. The country has also created special economic zones to increase production and business friendly rules and regulations (Prabhu, 2016).
- d) **Logistics and Transport:** Oman has all the key factors necessary for the growth of the logistics industry; for example, its geographical location, state of the art infrastructure and its stable political climate, all of which are viable to make it an important logistics centre. The logistics and transport sector contributes around 3% at present and the Government hopes that this sector will gradually yield at least 10 per cent of GDP in the next 25 years. (GCC Supply Chain and Logistics Conference, 2015)
- e) **Agriculture and Fishing:** Agriculture and fishing has been an important occupation in Oman for many centuries. In an effort to diversify the economy, the Sultanate of Oman is placing more importance on the expansion of fishing and agriculture. For instance, the Oman bank for Agriculture and Fisheries, established in 1981, grants loans at discounted rates to individuals if farming or fishing is their chief occupation. (Wikipedia, 2016)

- f) **Oil and gas sector:** Oman's oil and gas sector has to play a progressively major role in fulfilling the Sultanate of Oman's most pressing issues, which includes creating superior In-Country Value (ICV) and sustaining the development of SMEs. It is not only a good source of Government revenue but also a provider of employment for many Omanis and a source of knowhow and technology. This sector provides opportunities for small and medium enterprises in civil works, fire extinguishing equipment, welding supports, safety tools, catering and excavation (Editor, 2014).
- g) **Others:** There are many more investment opportunities. SMEs can invest in the educational sector (eg: language coaching, transportation, school management, hostel services), health and medical services in training, physiotherapy, special waste handling, fitness centres and medical equipment. In the electronics field SMEs have opportunities in service, sales and repair of electronic goods. In the food stuff industry avenues are available in manufacturing, packaging advertising, managing products with shelf life and food delivery. The garment and clothing sector can also provide options for SMEs in retail stores, designing and tailoring. (Ali, 2013)

10. SOURCES OF FINANCE AVAILABLE FOR SMALL AND MEDIUM ENTERPRISES IN OMAN

Studies reveal that the biggest challenge for SMEs is to access finance; hence, the Central bank of Oman (CBO) has mandated that all banks should allocate at least 5% of their total loan books to SMEs (Oxford Business group, 2015). Bank Muscat, Zubair Small Enterprises Centre and National bank of Oman are some of the companies in the private sector which provides financial support to SMEs (Al Bulushi and Bagum, 2017).

The institutions that support SMEs by offering finance (Christina, Neelufer and Amri, 2014) are listed in the Table 4 below:

Table 4: Supporting Institutions for SMEs

Government agencies	Quasi-government and private agencies	Commercial Banks
Ministry of Commerce and Industry (Business Diagnostic Center)	Oman Chamber of Commerce and Industry	HSBC Middle East
Ministry of Manpower (Sanad Programme)	Fund for Development of Youth Projects "Sharakah"	Bank Muscat
Ministry of Social Development (Livelihood (RizGH) Resources Projects)	Intilaaqah Programme	Sohar Bank
Public Establishment for Industrial Estate (Knowledge Oasis Muscat)	Grofin Oman	National Bank of Oman

Oman Development Bank	Omani Women's Association	Standard Chartered Bank
Omani Center for Investment Promotion and Export Development (OCIPED)		Oman Arab Bank
		Oman International Bank
		Bank Dhofar

Source: Sanand report, 2010 (Christina, Neelufer and Amri, 2014)

10.1 OMAN DEVELOPMENT BANK (ODB)

ODB is the only development bank owned by the government which promotes the development of SMEs. It provides subsidized term loans with fixed rates of interest and longer repayment terms and moratorium. ODB provides loans to all sectors mentioned by the government and it provides loans up to 56 percent on the total project cost, with a ceiling of RO 1 million. A loan Guarantee program has been implemented by ODB (ADFIAP, 2017).

To promote SMEs interest free loans with a maximum amount of OMR 5000 is provided to small investors of SMEs by the Oman Development Bank. For establishment of new projects and expanding the existing projects, ODB offers loans up to OMR 1 million with 3% interest rate per annum (Ali, 2013). Various opportunities are offered by ODB to the graduates of technical colleges and academic institutions to develop their craft skills and vocational skills. ODB also supports self-employed people, owners of the industry, craftsmen, fishermen, farmers and people who run cottage industries. In order to encourage innovation and activities that add value to the economy, the ODB provides support and gives special attention to projects which are innovative and technologically upgraded (Editor - Times of Oman, 2017). ODB is financing SMEs at an annual growth rate of 39% and it financed more than 53000 projects from July 1997 till June 2016, with a total value of OMR 426.7 million, thereby winning the Best Bank Award for SME Support (Times of Oman - Editor, 2017). Through the ODB the government provides soft loans and extends financial guarantees to boost SMEs (OER Bureau, 2015).

10.2 SME LOAN GUARANTEE PROGRAMME

This programme was launched by MoCI through a collaboration with the US Small Business Administration (SBA) which enables all the Omani SMEs that have a project value of less than OMR 500,000 to avail loans to the maximum of OMR 250,000, with three percentage interest rate. Under this programme collateral is not required for availing a loan; instead, 50% of the loan will be guaranteed by the ODB i.e., the government. This programme was launched

because most commercial banks issue loans through its SME division only through collateral that has 200 percent value of the loan (Khan, MoCI launches trial of SME Loan-Guarantee Programme, 2012). The programme was introduced to bridge the gap between banks and young Omani entrepreneurs and to promote SMEs. Eligible small business applicants for this programme must be organised for profits, should be located in Oman and owned by an Omani citizen. They should be a small or medium enterprise and should demonstrate the need for expected credit (ADFIAP, 2017).

10.3 AL RAFFD FUND

The aim of the Al Raffd Fund is to enable young Omanis to establish their own commercial projects. The Al Raffd Fund is a governmental institution which targets professionals, job seekers, crafts people, social security beneficiaries, rural women, at-home manufacturers and all categories decided by its board of directors. Loans valued up to 20000 OMR with a maximum duration for full repayment of 12 months grace period are provided by the fund (Ali, 2013).

10.4 PUBLIC AUTHORITY OF CRAFTS INDUSTRIES (PACI)

This is a governmental authority which mainly promotes the crafts industries in Oman. It has various initiatives for the crafts industry, such as supporting people by providing cash, tools for production, equipments, licenses for crafts projects, and encouraging people to participate in local and international exhibitions. It is also working on providing training to promote and market crafts products (Ali, 2013).

10.5 ZUBAIR SMALL ENTERPRISES CENTRE (SEC)

The centre was established in 2013 with an aim to provide support to small businesses. It is a Corporate Social responsibility initiative which provides financial support to selected entrepreneurs, an incubation centre, communication with partners of Zubair and other institutions, expert mentors advisory services and additional services that support entrepreneurs and their business (Ali, 2013).

10.6 AL WATHBAH PROGRAMME

This programme is a SME wing of bank Muscat which aims to support the growth of SMEs and development in the economy. It offers a range of banking services and finance to targeted sectors. SME customers who don't have their own office can use Wathbah Business Zone free of cost. For SMEs it offers financial credit of maximum OMR 400,000 and other advisory services (Ali, 2013).

10.7 THE PUBLIC AUTHORITY FOR SMALL AND MEDIUM ENTERPRISES DEVELOPMENT (RIYADA)

For the development of Small and Medium Enterprises in Oman, Riyada, which is an governmental authority, was established. With an incubation centre, Riyada offeres various advisory services and training programmes to entrepreneurs and gives full support to entrepreneurs (Ali, 2013).

10.8 NATIONAL BUSINESS CENTRE

The Public Establishment for Industrial Estates established the National Business Centre (NBC) with an aim to provide support to the entrepreneurs of Oman. NBC offers various financial, business advisory and legal advisory services, supports marketing and business promotion, provides mentoring and coaching and offers support in administration (Ali, 2013).

10.9 OMAN CHAMBER OF COMMERCE AND INDUSTRY (OCCI)

This is a public establishment which aims to protect, regulate and represent commercial and industrial interests. To support SMEs in Oman it offers information on opportunities for invetsments in Oman, provides legal advisory and economic consultancy, and encourages the private sector to participate in local and international exhibitions (Ali, 2013).

10.10 STARTUP OMAN

This aims to bring the whole eco-system of Oman, consisting of entrepreneurs, marketers, investors, business professionals, financial partners and educators, into one community. It organises various seminars, training, mentoring and networking in order to provide the best support to entrepreneurs (Ali, 2013).

10.11 INJAZ OMAN

This is a not for profit organisation which aims to develop competency and empowerment of youth. It provides education on entrepreneurship, leadership skills, programmes for junior achievers and an annual competition (Sharikati) (Ali, 2013).

10.12 SHARAKH

Sharakh is a joint stock company which aims to support and encourage entrepreneurs and SMEs in Oman. In order to provide various services to SMEs and entrepreneurs, Sharakh receives donations from the business community and individuals (Ali, 2013).

The various other start up resources are : The research council, which was established to promote economic, social and scientific development in Oman. AIESEC, a non profitable global organisation was established to develop leadership potential in Oman (Ali, 2013). Intilaaqah, is a social initiative programme in Oman by Shell which aims to create an environment for entrepreneurs and support small business to be successful by offering a range of services and programmes. The entrepreneur Conclave and SAS programme are conducted in Oman to identify the promising entrepreneurs in Oman and to provide them with support to establish their businesses. The Caledonian Centre for Creativity and Innovation aims to create entrepreneurship, creativity and innovation spirit among students and staff. The Youth Entrepreneurship Support Programme (YESI) to build future entrepreneurs offers a variety of awareness programmes on innovation and entrepreneurship (Ali, 2013).

11. CONCLUSION

In this chapter it is concluded that declining oil prices, increasing unemployment rate and declining contribution of oil and gas revenue to GDP demonstrate the need for growth of SMEs in Oman. The study has explored the various avenues available for Omanis to invest in SMEs. Finance being the biggest challenge for starting business, Oman's government is providing financial assistance to boost entrepreneurial spirit and to promote SMEs. Various forms of financial assistance and financial sources available for SMEs are explained in this chapter. Awareness of the various opportunities for investment financial assistance available for entrepreneurs will instil confidence among people to start up their business.

SMEs play a vital role in economic growth by eliminating poverty, uplifting the standard of living of the citizens, increasing employment rate, enabling economic diversification, promoting competitiveness, stimulating innovation, and by contributing to the GDP of a nation. As SMEs play a major role in economic growth, Oman's government is keen to strengthen the SMEs by eliminating the hurdles faced by entrepreneurs and by providing financial assistance. The government is making efforts to infuse confidence among its youth and investors by providing concessions to new start ups. A suitable amendment in labour law, single window clearance, classification of industries, banking rules and regulations have been made to facilitate the startups. The government also provides expertise in training, skill development and marketing support to investors through its various agencies created exclusively for the development of SMEs.

REFERENCES

- ADFIAP. (2017). ODB implements loan guarantee program to promote SME development. Retrieved June 23, 2017, from Association of Development Financing Institutions in Asia and the Pacific (ADFIAP): <http://www.adfiap.org/resources/odb-implements-loan-guarantee-program-promote-sme-development-2/>
- Al Bulushi, B. H., and Bagum, S. (2017). Growth Strategies of SME In Oman- Issues and Challenges. *International Journal of Small Business and Entrepreneurship Research*, 5(2), 21-61.

- AlBarwani, K. (2014). SME sector in Oman. Muscat: Central Bank of Oman.
- Ali, P. (2013). A Practical guide for Aspiring Entrepreneurs. Muscat: Government of Oman.
- Bureau. (2015). SME sector's growth in Oman. Retrieved June 1, 2017, from <http://oeronline.com/>: <http://oeronline.com/special-reports/sme-oman/sme-sectors-growth-in-oman.html>
- Christina, B., Neelufar, A., and Amri, S. A. (2014). Challenges and barriers encountered by the SMEs owners in Muscat. *International Journal of Small Business and Entrepreneurship Research*, 2(3), 1-13.
- Clare. (2017). Construction in Oman, Key trends and Opportunities to 2021. Retrieved June 25, 2017, from www.prnewswire.com: <http://www.reportlinker.com/p04685474-summary/view-report.html>
- Times of Oman. (2017). Times of Oman. Retrieved June 24, 2017, from Oman Development Bank to conduct seminar on small businesses: <http://timesofoman.com/article/102537/Business/Oman-Development-Bank-to-conduct-seminar-on-small-businesses>
- Timesof Oman. (2014). Oil and Gas sector plays key role in Oman's economy. Retrieved May 17, 2017, from Times of Oman: <http://www.TimesofOman.com>
- GCC Supply Chain and Logistics Conference. (2015). Oman Logistics. Retrieved May 23, 2017, from omanobserver.om: <http://omanobserver.om/main/files/pdf/2015/4/16/Oman%20Logistics%20.pdf>
- Katua, D. N. (2014). The Role of SMEs in Employment Creation and Economic Growth in. *International Journal of Education and Research*, 2(12), 461-472.
- Khalfan Mohamed Al Barwani, M. R. (2014). Towards a Growing, Competitive and Dynamic Small and Medium-Sized Enterprises. Sector in Oman: Strategy and Policies. Muscat: Central Bank of Oman.
- Khan, G. A. (2012). MoCI launches trial of SME Loan-Guarantee Programme. Retrieved June 17, 2017, from [Muscatdaily.com](http://www.muscatdaily.com): <http://www.muscatdaily.com/Archive/Business/MoCI-launches-trial-of-SME-loan-guarantee-programme>
- Khan, G. A. (2012). MOCI Revises definition of SMEs. Retrieved June 16, 2017, from [Muscatdaily.com](http://www.muscatdaily.com): <http://www.muscatdaily.com/Archive/Business/MoCI-revises-definition-of-SMEs>
- Magd, H. A., and McCoy, M. P. (2014). Entrepreneurship in Oman: Paving the way for a sustainable future. *Procedia Economics and Finance*, 1632-1640.
- Mahrouqi, K. M. (2014). Towards a Growing, Competitive and Dynamic Small and Medium-Sized Enterprises. Sector in Oman: Strategy and Policies. Muscat: Central Bank of Oman.
- Ministry of Manpower and Higher College of Technology. (n.d.). Guidebook for Entrepreneurship in Oman. Retrieved June 15, 2017, from HCT: <http://www.hct.edu.om/pdf/business-center/guidebook-entrepreneurship-oman.pdf>

- OER Bureau. (2015). SME sector's growth in Oman. Retrieved June 17, 2017, from Oman Economic Review: <http://oeronline.com/special-reports/sme-oman/sme-sectors-growth-in-oman.html>
- ONA. (2017). Oman's tourism sector set firmly on growth path, says Colliers International report. Retrieved June 25, 2017, from www.Times of Oman .com: <http://www.Times of Oman.com>
- Oxford Business group. (2015). Oman set to boost SME growth. Retrieved June 19, 2017, from Oxford Business Group: <https://www.oxfordbusinessgroup.com/analysis/starting-small-room-grow-smes-can-make-case-investment>
- Oxford Business group. (2016). Oman set to boost SME growth. Retrieved May 25, 2017, from www.oxfordbusinessgroup.com: <https://www.oxfordbusinessgroup.com/analysis/starting-small-room-grow-smes-can-make-case-investment>
- Pourmohammadi, E. (2016). New SME classification will improve coordination. Retrieved June 15, 2017, from Times of Oman: <http://timesofoman.com/article/75668/Business/New-SME-classification-will-improve-coordination>
- Prabhu, C. (2016). Automobile sector may drive Oman's Economy. Retrieved June 11, 2017, from Oman Observer.om: <https://omaninfo.om/english/module.php?module=topics-showtopic&CatID=35&ID=2866>
- Riyami, A. A. (2014). Need for more self-employed entrepreneurs in the Sultanate. Muscat: Oman Daily Observer.
- ROBU, M. (2013). The Dynamic and importance of SMEs in Economy. *The USV Annals of Economics and Public Administration*, 13(1), 84-89.
- Times of Oman. (2017). Times of Oman. Retrieved June 20, 2017, from Oman Development Bank wins Best Bank Award for SME support: <http://timesofoman.com/article/108351/Oman/Oman-Development-Bank-wins-Best-Bank-Award-for-SME-support>
- Times of Oman. (2014). Omani small and medium enterprises facing tremendous challenges: CEO National Company for Projects and Management. Retrieved June 15, 2017, from Times of Oman: <http://timesofoman.com/article/30430/Business/Omani-small-and-medium-enterprises-facing-tremendous-challenges:-CEO-National-Company-for-Projects-a>
- Editorial (2014). Omani small and medium enterprises facing tremendous challenges: CEO National Company for Projects and Management. *Times of Oman, Daily News paper*, February 16. Retrieved June 15, 2017, from Times of Oman: <http://timesofoman.com/article/30430/Business/Omani-small-and-medium-enterprises-facing-tremendous-challenges:-CEO-National-Company-for-Projects-a>
- Wikipedia. (2016). Agriculture in Oman. Retrieved May 22, 2017, from Wikipedia.org: <https://en.m.wikipedia.org>

Chapter 7

THE BANKING LAWS OF OMAN AND RECOGNISED SECURITY INTERESTS IN OMAN

Hassan A. Shad

ABSTRACT

The Banking Laws of the Sultanate of Oman are robust in nature and contain a plethora of rules relating to the conduct of banking business in the Sultanate. The Central Bank of Oman has been vested with powers and authority required to ensure the proper conduct of banking business. The Banking Law provides detailed rules relating to the conduct of Banking Business in Oman and the same is supplemented through directives and circulars issued by the Central Bank of Oman. Moreover, as is the case in other developed jurisdictions, the Sultanate of Oman also recognizes various forms of security interests that can be created as a legal right granted by the debtor to the creditor over the debtor's property (movable and immovable) and provides rules relating to the creation and enforcement of such security interests in the Sultanate.

Keywords: *Banking Law, Central Bank of Oman, Security Interests.*

1. OVERVIEW OF THE OMANI LEGAL SYSTEM

1.1 SOURCES OF LAW

All laws in Sultanate of Oman are promulgated as Royal Decrees by His Majesty the Sultan Qaboos Bin Said. Other laws which are subordinate to Royal Decrees, in the form of decisions and regulations, are issued by Ministers and other government officials as well as the administrative units of the government. Any Ministerial decision that is issued in pursuance to Royal Decree is typically intended as supplementing legislation to elaborate upon the rules and principles laid down in the Royal Decree. In the event of a conflict between the Royal Decree and the Ministerial decision following from the Royal Decree, the Royal Decree would prevail to the extent of any conflict.

All Royal Decrees are published in the Official Gazette. Ministerial decisions and regulations are in the most part also published in the Official Gazette although there are certain decisions and regulations which occasionally remain unpublished. In addition to the laws of Oman as published pursuant to the Official Gazette, Oman also operates a system of Shariah Law. However, the role of Shariah is limited and in practice has little if almost no influence in relation to commercial activities.

The Basic Law provides that Islam is the religion of the State and the Islamic Shariah is the basis of legislation and that existing laws and regulations remain in force provided that they do not conflict with any of the provisions of this Basic Law.

The Basic Law is in effect the constitution of Oman. It contains many provisions one would usually expect to see in a state constitution. Amongst other things it deals with the fundamental principles governing the policies of the state with respect to security, the economy and the rights of individuals; how the question of the succession of His Majesty the Sultan is to be dealt with; the duties of His Majesty the Sultan; the apparatus of the State such as the Council of Ministers, its duties and powers; the Judiciary and who has law making power and how that power can be delegated.

1.2 ENACTMENT OF NEW LAWS IN THE SULTANATE OF OMAN

There is no fixed procedure for promoting the creation of a new law, whether it is a Royal Decree or Ministerial decision. However, the law in question would have to be sponsored or proposed by a governmental body and would be subject to review by the Ministry of Legal Affairs. Normally a Ministry will determine or be convinced that a new law is needed for a particular subject. They will then draft it or have it drafted. It depends upon the subject matter and whether it is to be issued as a Royal Decree or Ministerial decision as to the degree of involvement and input from other arms of the government.

It is important to note that the concept of consultation is very important in Omani society, particularly in the government. As such, if a need for a new law is identified, depending upon the sphere of operation and effect of the proposed new law or ministerial decision, there will usually be a substantial consultative process undertaken before a law or decision is finalized and issued (either by His Majesty or as a Ministerial decision).

Oman issues a bi-monthly official gazette which is used as the means of publishing new legislation, including delegated legislation. The date of implementation of legislation is generally the date of issue of the gazette in which the legislation is published. The effective date will nearly always be specified and it is unusual for legislation to come into effect more than a few months after the date of the relevant gazette issue. The relevant official procedures required to implement new legislation can take some time to be put in place and this can lead to difficulties in applying legislation which is already in force.

2. BANKING LAW OF THE SULTANATE OF OMAN

2.1 INTRODUCTION

Much of the legislation in the Sultanate of Oman is consistent with legislation in force in other member states of the Arab Gulf Co-operation Council (GCC) all of which show a considerable degree of Egyptian influence. The Napoleonic Code was implemented in

Egypt and much of the GCC legislation has a predominantly French influence. However, as is the case in other GCC countries, there is also certain legislation that has a common-law influence, one of which is the Banking Law of Oman.

2.2 APPLICABLE LAW

The Banking Law of Oman is primarily set out in Royal Decree 114/2000 (Banking Law).

The Banking Law, like legislation in other countries, sets out the core objectives of the law. It aims to achieve the following objectives:

- A. Encourage the development of banking institutions to ensure that financial stability is safeguarded, contribution is made to achieve economic, industrial and financial growth and the Sultanate's status in the international financial sphere is consolidated.
- B. Empower the Central Bank to issue currency, safeguard its local and international value, supervise the banks and banking business in the Sultanate and provide counselling to the Sultanate's government on local and international economic affairs.
- C. Facilitate the expansion of the Sultanate's free market economy by increasing the use of recognized banking institutions and techniques.
- D. Contribute to the financial and monetary development of the Sultanate by way of effective participation in the international monetary society and in the procedure, negotiations and decisions of international monetary organisations in which the Sultanate participates.

The objectives clearly place an emphasis on the growth and development of the banking sector in Oman. The Banking Law is designed not to be overly restrictive but to allow the regulatory framework to adapt and grow as the sector also develops.

The Banking Law is divided into six parts:

- Part 1 sets out the general provisions including the definition of terms;
- Part 2 sets out the rules governing the organization and functions of the Central Bank;
- Part 3 sets out the rules relating to the currency of Oman;
- Part 4 sets out the rules relating to the organization of banking business;
- Part 5 sets out rules relating to the handling of cheques and deposits.
- Part 6 sets out the provisions relating to Islamic Banking in Oman

There are other laws that apply to the banking sector, in particular those contained in the Commercial Law promulgated by Royal Decree 55/90 (Commercial Law).

2.3 CENTRAL BANK OF OMAN: AN INTRODUCTION

The Central Bank is a juristic person i.e., a legal entity with an independent existence. The management of the Central Bank is entrusted to a Board of Governors who have been granted authority to exercise extensive powers in connection with banking business in Oman.

The Board of Governors are given a long list of powers including the formulation of monetary policy, licensing of banks, supervision of the currency and banking business generally. Article 15 of the Banking Law confirms the wide discretion in the form of “residual powers” available to the Central Bank by granting to the Board:

“other additional powers needed to carry on all the works required for properly managing the Central Bank, issuing the currency and controlling the banking institutions that are doing or seeking to do banking business in the Sultanate, where such activities and acts are not in conflict with the objectives of this law and are not inconsistent with its provisions or the provisions of any other laws in Oman.”

It is to be noted that the Central Bank can exercise rights of control and supervision over licensed banks in Oman through the issuance of regulations and directives. In accordance with Article 23 of the Banking Law, any regulations issued by the Board of Governors come into effect after 30 days from the date of publication in the official gazette or on such other date specified by the Board.

The overall powers prescribed to the Central Bank are very broad. For instance, Article 14 (g) confers on the Board of Governors the power to withdraw the license, or suspend the business of a licensed bank in the Sultanate or impose on it other penalties permissible in the regulations of the Central Bank in accordance with the exigencies of circumstances, on account of its failure to comply with the directives and policies of the Central Bank or on account of any violation of the provisions of the Banking Law and the rules and regulations of the Central Bank and other prevailing laws in the Sultanate; or if the Board of Governors decides that the situation of such a bank is unsound or insecure or that the suspension of its business or the imposition of these penalties provides the best guarantee to safeguard the interests of depositors in the Sultanate. In addition to the aforesaid, the Board of Directors also have the power to seize any suspended bank, administer it during the period of suspension and, if required, liquidate and close it or reorganize or reopen it or order, at any time, the sale of all or part of its business or assets and/ its liabilities.

2.4 REGULATIONS FOR BANKING BUSINESS AND BANKING TRANSACTIONS

The rules governing banking business in the Sultanate of Oman are contained in Part 4 of the Banking Law and Chapter 6 of the Oman Commercial Law, Royal Decree 55/90 (Commercial Law)

Article 49 of the Banking law prescribes the general powers of the Board of Governors of the Central Bank in accordance with the powers vested in the Board to organize banking business and supervise it in Oman. It is to be noted that, amongst other requirements, the rules contained in the Banking Law:

- i. Set out the process by which applicants may obtain a license to carry out banking business in Oman and for any branch offices including branch offices outside the Sultanate;
- ii. Require a licensed bank to obtain the approval of the Board of Governors for certain actions i.e. for any changes to their constitutive contract or management;
- iii. Specify the the minimum paid up capital requirement of local commercial banks to be RO 100 million and assigned capital of foreign banks in Oman to be RO 20 million.
- iv. Require each licensed Bank to make capital and reserve deposits with the Central bank;
- v. Require each licensed bank to comply with all Central Bank of Oman regulations;
- vi. Specify the general powers of credit and investment for licensed banks;
- vii. Set out the powers of dealing with real estate or personal property;
- viii. Set out reporting duties to the Central Bank, including for inspections by the Central Bank; and
- ix. Specify the liability of the licensed bank for the actions of its employees and for each of its officers, managers and staff individually.

The Banking Law states that each director of a licensed bank and each of its officers, managers and staff shall be responsible personally for any losses or damages suffered by the bank as a result of his performance of his/her functions in a fraudulent manner or with deliberate negligence or his failure to act reasonably and prudently under the circumstances. It is to be noted that any person to whom these violations are attributed shall be subject to civil, penal and other liabilities imposed by the Banking Law or any other prevailing laws of the Sultanate in any action instituted by the licensed bank, the Central Bank or a depositor or creditor of the licensed bank with a competent body or court.

It is to be further noted that licensed banks are bound by the acts performed by their directors or any committees thereof, officers, managers and employees when such persons are acting in the name of the licensed bank and within the scope of their authority. Moreover, any third party shall be entitled to assume that any action taken by the licensed bank, or by a director or committee thereof, officer, manager or employee having apparent authority to take such action in pursuance of the business of the licensed bank, was within the scope of authority of such person or group and the licensed bank shall be bound by any such action.

Part 5 of the Banking law and Chapter 6 of the Commercial Law set out rules relating to banking transactions including the making of cash deposits and withdrawals, bank transfers, current accounts, documentary credits and bank guarantees. Generally, these provisions set out the principles for carrying out banking transactions and business in the Sultanate of Oman. These are detailed and robust in nature and cover a plethora of rules and regulations relating to various aspects of banking business and transactions.

3. SECURITY INTERESTS IN OMAN`

3.1 SECURITY INTERESTS: GENERAL

The recognized forms of security in Oman are the following:

Commercial Mortgage.

- (i) Pledge.
- (ii) Registered Legal Mortgage.
- (iii) Sale and Purchase Agreements.
- (iv) Assignment.
- (v) Liens (Implied or Expressed).

3.2 COMMERCIAL MORTGAGE

A commercial mortgage can be taken out over the business and moveable assets of a commercial concern. The mortgage is valid only once it has been registered at the Oman Ministry of Commerce and Industry (MOCI). This must be done within 30 days of the date of execution and the commercial mortgage must be renewed at five-year intervals. The registration of the mortgage can be deleted by the mutual consent of the parties concerned or further to judgment of the Court.

A commercial mortgage must be by way of a formal written contract which must contain a statement from the debtor acknowledging that the lender has a lien over the commercial concern. The mortgage must contain the name of an insurance company which insures the borrower's premises and assets. The mortgage contract will be deemed to have been registered in the Commercial Register after its due execution by the parties and acceptance by the MOCI for registration through its endorsements and notations placed on the company's registration information document. Registration must be concluded within thirty days of the date of the contract.

The items intended to be included as the business of a commercial concern must be specified, and the list included in the commercial mortgage should be as detailed and comprehensive as possible. The mortgage would need to cover a company's commercial

concern, that must be defined as including its moveable assets and its material and non-material components, all goods, business furniture, industrial machinery, clients, trade name, leasing rights, trademarks, trade descriptions, patents, licenses, drawings and specimens. If the items included within the commercial mortgage are not precisely defined, the mortgage only applies to the trade name, the right of lease, the right to contact clients and goodwill and the right of sale.

It is also possible to include a mechanism in the commercial mortgage, designed, as far as possible, to capture future assets to the extent that general wording purporting to charge future assets was ineffective. An inventory of assets would be appended to the charge registered with the MOCI with a requirement that the inventory be updated. Any procedure for updating the inventory would also need to be practical and administratively workable.

Any commercial mortgage which provides for the registration of a floating charge, that is, a charge or security interest over the assets owned from time to time by the mortgagor, such assets not being precisely identifiable and owned by the mortgagor at the time the charge or security interest is entered into, may not be readily enforceable, as the concept of a floating charge is yet not yet recognized by Omani law, although in our experience the MOCI has allowed registration of such charges.

Article 67 of the Commercial Code, provides that where the items included within the mortgage are not precisely defined, the mortgage applies to the trade name only, the right of lease, the right to contact clients and their goodwill. This suggests that the assets to be the subject of a commercial mortgage in Oman must be precisely defined. As to the enforceability of a floating charge, much would depend upon the Omani Courts' interpretations of the definition of a commercial concern provided for in Article 37 and Article 67 of the OCL on which as yet there exists no case law.

As the validity of a registered commercial mortgage remains in place for a period of five years from the date of its registration with the MOCI, if the borrower's liabilities continue to remain outstanding, as on the date of expiry of the 5 year term, the lenders must renew the commercial mortgage for further periods of five years. As a matter of practice at the time of a renewal, the MOCI requires only a written request from the lender for renewal of the mortgage, with the payment of a renewal registration fee of OMR 30.

