Research and Reviews Journal of Educational Studies

Factors Influencing the Effective Implementation of Basel III: An Empirical Analysis of the UAE Banks

Hussein A. Hassan Al-Tamimi[1]*, Rama Rezq Aljaber[2]

[1]Department of Finance and Economics, College of Business Administration University of Sharjah, UAE
[2]Department of Finance University of Sharjah Media Center, University of Sharjah, UAE

Research Article

Received: 01/02/2021
Accepted: 15/02/2021
Published: 22/02/2021

***For Correspondence**
Hussein A. Hassan Al-Tamimi
Department of Finance and Economics, College of Business Administration University of Sharjah, UAE

Keywords: Basel III; UAE; Central Bank; Implementation, Effectiveness

E-mail: Hassan @gmail.com

ABSTRACT

This study aims to investigate the factors influencing the effective implementation of Basel III in the UAE banks. In this study, a modified questionnaire was used. The results of the regression analysis support the hypotheses proposing a significant positive relationship between implementation effectiveness and expected benefits and availability of resources needed. The results of the analysis did not support the influence of the variables awareness, role of management, and role of the central bank.

Based on the findings of this study, three recommendations were made: first, to promote the effective implementation of the Basel Accords in the UAE's banking sector; second, banks should review current implementation processes and plans to ensure that employees understand the requirements of Basel III implementation; and third, the UAE Central Bank should be more involved in setting a framework for implementing regulations to ensure the effective implementation of Basel III.

INTRODUCTION

The Basel Committee on Banking Supervision (BCBS) announced Basel III standards in 2010 as a response to the Global Financial Crisis (2007-2008) to cover the pre-crisis framework shortcomings and provide a resilient banking system foundation that resists systemic vulnerabilities (BIS, 2017).[1] The BCBS accords aim at strengthening the resilience of banks in light of the impact of the financial crisis by regulating and standardizing capital banking practices (KPMG, 2018).The Basel Committee on Banking Supervision – initially the Committee on Banking Regulations and Supervisory Practices – was established in 1974 as a response to serious failures in the international currency and banking market (BIS, 2018).

The first Basel Accord (Basel I), introduced in July 1988 with a focus on credit risk supervision and required internationally active banks in the G10 countries (The United States, the United Kingdom, the Netherlands, Canada, Belgium, France, Germany, Italy, Japan, Sweden, Switzerland, and Luxembourg) to hold a minimum total capital equal to 8% of risk-adjusted assets In 2004 the Committee introduced the Basel II Accord (BIS, 2018).

This new framework

was designed with the objective of improving the way regulatory capital requirements reflected underlying risks (BIS, 2018). The Committee expected Basel II to "provide strong incentives for banks to continue improving their internal risk-management capabilities" while making available the tools necessary to adapt to the rapid market changes and issues. Basel II did not change the capital adequacy ratio and maintained the capital base requirement of Basel I, however, it introduced detailed criteria for the treatment of credit risk as well as market and operational risks.[2]

As a response to the 2007-09 financial crisis, the Basel Committee on Banking Supervision introduced major revisions to the Basel II framework in Basel III (BIS, 2018). In 2007, the international banking sector collapsed into a financial crisis due to having too much leverage coupled with inadequate liquidity buffers, poor risk management systems, as well as inappropriate incentive structures (BIS, 2018). These factors led to the poor assessment of credit and liquidity risks and excess credit growth (BIS, 2018). With the intention of strengthening the Basel II capital framework, the Committee issued the Basel III Accord in 2010, which included new capital and liquidity risk measurement and monitoring standards as a more resilient global regulatory framework (BIS, 2018).

Basel III included new components covering capital norms, liquidity standards, leverage and risk coverage. The Basel III components advised strict capital and liquidity standards to ensure financial stability through increasing the shock absorbing capacity of banks during unexpected crises while enabling banks to manage all perceivable kinds of risks. Basel III promised benefits such as better management of risk and portfolios, effective supervision, more transparency in operations, as well as more risk-sensitive and balanced risk-return.[3]

Basel III can be divided into two phases: the 2010 framework and the reforms of 2017. The 2010 phase of Basel III focused on strengthening the quality of bank regulatory capital, increasing the level of capital

requirements to ensure resilience in times of bank stress, enhancing the risk capture for the risk-weighted capital framework, introducing capital buffers and exposure systems to mitigate risks, enhancing the minimum leverage ratio, and introducing an international framework for mitigating excessive liquidity risk (BIS, 2017). The 2010 Basel III framework required banks to maintain higher quality capital to cover unexpected losses, enhanced risk capture by increasing capital requirements based on market risk, focused of bank leverage ratio to ensure adequate debt availability for funding banks investments and activities, improved the banks' liquidity that is sustainable for 30 days during times of stress, and called banks to build capital buffers to fall back on during times of evonomic strain.[4] The 2017 Basel III reforms aimed to restore credibility in the calculation of Risk- Weighted Assets (RWAs) since discrepencies and variations in the RWAs calculation was found across banks, as well as improve the standerdised approaches for calculating banking risks (BIS, 2017).

