Determinants of Islamic and Conventional Banks Profitability: A Contingency Approach

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ABSTRACT

Manuscript type: Research paper

Research aims: The purpose of this study is to investigate the determinants of Islamic and conventional banks profitability in the Middle East and North African (MENA) regions.

Design/Methodology/Approach: This study utilises multiple regression analysis using a panel data model to identify profitability determinants through convenience sampling of Islamic and conventional banks across eight countries operating in the MENA region, between 2008 to 2016.

Research findings: This study found that the profitability of conventional banks measured by ROAE was higher than that of the Islamic banks. Furthermore, the liquidity and financial risk were proven to have a negative significant relationship with profitability, while the diversification strategy and human capital efficiency had a significant positive relationship with Islamic banks. The moderation effect of economic development was positive in terms of liquidity and financial risk, but negative on the diversification strategy. For conventional banks, cost leadership strategy had a significant negative relationship with profitability. The external variables including inflation rate and industry concentration had a significant effect on profitability. The moderation effect of economic development was

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negative with regards to the cost leadership strategy, and positive with regards to the financial risk-taking strategy.

Theoretical contribution/Originality: This study is supported by relatively new theories in the field of finance, using the contingency theory, and resource-based view theory. By utilising the added economic value for measuring the Islamic bank's profitability, in addition to the investigation on the moderation effects of the country's income level, this is deemed a relatively new method.

Practitioner/Policy implication: This study will benefit bank managers in selecting their strategies and capabilities wisely to improve their bank's profitability.

Research limitation/Implications: The existence of political and economic crisis during the research scope and the sample size was greatly affected by the unavailability of data.

Keywords: Banking, Conventional, Islamic, Profitability, MENA Region
JEL Classification: G21

1. Introduction

A country's economic performance is heavily dependent upon the performance of the financial sectors. Accordingly, banks play a crucial role in economic operations, and are considered a prerequisite for sustainable economic development (Aziz et al., 2016). The central function of the banking industry is financial intermediation, which is responsible for channeling savings into productive investments. With respect to this, the bank's success in performing this function will have benefits at both the micro and macro levels. At the micro level, when the bank is successful in conducting its business, it will gain more profit, which is considered the essential goal of any business. At the macro level, a profitable banking industry will ensure the stability of the financial sector, and lead to economic development (Menicucci & Paolucci, 2016). While the importance of banks is undeniable, its effect and degree of importance varies across countries. For example, countries in the MENA region are considered bank-based economies, as banks are the dominant institutions in the financial sector (Ben & Omran, 2011). The importance of the banking industry arises from its ability to attract large sums of money, which is reflected by the high percentage of bank deposits to the GDP in the region, compared to the rest of the world (Abdullah & Tan, 2017).

The MENA region comprises of 20 countries from across different income levels, with a population of over 436.72 million. It is currently achieving very rapid growth, which has increased its importance in the global economy. As it gains importance due to its geographical location which is considered a bridge connecting Europe and Asia, it is also considered to be one of the richest regions with resources, along with being the home to the world's largest Islamic banks (Caporale et al., 2017). Countries from the MENA region are responsible for 74% of the contribution to the total Islamic banking industry. According to Ernst and Young (2016), the Kingdom of Saudi Arabia had the highest contribution for the total Islamic banking assets at 36 per cent, followed by Malaysia (17%), United Arab Emirates (UAE) (16%), Kuwait (11%), Qatar (9%), Turkey (5%), Indonesia (3%), Bahrain (2%), and Pakistan (1%). Following the 2007 financial crisis, scholars have shown an interest in similar issues, with new studies on the existence of Islamic banks and their resilience being published. As a result, these studies have sought to examine the performance of both forms of banking systems, yielding disparate results in terms of the superiority of one bank over another, and the elements which influence both types of banking system's performance.

Not only has there been a debate on the literature about Islamic and conventional bank performance and its determinants, but the majority of studies have relied solely on models and hypotheses, rather than theories, such as the relative market power hypothesis, structure-conduct performance hypothesis, and the efficiency structure hypothesis. Furthermore, many studies have focused on only a few of the characteristics which may influence a bank's performance, ignoring others, including organisational capacities, which, according to the resource-based perspective theory, will have a significant impact on a bank's performance in today's knowledge-based economy. Olson and Zoubi (2017) and Khasawneh (2016) discovered that Islamic banks weathered the destructive effects of the financial crisis much better than their conventional peers. Nonetheless, as the repercussions of the financial crisis enveloped the actual economy in 2009-2010, the profitability of Islamic banks fell in comparison to conventional banks. However, from 2011 to 2014, both types of banks were profitable at similar rates. As a result, Islamic and conventional bank profitability converged, although both types of banks functioned differently, and performed differently across the country. Yet, while most studies were

only applicable to European countries and the United States, the nature of the MENA region was ignored, leading to divergent outcomes. The MENA region specifically consists of 20 countries with varying economic levels, ranging from high to low. Since the main aims of Islamic banks are meant to create profit and maximise social welfare in the country (Bidabad & Allahyarifard, 2008), their goals differ from those of their conventional ones, necessitating the use of various performance indicators which can reflect their unique characteristics.

A well-structured strong banking system is not only crucial for economic interaction among market sectors, but also to enhance operational efficiencies, and thereby accelerate economic growth (Rashid & Jabeen, 2016). In addition to the importance of the MENA region, its countries are considered bank-based economies along with being the main contributor to the total Islamic banking assets. Given this, the study aims to sort out the full conceptual framework of Islamic and conventional banks based on their profitability throughout the MENA nations and construct a comprehensive picture of the Islamic and conventional bank profitability across the MENA countries. It also seeks to analyse internal and external elements which may have an impact on the bank's profitability, considering the bank's characteristics, organisational strategies and capabilities, as well as external environmental factors. By incorporating the nature of both types of banks, this provides a comprehensive view of the Islamic and conventional banking profitability in the region, supported by the contingency theory and resource-based view theory. This research can be differentiated by its innovation and creativity, which is based on the location, variables employed, and theories chosen to pique the interest of the study, readers and future researchers to carry out comprehensive research on the profitability of Islamic and conventional banks.

2. Literature Review

2.1 Islamic and Conventional Banking: An Overview

The global financial crisis has become a major issue between the years 2007 and 2008. As a result of the situation, several conventional banks experienced financial difficulties. Islamic banks, on the other hand, were unaffected by the shocks, owing to their adherence to Sharia principles. As a result, Islamic banks piqued the curiosity of academics and

policymakers alike. Apart from the fact that there are over 300 Islamic financial institutions around the world, most international banks in the western economy, such as Citigroup and HSBC, now have Islamic windows to meet the growing demand for financial products that adhere to the Islamic legal code known as Sharia (Bukhari et al., 2013).

Under Islamic banking, the use of interest (*Riba*) to benefit from high-risk and uncertain investments is prohibited (*Gharar*). Instead, Islamic banks must engage in economic activities based on profit and risk-sharing between lenders and borrowers. As a result, profits are generated through trading, leasing and direct financing based on profit and loss sharing (PLS) (Al-Omar & Abdel Haq, 1996). They are essentially financial institutions which are similar to traditional banks but follow Sharia standards. Both types of banks use financial resources to make money, but Islamic banks accept deposits and lend money using *Musharakah*, *Mudharabah*, *Ijarah*, and *Sukuk*. Islamic banking also illustrates the integration of Islamic religious principles with the Islamic economic system's social goals, such as social justice and economic progress. As a result, Islamic banks function in a different context than their conventional counterparts, as they must adhere to Sharia rules, and must achieve their economic and social objectives.

