BANKING BEHAVIOUR TOWARDS SMALL BUSINESS FINANCING IN THE UAE: SUPPLY-SIDE ASSESSMENT BASED ON IMPORTANCE PERFORMANCE MAP ANALYSIS

Sayed Abbas Ahmed, Ajman University, UAE
Ibrahim Elsiddig Ahmed, Ajman University, UAE
Kiran Mir Zafarullah Khan, Ajman University, UAE

ABSTRACT

Financing of small and medium enterprises is one of the main challenges in the UAE and worldwide. The absence of development banks adds additional burden on commercial banks to play a significant role in financing SMEs. This study analyzed the supply side through evaluating and ranking the importance of banks' financial variables on lending to SMEs. The study selected twelve local commercial banks in the UAE based on the availability of secondary data over ten years period (2010-2019). The study applies different tools of correlation, regression, and importance-performance map analysis (IPMA) to explain their relationships with SMEs finance and their ranking priority. All the variables have a positive correlation with financing SMEs. In addition, the availability of financial resources and deposits of the banks come in top ranking influence on lending to SMEs.

Keywords: SMEs Finance, Banking Behaviour, Financial Variables, Importance Performance Map Analysis (IPMA).

INTRODUCTION

It is generally recognized that small firms have a very important influence on the future growth of today's economies in terms of optimal allocation of resources, the degree of asset utilization (110%) and mainstay against turbulence change in economies (Ahmed, 2010). In the UAE, small and medium-sized enterprises (SMEs) represent more than 80% of the businesses operating in the economy. It has been empirically proved that much of the investment that has been made by the public sector with so much wasted efforts with an economic loss of 25% as exemplified by the degree of assets utilization ratio as compared to 118% of small firms with the economic gain of 18%. As a result, poverty has increased perceptibly in certain countries (Yemen, Sudan) and employment rate falls down in most MENA region, including the GCC countries (World Bank Group, 2015).

One of the main problems facing small and medium enterprises (SMEs) is the difficulty of getting formal finance from the banking sector. It is an issue of supply and demand but becomes a challenge when there are excess financial resources with the banks not able to provide finance to SMEs. The contribution of small businesses is very visible in all economies (developed or developing) as they provide more job opportunities as compared to other sectors.

There is no one definition for small and medium enterprises but the common components of the definition are the number of employees, size, asset turnover, and capital.

Many studies have investigated the demand side, which considers the ability of SMEs to apply and get finance. On the other hand, the banks evaluate applications from risk evaluation angle and most likely reject such finance as the degree of risk is high.

This study is of the few studies that assess the variable affecting the lending to SMEs from the financial variable of the bank. In many countries, finance to SMEs is provided by development banks, whereas, in the United Arab Emirates (UAE) is generated from commercial banks because they do not have development ones. This special feature adds more importance to conduct this study.

The financing constraints can be especially severe in the case of start-ups or small businesses that rely on intangibles in their business model, as these are highly firm-specific and difficult to use as collateral in traditional debt relations (OECD, 2014).

The objective of this study is not only to highlight the relationship between small business finance and the financial profile of the banks but also to go beyond that to rank their degree of importance and rank the variables accordingly. It is the only study in the region to apply the importance-performance map analysis (IPMA), which is introduced by Ringle and Sarstedt (2016).

Although small businesses have special advantages, they also have special problems and difficulties. The empirical research efforts in the MENA region have identified the finance gap (Ahmed and Kiran, 2018), (Wafaa Sbeiti, 2010), (Al Hassan, 2010) and the entrepreneurial deficiency (Ahmed and Kiran, 2018). Despite its advantages, the small business' position is quite vulnerable as compared to large enterprises. The Donaldson concept (1970) as is exemplified in institutional finance, capital structure, and capitalization rules in the MENA stock market, collateral arrangement and cost of finance. It is quite clear that the Donaldson concept is a rule rather than an exception in the MENA region. The empirical research works have identified that the most crucial problems of small business financing are usually that own capital is insufficient (undercapitalization) and the traditional attitude of bankers all over the world is to be guided primarily by collateral rather than of eligibility Ahmed (2002), Kunt & Maks (1998).