If the owner of the commercial concern that is being mortgaged fails to pay its debt on a due date to the mortgagee, the mortgagee or lender may, eight days after the date of giving formal notification to the debtor (with possession of the commercial concern) apply to the Court seeking permission to sell by public auction all or some of the items of the commercial concern which are the subject matter of the lien of the mortgagee. The Court must decide this application expeditiously.

It may be noted that a charge over any bank accounts of the company held in Oman will be effected pursuant to the commercial mortgage. Where the account is a fixed term deposit

(that is, not a fluctuating account) the charge is simply effected by specific identification of the account in the commercial mortgage. It is unclear whether an amount which has a fluctuating balance can effectively be charged through a commercial mortgage.

With regards to the registration of a commercial mortgage at the MOCI, both the mortgagor and the mortgagee's representatives are required to physically attend at the MOCI with the relevant documents of authority executed in their favour, empowering them to execute and register the commercial mortgage.

3.3 PLEDGE

A pledge is a security which is normally registered over moveable property and shares. Pledges are not often used in Oman, principally because of the uncertainty of how they work and the requirement for possession makes such a charge impractical.

The Oman Commercial Law defines a pledge as a security interest created over movable assets as security for a debt. A pledge is deemed to have come into existence only if possession of the pledged assets has been transferred to the pledgee or to a person appointed for this purpose by the contracting parties and such assets continue to remain in the possession of a third party bailee, or custodian or the pledgee thereafter, until such time that the debt has been discharged.

In terms of the Commercial Code, a pledge may be registered over negotiable instruments such as stocks, shares and other securities pursuant to an agreement between the parties.

In the case of shares and securities of joint stock companies, a pledge must be recorded with the company responsible for issuing the pledged shares and for such company to issue a confirmation of the registration record of the share pledge in its shareholders' register. It is also required that the pledge be recorded on the shareholder register maintained at the Muscat Depository and Securities Registration Company SAOC.

The creation of a pledge confers statutory duties upon the pledgee or custodian. This includes a duty to take all necessary measures to safeguard the pledged item (although the pledger is liable to pay all costs incurred in this respect) and the imposition of liability for the destruction or damage of the pledged item, unless it is established that such damage was attributable to an inherent defect in the item or to an external reason beyond the pledgee's control.

In view of the, above, therefore, there are lender liability issues associated with taking pledges over specific assets, which would make such a charge practicable only where it is an intangible asset which is not subject to loss or destruction and where possession can be established by, for example, a certificate of title which could be placed in safe keeping. It may, for example, be possible to take a pledge over the borrower's Omani bank accounts (if any) in this way.

3.4 LEGAL MORTGAGE

A legal mortgage may be created by a borrower in favour of a lender over the property covering both the realty comprised in the land and any fixtures, on the land, as security for the grant of any credit facilities to a borrower by a lender. Mortgages over land are subject to registration. Any mortgage over land will automatically charge any plant, building and fixtures constructed or erected on the land.

All legal mortgages, to be enforceable, must be registered at the Ministry of Housing (MOH) through the registration of a formal mortgage deed, to which the loan documentation may be attached. The legal mortgage will continue to persist until the borrower's secured obligations have been discharged and a formal redemption deed signed by the parties has been deposited with the MOH, with a formal request for cancellation of the mortgage.

If any changes are introduced to the legal mortgage or credit facility documents, the changes or modifications need to be filed with the MOH, with the payment of a minimum fee, failing which, the mortgage may be adversely effected.

The execution and registration of the legal mortgage is effected at the Land Registrar's office at the MOH in Muscat, or at the relevant branch of the MOH in the locality where the property is situated. The mortgage, if executed for convenience purposes before the Land Registrar in Muscat, would nevertheless need to be formally registered at the MOH branch in the locality where the property is situated. Security interest, created pursuant to a legal mortgage will not be perfected until confirmation is received that the legal mortgage has been registered.

3.5 ASSIGNMENTS

Assignments are recognized by the Omani courts as coming into existence upon a party transferring its rights in respect of a particular debt, a claim or an asset in favour of an assignee, subject to the terms and conditions set out in an assignment deed or agreement.

Notification of the assignment must be sent to the third-party debtor from whom the assigned debt or asset is due, and from whom the assignee may thereafter as a matter of right receive any amounts or payments otherwise due to the assignor.

A lender as an assignee should obtain an acknowledgement of the assignment from the third-party debtor or the holder of the asset in respect of which the assignment has been entered into.

3.6 LIEN

An express lien may be granted as a matter of contract in favour of a lender by the legal owner, over his assets or funds in possession of the lender. Lenders may only exercise an

implied right of lien provided they do not have any prior notice of prior claims in respect of assets held by the lender on account of the borrower on which the implied right of lien is to be exercised.

3.7 PRIORITY OF SECURITY INTERESTS

It is to be noted that Omani law is unclear about priorities, particularly those between several types of security, apart from the general rule that priority will be dependent upon the date of registration. It is unclear how priorities stand between different types of security, and what happens when a security document has to be registered in more than one register.

In accordance with Omani law, for there to exist a perfected first-priority charge or security interest in favour of a creditor, the charge should be registered with the concerned regulatory authority. In the case of a share pledge over shares in a public company, the pledge should be registered at the Capital Markets Authority. In the case of a legal mortgage over real estate, the mortgage should be registered at the MOH. Similarly, in the case of a commercial charge over a borrower's assets, such charge must be registered with the MOCI.

Where any such security interest is registered with the concerned authority in favour of more than one lender, the rights of the secured creditors as amongst themselves, will be governed by the terms and conditions of the security documents. If the security documents provide for a *pari-passu* charge amongst the creditors, then such charge should be enforceable as per the terms of the security documents. It is therefore very important for security documents to be carefully drafted with particular attention to the rights and duties of the parties towards one another.

3.6 ENFORCEMENT OF SECURITY

Enforcement of security in Oman is through an application to the court. To enforce security, a judgment must first be obtained from court. In a straightforward debt recovery action, obtaining that judgment may take an average of six months. Thereafter, an application to enforce the security must be made to the commercial division of the court to execute the judgment.

The enforcement of the most basic security will usually take up to three or four months. Where circumstances are more complex, the process could take up to two or three years, or even longer. At present, enforcement in Oman is principally by way of public auction of the charged assets, following application by the creditor to the court.

Except for land, there are no express rules setting a minimum price which must be reached at public auction. The creditor has no say in the matter. In the case of land, the court may seek the assistance of suitable experts to decide a basic price. If this price is not reached, the property is re-auctioned and the minimum price is reduced by ten per cent until a sale is achieved. The creditor would have the right to object to the enforcement proceedings at any time, for example, if the sale price was too low.

Secured creditors have very little control over the level of the proceeds realized from the enforcement of their security.

Any party, including the shareholders, would be able to bid for the assets in the public auction. The only way the secured creditors could prevent the acquisition of the assets for an unacceptable price would be to bid themselves. The auction of assets would take place pursuant to the secured creditors claims being determined by the concerned court. The court would accept the liabilities owed by the borrower in lieu of the purchase price and grant the secured creditors possession of the assets without the secured creditors having to incur additional expenditure.

4. CONCLUSION

The Banking Laws of the Sultanate of Oman are a wide-ranging subject, covering banking transactions in the banker-customer relationship. It provides a comprehensive legal framework to cater to existing and future banking transactions and activities in the Sultanate of Oman. Purely from a conceptual perspective, the Banking Laws of Oman are as robust and comprehensive as laws in other jurisdictions. However, as Oman continues its march into the 21st Century, the role of the regulator would be of utmost importance in ensuring that the institutional framework provided by the Banking Laws is applied in letter and spirit for the overall development of the banking sector of the Sultanate of Oman.

REFERENCES

Oman Banking Law, Royal Decree 114/2000 as amended.

Oman Commercial Code, Royal Decree 55/90 as amended.

CBO Circular BM 1019, 10 April 2007.

Chapter 8

FACTORS AFFECTING EQUITY SELECTION: A STUDY OF INDIVIDUAL INVESTORS IN MUSCAT SECURITIES MARKET

Neelufer Aslam, Soofi Asra Mubeen and Bansari Bhujwala

ABSTRACT

Behavioral biases of individual investors towards equity selection define the stock market trend. This chapter identifies the factors and barriers affecting equity selection of individual investors in Muscat Securities Market. The data has been collected from 125 respondents both nationals and expatriates through a structured questionnaire. The data was collected from fifty non-investors to identify the barriers to investment. Reliability of the data was tested using Cronbach's alpha. Statistical tools such as mean, t-test and ANOVA were used for data analysis. Advocate recommendation was identified as the most important factor affecting equity selection. ANOVA results reveal a statistically significant relationship between age, income, years of capital market investment and factors affecting equity selection. The major factor restricting investment in the MSM was liquidity preference.

Keywords: *Equity, Investors, Muscat Stock Market (MSM)*

1. INTRODUCTION

Classical economic theory is based on the rationality and perfect markets assumption. An implication of this assumption is that the investors carefully evaluate and analyze stock market prices and trends and take a decision, which maximizes their return. The investors have complete knowledge about the economy and a change in the stock prices occurs only due to changes in the fundamental values such as per capita consumption, forecast consumption and general equilibrium. The linkage between prominent finance models and the entire economy, brought about by the rationality assumption, was well accepted in the 1970s. However, in the 1980s, much of the academic literature focused attention on the behavioral biases of investors. Evidence of biases implies that investors are less than fully rational in their investment behavior and equity selection process.

Muscat Security market is a place where investors can buy and sell securities and the prices of security transactions are determined by market demand and supply of the securities. Muscat Security market is the only stock exchange in the Sultanate of Oman and was incorporated by the Royal Decree 53/88 issued on 21st June 1988. In 1998, it was restructured by two Royal Decrees 80/98 and 82/98. The average number of shares traded daily increased from 6,037,000 in 1989 to 4,540,986,000 in 2016 (Annual Statistical Bulletin

2016, 2016). The market capitalization was 17.29 billion in 2016 and Trading value was 0.96 Billion Omani Rials, (OMR), with a daily average of 3.90 million OMR in 2016 (Annual Statistical Bulletin 2016, 2016). 40.92% and 42.62% of individual investors bought and sold shares in the Muscat Securities Market in 2016. The Main purpose of MSM is to regulate and control the Omani securities market. Individual investors are those who purchase the securities in small amounts from the savings of their income. This chapter will contribute to the existing literature by identifying the factors influencing equity selection and barriers to investment in the Muscat Securities Market. It also seeks to find if there exists a relation between variables influencing equity selection and age, income and years of capital market investment.

2. LITERATURE REVIEW

The following studies relating to the factors affecting equity selection of individual investors were collected and reviewed to identify the research gap for the present study.

Sarkar and Sahu (2017) investigated the factors influencing behavior of individual investors in the stock market. Data was collected by distributing structured questionnaires among 500 investors from different districts of West Bengal and concluded that behavior of individuals investing in the stock market is significantly influenced by their demographic factors and perceived risk attitude, based on the mental process involved in gaining knowledge and understanding, which includes thinking, knowing, remembering, judging and problem solving rather than an emotional component of an attitude.

Kishori, B and Kumar, D (2016) identified the factors influencing decisions in stock market investing. Liquidity, return in investment, safety and management of active involvement are the factors which shows the investment choices among investors.

Arathy et al., (2015) aimed to find out the factors affecting decisions on investment in mutual funds and the preference over retail investors and the factors which prevents investors from investing in mutual funds, although this is less risky than investment in stocks. The risk averse investors consider it as a safer option. The study is of descriptive research, with a sample of 200 investors from Ernakulam and Trivandrum. Results revealed that the most important factors which influences the investment decision of retail investors are tax benefits, high return, price and capital appreciation; while the major preventing factor when considering investment decision is their bitter past experience. Investor satisfaction is rated as average with regard to mutual funds.

Mistry, (2015) identified the preferred source of information influencing investment decision to access the psychology of investors in different market situations and studied the behavior of individual investors in the Indian stock market, their attitude and perception with respect to the stock market. The research is descriptive in nature with a sample of 150 investors from Bharuch district. The result showed that there is a positive relationship between market condition and decision making of investors in the Indian stock market.

Jagongo and Mutswenje (2014) established the factors which influence investment decisions in the Nairobi Stock Exchange, among 42 investors using a structured questionnaire. Researchers confirmed from the analysis that there is a certain degree of correlation between behavioral finance theory and previous empirical evidence identified for the average equity investor. They found that important factors like a firm's reputation, its status in industry, anticipated corporate earnings, stock past performance, share price and feeling on the economy are the factors that influence individual investment decisions.

Vijaya, E., (2014) reviewed various research studies and literature available worldwide on individual investor behavior to gain understanding about the important factors which affect investment behavior of individual investors in various countries. Based on secondary data it is concluded that the behavior of individual investors were influenced by market movements in developing suitable asset allocation policies.

Geete et al., (2013) used a sample of 100 investors, to identify the factors which affect decisions to invest in equity or mutual funds, by applying statistical factor analysis tools. Major factors identified were money growth, security, if money invested, and reliability of the company being invested in.

Das Kanti S., (2012) identified the retail investor's perceptions on mutual fund investment and researched the factors influencing selection of mutual fund schemes by adopting convenience sampling with 250 respondents from five commercial towns of Assam. His investigation outlined through simple statistics tools that the retail investors had a positive approach for making investment in mutual funds, relating to safety, liquidity, capital gains and transparency.

Hossain, F and Nasrin, S., (2012) determined principal factors in choosing equity shares by retail investors trading in the Dhaka Stock Exchange. 351 retail investors were taken as a sample, from the city of Khulna in Bangladesh. They also examined whether there were any significant differences in these factors across demographic characteristics of the respondents. Convenience sampling was used through factor analysis, an independent sample t-test and ANOVA. It was revealed that a company's particular attributes, net asset value and accounting information were factors which influence retail investors. The study also revealed that importance given to each of the factors, excluding ownership structure, differed significantly with at least one demographic characteristic of the sample respondents, such as gender, age, occupation, income, education and experience of the investors.

Chong Pin, T and Lai Ming, M., (2011) surveyed the factors influencing the equity selection process and its relationship with expected and actual returns. Neutral, and accounting information, social relevance and advocates' recommendations were incorporated in the study with a sample of 199 Malaysian investors. The results indicated from factor analysis that neutral information is considered to be more important than the other factors in the equity selection process. Analysis done through correlation and multiple regression revealed that neutral information was positively correlated, while accounting information was negatively correlated. Expected return and social relevance were found to be significant for female

investors in their investment decision making, when compared to male investors. The study concluded that investment decisions could be influenced by different variables and they did not depend on a single integrated factor.

The above literature related to the factors affecting individual investor behavior in stock markets is based on studies carried out in different countries' stock markets. Some of the studies even focused on factors affecting investment on Mutual funds. The present study made an attempt to investigate the factors that influence equity selection among investors in MSM.

3. OBJECTIVES OF THE STUDY

1. To find out the factors that influence equity selection among investors in Muscat Securities Market.
2. To examine the relationship between the variables influencing equity selection and the demographics of respondents, including age, income and years of capital market investment.
3. To identify the barriers faced by investors in equity selection.

4. SCOPE OF THE STUDY

Investors from the same society and income level may differ in their investment behavior. The individual investor's behavior is caused by various factors. The present study is aims to identify the factors affecting equity selection of individual investors in Muscat Securities Market.

5. RESEARCH METHODOLOGY

The study uses a quantitative and descriptive research design. Data has been collected from primary and secondary sources. The primary source is through the questionnaire developed by AlTamimi, 2006, to measure factors affecting equity selection. The questionnaire consists of 25 items using the 5- point Likert scale with rankings from Strongly Agree (5) to Strongly Disagree (1). It was found from the reliability test that the questionnaire is highly reliable ($\text{Alpha}=0.9430$). The questionnaire was distributed to 125 investors of Muscat Security Market, out of which 92 completed surveys were received, giving a response rate of 74%. Fifty questionnaires were distributed to non-investors to identify the top three barriers for investment.

6. DATA ANALYSIS METHOD

Data collected from the sample was analyzed through various statistical tools: descriptive statistics, t-test and ANOVA. SPSS version 20 was used to analyze the data on the factors affecting equity selection among individual investors in MSM.

7. RESULTS AND DISCUSSION

7.1 FACTORS INFLUENCING EQUITY SELECTION AMONG INVESTORS IN MUSCAT SECURITIES MARKET

Twenty-five variables that had an impact on the investment decisions of investors were identified. These variables were grouped into five factors: Firm Image, Self Image Coincidence, Accounting Information, Neutral Information, Advocate Recommendation and Personal Financial Needs. The mean and standard deviations were calculated for each of the factors, as shown in Table 1.

Table 1: Descriptive Statistics of Factors Affecting Equity Selection

Factors	Mean	Standard Deviation	Cronbach Alpha
Firm Image/ Self Image Coincidence	2.88	1.26	0.6702
Accounting Information	2.94	1.23	0.8305
Neutral Information	2.93	1.21	0.8466
Advocate Recommendation	3.00	1.18	0.8126
Personal Finance Needs	2.79	1.19	0.7405

Source: SPSS Output

From Table 1, it can be observed that the factor Advocate Recommendation (Mean = 3.00, SD=1.18) is the most important factor affecting equity selection.

The average scores of each item were translated into a ranking table to find the five most important dimensions affecting equity selection. The following table represents the five most important factors

Table 2: The top 5 dimensions influencing investment decisions of investors in Muscat Securities Market

Rank	Questions	Mean	Standard Deviation	t value	Significance	Result
1.	Opinions of family members	3.10	1.07	0.877	0.383	NS
2.	Diversification of investment	3.08	1.39	0.524	0.602	NS
3.	Company's reputation	3.08	1.45	0.502	0.617	NS
4.	Recent price movements in the company's stock	3.07	1.33	0.469	0.640	NS
5.	Friend's Recommendations	3.04	1.14	0.366	0.715	NS

NS = Not Significant at 1% and 5% level of Significance

Source: SPSS Output

The top five factors having a major impact on the investment decisions of the investors were identified as shown in Table 2. The most influencing factor identified is the opinions of the family members, with the highest mean ($M= 3.10$, $SD=1.07$). The second most important factor is the diversification of investment ($M=3.08$, $SD=1.39$). The Company's reputation was ranked as the third influencing factor in the investment decisions ($M=3.08$, $SD=1.45$). The fourth and the fifth top factors are the recent price movements in the Company's stock ($M=3.07$, $SD=1.33$) and friend's recommendations ($M=3.04$, $SD=1.14$).

Statistical significance of the mean score was analyzed using one sample t-test. Results show in Table 2 that there is no significant difference in the mean for opinions of family members and the hypothesized value (3.00), $t(91) = 0.877$, $p = 0.383$ and 95% CI [-0.1237, 0.3193]; diversification of investment $t(91) = 0.524$, $p = 0.602$ and 95% CI [-.2123, 3645]; company's reputation $t(91) = 0.502$, $p = 0.617$ and 95% CI [-.2251, 3773]; recent price movements in the company's stock $t(91) = 0.469$, $p = 0.640$ and 95% CI [-.2108, 3412] and friend's recommendations stock $t(91) = 0.366$, $p = 0.715$ and 95% CI [-.1922, 2791].

7.2 INFLUENCE OF DEMOGRAPHIC FACTORS ON EQUITY SELECTION

To understand the influence of age, income and years of capital market investment among investors on equity selection, ANOVA was conducted. The results of the test are indicated in the following table:

Table 3: ANOVA for age and factors influencing investment decisions

AGE	Firm Image/ Self-Image Coincidence	Accounting Information	Neutral Information	Advocate Recommendation	Personal Finance Needs
18-25	3.60	3.81	3.62	3.72	3.53
26-33	2.88	2.56	2.69	2.63	2.88
34-41	2.00	1.70	1.90	1.80	2.00
42-49	2.79	2.43	2.14	2.43	2.43
50& ABOVE	2.20	2.40	2.40	2.60	2.80
F	9.40	7.35	11.85	10.85	5.94
Sig	0.00	0.00	0.00	0.00	0.00
Result	**S	**S	**S	**S	**S

**S = Significant at 1% Level of Significance

Source: SPSS Output

Statistical significant difference was observed between the age of respondents and Firm Image / Self Image Coincidence [$F(4, 87) = 9.40, p = .000$], Accounting Information [$F(4, 87) = 7.35, p = .000$], Neutral Information [$F(4, 87) = 11.85, p = .000$], Advocate Recommendation [$F(4, 87) = 10.85, p = .000$] and Personal Finance Needs [$F(4, 87) = 5.94, p = .000$].

Post hoc comparisons using the Tukey test indicated that the mean Self Image / Firm Image, Neutral Information and Personal Finance Needs score for the 18 to 25 age group was significantly different from the 34-41 and 42-49 age group. A Tukey post-hoc test revealed that there is a statistically significant difference between 18-to 25 and 34-41 age groups for Accounting Information. A statistically significant difference for mean scores was reported among all age groups and Advocate Information.

Table 4: ANOVA for income and factors influencing investment decisions

Income	Firm Image/ Self Image Coincidence	Accounting Information	Neutral Information	Advocate Recommendation	Personal Finance Needs
Less than 500	3.60	3.89	3.64	3.81	3.49
500-1500	2.6	2.24	2.28	2.4	2.72
1500-2500	2.6	2	2.3	1.9	2.6
2500-3500	2.5	2.5	2.5	2.25	2
Above 3500	2.5	2.33	2.17	2.50	2.33
F	13.08	13.33	14.85	9.87	9.86
Sig	0.00	0.00	0.00	0.00	0.00
Result	**S	**S	**S	**S	**S

**S = Significant at 1% Level of Significance

Source: SPSS Output

As shown in Table 4, above, there was a significant difference between the income level of respondents and Firm Image/ Self Image Coincidence , [$F(4, 87) = 13.08, p = .000$], Accounting Information [$F(4, 87) = 13.33, p = .000$], Neutral Information , [$F(4, 87) = 14.85, p = .000$], Advocate Information [$F(4, 87) = 9.87, p = .000$] and Personal Finance Needs [$F(4, 87) = 9.86, p = .000$].

Post hoc comparisons using the Tukey test indicated that the mean Neutral Information and Accounting Information score was significantly different among all the income groups.

A Tukey post-hoc test revealed that there is a statistically significant difference between less than 500 and 500-1500, 1500 – 2500 and above 3,500 income groups for Self Image / Firm Image and Advocate Information.

Table 5: ANOVA for years of capital market investment and factors influencing investment decisions

Years of Investment	Firm Image/ Self Image Coincidence	Accounting Information	Neutral Information	Advocate Recommendation	Personal Finance Needs
Less than 5	3.44	3.50	3.34	3.50	3.30
6-10	2.24	2.00	2.12	2.06	2.53
11-15	2.63	2.63	2.50	2.50	2.75
16-20	2.00	1.33	1.33	1.00	1.33
F	11.95	14.19	14.53	9.09	11.25
Sig	0.00	0.00	0.00	0.00	0.00
Result	**S	**S	**S	**S	**S

**S = Significant at 1% Level of Significance

Source: SPSS Output

A statistically significant difference was reported between the years of capital investment of respondents and Firm Image / Self Image Coincidence, [F (3, 88) =11.95, p=.000], Accounting Information [F (3, 88) =14.19, p=.000], Neutral Information, [F (3, 88) =14.53, p=.000], Advocate Recommendation [F= (3, 88) =9.09, p=.000] and Personal Finance Needs [F= (3, 88) =11.25, p=.000].

A Tukey post-hoc test revealed that there is a statistically significant difference between less than 5 years of capital market investment and all other investment period groups for Self Image / Firm Image and Neutral Information. In the case of Accounting Information and Advocate Recommendation for less than 5 years, a Tukey post-hoc test revealed a statistically significant difference between 6-10 and 16-20 years in capital market investment.

8. BARRIERS TO INVESTMENT

To identify the reasons restricting investment in MSM, fifty non investors were asked to rank the top three barriers. The following Table 6 presents the cross tabulation of the barriers and ranks given by the respondents.

Table 6: Reasons restricting investment

S.NO	Reasons restricting Investment	Rank1	Rank2	Rank3
1	I prefer to have complete liquidity in my hand	20%	4%	2%
2	I don't possess investment knowledge	22%	8%	0%
3	I have never considered making an investment	2%	0%	8%
4	I don't see any benefit of doing so	0%	0%	0%
5	I find it all too confusing	4%	8%	4%
6	Put off by high fees charged by banks and companies	10%	6%	2%
7	There is no need to make an investment	0%	2%	4%
8	I don't have enough money for investment	22%	8%	4%
9	I never have a time to arrange for investment	2%	16%	4%
10	I don't trust the information given by the banks and companies	12%	6%	8%
11	For me, all the investment alternatives are too risky.	8%	2%	6%

Source: SPSS Output

The score for each barrier was calculated based on ranks awarded by the respondents. The first rank was given three points, the second was given two points and the third was given one point. Based on these points, the mean score was calculated for each barrier. The following table presents the mean score for each barrier to investment.

Table 7: Mean score for reasons restricting investment

S.NO	Reasons restricting Investment	Mean
1	I prefer to have complete liquidity in my hand	2.69
2	I don't have enough money for investment	2.53
3	I don't possess investment knowledge	2.37
4	I don't trust the information given by the banks and companies	2.15
5	For me, all the investment alternatives are too risky.	2.13
6	I find it all too confusing	2.00
7	I never have a time to arrange for investment	1.91
8	Put off by high fees charged by banks and companies	1.89
9	I have never considered making an investment	1.40
10	There is no need to make an investment	1.33
11	I don't see any benefit of doing so	0.00

Source: SPSS Output

One of the major factors restricting investment in the Muscat Securities Market was liquidity preference. Individuals prefer to have complete liquidity and prefer present consumption to savings. The second important factor identified was non-availability of surplus funds. Respondents claimed to have low financial literacy and did not trust the information provided by financial institutions. However, all respondents found investment beneficial. Thus, by improving financial literacy, non-investors can be induced to invest in appropriate investment alternatives.

9. CONCLUSION

The purpose of the chapter was to study the factors affecting equity selection among individual investors in Muscat Securities market (MSM.) Five factors were grouped from twenty-five variables. Through descriptive statistics it was found that the most important factor affecting equity selection is advocate recommendation. Investors take advice from analysts, financial advisors and stockbrokers; observing price movements of company stock before investing. The second factor was accounting information. Investors review a company's stock and past performance, gain knowledge about expected corporate earnings, stock split, capital increases and bonus offered. Thus, investors in MSM base their decisions on expert advice and company performance. Statistical significance of the mean score was analyzed using one sample t-test for the top 5 dimensions influencing investment decisions of investors in MSM. Results showed that there is no significant difference in the mean for opinion of family members, diversification of investment, company's reputation, recent price movements in the company's stock and friend's recommendations. To understand the influence of age, income and years of capital market investment on factors affecting equity selection, ANOVA was conducted. The results concluded that there is a significant difference between the age, income and years of capital market investment and Firm Image/ Self Image Coincidence, Accounting Information, Neutral Information, Advocate Recommendation and Personal Finance Needs. The reasons restricting investment in MSM were also identified from fifty non investors and the top three barriers ranked were preference to have complete liquidity in hand, lack of surplus investible funds and low financial knowledge. Thus by improving financial literacy non investors can be induced to invest. Returns from investment will surplus income for further investment and this cyclical trend will boost overall investment levels.

REFERENCES

- Al-Tamimi, H. (2006). Factors influencing individual investor behavior: an empirical study of the UAE financial markets, *The Business Review*, 5(2), 225-32.
- Arathy, B., Aswathy A Nair., Anju Sai P. and Pravitha, N.R. (2015). A Study on Factors Affecting Investment on Mutual funds and its Preference of Retail Investors. *International Journal of Scientific and Research Publications*, 5(8),1-4.

- Chong Pin-Tun., and Lai Ming –Ming.(2011). An empirical evidence of factors in equity selection process in Malaysia. *African Journal of Business Management*, 5(15), 6221-6232.
- Das Kanti Sanjay. (2012). Factors Influencing the Mutual Fund Scheme Selection by Retail Investors in Assam: An Empirical Analysis. *Indian Journal of Commerce and Management Studie*, 3(3), 17- 23.
- Geete, V., Thakur,A., and Desai, A., (2013). A study of factors affecting Investors preferences among mutual fund and equity. *Asian Journal of Management Research*, 3(2), 374-383.
- Hossain, F., and Nasrin, S.(2012). Factors Affecting Selection of Equity Shares: The case of Retail Investors in Bangladesh. *European Journal of Business and Management*, 4(20), 110-124.
- Jagongo, A., Mutswenje, S. Vincent. (2014). A survey of the Factors Influencing Investment Decisions: The Case of Individual Investors at the NSE. *International Journal of Humanities and Social Science*, 4(4), 92-102.
- Kishori, B., and Kumar Dinesh, P.(2016). A study on Factors Influencing the Investors Decision Making in Stock Market with Special Reference to Indian Stock Market. *International Journal of Management and Commerce Innovations*,4(1), 39-43.
- Mistry, K. (2015). A study of Individual Investors Behavior in Stock Market – With special Reference to Indian Stock Market. *International Journal of Management and Commerce Innovations*, 3(1), 541-545.
- Sarkar, Kumar, A., and Sahu Nath, T. (2017). Factors influencing behavior of Individual Investor in Stock Market: A case study in West Bengal. *International Journal of Commerce and Management Research*, IMS Business School Presents Doctoral Colloquium. 32-39.
- Vijaya, E.(2014). Influential Factors on Investment Behavior of Individual Investors: A review of Empirical Evidences from Various Countries. *International Research Journal of Management and Commerce*, 1(5), 35-46.

(Endnotes)

- 1 https://en.wikipedia.org/wiki/Muscat_Securities_Market.

Chapter 9

EXPLICATING CLOUD COMPUTING (SAAS) ACCEPTANCE BY BANK CUSTOMERS: A THEORETICAL FRAMEWORK

Sujeet Kumar Sharma and Saeed Al-Muharrami

ABSTRACT

The acceptance of cloud computing is changing the use of Internet in almost all types of business and organizations. Banks are also showing interests in accepting cloud-computing services to provide an advanced banking environment for customers. Banks are using cloud computing to increase customer satisfaction by fulfilling their day to day banking related needs. The main objective of this chapter is to explore the important factors influencing bank customers' intention to accept cloud computing in Oman. The proposed research model includes two key constructs, namely perceived ease of use and perceived usefulness from a well-known Technology Acceptance Model (TAM) and four key constructs: perceived benefits, security, trust, and cost. These key constructs influencing bank customers' intention to accept cloud computing are discussed and hypotheses proposed. Managerial implications are explored and possible future research directions also discussed.