Regions and countries around the world have had different implementation processes of the Bank of International Settlements (BIS) regulations such as Basel III. While the European Union has consistently applied the Basel frameworks, the story in the Americas, Eastern Europe, Africa, and the Middle East is different. Some countries have implemented the BIS regulations fully, while others selected elements of the frameworks such as the standerdised approach for calculating credit risk. Globally, the process of impelmenting Basel III began in 2013 – this included the United Arab Emirates.[5]

This paper investigates the factors influencing the effective implementation of Basel III in the UAE's banks. An attempt was made to answer six questions and six hypothses by using some statistical tools, regression and ANOVA analysis.

The main findings of this study are:

1. The results of the regression analysis unexpectedly did not support a significant positive relationship between implementation effectiveness and awareness/understanding of Basel III.

2. Respondents on average agreed that the UAE Central Bank and the bank management play a somewhat significant role in the effective implementation of Basel III, however, the overall statistical results unexpectedly did not support a significant role.

3. The regression results indicate that there is a significant positive relationship between Basel III effective implementation and expected benefits as well as availability of resources needed.

4. The statistical results reveal that there is a significant difference in the effective implementation of Basel III between the UAE's Islamic and Conventional banks.

This paper is structured as follows; after this introductory section it continues with a review of literature and hypotheses development. The subsequent section presents the research methodology used and is followed by an analysis of the results and discussion points. The last section provides concluding remarks and policy implications.

THEORETICAL BACKGROUND AND HYPOTHSES DEVELOPMENT

Literature review

The Basel Committee on Banking Supervision introduced the Basel Accords as a set of regulatory standards and risk supervision frameworks in response to financial crises affecting the global financial sector. The Global Financial Crisis of 2007 resulted in losses estimated at over $500 billion. There is an extensive body of literature existing on evaluating the implementation of the Basel III framework globally such as that provided. The existing body of literature studied the effectiveness of the risk management systems based on both the original and revised Basel Accord frameworks as well as the adequacy of the frameworks in setting the minimum capital requirements.[6] Results suggested that the revised Basel III framework had both costs and benefits where the costs arose from it being ineffective in preventing banks from taking substantive risks, while the benefits came from its better capital adequacy in sustaining those risks

When it comes to the Basel II framework, listed the expected challenges and impact of the implementation of the framework as providing a more complex regulatory environment that is both time and resource consuming, creating barriers and higher investment requirements that are costly, and deepening competition in the market. The observed benefits of Basel II were increasing the level of transparency of financial information and improving[7] risk management practices.

When studying the implementation of Basel II in low-income countries, Gottschalk and Griffith-Jones found that while Basel II improved the strength and stability of the international financial system, it presented a number of challenges in the implementation process.[8] Their findings are derived from interviews conducted with 8 low-income countries in the sub- Saharan Africa (Botswana, Ethiopia, Ghana, Kenya, Lesotho, Tanzania, Uganda and Zambia) and concluded that the implementation of Basel II in these countries was challenged by the available human skills and resources to grasp thorough and sufficient understanding and knowledge of the framework to ensure proper implementation. They also faced challenges with regards to technical capacities as well as the availability of sufficiently reliable data to banks to run the framework's models accurately. Other challenges

Gottschalk and Griffith-Jones presented were the rise of competitiveness between national and foreign banks – who had varying capacities and capabilities for implementing the framework – as well as the expected macro- economic impact of Basel II.

Similarly, Al-Tamimi explored the preparedness of the UAE's banks to implement the Basel II framework. His study found that the UAE's banks were prepared to effectively implement the framework depending on satisfying the following requirements: having sufficient resources for the implementation process, and that employees of the UAE banking sectors had thorough understanding of and education on the revised framework. His results also found no difference between the readiness of the UAE's national and foreign banks for implementing Basel II, which eliminated the challenge of having a competitive advantage between both types.[9]

Literature on Basel III agrees that capital is a major pillar in supporting financial stability. Basel III proposes that more capital and improved quality are the way to strengthen the resilience of the financial system. Basel III was intended to introduce a global regulatory framework that ensures more resilient banks and banking systems by improving the sector's ability[10] to absorb financial shocks regardless of their source while reducing risks of negatively impacting the economy.

Kaur and Kapoor examined the implementation of the Basel Accords worldwide between 2001 and 2013 by evaluating the existing literature and found a number of unifying global trends in the implementation of the Basel norms. The literature provided by Kaur, amongst various others, all provide a unifying look into the factors influencing the implementation of the Basel Accords. The reported factors include the expected benefits of the Basel frameworks such as proactive portfolio management,[11] forward-looking risk management, improved operational efficiency, and better risk absorption. Other factors included technological and data acquisition and reporting adequacy, level of sufficient resources and training and education of the Basel framework, as well as bank management and central bank involvement and influence. These factors are both variables and challenges influencing the effective implementation of the Basel frameworks. Literature on the impact of Basel III in terms of benefits and costs.Tanna concluded the following: The benefits of implementing Basel III included better management of risks and portfolios, effective risk and financial supervision, transparency in financial declarations, higher risk sensitivity and balanced risk-returns.[12] Some of the negative impacts and/or costs of implementing Basel III in the various regions of the global financial sector included higher costs for maintaining capital, difficulty in raising funds and therefore higher bank costs, issues in the availability of technical skills, the stringent higher capital requirements were linked to the banks' performance, lack of resources necessary for the implementation, complexities in reporting data as well as data quality issues.[13] Those studies concluded thateffective management involvement, efficient resources, awareness and knowledge of the Basel III framework, as well as expertise were necessary for the effective implementation.

