



**Impact of Islamic Banks Determinant on their Profitability:
Pakistan Perspective**

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Abstract

It is most necessarily focused in this research to examine the determinants of Pakistani Islamic banks and its impact on the bank's profitability. The research is taken the date form the time period of the 2008 to 2018 of the 11 year Islamic banks of the Pakistan to the check the variables impact on the bank's performance. The multiple regression approach was use in this research study. Further, Descriptive, Correlation, ANOVA and regression analysis used in the research study. The Islamic banks were measured through the Return on asset (ROA). The SPSS statistical tools were used in the research study. The finding of this research study reveals that there is a significant role of the determinants on the banks performance. Another way Asset management is the key factor in the banks that in general, while operating efficiency, assets (size) and bank age has significant impact on the Islamic profitability.

Key word: Asset, age, management size, capital adequacy ratio profitability and Pakistan

Introduction

Islamic banking a new phenomenon, started in 1960's in Egypt. Different experiments of Islamic banking were tried in different Muslim countries. The Islamic banking was introduced In Pakistan during 1979-80. After Supreme Court's Judgement the Islamic banking was re-launched in 2002, Meezan Bank was first Islamic bank of Pakistan. Nowadays there are four full-fledge Islamic banks and almost every conventional bank in Pakistan has launched its Islamic banking branches.¹ Islamic banking is growing at a rapid rate in Pakistan, to increase in the financial performance of an institution having three principles i.e. Size of the financial institution, assets management and operational efficiency. Since the 1st Islamic financial institution, this industry spread in almost all Muslim country And also non-Muslim countries shows tendency towards establishment of Islamic financial system. As Islamic banks having different modes of financing as well it is based on the profit-loss sharing mechanism instead of pre-determined interest means having contrast banking system to conventional. The Islamic banks offer financing on different modes through participatory modes, trade-based modes and rental based modes on the other hand the conventional banks provide loan on interest basis. The probability is the "ability of the business organization to maintain its profit year after year". The profitability of the any banking institution shows the achievement of the management. Profitability is the main concern of the banking sector and it is the important indicator while measuring a specific business organizational performance. Variations in the profitability also indicates the economic progress, profits also effect the investment and saving decisions of the companies. It also increases the cash flow position of companies.² In a competitive business market at the micro level, profit is also essential in the banking institutions that indicate the performance and its growth as a whole in the financial market. Besides that profitable bank could be able to bear any shock and can positively contribute for the stability of the financial industry.³ In the last two decades, Financial industry and banking sector as well experienced major global shocks where there were an internal as well external factors that affected the whole structure and performance of the banking and financial industry.

What is Term Profitability?

Profitability is the profit earned by a financial institution or business entity. Similarly, profit is remaining figure of amount after deduction of all the expenses from the income earned by the business of an entity or financial institution. Profitable financial intermediary or entity indicates the performance of their management and it is also a key indicator for investors to invest.

Statement of Problem:

The literature reexamine that the Islamic banking is quickly growing in Pakistan. Islamic banking and Islamic finance sector growing quickly all over the world. The research study examines that the determinant of Islamic banks on their profitability in Pakistan. There limited research to find out that the internal determinant and external determinants to check the bank performance. We can't find that any research study has checked the determinant of known *shari'ah* based financial intermediaries (Islamic Banks) of Pakistan. However, on this perspective much research studies been conducted on the conventional side.

Research objectives

1. To investigate the relationship between BS on the ROA of the Islamic banks.
2. To investigate the relationship between AM on the ROA of the Islamic banks.
3. To investigate the relationship between OE on the ROA of the Islamic banks.
4. To investigate the relationship between CAR on the ROA of the Islamic banks.
5. To investigate the relationship between BA on the ROA of the Islamic banks.

Research Questions

As research questions are developed through research Objectives following are the research questions

1. Whether BS has any significant impact on Return on Equity of the Islamic banks?
2. Whether AM has any significant impact on Return on Equity of the

Islamic banks?

3. Whether OE has any significant impact on Return on Equity of the Islamic banks?
4. Whether CAR has any significant impact on Return on Equity of the Islamic banks?
5. Whether BA has any significant impact on Return on Equity of the Islamic banks?