Keywords: *Cloud Computing, Technology Acceptance Model, Banks, Oman*

1. INTRODUCTION

Cloud computing has attracted great attention from researchers and academicians in the recent past. Cloud computing is defined by Buyya et al., (2009) as a parallel and distributed system consisting of a collection of interconnected and virtualized computers that are dynamically provisioned and presented as one or more unified computing resources based on service level agreements (SLA) established through negotiation between the service provider and consumers". Cloud computing primarily provides three main services, namely Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). The IaaS model is used for data storage and outsource processing and PaaS is used for providing a platform for users to develop applications and various types of services. SaaS is the most commonly used model, which is used to access the service provider's applications with the help of a web browser, without installing software on the user's devices. Huang et al., (2011) suggested the application of cloud computing services in the banking sector, particularly SaaS, to help bank customers in daily financial transactions, with no extra cost and without extra effort. There is no need to install these applications on the customer's devices.

Therefore, it is interesting to understand the key factors which may influence bank customers' acceptance of the cloud based applications. Cloud based applications may provide a large number of benefits to the customers. However, there is still very limited evidences of cloud based applications in the banking sector (Asadi et al., 2016; Rani and Gangal 2012). Oman, one of the Gulf Council Cooperation (GCC) countries, is a developing and oil based economy. The policy makers in Oman always attempt to bring latest technologies in almost all spheres of government and private sectors. A cloud based application for bank customers in Oman is a relatively new phenomenon. Therefore, this chapter attempts to explore and understand the key constructs which may influence bank customers' decision to accept cloud-based applications, from a developing country perspective.

This chapter has three key objectives: firstly, to review existing literature to explore key antecedents that may influence bank customers' decision to accept cloud computing services in the banking sector; secondly, to extend the commonly used TAM (Technology Acceptance Model) developed by Davis et al., (1989), by incorporating four key constructs: perceived benefits, security, trust, and cost and finally, to discuss the managerial implications of cloud-based applications in a developing country like Oman.

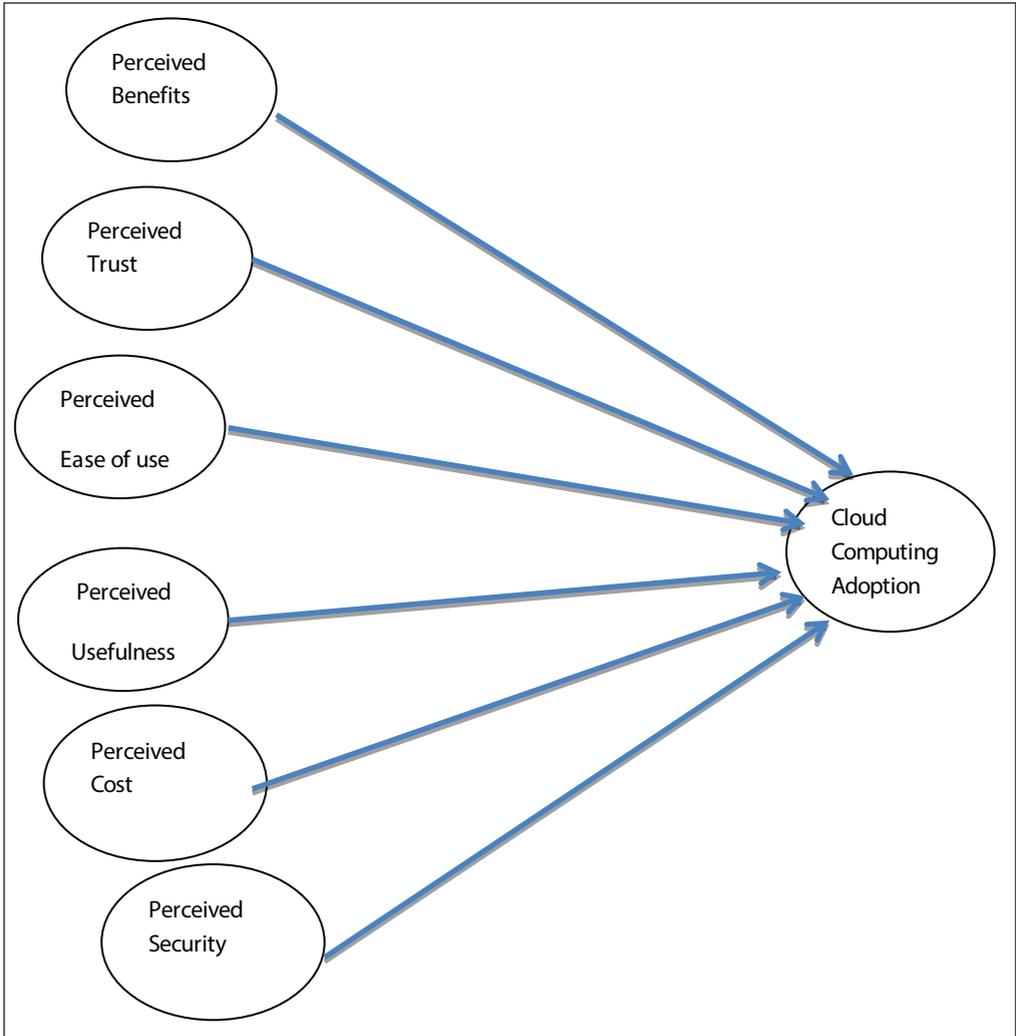
2. THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

Studies on information systems have shown that in the past users' attitude has played a key role in the acceptance of new technology (Davis, 1989; Venkatesh and Davis, 1996). Information systems acceptance in the literature has employed empirical methods using various well known models, namely Theory of Reasoned Action (Fishbein and Ajzen, 1975), Theory of Planned Behavior (Ajzen, 1991), Technology Acceptance Model (Davis, 1989) and Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003). Among these commonly employed models, TAM by Davis (1989) is the most cited model for the acceptance of new technology. There are two fundamental constructs of TAM, which are known as perceived ease of use and perceived usefulness. Barki (2007) argued that TAM is incomplete as it has a number of limitations and is considered very simple. Venkatesh and Davis (2000) proposed TAM 2 and Venkatesh and Bala (2008) proposed TAM 3 by incorporating a number of constructs into the original TAM, such as social influence and facilitating conditions. A number of studies are available in the literature, where TAM has been extended by integrating a number of new constructs (Chong, 2013). TAM has been employed successfully in domains such as Internet (Kim et al., 2007), Internet banking (Al-Somali et al., 2009, Sharma et al., 2015), mobile instant messaging (Hsu et al., 2009) and mobile commerce (Chong, 2013). Therefore, it is important to explore and understand, from a developing country perspective, the intention of bank users to adopt cloud-based applications.

Davis (1989) argued in his most cited TAM that intention is considered the best predictor of behavior towards new technology. In this study, an attempt has been made to understand and explore bank customers' intention to use cloud computing. In Oman, the use of cloud computing in the banking sector is still in its infancy.

As shown in figure 1, the proposed research model is an extension of the most cited technology acceptance model, by Davis (1989), incorporating the four key constructs of perceived benefits, security, trust, and cost.

Figure 1: Theoretical research framework



Source: Prepared by the Authors

Perceived usefulness is a fundamental construct of TAM and defined as “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989). Perceived ease of use (PEOU) is another important construct of TAM and this construct has been used widely to explain the intention to adopt new technology. Davis (1989) defined PEOU as “the degree to which a person believes that using a particular system would be free from effort”. It has been established by a number of researchers that perceived usefulness and perceived ease of use influence behavioral intention of users

towards new technology (Davis, 1989; Kim et al., 2007; Al-Somali et al., 2009; Hsu et al., 2009; Zhang et al., 2012; Akturan and Tezcan 2012, Chong et al., 2012; Chong, 2013, Safeena et al., 2013; Sharma et al., 2015; Sharma et al., 2016; Palos-Sanchez et al., 2017). It is expected that there will be a significant relationship between perceived usefulness of cloud-based services (SaaS) for bank users and intention of the users. Furthermore, a relationship is also expected between perceived ease of use of cloud based applications (SaaS) and intention of bank customers. Ease of use motivates people to use new technology more as it reduces the effort in finishing routine jobs. On the basis of the aforementioned argument, the following hypotheses are proposed:

H1: Perceived usefulness will positively influence behavioral intention to use cloud-based services.

H2: Perceived ease of use will positively influence behavioral intention to use cloud-based services.

The acceptance of new technology mainly depends on functional and non-functional reasons (Pederson, 2005). Perceived benefit is considered as “the degree to which individuals perceive using the SaaS as a representation of fashionability, a symbol of status, and a way to increase confidence” (Asadi et al., 2016). It is assumed that a number of benefits are being offered to banking customers who are adopting cloud based services; namely a significant reduction in waiting in long queues and other benefits. It is meaningful to assume that in a developing country like Oman there is a significant relationship between perceived benefits and behavioral intention to adopt cloud based services.

H3: Perceived benefits will positively influence behavioral intention to use cloud-based services.

Trust plays a significant role in the acceptance of a new technology, where financial transactions and personal information are shared in a virtual environment. Vance et al., (2008) defined trust as “a person’s feeling or belief that the processes, systems and environment in which he/she transacts have appropriate safeguards and measures”. Lu et al., (2003) argued that sharing personal information with the third party in a virtual environment creates doubt in the minds of users. Cloud based services (SaaS) are considered to be one of the most sensitive domains where users will share very sensitive information. Al-Somali (2009) found that trust influences the decision to adopt Internet banking in one of the GCC countries. Furthermore, Sharma et al (2015) and Yadav et al., (2016) found that trust is one of the most important predictors of Internet banking in Oman and mobile commerce in the Indian context. In this chapter, it is assumed that higher level of trust in cloud-based services will increase the intention to use more cloud-based services. Therefore, we hypothesize

H4: Perceived trust will positively influence behavioral intention to use cloud-based services.

Cloud-based services support the lower prices of high-end software, even without installation of the devices. Chong (2013) and Yadav et al., (2016) argued that cost has a

negative impact on the behavioral intention attitude of users towards new technology because of its higher cost. However, Cloud based services are cheaper so it is assumed that cost will have a positive relationship with the behavioral intention of bank users to adopt the services. In this study, we hypothesize that the lower cost of cloud computing applications will have a positive relation with the acceptance of this new technology.

H5: Perceived cost will positively influence behavioral intention to use cloud-based services.

Most people use digital money in various forms such as credit or debit cards, online transactions and others. Banks are also motivating customers to use more digital money to minimize their operational cost. In a traditional banking system, banks spend a considerable amount of money on transporting currency from one place to another and on security related issues. Asadi et al., (2016) found that security and privacy issues influence the acceptance of cloud computing in the developed world. Gartner (2014) reported that security and privacy are the key barriers in the adoption of cloud-based services. Sharma et al., (2015) also found that the impact of security issues on the acceptance of Internet banking in Oman was significant. In this study, we hypothesize that in Oman there will be a positive relationship between perceived security and behavioral intention of bank customers to accept and use cloud based services (SaaS).

H6: Perceived security will positively influence behavioral intention to use cloud-based services.

To summarize the discussion about the potential constructs which may influence the decision to adopt cloud-based services, a research model to adopt cloud based services is proposed and outlined above in Figure 1. The managerial implications and discussion of the theoretical model are outlined in the following section.

3. MANAGERIAL IMPLICATIONS AND DISCUSSIONS

In the era of technology driven economy, new technologies are enriching lives of people around the globe. The acceptance of new technology is usually influenced by many factors related to human nature and organizational issues. A number of theoretical models have been proposed in the literature, to study and explain users' behavioral intention. The technology acceptance model (TAM) by Davis (1989) is one of the most cited models to explain and understand users' intentions to adopt new technology. TAM is simple, and easy to understand and considered the best model for extension in the domain of information systems studies (Safeena et al., 2013). The basic nature and useful outcomes of TAM motivated authors to develop the theoretical model in this chapter, which may explain and understand bank users' behavior regarding acceptance of cloud based applications. Furthermore, the theoretical model proposed in this chapter can be tested empirically to provide a foundation for further research in the domain of cloud computing acceptance in the banking industry, from a developing country perspective.

This chapter has multiple implications for academicians, researchers, web application developers and decision makers in the domain of information systems and the banking industry. Firstly, it will serve as a generic model for cloud computing applications in a developing country. This model has explored the new and direct relationship of potential construct influencing users' behavioral intention to adopt new technology in the banking environment. The framework proposed in this chapter will assist decision makers to understand key factors influencing decisions to adopt cloud-computing applications in the banking sector. The model will assist developers of cloud based applications and marketers to establish a new assessment and evaluation framework for the new technology, from the users' perspective. Pederson (2005) recommended such theoretical frameworks to understand the potential adoption of newly launched web based applications.

Secondly, this chapter will provide suitable guidelines to the cloud computing service providers to provide ranking of various services offered on the basis of the opinions of bank customers in Oman. Analysis of users' opinions will help in developing better customer relationship management in the banking industry. In addition, it will assist in improving financial management for customers, which will help in retaining existing customers as well as attracting potential costumers. Asadi et al., (2016) and Palos-Sanchez et al., (2017) argued that cloud computing applications have offered greater opportunities to banking sectors and organizations as a whole in the developed world context. A number of information systems researchers in the recent past (Shmueli and Koppius (2010), Chong et al., (2013), Sharma et al., 2015; Sharma et al., 2016) proposed a very innovative and promising research methodology, which is based on a predictive modeling approach, rather than on the commonly used causal and statistical modeling approach. The theoretical model developed in this chapter is ideal for predictive modeling purposes.

Thirdly, many researchers and academicians spend a significant amount of time in developing a new theoretical model for pilot studies to test and validate proposed relationships among decision variables in the context of new and cutting edge technology. This chapter may provide useful guidelines and future research directions for both researchers and academicians who are working in the domain of cloud based applications and related cutting edge domains in the context of a developing country.

Finally, this chapter is proposing a theoretical framework for Oman, one of the most promising economic and emerging markets in the GCC countries. The theoretical model will provide guidelines for adoption and continuous usage of promising cloud-based applications by bank users in all six GCC countries, namely Saudi Arabia, Qatar, Kuwait, Bahrain, United Arab Emirates, and Oman, especially as in the recent past, it has been observed that GCC countries adopt new technologies relatively faster than their counterparts in the region. Cloud based applications are one of the most promising applications of the Web 2.0, which provides its users with a dynamic platform.

4. CONCLUSION

The objective of this chapter was to understand and explore key factors influencing the decision of bank customers to accept cloud-based services (SaaS), from the perspective of a developing country in the Middle East and North Africa (MENA) region. The chapter examined the direct effect of a number of predictors for the behavioral intention and usage of cloud computing applications. The theoretical model proposed in this chapter was based on the widely used technology acceptance model (TAM). The TAM was extended by incorporating the four key and additional constructs of perceived benefits, perceived security, perceived trust, and perceived cost, to provide a complete and clear picture of key issues considered by bank customers in Oman.

5. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

This chapter proposes a theoretical framework to understand and explore the key antecedents influencing the decision to adopt cloud based services (SaaS) in the banking sector in Oman, albeit with limitations. Future research may examine the proposed model empirically and assess the statistical significance of the proposed hypotheses. The model may be extended by incorporating the five personality constructs validated by Chong et al., (2015) in the context of RFID adoption in the healthcare sector. The theoretical model presented in this chapter may also be extended by including organizational constructs, namely technology complexity, top management support, training, and organization size. The outcome of the theoretical framework may also be tested empirically in other countries of the Middle East and North Africa region to validate the proposed relationships among decision variables. Furthermore, validation of the proposed hypotheses in the context of cross country comparison and evaluation is recommended.

REFERENCES

- Asadi, S., Nilashi, M., Husin, A. R. C., and Yadegaridehkordi, E. (2017) Customers perspectives on adoption of cloud computing in banking sector. *Information Technology and Management*, 18(4), 305-330.
- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179–211.
- Akturan, U., and Tezcan, N. (2012). Mobile banking adoption of the youth market: Perceptions and intentions. *Marketing Intelligence and Planning*, 30(4), 444-459.
- Chong, A. Y. L., Chan, F. T. S. and Ooi, K. B. (2012). Predicting consumer decisions to adopt mobile commerce: cross country empirical examination between China and Malaysia. *Decision Support System*, 53(1), 34-43.

- Chong, A. Y. L. (2013). A two-staged SEM-neural network approach for understanding and predicting the determinants of m-commerce adoption. *Expert Systems with Applications*, 40(4), 1240–1247.
- Chong, A. Y. L., Liu, M. J., Luo, J., and Keng-Boon, O. (2015). Predicting RFID adoption in healthcare supply chain from the perspectives of users. *International Journal of Production Economics*, 159, 66-75.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technologies. *MIS Quarterly*, 13(2), 319–340
- Fishbein, M. and Ajzen, I. (1975). *Beliefs, attitudes, intention, and behavior: an introduction of theory and research*. Reading, MA: Addison-Wesley.
- Hair, F. J., Black, W., Babin, B., and Anderson, R. (2010). *Multivariate data analysis: A Global perspective*. New Jersey: Pearson Education Inc.
- Hanafizadeh, A., Behboudi, M., Koshksaray, A. A. and Tabar, M.J.S. (2014). Mobile-banking adoption by Iranian bank clients. *Telematics and Informatics*, 31(1), 62–78.
- Hsu, C. I., Shih, M. L., Huang, B. W., Lin, B. Y. and Lin, C. N. (2009). Predicting tourism loyalty using an integrated Bayesian network mechanism. *Expert Systems with Applications*, 36(9), 11760–11763.
- Hsu, C. L. and Wang, C. F. (2011). Investigating customer adoption behaviors in mobile financial services. *International Journal of Mobile Communications*, 9(5), 477–494.
- Khalifa, M. and Ning Shen. K. (2008). Explaining the adoption of transactional B2C mobile commerce. *Journal of Enterprise Information Management*, 21(2), 110-124.
- Kim, H.W., Chan, H.C. and Gupta, S. (2007). Value based adoption of mobile internet: an empirical investigation. *Decision support system*, 43(1), 111-126.
- Lee, C.C., Cheng, H.K. and Cheng, H.H. (2007). An empirical study of mobile commerce in insurance industry: task-technology fit and individual differences. *Decision Support Systems*, 43(1), 95-110.
- Lee, Y.K, Park, J.H., Chung, N and Blakeney, A. (2011). A unified perspective on the factors influencing usage intention towards mobile financial services. *Journal of Business Research*, 65(11), 1590-1599.
- Lu, J., Yao, J.E. and Yu, C.S. (2005). Personal innovativeness, social influences and adoption of wireless internet services via mobile technology. *The Journal of Strategic Information Systems*, 14(3), 245–268.
- Lu, J., Yu, C., Liu, C. and Yao, J. (2003). Technology acceptance model for wireless internet. *Internet Research: Electronic Networking Applications and Policy*, 13(3), 206-22.
- Ngai, E.W.T. and Gunasekaran, A. (2007). A review for mobile commerce research and applications. *Decision Support Systems*, 43(1), 3–15.
- Palos-Sanchez, P. R., Arenas-Marquez, F. J., and Aguayo-Camacho, M.(2017). *Cloud Computing*

- (SaaS) adoption as a strategic technology: Results of an empirical study. *Mobile Information Systems*, 1-21.
- Pedersen, P. E. (2005). Adoption of mobile Internet services: An exploratory study of mobile commerce early adopters. *Journal of organizational computing and electronic commerce*, 15(3), 203-222.
- Roger, E.M. (1995). *Diffusion of innovations*. New York: The Free Press.
- Safeena, R, Date, H., Hundewale, H and Kammani, A. (2013). Combination of TAM and TPB in internet banking adoption. *International Journal of Computer Theory and Engineering*, 5(1), 146-150.
- Sharma, S. K., Govindaluri, S. M., and Al Balushi, S. M. (2015). Predicting determinants of Internet banking adoption: A two-staged regression-neural network approach. *Management Research Review*, 38(7), 750-766.
- Sharma, S. K., Joshi, A., and Sharma, H. (2016). A multi-analytical approach to predict the Facebook usage in higher education. *Computers in Human Behavior*, 55, 340-353.
- Shmueli, G. and Koppius, O. R. (2010). Predictive analytics in information systems research. *MIS Quarterly*, 35(3), 553-572.
- Vance, A., Cosaque, C.E.D. and Straub, B.(2008). Examining trust in information technology artifacts: the effects of system quality and culture. *Journal of management information system*, 24(4), 73-100.
- Venkatesh, V., and Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision sciences*, 39(2), 273-315.
- Venkatesh, V., and Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, 46(2), 186-204.
- Venkatesh, V., Morris, M. G., Davis, G. B. and Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.
- Wei, T.T., Marthandan, G., Loong, A.Y., Boon, C.K. and Arumugam, O.S. (2009). What drives Malaysian m-commerce adoption? An empirical analysis. *Industrial Management and Data System*, 109(3), 370-388.
- Yadav, R., Sharma, S. K., and Tarhini, A. (2016). A multi-analytical approach to understand and predict the mobile commerce adoption. *Journal of enterprise information management*, 29(2), 222-237.
- Zhang, L, Zhu, J. and Liu, Q. (2012). A meta-analysis of mobile commerce adoption and the moderating effect of culture. *Computers in human behaviour*, 28(5), 1902-1911.
- Zhou, T., Lu, Y., and Wang, B. (2010). Integrating TTF and UTAUT to explain mobile banking user adoption. *Computers in Human Behavior*, 26(4), 760-767.

Chapter 10

EMERGING CONTOURS IN INDIA-OMAN INVESTMENT AND TRADE RELATIONS

Sunder Ram Korivi and Rachana Baid

ABSTRACT

The India-Oman relationship has traditionally been characterized by strategic considerations, encompassing defense cooperation, food security and energy security. Over time, this relationship has blossomed to foreign direct investment, sovereign wealth fund investment and private equity. India's growing international influence as a peace-loving nation, its economic growth opportunities and growing technical prowess, coupled with Oman's energy resources and investible capital serve as an ideal platform for taking the relationship to the next level. The investment rationale, investment vehicles and deal flows are covered in this chapter.

Keywords: *India-Oman, Investment, Sovereign Wealth Fund, Private Equity, Remittances*

1. INTRODUCTION

In the last few decades, trade dynamics within the global economy have undergone significant changes. The presence and contribution of developing economies is increasingly being felt in international trade and finance. International trade and investments have been drivers of economic growth in many developing countries.

In this context, the trade relations between India and Oman are worth mentioning. Since 2000-01, India's trade with Gulf Cooperation Council countries (GCC) has been on a growth trajectory. India is the 16th largest export economy in the world. Major items of Indian exports are refined petroleum, diamonds, packaged medicaments, jewellery and rice. Its top imports are crude petroleum, gold, coal briquettes and petroleum gas. Oman is the 59th largest export economy in the world. Its top exports are crude petroleum, petroleum gas, refined petroleum, nitrogenous fertilizers and acyclic alcohols. Its top imports are cars, refined petroleum, delivery trucks, planes, helicopters, aircraft and excavation machinery.

Oman accords a high priority to its ties with India and is a strategic partner of India. Good relations between India and Oman go back to maritime history. In recent decades, the Omani government has recognized and acknowledged the role played by the Indian expatriate community in the building of Oman. Remittances by expatriates from Oman, as a percentage of its GDP, are the highest in the world, at 12.6%, as per the 2016 World Bank Migration and Remittances Factbook. Oman was ranked 11th in the world in outward remittances in absolute terms, as per the Factbook. The total outflows from Oman were US\$

10.3 billion, as compared to 1st ranked USA (\$ 36.9 billion) and 10th ranked Italy (\$ 11.2 billion). Indians account for a significant portion of the 40-50% expatriate population originating from South Asia. The positive benefit of remittances is that it arrests local inflation. As stated in a December 2015 World Bank report, India (US \$ 72 billion) overtook China (\$ 64 billion) in being the world's leading nation in inward remittances. The Philippines ranked third with \$ 30 billion.

India ranks highly in the top import and export destination for Oman¹. Alpen Capital Investment Bank's report (2012) also places Oman as the second largest GCC investor in India. Institutional arrangements have been put in place to strengthen the India-Oman bilateral relationship. Accordingly, a Joint Commission Meeting (JCM) and Joint Business Council (JBC) was established by the Government. This chapter attempts to provide broad details of the growing trade and finance relationship between India and Oman.

1.1 TRADE BETWEEN INDIA AND OMAN

India's imports from Oman increased from \$6 million in 2000-2001 to \$ 1,675 million in 2015-16². Its exports from Oman showed a similar trend. They were \$145 million in 2000-2001 and increased to \$ 2,191million in 2015-16³.

1.2 INDIA-OMAN JOINT VENTURES

There are about 3000 Indian enterprises in Oman with a total investment of over \$ 4.5 billion. The Oman India Fertilizer Company (OMIFCO) is the largest Indian Joint Venture abroad. It started operations in January 2006. Bharat Oman Refineries Limited (BORL), is a joint venture promoted by Bharat Petroleum Corporation Limited (BPCL) and Oman Oil Company (OOC). Indian companies and their joint ventures in Oman have won contracts for building infrastructure projects, gas pipelines and storage facilities. Indian private sector players have also entered into joint ventures with businesses in Oman. Prominent amongst them are Jindal Steel & Power Ltd. (JSPL) and Larsen and Toubro Ltd. (L&T). L&T has established four mega joint ventures, which are L&T Oman LLC, L&T Electromac LLC, L&T Modular Fabrication Yard LLC and L&T Heavy Engineering LLC, with the Zubair Group. Jindal Steel & Power Ltd. (JSPL) acquired the Oman-based Shaded Iron & Steel Co LLC.

¹ The top export destinations of Oman are China (\$14.7B), South Korea (\$2.78B), the United Arab Emirates (\$2.05B), Other Asia (\$2B) and India (\$1.45B). The top import origins are the United Arab Emirates (\$10B), Japan (\$3.16B), China (\$1.81B), India (\$1.67B) and the United States (\$1.64B).

² Source: Government of India, Department of Commerce, Import Export Data Bank, updated February 14, 2017.

³ Source: Government of India, Department of Commerce, Import Export Data Bank, updated February 14, 2017.

India and Oman have also collaborated in the field of education, technology and health care. On January 14, 2012, former Indian President Dr. Kalam inaugurated the 'Centre of Excellence', set up jointly by Anna University and Bahwan CyberTek of Oman, in the university campus in Chennai. Nova Polyclinic, a pioneer in short-stay surgeries, opened its first polyclinic and a short-stay surgical unit in Oman in February 2012. Nova Medical Centre's Middle East LLC is a joint venture between Nova Medical Centre, India, and the Amethyst, a diversified group of over 75 companies in the Sultanate of Oman. Infosys entered into a partnership with Oman's Information Technology Company (ITC), for its universal banking solution product 'Finnacle'. A joint venture between Khimji Ramdas Shipping of Oman and TM International Logistics Ltd., an integrated marine logistics service company of India, is developing the facilities linked to the operation of a new bulk minerals terminal at the Port of Sohar. Godrej, a conglomerate from India, entered into a partnership with Mohsin Haider Darwish (MHD) in Oman's healthcare facilities and allied services industry. Aurobindo Pharma Ltd. of India announced its partnership with Khimji Pharmacy LLC of Oman and launched its entry into Oman and the GCC pharmaceutical market. India's retail player, the Future Group, plans to enter Oman with 4 to 5 stores, in collaboration with Khimji Ramdas LLC of Oman.

The two countries have a strong strategic partnership which has stood the test of time, including a defence cooperation agreement. Oman has been interested in securing its food supply by procuring wheat, rice and sugar from India, and expressed its willingness to invest in any cooperative of its choice. Oman has been one of the first countries in the Gulf region to favourable to the present Indian government's diplomatic initiatives. Oman also hosted the India-Oman Partnership Conference in Muscat in December 2016.

2. INVESTMENT

The predominant investment instrument has been equities. The direction of investment has been inbound, i.e., from Oman into India, going by the transactions witnessed in 2016 and 2017. Direct investment by Oman's Sovereign Wealth Fund (SWF) has been explored, as have fund raising and deployment through an Indo-Omani joint investment Private Equity vehicle. The renewable energy sector seems to be in vogue, particularly as energy-rich SWFs seek diversification. Private Equity investment sentiment has turned positively since 2015, both on the fund-raising and the exit side.

In subsequent paragraphs, the following are described:

- Key Players
- Investment Rationale, Vehicle and Industry
- Deal Flows

2.1 KEY PLAYERS

Under a bilateral arrangement, the State General Reserve Fund (SGRF) of Oman

has collaborated with India's largest bank, State Bank of India (SBI) to constitute a vehicle called the Oman India Joint Investment Fund (OIJIF). Some of the significant players OIJIF investments are listed in Table 1 below:

Table 1: OIJIF Investments

National Commodity Derivatives Exchange of India (NCDEX)
ING Vysya Bank (now merged into Kotak Mahindra Bank)
Beaver Engineering
SSIPL Retail
Solar Industries Limited
Leap Green Energy Private Limited
GSP Crop Science Private Ltd
Indus Teqsite Private Ltd

Source: Published in Mint, March 20, 2017

A description of the activities of some of the investing companies is provided below.

- **State General Reserve Fund (SGRF)** is Oman's Sovereign Wealth Fund. SGRF manages the oil and gas revenues of energy-rich Oman and has a diversified portfolio in 25 countries. SWFs have, in recent times, developed an interest in India's clean energy space.
- **Oman India Joint Investment Fund (OIJIF)** is a collaborative effort between SGRF of Oman and SBI of India. OIJIF works as a Private Equity fund, which looks at investment opportunities in the listed and unlisted space and makes profitable exits. Based on the positive investment experience over the past few years, OIJIF will now be looking at larger-sized deals.
- **State Bank of India (SBI)** is India's largest bank. It is a government-promoted bank, listed on India's premier stock exchanges, the National Stock Exchange of India (NSE) and the Bombay Stock Exchange (now BSE). It had grown in size, following a merger with two of its subsidiaries viz. State Bank of Saurashtra and State Bank of Patiala. It will also grow even larger with effect from the financial year 2017-18, following its merger with six more banks – five of its subsidiaries and also another state-owned bank, the Bharat Mahila Bank. SBI will now be poised to play a global role. On the financial services side, SBI has an Asset Management Company which runs SBI Mutual Fund. It advises India's Employer's Provident Fund Organization (EPFO) and the National Pension System (NPS). It also advises the Central Government's Department of Investment in Public Assets and Management (DIPAM) on disinvestment through the Central Public Sector Enterprise (CPSE) Exchange Traded Fund (ETF). This fund

won the Morningstar Award 2016 for being the best in the Equity-diversified category, based on a strategy of prudent research-based stock selection and avoidance of 'losers'. Further, on the securities markets side, another subsidiary of SBI is SBI Capital Markets, the Investment Banking arm, which manages public offerings and ranks among India's top10 investment banks. On the insurance side, SBI Life and SBI General Insurance are two companies for life and non-life businesses. SBI has also promoted a securities transaction processing outfit in collaboration with Societe Generale, called SBI SG Global Services Ltd (SBISGGSL). SBI is systemically important to India and its activities straddle across the regulatory spaces of the Reserve Bank of India, 'RBI', (the banking regulator), Securities and Exchange Board of India, 'SEBI', (the securities market regulator), Insurance Regulatory Development Authority, 'IRDA', (the insurance sector regulator) and Pension Fund Regulatory Development Authority, 'PFRDA'. SBI has a branch in Oman, and through it, remittances can be made to around 13,000 branches in India. (Besides SBI, Bank of Baroda has 4 branches in Oman).