Islamic banks are prohibited from engaging in any transaction or investment involving the production or consumption of *Haram* (illegal under Sharia laws) goods or services, such as alcohol, pork, cigarettes, gambling and prostitution. In addition, participation in any enterprise which may have a harmful impact on society is prohibited. Aside from the fact that these limitations are beneficial to society and the environment, they also limit the profitability of Islamic banks. *Mudharabah* (Profit Sharing), *Wadiah* (Safekeeping), *Musharakah* (Joint Venture), *Murabahah* (Cost Plus Finance), *Ijar* (Leasing), *Hawala* (Fund Transfer System), and *Takaful* (Insurance), are examples of Islamic banking products associated with loan contracts, conventional bank trade transactions, and many more. Some of these include *Mudharabah* (profit sharing), *Wadiah* (safekeeping), *Musharakah* (joint venture), *Murabahah* (cost plus finance), *Ijarah* (leasing), *Hawala* (an international fund transfer system), *Takaful* (Islamic insurance), and *Sukuk* (Islamic bonds) (Salman, 2011; Machado et al., 2018).

The fundamental distinctions between Islamic and conventional banks are based on the Islamic bank's adherence to Sharia regulations and principles. Islamic banks obtain finances primarily through the

issuance of equity, and the acceptance of deposits, whereas conventional banks mostly rely on financial instruments. Furthermore, Islamic banks receive profit-sharing deposits rather than interest-bearing deposits from traditional banks. Due to Sharia regulations, Islamic banks are frequently restricted in the sorts of investment vehicles in which they can engage in. Lastly, Islamic banking corporate governance is based on the "Sharia Committee" which comprises of Islamic law experts who approve any transaction and operation carried out by the Islamic bank, to ensure its compliance with Sharia (Olson & Zoubi, 2017).

2.2 Profitability Measures

The early research interests with banks' performance were mainly concerned with the bank's structure and competition. Ultimately, the focus of these researchers turned toward examining the bank's profitability and efficiency. However, recent literature has focused on comparative studies across countries, and across different banking systems (Muda et al., 2013). Given the fact that profitability is the main concern for any organisation, a bank's performance and its determinants have been one of the main concerns among researchers in the banking industry.

Maditinos et al., (2009) and Hailey and Sorgenfrei (2003) mentioned that managerial performance was assessed in the past using traditional accounting measures, which has led to various issues such as manipulation, fraud and dishonesty. They further highlighted that these measures included earnings per share, return on assets, return on equity and net profit. However, the evolution of measuring performance over the years has been improvised and evaluated using a combination of value creation measures, along with traditional accounting techniques, to consider both the financial performance and the long-run assessments of non-financial factors (Rajnoha et al., 2016). The measures of value-added which reflect residual income evaluations, such as shareholder value addition, cash flows return on investment, free cash flows return on investment, economic profit, and cash value added (Shil, 2009) were brought to light. Those modern techniques take into consideration the cost of capital and adjust operating income with the required inherent costs to get a clearer picture of the performance. Consequently, the dependent variables used in this study which capture a bank's profitability would be used for both traditional and modern measures (Shil, 2009; Azeem et al., 2018).

As for the modern techniques used in performance evaluation, economic value added (EVA) has been used in this study as a proxy of profitability. EVA had been used as the most powerful tool for measuring performance, and has been less debated among practitioners (Goel, 2019; Jakub et al., 2015; Van Doorn, 2014). In other words, it captures the amount of money that exceeds the minimum requirement set by the investors, representing the operating profit surpassing the capital opportunity cost (Matac, 2017). EVA is considered a crucial indicator which is used in allocating capital at both the company level and the national level. Under the same level of risk, the minimum return achieved by the company should be equal to the average return achieved by the capital market. Accordingly, if the company fails to achieve such a return, shareholders will typically transfer their capital to other investments (Matac, 2017; Owusu-Antwi et al., 2015).

This study investigates the profitability determinants of Islamic and conventional banks in the MENA region. Accordingly, with respect to the nature of the Islamic banks, and for the sake of utilising new measures of profitability which may exploit new insights regarding the profitability of banks, this study uses three measures of profitability, namely, ROAE, ROEE and EVA. They are the most used measurements of profitability utilised by previous researchers, such as Dietrich & Wanzenried (2011), Noman (2015), Petria et al. (2015), Abdullah and Tan (2017), and Alharbi (2017). These measures are employed to account for the drawbacks of each measure, and to provide a comprehensive view of a bank's profitability by measuring their return on the assets and the equity side. Despite EVA being used previously in different regions, to the best of the author's knowledge, EVA has never been used as a proxy for analysing a bank's profitability determinants in the MENA region. It will help to reflect the profitability of Islamic banks much better than the conventional measures, as it is much more linked to the goals of Islamic banking for creating value (Ariss, 2010; Beck et al., 2013).

2.3 Determinants of a Bank's Profitability

Various studies have examined the determinants of Islamic and conventional bank's profitability. For example, Jaara et al. (2021) found that there were substantial variances between the Islamic and conventional banks in terms of the determinants of a bank's profitability, as it was found that 89 per cent of an Islamic bank's profitability, and 85 per cent of a conventional bank's profitability was influenced by the bank's

size, market to book value, capital ratio, cash to assets, gross domestic product (GDP), GDP growth and inflation. In addition, Malim and Azizan (2020) investigated the determinants of profitability of both Islamic and conventional banks in selected Asian countries and showed that the profitability of Islamic and conventional banks was affected by different factors. Of which, the profitability of Islamic banks was seen to be significantly affected by the size, management efficiency, inflation, market concentration, rule of law and monetary freedom. For conventional banks, the key determinants included capital, size, credit risk, management efficiency, monetary freedom and economic growth. These findings highlighted the importance of policy implications for bankers and policymakers, to increase profitability in the dual banking system.

2.3.1 *The Effect of Bank's Organisational Characteristics on Profitability*

The organisational characteristics of banks are examined in this study, across both bank ownership and liquidity. Of which, liquidity is defined as the ability of a bank's funds to meet depositors withdrawals (Muda et al., 2013). Consequently, lower liquidity indicates a higher risk. Following the portfolio theory, this should lead to higher profitability. Accordingly, many studies expect a positive relationship between liquidity and profitability (Zarrouk et al., 2016). On the other hand, other researchers argued that holding excess liquidity can be viewed as wasted funds which should have been loaned to earn more profit. This view was supported by the findings of Abdullah and Tan (2017), Caporale et al. (2017) and Noman (2015).

The existent literature reported mixed results on the effects of ownership on a bank's performance, of which foreign-owned banks were expected to achieve higher profits due to their lower incurred costs by operating in developing countries (Caporale et al., 2017). Also, foreign ownership can have a positive impact on profitability, as foreign banks retain advanced technology, and high governance standards, as well as better risk mitigation techniques and tax benefits (Alharbi, 2017). On the other hand, foreign banks are not only faced with economic risks in their operating country, but are also exposed to economic and financial risks from their home country, which might affect profitability in a negative way (Alharbi, 2017). Haque and Shahid (2016) found that foreign ownership had a significant negative relationship toward profitability. Likewise, Alharbi (2017) found that foreign ownership had a negative impact on an Islamic bank's profitability.

2.3.2 *The Effect of Bank's Organisational Strategies on Profitability*

Three strategies have been discussed in the context of banking: the cost leadership strategy, the risk-taking strategy and the diversification strategy. Firstly, the cost leadership strategy can be examined by the degree of a bank's efficiency, which can result from reducing cost, or increasing the amount of productive credit (Belkhaoui et al., 2014). Khasawneh (2016) found that efficiency on average is much lower for Islamic banks in the MENA region, which reflects a better operational efficiency of conventional banks, thus, revealing their higher ability in converting their resources into revenues much better than Islamic banks. Also, Noman (2015) found a negative relationship between the profitability and efficiency of banks in Bangladesh. Belkhaoui et al. (2014), found that the cost leadership strategy had a positive indirect effect on a bank's performance.