The financial sector in the GCC countries is generally dominated by the banking sector, which is relatively concentrated with a few domestic players dominating the market and the UAE is of no exception. In all six GCC countries, the largest five banks are domestic. In the UAE, the largest domestic banks account for 70-80% of the total banking sector assets (The Central Bank Annual Report, 2017). The UAE has the second largest banking sector in the GCC after Bahrain, with total assets accounting for over 140% of GDP (Al Hassan et al., 2010). Islamic banks have grown and become a prominent source of finance in the UAE. It is observable that the banking density ratio as exemplified by the Goldsmith model (1965) with a degree of positive deviation of more than 100%. The alarming feature in the UAE banking sector is that the Non-performing loans throughout the period 1995-2016 were around 2.4% as the un-weighted ratio and median ratio of 4.3%. This fact provides evidence that the credit risk in the UAE banking sector is quite modest as compared to other GCC countries (Bahrain 90%) and other MENA region countries (Egypt 12%). It is noticeable that there is no positive correlation between credit growth and credit risk in the UAE banking system. In this paper, we investigate the banking behavior towards small business financing. We also explore the relationship between the financial structure, financial resources, lending capacity, and reserve structure and small business financing needs. A better understanding of the banking attitude towards risky finance has

important policy and resource implications. This investigation has a very special feature in the growing financial sector with a low non-performing loan ratio, a high degree of similarity between Islamic and non-Islamic banks in terms of deposit structure and capitalization growth rate.

We address these issues using financial data of selected banks operating in the UAE economy. We have to admit that the data has shortcomings as a small firm is not well defined in the banking sector (institutional gap).

Review of Relevant Literature and Development of Hypotheses

The critical review of the literature on finance reveals that drastic changes have been noted in the ways firms are financed and empirically responding to answer their capital structure puzzles. Petersen and Rajan (1994) asserted that managers of small firms often complain of being unable to borrow enough capital at reasonable terms and rates. This is a rather old and new story starting from McMillan Gap (1931), ending with the 2009 financial crisis and still persistent as the most debatable issue in the post-financial crisis era.

Despite the importance of SMEs finance, there has been relatively little research on the supply-side of bank finance to SMEs. Notable exceptions are Beck, Kunt and Peria (2008 and 2009), Torre, Peria and Sohmuker (2009). Due to the death of data in the GCC countries, banks and small business is a forgotten area of research and investigation. The World Bank Report of 2010 concluded that 'only 20% of SMEs in MENA have a loan or line of credit, and 10% of their investment expenditures are financed by a bank loan.'

A good number of researchers including Stiglitz and Weiss (1981), Kunt and Maks (1998), Owualah (1990) and Johnson (1997) suggest that the unavailability of funds with profitable investment opportunities is due to market frictions such as information asymmetries and agency cost. The economic theory suggests that banks have a comparative advantage as a provider of capital because of their knowledge of customers and the ability to monitor the use of funds as an on-going basis (Ahmed, 1993). Fama (1985) and Diamond (1991) describe the ability of banks in overcoming the information gap. In banking literature, a growing number of the theoretical model focuses on the role of banks in reducing and mitigating the problems associated with external finance under asymmetric information. Berger and Udell (2002) went further in asserting that a strong institutional relationship between small businesses and their lenders is critical to ensure access to and continuity of funds. This is rather borrowing the concept of the Radcliff gap of 1959 in the UK economy.

The banking sector around the world has experienced a profound regulatory and technological change. This has had an impact on capitalization signaled out by Basel Accord and banking density ratio. The World Bank Report (2010) on the status of bank lending to SMEs in the MENA region showed that a large share of GCC banks perceives SMEs as riskier than large enterprises. This is inconsistent with the capitalization practice of GCC banks which on average deviates positively by more than 100% as exemplified by Basel III rating (Sayed & Ibrahim, 2012).