Along with the aforemnetioned benefits of proactive porfolio management and so on, studies by Parcon-Santos and Bernabe, Angelini, Cosimano and Hakura, MAG, Dedu and Nitescu, and Locarno all also concluded that Basel III implementation is expected to strengthen the risks absorption capacity of banks while reducing the possibility and fragility against future banking crises.[14] They also found that the effective implementation of Basel III requires extensive availability of resources to cover the implementation costs of stronger capital and liquidity requirements, maintaining data acquisition and reporting systems, and ensuring the training and education of the human resources.

Studies also found the level of understanding and education as an underlying factor impacting the challenges associated with the effective implementation of the Basel framework. Report some of the challenges (understanding and education) associated with the effective implementation of Basel III. These challenges include the introduction of a new finance management culture that requires a higher level of understanding and involvement of management and regulators in implementation process, the variations amongst difference geographies as well as capabiltiies of emerging economics and sectors, and challenges in reporting and acquiring data. Kaur and Kapoor identified that Basel III implementation is expected to affect emerging economies at a different scale by affecting the macroeconomic performance, increasing risk exposure of investment due to massive outflows of foreign funds in emerging countries, downsizing activitiy in investment banking as customers would be tempted to take risks outside the banking system resulting in an increase in systemic risks, and might cause liquidity strains in the market resulting the Central Banks getting involved as providers of liquidity.

Amorello summarized the constraints of Basel III that led to these consequences on the economy as relying in its extreme complexity, its continued dependence on model-based regulation to calculate capital requirements, failure to capture a number of risks, and inconsistencies in the disclosure of requirements. This is also a strong indicator of the vital role of the avaiability of sufficient resources in the banking system along with extensive awarneess and understanding of the framework for the effective implementation of the Basel III framework.

Some researchers identified the role of a country's Central Bank as recognizing and monitoring shifts and developments in the financial sectors and intervening where appropriate, providing liquidity support against

shocks in the global economy, superising the banking sector along with banks' management, coordinating monetary, fiscal and interest rate policies, neutralizing excess liquidity in crisis situations, providing a clear distribution of tasks between authorities as well as selecting the appropriate instruments and aid for policy implementation, and transparently communicating with the banking sector. This means Central Banks play a vital role in the effective implementation of Basel III. Therefore, it is crucial to assess and understand the role of the UAE's Central Bank in the effective implementation of Basel III. However, banks' management also plays a vital role in the effective implementation of policies. In fact, Central Banks and banks' management jointly collaborate on implementating policies and frameworks to regulate banking activities. In fact, harmony between supervisory powers split between the Central Banks and management is crucial to banking stability.

In examining the effective implementation of the UAE for the Basel III framework as a buffer against global financial crises and a risk management system, we can consider both conventional and Islamic banks in the UAE under the same model. This is considering the financial effects of crises and failures to cover the various kinds of banking risks are global and universal across both conventional and Islamic financial systems. Where Islamic banks seek to develop products similar to those in the conventional banking system, this will result in Islamic banks carrying similar risks to the conventional banks, thus making them more vulnerable in a financial crisis.

This paper, therefore, contributes to three aspects of existing literature: first, it adds to the extensive body of literature studying the implementation of the Basel III framework, but from a UAE-specific perspective. Second, it provides new knowledge to the existing literature by specifically studying the effective implementation of Basel III in the UAE banking sector, which is an area not covered yet in literature. Third, it supports the findings of existing literature of the factors and variables influencing the implementation of Basel III.

Reseach questions and hypothses

Studying the effective implementation of the UAE's banks of Basel III is of critical importance as we must ensure they effectively and seamlessly implemented the framework while complying with the international standards of banking. This paper builds on previous research done on the effectiveness of the implementation of the Basel II and Basel III frameworks in other settings, and studies done specifically on the UAE's banking sector.[15] The researcher therefore attempts to answer the following questions:

1. Have the UAE banks effectively implemented the Basel III regulatory framework?
2. Are the UAE banks aware of the proposed benefits of implementing Basel III?
3. Do UAE bank managers understand the components of Basel III?
4. Do UAE banks have the necessary resources to effectively implement Basel III?
5. What role does the UAE's Central Bank play in the effective implementation of Basel III?
   What role does management play in the effective implementation of Basel III?

Based on the stated objective of the study and research questions, the following hypotheses are formulated:

1. H1.There is a significant and positive relationship between effective implementation of Basell III and the expected benefits
2. H2.There is a significant and positive relationship between effective implementation of Basell III and the support of the Central Bank.
3. H3.There is a significant and positive relationship between effective implementation of Basell III and the positive attitude of the bank's top management.
4. H4.There is a significant and positive relationship between effective implementation of Basell III and the understanding of the content of Basel III
5. H5.There is a significant and positive relationship between the effective implementation of Basell III and the availability of resources.
6. H6: There is a significant difference between the conventional and Islamic banks regarding the effectiveness of the implementation of Basel III

Following the extensive literature above and based on the commonality of various variables studied as factors influencing the effective implementation of Basel III and its predecessors Basel I and II in a number of countries internationally. With that, we propose the following theoretical framework using the most influential and effective factors:**Figure 1.**