- **National Commodity Derivatives Exchange of India (NCDEX)** is a commodities derivative exchange promoted by the NSE. Other large financial-market players also hold stakes in NCDEX. Commodity derivative exchanges are regulated by SEBI, following the September 28, 2015 merger of the commodity derivative market regulator, Forward Markets Commission (FMC), with SEBI. This is one of the most important cogs in India's economic wheel, as the burden of inflation (especially on food items) is a major concern of RBI and the Ministry of Finance. One of the challenges in controlling price spikes is the conceptual integration of the commodity derivative markets with the commodity spot markets. Once the spot markets are integrated under e-NAM (electronic National Agricultural Market), there will be greater transparency in the price discovery process. In addition, the Food Corporation of India (FCI) which is the government food-grain procurement agency, will regularly communicate its stock levels to the public, reducing information asymmetry. Markets will also be freed up, but under a regulated environment, to take care of information asymmetry, and to curb unfair trade practices and market manipulation. The NCDEX platform facilitates trading in agricultural as well as industrial commodity derivatives. Trading in commodity options, commodity indices are on the anvil, with a possibility of index-based products and weather derivatives on the horizon.
- **ING Vysya Bank** was originally promoted by ING of the Netherlands and Vysya Bank of South India, with around 600 branches. Recently, (April 2015) ING Vysya Bank was acquired and became a part of Kotak Mahindra Bank (KMB), taking KMB's branch network beyond the 1200 mark and placing it among the top 4 private sector banks in India. OIJIF invested in ING Vysya Bank in 2013, and this bank was taken over by Kotak Mahindra Bank in 2015, and subsequently, on divestment by OIJIF in 2017, it doubled its investment, doublings its earnings over a 4-year period.
- **Beaver Engineering** is a holding company of HBL Systems.

- **SSIPL Retail** is a footwear manufacturing company with a retail base.
- **Solar Industries** is engaged in the manufacture of explosives used in the mining sector.
- **Leap Green Energy Private Limited** is promoted by India's ace Formula One car driver Narayanan Karthikeyan, who holds 25%, the other 75% being held by JP Morgan Asset Management Company, the investment arm of JP Morgan Chase and Company. It is engaged in clean energy generation. The green energy investment space in India has seen an increase in activity in India since 2015, and has gained impetus with India's adoption of the COP21 principles on climate change.

2.2 SUCCESS IN EXITS

OIJIF made a successful exit with a doubling in size (2x, in the language of PE Investing). Its initial investment in Kotak Mahindra Bank (the initial investment was in ING Vysya Bank which was acquired and merged with Kotak Mahindra Bank). The exit from Solar Industries was at 3.4x. A partial exit was made from Beaver Industries at an IRR of 25%. In 2016, PEs returned \$ 10.3 billion to investors as against \$ 9.4 billion in 2015 and \$ 6 billion in 2014. A total of 199 exits were witnessed in 2016, as reported in Mint, on March 20, 2017.

2.3 INVESTMENT RATIONALE, VEHICLE AND INDUSTRY

SGRF, the Sovereign Wealth Fund of Oman, has diversified its investments across 25 countries, and also diversified its industry in an effort to move away from oil and gas concentration, especially through renewable energy. India's GDP is expected to grow at 7% in 2017-18, despite the disruptions through the tax reform in the form of the new, integrated Goods and Services Tax (GST). The chosen investment instrument has been equities, which offer long-term growth prospects. Over the next few decades, GCC countries hope to reduce their dependence on the oil and gas sectors. Oil prices are subject to downward shocks, due to competition from shale reserves, global environmental concerns and technological progress in alternative forms of energy, such as renewables, at declining prices. The investment philosophy is not expected to be interest rate arbitrage, short-term or even speculative. Long-term SWF investment is focused on entering the market at an early stage and waiting for the ripening of the investment, which is precisely the nature of equities. Besides, dividends and capital gains are Sharia-compliant investments. Following the Conference of Parties (COP) under the United Nations Framework for Climate Change (UNFCCC) agreements, many Sovereign Wealth Funds (SWFs) have expressed a desire to invest in the clean energy sector. India-centric investments have also been popular with SWFs. Notable players from the GCC countries are Qatar Investment Authority (QIA) which entered into a Memorandum of Understanding (MoU) with India's National Investment and Infrastructure Fund (NIIF), to explore a pipeline of investment opportunities under a framework for exchange of information to decide on joint investments. Dubai's SWF, Investment Corporation of Dubai,

has a subsidiary, Dubai Holding LLC, which is scouting for investment in the Indian renewable energy sector. Abu Dhabi Investment Authority had invested US\$ 392 million in Sun Edison. Thus, the theme is Socially Responsible Investing (SRI), or a concern for Environmental, Social and Governance (ESG) factors. Likewise, Singapore's SWF, GIC Holdings Pte., invested in Greenko Energies Pvt. Ltd.

It may not be possible for SGRF itself to focus on the entire range of activities such as scouting, due diligence review, monitoring and exit. A better approach would be to engage directly in large ticket-size investment and rely on other vehicles, probably with the support of local partners, to perform a fully comprehensive range of functions for a portfolio of smaller ticket-size investments. This is precisely the approach followed by SGRF. It has set up OIJIF in partnership with SBI for scouting and monitoring its India-focused investment. OIJIF is a Private Equity investment vehicle, for investing at early stages and exiting on fruition. As regards fund-raising, OIJIF has partnered with SBI in its first fund and has also welcomed other investors in addition to SBI, for its second fund. On the investment side, OIJIF has targeted the finance, consumer and industrial sectors for investment.

2.4 DEAL FLOWS

SGRF has sought to invest directly in Leap Green Energy, a clean energy company, which is a continuation of the sustainable development theme. OIJIF, the joint venture with SBI, raised US\$ 100 million in its first fund. The ticket size of the investment in each of the deals was between US\$ 10 to 20 million. The marquee investments were NCDEX, ING Vysya Bank, Solar Industries and SSIPL Retail. In the second fund, it is expected that there will be an increase of as much as US\$ 350 to 400 million by the end of the calendar year 2017. Of this, US\$ 250 million has already been raised, notably, US\$ 100 million each from SGRF and SBI respectively and US\$ 50 million from others. The ticket size of the investment in each of the forthcoming deals is expected to be larger in comparison to its first fund, to be in the region of US\$ 30 to 50 million in each deal.

The environment for deal flows has been extremely conducive, as detailed in Bain and Co.'s India Private Equity Report (2016). Investors brought US\$ 22.9 billion into India in 2016, as compared to US\$ 17.1 billion in 2007, which was the previous high.

Some significant fund raisings in the PE sector in 2016 are tabulated below:

Table 2: Fund raising by PEs for India

Fund	US\$, millions
Everstone Capital	730
ICICI Venture	190
Gaja Capital	240

Source: *Mint*, May 30, 2016

Others planning to raise funds include Multiples Alternate Asset Management P Ltd., IDFC Alternatives, CX Partners and Tano Capital, reflecting the positive sentiment.

Exit sentiments were also positive and profitable. In 2015 PE investors made the highest number of exits in five years. Deal volumes rose 10% with 213 exits reported. These were the best in 5 years. General Partners returned US\$ 9.4 billion in 2015, as compared to US\$ 6 billion in 2014. Exits were secondary as well, as through IPOs. In 2016, PEs returned US\$ 10.3 billion.

3. CONCLUDING REMARKS

Trade and investment relations between India and Oman have made substantial progress. From maritime history, strategic relations, to foreign direct investment, joint ventures have now extended to sovereign wealth fund investment and private equity investment.

Traditionally, India has been offering food security as well as strategic defence cooperation. The fruition of the Chabahar Port in Iran adds a new dimension to trade. In addition, India now offers growth opportunities in food security as well as technical expertise in engineering, space and value-added exports. In turn, Oman offers energy security, capital and access to the GCC markets. Hence, the relationship is synergistic and it is an opportune time to further develop the relationship. The financial capital of Oman and its energy resources can be effectively combined with the technical prowess of India at an economical cost, to enhance productivity in a synergistic manner, resulting in a win-win situation for both countries. Oman could gain valuable experience through large-scale alternate energy investment opportunities in India, in its energy-mix diversification effort. Such experiences in solar and wind energy in India could be transplanted to Oman. This is evidenced by the 25% IRR and 2x returns from some of the recent PE deals. More business-to-business meetings could be held to raise awareness on the synergistic potential for trade and investment.

Against this backdrop, the next significant area of study could be the manner in which Indian expatriates in Oman invest their savings and remittances, and how they are served by Indian and Omani banks in this direction. Financial services could be more broad-based, with banking, investment banking, equities, bonds, gold, and commodities pooled, streamlined and enhanced.

REFERENCES

- Oman India Joint Investment Fund exits Kotak Mahindra Bank (March 20, 2017). Mint, Mumbai.
- UK Green Investment Bank, Oman's SGRF eye stake in Leap Green Energy (January 23, 2017). Mint, Mumbai.
- OIJIF hits first close of \$250 mn for second fund (May 30, 2016). Mint, Mumbai.
- Modi to fast-track his visit to Oman (March 21, 2017). The Hindu, New Delhi.
- Future Group goes overseas with joint venture for Oman (May 16, 2017). Mint, Mumbai.

Chapter 11

SOCIAL ENTREPRENEURSHIP: AN ALTERNATIVE APPROACH FOR BOOSTING OMAN'S ECONOMIC DEVELOPMENT

Raveendra P. V. and Rizwana M.

ABSTRACT

The economic development of a country is generally driven by group of industries that propel the economy forward (Frost, 2014). Oman's economy has shown growth in the past five years (Trading Economics, 2017) but the future is not so attractive when one observes the economic indicators of the nation. Stable international oil prices around \$50 per barrel have slowed down economic growth of many oil-producing countries and Oman is not an exception to that. In addition, the produce of oil has fallen for the past few years in Oman. To recover from the problem which arises due to depleting oil resources, Oman's government should focus on other alternatives to generate revenue and build their economy. Social entrepreneurship might be a suitable alternative to meet these future economic challenges. The present study is an attempt to analyze the role of social entrepreneurship in Oman's economic development. The authors have made an attempt to review Oman's present economic situation, reviewed papers related to the significance of Social entrepreneurship and also discussed how to accelerate entrepreneurship in Oman's Economy. The present study is based on secondary data and the required data has been sourced from journal papers, newspaper articles and reports. Eventually, the authors have stressed that to build a sustainable economy along with entrepreneurship the country should focus on social entrepreneurship.

Keywords: *Entrepreneurship, Social Entrepreneurship, Economic Development*

1. INTRODUCTION

Oil price fluctuations in the International market would affect the economics of many oil-producing countries. Mahmood, (2012) pointed out that because of the global economic slowdown, the recession in Europe, and the economic slowdown in China, oil prices are not going to increase. The author's prediction came true after oil prices, once reaching above \$ 100 per barrel, are now trading below \$50 per barrel. As a result, the oil producing countries have constraints on their financial budget and governments are not able to provide employment opportunities in the public sectors; consequently unemployment will become a major problem.

The majority of Oman's oil export has contributed significantly to the government revenue, which in turn has contributed to the per capita income of Oman's citizens (Frost,

2014). Unfortunately, the oil reserves within Oman are being depleted, and thus Oman is looking to diversify its economy to counter the expected decline in revenue from oil exports. Oman has already planned various strategies to supplement the sources of national income as a substitute for the decline in oil revenue.

Accordingly, the country has targeted diverse sectors like manufacturing, mining, agriculture, health, education and tourism. The country has also attempted to boost the role of the private sector in the economy, as the country has enough potential for social entrepreneurship (Prins, 2016) and social entrepreneurship also provides a sustainable solution to the present economic situation of Oman.

With this backdrop the present paper is an attempt to analyse the role of social entrepreneurship in Oman's economic development.

2. OMAN'S PRESENT ECONOMIC SITUATION

Due to the global drop in oil prices, Oman remains exceptionally unsafe as its oil reserves are expected to run dry within 20 years and it becomes very challenging to extract the crude (Khan, 2016). It has long been realized that the Sultanate of Oman could develop its social and economic prosperity only by reduction of the country's dependence on oil revenues and thereby investing in the private sector (MagdMar and McCoy, 2014). The continuous fluctuations in oil prices have played an important role in driving recessions (Mazumdar, 2016).

The following charts show the decline of the GDP of Oman in the recent past.

2.1 OMAN'S ECONOMIC TRENDS

Figure 1: GDP trend in Oman



Source: Trading Economics, 2017

Figure 2: Trend in unemployment rates of Oman



Source: Trading economics, 2017

Figure 3: Government spending in Oman



Source: Trading economics, 2017

It may be observed from the above figures that the rate of unemployment has increased despite of increase in government expenditure. Foreign companies which have already invested in Oman, might have hired labour from other countries at lower cost and not employed locally. This has put the pressure on unemployment level, which is as high as above 17% and expected to grow in the future.

The challenge for oil-producing countries is that oil is a very capital-intensive industry without employing a lot of workforce. Most people were employed by government either in security forces or civil government without contributing to GDP or adding value by creation of goods/services. Now it is for the government to explore the economic diversification through which it can find industries that are labor intensive (to cut the unemployment) and to

generate significant revenue. The main problem identified by the authors is that government investment is increasing but unemployment also increasing. Foreign direct investment is declining; tourism industry is not growing as expected. GDP is also not showing progressive growth. Hence, the purpose of this paper is to check whether social entrepreneurship is the answer to the changing economic needs of Oman.

3. REVIEW OF LITERATURE ON SOCIAL ENTREPRENEURSHIP

According to Neal (2014) Social entrepreneurship is often treated as a secondary and peripheral sector when compared to mainstream entrepreneurial start-ups, although it provides a significant contribution to the development of sustainable economies. Dees (2001) gave a more elaborate definition of social entrepreneurship by highlighting that it should reflect the need for a substitute for the market discipline that works for business entrepreneurs. Austin, Austin, Stevenson and Wei-Skillern, (2006) identified the various areas to be related to social entrepreneurship and commercial entrepreneurship and highlighted the key similarities and differences between commercial entrepreneurship and social entrepreneurship. It was opined by the authors that in spite of the existence of similarities between social entrepreneurship and commercial entrepreneurship some significant differences related to the authors' original propositions regarding market failure, mission, resource mobilization, and performance measurement do exist. Omar Faruk, Hassan, and Islam, (2016) identified the determinants of social entrepreneurship. It was stated in the study that the main motives of social entrepreneurship are social welfare and value creation through innovativeness, leadership, and risk management. The authors have identified several important factors which contribute to the accomplishment of social entrepreneurship. The key factors are social welfare and value, non-profit motives, experiences, skill, knowledge, innovative ideas, principles, morals, social network, leadership, governmental policies and institutional support. Shaw and Carter, (2016) addressed the emerging practices of social entrepreneurship by exploring the historical and theoretical antecedents of social enterprise and its contemporary practice. By exploring key theoretical concepts, the paper draws comparisons between profit and social entrepreneurs. The paper also discussed the contemporary practice of social entrepreneurship. In an in depth interview with eighty social entrepreneurs from across the UK, the authors found the five core themes in which one can compare and contrast the practice of social entrepreneurship with profit entrepreneurship. The core themes include the entrepreneurial process, in particular, opportunity recognition, network ability, the nature of financial risk and profit, the role of individual versus collective action in managing and structuring enterprises, and creativity and innovation. Halme and Korpela (2014) studied the resources that small enterprises need to develop to improve sustainable development. Based on empirical data from 13 Nordic SMEs, the study investigated the environmentally and socially responsible innovations of SMEs from a resource perspective. The findings indicated that SMEs can create responsible innovations with very different resource combinations. The most common resource

combination comprises equity, research and development cooperation, networks, industry knowledge and reputation. Singh (2012) highlighted the benefits of social entrepreneurs and stated that although many social entrepreneurs are still blighted by unemployment and illiteracy, they can help get better various issues like nutrition, education and healthcare by helping those less fortunate towards a worthwhile life. Hence, it is evident that the studies related to social entrepreneurship on Oman economy remains elusive.

4. REVIEW OF ENTREPRENEURSHIP WITH REFERENCE TO OMAN'S ECONOMY

By encouraging entrepreneurship, Oman is trying to guarantee entrepreneurship for its young generation by diversifying its revenue resources. Recently entrepreneurship and entrepreneurship education are gaining its attention in Oman and the government has taken initiatives to access finance for setting up the business and also has introduced SANAD programme for youth jobseekers who are in the age group 18-40, it targets the new graduates who are interested in starting the small business. (Yarahmadi and Magd, 2015, Khan, Ghosh, and Myers, 2005). While the entrepreneurship environment of Oman is still at a growth stage, there exist favourable environmental factors which will facilitate entrepreneurial growth in Oman. Of all the macro environmental factors, political stability is the most attractive variable which helps in supporting entrepreneurship (Matriano and Suguku, 2015).

By reducing the regulatory guidelines and by providing liberalization, Oman has progressively improved the business environment. To accelerate the entrepreneurial culture, the government has also put substantial effort into reducing the cost and time involved in starting a business. As a result, Oman's overall ease of doing business ranking (as measured by the World Bank) improved dramatically from 114th in 2007 to 57th in 2010 (Buckley and Rynhart, 2011). According to the report published by Times of Oman (December 2, 2017) the Sultanate is ranked third at the Arab level and thirty third at the global level in the 2018 Entrepreneurship Index, issued by the Washington based Global Entrepreneurship and Development Institute (GEDI). The report written by Muscat's Daily staff writer says that given an opportunity, the majority of the Oman residents want to run their own business.

5. ACCELERATING SOCIAL ENTREPRENEURSHIP TO BUILD OMAN'S ECONOMY

Entrepreneurship is one of the most important inputs in the economic development of a country (Dhaliwal, 2016). The terms entrepreneurship and economic development are closely related irrespective of the form of economic and political set-up of a country and entrepreneurship is indispensable for economic development of a nation (Bayineni, 2005). Entrepreneurship creates employment and inculcating entrepreneurship helps the developing countries to perform better and also provides support in terms of long-term growth and sustainability. In the case of Oman's economy, fostering indigenous entrepreneurship is not going to be easy for a country that has a small private sector and low national entrepreneurial activity (Al-Shanfari, 2012). Oman's economy also lacks diversity in

seed capital financing sources and the venture capital industry is not lucrative. There is also a lack of entrepreneurship support programmes at the post start-up stage. (Al- Shanfari, 2012).

Entrepreneurship is key for economic diversification, employment creation and sustainable growth, especially in the GCC countries (Miniaoui and Schilir`o, 2016). A relatively stable government and low taxes make Oman a desirable location for entrepreneurial ventures and the conducive, entrepreneurial environment encouraged by ease of starting and setting up of business allows more comprehensive and flexible implementation systems. These can motivate Omanis towards greater entrepreneurial activity. (Shachmurove). Apart from inculcating entrepreneurship, Oman's government has created a platform for social innovation and knowledge-sharing, and through the scheme Knowledge Oman effort has been made by the country to create and train its social entrepreneurs. (Omaninfo, 2016)

The government of Oman has also taken initiatives like the SANAD programme to encourage the youth business startups, through the provision of loans and expertise to recent graduates; Know About Business (KAB) to enhance the skill of technical graduates and to train the entrepreneurs in management skills for developing an entrepreneurial attitude through entrepreneurship education and the "Intilaaqah" programme to assist young entrepreneurs by providing suitable training, counseling and consultancy services which facilitate them to hold their own startups(www.unevoc.unesco.org). However, challenges do exist in the form of labor market, culture and social norms of Oman, education and training and bureaucracy (Matriano and Suguku, 2012).

Hence, Oman can propose attractive schemes to facilitate and enable the youth to pursue entrepreneurship as well as social entrepreneurship. The government should take necessary steps to provide an entrepreneurial environment that is conducive for establishing new ventures by high potential entrepreneurs. It could do this by giving incentives to start ups to accelerate entrepreneurship create employment. But the need of the day is not mere entrepreneurship but social entrepreneurship.

6. CONCLUSION

With stable oil prices around \$50 per barrel, oil producing countries like Oman should be ready to face future challenges. At present, the economic indicators of Oman are not favorable for sustainable growth of the country. As prevention is better than cure, it is the right time for Oman to diversity its economic activities from oil sector to non-oil sector. Hence, there is a need to identify, the weak areas in Oman's macro environment which are hindering entrepreneurship development. It is also high time for the Oman government to realize the importance of inculcating entrepreneurship to build a sustainable solution to the present economic situation of Oman.

REFERENCES

- Al-Shanfari , D. A. (2012). Entrepreneurship in Oman: A Snapshot of the Main Challenges.
- United Nations Conference on Trade and Development: Multi-year expert meeting on enterprise development policies and capacity-building in science, technology and innovation (STI) (fourth session). Geneva.
- Khan. S., Ghosh, and Myers, D. (2005). Women Entrepreneurship in Oman. Proceedings of the 50th World Conference of the International Council for the Small Business (ICSB), 15-18 June, 2005, Washington, DC).
- MagdMar, H., and McCoy. (2014). Entrepreneurship in Oman: Paving the Way for a Sustainable Future. *Procedia Economics and Finance*, 15, 1632-1640.
- Austin, J., Austin, J., Stevenson, H., and Wei-Skillern, , J. (2006, January 7). Social and Commercial Entrepreneurship: Same, Different, or Both? Retrieved may 17, 2017, from <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-6520.2006.00107.x/abstract>
- Bayineni, S. (2005). The Role of Entrepreneurship in Economic Development. Retrieved from IDEAS: <https://ideas.repec.org/a/icf/icfjme/v03y2005i4p39-45.html#cites>
- Black, L. (2012). Muhammad Yunus: the model social enterprise leader. Retrieved may 20, 2017, from *.theguardian*: <https://www.theguardian.com/social-enterprise-network/2012/sep/12/muhammad-yunus-social-enterprise-leader>
- Buckley, G., and Rynhart, G. (2011). The Sultanate of Oman The enabling environment for sustainable enterprises: An "EESE" Assessment. Geneva: International Labour office.
- Dees, J. G. (2001). The Meaning of "Social Entrepreneurship. Retrieved from entrepreneurship.duke.edu: <https://entrepreneurship.duke.edu/news-item/the-meaning-of-social-entrepreneurship/>
- Dhaliwal, A. (2016). Role Of Entrepreneurship In Economic Development. *International Journal of scientific research and management*, 4(6), 42624269.
- Entrepreneurship Education, Oman retrieved from http://www.unevoc.unesco.org/fileadmin/user_upload/pubs/Entrepreneurship%20education%20-%20Oman.pdf
- Frost, E. (2014). Economic Development Of Oman. Retrieved November 25, 2017, from *internationalbanker.com*: <https://internationalbanker.com/finance/economic-development-oman/>
- Halme M., A. K. (2014). Responsible Innovation Toward Sustainable Development in Small and Medium-Sized Enterprises: a Resource Perspectiv. *Bus. Strat. Env.*, 23, , , 547–566.
- Hemantkumar P. Bulsara, S. G. (2015). Social Entrepreneurship In India: An Exploratory Study. Retrieved May 14, 2017, from *journaliji.org*: <http://www.journaliji.org/index.php/iji/article/view/20>

- Jain, D. R. (2016). Social Entrepreneurship: A Form of Social Responsibility in India . Retrieved April 15, 2017, from professionalpanorama.in: http://www.professionalpanorama.in/wp-content/uploads/2016/05/3._Reena_Mehta.pdf
- Khan, T. (2016). Can entrepreneurial spirit and tourists help wean Oman off oil? the national.
- Mahmood, H. (2012). Oman – a booming economy in danger of running out of steam. Retrieved June 20, 2017, from http://www.yourmiddleeast.com/features/oman-a-booming-economy-in-danger-of-running-out-of-steam_8999
- Matriano, M. T., and Suguku, D. (2015). Entrepreneurship Growth In Oman: Position, Prospects And Growth of Entrepreneurial Education. IJAEDU- International E-Journal of Advances in Education, 1(2), 127-130.
- Mazumdar, R. (2016). The oil mighty: The economic impact of oil price fluctuations. Retrieved December 3, 2017, from Deloitte.
- Miniaoui, H., and Schilirò, D. (2016). Innovation and Entrepreneurship for the growth and diversification of the GCC Economies. Dubai: University of Wollongong in Dubai.
- Matriano, M. T., and Suguku, D. (2012). Entrepreneurship Growth In Oman: Position, Prospects And Growth Of Entrepreneurial Education. Proceedings of SOCIOINT15- 2nd International Conference on Education, Social Sciences and Humanities, (pp. 817-821). Istanbul, Turkey.
- Neal, M. (2014) Social entrepreneurship and sustainability in MENA. Available from: https://www.researchgate.net/publication/289505517_Social_entrepreneurship_and_sustainability_in_MENA [accessed Dec 11 2017].
- Omar Faruk., M., Hassan, N., and D Islam, R. (2016). Factors Influencing the Development of Social. Retrieved May 15, 2017, from .easternuni.edu.bd: [http://gsdl.easternuni.edu.bd/greenstone/collect/7eufacultypub/index/assoc/HASH0139.dir/doc.p.KO_develops_Social_Entrepreneurs_for_Oman_\(January_4,2016\)_retrieved_December_9,2017_from_https://omaninfo.om/english/module.php?module=topics-showtopicandID=1564](http://gsdl.easternuni.edu.bd/greenstone/collect/7eufacultypub/index/assoc/HASH0139.dir/doc.p.KO_develops_Social_Entrepreneurs_for_Oman_(January_4,2016)_retrieved_December_9,2017_from_https://omaninfo.om/english/module.php?module=topics-showtopicandID=1564)
- Prins, E. (2016). Social entrepreneurship has huge potential in Oman. Retrieved November 23, 2017, from timesofoman: <http://timesofoman.com/article/80630>
- Schomberg, R. V. (2015). Ph.D course on the philosophy of responsible innovation. Retrieved April 15, 2017, from <https://renevonschomberg.wordpress.com>: <https://renevonschomberg.wordpress.com/2015/09/10/ph-d-course-on-the-philosophy-of-responsible-innovation/>
- Shachmurove, Y. (n.d.). Entrepreneurship in Oman. Philadelphia: Penn Institute for Economic Research. Shachmurove, Y. Entrepreneurship in Oman. Philadelphia: Penn Institute for Economic Research.
- Shaw, E., and Carter, S. (2016). Social entrepreneurship: Theoretical antecedents and empirical analysis of entrepreneurial processes and outcome. Journal of Small Business and Enterprise Development, 418-434,.

- Singh, D. P. (Dr. Partap Singh). Social Entrepreneurship: A Growing economy. *International Journal of Innovations in Engineering and Technology (IJET)*, 44-52.
- Timesof Oman. (2017). Retrieved December 6, 2017, from Oman third in doing business at Arab level TRADING ECONOMIC. (2017). Oman Foreign Direct Investment 1998-2017. Retrieved June 10, 2017, from trading economic: <https://tradingeconomics.com/oman/foreign-direct-investment>
- Trading economics. (2017). Oman Tourist Arrivals 2015-2017. Retrieved June 10, 2017, from trading economic: <https://tradingeconomics.com/oman/tourist-arrivals>
- Trading economics. (2017). Oman Unemployment Rate Forecast 2016-2020. Retrieved June 20, 2017, from tradingeconomics.com: <https://tradingeconomics.com/oman/unemployment-rate/forecast>
- Trading economics. (2017). Oman Unemployment Rate Forecast 2016-2020. Retrieved June 20, 2017, from <https://tradingeconomics.com/oman/unemployment-rate/forecast>
- Yarahmadi, F., and Magd, H. (2015). Entrepreneurship Infrastructure and Education in Oman. third Global Conference on Business and Social Sciences. Malaysia: Elsevier.
- Muscat Daily (2017). 68% OF Oman residents prefer to be self-employed, finds survey (NOVEMBER 22,2017)Read more: <http://www.muscatdaily.com/Archive/Oman/68-of-Oman-residents-prefer-to-be-self-employed-finds-survey-55aa#ixzz50gDVE7HW>

Chapter 12

THE FUTURE OF PAYMENTS, BANKING AND FINTECH IN OMAN

Raghu M. R.

ABSTRACT

As the penetration of new technological concepts and digital uptake surges in the global banking industry, counterparts in Oman are finding that they have to increase their capabilities across areas like digital, cloud systems, web products and advanced analytics. To remain profitable and thrive in the new digital economy, Omani banks need to foster a customer-centric business model. This means that while diversifying online delivery of financial products and services channels, they have to commence advanced analytics of the plethora of data available. A digitally smart, enterprise-wide model will enable Omani banks to improve client satisfaction and loyalty, developing long-term relationships and greater profitability. Even as banking consumers are increasingly blending the personalized virtual or online world with their daily experiences, multiple channel gateways that deliver timely customized experiences hold the key to preserving relevance.

Keywords: *Oman banking, Fintech, Big Data, Artificial Intelligence, Analytics, Digital Transformation*

1. INTRODUCTION

The effects of globalization and financial innovation have altered the nature of financial and economic transactions. It is now impossible to imagine current financial services without the Internet or mobile (smart phone) devices that are now fundamental to daily financial service routines. The digital evolution has authored a paradigm shift, transforming the manner in which customers access financial products and services.

Technology is at the center of the transforming payments landscape, with a chain-reaction of behavioral changes in its wake. Technology developments have made it possible to effectively study or analyze and interpret large, complex sets of data. This has helped uncover latent patterns and trends from which fresh client insights can be obtained. Such enhanced capabilities can permit banks to strengthen their own internal methodologies and processes and provide significant value to clients through greater understanding of their requirements.