In the selected literature, Rajan & Zingales (1998, 2004) and Kunt & Maks (1998) both examine the relationship between banks, external finance, and firm performance. The criticism that could be levied is to narrow the approach used in defining external finance as narrowly, focusing on long-term finance (equity finance and long-term debt). Theory suggests that firms in countries with a strong legal system are likely to rely on these types of external finance. On the

contrary, in countries with a weaker system, firms need to raise other sources of finance (Beek et al., 2005).

Traditional long-term bank finance is generally inaccessible to small businesses because they lack the required collateral and have no business records (Girabi, 2013; Olusola & Olusola, 2013). Atieno (2009) found out that lack of access to finance is a major constraint facing SMEs thus is one of the reasons for the slow growth of SME firms.

Jude & Adamou (2018) state that "Contrary to the predictions of the pecking order theory, managerial behaviors such as the fear to lose the control of the firm, and overconfidence provide explanations on the decisions of SMEs to seek bank loans. For instance, the fact that debt does not entail any loss of business control urges SMEs to prefer debt than external equity.

Islamic finance has gained significant attention in non-GCC and GCC countries in recent years due to its size, the volume of assets, density ratio, and fast-paced growth. Since its inception in 1975, there are over 300 Islamic banks today in more than 75 countries. In the UAE alone, the total assets of Islamic banks are around $156 billion with a projected annual growth of 12-15%. Archer and Ahmed (2006) indicate that 12% of Islamic banks' assets are circulating in the GCC countries. Kym (2003) presents interesting evidence that Islamic banks like their conventional counterparts are subject to many forms of risk, which may broadly be classified into credit risk and market risk. The concept of project and risk sharing is a point of demarcation between conventional and Islamic banks rather than financial and leverage structure. It was stated by scholars (Siddiqqi 1983, 2006), that Musharaka finance instruments are the appropriate mechanism to eradicate and close the equity gap. This is rather a debatable issue in light of small business difficulties in raising initial and expansionary capital.

Wilkinson & Christensson (2011) examined two policy tools to increase the supply of small business lending: increasing bank capital and reducing problem assets. The results show that both strategies have a statistically significant effect on the supply of small business loans and thus are potentially useful policy tools for expanding the supply of small business loans.

This discussion of the relevant literature related to the access of SMEs to institutional finance as well as financing of investment and capital structure provides evidence that small business financing is lacking the theoretical model. The modification of M and M theory fails to provide an explanation to the financial structure and financial profile of small enterprise (Myers and Majluf, 1984). In an attempt to provide readings to the financing experiences of small business from the supply-side perspective, the following hypotheses have been developed:

H1: Small business finance provided by the UAE banking sector is significantly correlated with their available financial resources.

H2: The existence of un-used lending capacity is the main factor behind financing SMEs in the UAE.

H3: There is a significant correlation between the growth of deposits, banking capital, and lending capacity on one hand and the financing of SMEs on the other hand.

METHODOLOGY AND ANALYSIS

Banks in the United Arab Emirates (UAE) fall in four broad categories: commercial, investment, Islamic, and industrial. The total number of locally licensed banks are 23. This study concentrates on commercial banks, which represent 27% (13 out of the 23). To analyze the impact of banks' behavior on financing small and medium enterprises, the secondary data is collected from a sample of twelve UAE local commercial banks over ten year's period (2010 –

2019), which means a total of 120 obserbations. Only one bank is excluded because it has been recently established and have no data for the first four years. The factors expected to affect small business finance are computed, tabulated, and arranged to measure their impact on small business finance.

To rank the determinants of banks' behavior towards financing SMEs, two stages of analysis are conducted.

1. The Importance-performance Map Analysis (IPMA): The objective is to go beyond coefficients of factors to identify their relative importance to providing finance to SMEs. One of the requirements of this approach is to find positively correlated variables with SMEs finance. To achieve this requirement, only positive correlated variables are selected based on correlation analysis.
2. Correlation and Regression: The study deploys correlation and linear multiple regression models to measure the effect of the independent variables on the dependent variable. In addition, to avoid the problem of multicollinearity, the backward elimination procedure of regression has been used.