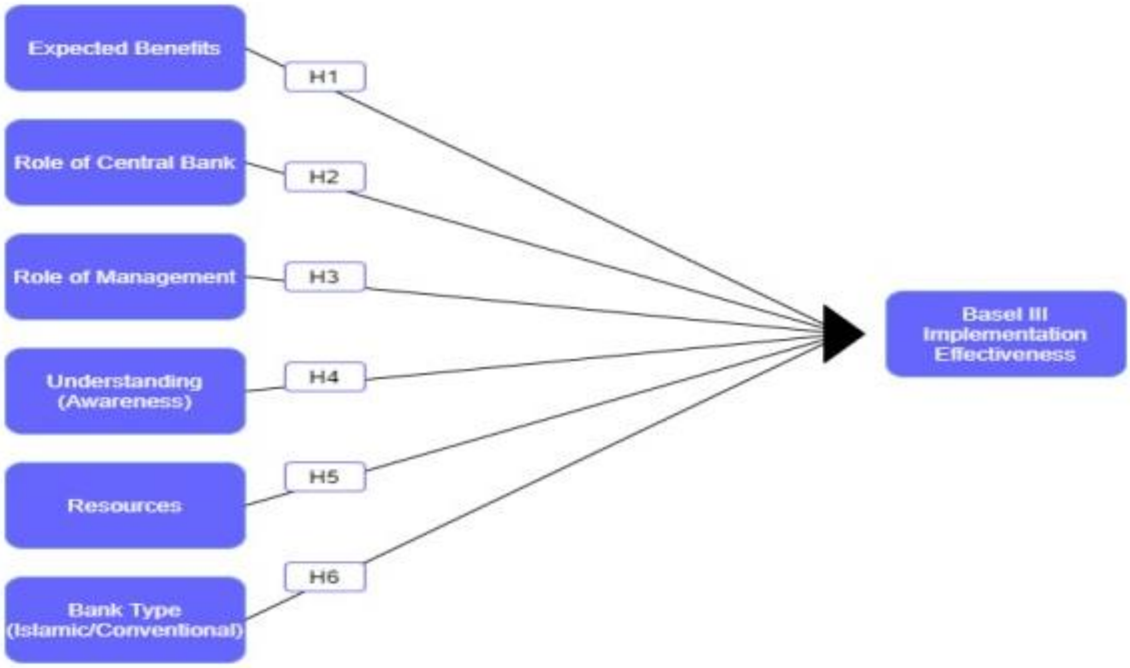

Figure 1. Theretical frame work

To answer the research questions, descriptive statistics were used in the data analysis section, while to test the first five hypotheses of the research, the following regression model was used:

BEIM = f (EXB, BAW, ARN, BMT, CBR)

Where:

BEIM- Implementation Effectiveness

EXB - Expected benefits from Basel III Implementation BAW- Basel III awareness

ARN- Availability of Resources Needed BMT- The role of Bank Management CBR- The role of the UAE Central Bank for the last hypothesis (H6), ANOVA analysis will be used..

RESEARCH METHODOLOGY

Development of the questionnaire

This research paper depends on data collected by using a modfied questionnaire. The questionnaire consists of two sections: the first covers general information and demographics data, the second section covers five aspects namely; anticipated benefits of implementing Basel III, understanding and awareness level of the revised Basel III, availability of bank resources to facilitate the implementation, the role of top management in the implementation and the role of the Central Bank support[16]

The second part includes a number of closed-ended questions based on a seven-point Likert scale (with 7 corresponding to “Strongly Agree” and 1 corresponding to “Strongly Disagree”) with the questions corresponding to each of the aforementioned aspects. Therefore, the questionnaire comprising of 54 questions (4 demographic-specific and 50 related to our variables). The questionnaire draft was piloted by three academicians and three practitioners. Accordingly, we made changes and reformulated some questions.

Sampling and Data Collection

The population selected for this research paper is based on a convenient sample of bank managers who are involved in risk management and Basel (I,II and III) implementation in both conventional and Islamic banks. The questionnaire is anonymous, and participants were assured that all collected data will be used to research purposes only.[17] Due to the native language of the UAE being Arabic, for convenience we handed out both an English and an Arabic version of the questionnaire. The sample was carefully selected to ensure that the questionnaire respondents are highly aware and involved in the research subject and therefore provide more reliable responses.

We successfully distributed a total of 103 questionnaires in hard copies or via emails urging respondents to fill a Google Form of the questionnaire. Of the 103 bank managers to whom we sent the questionnaires, 13 were excluded for being either incomplete or the participant did not respond; 90 bank senior managers responded to the questionnaire and those are counted in the data analysis section.[18] The 90 represent an effective response rate of 87.37% of the total sample, which is acceptable for our research purposes.

DATA ANALYSIS AND RESULTS

This section concentrates on discussing the data analysis and results. It consists of three parts; In the first one, the profile of the respondents is discussed, in section two the reliability of the measures is examined and in the third, we discuss some descriptive statistics and test the study's hypotheses.

The profile of the study's respondents

This study's questionnaire included four demographics questions to collect data on the respondents' gender, bank type, experience in banking (in years), and their education background.This to provide some insight into the respondents' knowledge as well as draw patterns related to the research from their answers.