Since banks are unable to function in isolated environments, and as there is no assurance for the stability of the financial industry, the risk is considered as an intrinsic element in the bank's operation, that should be managed comprehensively to maintain the success and survival of the banking system. In the banking industry, risk-taking strategies are mainly divided into two categories. First, a financial risk, which reflects the risk-taking from the perspective of shareholders, and secondly, credit risk, resulting from the bank's asset quality (Belkhaoui et al., 2014). The financial risk reflected by the bank capitalisation ratio is considered a strategic choice by the management for selecting the amount of leverage for financing the organisation (Belkhaoui et al., 2014). Credit risk is defined as the probability of loss which occurs due to the debtor failing to fulfill its obligations to the banks (Petria et al., 2015).

Several researchers have investigated the effects of credit and financial risk as a determinant of a bank's profitability. For example, Javaid & Alalawi (2018), found that the capitalisation ratio had a positive significant relationship with profitability, while credit risk had a negative effect. Also, Zarrouk et al. (2016), found a significant positive relation between the capitalisation ratio and profitability in the MENA region. In the context of Jordanian and Saudi banks, Almazari (2014) found that capitalisation was positively related to profitability. Yet, the effect of credit risk on profitability was only found to be positive in the Jordanian banks, while its effect in Saudi banks was negative. Furthermore, it was also found that credit risk had a significant negative effect on all the measures of profitability in the UAE (Mehta & Bhavani, 2017). Belkhaoui et al. (2014), investigated the causal relationship between

bank performance, market structure, and strategic choice, and found that the credit risk-taking strategy had a significant indirect effect and non-significant direct effect on a bank's performance. The total effect of the capitalisation ratio became significantly positive with performance. On the contrary, Noman (2015) examined the effect of bank-specific and macroeconomic variables on the profitability of Islamic banks in Bangladesh, and the results showed a significant negative influence on credit risk and capitalisation ratios toward profitability.

The rapid change occurring in the financial environment, along with the regulatory and competitive pressures, increase the volatility of the banking industry, encouraging banks to look for other sources of income to survive. Accordingly, non–interest incomes have become one of the most important sources of a bank's income diversification (Ismail et al., 2015). Even though banks are now moving towards following a diversification strategy by increasing their non-interest income, it has its drawback. Despite being an essential strategic choice, it may lead to the destruction of the organisational values, which is known as "diversification discount". Organisations should adopt this strategy when the gains outweigh the costs (Belkhaoui et al., 2014). Almazari (2014), Hamdi et al. (2017), and Zarrouk et al. (2016), found a significant positive relationship with profitability. On the contrary, Belkhaoui et al. (2014) found a significant negative relationship between diversification and a bank's performance.

2.3.3 The Effect of Bank's Capabilities on Profitability

One of the earliest definitions viewed intellectual capital (IC) as an intangible asset, similar to the brand name, loyalties and technological development, which is used to achieve a competitive advantage (Itami, 1987). Edvinsson and Sullivan (1996) defined IC as any knowledge that the firm possesses, which can be transformed into value. Stewart (1997), broadened this definition by adding information, intellectual property and experience toward the knowledge base as intellectual resources which are used for creating wealth and prosperity for the firm. Based on the existing literature, IC is classified into three main components: human capital, structural capital and relational capital (Alipour, 2012; Kehelwalatenna, 2016; Meles et al., 2016). Human capital includes the knowledge, capabilities, skills and experiences of the organisation's employees (Roos et al., 1997). Relational capital is defined as the ability of an organisation to interact with the external world, including all

the firm's stakeholders, as well as the knowledge embedded in these interactions (Bontis, 1998; Roos et al., 1997). Finally, structural capital is considered as the infrastructure which encourages the employees to create and leverage their knowledge for representing the backbone of the organisation (Roos et al., 1997).

Mondal and Ghosh (2012) studied the effect of IC on the financial performance of Indian banks, and found that IC had a significant positive relationship. Another study conducted by Isanzu (2016) in Tanzania revealed the same results. Al-Musali and Ismail (2016), found a significant positive relation between IC and a bank's profitability in the Gulf Cooperation Council (GCC). The effect of IC on profitability was found to be positive across 64 Islamic financial institutions, covering 18 different countries in Asia, Europe and the Middle East (Tasawar & Haniffa, 2017). In another study, Kehelwalatenna (2016), found that IC did not have a significant effect on the performance during the financial crisis. These various studies focused on analysing the effect of each subcomponent of the IC, rather than examining the aggregate level. Rehman et al. (2012), examined the influence of ICs on a bank's financial performance in Pakistan, and found a positive relationship. In addition, the researchers argued that HCE was found to have the most influence on profitability, with an average of 70 per cent of the performance contributing only to the human capital. Accordingly, this study investigated the relationship between IC and profitability, and also the effect of IC subcomponents, which will be examined individually, of which, a positive effect is expected for all the relationships.

2.3.4 *The Effect of Bank's External Environment on Profitability*

The impact of the external environment, namely the industry, and the inflation rate, will be investigated in this study. Banks are expected to earn more profit when the market becomes much more concentrated, as their ability on requiring higher rates on loans by providing lower rates on deposits increases regardless of the management efficiency and associated strategies (Belkhaoui et al., 2014). Several researchers have studied the effect of market structure and industry concentration on the profitability of banks. Belkhaoui et al. (2014) found that market concentration had a positive direct effect on bank performance, yet it was statistically insignificant. In addition, Hamdi et al. (2017) found a positive significant effect for the industry concentration when examining the Tunisian banking sector's profitability.

The inflation rate is considered a proxy of how macroeconomic risk can influence a bank's profitability (Noman, 2015). Even though high inflation is expected to be related to both high income and high cost, sometimes, the degree of increase in both income and cost is not equivalent, which results in mixed effects of inflation on profitability. If the degree of increase in income exceeds the increase in cost, inflation is expected to have a positive effect on profitability, and vice versa (Noman, 2015; Wasiuzzaman & Tarmizi, 2010). In addition, the effect of inflation is related to business expectations. If the inflation is fully anticipated, the bank's management will adjust their interest rates and fees to absorb the increase in costs, and vice versa (Abdullah & Tan, 2017). A significant positive effect relation between inflation and profitability was found by Abdullah and Tan (2017) and Masood et al. (2012). Likewise, Masood et al. (2012) found significant inflation had a significant positive impact on the Islamic banks across different regions. On the contrary, Nouaili et al. (2015) found that the inflation rate negatively affected banks' performance in Tunisia.

2.3.5 *Moderation Effect of Economic Development*

The country's economic development influences banking activity, as it increases both customer deposits and loans, which affect a bank's profitability positively (Dietrich & Wanzenried, 2011; Nouaili et al., 2015; Petria et al., 2015). Consequently, some of the variables also interact with the GDP per capita, which affects profitability at different levels of income. Previous studies have tested the effect of these interactions. For example, Bashir (2003) examined the interaction between GDP per capita with capitalisation ratios, liquidity and efficiency. From which, the interaction effect between both the GDP per capita and liquidity, and the GDP per capita and capitalisation, was found to be insignificant. However, the interaction effect between efficiency and GDP per capita had a positive significant relationship with profitability. Demirgüç-Kunt and Huizinga (1999) tested the interaction effect of diversification and GDP per capita, and found a negative relation for high-income countries. Zantioti (2009) found that the interaction between diversification and GDP per capita had a significant positive effect on profitability, and the capitalisation ratio interacted with the GDP per capita, which had a significant positive effect on the ROA, and an insignificant effect on the ROE. The interaction effect on liquidity and GDP per capita affected the profitability of banks in low-income countries.

Gunnarsdóttir and Mostepan (2013) tested the interaction between GDP per capita and bank characteristics, and found a significant negative relationship between both the interaction of credit risk and GDP per capita, and the leverage and GDP per capita with that of bank profitability. Accordingly, this study will examine the interaction effect between the GDP per capita and size, liquidity, efficiency, credit risk, financial risk, and diversification on profitability.

2.4 Theoretical Background

The development of a contingency theory started when empirical studies found that the existing managerial theory was not able to describe the existing forms of businesses. Accordingly, researchers observed that the organisation's structure was different across various markets and environments, which led to a conceptual change in the literature. Consequently, this theory followed the situational perspective, which argued that management cannot follow certain rules to govern all organisations across different environments.