A linear multiple regression model has been used to measure the combined effects of explanatory variables on the dependent variable. The general form of multiple linear equation is:

$$Y = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + \ldots\ldots + a_nX_n \quad (1)$$

Where, Y = dependent variable, X_1, X_2, X_3……..X_n = independent variables, a_1, a_2, a_3………..a_n = regression coefficient of independent variables.

The statistical significance of regression coefficients have been worked out and tested with the help of t-test. The coefficient of determination is computed to determine the percentage variation in the dependent variables explained by independent variables. In addition, adjusted R-square (R^2) and change statistic values are measured. The 'F' values are also computed to test the significance of R2 with 'F' distribution at five percent level of significance.

The following relationship of independent variables with the dependent variable is formed: SBF = f (D, TFR, LC, FIN, U FIN, EQ, B, R)
Where: SBF: Small Business Finance, D: Total Deposits, TFR: Total Financial Resources, LC: Lending Capacity, FIN: Total Finance, U FIN: Un-utilized Finance, EQ: Equity Capital, B: Borrowings, and R: Reserves.

Table 1 DESCRIPTIVE STATISTICS					
	N	Minimum	Maximum	Mean	Std. Deviation
Log SBF	120	5.9866	10.8526	7.019279	0.4068670
Log Equity	120	9.4444	13.0095	11.135896	0.2824517
Log Deposits	120	6.8339	12.2901	9.794290	0.5370775
Log Borrowing	120	8.6418	11.1953	9.142109	0.6159302
Log TFR	120	7.6793	10.8251	10.786895	0.5711593
Log Reserves	120	11.0110	15.3161	12.979693	0.7415917
Log LC	120	8.6054	11.8199	10.528795	0.9344566
Log Fin	120	7.8896	11.6595	9.882663	0.5019535
Log U Fin	120	6.2037	11.3095	8.231870	0.5328775
Valid N (listwise)	120				

The descriptive statistics in Table 1 gives details on both dependent and independent variables of the study. The mean, maximum, minimum and the standard deviation are converted into Log values to respond to skewness towards large values. The log transformation is used to

make highly skewed distributions less skewed. The comparison of the means of log-transformed data is actually a comparison of geometric means. Equity has the lowest standard deviation (0.28), which indicates that the data points tend to be close to the mean or expected value of the set, while the lending capacity has the highest standard deviation (0.934), which indicates that the data points are spread out over a wider range of values.

Table 2 shows the Pearson correlation coefficients between the different variables. It shows that there is a significant positive correlation between small business finance as dependent variable with the following independent variables: deposits (0.575), total financial resources (0.45), finance provided by UAE banks (0.682), lending capacity (0.31), and equity (0.502). On the other hand, small business finance has a negative significant correlation with the unutilized financial resources (-0.55), banks' borrowing (-0.364), and reserves (-0.456).

		Log SBF	Log Deposits	Log TFR	Log LC	Log Fin	Log U Fin	Log Equity	Log Borrowing	Log Reserves
Log SBF	Pearson Correlation	1	0.575**	0.450**	0.306**	0.682**	-0.550**	0.502**	-0.364**	-0.456*
	Sig. (2-tailed)		0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.022
	N	120	120	120	120	120	120	120	120	120
Log Deposits	Pearson Correlation	0.575**	1	0.787**	0.507**	0.958**	0.901**	0.939**	0.873**	0.555**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	120	120	120	120	120	120	120	120	120
Log TFR	Pearson Correlation	0.450**	0.787**	1	0.869**	0.764**	0.718**	0.805**	0.858**	.040
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.725
	N	120	120	120	120	120	120	120	120	120
Log LC	Pearson Correlation	0.306**	0.507**	0.869**	1	0.436**	0.351**	0.500**	0.699**	-0.350**
	Sig. (2-tailed)	0.006	0.000	0.000		0.000	0.001	0.000	0.000	0.001
	N	120	120	120	120	120	120	120	120	120
Log Fin	Pearson Correlation	0.682**	0.958**	0.764**	0.436**	1	0.931**	0.965**	0.883**	0.651**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000
	N	120	120	120	120	120	120	120	120	120
Log U Fin	Pearson Correlation	-0.550**	0.901**	0.718**	0.351**	0.931**	1	0.954**	0.795**	0.652**
	Sig. (2-tailed)	0.000	0.000	0.000	0.001	0.000		0.000	0.000	0.000
	N	120	120	120	120	120	120	120	120	120
Log Equity	Pearson Correlation	0.502**	0.939**	0.805**	0.500**	0.965**	0.954**	1	0.870**	0.578**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000
	N	120	120	120	120	120	120	120	120	120
Log Borrowing	Pearson Correlation	-0.364**	0.873**	0.858**	0.699**	0.883**	0.795**	0.870**	1	0.357**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.001
	N	120	120	120	120	120	120	120	120	120
Log Reserves	Pearson Correlation	-0.456*	0.555**	0.040	-0.350**	0.651**	0.652**	0.578**	0.357**	1
	Sig. (2-tailed)	0.022	0.000	0.725	0.001	0.000	0.000	0.000	0.001	
	N	120	120	120	120	120	120	120	120	120