According to a 2017 Ernst & Young report, the Gulf Cooperation Council (GCC), and the wider Middle East and North Africa (MENA) region has a mixed record in payment virtualization. A high proportion of the GCC population is made up of under-30 *digital natives*, with about 70%-80% of the population enjoying access to smart phones according

to McKinsey. However, on the business side, adoption of digital technologies is still lagging behind in the GCC. According to a Customer Service.ae survey, only 18% of small and midsize enterprises (SMEs) in the United Arab Emirates and 15% in the Kingdom of Saudi Arabia have an online presence.

However, the critical design elements for FinTech ecosystems exist in the GCC. The design elements are business environment/access to markets; government/regulatory support; access to capital and financial expertise. This provides GCC countries, including Oman, a competitive advantage over many other emerging countries. Omani banks would do well to build upon the technological developments in order to be able to collaborate with FinTech companies, sophisticated global and domestic start-ups and other market stakeholders. For example, long-term success for digital payments in Oman would be contingent on convenient modes of usage and effective regulatory frameworks that offer effective customer redressal platforms.

Specifically for Oman, its rapid adoption of Islamic finance has created an attractive opportunity to help meet economic diversification needs and emerge as a hub for Islamic Finance FinTech. If leveraged well, it could be a promising period for Omani financial services in terms of creating a smart and automated version of Sharia finance that is both cost and user friendly.

2. SIZING GLOBAL TRENDS

The second half of the previous century witnessed a wave of banking sector transformation, including a conversion to electronic operations and the introduction of Automatic Teller Machine (ATMs). These led to an efficiency and automation-driven model that made traditional banking more transactional and technology driven. Banks focused on rapid and more convenient transactional processes, while consumers took advantage of Social, Mobile, Analytics and Cloud Technologies (or SMAC) to unleash a second wave of change.

In essence, the function of technology has rapidly changed from a monolithic enhancer of financial efficiency to an engine for customized provisioning of banking services for digitally empowered customers. As a result, an altered banking landscape is taking shape in which unconventional business constructs (like decentralized currencies) and technology research (like virtual personal assistants) will have to be accommodated.

Table 1: The Evolution of Banking

State	Defining Features
Pre-digital/Traditional	Mainframe; Branch; ATM; Batch
Digital 1.0	Social; Mobile; Analytics; Cloud
Digital 2.0	Artificial Intelligence; Robotics Process Automation; Internet of Things; Open Banking; Blockchain

Source: Cognizant

The key characteristics of the banks of the future are already becoming evident. They are:

- Orchestrate customer journeys across Digital 2.0 channels and manage the customer experience contextually.
- Aggregate capabilities from across the banking ecosystem (partners, individual developers, FinTechs) and technology providers to deliver banking products and services.
- Leverage platforms, robotic process automation, AI and Internet of Things to drive holistic front-to-back digitization, seamless integration, and information flow and error control, adopting a case-based approach to digitization.
- Turn data into intelligence by marrying transactional big data with thick data to power micro-segmented customer and market solutions.
- Power the bank with the right selection of service and deployment model that lowers Total Cost of Ownership while providing flexibility and responsiveness.

According to Deloitte there are 11 clusters of innovation in financial services. The following table summarizes the clusters and provides the banking area against which they can be closely mapped.

Table 2: 11 Clusters of Innovation in Financial Services

Cluster	Banking Area
Crypto currency; Peer-to-peer foreign exchange (P2P FX); Emerging payment rails; Mobile money	Payments
Integrated billing; Mobile payments; Cashless world; Streamlined payments	
Sharingeconomy; Autonomous vehicles; Insurance disaggregation; Digital distribution; Securitization and hedge funds	Insurance
Internet of Things; Advanced sensors; Connected insurance; Wearable computers	
P2P lending; Alternative lending; Alternative adjudication	Deposits and Lending
Virtual technologies; Mobile 3.0; Shifting customer preferences; Third party Application programming interface (API)	
Virtual exchanges and smart contracts; Crowdfunding; Alternative due diligence	Capital Raising
Cloud computing; Advanced algorithms; Process externalization; Capability sharing; Open source IT	Investment Management
Automated advice and management; Empowered investors; Social trading; Retail algorithmic trading	
Artificial intelligence/machine learning; Big data; Smarter, faster machines; Machine readable news; Social sentiment	Market Provisioning
Market information platforms; New market platforms; Automation data collection and analysis	

Source: Deloitte

Globally, major banks globally have pursued a transformation strategy by engineering personalized customer experiences as digitization leads to completely personalized, enhanced, systemic end-to-end-services. For example, according to McKinsey (2017), the top five global banks, in terms of digital sales contribution, average 50% of sales in digital channels. This improves convenience for its account holders. Moreover, facilitating instant services and reducing time to market is another key consideration. Canada's Scotiabank, for example, has collaborated with Chase on payment technology APIs in merchant services, to reduce the time it takes for funds settlement. This is key for banks as fee erosion is becoming common.

Banks will also be called upon to leverage Augmented Reality (AR). For example, the Commonwealth Bank of Australia launched an AR home finder app in 2011, which was followed by the UK based Halifax in 2012. In India, the Federal Bank of India provides an AR calendar that pushes relevant messages when viewed through a smartphone. Even in Oman, the National Bank of Oman is making use of AR to assist customers in locating branches and ATMs, while simultaneously displaying the latest offers and finance deals as they walk into an Omani mall or retail outlets

If traditional banks do not move fast to take advantage of AR's potential, FinTech start-ups will. The investment bank, Goldman Sachs, predicts that virtual reality will be an 80 billion US dollar business by 2025. A failure to make the most of AR at a time when technology players like Apple and Google are installing it in their devices will result in a missed opportunity. In Europe, the new Payments Services Directive³ (PSD2) will make it even simpler for start-ups, helping to even the playing field by offering them access to a customer's financial account and payment information.

For banks, the threat always exists that a FinTech challenger could surface with an attractive aggregated user interface that brings in customers and makes bank functions redundant in many areas. The new provider would then own the customer relationship process. Thus, banks could risk becoming utilities, selling their products via third party agencies or market platforms. This would risk cutting banks out of vital customer data that aids them in developing targeted propositions and marketing.

3. THE FUTURE OF BANKING IN OMAN

With total assets of around USD 75 billion by the end of 2016, the Omani banking sector is the smallest in the GCC region. It is comparatively modest in scale compared to their GCC peers the UAE (USD 711 billion as of 2016) or Saudi Arabia (USD 600 billion as of 2016). However, Oman is considered an over-banked economy with seven locally incorporated banks, two exclusive Islamic banks and eight foreign banks. As elsewhere, in Oman, the payment systems of the future will be characterized by a shift from paper-based instruments to electronic platforms, aided by infrastructure that will promote interoperability, efficiency and enhanced security. User experiences that cuts across several market segments and demographics will also become evident.

The creation of a unified governance structure will provide more rapid and complete adoption of payments solutions and foster innovations in the landscape through simplification of Oman's regulatory and operational environment. Consolidating and streamlining a single set of transparent business methodologies and rules will support access to every centralized clearing and payment service in Oman.

For Oman, it is very likely that FinTech will form a dynamic segment at the nexus of the financial services and technology sectors, wherein technology-focused start-ups and new market entrants create the products and services traditionally provided by the conventional banks. Cutting-edge FinTech companies and new market activities will redraw the competitive landscape, eroding the lines that define players in the financial sector.

New digital technologies will reshape the value proposition of existing Omani financial products and services. While not underestimating the ability of incumbents to assimilate innovative ideas, the overall disruption of the financial sector is underway in Oman. It is likely that consumer banking and payments will be the most exposed, followed by insurance and asset management segments.

As Omani clients are becoming used to the digital experience offered by companies such as Google and Amazon, they will expect the same level of client experience from their financial services providers. FinTech will be increasingly seen as possessing the solutions that can better provide enhanced accessibility, convenience and customized products. In this scenario, the seeking of customer centricity will become a main priority and it will support meeting the needs of the growing digital native clientele.

Although traditional Omani banks already have many of the streamlined and digital/mobile-first levers, they will look to integrate their digital channels into an omni-channel client experience and expand their existing customer relationships and scale. Banks can align around customers, rather than provide a unitary product or channel; thus refining their approach to offer holistic solutions by customizing their offerings to Omani customer expectations. These efforts can also be facilitated by using novel digital channels to collect data from Omani clients to help them better foresee their needs, providing compelling value propositions in the process.

Speed, better security and deeper digitization will be burgeoning trends for the Omani payments ecosystem. In an era where traditional loyalty to financial entities is being eroded and barriers to entry from third parties are reduced, the competitive landscape is fluid and potentially fungible. Incumbents that are lethargic in adapting to change could well find themselves losing their market share to firms that may not possess a traditional payments pedigree.

To meet mounting challenges effectively, Omani banks are expected to respond with in-house and proprietary solutions, and changes in the financial advisory model will create a challenge for Omani wealth managers. Robo-advisors could make an entry providing a viable solution and can serve as segue to full service personalized or human advice for clients with specific needs.

Disruption of the Omani Financial Services (FS) industry is happening and it will reshape the way companies and consumers engage by navigating the glut of information. The principal impact of FinTech in Oman will be the surge of new FS business models that will create challenges for both Omani regulators and market players. Banks will move away from attempting to control all parts of their overall value chain and customer experience through conventional business models, and instead shift toward the centre of the FinTech ecosystem by taking advantage of their trusted relationships with customers and their extensive access to customer data.

For many traditional Omani banks, this approach will mandate a fundamental shift in identity and service purpose. The new model will involve moving away from a linear product push methodology, to a client-centric model in which financial services providers are facilitators of a needed service that enables customers to acquire advice and interact with all relevant stakeholders through multiple channels. By orienting towards incorporating new technologies into their own enterprise architecture, traditional Omani financial institutions will prepare themselves to play a central role in the financial services space in which they will operate at the nexus of customer activity and maintain strong positions even as innovations transform the marketplace.

Like counterparts around the world, Omani regulatory authorities will have to focus on due diligence on technology providers for sophisticated cloud-based processes. Many Omani banks will face the prospect of migrating core bank processes to the infrastructure of the cloud. This is likely to be a phased migration and ultimately will be shaped by consumer experiences. Also, banks will find that their budgets will have to reallocate maintenance-based costs towards innovation investments. It is likely that the transformative changes to banking in terms of technologies will engender revision of long-term revenue forecasts and stress-testing scenarios to reflect changing business priorities.

In the speedy evolution of FinTech, Omani banks will have to face up to the challenge of investing smartly in appropriate digital banking platforms in order to fend off new players entering the market. This means that banks will have to get used to operating on a lean back end infrastructure, while being agile in attending to personalized client requirements. Regulatory authorities in Oman will see themselves focused on tweaking payment technologies and customer payment patterns.

Developing P2P models will bring greater complexity to the developing banking landscape, as it ties together an ecosystem of newcomers and incumbents, even as the basic definition of what a bank is starts being debated. Digital transformation mean a substantial change in the processes of a bank. Hence, Omani banks will need to set up cross-functional teams to anchor the transformative changes that will influence the length and breadth of their organization. The war for appropriate talent too will escalate.

The greatest transformations will likely take place in the area of understanding how and where to use multifarious data, leading to implementation of more analytics models. For example, historical information and the insights of predictive analytics can now be fed

into Artificial Intelligence (AI) for the purpose of modeling transactions and outlining the fraudulent ones among clusters in real-time. Omani banks will also have to prepare for a future in which they enable customers to share financial data securely with other banks and with third party service providers. Banking customers, in turn, will have oversight over their own financial and personal information that allows them to get the most out of service providers. This means managing their accounts from a unified user-friendly interface.

4. PREPARING A ROADMAP FOR DIGITAL CHANGE

It is becoming increasingly clear that the future of banking lies in open innovation and strategic collaboration with the overarching developer ecosystem. Open banking will be driven by Application Program Interfaces (APIs), applications and app stores. Not only third-party services will gain from this model; it will open the gates to more data for Oman's banks themselves. The Banks can channel this data back into their own client processes to fine tune and personalize user experiences. Omani banks will have to prepare a roadmap that takes into account the following factors:

- The need to work in the areas of infrastructure funding and partnerships with non-banks for generating new revenue streams.
- Adopting a digital ecosystem with an omni-channel approach that will define how banks enhance customer experience by ensuring overall consistency in services across several banking channels.
- Retooling current business processes and building technology forums in order to manage customer expectations such as personalized services and synthesis of information across channels for a smooth experience.
- Using communities-of-interest and customer feedback opportunities to encourage information sharing.
- Using latest data analytics to construct an understanding of customer behaviors, requirements and trends.
- Making sense of vast troves of information contained in unstructured form (magazines, news articles, emails and video content) in order derive insight from it.

Omani banks will also have to find ways of increasing automation to improve their reporting to clients and sector regulators. Investing in new technologies like digital signatures and optical recognition in order to support the user experience and protect against cybercrime activities will be key. Digital technology can give rise to banks that build platforms on a hitherto massive scale. Their enterprise size, the huge amount of data they amass, and the range of analytical talent they deploy will determine their ability to stave off newcomers and compete better with existing players. Unearthing the potential for new banking value propositions and client markets will determine the digital curve a bank moves through.

The large banks in Oman will also find that digital technologies increasingly allow them to assess risk on the grounds of data about specific clients, rather than generic data. Concomitantly, achieving a high degree of banking automation will require profound changes to banks' IT architecture as every layer will be affected. For instance, insurance policy administration and claims systems will need to be revamped, be it in response to a higher level of IT intensity, the incorporation of latest robotics, or upgrade of workflow engines.

To know where to focus their efforts, bankers should first determine how quickly digital technology will impact different business lines, then various functions within those businesses. With clarity on such factors, efforts can be made to refine those areas of a digital culture where processes are weakest. It is arguable that a fully integrated IT enterprise would break down the silos between business and technology processes.

It is evident in the GCC and around the world that financial technology firms armed with innovative products and services have been targeting some of the most profitable parts of the financial-services value chain such as lending and personal finance. Developments in analytics and digital behavior monitoring have given banks access to vast sets of data about customer behaviors and predilections. This provides an extraordinary opportunity to create products and services that meet or even foresee customer needs. AI, automation, and customer analytics will drive client engagements and product developments over the next decade in Omani banks.

The developing narrative is that the centralized IT structure that helped the financial services industry for so long is now an encumbrance in terms of going heavily digital. Realigning IT will not be easy, but agility and responsiveness are requirements of the day. A bank that constructs its expertise in a specific area can more effectively marshal digital technology, including advanced data analytics and software-as-a-service models, to provide solutions and methodologies that another competitor could offer as easily.

5. IMPLEMENTING STRATEGIC ACTION PLANS

Like their counterparts in many parts of the world, Omani banks appear deeply conscious of the evolution of digital societies and the impact on the way people are using banks. However, only a few appear to have started their architectural transformation. For Omani banks, combining the traditional or legacy culture and the emergent digital culture requires the right strategic approach. The capability to work with multiple operating models is key.

Moreover, the intensity of change means that new ways of thinking about risk are needed. In the context of disruptive technologies, cyber-threats, and complex business ecosystems, strategies to seize competitive opportunities and satisfy stakeholders' expectations are needed.

Action plans can only come from understanding of competitive advantage through

a flexible and scalable model. SaaS and Infrastructure as a Service (IaaS) will be significant growth drivers for Omani Banks. Thus, building suitable capabilities to achieve a competitive advantage is critical. It is about elevating strategic thinking and improving performance by positioning analytics in day-to-day operations. It is also about gaining competitive advantage by pressing innovative types of data and technologies into service.

Ensuring easy access and employability of data by optimizing and maintaining banking quality through robust governance will aid decision-making. In essence, Omani banks do not require a digital strategy, but an innovation strategy for the digital era. This will undoubtedly call for a focus on high-value, deeper planning and analysis activities, while automating low value or transactional processing functions. Real-time and dynamic performance management will also be key, for which user-centric models will have to be in place. This is necessary to keep pace with technological evolution and transformative technologies, such as blockchain, cloud and big data.

REFERENCES

- Bank Muscat (2017). Asalah newsletter. Retrieved from http://asalah.bankmuscat.com/pdf/2017-01-TRL-Bank-Muscat_Newsletter-AS-English-Issue-23-9.pdf
- Cognizant. (2017). How Digital 2.0 Is Driving Banking's Next Wave of Change. Retrieved from <https://www.cognizant.com/whitepapers/how-digital-2-0-is-driving-banking-s-next-wave-of-change-codex2865.pdf>
- Cognizant. (2017). Why Banks Must Become Smart Aggregators in the Financial Services Digital Ecosystem. Retrieved from <https://www.cognizant.com/whitepapers/why-banks-must-become-smart-aggregators-in-the-financial-services-digital-ecosystem-codex2866.pdf>
- Deloitte (2016) The future of financial services Impact for Australia. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/financial-services/deloitte-au-fs-future-financial-services-impact-australia-030516.pdf>
- Dominic Broom (Head of Treasury Services EMEA, BNY Mellon). (2015). Innovation in Payments: The Future is Fintech. Retrieved from https://www.bnymellon.com/_global-assets/pdf/our-thinking/innovation-in-payments-the-future-is-fintech.pdf
- EdgeVerve Systems (2017). Digital to #TrulyDigital: 12 Trends Shaping Banking in 2017. Retrieved from https://www.edgeverve.com/wp-content/uploads/2017/03/Infosys-Finacle_Trends-2017.pdf
- Elliott Holley (2014). Omani Bank Muscat automates investments with Charles River tools. Retrieved from <http://www.bankingtech.com/200552/omani-bank-muscat-connects-charles-river-investment-tools/>
- EY (2017) The future of money. Retrieved from [http://www.ey.com/Publication/vwLUAssets/ey-the-future-of-money/\\$FILE/ey-the-future-of-money.pdf](http://www.ey.com/Publication/vwLUAssets/ey-the-future-of-money/$FILE/ey-the-future-of-money.pdf)

- Fintechnews Middle East (2017) Fintech Still in Infancy in Oman Despite Growth Potential. Retrieved from <http://fintechnews.ae/fintech-oman/>
- Genpact (2017). Will augmented reality transform banking? Retrieved from <http://www.genpact.com/downloadable-content/insight/will-augmented-reality-transform-banking.pdf>
- KPMG (2016). Singapore Payments Roadmap. Retrieved from <http://www.mas.gov.sg/~media/MAS/News%20and%20Publications/Press%20Releases/Singapore%20Payments%20Roadmap%20Report%20%20August%202016.pdf>
- McKinsey (2017). Digital disruption in insurance: Cutting through the noise. Retrieved from <http://www.mckinsey.com/~media/McKinsey/Industries/Financial%20Services/Our%20Insights/Time%20for%20insurance%20companies%20to%20face%20digital%20reality/Digital-disruption-in-Insurance.ashx>
- McKinsey (2017) The winning formula for omnichannel banking in North America. Retrieved from <https://www.mckinsey.com/industries/financial-services/our-insights/the-winning-formula-for-omnichannel-banking-in-north-america>
- McKinsey (2016) Digital Middle East: Transforming the region into a leading digital economy. Retrieved from <https://www.mckinsey.com/global-themes/middle-east-and-africa/digital-middle-east-transforming-the-region-into-a-leading-digital-economy>
- Muscat Media Group (2016). Oman banks' merger to strengthen financial sector. Retrieved from <http://timesofoman.com/article/86038/Business/Oman-banks%27-merger-to-strengthen-financial-system>
- Oxford Business Group (2017) Oman's banking sector records rises in assets, lending and deposits. Retrieved from <https://www.oxfordbusinessgroup.com/overview/solid-performance-sector-records-rises-assets-lending-and-deposits-central-bank-keeps-tabs-liquidity>
- PWC (2017). Reimagine and transform your finance function in the digital age. Retrieved from <https://news.pwc.ch/wp-content/uploads/2017/04/Reimagine-and-transform-your-finance-function-in-the-digital-age.pdf>
- PWC (2016). Blurred lines: How FinTech is shaping Financial Services. Retrieved from <https://www.pwc.de/de/finanzdienstleistungen/assets/pwc-fintech-global-report.pdf>
- Strategy (2017). Moving beyond the old-fashioned centralized IT model. Retrieved from <https://www.strategyand.pwc.com/media/file/2017-Financial-Services-Trends.pdf>
- Strategy (2016) Banks head for the cloud for reasons other than expected. Retrieved from <https://www.strategyand.pwc.com/media/file/DeNovo-Quarterly-Q3-2016.pdf>

Chapter 13

THE IMPACT OF ADOPTING BUSINESS INTELLIGENCE SYSTEMS ON CREDIT RISK MANAGEMENT: AN EXPLORATORY STUDY OF THE OMANI BANKING INDUSTRY

Jihad Rashid Al Wahshi

ABSTRACT

The main aim of the research paper is to investigate the impact of adopting Business Intelligence (BI) systems in the Omani banking industry, emphasising the credit risk management area. The secondary aim is to evaluate the effectiveness of BI tools in mitigating potential credit risks in banks operating in the Sultanate of Oman. In order to achieve these aims, this study adopted an inductive approach. A qualitative method using semi-structured interviews was applied to collect the primary data. The sample consisted of nine participants recruited from six Omani banks: the Central Bank of Oman, Bank Muscat, HSBC Oman, Oman Arab Bank, National Bank of Oman, and Al IZZ Islamic bank. The interview results provide confirmatory evidence that BI tools have a significant impact in mitigating potential credit risks across many banks in Oman. The research findings also indicate that BI systems are viewed as mission-critical tools in managing banking related risks.

Keywords: *Business Intelligence, credit risk management, big data, Analytics*

1. INTRODUCTION

Business intelligence (BI) systems, have become extremely important for many organisations and have remained a topic of interest in academic and practitioner research over the past two decades (Jourdan, Kelly Rainer, and Marshall, 2008; Lawton, 2006). These systems are typically used for decision-making problems that involve a real-time analysis of complex datasets embedded in different corporate information systems (Ranjan, 2009) however, a growing number channel-oriented applications (e.g. e-commerce support, call center support. Surveys, such as that conducted by the IBM Tech Trends Report, show that BI analytics have been recognised as one of the top four dominant technologies in the 2010s (Chen et al., 2012).

Furthermore, they have consistently been ranked as one of the two key agenda items of senior executives (Luftman and Ben-Zvi, 2010). Moreover, BI is the most common search term on gartner.com (Schlegel, 2011). These factors have therefore led to an increase in the popularity of the BI systems amongst different business organisations, that have recognised them as critical fundamental underpinnings of competition (Vercellis, 2009).

In recent years, the banking industry has been widely influenced by BI technology due to the rapid increase of financial risks, such as credit risk, market risk and operational risk (Preko and Kester, 2015). These risks could emerge from the internal or external environments by which the financial sectors operate (Bessis and O'Kelly, 2015). The environment in which banks conduct their business is highly dynamic, volatile and fiercely competitive (Chen and Lin, 2015) the requirements of personal consumer loans have increased. However, the banks are often worried about the status of repayment because the behaviors of every borrower are always fuzzy and uncertain. The most important thing is banks must realize the credit risk of borrowers when they review the applications of personal consumer loans. As a result, this study aims to mine the patterns of default in big data of the banks. The method of self-organizing mapping (SOM). Thus, controlling all these dimensions using traditional legacy systems is becoming impractical (Mishra, 2016). Moreover, the consistent changes in regulations, such as Basel II, have forced many banks to harmonise their business operations to comply with relevant regulations and policies. These factors, however, indicated an urgent need for effective tools to mitigate the credit risks, which triggered many banks in Oman to adopt various BI techniques.

Throughout this paper, the term business intelligence (BI) will refer to “a broad category of technologies, applications, and processes for gathering, storing, accessing, and analysing data to help its users to make better decisions” (Wixom and Watson, 2012).

2. OVERVIEW OF BANKING SECTOR IN OMAN

The Omani banking industry combines seven local banks, nine foreign commercial banks, two local Islamic banks, and two specialised banks governed by the Central Bank of Oman (CBO) (see Table 1). These licensed banks are operating across different regions in Oman with a network of 468 branches (CBO, 2015). CBO is a regulatory body that plays a critical role in maintaining financial stability through effective supervision and monitoring of Oman's financial services industry.

A recent report shows that the top three leading banks, namely Bank Muscat, National Bank of Oman, and Bank Dhofar are being contributed to by approximately 62% of total sector assets (The Business Year, 2015).

Table 1: Banks in Oman

	Bank Name	Bank Website
Local Banks	1. Bank Muscat	http://www.bankmuscat.com
	2. HSBC Bank Oman	http://www.hsbc.co.om
	3. National Bank of Oman	http://www.nbo.co.om
	4. Bank Dhofar	http://www.bankdhofar.com
	5. Oman Arab Bank	http://oman-arabbank.com
	6. Bank Sohar	http://www.banksohar.com
	7. Ahli Bank	http://www.ahlibank-oman.com

Foreign (Commercial) Banks	8.	Bank Of Baroda	http://www.bankofbaroda.com
	9.	Bank of Beirut	http://www.bankofbeirut.com
	10.	Bank Melli Iran	http://www.bankmelli.de
	11.	Bank Saderat Iran	http://www.bsi.ir
	12.	Habib Bank	http://globalhbl.com
	13.	National Bank of Abu Dhabi	http://www.nbad.com
	14.	Qatar National Bank	http://www.qnb.com
	15.	StandardCharteredBank	http://www.sc.com
Islamic Banks	16.	State Bank of India	http://www.sbioman.com
	17.	Al Izz Islamic Bank	http://www.alizzislamic.om
Specialised Banks	18.	Bank Nizwa	http://www.banknizwa.om
	19.	Oman Development Bank	http://www.odb.com.om
	20.	Oman Housing Bank	http://www.ohb.co.om

Source: Compiled by the Author

The loan growth of overall credit facilities extended by all licensed banks in the Sultanate of Oman during the last six years is presented in Figure 1. As the data show, loan rates have increased significantly from 27.9% in 2010 to 46.3% up to June 2015, with an annual growth rate of 11.9%, as compared to 13.3% of deposits. This incremental loan growth has been driven by the growing demands for credit from both the corporate and retail sectors to fund projects (Times of Oman, 2015). Speaking on this issue, H.E Hamood Al Zadjali, the executive president of CBO, reported that “the credit growth for the whole year would be in double digits and would probably hover around 10 percent” (Times of Oman, 2015). Oman’s banks are clearly facing a serious problem due to the rapid growth of credits, which requires effective control and monitoring.

Figure 1: Loans and deposits growth in Omani banking industry



Source: Bank Muscat (2015)

3. BUSINESS INTELLIGENCE IN BANKING

Over the past decade, banks and financial services have made a significant investment in BI systems (Gadda, 2014; Lorenzetti, 2010). This trend towards adoption of BI in the financial market resulted in the high capability of BI technology to help banks mitigate risks, increase their customer base, detect fraud, reduce transaction costs and provide insights into their profitability (Preko and Kester, 2015).

4. MOTIVATION FOR ADOPTION OF BI IN BANKS

Prior to the emergence of analytical software packages in the 1970s and 1980s, manual reporting systems were increasingly used by banks with relatively small operations (Rasmussen, Goldy, and Solli, 2002). These systems were limited to branches requiring manual recording of branch transactions and ledgers (Sahu, 2012). Hence, the capability of manual systems was restricted to rudimentary reporting of banking transactions (Najmi, Sepehri, and Hashemi, 2010). Indeed, as banks grew and expanded geographically, their transactions became vast and complex. Thus, managing such huge volumes of transactions through traditional legacy systems became time-consuming and error-prone (Sahu, 2012).

Additionally, the rapid increase of consumer and corporate loans has prioritised the banks' concerns to issues relating to the repayment of credits in accordance with the agreed terms and conditions (Chen and Lin, 2015) the requirements of personal consumer loans have increased. However, the banks are often worried about the status of repayment because the behaviors of every borrower are always fuzzy and uncertain. The most important thing is banks must realize the credit risk of borrowers when they review the applications of personal consumer loans. As a result, this study aims to mine the patterns of default in big data of the banks. The method of self-organizing mapping (SOM). Loans make up a core part of bank business; thus, effective management of credit risks is a major activity involved in achieving sustainable profits (Weber, 2012).

However, predicting credit defaults involves deep analysis of borrowers' historical data and characteristics (such as earnings, liquidity and capital stock), which cannot be done via traditional systems (Weber, 2012). Moreover, the complexity of decision-making processes in banking requires rigorous analytical methodologies and mathematical algorithms (Vercellis, 2009).

Consequently, modern banks have increasingly begun to adopt advanced analytical tools, such as BI, for managing their banking operations, thereby increasing operational efficiency (Mishra, 2016). This view was supported by Preko and Kester (2015), who showed that banks that applied BI techniques gained a competitive advantage and power in the financial market.

In general, the technical limitations of legacy systems, growth of credit risks and

complexity of decision-making processes were the major influences that caused many banks to invest in BI technologies.

5. BUSINESS INTELLIGENCE FOR CREDIT RISK MANAGEMENT

Risk is at the heart of the banking industry, and failure to mitigate its occurrences can lead to significant losses in profitability (Wu and Olson, 2010). Thus, effective risk-management strategies become crucial to ensure the long-term survival of banks (Bessis and O'Kelly, 2015). In their study "Business Intelligence in Risk Management", Wu, Chen, and Olson (2014) define risk management as "the process of identification, analysis and either the acceptance or mitigation of uncertainty in investment decision-making" (p. 2). In practice, each business should cope efficiently with specific risks, to be able to exist (Wu and Olson, 2010). The financial sector, for example, should respond to numerous risks, including, but not restricted to, credit, market and liquidity risks.

According to Chen and Lin (2015), credit risk is far more critical for the banking industry; therefore, this risk has prompted many banks to re-think their business strategies to reduce negative impacts to an acceptable level.

In the era of big data, BI systems have provided new opportunities for credit officers to gain deep insights into borrowers' credit information (Mishra, 2016). Through the integration of BI with credit-risk management approaches, predicting borrowers' future behaviour becomes more practical by mining customers' personal information (Yap, Ong, and Husain, 2011). This view is supported by Lee, Chiu, Chou, and Lu (2006), who confirm the effectiveness of clustering and regression BI techniques in providing a high-accuracy estimation of credit defaults. Furthermore, Thomas, Edelman, and Crook (2002) show that the survival analysis model can be utilised for performing credit behavioural scoring, as well as predicting the time in which borrowers are likely to default on debts.

Another major study has further extended the capabilities of survival analysis by integrating it with neural network methods (Baesens, Gestel, Stepanova, Van den Poel, and Vanthienen, 2005). In this regard, Bellotti and Crook (2009) found that further improvement in predicting the probability of default (PD) can be perceived by including macroeconomic variables (e.g., inflation rate and unemployment rate) into the Cox model.