Table 1 presents the information on the profile of the research questionnaire's respondents.Firstly, out of 90 respondents, we found that the majority (at 71 respondents) were male representing a 78.9% of the sample, leaving only 19 female respondents representing the remaining21.1%. These results give a clear indication to the UAE's banking sector – especially at the managerial level – is primarily dominated by male employees. In the following question regarding bank type, 59 responses representing 65.5% of the sample indicated they worked at Islamic banks, leaving only 31 responses at 34.4% stating they were belonged to conventional banks. However, the high percentage of Islamic banks type does not reflect the dominance of these banks, as the market share of Islamic banks was about 20 percent in 2019 (UAE Central Bank, 2019).[19]

When asked about their experience duration as bankers, out of the 90 responses, 22 (24.4%)selected 1 to 5 years, the majority at 38 (42.2%) selected 6 to 10 years, and finally 30 (33.3%) selected more than 10 years. None of the bank senior managers responding to the questionnaire selected the "one year or less" option. This shows that there are three different groups of work experience among the senior bank managers in our study sample. However, most had 6 to 10 yearsof experience. Finally, when asked about their educational background, the 90 respondents indicated the following: 19 responders (21.1%) were high school graduates or its equivalent, 5 (5.6%) were at the diploma/high diploma level, 57 (63.3%) had college/bachelor degrees, and 9 (10%) had graduate degrees (Master's or PhD). Clearly, most respondents at 63.3% had an undergraduate degree in their field of work.**Table 1.**

Table 1. Respondents Characteristics.

Variable	Frequency	Valid Percent
	Gender	
Male	71	78.90%
Female	19	21.20%
	Bank Type	
Islamic	59	65.60%
Conventional	31	34.40%
	Experience	
One Year – 5 Years	22	24.40%
6 Years – 10 Years	38	42.20%
More than 10 Years	30	33.30%
	Education	
High School or Equivalent	19	21.10%
Diploma / High Diploma	5	5.60%

College / Bachelor	57	63.30%
Graduate Degree (Masters or Phd)	9	10%

Reliability

Using Cronbach's Alpha, we conducted a reliability of measures test, which allows us to measure the reliability of the different selected factors hypothesized to contribute to the effective implementation of Basel III in the UAE. A measure of reliability tells researchers that with a highreliability score indicating that it is effective in measuring the assumed result and a low reliability indicating that it is not. Peters states that the acceptable Cronbach's Alpha value is 0.7 andabove. Meaning, factors given the Alpha value of 0.7 and higher are deemed reliable. Table II shows the Cronbach's Alpha results of our factors as reliable since they range between 0.796 and 0.819.

Table 2: Reliability of the Factors Influencing the Implementation Effectiveness of Basel III in the UAE

Category	Alpha
Expected Benefits (EXB)	0.812
Basel III Awareness (BAW)	0.796
Implementation Effectiveness (BEIM)	0.801
Availability of Resources Needed (ARN)	0.806
Role of Bank Management (BMT)	0.819
Central Bank of UAE Role (CBR)	0.797

Descriptive statistics

Table III provides descriptive statistics for the six factors influencing the effective implementation of Basel III in the UAE banks. It can be seen that the range of mean value is between 5.104 to 5.477, which indicates in general that the UAE banks implemented Basel III effectively. The table also indicates that the mean values of each of the six factors were almost the same, since the difference between the maximums and the minimums was marginal. With regards to standard deviation, we found the responses range between 0.529 to 0.756, clearly showing none of the variables had a standard deviation of 1 or greater. A generally accepted rule is that variables with smaller values of standard deviation (less than 1) indicate higher consistencyamong responses of participants. This alternatively means that values higher than 1 indicate lower consistency between the answers. Since our results indicate values ranging below 1, that means the responses to the questionnaire were consistent and uniform in their answers regarding the subject matter.[20] In order to identify the factors that have the most influence on the effective implementation of Basell III and to answer our research questions, Table IV shows the classification of factors within each category and their means. For the first variable "Expected Benefits" (EXB) with a mean of 5.47, the most influential factor has a mean of 5.74 as respondents agreed that Basel III improves the use of regulatory capital. The least influential factor with a mean of 5.23 is that Basel III enhances the reputation of the bank. The mean of the 11 factors of 5.4778 out of 7 indicates that respondents were sufficiently aware of the expected benefits of the Basel III implementation, which represents a positive answer to the second question that states: Are the UAE banks aware of the proposed benefits of implementing Basel III?

Table 3: Descriptive Statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
EXB	90	4.45	6.64	5.4778	0.52983
BAW	90	4.45	6.73	5.3747	0.53823
BEIM	90	3.9	6.5	5.1044	0.61879
ARN	90	4	7	5.2867	0.75672
BMT	90	3.71	6.86	5.381	0.68529
CBR	90	4.17	7	5.4426	0.7203

In the second category of "Basel III Awareness", the most influential factor with a mean of 5.56 is that most of the respondents were aware that Basel III is a major step forward for capital regulations. The least influentifactor was a mean of 5.11, according to which respondents were aware of the Liquidity Coverage Ratio (LCR). The mean of the 11 factors about Basel III awareness of 5.3747 out of 7 clearly shows that the respondents understood the content of Basel III and this is a positive answer to the third question, which stats: Do the managers of UAE banks understand the components of Basel III?

Table 4: Classification of the Factors within Each Category.