Table 2 CORRELATIONS

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Regression Analysis

Findings from the regression analysis result for the selected firms as depicted in Table 3 indicates that from the model, the R^2 which is often referred to as the coefficient of determination of the variables is 0.693. The R-Squared which is also a measure of the overall

fitness of the model indicates that the model is capable of explaining about 69.3% of the variability in the small business finance. This means that the model explains about 70 % of the systematic variation in the dependent variable. That is, about 30.7% of the variations in the small business finance are accounted for by other factors not captured by the model. This result is complemented by the adjusted R^2 of about 58.8%, which in essence is the proportion of total variance that is explained by the model.

Analyzing further empirical findings listed in Table 3 depict that there is a significant positive relationship between small business finance and total deposits. This is evident in the t-statistics value of 0.008 and *p-value>|t|* (95% confidence level). This outcome basically implies that with all other variables held constant, an increase or a change in the deposits, say by one percent on the average brings about a 2.751% percent increase in the small business finance. The small business finance is also significantly and positively correlated with the total finance provided by UAE banks (4.251 at P = 0.000). On the other hand, small business finance is significantly and negatively correlated with the unutilized financial resources, borrowing, and reserves (-1.08 at P = 0.014, -0.75 at P = 0.052, and -4.15 at P = 0.00 respectively). It is found that equity and lending capacity have no significant impact.

Table 3
REGRESSION ANALYSIS

1	0.770[a]	R 0.693	R^2 0.588	0.2739618

a. Predictors: (Constant), Log Fin, Log LC, Log U Fin, Log Borrowing, Log Reserves, Log Deposits, Log Equity, Log TFR

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.749	12	0.969	12.905	0.000[b]
	Residual	5.329	99	0.075		
	Total	13.078	119			

a. Dependent Variable: Log SBF

b. Predictors: (Constant), Log Fin, Log LC, Log U Fin, Log Borrowing, Log Reserves, Log Deposits, Log Equity, Log TFR

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.272	1.235		5.890	0.000
	Log Equity	0.633	0.472	0.595	1.341	0.184
	Log Deposits	0.614	0.223	0.811	2.751	0.008
	Log Borrowing	-0.133	0.177	-0.202	-0.751	0.052
	Log TFR	0.917	0.335	1.288	2.738	0.008
	Log LC	0.089	0.173	0.192	0.513	0.609
	Log U Fin	-0.029	0.265	-0.037	-0.108	0.014
	Log Reserves	-0.813	0.196	-1.481	-4.154	0.000
	Log Fin	2.070	0.487	2.554	4.251	0.000

a. Dependent Variable: Log SBF

The Importance-Performance Map Analysis (IPMA)

Ringle & Sarstedt (2016) illustrated the use of the Importance-Performance Map Analysis (IPMA; also called importance-performance matrix, impact-performance map, or priority map analysis), a useful analysis approach that extends the standard results reporting of

path coefficient estimates by adding a dimension that considers the average values of the latent variable scores. The goal is to identify factors that have relatively high importance for the target construct (i.e. those that have a strong total effect), but also have relatively low performance (i.e. low average latent variable scores).