The contingency theory claims that there is no an optimal way to manage an organisation, but the ideal course of action is contingent upon the interactions between the internal situation in the organisation, and its external environment due to the high uncertainty and the continuous changes in the external environment (Lawrence & Lorsch, 1967). It examines the organisational structure (structural contingency theory) which takes into consideration the environment, the organisational size, and the strategy as contingency factors, so that the structure of the organisation should adapt to it. In addition, various factors are also considered in the structural contingency theory, but these are the most dominant.

On the other hand, the resource-based view (RBV) mainly examines the relationship between a firm's internal characteristics and performance (Barney, 1991). From the RBV's perspective, the firm's competitive advantage is formed by the acquisition of idiosyncratic resources. Resources are considered as attributes which the firm possesses to use as opportunities or offsets against threats from the surrounding environment (Barney, 1991). These resources comprise all the required strengths, weaknesses, assets, capabilities, processes and knowledge which are included in the organisation. From RBV's point of view, the firm is seen as a collection of unique resources and capabilities, which enable it to have a sustainable competitive advantage. However, these

resources and capabilities should be valuable, rare, non-substitutable and difficult to imitate. RBV postulates that organisations should possess these critical strategic resources, which are heterogeneous across organisations, and not perfectly mobile to promote them to gain and maintain a strategic competitive advantage. Grant (1996) classified these resources into tangible assets, intangible assets and human resources. The human resources were found to be the most dominant. According to Barney (1991), resources can only create a sustainable competitive advantage if they are valuable, rare, inimitable and non-substitutable (VRIN attributes).

However, competitive advantage is not solely reliant on the resources that the firm acquired, but also on the competencies and capabilities which can leverage the resource usage inside the firm (Barney, 1991). Moreover, the capabilities which are based on a combination of resources are much more difficult to be duplicated by competitors, which provides a stronger competitive advantage to the firm (Barney, 1991). In light of this proposition, intellectual capital (IC) is one of the most important strategic resources that the firm can have in a knowledge-based economy, as it is considered the output of transferring knowledge into intellectual assets to gain competitive advantage. Accordingly, IC is considered to have a significant impact on performance.

Based on the previous studies, and in line with contingency theory and resource-based view theory, a conceptual model was developed. A bank's profitability (dependent variable) is expected to be affected by organisational characteristics, organisational strategies, and the external environment, as postulated by the contingency theory. In addition, the moderation effect of a country's economic development is typically analysed as the interaction between a bank's internal variables and external environment, and is expected to affect its profitability, according to the concept of fit in the contingency theory. Moreover, a bank's capabilities are also expected to affect its profitability, supported by the RBV theory. The conceptual model was developed and depicted in Figure 1.

3. Methodology

3.1 Population and Sampling

This study determines the factors which affect the profitability of Islamic and conventional banks in the MENA region, which is comprised of 20 countries, namely, Algeria, Bahrain, Djibouti, Egypt, the Islamic Republic
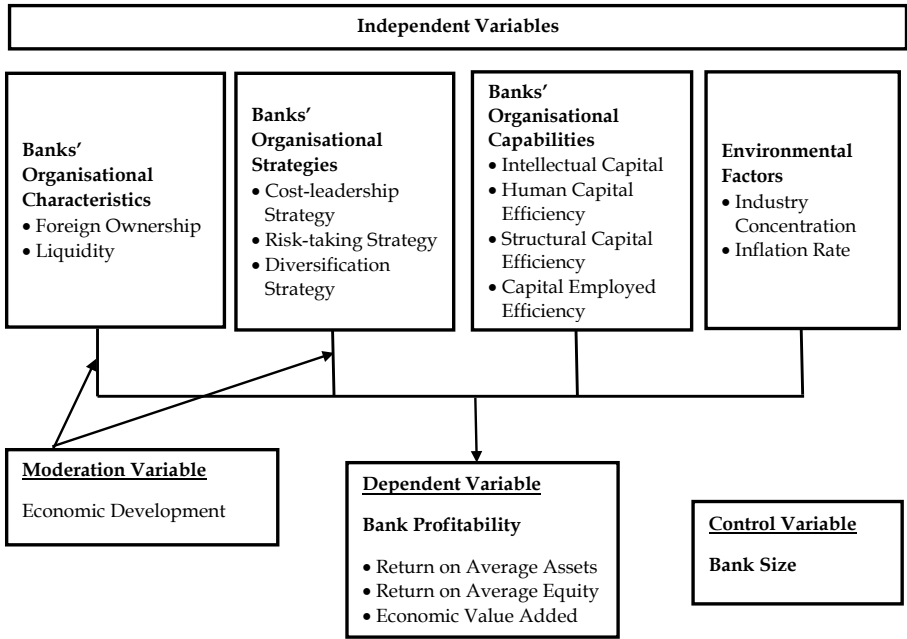
Independent Variables			
Banks' Organisational Characteristics • Foreign Ownership • Liquidity	**Banks' Organisational Strategies** • Cost-leadership Strategy • Risk-taking Strategy • Diversification Strategy	**Banks' Organisational Capabilities** • Intellectual Capital • Human Capital Efficiency • Structural Capital Efficiency • Capital Employed Efficiency	**Environmental Factors** • Industry Concentration • Inflation Rate

Moderation Variable

Economic Development

Dependent Variable

Bank Profitability

• Return on Average Assets
• Return on Average Equity
• Economic Value Added

Control Variable

Bank Size

Figure 1: Conceptual Model

of Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, the Syrian Arab Republic, Tunisia, the United Arab Emirates, Yemen and Malta. Table 1 presents the population in the study, which includes all listed Islamic and conventional banks across these 20 countries. The population included all the Islamic and conventional banks which were listed on the stock exchange in these 20 countries in the MENA region. This study analysed the bank's data from 2008 to 2016, so as to include time-series data of pre- and post-global 2008 financial crisis.

However, four countries in the population, namely, Libya, Morocco, Tunisia and Malta did not have Islamic banks listed since the introduction of Islamic banking in these countries were still considered to be at the rudimentary stage. The central bank of Libya approved the launch of Islamic banking and finance in 2012 (Abdulsaleh, 2017). Morocco passed the introduction of Islamic banking in the Participative Banking Act chapter in 2014, while the central bank of Morocco had approved five banks which offered Sharia-compliant products and services in 2017 (Rhanoui & Khaled, 2017). Tunisia passed the Finance Act in 2012, which

Table 1: Population and Sampling

N	Country	No. of Conventional Banks	Sample	No. of Islamic Banks	Sample
1	Bahrain	3	3	3	3
2	Egypt	11	7	3	1
3	Iran	0	0	11	0
4	Iraq	19	0	15	0
5	Jordan	4	2	10	9
6	Kuwait	5	2	4	1
7	Lebanon	5	5	1	1
8	Libya	4	0	0	0
9	Morocco	6	0	0	0
10	Oman	4	4	4	2
11	Palestine	2	0	2	0
12	Qatar	2	2	6	5
13	Kingdom of Saudi Arabia	0	0	10	0
14	Syria	9	0	3	0
15	Tunisia	10	0	0	0
16	UAE	11	9	2	1
17	Malta	4	0	0	0
18	Djibouti	0	0	0	0
19	Yemen	0	0	0	0
	Total	99	34	74	23

offered a complete set of regulations and laws for governing Islamic capital (Echchabi et al., 2016). On the contrary, the Islamic Republic of Iran and the Kingdom of Saudi Arabia relied only on Islamic banking in the financial industry.

Two countries, namely Djibouti and Yemen were excluded from the population, as they had no stock exchange. Algeria's banks were also excluded, as there were no banks listed on the stock exchange. Iraq, Syria and Palestine were also excluded from the sample due to the unavailability of data from the banks in these countries.