6. EFFECTIVENESS OF BI IN BANKING

The use of BI systems can likely bring vast benefits to an organisation if deployed properly (e.g. Ranjan, 2009; Tunowski, 2015) however, a growing number channel-oriented applications (e.g. e-commerce support, call center support. In their study, Gibson et al., (2004) classified the benefits of BI into tangible (e.g. cost savings and return on investments [ROI]) and intangibles (e.g. better quality, better strategies, better tactics and decisions and better information).

The researchers assert that the intangible benefits outweigh the tangibles due to the difficulty in measuring the tangibles' delayed impacts on the business success (Gibson et al., 2004). Watson and Wixom (2007) propose a model that illustrates the spectrum of BI benefits against its impact scope (see Figure 2).

According to Watson and Wixom's (2007) model, the most tangible benefits (e.g. cost savings) have a major influence at the local level of an organisation, typically a departmental level. However, the most intangible benefits, such as business improvements and strategic support, can have a major impact on the entire organisation (Watson and Wixom, 2007).

Figure 2: Spectrum of BI benefits



Source: Watson and Wixom (2007)

6.1 BENEFITS OF BI IN BANKING

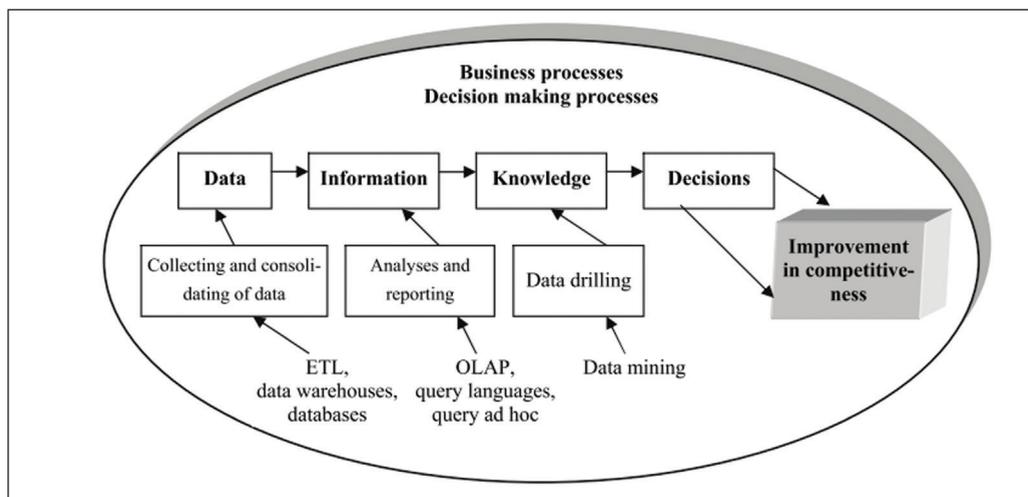
In his study, Bhasin (2006) draws attention to a number of business opportunities that could be obtained by adopting BI in banking. According to Bhasin (2006), BI can help banks and other financial institutions gain valuable insights into customers' behaviours, predicting payment default by mining historical data, detecting fraudulent transactions, optimising business decisions and improving risk management. Through the use of BI, the bank would be able to increase its efficiency and effectiveness by making better and accurate decisions based on real-time data (Moro, Cortez, and Rita, 2015).

This view has been evidenced by Olszak and Ziemia (2003), who argue that BI can support all levels of management regardless of their structuralisation, by providing effective decision making, strategic thinking and acting in organisations. As shown in Figure 3, BI software plays a critical role in transforming raw data into information and knowledge crucial for making smart decisions (Ranjan, 2009) however, a growing number channel-oriented applications (e.g. e-commerce support, call center support.

Through this automated process, banking enterprises can keep track of all relevant information and assess which information is valuable for increasing the revenue while reducing costs (Gibson et al., 2004). However, reducing costs cannot be achieved without proper mitigation and control of risks, as well as enhancing operational efficiency (Bekhet and Eletter, 2012; Dass, 2009).

Furthermore, the use of BI systems has allowed bankers to perform in-depth and accurate risk analysis based on an evaluation of borrowers' trends (MicroStrategy, 2008; Wu et al., 2014).

Figure 3: The role of BI systems in the decision-making process



Source: Olszak and Ziemia (2007)

From a strategic level, BI has allowed decision makers in banks to set up their strategic objectives and monitor key business performances through an interactive user interface (i.e. BI dashboards; Dass, 2009). By measuring business performance on a risk-adjusted basis, banks can strengthen their performance goals while adhering to new compliance requirements, such as Basel II (Bekhet and Eletter, 2012).

Also, by using BI models, such as predictive modelling, bank executives and officers can predict which customers will be likely to default on a credit loan (Bessis and O'Kelly, 2015). This feature can help to mitigate potential credit risks (Chen and Lin, 2015) the requirements of personal consumer loans have increased. However, the banks are often worried about the status of repayment because the behaviors of every borrower are always fuzzy and uncertain. The most important thing is banks must realize the credit risk of borrowers when they review the applications of personal consumer loans. As a result, this study aims to mine the patterns of default in big data of the banks. The method of self-organizing mapping (SOM).

Rao and Kumar (2011) report that banks worldwide are adopting intelligent business solutions, typically BI for managing risks, ensuring compliance requirements, profitability analysis, historical analysis, regulatory reporting, performance management and customer relationship management. Similarly, Chee et al., (2009) highlight critical areas of BI application in banking as evidence of its usefulness (see Table 2).

Table 2: Benefits of BI in banking

BI Application	Benefits
<ul style="list-style-type: none"> Banking industry relies on the BI platform to make more effective decisions in a few areas such as Customer Analysis, Operations & Financial Analysis, Sales & Marketing Analysis, Promotion Analysis, and Risk & Fraud Analysis. 	<ul style="list-style-type: none"> BI applications help management to improve operational and strategic decisions based on better and timely information. Potential customers are identified through the analysis of purchasing data. Cross-selling opportunities will be recognized via analysis of customer behavior.

Source: adapted from Chee et al., (2009)

In summary, the benefits of BI systems can be divided into five main categories. These categories, as shown in Figure 10, are revenue increase, profit increase, customer satisfaction improvement, saving increase and market share gain (Moss and Atre, 2003). In the context of banks and finance, BI provides the executives and officers with the ability to solve problems in various fields, including risk, performance, and compliance management, credit analysis and fraud detection (Sahu, 2012).

Figure 4: BI benefit categories



Source: Moss and Atre (2003)

6.2 COSTS OF BUSINESS INTELLIGENCE

Many current publications and books focus on the benefits of BI, but few sources consider its related costs or risks. Nevertheless, the most significant costs of BI are associated with the implementation requirements, including hardware, software, human resources, data quality issues and development costs (Scholz, Schieder, Kurze, Gluchowski, and Böhringer, 2010). Table 3 summarises the most common costs of BI implementation projects.

Table 3: Costs of business intelligence system

Cost	Source
Business intelligence requires investment into hardware, such as servers.	Gartner, 2013 Madsen, 2010
Business intelligence requires investment into software, such as tools, applications, and licences.	Gartner, 2013 Madsen, 2010
Business intelligence biggest expenses are related to solution initial implementation, on-going development, and maintenance.	Gartner, 2013 Madsen, 2010
Business intelligence solution implementation requires investment into business process redesign. Moreover, business intelligence solution implementation has cost of disruption.	Gartner, 2013 Madsen, 2010
Business intelligence requires investment into human resources, such as salaries, wages, travel expenses, trainings.	Gartner, 2013 Madsen, 2010

Source: Ponomarjovs (2013)

7. METHODOLOGY

This research paper was conducted using an inductive approach (Heit and Rotello, 2010). Adopting inductive reasoning is arguably the most appropriate because the study is exploratory, aiming to develop theoretical explanations based on empirical data collected through interviews. In addition, the study begins with observations and analysis of the empirical findings, rather than hypotheses or existing theories.

In the current study, both primary and secondary data were used to address the pre-defined research questions. A qualitative semi-structured interview was conducted to collect the primary data, while relevant literature and other external sources including personal experience of the researcher were used to collect the secondary data. Adopting a semi-structured interview approach in this research was more sensible, as it provides the researcher with more flexibility in preparing the core format and topics of the interview (Barriball and While, 1994).

Additionally, through a semi-structured interview, the researcher can add supplementary questions based on the participants' responses (Barriball and While, 1994).

Consequently, a more in-depth exploration of the phenomena under a selected context is possible.

Participants of this study were recruited from the Omani banking industry: Central Bank of Oman, Bank Muscat, HSBC Oman, Oman Arab Bank, National Bank of Oman and Al IZZ Islamic bank. An email invitation was sent to 40 technical, and non-technical professionals who matched the sampling criteria, yet-only 9 respondents agreed to take part in this study. A purposive probability sampling method was employed to identify the sample respondents, who were divided into two groups based on their functional departments at the banks: technical and non-technical. These departments included, but were not limited to, risk management, credit bureau, IT, financial stability and project management.

8. RESULTS

8.1 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Table 4 below provides details of demographic characteristics of the sample study. As shown in the table, the sample comprised nine respondents of technical and non-technical professionals working at different commercial banks in Oman. These participants were interested in taking part in this study because they believe that credit risk management is one of the critical issues faced by most banks in the world, including Omani banks.

Table 4: Respondent profiles

Sr. No	Gender	Bank Code	Department Name	Job Title	Total Years of Experience in credit risk	Total Years of Experience in BI
1	Female	CBO	Banking Surveillance	Manager	35	15
2	Male	CBO	Banking Surveillance	Senior Bank Examiner	8	8
3	Male	CBO	Banking Surveillance	Expert	19	19
4	Male	CBO	Financial Stability	Sr. Financial Analyst	8	4
5	Male	BM	Credit Administration	Consultant	6	6
6	Male	ALIZ	Credit risk	Assistant Manager	17	5
7	Male	HSBC	Customer Experience	Manager	10	3
8	Female	OAB	Risk Management	Senior Manager	35	6
9	Male	NBO	Project Management	Project Manager	6	7

Source: Prepared by the Author

In order to identify the most appropriate themes for this study, the researcher applied his personal experience of the subject, and the guidelines proposed by Braun and Clarke (2006). Additionally, an NVivo qualitative analytical tool was used to gain an insight into the most repeated theme across the interview data. The identified thematic categories for this research are presented in Table 5 below.

Table 5: Themes identified for this research

<p>Research Question 1: What are the motivations that triggered the banks in Oman to implement enterprise BI systems?</p>	<ul style="list-style-type: none"> • Credit risks • Lack of traditional reporting systems • Data quality issues and inconsistencies • Decision-making support
<p>Research Question 2: What are the benefits and costs of adopting BI systems for credit risk management in the banks of Oman?</p>	<p>Benefits.</p> <ul style="list-style-type: none"> • Effective supervision of the credit risk management process • Making better predictions • Ensuring compliance with all regulatory and supervisory norms • Real-time unified access to data. <p>Costs.</p> <ul style="list-style-type: none"> • Improper data integration • Data quality problems • Over-reliance on data fed into the system without application of logic.

Source: Prepared by the Author

8.2 INTERVIEW FINDINGS

8.2.1 REASONS FOR BI IMPLEMENTATION IN OMANI BANKS

In the interview, respondents were asked to answer the following question: "What were the primary motivations for implementing BI technology in your organisation /department?"

Most of those who responded to this question revealed that credit risks and data quality issues were among the major factors that prompted them to adopt a BI solution. This view was supported by participants' responses from both technical and non-technical departments.

For example, an expert from a banking surveillance department stated that:

"As a central bank the credit facility information further aids in the effective supervision and monitoring of the credit environment in the country. However, to derive insights from the micro data to make macro decisions there is a definite need for an effective BI framework" [Respondent 3].

Similarly, another interviewee from the credit administration department reported that the motivation for implementing BI was *“to reduce risk on missing any aspects of credit and other forms of risk”* [Respondent 5]. Clearly, both views agree on the necessity of having a robust credit information system as an integral part of risk management.

Other participants provided quite different responses to the same item. For instance, a manager from customer experience argued that their implementation of a BI system was triggered by the need *“for better decision making in various departments”* [Respondent 7]. He added that *“without BI analysis, decisions cannot be made on assumptions or estimates”*. In contrast, a participant from a financial stability department explained that the reason for installing BI was an effort to *“increase efficiency and effectiveness of our analysis”* [Respondent 4].

Together, it seems that there are three common reasons for BI adoption across the represented banks in this research: credit risk management, decision-making support, and data quality problem.

8.2.2 THE EFFECTIVENESS OF BI ON CREDIT RISK MANAGEMENT

8.2.2.1 PERSPECTIVES FROM PARTICIPANTS

Respondents were asked to provide their opinions about whether BI tools were effective in managing credit risks. According to most participants, the use of BI tools contributed to decreasing the likelihood of defaulting, through the provision of high-performance predictive techniques. A senior manager from a risk management department provided insight into his experience with BI:

“BI implementation from credit risk perspective, it supported us to deliver proper analytical review to the BOD, with clear understating of the bank portfolio... to make proper decision...” [Respondent 8].

This view was supported by another senior specialist from the regulatory bank who said the following:

“Yes BI systems are very much effective in managing credit risk

- *BI system allows predicting and forecasting and also measuring the potential risk factor in any transaction.*

- *The bank's management can also make use of certain credit models embedded into the BI system which can act as a valuable tool which can be used to determine the level of lending measuring the risk”* [Respondent 2].

Therefore, the adoption of BI systems can be inferred to be effective, as the systems helps create proactive decisions because of their abilities to predict accuracy.

8.2.2.2 THE BENEFITS OF BI SYSTEMS

When the participants were asked about the advantages they gained from their experience with BI systems, a range of responses was elicited, as summarised in Table 6. Interestingly, the participants, on the whole, deemed the effective supervision of credit-risk management as a key benefit of adopting BI. They reported that the use of BI software enabled them to gain a thorough understanding of the bank's overall credit risk through the interactive dashboard and online reporting service.

Table 6: Benefits of business intelligence systems

Respondent 1	<ul style="list-style-type: none"> • Real-time scoring and limits monitoring • Robust stress-testing capabilities • Data visualisation techniques • Effective supervision and monitoring of credit risk
Respondent 2	<ul style="list-style-type: none"> • Extensive credit risk functionality integrated with economic and regulatory credit risk applications • Ensured compliance with all regulatory and supervisory norms • Real-time unified access to data • Predictive analysis and data mining techniques
Respondent 3	<ul style="list-style-type: none"> • Independent evaluation of the banks' loan portfolio • Effective supervision of credit risks management process • Review conducted of quality of a sample of individual credits • Early detection of risks • Decision-making support
Respondent 4	<ul style="list-style-type: none"> • Enhanced monitoring of credit portfolios • Quick access to data • Increased efficiency and effectiveness of analysis
Respondent 5	<ul style="list-style-type: none"> • Improved decision-making process • Better credit administration • Discovery of hidden patterns
Respondent 6	<ul style="list-style-type: none"> • Better quality of information • Enhanced business decisions • Effective monitoring of risks
Respondent 7	<ul style="list-style-type: none"> • Better understanding of customer segments • Trends analysis over time-series • Increased accuracy of making loans decisions • Timely and reliable data

Respondent 8	<ul style="list-style-type: none"> • Enhanced customer relationships • Accurate forecasts made based on past trends • Enterprise risks managed • Increased operational efficiency • Reporting and analysis
Respondent 9	<ul style="list-style-type: none"> • Knowledge of vulnerable areas of the bank's lending • Time series analysis • Improved banking supervision • Forecasting of capabilities

Source: Prepared by the Author

8.2.2.3 THE COSTS OF BI SYSTEMS

Respondents raised some concerns when they were asked to indicate the risks of implementing BI tools in the banking industry. Of nine participants, only four provided a response to this question (see Table 7). Poor quality of source systems was amongst the key issues identified by the majority of interviewees. The understanding from these results is that poor quality of data can hinder business decisions, thereby causing negative consequences to the bank and customers.

Another serious drawback highlighted by respondents was the over-reliance on BI machines to make decisions without considering human interpretations. Talking about this issue, an interviewee stressed the need for human involvement in every stage of the decision-making process, since the role of BI technologies is typically communicating data to the end-user.

Table 7: Costs of business intelligence systems

Interview question	Responses
<i>What are the potential risks or costs associated with using BI technology for credit risk management in your organisation?</i>	<ul style="list-style-type: none"> • Over-reliance on data fed into the system without application of logic • Improper data integration may lead to making wrong decision • Data quality issues from the source systems • Over-looking qualitative factors of credit risk management. • Excessive information overload

Source: Prepared by the Author

9. DISCUSSION

The respondents drew attention to key challenges encountered throughout different phases of BI implementation project, as shown in Table 8.

Table 8: Key issues before, during and after BI implementation

Initiation	Implementation	Impacts
<ul style="list-style-type: none"> • Ad-hoc change requests • Communication issues • User training and awareness • Software and hardware preparation • Vendor selection • Top management support 	<ul style="list-style-type: none"> • Data quality issues • Lack of skilled staff • Migration of old data to new BI system • Rapid growth of big data 	<ul style="list-style-type: none"> • Poor data quality could lead to wrong decision-making • Improper selection of BI product could lead to inability to meet business requirements • Insufficient support from top management may hinder the progress of BI project

Source: Prepared by the Author

10. CONCLUSION

This research investigated the impact of adopting BI systems in the Omani banking industry, with an emphasis on credit risk management. A qualitative semi-structured interview approach was applied to answer the overall research question, which was:

“How effective is the BI system in mitigating the problem of credit risks in Omani banking industry?”.

The results of this investigation provided confirmatory evidence that BI tools contributed positively in mitigating potential credit risks across Omani banks. These findings complement those of earlier studies (Bekhet and Eletter, 2012; Wu et al., 2014). From the research findings, it was apparent that the majority of respondents (77.7%) deemed the BI to be a mission-critical tool for achieving both departmental and organisational objectives.

The respondents, on the whole, agreed that BI assisted them in managing banking risks effectively, understanding credit risk profiles, improving the decision-making processes, building accurate predictive models, conducting a robust stress testing, as well as increasing operational efficiency.

Although this research provides insights for bankers into the core capabilities and uses of BI systems in the area of credit-risk analysis, further studies would be worthwhile.

Future research may employ a case study approach to gain an in-depth understanding into the actual business value obtained from implementing the BI tool within its real-life context.

A mixed-methods approach may be applied, so the researcher can statistically measure the usefulness of BI technology across multiple Omani banks, by adopting a Technology Acceptance Model-based quantitative survey. Further research may be undertaken to investigate the impact of broader external factors (e.g. vendor selection and partnership) on the success of BI projects.

REFERENCES

- Al-Hajri, S., and Tatnall, A. (2008). Adoption of Internet Technology by the Banking Industry in Oman: A Study Informed by the Australian Experience. *Journal of Electronic Commerce in Organizations*, 6(3), 20–36. Retrieved from http://search.proquest.com/docview/236430257?accountid=17193%5Cnhttp://sfx.brad.ac.uk/sfx_local?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ:abiglobal&atitle=Adoption+of+Internet+Technology+by+the+Banking+Indust
- Al-Lamki, S. M. (2005). The role of the private sector in Omanization: the case of the banking industry in the Sultanate of Oman. *International Journal of Management*, 22(2), 176.
- Baesens, B., Gestel, T. Van, Stepanova, M., Van den Poel, D., and Vanthienen, J. (2005). Neural network survival analysis for personal loan data. *The Journal of the Operational Research Society*, 56(9), 1089–1098. <http://doi.org/http://dx.doi.org/10.1057/palgrave.jors.2601990>
- Bank Muscat. (2015). Bank Muscat - Investor Presentaion. Retrieved August 25, 2016, from <http://www.bankmuscat.com/en-us/InvestorRelation/fi/Presentation/InvestorPresentationJune2015.pdf>
- Bekhet, H. A., and Eletter, S. F. K. (2012). Credit risk management for the Jordanian commercial banks: A business intelligence approach. *Australian Journal of Basic and Applied Sciences*, 6(9), 188–195. Retrieved from <http://www.scopus.com/inward/record.url?eid=2-s2.0-84871686790> and partnerID=tZOTx3y1
- Bellotti, T., and Crook, J. (2009). Credit scoring with macroeconomic variables using survival analysis. *Journal of the Operational Research Society*, 60(12), 1699–1707. <http://doi.org/10.1057/jors.2008.130>
- Beltratti, A., and Stulz, R. M. (2012). The credit crisis around the globe: Why did some banks perform better? *Journal of Financial Economics*, 105(1), 1–17. <http://doi.org/10.1016/j.jfineco.2011.12.005>
- Bessis, J., and O'Kelly, B. (2015). *Risk management in banking*. John Wiley and Sons.
- Bhasin, M. L. (2006). Data Mining: A Competitive Tool in the Banking and Retail Industries. *The Chartered Accountant*, (October), 588–594.

- Bodla, B. S., and Verma, R. (2009). Credit Risk Management Framework at Banks in India. *ICFAI Journal of Bank Management*, 8(1), 47–72.
- Caouette, J. B., Altman, E. I., and Narayanan, P. (1998). *Managing credit risk: the next great financial challenge* (Vol. 2). John Wiley and Sons.
- Carr, E. C. J., and Worth, A. (2001). The use of the telephone interview for research. *Nursing Times Research*, 6(1), 511–524.
- CBO. (2011). Outsourcing. Retrieved August 22, 2016, from http://www.cbo-oman.org/circulars/2011/BM_1080_2011.pdf
- CBO. (2015). Annual Report. Retrieved August 26, 2016, from http://www.cbo-oman.org/annual/Annual_Report_2015.pdf
- Chee, T., Chan, L., Chuah, M., Tan, C., Wong, S., Yeoh, W., and Rahman, A. (2009). Business Intelligence Systems: State-of-the-art review and contemporary applications. *Symposium on Progress in Information and Communication Technology*, 96–101.
- Chen, H., Chiang, R. H. L., and Storey, V. C. (2012). Business Intelligence and Analytics: From Big Data to Big Impact. *MIS Quarterly*, 36(4), 1165–1188.
- Chen, Q., and Lin, J. (2015). Integrating of business intelligence and CRM in banks: An empirical study of SOM applied in personal customer loans in Taiwan. 2015 International Conference on Fuzzy Theory and Its Applications (iFUZZY), 68–73. <http://doi.org/10.1109/iFUZZY.2015.7391896>
- Dass, R. (2009). Data mining in banking and finance: A note for bankers. Indian Institute of. Retrieved from [http://iimahd.ernet.in/publications/data/Note on Data Mining %26 BI in Banking Sector.pdf](http://iimahd.ernet.in/publications/data/Note%20on%20Data%20Mining%20in%20Banking%20Sector.pdf)
- Fayyad, A., and Daly, K. (2011). The impact of oil price shocks on stock market returns: Comparing GCC countries with the UK and USA. *Emerging Markets Review*, 12(1), 61–78. <http://doi.org/10.1016/j.ememar.2010.12.001>
- Funso, K., Kolade, A., and Ojo, O. (2012). Credit risk and commercial banks' performance in Nigeria: A panel model approach. *Australian Journal of Business and Management Research*, 2(2), 31–38.
- Gadda, K. R. (2014). Business Intelligence for Public Sector Banks in India: A Case study- Design, Development and Deployment Koteswara Rao Gadda,. *Journal of Finance, Accounting and Management*, 5(2), 37–58.
- Gangadharan, G. R., and Swami, S. N. (2004). Business intelligence systems: design and implementation strategies. *Information Technology Interfaces, 2004. 26th International Conference on*, 139–144 Vol.1. <http://doi.org/10.1109/ITI.2004.241406>
- Gibson, M., Arnott, D., Jagielska, I., and Melbourne, A. (2004). Evaluating the intangible benefits of business intelligence: Review and research agenda. In *Proceedings of the*

- 2004 IFIP International Conference on Decision Support Systems (DSS2004): Decision Support in an Uncertain and Complex World (pp. 295–305). Citeseer.
- Gizaw, M., Kebede, M., and Selvaraj, S. (2015). The impact of credit risk on profitability performance of commercial banks in Ethiopia, 9(2), 59–66. <http://doi.org/10.5897/AJBM2013.7171>
- Golfarelli, M., Rizzi, S., and Castenaso, V. (2004). Beyond Data Warehousing : What ' s Next in Business Intelligence ? *Acm*, 1–6.
- Grandhi, S., and Chugh, R. (2013). The Value of Business Intelligence Tools: Aligning Business Intelligence Governance with Corporate Governance. In *The International Conference on E-Technologies and Business on the Web (EBW2013)* (pp. 28–32). The Society of Digital Information and Wireless Communication.
- Gray, P. (2003). *Business intelligence: A new name or the future of DSS. DSS in the Uncertainty of the Internet Age*. Katowice: University of Economics.
- Hannula, M., and Pirttimäki, V. (2003). Business intelligence empirical study on the top 50 Finnish companies. *Journal of American Academy of Business*, 2, 593–599.
- Heit, E., and Rotello, C. M. (2010). Relations between inductive reasoning and deductive reasoning. *Journal of Experimental Psychology. Learning, Memory, and Cognition*, 36(3), 805–812. <http://doi.org/10.1037/a0018784>
- Jagielska, I., Darke, P., and Zagari, G. (2003). Business intelligence systems for decision support: Concepts, processes and practice. In *7th International Conference of the International Society for Decision Support Systems (ISDSS'03)*(Jerzy Goluchowski 13 July 2003 to 16 July 2003) (pp. 215–228). The Karol Adamiecki University of Economics.
- Jourdan, Z., Kelly Rainer, R., and Marshall, T. E. (2008). Business Intelligence: An Analysis of the Literature. *Information Systems Management*, 25(2), 121–131. <http://doi.org/10.1080/10580530801941512>
- King, N. (1994). *The qualitative research interview*. Sage Publications, Inc.
- King, N., and Horrocks, C. (2010). *Interviews in qualitative research*. Sage.
- Kvale, S., and Brinkmann, S. (2009). *Interview: Learning the craft of qualitative research interviewing*. Det Kvalitative Forskningsintervju. Oslo: Gyldendal Akademisk.
- Lawton, G. (2006). Making Business Intelligence More Useful. *IEEE Computer Society*, 39(9), 14–16. <http://doi.org/10.1109/MC.2006.318>
- Lee, T.-S., Chiu, C.-C., Chou, Y.-C., and Lu, C.-J. (2006). Mining the customer credit using classification and regression tree and multivariate adaptive regression splines. *Computational Statistics and Data Analysis*, 50(4), 1113–1130. <http://doi.org/10.1016/j.csda.2004.11.006>
- Lorenzetti, C. (2010). Business Intelligence Systems in the Financial Industry, (725098), 18.