Steps followed to Apply IPMA

Step 1: Checking Requirements: To carry out the analysis, we rescaled the variables from 0 to 100, we coded indicators to have a minimum for low and maximum for a high-performance indicator, and to find the positive outer weights estimates.

Step 2: Computation of the Performance Values: Conducting an IPMA on the indicator level, the mean value of an indicator represents its average performance. The results of step 1 and step 2 are shown in Table 4 below. The main finding is the consistency between index values and performance values. Table 4 shows that total banking finance comes in scale 1 and has the highest performance value (13.58 indexes and 59.65 performance value) but banking reserves come at the end (6.88 index value and 37.5 performance value).

Table 4 RESCALING AND PERFORMANCE VALUES		
	LV Index Values	**LV Performances**
LogFin	13.58	59.65
LogDeposits	11.79	56.29
LogTFR	10.82	54.74
LogLC	10.53	54.14
LogUFin	9.45	48.55
LogBorrowing	9.20	46.84
LogEquity	8.14	42.00
LogSBF	7.25	40.15
LogReserves	6.88	37.50

Step 3: Computation of the Importance Values: Here we compute the total effect of the relationship between small business finance and the determinant variables. The total effect is the sum of the direct and indirect effects in the structural model (Hair et al., 2017). The results are in Table 4 and Table 5.
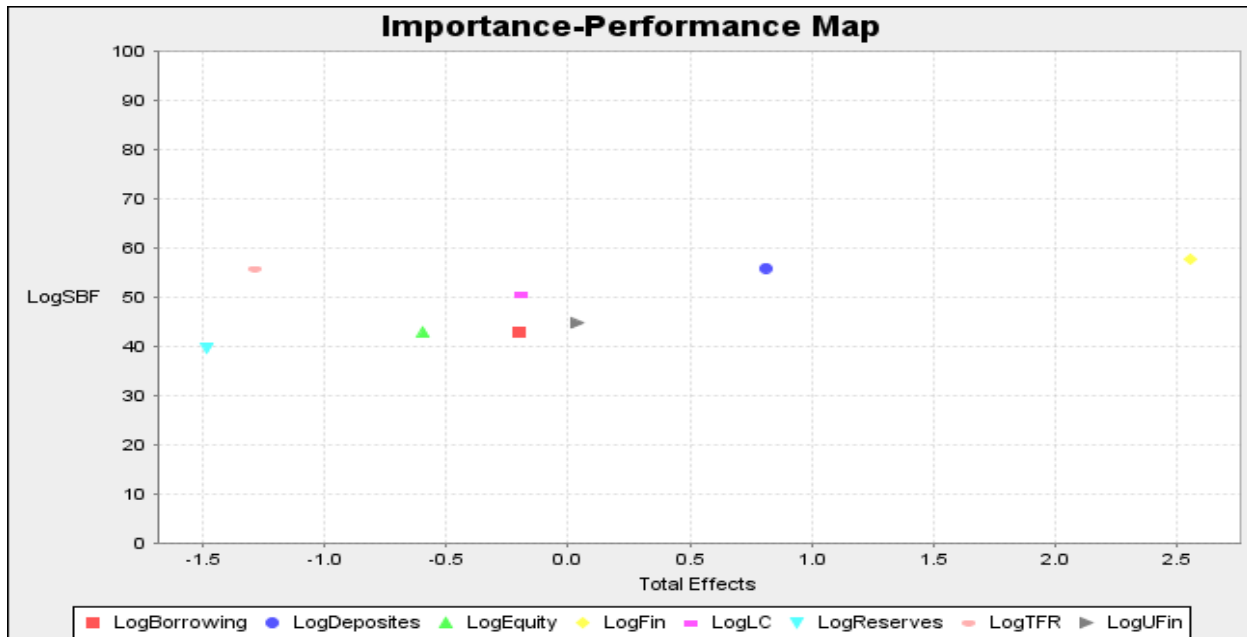
Step 4: Importance performance Map: The IPMA focuses on one key target construct of interest. Therefore, the first step in creating an importance-performance map requires selecting the target construct of interest, which is the small business finance (LogSBF). Table 5 and Figure 1 show the ranking of importance on the map. The lending capacity of the banks (LogLC) comes in the top of the map (2.55), followed by the amount of deposits attracted by the banks of (LogDeposits of 0.81), reserves 0.04, and the rest factors show negative importance-performance on the map. For details, see Table 5 and Figure 1.