Significance of the Study:

The current research study, conducting on the internal factor that effects the performance of Islamic banking in Pakistan. The research also examine that the determinant of Islamic banks has significant impact on banks profitability.

Objectives and structure of the Study:

The main purpose while conducting this research study is to examine the variation in the determinants and its impact on the performance on the Islamic banks. With such manner combatively to the studies conducted in the conventional. This research is main Five Chapter. Chapter one highlight introduction chapter two literature of the study and focus on determinant of bank performance chapter 3 Research Methodology in which research methods and used statistical tools for the analysis purpose been discussed. Further, chapter 4 is the discussion where the results been discussed and in the last chapter 5 is the conclusion and recommendations for further research studies.

LITRATURE REVIEW

⁴ The research works investigated the Pakistani banking sector after 2008 crisis using internal and external determinants. Sample data was based on all 26 banks including 5 Islamic banks. Time period of data was from 2009-2013. For the profitability measurement of the banks ROE and ROA were taken as dependent variables. Internal factors showed significant results and external factors showed insignificant results. On performing loans, GDP, liquidity and operating efficacy showed negatively affect whether financial risk, management of the assets, bank's size, total loans allocated in the total asset has positively related and impact. Inversely to this inflation, quality of the assets and bank's size impacts negatively on equity. The results showed

that Pakistani banks are managing well to avoid impact of external factors on profitability. ⁵Used longitudinal data from the year 1992-2008 and investigated the factors. The empirical results indicated bank size, other operating income, GDP and capital ratio showed positive affect on profitability while GDP growth, insurance and foreign rights had negative effects. ⁶Assess the factor that effects profitability of Pakistani Islamic banks. Where dependent variables were earning per share and ROE, on the other side dependent variables were deposit ratio, asset management, operating efficiency, bank size, gross domestic product and consumer price index. The study result shows that the dependent variables have positive impact on the independent variable. ⁷ Studies that Islamic banking industry is changing with fast paste as capital market is also involving. The business need profit which is unable to relay on NGOs investment. The study purpose was to analyze the factors for profitability and whether interest really provides high profit. Expenses, portfolio, deposits, efficiency, age were compared with profitability. Yield on gross profit was insignificant relationship with the profit. ⁸ Evaluated the performance of Islamic banking industry of Pakistan. Researchers analyzed profitability, productivity, efficiency and credit risk. Data was gathered through PMN in annual quarterly form. Thirty microfinance providers were included for the year 2002-2012. Ordinary least square method was used. Results showed that growth in outreach increases profitability but asset utilization has no impact on profitability. Credit risk can reduce by providing group loans and efficiency can increase by decreasing expenses. ⁹Reviewed the performance and challenges faced by the rural financial institutions in Ethiopia. Secondary data was used to measure outreach to the poor, financial sustainability and welfare impact. Result showed the reach of MFI was increased 22.9%, financial sustainability was measured through return of asset and return of equity and also women response was increased. ¹⁰ Took the data for the years 1994 to 2001 to examine the world Islamic bank's performance where the results shows higher profitability in the response of loan to assets ratio and high capital while explicit and implicit taxes has impacted negatively. Further, in ¹¹ Islamic bank's determinants been studied with the cross-country data. Data was taken from the year 1993-1998 from 14 Islamic banks of 8 countries of Middle