	Expected Benefits	
1	Productive portfolio risk management	5.61
2	Lower loan losses resulting from better credit risk evaluation capacities for new credits	5.62
3	Improvement of operational risk management	5.32
4	Enhanced reputation	5.23
5	Basel III provides overall better risk coverage (for example counterparty credit risk)	5.28
6	Provides sufficient countercyclical capital buffers	5.54
7	Basel III provides improved leverage ratios	5.3
8	Basel III takes necessary steps to strengthen bank capital standards.	5.71
9	Improvement of use of regulatory capital	5.74
10	Basel III is important in re-establishing the foundations: better quality liquidity standards and capital	5.43
11	The Basel III package is balanced and specifically designed to address lessons learned	5.46
	Mean	5.47 78
	Standard Deviation	0.52 983
	Basel III Awareness	
12	Basel III is a major step forward for capital regulation.	5.56
13	Basel III takes necessary steps to strengthen bank capital standards.	5.52
14	The Basel III standards are rigorous regarding the quality and quantity of capital.	5.38
15	For Net stable Funding Ratio (NSFR), the available stable funding should be more than the required stable funding.	5.4
16	For Liquidity Coverage Ratio (LCR), the high-quality liquid assets (HQLA) should	5.11
	be equal or greater the total net cash outflows over the next 30 calendar days.	
17	One of the requirements of Basel III is to increase Tier 1 from 2% of risk- weighted assets to a minimum 7% by 2019.	5.12
18	The net stable funding ratio (NSFR) is useful to deal with risk of fundingvery long-	5.37
	term assets with very short-term Liabilities.	
19	The Implementation of Basel III increases the ability of banks to absorb losses by demanding higher levels of equity-like capital instruments.	5.49
20	I am very familiar with understanding the content and sequence of Basel I, II and III	5.37
21	I am very familiar with understanding the technical part of Basel III	5.41
22	I am very familiar with the three pillars proposed by Basel III	5.4
	Mean	5.37 47
	Standard Deviation	0.53 823
	Basel III Implementation Effectiveness	
23	Basel III is fully implemented by our bank	5.53
24	Our bank has some technical problems in the implementation of Basel III.	5.13
25	At our bank, there is always positive feedback about the implementation of Basel III.	5.27
26	Our bank carried out the most important part of Basel III.	5.26

27	Our bank faced a liquidity problem despite the implementation of Basel III.	4.79
28	Our bank faced interpretation problems in the implementation of Basel III.	4.77
29	Basel III was partially implemented by our bank	4.9
30	Risk management practices have been significantly improved as a result of the implementation of Basel III.	5.14
31	After the implementation of Basel III, our bank achieved the targeted liquidity ratio (LCR) and to hold additional capital under Basel III.	5.04
32	After implementation of Basel III, our bank achieved the targeted risk coverage, capital conservation buffer, countercyclical capital buffer andthe	5.21
	leverage ratio	
	Mean	5.10 44
	Standard Deviation	0.61 879
	Availability of Resources Needed	
33	Maintaining executive and organizational Governance.	5.21
34	Effective documentation and supervisory review.	5.29
35	Efficient information systems.	5.18
36	Sufficient funds allocated for Basel III Implementation.	5.49
37	Continuous Updating of technologies	5.27
	Mean	5.28 67
	Standard Deviation	0.75 672
	Role of Bank Management	
38	In our bank there is constant encouragement from senior management to achieve the best implementation of Basel III.	5.61
39	Our bank provided training opportunities for the effective implementation of Basel III.	5.32
40	The management of our bank continuously monitors the implementation of Basel III	5.2
41	Our management has consistently organized meetings and discussions on the implementation of Basel III.	5.14
42	Our bank provides performance incentives for the best implementation of Basel III.	5.36
43	Management has clearly identified a plan for implementation	5.7
44	Our bank communicates the objectives of the implementation of BaselIII.	5.33
	Mean	5.38 1
	Standard Deviation	0.68 529
	Role of UAE Central Bank	
45	Continuous monitoring by the Central Bank for a better implementation of Basel III.	5.52
46	Provide guidance, training and workshops on the implementation of Basel III	5.44
47	Develop a time frame for the implementation of Basel III.	5.37
48	Provide incentives to the best performing bank regarding the implementation of Basel III	5.4
49	Ongoing review, discussion and corrections to the feedback reports.	5.42
50	Central Bank clearly communicates the Basel III implementation objectives.	5.5
	Mean	5.44 26

Standard Deviation	0.7203

Responses to the Basel III implementation effectiveness category showcases that the most influential factor is the recognition that the bank has fully implemented Basel III (mean 5.56), however, the surprising least influential factor with a mean of 4.77 is a direct indicator of interpreting Basel III correctly to facilitate effective implementation. The respondents a positive answers on the 10 factors with a mean of 5.1044 reveal that Basel III implementation is effective which reflects a positive answer to the first question, that stats: Have the UAE banks effectively implemented the Basel III regulatory framework?

Regarding the “Availability of Resources” category, the table indicates that the most influential factor is the availability of funds necessary to implement Basel III (mean 5.49), whereas the least influential factor with a mean of (5.18) is about the availability of efficient information systems to implement Basel III effectively. However, because the mean of the five factors included in this category is 5.2867 which is enough to support the availability of the required resources, which reflects a positive answer of question four that states: Do UAE banks have the necessary resources to effectively implement Basel III?