Step 5: Extension of IPMA on Indicator Level: Finally, the IPMA can be extended on the indicator level to obtain more specific information on the most effective managerial actions.

In this study, the importance-performance map (Figure 1) shows that reserves have a relatively low performance of 37.5. In comparison with the other constructs, the reserve's performance is slightly below average. On the other hand, with a total effect of 2.55, lending capacity importance is particularly high. Therefore, a one-unit increase in lending capacity would increase

the performance of small business finance by 2.55 points. Hence, when managers aim at increasing the performance of the target construct (Small business finance), their first priority should be to improve the performance of aspects captured by lending capacity, as this construct has the highest (above average) importance. To enhance small business finance, deposits come in the second as an important variable.

Table 5 CONSTRUCT PERFORMANCES AND THEIR IMPORTANCE MAP FOR [LOGSBF]		
	Performance Values	Importance-Performance Maps
LogLC	50.58	2.55
LogDeposites	55.89	0.81
LogReserves	39.59	0.04
LogUFin	44.64	-0.19
LogFin	57.65	-0.20
LogTFR	55.74	-0.59
LogEquity	42.72	-1.29
LogBorrowing	42.84	-1.48

FIGURE 1
IMPORTANCE-PERFORMANCE MAP

The Main Findings

One of the findings is that finance provided by the UAE commercial banks is directly related to the total finance provided to corporations and individuals. The IPMA reveals that the lenient financial variables affect finance to SMEs in the following ranking order: 1. Total finance, 2. Amount and growth in deposits, 3. Total financial resources of the bank, 4. Lending capacity, 5. Un-utilized financial resources, 6. Level of banks' borrowing, 7. Equity and the least one is 8. Reserves. This result supports the acceptance of the first hypotheses as there is a significant relationship between all the mentioned variables and financing SMEs.

The total financial resources of the banks and their deposits have the highest performance values around (58 and 56 respectively). This finding supports the first part of the third hypothesis about deposits but rejects the second part of it (equity).

The un-used financial resources of the banks have a very low-performance value and a negative importance-performance map (-0.19), which leads to the rejection of the second hypothesis.

CONCLUSIONS

The objective of this paper is to examine the impact of bank financing behaviour on banks' lending to small and medium enterprises in UAE using a sample of eight of the UAE commercial banks over ten years period from 2008 to 2017.

To rank the determinants of banks' behavior towards financing SMEs, the study applies Importance-performance Map Analysis (IPMA). It is the first study in the UAE and the region that applies IPMA to identify the relative importance of the banking variables that influencing finance to SMEs. The procedure of applying this methodology is composed of 5 steps, which start by scaling of variables and ends by their performance on the map.

Unlike previous studies, the findings of this study concentrated on the supply side rather than the assessment of credit applications of SMEs. Eight financial variables have been investigated to know their correlations with finance to SMEs and then ranked according to their importance. Some of the financial variables are positively correlated and only three are negatively correlated with financing SMEs finance. The most influential factor is the total financial resources available for the banks, followed by the amount and growth of deposits. The least important on the map is the banking reserves.

One of the limitations of this study is the difficulty to determine exactly the finance provided to SMEs because their definition is not clear enough. In the future, the components of deposits and financial resources may be tested and analyzed.

REFERENCES

Al-Hassan, A., Khamis, M., & Oulidi, N. (2017). The GCC banking sector: Topography and analysis. IMF Working Paper.

Ahmed, S., & Khan, K. (2018). Entrepreneurial typology in a developing economy: The Case of Jordan. *International Journal of Economics, Finance and Business Management Studies, 6*(1), 37-47.

Jude, J., & Adamou, N. (2018). Bank loan financing decisions of small and medium-sized enterprises: The significance of owner/managers' behaviors. *International Journal of Economics and Finance, 10*(5).