3.2 Research Design

This study follows a pragmatic philosophy, and a functionalist paradigm. Moreover, it uses an abductive approach in formulating the research framework, by mixing the deductive with inductive approaches

which matches the adopted pragmatic research philosophy. The purpose of this research is descriptive and explanatory. The first question aims at describing the profitability of Islamic and conventional banks in the MENA region, and the remaining research questions are of an explanatory nature and seeks to explore the determinants of a bank's profitability across bank types and countries.

The differences of a bank's profitability between the Islamic and conventional banks were examined using a T-test. In order to investigate the factors which affect a bank's profitability across both Islamic and conventional banks, multiple regression analysis was performed on two models, where one was conventional banks and the other was Islamic banks. Developing two models across a different kind of bank system is essential since the types of the bank are different in terms of their operation, system, products, aims, management, etc. The choice of the multiple regression analysis was selected after testing all the assumptions of the regression analysis. In addition, as per the literature review, a bank's profitability was measured using three indicators: economic value added (EVA), return on average assets (ROAA), and return on average equity (ROAE). Therefore, each of the two models used for conventional and Islamic Banks were reformulated into three multiple regression equations for testing the effect of a bank's characteristics, a bank's organisational strategies, a bank's capabilities, and external environment associated with the bank's profitability measures, i.e., EVA, ROAA and ROAE. The variables used in this study are shown in Table 2.

4. Findings and Discussion

4.1 Descriptive Analysis

The samples included in the analysis were 57 banks listed in the exchange board of countries in the MENA region, of which 24 banks were Islamic, with a percentage of 40.4 per cent, and 43 banks were conventional, with a percentage of 59.6 per cent. Of the 57 banks listed in the exchange of countries in the MENA region, 48 banks were locally owned (84.2%), and the rests were owned by foreigners. This indicates that most of the banks in the MENA region relied on domestic owners.

4.2 Correlation Analysis

Since the data used in the analysis is proven to be parametric, the Spearman correlation was used. EVA demonstrated a significant

Table 2: Research Variables

Variables	Description	Sign	Notation	Source
Dependent Variable				
Bank Profitability	EVA: the net operating profit deducted from the opportunity cost of the invested capital (Matac, 2017)		EVA	Author calculation based on Data Stream data
	ROAE: a ratio of net profit to average equity (Zarrouk et al., 2016)		ROAE	Data Stream
	ROAA: the ratio of net profit to average assets (Zarrouk et al., 2016)		ROAA	Data Stream
Independent Variables				
Bank's Characteristics				
Foreign Ownership	A dummy variable with a value of one if the bank is foreign, and a value of zero if the bank is domestic (Caporale et al., 2017)	-ve	OW	Data Stream
Liquidity	Total loans to total assets (Abdullah & Tan, 2017; Zarrouk et al., 2016)	-ve	LIQ	Data Stream
Bank Organisational Strategies				
Cost Leadership Strategy	Cost to income ratio = overhead costs /revenues (Doumpos et al., 2017; Rajhi & Hassairi, 2013)	+ve	CLS	Data Stream
Risk–Taking Strategy	Financial Risk: Total equity to average assets (Almazari, 2014)	-ve	FR	Data Stream
	Credit Risk: The ratio of loan loss provisions over total loans (Alharbi, 2017; Almazari, 2014)	+ve	CR	Data Stream
Diversification Strategy	Non-interest income to gross revenue ratio (Abdullah & Tan, 2017; Zarrouk et al., 2016)	+ve	DS	Data Stream

Table 2: Continued

Variables	Description	Sign	Notation	Source
Bank's Organisational Capabilities				
Intellectual Capital	Value added intellectual coefficiency = capital employed efficiency + human capital efficiency + structural capital efficiency (Pulic, 2011)	+ve	IC	Author calculation based on Data Stream data
Environmental Factors				
Industry Concentration	Herfindahl-Hirschman Index (HHI): The sum of the squares of the market share of banks (Dietrich & Wanzenried, 2011)	+ve	INC	Author calculation based on Data Stream data
Economic Conditions	Annual inflation rate (Noman, 2015)	+ve	INF	World Bank Database
Moderation Variables				
Liquidity and Economic Development	Interaction of Liquidity and GDP per capita	-ve	LIQGDP	Author calculation based on Data Stream data
Cost Leadership Strategy and Economic Development	Interaction of Cost to income ratio and GDP per capita	+ve	CLSGDP	Author calculation based on Data Stream data
Risk-taking Strategy and Economic Development	Interaction of Total equity to average assets and GDP per capita	-ve	FRGDP	Author calculation based on Data Stream data
Cost Leadership Strategy and Economic Development	Interaction of loan loss provisions over total loans and GDP per capita	+ve	CRGDP	Author calculation based on Data Stream data
Diversification Strategy and Economic Development	Interaction of Non-interest income to gross revenue and GDP per capita	+ve	DVGDP	Author calculation based on Data Stream data

Table 3: Correlation Analysis

	EVA	ROAE	ROAA	CLS	CR	FR	DS	HCE	SCE	CEE	VAIC	IC	IR	LIQ	BS	GDP
EVA																
ROAE	.056															
ROAA	.064	.579**														
CLS	.083**	-.065	-.056													
CR	-.039	.012	-.038	-.057												
FR	.017	-.117**	.005	-.258**	-.078											
DS	.116**	-.085*	.023	-.029	-.088*	.099*										
HCE	.009	.007	-.004	-.199**	-.054	.089*	-.039									
SCE	.044	-.017	-.153**	-.255**	-.122**	.077	-.039	-.136**								
CEE	.008	.117**	-.302**	-.194**	.058	.023	.150**	0.27	.545**							
VAIC	.080	-.037	-.168**	-.229**	.036	-.132**	-.086*	.043	.803**	.619**						
IC	-.063	-.059	-.161**	-.195**	.019	-.131**	-.028	.078	.203**	.188**	.215**					
IR	.127**	.042	.109**	.184**	.001	-.079	-.082	.065	-.107*	-.214**	-.091*	-.211**				
LIQ	-.067	.096*	.050	-.077	-.044	.073	.045	-.001	.020	.075	.030	-.144**	-.070			
BS	-.012	.086*	-.003	-.009	-.033	-.348**	.002	-.298**	-.020	-.082*	.057	-.268**	.069	.070		
GDP	-.078	-.066	-.031	-.384**	-.062	.240**	.157**	.105*	.297*	.445**	.323**	-.358**	-.358***	-.390**	.167**	

Note: EVA = Economic Added Value, ROAE = Return on Average Equity, ROAA = Return on Average Assets, CLS = Cost Leadership Strategy, CR = Credit Risk, FR = Financial Risk, DS = Diversification Strategy, HCE = Human Capital Efficiency, SCE = Structural Capital Efficiency, CEE = Capital Employed Efficiency, VAIC = Value Added Intellectual Coefficiency, IC = Intellectual Capital, IR= Inflation Rate, LIQ = Liquidity, BS = Bank Size, GDP = Gross Domestic Product.

relationship with the inflation rate (.127**). However, it had the weakest relationship with GDP (-.078). ROAE showed a strong relationship with ROAA (.579**), and a weak relationship with CEE (-.177**). CLS had a much more negative than positive relationship, and only one was positive, at .579**, with IR. The highest negative matched the GDP (-.384**). CRS and SCE displayed a good relationship (.122**) and a relatively weak relationship with FRS (-.078). FRS (.240**), DS (.157**) and LIQ (.390**) had the highest relationship with GDP. HCE had the strongest relationship with BS (.298**). VAIC showed a good relationship with SCE (.803**), CEE (.619**) and ICE (.215**). For IR, a high relationship was recorded with CLS (.184**). The result noted that BS had a good relationship with HCE (.s298**), and last but not least, GDP and CEE also had a high value at .445**.

4.3 Comparing the Mean of Two Groups (Islamic and Conventional Banks)

This study used the independent t-test, as the data was parametric, to test the significant difference between the means of the Islamic and conventional banks. Accordingly, ROAE was the only measure of profitability, which was significantly different, with a significance of .004 and .001, respectively. In addition, according to the means rank of ROAE for the conventional banks, this was deemed to be much higher than Islamic banks (Table 4).