The last two categories “the role of bank management" and "the role of the Central Bank of the UAE" (four and five), the table reveals that the mean of the respondents answers are 5.3810 and 5.4426, respectively. This is to support the positive role of both, the bank's management and the Central Bank of the UAE in better implementation of the Basel III accord, which also reflects a positive answer to the fifth and sixth of the research questions content of Basel III and this is a positive answer to the third question, which stats: Do the managers of UAE banks understand the components of Basel III?

Table 5: Correlation Coefficients between Independent Variables.

Independent Variables	EXB	BAW	ARN	BMT	CBR
EXB	1				
BAW	.701**	1			
ARN	.310**	.452**	1		
BMT	.334**	.426**	.330**	1	
CBR	.372**	.465**	.562**	.630**	1

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

Responses to the Basel III implementation effectiveness category showcases that the most influential factor is the recognition that the bank has fully implemented Basel III (mean 5.56), however, the surprising least influential factor with a mean of 4.77 is a direct indicator of interpreting Basel III correctly to facilitate effective implementation. The respondents a positive answers on the 10 factors with a mean of 5.1044 reveal that Basel III implementation is effective which reflects a positive answer to the first question, that stats: Have the UAE banks effectively implemented the Basel III regulatory framework?

Regarding the “Availability of Resources” category, the table indicates that the most influential factor is the availability of funds necessary to implement Basel III (mean 5.49), whereas the least influential factor with a mean of (5.18) is about the availability of efficient information systems to implement Basel III effectively. However, because the mean of the five factors included in this category is 5.2867 which is enough to support the availability of the required resources, which reflects a positive answer of question four that states: Do UAE banks have the necessary resources to effectively implement Basel III?

The last two categories “the role of bank management" and "the role of the Central Bank of the UAE" (four and five), the table reveals that the mean of the respondents answers are 5.3810 and 5.4426, respectively. This is to support the positive role of both, the bank's management and the Central Bank of the UAE in better implementation of the Basel III accord, which also reflects a positive answer to the fifth and sixth of the research questions.

Testing the study’s hypotheses

Regression analysis and one-way ANOVA were used to test the six research hypotheses. To test the first five research hypotheses, the following regression model was used:

BEIM = f (EXB, BAW, ARN, BMT, CBR)

Where:

BEIM- Implementation Effectiveness

EXB - Expected benefits from Basel III Implementation. BAW- Basel II awareness

ARN- Availability of Resources Needed BMT- The role of Bank Management CBR- The role of the UAE Central Bankfor the last hypothesis (H6), ANOVA analysis will be used. Before examining the contribution of the above-mentioned independent variables to the regression model, a multicollinearity test was conducted in order to avoid the problem of the strong relationship among the independent variables. The correlation table is a measure of how the independent variables are related. Gogtay and Thatte, 2017 in this regard present the scale of determining the strength or weakness of the relationship among variables on a scale of +1 to -1 following the "Pearson Correlation Coefficient". Table V shows that all the presented independent variables have a positive "r" value and statistically significant at 1 percent level over 0 and ranging between 0.310 to 0.701, therefore, the table indicates that there is no multicollinearity problem among the independent variables.

Table 6: Summary of Regression Results.

Independent Variable	Beta	t	Sig.
(Constant)		0.567	0.573
EXB	0.431	4.258	0
BAW	-0.032	-0.289	0.773
ARN	0.612	6.921	0
BMT	0.171	1.852	0.068
CBR	-0.262	-2.514	0.014
R Square: .586			
Adjusted R Square: .561			
Std. Error of the Estimate: .40978			

Table 6 reveals the results of the regression model. The value of R squared represented how much variance in the dependent variable is explained by the independent variables. The table shows that R squared is 0.586 or 58.6%, meaning only 58.6% of the variation in the implementation effectiveness of Basel III in the UAE banks is explained by the variables (Expected Benefits, Awareness, Available Resources, Role of Bank Management, and Role of the UAE Central Bank. This is a relatively low percentage that raises questions of whether some variables should be considered in the model, or to exclude some variables from the regression model.

Table 6reveals that the estimated coefficients of three independent variables (EXB,ARN,and BMT), were, as expected, positive and statistically significant at 1 per cent level in the case of EXB and ARN and at 10% level in the case of BMT. These results confirmed hypotheses 1,3 and 5. The positive and significant and relationship between effective implementation of Basell III and the expected benefits wasconsistance with the fidings of. The results of ARN were supported by the findings of Jayadev. As for the role of management (BMT), the results were inconsistent with finding of effective role of management reached. However, unexpectedly the results indicate that the estimated coefficients of the remaining independent variables (BAW and CBR) were negative and statistically significant at 1% in the case of CBR, this finding was inconsistence with findings of Adam and Variable and statistically insignificant in the cate of BAW, Obviously the results do not support hypotheses 2 and 4.[21]

Regarding BAW, the results consistence with outcomes of Boora and Jangra.