- Retrieved from https://www.politesi.polimi.it/bitstream/10589/6123/1/2010_12_Lorenzetti.pdf.
- Louise Barriball, K., and While, A. (1994). Collecting Data using a semi-structured interview: a discussion paper. *Journal of Advanced Nursing*, 19(2), 328–335.
- Luftman, J., and Ben-Zvi, T. (2010). Key issues for IT executives 2010: judicious IT investments continue post-recession. *MIS Quarterly Executive*, 9(4), 263–273.
- Microsoft. (2007). *Banking Industry Using Business Intelligence to Increase Revenue and Profitability Software for the*, 1–12.
- MicroStrategy. (2008). *Business Intelligence and banking*. Retrieved June 26, 2016, from <http://www.microstrategy.com/>
- Mishra, R. (2016). *Business Intelligence and Analytics : Paving way for Operational Excellence in Indian Banks*, (2011), 53–58.
- Mohammed Al Balushi. (2014). Risk of credit. *Oman Observer*. Muscat. Retrieved from <http://omanobserver.om/risk-of-credit/>
- Moro, S., Cortez, P., and Rita, P. (2015). Business intelligence in banking: A literature analysis from 2002 to 2013 using text mining and latent Dirichlet allocation. *Expert Systems with Applications*, 42(3), 1314–1324. <http://doi.org/10.1016/j.eswa.2014.09.024>
- Moss, L. T., and Atre, S. (2003). *Business intelligence roadmap: the complete project lifecycle for decision-support applications*. Addison-Wesley Professional.
- Najmi, M., Sepehri, M., and Hashemi, S. (2010). The evaluation of Business Intelligence maturity level in Iranian Banking Industry. In *Proceedings - 2010 IEEE 17th International Conference on Industrial Engineering and Engineering Management, IE and EM2010* (pp. 466–470). <http://doi.org/10.1109/ICIEEM.2010.5646571>
- Naveen K. Vodapalli. (2009). *Critical Success Factors of BI Implementation*. IT University of Copenhagen. Retrieved from <http://www.itu.dk/~navvod/CSFsOfBlimpl.pdf>
- Negash, S. (2004). Business intelligence. *Communications of the Association for Information ...*, 13, 1–16. <http://doi.org/10.1002/9780470753866>
- Olszak, C. M., and Ziemba, E. (2003). Business Intelligence as a Key to Management of an Enterprise. In: *Informing Science Institute, Informing Science + Information Technology Education*, (June).
- Olszak, C. M., and Ziemba, E. (2006). Business intelligence systems in the holistic infrastructure development supporting decision-making in organizations. *Interdisciplinary Journal of Information, Knowledge and Management*, 1(2006), 47–58. Retrieved from <http://ijikm.org/Volume1/IJIKMv1p047-058Olszak19.pdf>
- Olszak, C. M., and Ziemba, E. (2007). Approach to building and implementing Business

- Intelligence systems. *Interdisciplinary Journal of Information, Knowledge, and Management*, 2, 135–148. Retrieved from [http://www.scopus.com.ezproxy.unal.edu.co/record/display.url?eid=2-s2.0-77749242597&origin=resultslist&sort=cp-f&src=s&st1=%22Business+Intelligence%22&nlo=&nlr=&nls=&sid=179FDBCE1FAC55C980431F1A5958C2F2.FZg2ODcJC9ArCe8WOZPvA:2910&sot=b&sdt=b&sl=49&s=TITLE\(%22Bu](http://www.scopus.com.ezproxy.unal.edu.co/record/display.url?eid=2-s2.0-77749242597&origin=resultslist&sort=cp-f&src=s&st1=%22Business+Intelligence%22&nlo=&nlr=&nls=&sid=179FDBCE1FAC55C980431F1A5958C2F2.FZg2ODcJC9ArCe8WOZPvA:2910&sot=b&sdt=b&sl=49&s=TITLE(%22Bu)
- Omar, R., Zahir, W., and Al, S. (2015). RISK MANAGEMENT DURING TIME OF FINANCIAL TURBULENCE : THE CASE OF SAUDI ARABIA AND OMAN, 2(1), 64–91.
- Papadopoulos, T., and Kanellis, P. (2010). A path to the successful implementation of Business Intelligence: An example from the Hellenic Banking sector. *OR Insight*, 23(1), 15–26. <http://doi.org/http://dx.doi.org/10.1057/ori.2009.14>
- Petrini, M., and Pozzebon, M. (2008). What Role is “Business Intelligence” Playing in Developing Countries? *Data Mining Applications for Empowering Knowledge Societies*, 241.
- Pickard, A. (2012). *Research methods in information*. Facet publishing.
- Pirttimäki, V. H. (2009). Conceptual analysis of business intelligence. *SA Journal of Information Management*, 9(2). <http://doi.org/10.4102/sajim.v9i2.24>
- Ponomarjovs, A. (2013). Business Value of Business Intelligence, 1–9. Retrieved from <https://dspace.cc.tut.fi/dpub/handle/123456789/21689>
- Prakash, R., and Poudel, S. (2012). The impact of credit risk management on financial performance of commercial banks in Nepal. *International Journal of Arts and Commerce*, 1(5), 9–15. <http://doi.org/10.5897/AJBM2013.7171>
- Preko, M., and Kester, Q.-A. (2015). The Study of the Impact of Business Intelligence in the Banking Industry of Ghana.
- Prevé, J. (2008). Business Intelligence for Financial Risk Management. Retrieved from <http://m.wpi.edu/Pubs/E-project/Available/E-project-042009-212059/unrestricted/AGWS09-v053.pdf>
- Ranjan, J. (2009). Business Intelligence: Concepts, Components, Techniques and Benefits. *Journal of Theoretical and Applied Information Technology*, 9, 60. <http://doi.org/10.2139/ssrn.2150581>
- Rao, G. K., and Kumar, R. (2011). Framework to integrate business intelligence and knowledge management in banking industry. *Review of Business and Technology Research*, 4(1). Retrieved from <http://arxiv.org/ftp/arxiv/papers/1109/1109.0614.pdf%5Cnhttp://arxiv.org/abs/1109.0614>
- Rasmussen, N. H., Goldy, P. S., and Solli, P. O. (2002). *Financial business intelligence: trends, technology, software selection, and implementation*. John Wiley and Sons.
- Sahu, R. (2012). Business Intelligence for Banking. Retrieved from <http://www.infosys.com/finacle/solutions/thought-papers/Documents/business-intelligence-for-banking.pdf>

- Schlegel, K. (2011). Key Issues for Analytics , Business Intelligence and Performance Management , 2011. Intelligence, (March), 7.
- Scholz, P., Schieder, C., Kurze, C., Gluchowski, P., and Böhringer, M. (2010). Benefits and Challenges of Business Intelligence Adoption in Small and Medium-Sized Enterprises. 18th European Conference on Information Systems. Retrieved from <http://aisel.aisnet.org/ecis2010/32/>
- The Business Year. (2015). BANK ON OMAN. Retrieved from <https://www.thebusinessyear.com/oman-2015/bank-on-oman/review>
- Thomas, L. C., Edelman, D. B., and Crook, J. N. (2002). Credit scoring and its applications. Siam.
- Times of Oman. (2015). Oman's bank credit grows by 10% to OMR18 billion. Muscat. Retrieved from <http://timesofoman.com/article/69602/Business/Oman's-bank-credit-grows-by-10-to-OMR18-billion>
- Tunowski, R. (2015). Business Intelligence in Organization. Benefits, Risks and Developments. *Przedsiębiorczość I Zarządzanie*, 16(2), 133–144. <http://doi.org/10.1515/eam-2015-0022>
- Turner, D. W. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report*, 15(3), 754–760. <http://doi.org/http://www.nova.edu/ssss/QR/QR15-3/qid.pdf>
- Verbitskiy, Y., and Yeoh, W. (2011). Data Quality Management in a Business Intelligence Environment: From the Lens of Metadata. Proceedings of 16th International Conference on Information Quality. University of South Australia, 435–447.
- Vercellis, C. (2009). Business intelligence : Data mining and optimization for decision making. Chichester: Wiley.
- Wang, Y. (2013). Credit Risk Management in Rural Commercial Banks in China. Edinburgh Napier University. Retrieved from http://researchrepository.napier.ac.uk/6659/1/Wang_Yang_PHD_Thesis.pdf
- Watson, H. J., and Wixom, B. H. (2007). The current state of business intelligence. *Computer*, 40(9), 96–99.
- Weber, O. (2012). Environmental Credit Risk Management in Banks and Financial Service Institutions. *Business Strategy and the Environment*, 21(4), 248–263. <http://doi.org/10.1002/bse.737>
- Whitehorn, M., and Whitehorn, M. (1999). Business Intelligence: the IBM Solution: Datawarehousing and OLAP. Springer Science and Business Media.
- Wixom, B., and Watson, H. (2012). The BI-based organization. *Organizational Applications of Business Intelligence Management: Emerging Trends*, IGI Global, Hershey, 193–208.
- Wu, D. D., Chen, S. H., and Olson, D. L. (2014). Business intelligence in risk management:

- Some recent progresses. *Information Sciences*, 256, 1–7. <http://doi.org/10.1016/j.ins.2013.10.008>
- Wu, D., and Olson, D. L. (2010). Enterprise risk management: coping with model risk in a large bank. *Journal of the Operational Research Society*, 61(2), 179–190. <http://doi.org/10.1057/jors.2008.144>
- Yap, B. W., Ong, S. H., and Husain, N. H. M. (2011). Using data mining to improve assessment of credit worthiness via credit scoring models. *Expert Systems with Applications*, 38(10), 13274–13283. <http://doi.org/10.1016/j.eswa.2011.04.147>
- Zeng, L., Xu, L., Shi, Z., Wang, M., and Wu, W. (2007). Techniques, process, and enterprise solutions of business intelligence. *Conference Proceedings - IEEE International Conference on Systems, Man and Cybernetics*, 6, 4722–4726. <http://doi.org/10.1109/ICSMC.2006.385050>
- Zerban, A., Omar, R., and Al Sibani, W. Z. S. (2015). RISK MANAGEMENT DURING TIME OF FINANCIAL TURBULENCE: THE CASE OF SAUDI ARABIA AND OMAN. *European Journal of Contemporary Economics and Management*, 64.

Chapter 14

HUMAN RESOURCES DEVELOPMENT IN OMAN'S FINANCIAL SECTOR

Hussain Alhejji

ABSTRACT

This chapter discusses factors influencing human resources development (HRD) in the Omani financial sector. At the national level, this study outlines some of the legal, historic, economic, cultural, and social contexts that play a pivotal role in shaping HRD policies and practices. The HRD system in the Sultanate of Oman is largely influenced by traditional norms and values, power hierarchy, challenges to diversify the source of economic growth apart from oil and gas production, over-reliance on expatriate and foreign workers, response to the dramatic increase of a youthful population, and gender imbalance in the workforce. At the organisational level, this chapter highlights how these broad challenges influence HRD in the financial sector, and it offers some suggestions to overcome these challenges. This chapter discusses the interplay between national and organisational levels to better understand how these forces influence and shape the HRD system in Oman.

Keywords: Human Resources Development, External forces, Financial Sector, Oman

1. INTRODUCTION

The aim of this chapter is to discuss HRD in Oman's financial sector. Along with its Gulf Region neighbours, research in the area of HRD in the Sultanate of Oman is limited (Swailles, Al Said, and Al Fahdi, 2012). Research into HRD in the Sultanate has largely focused on the role of educational and vocational training (Al-Hamadi, Budhwar, and Shipton, 2007), with limited focus on skills capability, and human capacity building of country and regional institutions that shape HRD systems (Alhejji and Garavan, 2017). Aycan et al., (2007) argued that HRD is a priority in most Omani organisations, but at the same time, it may pose a threat to organisational solidarity and teamwork when a holistic approach is not taken. Research in HRD is needed to understand and overcome pressures facing the HRD system within the financial sectors and across other sectors (Moideenkutty, Al-Lamki, and Murthy, 2011). Examples of these pressures include decreasing government spending, shifting wealth, population growth, gender imbalance, natural resource constraints and skills-based technological change. These pressures, therefore, may not only impact financial sector approaches towards HRD policies and practices, but also the intention to invest in local human capital in the future.

This chapter starts with an overview of HRD as an academic field, along with its related concept. The second section offers a general discussion of the legal, economic, social, and cultural contexts that play a pivotal role in shaping HRD systems in Oman. This is followed by a discussion on how these external forces influence HRD systems in the Omani financial sector, as well as an outline of some challenges facing HRD in the Omani financial sector. Budhawr and Sparrow (2002) argued that it is quite difficult to examine all the internal and external variables influencing HRD policies and practices given the absence of rich information. Therefore, an appropriate starting point is to highlight the national factors that influence the HRD system in the Omani financial institutions.

2. THE CONTEXT OF HRD: AN OVERVIEW

Although there are a number of national factors that led to variation in how HRD is conceptualised, McGuire (2014) proposes that HRD has three major focuses: the development of human potential, the enhancement of organisational effectiveness, and social development. The combination of these objectives emphasizes the multidisciplinary nature of HRD globally. In the United States, for instance, the early focus on HRD was on individual development, with a strong emphasis on education as a tool towards achieving HRD outcomes (Knowles, Holton, and Swanson, 1998). In contrast, the UK definition of HRD focused mainly on the value of training to the primacy of learning as a fundamental aspect of the HRD system (Garavan and Carbery, 2012). More recently, the primary focus of HRD was on the individual, including motivation to learn, self-efficacy, personal development and skills development. This focus subsequently moved to the organisational level of analysis and how HRD can contribute to overall business performance. McLean, Osman-Gani, and Cho (2004), emphasize the need to examine HRD at various national levels due to socioeconomic and institutional differences. These various approaches indicated that HRD as a field has reached a point of maturity in non-western contexts; thus, there is a need to provide more evidence of the growing maturity of the HRD field in different cultural and organisational contexts, including the Omani financial sector.

There are several main concepts essential to understanding the context of HRD in Omani's financial sector, including learning, training, development and education.

Learning: Learning is considered a normal process for all individuals. In the context of HRD, it is used in a very narrow sense to identify individuals who have grasped new skills or knowledge and are able to utilise that learning in a real work context.

Training: Training is a 'systematic process through which an employee is helped or facilitated to master defined tasks or competencies for a definite correct purpose' (Garavan, Hogan, and Cahir-O'Donnell, 2003, p.20).

Development: Development is a less tangible concept than training, but is considered more systematic than education (McGuire, 2014). Development is a process or set of planned activities that will help an individual develop to their full potential over time.

Education is a broader concept and it tends to have a stronger orientation towards the future. It focuses on long-term learning that will help the employee to take on a new role, or to do a different job in the future (Knowles et al., 1998).

3. HISTORICAL AND LEGAL FRAMEWORK

The location of Oman represents a unique aspect in the context of HRD systems. The Indian Ocean in Oman has opened the gateway for many international corporations to access Arabic, Asian, and African markets (Porcaro, 2014). Among these locations, the economic and social development in Oman has dramatically improved since 1970, when Sultan Qaboos bin Said became the ruler. This has contributed to the transformation of Oman from a medieval country to a modern state with a developed infrastructure, particularly in the capital city of Muscat (Moideenkutty et al., 2011). To pursue the country's long-term objectives, the Central Bank of Oman (CBO) is seen as the driver of financial prudence and economic stability in a region that has seen its influence from the recent global financial crisis. Oman's financial sector, therefore, became buoyant as a result of the recent progress in the country.

Moreover, investing in human capital is considered the most important aspect of the five-year strategy proposed by the government in 1995. According to the Oman 2020 vision, national HRD should be strongly considered in order to boost citizens' skills and knowledge through well-structured training and development activities, at both national and organisational levels (Harry, 2007). To achieve this objective, the government initiated a localisation oversight group, Omanisation, aimed at reducing organisations' over-reliance on expatriate and foreign workers, as well as to respond to the growing demands of the Omani youth population. The success of these initiatives relied heavily on the role of the financial sector in advancing the national HRD system. The localisation policy, Omanisation, is the national policy of Oman aimed to encourage employment of Omani nationals in the private sectors, which are still dominated by expatriate and foreign workers. This policy also intends to change peoples' attitudes towards working in private sectors, as well as to increase the percentage of female participation in the workforce. The uptake goals of Omanisation extend to giving investment and support to locals to enable them to build their knowledge and skills, thus improving their chances in the local competitive job market (Alhejji and Garavan 2016).

Despite the above argument, the financial sector, including public, private and foreign institutions, has led the way in achieving more than 90% Omanisation. Although the banking sector, for example, is largely focusing on recruiting and training more Omanis, the HRD system in the banking sector has been criticized in a number of ways. Bontenbal and Aziz (2013) argued that the localisations policy in Oman needs to move beyond 'simply a numbers game', and focus on talent development and increasing the return on human capital investment. Organisations within the financial institutions spend major resources on attracting and retaining Omani talent, but the return on investment does not tend to be worthwhile (Sidani and Al Ariss, 2014). The success of Omanisation in the banking sector is undermined in a culture that is focusing more on prestige than performance. Other

major barriers to successful implementation of Omanisation include economic pressure. Although the Central Bank of Oman has also required all financial institutions to have a 100% Omanisation record for its non-clerical cadre, and around 90% for middle management positions, the success of Omanisation has been slow due to the recent economic downturn. There is still a limited emphasis on well-structured HRD systems that are linked to employees' overall career development and growth (Budhwar, Al-Yahmadi, and Debrah, 2002).

4. ECONOMIC CONTEXT

The economic context has a critical impact on the HRD system within Oman's financial sector. For the last few decades, the Omani economy relied heavily on natural resources, such as oil and gas production, to increase government spending on major areas, including education and vocational training (Katou, Budhwar, Woldu, and Al-Hamadi, 2010). Thus, the HRD system is largely influenced by the oil-based growth model (Alhejji and Garavan, 2016). The robust GDP growth during the last two decades was enhanced by massive government spending, increase in number of financial statements and modernized infrastructure financed by dramatically increasing oil revenues. Although the global financial crisis has negatively impacted oil prices, local statistics show that the growth of liquidity and credit rates remains highly satisfactory (Al-Waqfi and Forstenlechner, 2012). According to the United Nations Conference on Trade and Development (UNCTD), in 2016, Oman's GDP increased 5.7% compared to the previous year, as a result of the stability of the inflation rate (see Table 1).

Table 1: General profile: Oman

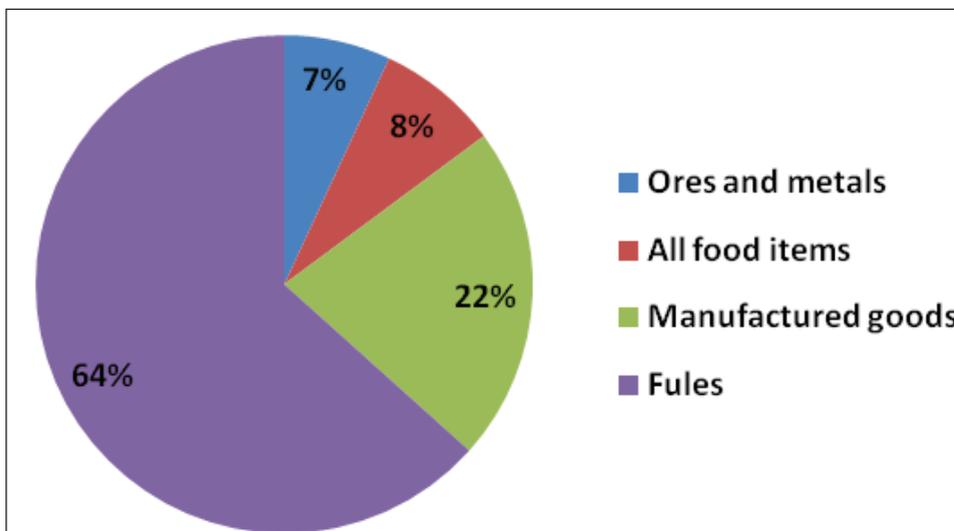
General information for 2015	
Population	4,491 millions
Land area	(m) 309 500 km ²
Exchange rate	0.385 OMR/US\$
Economic Trends in 2015 (millions of US\$ unless otherwise specified)	
GDP	69 832
GDP per capita	15 551
Real GDP growth, y-on-y, %	5.65
Current balance, % of GDP	-12.89
CPI growth	0.07%
GDP by Expenditure in 2014 (as % of total GDP)	
Household Consumption	27.7
General government final consumption expenditure	24.7
Cross Capital Formation	24.8
Exports	69.5
Imports	46.7

Financial Flows (millions of US\$ unless otherwise specified)	
FDI inflows	821.85
FDI outflows	854.79

Sources: United Nations Conference on Trade and Development

The continued reduction of oil prices has impacted government planning and strategic goals towards enhancing the national HRD system (Porcaro, 2014). According to the World Economic Forum’s (WEF) Global Competitiveness Report, Oman’s economy was ranked 32nd and 66th among 138 countries in the world in 2012 and 2016, respectively. This indicates that the country has suffered from these economic challenges in recent years, which has forced the government to initiate a number of strategies (i.e., *Tanfeedh*) aimed at diversifying its local economy. The economic diversification has proceeded to the point that government revenues are derived from non-oil products, such as tourism and fish aquaculture sectors (Figure 1). Herb (2009) argued that the low level of economic diversification into productive and labour-intensive markets is what distinguishes the Omani economic path from that of most developing economies. Unlike its neighbours, Oman has managed to reduce its over-reliance on natural resources in the last few years (World Bank 2010); however, it has been argued that the economic diversification would add some advantages, including reduced exposure of global economic uncertainties, creation of new jobs to meet the growth in the population, increased productivity and sustainability, and enhanced non-oil revenues in the near future (Al-Waqfi and Forstenlechner, 2012).

Figure 1: Export structure by product group in 2015



Sources: United Nations Conference on Trade and Development

The success of economic growth is largely dependent on the privatisation scheme. This scheme aims to cut public expenditure and ramp up returns. Throughout privatisation,

government intends to tackle the reduction of oil price with a plan to drive the country to economic stability. Policy-makers indicate that the privatisation schemes would greatly encourage private sector contributions to the local economy, thus, enhancing the national HRD system. However, Cook and Uchida (2003) argue that most developing countries proceeded with privatisation schemes with limited knowledge of the impact or contribution to economic growth and national HRD systems. Their analysis found that Oman is among few countries that show a negative correlation between privatisation and economic growth. This indicates that there has been limited focus by the financial sector on improving the HRD system to enhance the privatisation scheme in the country.

For a rentier-state, the above discussion might show some indication of successful economic growth; however, it also cements Oman's heavy dependence on foreign workers (Herb, 2009). Nonetheless, a major aspect in the Omani model, particularly accommodating business climate with its unskilled cheap labour, is likely to manage the current crisis in Oman and among its better capitalised Arab Gulf neighbours. The financial sector, therefore, is expected to play an important role in the HRD context, because a positive link exists between the sophistication of the financial institutions and economic diversification in the country (Al-Lamki, 2005). Policy-makers and institutional actors believe that the success of vision 2020 requires a major investment in a national HRD system (Swales et al., 2012). Government by itself cannot achieve these long-term goals without mutual contributions from key sectors in the economy, such as the financial sector. However, there are still a few attempts being made to measure the role of the financial sector in enhancing the national HRD system and how this would have an impact on the local economy (Sidani and Al Ariss, 2014). The financial sector is a major player in the local economy and enhancing the national HRD seems an initial step towards promoting this.

5. CULTURAL CONTEXT

Religion and tribe are considered to be the central cultural forces in the country and they are significantly associated with people's behaviour and attitudes (Khan and Sheikh, 2012). Islam is the official religion in Oman, and the country's constitution is the Holy Qur'an and the Hadith (the reports of deeds and sayings of the Prophet Mohammed that became the *Sunna*). The importance of education and learning, therefore, are stressed in these two main sources, with frequent injunctions. For example, the Holy Qur'an stated "O my Lord! Increase me in knowledge" (The Holy Qur'an 20:114). Such a tenet stimulates individuals to learn and to seek more knowledge and skills. Muslims view the Holy Qur'an as the path to learning. Islam, therefore, is seen as a fundamental influence on the HRD within the Omani financial sector. Islam has also influenced the way that the financial sector is operating in the country, which has resulted in Islamic banks that specifically comply with Sharia law and its practical implications. Given this strong influence of Islam, successful HRD policies and practices in the financial sector must adhere to the Islamic religion. However, some studies have shown that most institutions in the Middle East are still adopting the Western approach of training and

development (Garavan and Carbery, 2012). Such approaches might lead to some positive outcomes; however, a large number of scholars have called for a more contextualised HRD system that suits particular cultural and institutional contexts (McLean, Osman-Gani and Cho 2004).

In addition, Islamic values have also played an important role in shaping the HRD system in the Omani financial sector. For instance, the prophet Mohammed is viewed through the concept of 'behaviour modelling', which is well recognised in HRD theory and practice (Syed and Ali, 2010). According to Social Learning Theory (SLT), people tend to learn from things they see, observe or experience in a hands-on way. Behaviour modelling in the workplace, as part of SLT, is the act of showing workers how to do, or deal with something through the process of imitating the modelled behaviour. Behaviour modelling in the financial sector has practical applications for daily work duties, as well as deeper applications for developing organisational cultures. Galanou and Farrag (2015) argued that HRD practices in Muslim majority countries are more likely to be more effective if they are linked to the Islamic behaviour role model represented by Mohammed. This is how HRD practices in Muslim countries have been implemented, compared to HRD practices in non-Muslim countries (Khan and Sheikh, 2012).

In terms of the national culture, in Oman there is still a focus on oral-based learning and interpersonal interaction (Porcaro, 2014). Trainers or instructors tend to be the sources of authority in the training room. This might be related to the argument made by Hofstede (1984). According to his cultural dimensions, Oman can be considered high in power distance culture, where learning tends to be driven by hierarchy and a top-down approach. He demonstrates that national cultures will impact training design where organisations intend to adopt formalised tasks and specific ways of teaching. In most Omani financial organisations, learning tends to be based on formal lecture rather than case-study, problem solving activities and role playing (Porcaro, 2014), which again confirms the influence of social preference among people in the country. Therefore, a standardized approach to HRD design is more likely to be used. The proposed training practices has clear objectives, a timetable, and structured learning methods. Participants often enjoy training exercises that have one correct answer and where there is a reward for accuracy (Moideenkutty et al., 2011). It is also important to note that HRD within Oman's financial sector is supported by strong learning standards and procedures and that the competence of the training is certified.

Given the above discussion, empirical evidence showed limited knowledge regarding Oman's financial sector's enhancement of the concept of self-efficacy (Alhejji and Garavan 2017). Self-efficacy is defined as an employee's belief in his or her ability to complete a given task effectively. Employees with high self-efficacy are more likely to take responsibility and accountability for their own learning growth and career development. Offering opportunities in training for employees to achieve success in their job can help them build self-efficacy, as they build confidence in their abilities. However, Aycan et al., (2007) concluded that organisations in collectivist cultures (e.g. Oman) will adjust less to the freedom of choice and autonomy

in relation to training and development. This means that organisations in the financial sector will emphasis mandatory training attendance and less focus on self-efficacy and/or voluntary training attendance.

6. EDUCATION CONTEXT

The United Nations Human Development Index (HDI) offers a rich source for analysing the national HRD system in most countries around the world. The HDI integrates three basic dimensions of human development: life expectancy at birth, mean years of schooling, and gross national income per capita. A 2016 United Nations Development Program (UNDP) report showed that some progress has already been made globally. The HDI proposed scores ranging from 0-1.000 and categorises countries into low HDI (<0.500), medium HDI (0.500-0.700), high HDI (0.700-0.800), and very high HDI (>0.800). In 2014, for example, Oman was classified to be in the high HDI with a score of 0.796. It is also important to note that in 2014 Oman HDI was ranked amongst the highest compared to the last 10 years. However, by the end of 2016 Oman's HDI ranked last among Arab Gulf countries and 52nd among 138 countries in the world.

Since its independency, the Omani government has invested heavily in its education system, aiming to enhance the national HRD system. The educational strategy in the country served as a constructive reference for enhancing national education polices and for guiding the development of all stages and types of education (Porcaro, 2014). Oman's higher education system, however, is considered to be at the development stage, as the first public university (Sultan Qaboos University) was established in 1986. During the mid-1990s, the government allowed private institutions in the Sultanate to participate in the development of the educational system. There are now 7 private universities and approximately 25 colleges providing a number of educational and vocational training majors. The government has stressed the need to develop more technical education and vocational training systems in order to promote national human capital and to meet the economic demands in the Sultanate. However, the privatisation of the higher education system in Oman is a recent market orientation phenomenon; with only one, limited study that attempted to evaluate its effectiveness to the national HRD system (Al-Lamki, 2002). There is an urgent need to increase the impact of education privatisation on the role of the national HRD system. This is important because education is seen as a key driver in the successful implementation of HRD systems in financial institutions (Budhwar et al., 2010).

The financial sector has played a pivotal role in enhancing the education system in Oman. As the government sponsored a number of high school graduates (based on their grades) to study in local and international universities and colleges, a large proportion of students are still relying on banks to provide them with the financial support they need to further their education. According to local figures in 2017, there were around 4,000 students who have taken loans from privately funded banks for the purpose of education. This has made potential graduates feel under pressure about bank loan repayments, particularly in a tight employment market (Swailles et al., 2012). The absence of well-established mechanisms

for student loans is one of the important gaps that still needs to be addressed by the financial sector in Oman (Al-Lamki, 2002). This absence might impact the way that students perform, which in turn might impact the national HRD system in the long term (Budhwar et al., 2010).

In addition, it has been argued that the majority of local people hold qualifications that are somewhat unrelated to the current market needs (Aycan et al., 2007). Although the majority of universities and colleges in the Sultanate of Oman are attempting to respond to the growing demand for highly-skilled graduates to join the financial sector, empirical evidence has shown that graduates are still lacking the skills that employers actually need. Despite the growing number of jobseekers, the skills gap is evident in the region, and potential employers are finding it hard to find candidates who meet the requirements. Budhwar et al., (2002) found that even when locals are employed, they are still lacking the appropriate skills, including entrepreneurship, written communication, time management, critical thinking skills, and leadership skills. The focus on creative thinking skills, and on those who have a global mind-set, are also lacking among fresh graduates, as well as experienced Omani employees.

6.1 VOCATIONAL TRAINING

Since 1988, the government has established a number of vocational training institutions to respond to high unemployment rate among youth, as well as to promote national human capital to reflect the high market demands. Vocational training, in the Omani context, is an integral part of the education system and sets to enhance the production process and the acquisition of knowledge and skills (Harry, 2007). Some citizens are receiving scholarships annually under the Council of Higher Education programs, which intended to enhance the development of human resources. The evaluation of the continuous vocational training locally and internationally, monitored by the Ministry of National Economy, is an important part of the vision for success 2020 (Porcaro, 2014). To ensure the effectiveness of these programs, the government initiated five-year development plans to promote participation of various national activities.

Despite such progress, empirical evidence has shown that in most Omani organisations, there is still limited implementation of a number of HRD practices at various levels (Al-Hamadi et al., 2007). Studies highlighted that Omani managers hold responsibility for the strategic HRD system in their organisations. Within this functional responsibility, HRD systems are seen as an important function in personal management, and were "subjected to a bureaucratization of procedures to ensure that decisions and actions were consistent, formalized and systematically addressed activities through a pre-defined application of rules and processes" (Brown, 2004, p.306). Training and development in Omani organisations, according to Aycan et al., (2007), were highly centralized and led by powerful actors that were in charge of all strategic decision making processes.

The Institution of Public Administration and the College of Banking and Financial

Studies are the primary training bodies for the financial sector. These two institutions aim to offer continuous training and development activities to enhance the skills among current professionals and for those learning a new profession. However, most of the programs provided are considered to be off-the-job training (Moideenkutty et al., 2011). Off-the-job training typically takes the form of interactive workshops and programs with a strong educational focus (Alhejji, Garavan, Carbery, O'Brien, and McGuire., 2016). It may focus more on the general principles of a given topic, rather than on customisation of content to particular contexts. On-the-job training programs, in contrast, occur as part of normal day to day work activities and will normally be delivered as part of the job or through the use of technology. Garavan (1997) suggested that on-the-job training will have a strong task and results focus, and it can be undertaken as part of coaching, mentoring, instruction, and other blended learning approaches. Therefore, financial institutions in Oman are required to stress the need for on-the-job training, given its focus on application of learning on the job.

7. DEMOGRAPHIC STRUCTURE

According to the World Bank, the Omani population has increased from 551,737 in 1960 to 4.7 million in 2016. What distinguished the Omani population from its neighbours is that approximately 73% of the population is urban, with a median age of around 30 years old. This highlights that the population is considered to be young in scope. The youth population (under 25 years) represents almost half of the total population. As the population continues to increase each year, Omani government entities are required to provide the necessary adjustments for such growth, including basic education, vocational training, and job opportunities. The World Economic Forum has warned Oman, along with other countries in the region, to prepare for such demographic changes in the population, which could result in 'youth dividend' or 'youth liability'. This socio-economic change might lead to a potential conflict and instability in the design and implementation of HRD systems within the financial sector.

The fast growth of the youth demographic in Oman is likely to gradually face some constraints in the near future. The World Bank (2010) estimated that more than 50% of the population is under the age of 25 years. This massive increase in the youth population represents challenges and opportunities for the financial sector, as they are required to contribute to their educational and employment achievement. By 2020, Oman, along with its neighbours, will be considered among the fastest-growing populations in the world. It is surprising, however, to see that the majority of policy-makers, as well as employers, view the increasing size of the youth population as problematic, not as an asset that can be capitalised upon and used as a powerful means to introduce and promote economic development (Forstenlechner, Lettice, and Özbilgin, 2012). Al-Lamki (2005) argued that the absence of a clear strategic vision by government and business leaders has not solved this issue. There is a need for more interaction between educational institutions and organisations, which will help guide human and economic development in the future.