Table 4: Independent T-test

	Bank Type	N	Mean ± SD	Sig.	T-value	df
EVA	Islamic	23	-6308760.496 ± 31337412.5275	.168	-1.382	568
	Conventional	34	-56521.771 ± 63589941.4125	.121		
ROAE	Islamic	23	.14 ± .057	.004	-2.891	568
	Conventional	34	.26 ± .591	.001		
ROAA	Islamic	23	.02 ±.010	.140	1.477	568
	Conventional	34	.02 ± .008	.158		

Note: EVA = Economic Added Value, ROAE = Return on Average Equity, ROAA = Return on Average Assets.

4.3 Regression Analysis

Three regression analyses were conducted, of which each of the analysis included two models. One was an empirical model conducted for the conventional bank, and the other was for the Islamic banks. Due to the presence of several insignificant models, a backward stepwise regression analysis was conducted for the three dependent variables among the two bank types, to reach the optimal combination of variables. In model 4A, it is indicated that the Islamic bank's regression model was significant with an R-square of .538, and significance of .000, while the conventional bank's model was found to be insignificant (Table 5). In addition, the diversification strategy and the moderation of the GDP with the financial risks were proven to have a significant positive relationship with the Islamic bank's EVA. As for the financial risks, SCE, and the moderation of the GDP, the diversification strategy had a significant negative relationship with the EVA of the Islamic banks, as shown in Table 5. The rest of the variables were proven to be insignificant. In model 4B, both the Islamic and conventional bank's regression was significant with a R-square of .279 and .219, respectively. The financial risk strategy and liquidity were shown to have a significant negative relationship with the with ROAA for the Islamic banks, while, the SCE and the moderation of the GDP with the liquidity were proven to have a significant positive relationship.

On the other hand, the moderation of the GDP with the financial risk and cost to that of the income ratio was proven to have a significant positive relationship with the ROAA across the conventional banks. Yet, the costs to income ratio and industry concentration showed a significant negative relationship with the conventional bank's ROAA, while the other variables were proven to be insignificant, as shown in Table 6. In the model 4C, the Islamic bank's regression analysis was significant, with a R-square of .421, and a significance of 0.000. The conventional bank regression analysis was significant with a R-square of 0.059, and a significance of 0.026, as shown in Table 7. The results of the regression analysis of the Islamic banks showed that liquidity had a significant negative relationship with the ROAE, while, HCE, the size of the bank, and the moderation of the GDP with liquidity, revealed a significant positive relationship with the ROAE in the Islamic banks. However, only the inflation rate was proven to have a significant positive relationship with the ROAE across conventional banks, while the rest of the variables showed an insignificant relationship, as shown in Table 7.

Table 5: Regression Coefficients of Backward Stepwise Regression Analyses (using EVA as dependent variable) – Model 4A

Bank Type	Model	Unstandardised Coefficients		Standardised Coefficient	t-value	Sig.
		B	Std. Error	Beta		
Islamic Banks	4A (Constant)	186798.186	142006.332		1.315	.194
	FR	-23405490.44	9077238.518	-2.418	-2.578	.013
	DIV	11200072.350	4618792.472	2.465	2.425	.019
	SCE	-29108.824	4940.457	-.534	-5.89	.000
	GDP.FR	4425480.070	2084029.051	2.130	2.124	.038
	GDP.DIV	-2296189.964	1108007.020	-2.228	-2.07	.043
Conventional Banks	4A (Constant)	-12511290.93	11225253.820		-1.115	.267
	HCE	9451009.331	4999531.748	.171	1.890	.061

Table 6: Regression Coefficients of Backward Stepwise Regression Analyses (using ROAA as dependent variable) – Model 4B

Bank Type	Model		Unstandardised Coefficients		Standardised Coefficient	t-value	Sig.
			B	Std. Error	Beta		
Islamic Banks	4B	(Constant)	.024	.005		4.475	.000
		FR	-.102	.040	-.294	2.512	.015
		SCE	.001	.000	.373	3.259	.002
		Liquidity	-.074	.033	-1.361	2.282	.026
		GDP.LIQ	.019	.007	1.573	2.639	.011
Conventional Banks	4B	(Constant)	.010	.007		1.459	.147
		CIR	-.140	.071	-2.959	1.982	.050
		INC	-2.069E-6	.000	-.295	3.238	.002
		LIQ	.111	.059	1.428	1.885	.062
		GDP.LIQ	-.024	.013	-1.367	1.856	.066
		GDP.CLS	.032	.015	2.925	2.085	.039
		GDP.FR	.008	.002	.302	3.295	.001

Table 7: Regression Coefficients of Backward Stepwise Regression Analyses (using ROAE as dependent variable) – Model 4C

Bank Type	Model	Unstandardised Coefficients		Standardised Coefficient	t-value	Sig.
		B	Std. Error	Beta		
Islamic Banks	4C (Constant)	-.282	.108		-2.623	.011
	HCE	.010	.003	.448	3.352	.001
	IR	-.006	.003	-.456	-1.966	.054
	LIQ	-.498	.244	-1.924	-2.044	.046
	BS	.061	.015	.705	4.174	.000
	GDP.LIQ	.130	.061	2.244	2.127	.038
Conventional Banks	4C (Constant)	.166	.028		5.941	.000
	IC	-1.523E-5	.000	-.154	-1.725	.087
	IR	.005	.002	.178	1.994	.048

5. Discussion and Conclusion

5.1 Comparing the Profitability of Islamic and Conventional Banks

The results showed that only the ROAE was proven to be significantly different between the Islamic and conventional banks, of which, the mean rank for the ROAE across the conventional banks was 26 per cent, compared to 14 per cent across Islamic banks. This implied that the superiority of the conventional bank's returns over the shareholder's equity to that of the Islamic banks in the MENA region were much better. The difference between the ROAA and EVA of the Islamic and conventional banks was insignificant. This result contradicted the work by Parashar and Venkatesh (2010), Alqahtani et al. (2016), Bourkhis and Nabi (2013), who postulated that Islamic banks outperformed conventional banks. Yet, the results were consistent with the work by Rashwan (2012), who found that both types of banks suffered from the crisis. The work by Olson and Zoubi (2017) found that as the crisis spread to the larger state of the economy in 2009, the Islamic bank's profitability was substantial compared to that of conventional banks.

Accordingly, the researcher concluded that the significant difference between the ROAE may have resulted from the fact that the ROAE can be misleading, as it relied on both the earning of the banks, and the amount of equity used in financing it. As banks relied less on equity, it would typically have a lower ROAA, and higher ROAE (Dietrich & Wanzenried, 2011). However, the mean rank of the EVA, ROAA, and ROAE of the conventional banks were much higher than Islamic banks, which help to conclude that conventional banks were able to generate much more profit than Islamic banks in the MENA region. In addition to the fact that the size of conventional banks were much larger than Islamic banks (mean rank of 316.31 and 239.46), this may also be a factor which leads to better use of economies of a larger scale. Larger banks are expected to enhance their profitability, due to their positive impact on the market power, technological effacing, and ability to obtain cheaper funds (Javaid & Alalawi, 2018). In addition, larger banks are able to diversify much more efficiently among a broader range of investments and activities (Khasawneh, 2016).

5.2 The Determinants of a Bank's Profitability

5.2.1 The Relationship between the Bank's Characteristics and Profitability

The results indicated that bank ownership and liquidity had no significant effect on the added economic value. In model 4B, only the liquidity

was proven to have a significant negative effect on the Islamic bank's profitability. Conventional bank characteristics were proven to have an insignificant effect. Similar to model 4C, only liquidity was proven to have a significant negative effect on the Islamic bank's profitability. As for conventional banks, the characteristics were proven to have an insignificant effect. The analysis of these results showed that bank ownership did not have a significant influence on the Islamic and conventional bank's profitability, which contradicted the results of Alharbi (2017), Haque and Shahid (2016), who found a significant negative effect between bank ownership and profitability.