Archer, S., & Ahmed, R., (2006). On capital structure, risk sharing and capital adequacy in Islamic Banks. *International Journal of Theoretical and Applied Finance, 9*(3), 269-280.

Torre, A., Pería, M.S.M., & Schmukler, S.L. (2009). Drivers and Obstacles to Banking SMEs: The Role of Competition and the Institutional Framework, CESifo Working Paper Series 2651, CESifo Group Munich.

Atieno, R. (2009). Linkages, access to finance and the performance of small-scale enterprises in Kenya, research paper no. 2009/06. UNU World Institute for Development Economics Research (UNU-WIDER).

Beck, T., Demirguc-Kunt, A., & Maksimovic, V. (2005). Financial and Legal Constraints to Firm Growth: Does Firm Size Matter? *Journal of Finance, 60,* 137-177.

Ringle, C.M., & Sarstedt, M. (2016). Gain more Insights from your PLS-SEM Results: The Importance-Performance Map Analysis. *Industrial Management & Data Systems, 116*(9), 1865-1886.

Diamond, D. (1991). Monitoring and reputation: The choice between bank loans and directly placed debt. *Journal of Political Economy, 99*(4), 689-721.

Fama, E.F. (1985). What's different about banks? *Journal of Monetary Economics, 15,* 29-39.

Girabi, F., & Mwakaje, A.E.G. (2013). Impact of microfinance on smallholder farm productivity in Tanzania. *The Case of Iramba District, Asian Economic & Financial Review, 3*(2), 227-242.

Udell, G.F., & Berger, A.N. (2002). Small business credit availability and relationship lending: The importance of bank organization structure. *The Economic Journal, 112*(477), 32-32.

Hair, J.F., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM).* Sage, Thousand Oaks, CA.

Wilkinson, J., & Christensson, J. (2011). Can the supply of small business loans be increased? *Economic Review,* Second Quarter.

Johnson, S. (1997). An empirical analysis of the determinants of corporate debt ownership structure. *Journal of Financial and Quantitative Analysis, 32*(1), 47-69.

Stiglitz, J.E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American Economic Review, 71*(3), 393-410.

Kunt, A.D. & Maksimovic, V. (1998). Law, finance and firm growth. *The Journal of Finance, 53*(6), 2107-2137.

Brown, K. (2003). Islamic banking comparative analysis. *The Arab Bank Review, 5*(2), 43-50.

Siddiqi, M.N. (2006). Islamic banking and finance in theory and practice: A survey of state of the art. *Islamic Economic Studies, 13*(2).

Siddiqi, M.N. (1983). *Issues in Islamic Banking.* Leicester: Islamic Foundation.

Petersen, M.A., & Rajan, R.G. (1994). The benefits of lending relationships: Evidence from Small Business Data. *The Journal of Finance, 49*(1), 3-37.

Myers, S., & Majluf, N. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics, 13*(2), 187-221.

OECD (2014), SME debt financing beyond bank lending: the role of securitization, bonds and private placements, OECD, Paris.

Olusola, O.J., & Olusola, O.A. (2013). Estimating growth in investment of micro and small enterprises in Nigeria. *Asian Economic & Financial Review, 3*(1), 111-123.

Owualah, S.I. (1990). Venturing into small business in a developing economy: Motivations and Constraints. *Savings and Development, 4,* 415 - 424.

Wilkinson, J., & Christensson, J. (2011). *Can the supply of small business loans be increased?* Economic Review, Second Quarter, 2011.

Rajan and Zingales.; Financial Systems, Industrial Structure, And Growth, Oxford Review of Economic Policy, Vol.17, No.4. (1998).

Sayed A. Ahmed, Four to Fear in the MENA Banking Sector and the Small Business Financing, Arab Banking Association. Khartoum, Sudan August 2010. Sudan Central Bank Roundtable Meeting.

Sayed A. Ahmed & Ibrahim E. Ahmed (2012); "Are UAE Islamic Banks Adequately Capitalized?" Economic Directions II, Kuwait University, Kuwait, 11-13. Conference Proceedings.

The UAE Central Bank Annual Report, 2017.