This indicates that much needs to be implemented for the Omani government to capitalise on their youth population. Bontenbal and Aziz (2013) argued that the main windows for reform lie within the education system and the labour market. There still exists a

major gap between college graduates and market needs. Alhejji and Garavan (2016) argued that the education system in Oman has failed to enhance students' skills and abilities to meet the market demand, including technical and leadership skills. There is still time to prepare students to compete in a labour market dominated by expatriate and foreign employees. In fact, there is still a strong dependency on expatriate and foreign workers, who work mainly in private sectors, whereas local nationals tend to favour public sector jobs because of low working hours, high job security, and low workload (Alserhan, Forstenlechner, and Al-Nakeeb, 2009). The high unemployment rate among Omani nationals continues to pose a major challenge to political leaders as well as to the HRD system in the financial sector (Mellahi, 2007).

8. GENDER IMBALANCE

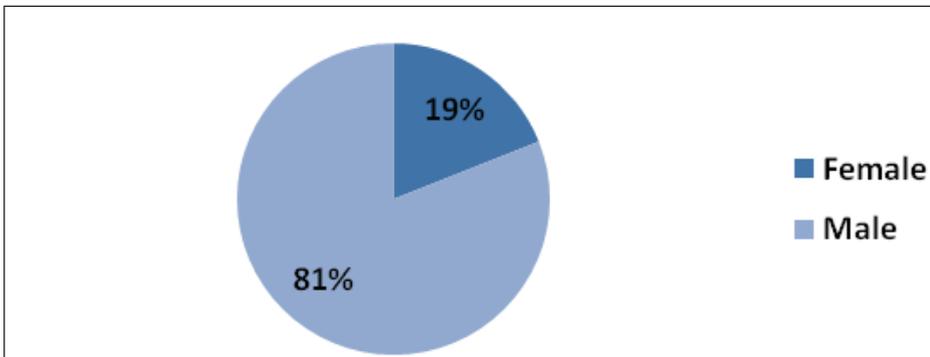
Cultural norms and local tradition play a major role in defining and shaping the role of women in the Sultanate of Oman. As people in the country value family and tradition, any practice that appears to threaten the traditional family structure may meet resistance (Tlaiss and Kauser, 2011). Within such a society, the role of women is perceived to be mainly that of housewife and mother. Even when married women work, they usually suffer in balancing between the role of family and work due to a lack of child care and maternity policies (Metcalf, 2007). This tradition has also imposed a restriction on women's mobility and empowerment. Furthermore, research has found that women in most Arab Middle East countries lack proper education or appropriate skills (Hutchings, Lirio, and Metcalfe, 2012). Although the situation in Oman is slightly different (female college students represent more than 75% in total), studies found that education systems in Oman have not met the demand of the labour market (Mellahi, 2007). There is a major gap between what organisations require and what women graduates can offer. The nature of Oman's economy has also limited the supply and demand of female workers. The country relies heavily on oil production, which requires technical and mechanical skills, skills that women in the region lack (Alhejji, Ng, Garavan, and Carbery, 2016).

Individual attitudes and organisational work environments have been widely discussed as a major issue of gender employment in the Omani labour market (Aycan et al., 2007). Research has found that Omani males believe that they are more dominant, independent, and capable of leadership positions, whereas females are viewed as dependent and excellent in household activities. Hutchings et al., (2010) found that male dominated and corporate attitudes in Arab countries are the major obstacles for women's career advancement. In addition, the literature on gender diversity has shown that location of one organisation may limit female choices to pursue domestic or international job assignments because of mobility restriction and social factors (Metcalf, 2007). This would explain the low level of female representation in the leadership roles within the financial sectors. Despite government support of females in leadership, local statistics show that females represent less than 10% of leadership roles (Al-Lamky, 2007).

Gender imbalance in the managerial role, therefore, is seen as a major obstacle in advancing the HRD system in the Omani financial sector. Despite enormous development in educational attainment, the participation rate of females within the labour market in general,

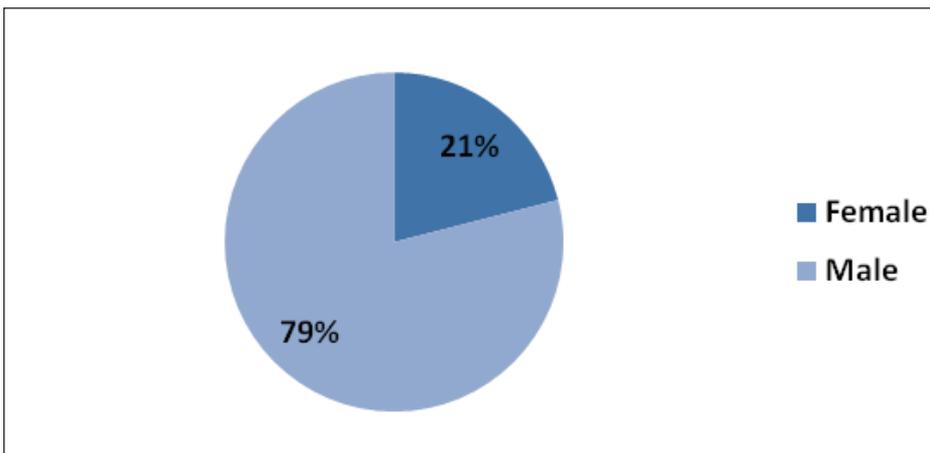
and the financial sector in particular, is estimated to be as low as 19% and 21%, respectively (see figure 2 and 3). These figures indicate that there are a large number of Omani females outside the labour market. While an increasing number of females have begun to join the labour market, many are still struggling to secure job opportunities. There is still a need to change the perception of traditional norms and traditions towards female employment in the Sultanate. Yet, most private sector jobs are not ready to accommodate Omani female employees (Katou et al., 2010). Employment work-life balance practices and childcare policies are not widely implemented or enforced in the financial sectors. The government, however, required organisations in the Sultanate to hire local females, under the Omanisation policies (Al-Lamki, 2005), and make the workplace more attractive to them, to reflect the moral structure and fabric of Islamic values. Managers still believe that engaging females as leaders in Oman's financial sector workplace is undesirable practice, given the country's norms and traditions (Issan, 2010).

Figure 2: labour workforce by gender in the Omani workforce in 2015



Sources: United Nations Conference on Trade and Development

Figure 3: labour workforce by gender in the Omani Financial Sector in 2015



Sources: Sultanate Oman Ministry of Finance

9. CONCLUSION

This chapter has discussed a number of forces that impact the HRD in Oman's financial sector. It has outlined that the legal, economic, cultural, and demographic structure of the population has played a critical role in the context of HRD systems. To meet these challenges, the government needs to transition from an oil-based economy to a knowledge-based economy, promote the employment of locals in the financial sector and elsewhere, and close the gender gap in employment. Although the government has already initiated plans for future development, there is a need to take into consideration the influx of skilled labour in the country, to maintain growth in the financial sector. There is also a need to intensively address HRD in the Omani financial sector through a number of professional organisations, including training and development, career development, leadership development, and other components.

Financial sector institutions are also required to ensure that HRD policies and practices are well integrated, with wider management practices to enhance individual, group and organisational outcomes. Financial sector institutions need to take an active part in promoting national HRD through systematic training and development practices. It is also important to ensure that training needs assessment analysis is well-implemented at different levels. The evaluation of training programs should be broader and include several actors to ensure a thorough assessment of such training. This is a critical aspect, as most organisations in Oman are still relying on self-report evaluations when assessing training effectiveness (Aycan et al., 2007).

REFERENCES

- Al-Hamadi, A. B., Budhwar, P. S., and Shipton, H. (2007). Management of human resources in Oman. *The International Journal of Human Resource Management*, 18(1), 100-113.
- Al-Lamki, S. M. (2002). Higher education in the Sultanate of Oman: The challenge of access, equity and privatization. *Journal of Higher Education Policy and Management*, 24(1), 75-86.
- Al-Lamki, S. M. (2005). The role of the private sector in Omanization: the case of the banking industry in the Sultanate of Oman. *International Journal of Management*, 22(2), 176.
- Al-Lamky, A. (2007). Feminizing leadership in Arab societies: the perspectives of Omani female leaders. *Women in Management Review*, 22(1), 49-67.
- Alhejji, H., and Garavan, T. (2017). IHRD in international non-governmental organisations, nonprofit and public sector. In T. Garavan, A. M. McCarthy and R. Carbery (Eds.), *Handbook of International Human Resource Development: Context, Processes and People* (pp. 52-75). Cheltenham, UK: Edward Elgar.

- Alhejji, H., Garavan, T., Carbery, R., O'Brien, F., and McGuire, D. (2016). Diversity training programme outcomes: A systematic review. *Human Resource Development Quarterly*. doi: 10.1002/hrdq.21221
- Alhejji, H., Ng, E. S., Garavan, T., and Carbery, R. (2016). The Impact of Formal and Informal Distance on Gender Equality Approaches: The Case of a British MNC in Saudi Arabia. *Thunderbird International Business Review*. DOI: 10.1002/tie.21828
- Alhejji, H. A., and Garavan, T. N. (2016). Human Resource Development in the Middle East. *Global Human Resource Development: Regional and Country Perspectives*, eds T. N. Garavan, A. M. McCarthy, and M. J. Morley. London: Routledge.
- Alserhan, B. A., Forstenlechner, I., and Al-Nakeeb, A. (2009). Employees' attitudes towards diversity in a non-western context. *Employee Relations*, 32(1), 42-55. doi: 10.1108/01425451011002752
- Al-Waqfi, M. A., and Forstenlechner, I. (2012). Of private sector fear and prejudice: The case of young citizens in an oil-rich Arabian Gulf economy. *Personnel Review*, 41(5), 609-629.
- Aycan, Z., Al-Hamadi, A. B., Davis, A., and Budhwar, P. (2007). Cultural orientations and preferences for HRM policies and practices: the case of Oman. *The International Journal of Human Resource Management*, 18(1), 11-32.
- Bontenbal, M., and Aziz, H. (2013). Oman's Tourism Industry: Student Career Perceptions and Attitudes. *Journal of Arabian Studies*, 3(2), 232-248.
- Brown, K. (2004). Human resource management in the public sector. *Public management review*, 6(3), 303-309.
- Budhwar, P. S., Al-Yahmadi, S., and Debrah, Y. (2002). Human resource development in the Sultanate of Oman. *International Journal of Training and Development*, 6(3), 198-215.
- Budhwar, P. S., Mellahi, K., Katou, A. A., Budhwar, P. S., Woldu, H., and Basit Al-Hamadi, A. (2010). Influence of ethical beliefs, national culture and institutions on preferences for HRM in Oman. *Personnel Review*, 39(6), 728-745.
- Budhwar, P. S., and Sparrow, P. R. (2002). An integrative framework for understanding cross-national human resource management practices. *Human Resource Management Review*, 12(3), 377-403.
- Cook, P., and Uchida, Y. (2003). Privatisation and economic growth in developing countries. *The Journal of Development Studies*, 39(6), 121-154.
- Fasano, U., and Iqbal, Z. (2003). GCC countries: from oil dependence to diversification: International Monetary Fund.
- Forstenlechner, I., Lettice, F., and Özbilgin, M. F. (2012). Questioning quotas: Applying a relational framework for diversity management practices in the United Arab Emirates. *Human Resource Management Journal*, 22(3), 299-315. doi: 10.1111/j.1748-8583.2011.00174.x

- Galanou, A., and Farrag, D. A. (2015). Towards the distinctive Islamic mode of leadership in business. *Journal of Management Development*, 34(8), 882-900.
- Garavan, T. N., and Carbery, R. (2012). A review of international HRD: incorporating a global HRD construct. *European Journal of Training and Development*, 36(2/3), 129-157.
- Garavan, T. N. (1997). Training, development, education and learning: different or the same? *Journal of European Industrial Training*, 21(2), 39-50.
- Garavan, T. N., Hogan, C., and Cahir-O'Donnell, A. (2003). *Making training and development work: a "best practice" guide*: Oak Tree Press.
- Harry, W. (2007). Employment creation and localization: the crucial human resource issues for the GCC. *The International Journal of Human Resource Management*, 18(1), 132-146.
- Herb, M. (2009). A nation of bureaucrats: Political participation and economic diversification in Kuwait and the United Arab Emirates. *International Journal of Middle East Studies*, 41(3), 375-395.
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values (Vol. 5)*: sage.
- Hutchings, K., Dawn Metcalfe, B., and Cooper, B. K. (2010). Exploring Arab Middle Eastern women's perceptions of barriers to, and facilitators of, international management opportunities. *The International Journal of Human Resource Management*, 21(1), 61-83.
- Hutchings, K., Lirio, P., and Metcalfe, B. D. (2012). Gender, globalisation and development: a re-evaluation of the nature of women's global work. *The International Journal of Human Resource Management*, 23(9), 1763-1787.
- Issan, S. A. Y. (2010). Preparing for the Women of the Future: Literacy and Development in the Sultanate of Oman. *Hawwa*, 8(2), 120-153.
- Katou, A. A., Budhwar, P. S., Woldu, H., and Al-Hamadi, A. (2010). Influence of ethical beliefs, national culture and institutions on preferences for HRM in Oman. *Personnel Review*, 39(6), 728-745.
- Khan, M. B. K., and Sheikh, N. N. (2012). Human resource development, motivation and Islam. *Journal of Management Development*, 31(10), 1021-1034.
- Knowles, M. S., Holton, E. F., and Swanson, R. A. (1998). *The adult learner: The definite classic in adult education and human resource development*: Gulf Publishing Company.
- McGuire, D. (2014). *Human resource development*: Sage.
- McLean, G. N., Osman-Gani, A. M., and Cho, E. (2004). Human resource development as national policy. *Advances in Developing Human Resources*, 6(3), 265-268.
- Mellahi, K. (2007). *The effect of regulations on HRM: Private sector firms in Saudi Arabia*.

- The International Journal of Human Resource Management, 18(1), 85-99. doi: 10.1080/09585190601068359
- Metcalfe, B. D. (2007). Gender and human resource management in the Middle East. *The International Journal of Human Resource Management*, 18(1), 54-74.
- Moideenkutty, U., Al-Lamki, A., and Murthy, Y. (2011). HRM practices and organizational performance in Oman. *Personnel Review*, 40(2), 239-251.
- Porcaro, D. S. (2014). Educational change in Oman: a design research study of personal, institutional, and societal reactions to collaborative knowledge building. *Technology, Pedagogy and Education*, 23(2), 199-223.
- Sharpley, R. (2002). The challenges of economic diversification through tourism: the case of Abu Dhabi. *International Journal of Tourism Research*, 4(3), 221-235.
- Sidani, Y., and Al Ariss, A. (2014). Institutional and corporate drivers of global talent management: Evidence from the Arab Gulf region. *Journal of World Business*, 49(2).
- Swailles, S., Al Said, L., and Al Fahdi, S. (2012). Localisation policy in Oman: a psychological contracting interpretation. *International Journal of Public Sector Management*, 25(5), 357-372.
- Syed, J. (2008). A context-specific perspective of equal employment opportunity in Islamic societies. *Asia Pacific Journal of Management*, 25(1), 135-151. doi: 10.1007/s10490-007-9051-6
- Syed, J., and Ali, A. J. (2010). Principles of employment relations in Islam: a normative view. *Employee Relations*, 32(5), 454-469. doi: 10.1108/01425451011061630
- Tayeb, M. (1997). Islamic revival in Asia and human resource management. *Employee relations*, 19(4), 352-364.
- Tlaiss, H., and Kauser, S. (2011). The impact of gender, family, and work on the career advancement of Lebanese women managers. *Gender in Management: An International Journal*, 26(1), 8-36.
- World Bank (2010). *Doing business in the Arab world 2012*. Accessed 15 July 2017. <http://www.doingbusiness.org/~media/WBG/DoingBusiness/Documents/Special-Reports/DB12-ArabWorld.pdf>
- United Nations Conference on Trade and Development. Accessed 18 July 2017, <http://unctadstat.unctad.org/CountryProfile/GeneralProfile/en-GB/512/index.html>

Chapter 15

TIDING OVER TURBULENT TIMES: COMPETENCIES REQUIRED FOR FINANCE PROFESSIONALS

Venkatesh Palakkad

ABSTRACT

The Economic turmoil which the world has been witnessing over the last few years has resulted in challenging business situations summarized by the acronym VUCA. (Volatility, Uncertainty, Complexity, Ambiguity) The Financial Services Industry had to develop and adapt to the changed scenario. In addition to high level technical skills in terms of Economic modelling and Predictive analytics, finance professionals had to develop a variety of behavioral competencies to help them tide over this extraordinary economic situation. This article examines these key behavioral competencies and articulates how they are relevant to combat the VUCA phenomenon

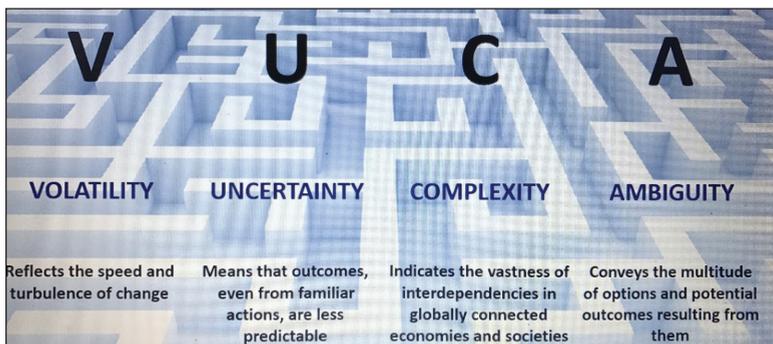
Keywords: VUCA, financial Industry behavioral competencies

1. INTRODUCTION

Global uncertainties are increasing day by day, complexity of doing business is growing multifold. Such a complex business environment brings multifarious challenges to professionals in business. Challenges and opportunities are striking organizations at lightning speed without warning. There is no time or opportunity to do a detailed SWOT analysis since the speed of change is getting faster day by day. The World economy has experienced maximum turbulence in the last twelve years when compared to the last thirty years. (Sullivan, 2012).

The various elements of the uncertain economic condition are summarized as the VUCA phenomenon:

Figure 1: VUCA Model



Source: Compiled by the Author

Volatility represents the speed and turbulence of change. Trade liberalization, global competition and business model innovation has been repeatedly disrupting the economy.—

Uncertainty means the outcomes, even from familiar actions, are becoming less predictable. Past events are no more predictors of future events or outcomes. Forecasting and predicting economic outcomes is becoming more and more challenging. (Sullivan, 2012)

Complexity indicates the vastness of interdependencies in globally connected economies and societies. There are numerous causes and mitigating factors inside and outside an organization. These layers of complexities added to the turbulence of change and absence of past predictors adds to the difficulty of decision makers and leads to more confusion and chaos. (Sullivan, 2012)

Ambiguity conveys the multitude of options and potential outcomes resulting from them. Causes behind who, what, where, how and why are becoming difficult to ascertain. (Sullivan, 2012)

A level of frustration is setting in when compartmentalized accomplishments fail to add up to comprehensive or enduring success. (Kail, 2010)

The notion of VUCA was introduced by the U.S. Army War College to describe the more volatile, uncertain, complex, and ambiguous, multilateral world which resulted from the end of the Cold War (Kinsinger and Walch, 2012; Horney et al, 2010). The acronym itself was not created until the late 1990s, and it was not until the terrorist attacks of September 11, 2001 (commonly known as 9/11), that notion and acronym really took hold, but really gained currency in the private sector with the onset of the financial crisis in 2008-2009, when companies and organizations all over the world suddenly found themselves faced with similar turbulence in their business environments and, subsequently, in their business models (Lawrence, 2013; Kinsinger and Walch, 2012). VUCA was subsequently adopted by strategic business leaders to describe the chaotic, turbulent, and rapidly changing business environment that has become the “new normal” (Lawrence, 2013).

In this volatile world more and more companies would strive to become “Velcro organisations’ where people and capacity can be rearranged or recombined creatively and quickly without any major structural changes. (Prahalad, 2009)

The Financial Services Industry bears the brunt of the vagaries of the economy since it front ends the economic world and is expected to devise strategies and plans to tide over turbulent times. Financial services professionals therefore need to develop very different skills and competencies to combat various aspects of VUCA.

Financial Industry leaders will be required to be visionaries, thinking ahead of time and making informed business decisions. They need to be people who can Stop, Look and listen and look beyond their own functional areas. They should be able to sift over complex information and develop the ability to make sense out of the chaos. They should be able to communicate effectively across organizations and move quickly to apply solutions.

These skills, abilities and attitude do not come so easily and finance professionals need to develop very specific competencies to be successful in today's challenging economic times.

Following are specific behavioral competencies which financial Industry Professionals should develop to ensure that they effectively combat VUCA.

2. COLLABORATIVE WORKING

Working in Functional Silos will no longer prove to be effective. Finance professionals should develop the ability to work collaboratively across the organization (Nick Horney, 2010).

They cannot depend on relying only on the inputs and information generated by their own department but will have to work collaboratively to ensure that they network and work across the organization and have access to every possible information available.

This would necessitate collaboration in work processes, job roles measures and rewards. Finance professionals need to identify key relationships in which both sides benefit from collaborative innovation. Their work methods should have collaborative working styles and spaces in which people across geographies, locations and departments can work together.

In today's globalized context it is not necessary that a team member is someone who sits in the same geographical or physical location. Team members could be geographically spread and may be working from a remote location in some part of the world. In the absence of physical proximity of team members, professionals should be skilled in using collaborative working tools to ensure that the teams work in a cohesive manner and supports and encourages each other in achieving their goals.

Hierarchies and seniority are no longer primary determining factors in a person's ability to contribute. The relevance and value of the information which one brings to the table is more significant. Organization structures within financial services companies should therefore be more flat, cross functional and team based with very less reliance on hierarchy to ensure collaborative working and innovation. Senior executives should specifically develop the ability to connect and work with people from different cultures, age groups and functional specializations.

3. IMPACTFUL COMMUNICATION

Professionals who exhibit this behavior will communicate with others confidently; have thorough conversational knowledge of the subject of discussions be well prepared and also relate very well with people across situations. People will be comfortable and confident having conversations and sharing information with these professionals. These individuals will also be very impactful in their presentations and will deliver them with skill and confidence.

In the Financial services industry this trait is perceived as very effective. The ability with

which one delivers data and ensures that people on the other side of the table understand and assimilate the information is a key element in the success of a financial industry professional.

For some people this is an innate ability, but for many others this needs to be honed and developed. Therefore, in early stages of a professional's career there must be sufficient emphasis and importance to nurture this trait.

Educational institutions have a great responsibility to ensure that sufficient opportunities are given for students pursuing education in financial services courses to develop this trait. As part of the curriculum there must be requirements specified for analyzing and presenting data to an informed audience, which should be critiqued and candid feedback provided to the presenter so that areas for improvement can be identified and worked upon.

There are also numerous resources such as Toastmasters and Ted Talks which provides a platform and support system for speakers to develop confidence and students must be encouraged to participate and benefit from them.

4. BUILDING NETWORKS

It must be clearly understood that the Financial Services Industry thrives on building relationships and trust. What differentiates a successful financial professional from one who is not is the ability to build powerful networks.

A professional who exhibits this behavior is someone who will take the initiative to maintain new contacts, develop strong and productive relationships and communicate frequently with a network of contacts. This does not happen easily and professionals need to invest sufficient time and effort to build a powerful web of connections around themselves. To achieve this there needs to be a genuine interest in connecting and networking with people, to willingly support those in one's network at times of need.

An example of the power of networking is the professional social media network LinkedIn. LinkedIn helps professionals to connect and maintain their networks over an extended period. Sufficient effort needs to be made to ensure that one builds the appropriate network which benefits oneself and the people in the network.

Other key networking tools are groups, blogs and professional forums in which professionals interact. The sharing of knowledge and information and the professional camaraderie these forums bring can be very useful and one in building a powerful web of connections across the world.

While the power of the social media in building networks is tremendous, nothing can substitute informal meetings shared with colleagues. The power of this personal connect is key in the success of a finance Industry Professional.

The power of networking should be instilled early in the minds of young professionals.

The time to start building the right network is when one is at university. Taking part in professional symposiums, conferences and presenting papers in workshops is also important in building powerful connections

5. SUPPORTING TEAM WORK

Professionals who exhibit this behavior will prioritise the needs of the team, to support and encourage others to work together.

Professionals must work and improve their cooperative team skills. In today's world, while individual achievements and credentials are important, equally important are achievements as a team. The ability to work as part of a team or lead a team in achieving a goal is of prime importance in one's effectiveness in the work place. Also, the strong bonds which can develop when a team works towards achieving a difficult goal can be very rewarding professionally and personally.

Giving credits to the original contributor of an idea and acknowledging and recognizing the same in public forums is a key enabler in ensuring the success of a team working environment.

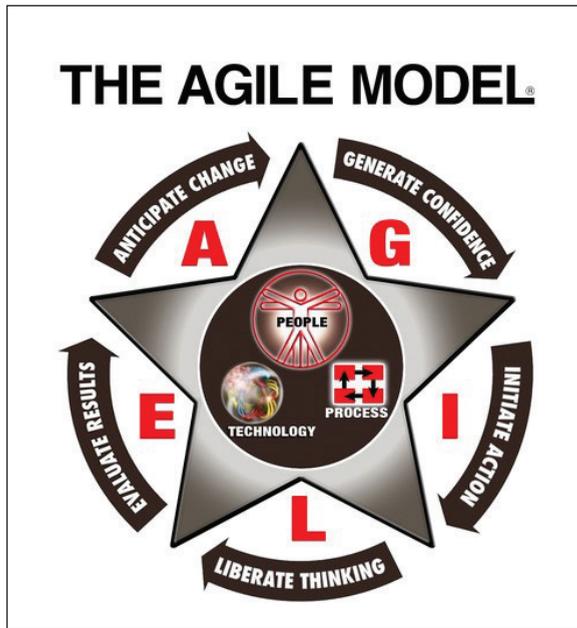
One advantage of geographically spread out teams is the speed in which projects can be delivered. Effective collaboration tools ensure that work in progress may be handed over to a team in another time zone at the end of a working day, so that work can be continued by the new team and handed over to yet another team working in another time zone, at the end of their working day.

Team work has been rated as one of the top competencies to counter the VUCA W world and therefore financial services professionals should master the techniques and skills and develop a mindset which fosters such an environment.

6. AGILITY

Agility is another core and behavioral trait required in every leader in general and a financial professional specifically. Agility could be described as the capability to dynamically sense and respond to changes in the business environment with actions which are focused, fast and flexible. This refers to a financial professional's ability to anticipate change in advance and have a tangible plan of action to manage the change with minimal adversities.

Agility is something every successful financial industry professional should possess in rich measures. The agile Model of Leadership also applies to professionals from financial services industry (Nick Horney, et al., 2010). The Model refers to five key elements which determine agility in a business professional.



Source: Nick Horney, et al., 2010)

Anticipating change means interpreting the potential impact of business turbulence and trends along with the implications for the enterprise. Armed with the power of data and the skills to interpret and analyze them a finance professional can have a distinct advantage.

Generating confidence involves creating a culture of confidence and engagement of all associates into effective and collaborative teams. This specific trait is more on the People Quadrant and primarily focusses on the ability of a professional to have a confident team who share the same beliefs and ideas on managing change.

Initiating action refers to individuals providing the energy and the systems to make things happen proactively and responsively at all levels of the organization; the power of any action being in its execution. Finance professionals should work on their ability to execute plans and actions. Execution forms a very important role in countering VUCA since it is that part of the plan where professionals keep their foot on the ground and start facing reality.

To liberate thinking means creating the conditions for fresh solutions by empowering, encouraging and teaching others to be innovative. One of the most critical traits in today's challenging work environment is to nurture innovation and creativity in one's own way of working and also permeate the same across teams. Extraordinary ideas are required to counter exceptional problems and this is the only way to bring in such creative thinking and an innovative approach. This is the cycle of a process in which one looks at performance or results and reflects on what went well and what could have gone better, in order to provide real time feedback. It is important to keeping the focus keep focused and manage knowledge

to learn and improve from actions. This phase involves the ability to interpret data using performance metrics grounded in solid information management, thus allowing reliable insights and conclusions.

7. LOGICAL REASONING AND CRITICAL THINKING SKILLS

In numerous studies and models, possessing a high level of Logical Reasoning and critical thinking skills have been mentioned as critical success factors for succeeding in a VUCA Environment. This is an overarching competency which ensures success in all the competencies mentioned above. This ability allows one to connect the dots and make sense out of chaos and take logical and rational decisions. Defying popular thinking, not all finance professionals are high on these skills and therefore finance professionals should inculcate this ability from an early stage of their career. Unlike several other competencies which are dubbed as inborn and naturally present in individuals, critical thinking skills are ones which can be nurtured. Once again educational institutions will play a major role in developing this skill among budding finance professionals by having a curriculum which pushes upcoming finance professionals to sharpen their logical and reasoning skills. Numerous aptitude tests for recruiting Finance professionals have now started placing reliance on this competency and consider it as a good predictor of a successful finance professional.

8. CONCLUSION

An uncertain economy often brings in job insecurity, instability, cost implications and can be emotionally challenging. The volatility, uncertainty, complexity, and ambiguity inherent in today's business world is the "new normal", and it is profoundly changing not only how organizations do business, but how business leaders lead. The skills and abilities financial professionals once needed to help their organizations thrive are no longer sufficient. Today, specific behavioral competencies as discussed above are required for Finance Professionals and HR and talent management professionals in the financial services industry can help their organizations succeed in today's VUCA environment by developing leaders who possess the above-mentioned competencies. Specific developmental plans in an organization's specific context should be put in place for emerging leaders in the financial services industry and training, mentoring, projects and on the job programs should be designed to develop these competencies. There has been considerable advancement in psychometrics today and extremely good assessment tools and assessment centers are available which will aid the talent management professionals with identifying appropriate developmental gaps in professionals and putting together a fit for purpose developmental plan. Likewise, educational institutions should also ensure that there is sufficient scope in their curriculum to nurture and develop these behavioral competencies and they produce well rounded professionals who are technically and behaviorally competent to effectively counter this VUCA world.

REFERENCES

- Manash Kumar Sahu and Arun Kumar Panda (2016). A VUCA Metric Analysis of organized retail sector in India. *European Journal of Business and Management*, 8(31).
- Kirk Lawrence (2013). *Developing Leaders in a Vuca Environment*, Kenan- Flagler business School, UNC Executive Development.
- Nick Horney, Bill Pasmore and Tom O shee (2010). Leadership agility a business imperative for a Vuca world. *People and Strategy*, 33(4).
- Paul GH Schoemaker (2015). *Strategic Approaches to Managing Uncertainty*. *Decision Strategies and Wharton*. October, 19, 2015.
- Kornferry Hay Group. Kornferry Leadership Architect (KFLA) Competencies formerly called as the Loominger leadership Competencies.



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