These insignificant results may have resulted from the structure of the banking industry in the MENA region, for example, in oil-exporting countries, the majority of the banks are owned by domestic owners, who impose restrictions and barriers for the entry of foreign owners, by limiting the percentage of ownership between 0 to 49 per cent. The non-oil exporting countries on the other hand, tend to encourage a diversified economy, which heavily depends on foreign direct investment, agriculture and tourism, besides other sources of income. However, they still had the largest share of government ownership of banks, even without restricting foreign ownership (Abdullah & Tan, 2017). This assumption was supported by the number of foreign banks in the region, which stood at only 9 out of the 57 banks which were used in the analysis, of which were foreign-owned, along with 48 domestically-owned banks. This insignificant effect was supported by the resource-based view theory. The impact of foreign ownership was shown when it brought additional capabilities to the local bank. So, the insignificant impact means that the capabilities which were transferred were not much different from those applied in the local banks.

In Islamic banks, the results of the analysis indicated that there was an insignificant relationship between liquidity and the EVA, of which, the amount of assets used in financing did not significantly affect the economic value added toward the bank. Liquidity had a significant negative effect toward the banks' ROAA and ROAE, which was supported by the assumptions of the modern portfolio theory, indicating that lower liquidity increased the risk at which it achieved higher profits. Of which, banks which used more of their assets in providing loans had low liquidity, but was meant to also achieve better profits through their large portfolio of loans, benefiting from the bank's interest rates received from its debtholders. This result was consistent with the results of Abdullah and Tan (2017), Caporale et al.

(2017), and Noman (2015). In addition, these results indicated that holding excess liquidity was considered wasted funds which should have been loaned to obtain more profits. Accordingly, the hypotheses related to liquidity are well supported. For the conventional banks, the impact of liquidity was found insignificant across the three measures of profitability. The difference in the effect of liquidity (significant positive, significant negative, or insignificant) across the bank types supported the contingency theory. Of which, the same variable may have a different impact on the organisational performance, depending on the nature of the organisation, and its surrounding environment.

5.2.2 *The Relationship between Bank Organisational Strategies and Bank Profitability*

In conventional banks, the cost leadership strategy showed a significant positive relationship with the bank return on average assets, which supported the findings of Almazari (2014). On the other hand, in Islamic banks, the cost leadership strategy was found to be insignificant, which was similar to the results obtained by Belkhaoui et al. (2014), which reflects the limited function of the cost management efficiency which affects the profitability of the banks. This insignificant relationship may result from the lack of competence in terms of cost management, due to the limited management experience among the Islamic bank. In addition, Islamic banks transferred a part of the increased cost to customers. Accordingly, conventional banks were more efficient, and their efficiency positively impacted their profitability, which may be one of the reasons for their superior performance.

The effect of credit risk on the Islamic bank's profitability was found to be insignificant (Belkhaoui et al., 2014). This insignificant relationship may result in the main operations of the Islamic banks not relying on loans and debts, but instead, relying on profit and loss sharing products. Its effect on the conventional bank's profitability was measured by ROAA, which is positive and significant, without taking into consideration the effect of the bank size as a control variable, or the effect of economic development as a moderator. This result was congruent with the findings of Almazari (2014). These results indicated that conventional banks were exposed to more credit risks despite achieving more profits. These positive relationships imposed a challenge toward bank management, to reduce the risk of loan default, and to

value loans much more appropriately by focusing on the quality of the loans, not just the volume. As with the loads of high quality, a high ratio could suggest a positive relationship between the risks and profits, in line with the risk-return hypothesis (Menicucci & Paolucci, 2016). Furthermore, there was a significant difference between the credit risk of Islamic banks and conventional banks, of which, the Islamic bank's mean value of credit risk was 239.18, while conventional bank's mean value was 273.58. It indicated that the credit risk was relatively lower among Islamic banks, due to the nature of the banking operations under Shariah rules.

Islamic banks showed a negative significant relationship between financial risk and profitability, measured by EVA and ROAA, which supported the findings of Belkhaoui et al. (2014), Dietrich and Wanzen-ried (2011), Hajer et al. (2016), and Zopounidis et al. (2017). These results indicated that Islamic banks were capable of reducing the costs of external financing, to increase their capital without deteriorating profitability. On the other hand, conventional bank's financial risks had a significant positive relationship with EVA, without taking into consideration the moderation effect of economic development, which supported the postulation of the agency theory, assuming that at the lower level of leverage, increasing debt, which reduced agency cost and increased profitability.

The effect of the diversification strategy was significant and positive with that of the Islamic bank's EVA, which reflected that the Islamic bank's portfolio diversification positively affected the economic value, similar to the findings of Abdullah and Tan (2017). The effect of this strategy was insignificant with the other measures of profitability across Islamic banks (ROAA, and ROAE), and all the measures across conventional banks. There was a positive relationship between the diversification strategy, and Islamic bank's profitability only, when measured using EVA. This outcome was due demonstrated since Islamic and conventional banks in the region did not rely on non-interest income. With the average ratio of the non-interest income to the gross revenue was 18 per cent, it may not have a significant effect on the bank's overall profitability. Even though Islamic banks are restricted by religious limitations, it is much more concerned with diversification than conventional banks. For Islamic banks, their main principle is for profit-loss sharing (PLS), not interest-based activities such as conventional banks.

5.2.3 Relationship between Bank Capabilities and Bank Profitability

For Islamic banks, SCE showed a positive significant correlation with ROAA, and a negative significant relationship with EVA. HCE had a significant positive relationship with ROAE. This implied that the efficiency of structural capital may deteriorate as the economic value is added, but increase the ROAA. For conventional banks, the IC subcomponents all had an insignificant effect on the bank's profitability. The results were similar to the findings by Kehelwalatenna (2016), of which the results from the effects of the financial crisis and the Arab springs which reduced the profitability of the banks due to external factors despite the capabilities implemented and embedded within, did not transpire.

5.2.4 Relationship between External Factors and Bank Profitability

For the Islamic banks, the inflation rate was found to be insignificant, as it was highly anticipated due to the involvement of the Islamic banks in the projects based on the profit-loss sharing principle. In addition, as Islamic banks are not relying on interest rates, the effect of inflation rates are eliminated. The same goes for industry concentration, as the involvement of the Islamic banks in activities such as *Musharka* and *Murabha* limited the effect of concentration, as all the Islamic banks were involved in projects without having a dominant bank controlling the market, as a result of concentration. This relationship was supported by the structure-conduct-performance hypothesis, which postulates that the level of concentration in the market increases market power, which leads to a much better financial performance. According to Baye (2010), the structure of the industry included factors such as technology, concentration, band market conditions, which refers to the firm's behaviour in the market, and performance, which refers to profits and social welfare that arise in the market. Accordingly, due to the conduct (behaviour) of Islamic banks, the effect of the structure (concentration, and market conditions) was insignificant. For conventional banks, the inflation rate impacted the profitability, which was positive, as the conventional banks adjusted their interest and fees based on the economic conditions in these countries. The industry concentration impact was negative, and contradicted the structure conduct performance hypothesis, and due to the recent crisis in the region, the concentration of the banks in the market manifested their losses.

5.2.5 *The Moderation Effect of Country's Economic Development on the Determinants of Banks' Profitability*

The interaction effect of the country economic development with the cost leadership strategy and credit risk was insignificant for Islamic banks. This implied that these variables were not affected by economic development. On the other hand, the interaction effect of economic development and liquidity was significant, and had a positive effect on the Islamic bank's ROAA and ROAE, which implied that the level of liquidity of the banks were affected by the bank's economic development. Highly developed countries tended to have an excess amount of liquidity due to the high amount of deposits. In addition, the interaction effect between economic development and financial risk was significantly positive for the Islamic bank's EVA, and negative for the bank's diversification strategy. The positive impact of the interaction of economic development and financial risk resulted in highly developed countries, of which, banks tended to rely more on equity in terms of financing their capital. The effect of diversification may have resulted from the inability of the Islamic banks to diversify all their funds, for example, in highly developed countries, due to their limited choices. Yet, across conventional banks, the interaction effect of the country's economic development was significant, with the cost leadership strategy and diversification strategy, of which the economic development affected the relationship between these two strategies, and positively for the conventional bank's ROAA. This was because conventional banks in highly developed countries tended to provide a much large number of loans leading to cost leadership (economics of scale), and diversifying their funds among different projects.