Based on our findings, it can be concluded that the respondents were aware of the expected benefits of Basel III implementation. They were also satisfied with the available resource required to implement Basel III. In addition, the results reveal somehow a positive role of bank management, but it is not strong enough. On the other hand, the participants were not familiar enough with the Basel III agreement, knowing that the needed familiarity can be achieved by both the UAE central bank and the bank management, but the results indicate that their role was not strong enough

Table 7: ANOVA of Difference between Bank Type.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.712	23	0.335	1.755	0.04
Within Groups	12.611	66	0.191		
Total	20.322	89			

In order to test the final hypothesis 6 that states: "there is a significant difference between the conventional and Islamic banks regarding the effectiveness of the implementation of Basel III", we conducted a one-way ANOVA test. Table 7 shows that the calculated F value was higher than the tabulated value and statistically significant at 1 percent. Therefore, hypothesis 6 is confirmed. These results were expected because of the differences between the two types of banks in many aspects. The finding was consistent with the outcomes of Alsharif, Jaradat and Al- Hares [1-20].

CONCLUSION

The objective of this paper is to investigate the factors influencing the effective implementation of Basel III in the UAE's banks. While some previous studies in the UAE examined the implementation of the previous Basel Accord (Basel I and II), no studies so far have evaluated the effective implementation of Basel III, which was developed in 2010. Therefore, this study is the first of its kind focusing on the UAE banks implementation of Basel III. The attempt was made to answer the research questions (six questins), the conclusion reached is: the respondents were aware of the expected benefits of the implementation of Basel III, they were

familiar with the content of Basel III, they were satisfied with the available resources, but they expressed their concern about the role of bank management and the UAE Central bank. Conclusions also reached based after testing the research hypotheses, the main conclusions in this regard are: there is a positive relationship between the effective implementation of Basell III and the expected benefits, the avialable resources and the role of bank management. However, the results indicate a negative relationship between the implementation of Basell III and the support of the Central Bank and the respondents understanding of the content of Basel III. The last coclusion of this study is as expected there is a significant difference between the conventional and Islamic banks regarding the effectiveness of the implementation of Basel III and this is due to the differences between the two types of banks in many aspects.

Based on the findings reached in this study, the following policy implications can be recommended:

To promote the effective implementation of the Basel Accords in the UAE's banking sector by the UAE's Central Bank as well as bank management should promote regarding understanding and awareness of the Basel regulations, the expected benefits, and the required resources necessary, in addition to revise the implementation procedures by both the Central bank and commercial banks to ensure efficiency and minimize mistakes.

REFERENCES

1. Aathira K, et al. "Basel III-The impact on banking Sector. Sum J Mana. 2013;24-10.
2. Adam M, et al. "Bank liquidity-stress testing and Basel III implementation in Indonesia". Eco J Emer Mark. 2015;7: 12-23.
3. Ahmed SU, et al. "Impact of Basel II Implementation on the Financial Performance of Private Commercial Banks of Bangladesh". Eur J Eco, Fin Admin Sci. 2015;77:73-84.
4. Akter R, et al. "A Study on the Implementation of Basel Iii: Bangladesh Perspective". AcadStrMana J. 2019;18:1-10.
5. Alexander G J, et al. "A comparison of the original and revised Basel market risk frameworks for regulating bank capital". J Eco BehOrga. 2013;85:249-268.
6. Al-Hares OM, et al. "Financial Performance and Compliance with Basel III Capital Standards: Conventional vs. Islamic Banks", J App Bus Res. 2013;29:1031.
7. Alsharif M, et al. "The productivity of GCC Islamic and conventional banks after Basel III announcement". J IslAcc Bus Res. 2013;10:770-792.
8. Al-Tamimi H, et al. "Implementing Basel II: An Investigation of the UAE Banks' Basel II Preparations", J Fin Reg Comp. 2008;16173- 187.
9. Al-Tamimi H, et al. "Banks' Risk Management: A Comparison Study of UAE National and Foreign Banks". J Risk Fin. 2007;8:394-409.
10. Amorello L, et al. "Beyond the Horizon of Banking Regulation: What to Expect from Basel IV? ",SSRN. 2016.
11. Angelini P, et al. "Basel III: Long-Term Impact on Economic Performance and Fluctuations", B Int Sett. 2011.
12. Ayadi R, et al. "Implementing Basel III in Europe: Diagnosis and Avenues for Improvement". Cen Euro Pol Stu. 2012;1-19.
13. Bano A. "Basel III: Implementation And Challenges Faced By Pakistan's Banking Industry". Grassroots. 2018;51:2.
14. Barakat A. "Banks Basel II Norms Requirement Regarding Internal Control: Field Study on Jordan Banks". Delhi Bus Rev. 2009;10:35-48.
15. BCBS. "Finalising Basel III in Brief", Bank for International Settlements. 2017.
16. BCBS. "High-Level Summary of Basel III Reforms", Bank for International Settlements. 2017.

17. Bilal Z, et al. “Does Basil III Implementation Impact on Financial Performance? Evidence from Omani’s Commercial Banks”. Int J Eco FinIIssu. 2016;3:963-970.
18.
19. Boora K, et al.“Preparedness Level of Indian Public Sector Banks for Implementation of Basel III”. Man Fin. 2019;45:172-189.
20. Bors I. The impact of the foreign capital banks on ensuring financial stability on long term. Annals Eco Pub Adm. 2015;15:246-253.
21. Braima BHGE. “Impact of Islamic Securitization (Sukuk) on Islamic Banks Liquidity Risk in Light of Basel III Requirements”. Int J Fin Bank Stu. 2017;6:85.