These contradictory results of the determinants on the profitability of Islamic and conventional banks supported the contingency theory, in which each organisation found its fit between the internal and external contingencies, to increase its performance. According to the contingency theory, the ideal setting is depending on the organisation and its environment. Accordingly, the contradictory results of the same variable across Islamic and conventional banks supported the effect of the same factors which may differ depending on the nature of the organisation, and the environment. Furthermore, the implications of this study included formulating the conceptual framework to present a relatively new model on the factors which may affect the profitability of banks. Moreover, this study is considered a new application of the contingency theory for the banking field, as it examined the effect of bank-specific,

industry-specific, and economic-specific characteristics, along with the interaction between some bank-specific variables with the economic development across different countries, to account for the differences in income levels. In addition, a dearth of research exists on the MENA region. Consequently, this research approached the banking field by studying a region that not only involved a dual banking system, but also included a variety of countries across both developing and developed nations, and also with different income levels.

6. Implications and Conclusion

Analysing banking performance has gained the interest of academic researchers alike, since the great depression, of which many researchers have been interested in analysing the factors which affected the bank's performance. Of recent times, researchers have shown an interest in the same area again, after the financial crisis that took place in 2007, but this time the existence of Islamic banks and their resilience were taken into consideration. Consequently, researchers have begun to analyse the performance of both types of banks, which has led to contradictory results regarding the superiority of one bank over the other, and also in terms of determining the factors which affect the performance of both types of banks.

Literature reviews have shown that the majority of studies were conducted in western economies, such as in the U.S. and Europe, while the MENA regions have suffered from a lack of research. As the regions consist of the greatest percentage of Islamic banks, a comparative study on the types of banks in the region has become essential. Thus, the main motive for conducting this study is the gap which existed in the available literature. In addition, this study offers a comparison not only among bank types in the region, but also across countries with different income levels, as represented by their economic development. There's been much debate on the literature concerning the performance of Islamic and conventional banking, and their determinants. In addition, the theoretical foundation of the majority of researches have been based only on models and hypotheses, not theories such as the relative market power hypothesis, structure-conduct performance hypothesis, and efficiency structure hypothesis. Hence, this study intends to provide a different application of the contingency theory in the banking field, which serves as a good theoretical foundation which may help to capture different variables which may affect the bank's performance.

This study provides several theoretical implications. Firstly, regarding the selection of the dependent variables, the economic value added was used for EVA, which has been used as a powerful tool for measuring performance, and catering for less debate among practitioners, as it essentially captures the amount of money which exceeds the minimum requirement set by the investors, representing the operating profit which surpasses the capital opportunity cost. In doing so, this study can be considered as a response to calls for new research, which helps to compare the performance of Islamic and conventional banks, to consider the goals and nature of Islamic banks, which indicates that the discipline of banks profitability measurement still needs more deliberations and contributions to recover and overcome the difference between bank types. Thus, the present study contributed to the discipline of profitability measurement by choosing economic value added, addition of the bank's operating profit as an indicator of profitability.

Secondly, many studies only examined some of the factors which may affect the performance of banks, and neglecting others, especially organisational capabilities, which according to the resource-based view theory, will have a significant impact on the performance. Accordingly, this study incorporates new determinants of profitability which are included in the research framework, that to the best of the researcher's knowledge, has not been investigated by other researchers among the bank-specific determinants of profitability. It, therefore, provides new indicators, and has been considered as an extension for prior research works in this discipline, as, to the best of the researcher's knowledge, no prior work had been carried out in both developed and developing economies, which considered the capabilities as a part of the profitability determinants. Thirdly, the consideration of the external environment and the moderation effect of economic development will help to provide insights into how a country's economic conditions may affect a bank's profitability, and how this effect is different, depending on the bank type. Fourth, the application of the contingency theory to explain the contradiction of the results of this study and previous literature for the same factor among bank types, may open the way to further studies to consider the contingency theory as a supporting theory for their research framework. Thus, the theoretical framework employed in this study was particularly different from those used by other researchers, who conducted work in the MENA region, and in the banking field. From which, from a theoretical point of view, it was seen that by combining the contingency theory and resource-based view theory to investigate

the internal and external determinants of profitability in Islamic banks in and conventional banks, this was relatively genuine.

The aim of this publication is to serve as guide for researchers, policymakers, governments, and regulators, to better understand the determinants of a bank's profitability, and the difference between Islamic and conventional banks in the MENA region. In addition, to the best of the researcher's knowledge, this study followed a different approach for investigating the determinants of Islamic and conventional bank's profitability in the MENA region. It is also used as a distinctive combination of theories to build the theoretical framework.

The development of the financial sector's effects on a country's economic performance is heavily, as its main function, driven by financial intermediation, which is responsible for channelling savings into productive investments. As Hamdi and Hakimi (2013) revealed, a positive relationship exists between banking development and economic growth in the MENA region. Accordingly, examining the profitability of banks and their determinants are crucial for bank managers, as well as financial regulators. Hence, this study intends to provide new dimensions toward the profitability in the banking sectors, which will assist managers in benchmarking their position according to the true economic profits earned.

As performance appraisal is essential for any organisation, this study utilises three different measures of performance to capture different dimensions to better reflect the principles of Islamic banks, which is crucial for managerial and regulatory purposes. From the managerial perspective, it could help managers in assessing the consequences of their managerial decisions. Thus, it will help the management to better understand the performance of the banks, and the decisions and actions which affect them. Based on the results, the profitability of conventional banks was measured using the ROAE, which is higher than that of the Islamic bank's ROAE, which should encourage Islamic bank managers to look for new ways of management, and tools to increase their performance.

Furthermore, it will assist managers in both Islamic and conventional banking in making intelligent strategic decisions, in order to maximise revenues. It will aid foreign banks in considering which countries to operate in when considering the MENA region, as this study will reveal the impact of the external environment on the bank's profitability, allowing foreign bank executives to choose countries with the most favourable conditions for economic success. Furthermore, the

outcomes of this study will serve as a benchmark for bank executives when it comes to intellectual capital, allowing them to develop policies around intellectual capital investment strategies. Finally, the results will assist policymakers in regulating the banking sector in a way which can help in increasing their profitability, in order to increase economic growth inside the country.

From a regulator's perspective, this study should help them in formulating regulations and laws which benefit the Islamic banks. Islamic bank's profitability is affected by different factors other than those affecting conventional banks. Regulators should encourage banks to concentrate much more on generating economic value, not only returns, to better boost the country's economic development.

Although, this study introduced valuable insights into the banking industry in the MENA region, yet, future researchers may consider the following areas. First, measuring the intellectual capital of the banks using different measures which involve the use of questionnaires to get an insight of the employees and the managers regarding the importance of the bank's capabilities. Secondly, by comparing the overall performance of Islamic and conventional banks – not just profitability-yet by using more comprehensive measures such as the CAMEL framework. Thirdly, measuring other dimensions of the performance of Islamic and conventional banks – not just profitability – such as productivity and stability. Fourth, looking at the drivers of Islamic bank profitability without taking into account conventional banks, so that variables such as *Mudharabah* and *Murabaha* can be considered as determinants of profitability. Fifth, developing an index or benchmark, that better captures the performance of Islamic banks operating under Shariah guidelines. Finally, future research should be broadened across the geographical areas of investigation, allowing for a comparison of the MENA region and that of the European Union countries.

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