East. ROE and ROA were taken as dependent variables. to analyses the result regression analysis been used where it resulted negative relationship between tax and profitability while stock market impact was positive. ¹² Was the first one to analyze the profitability of banks determinants on cross-country data where capital ratio, liquidity ratio, and staff expenses were the independent variables that resulted that all internal variables were positively affecting the profitability. ¹³ Examined the impact of determinants on the profitability of Philippines banks for the time period of a decade and half from 1990 to 2005 and the result suggests that bank size, credit risk and expenses impacted negatively on banks profitability. External factor, as inflation has impact negatively on the bank's profitability. Moreover economic growth, money supply and market capitalization has no impact on the bank's performance. Determinants of profitability are of two types: internal factor and external factors. Profitability is calculated as returns on asset, returns on equity or net interest margin (NIM). ¹⁴ Explained the relationship of profitability and equity to asset ratio. Study found proportional relationship when equity ratio is higher, higher the profitability of a bank. Other internal factors are mentioned by ^{15 16 17} are loan expenses, equity to liquidity ratio, deposit and loan ratios. ¹⁸ analyzed the banking performance of 80 countries for the year 1988-1995. He tool both developed and developing countries data and found out that developing countries have low profitability as compare to developed countries but the relationship between profitability and capital ratio was positive. ¹⁹ Took forty-four Kenyan banks for the year 200-2009 for checking the internal factors on net interest margin taking as profitability. The empirical results showed that credit risk and operating expense have significant effect on NIM. ²⁰ Examined the relationship between competition and the performance of microfinance institutions. Lerner Index was used to access market power. Outreach, loan repayment, efficiency and performance were measured. From seventy-three counties, 362 micro financial institutions were taken for the year 1995-2009. Results showed negative association of competition with performance. ²¹ Analyzed the factors affecting the economy of Nigeria and poverty. Author gathered the data from National Bureau of statistics. He used regression analysis to identify the factors. Author found five factors high prices of commodities, lack of initial investment, low profit

rate, inflation and low rate of business success are the reasons of poverty. In second phase, he analyzed the impact of micro financial institutions those are reducing the poverty rate.²² Studied the effect of management, size, location, time on profitability of banks. The management tests showed the importance of management performance on profitability. Management performance should be encouraged. Size also affects the profitability and operating relationship. Location also affects the significance of regional diversity.²³ studied profitability for the purpose examiner took independent variable as number of branches that resulted no effect of the dependent variable on the bank's profitability. Similarly,²⁴ examined the relationship between the profitability and bank branches where the bank branches categorized into further three categories i.e. including unit, limited and state wide branch. The results showed different levels have different impact on profitability of banks. Similarly,²⁵ studied the impact of location and found significant relationship.²⁶ Examined the impact of internal banks determinants and external macro factors on Macao banking industry. Panel data regression was used for the period 1993-2006. The results showed that a well-capitalized bank faces low risk and high profitability. Loan loss provisions affect banks adversely and large retail depositing institutions or networks is less profitable as compare to the small network. Inflation as macro factor shows significant relationship.²⁷ Analyzed the factors affecting Tunisian banks for the year 2003-2012. Results showed size, increase in capital affected positively on bank performance.

Private Banks performance was better than private banks and the revolution of 2011 affected negatively on the bank's performance.²⁸ Found out that there is hard competition between commercial banks and microfinance Banks. Authors examined the determinants of financial performance of MFB. Secondary data was taken of 7 banks for the year 2011-2015. Data was analyzed by using regression and correlation.²⁹ Competitively examined the profitability of conventional and Islamic banks where its results explained that in the long-run the return on profitability of Islamic banks will be higher than the interest rate.³⁰ Analyzed the purpose of Islamic banking institutions whether they were able to fulfill the purpose of MFIs which is the reduction of poverty. Primary data was used for the study through structured questions.

Data was collected from Tameer Microfinance Bank. Author applied multiple linear regression and t-test. The results indicated the positive impact of micro financing on financial situation of business and children education. The results were mix for house expenses. The result also shows that high number of income earners has positive impact on microfinance customer.³¹ Took ten banks of Tunisia and used net interest margin as profitability, Data was collected for the year 1980-2000. The factors which affected negatively were bank size and loans.³² Showed negative effects of loans on profitability.³³ Analyzed the world largest 245 micro financial institutions and the relationship between profitability and outreach for borrowers specially women. Ordinary Least Square regression was used. The results show cost increases for outreach,³⁴ used the data of Islamic banks for the period 2006-2009 and investigated the effects of the performance of Islamic banks. Results showed that capital adequacy ratio showed positive impact for ROA and ROE. Bank size impacted negative on both models. While capital adequacy showed significant results for both models.³⁵, many banks in Indonesia moved towards micro financing with profitability goals. The author used regression and found out that profitability relates with the equity to total assets, fixed asset ratio, bank size. Operating efficiency shows opposite relationship. Therefore, more cost-efficient microfinance banks are needed.³⁶ Analyzed the banking sector of Pakistan. As banking sector plays a very important role in the growth of economy and its development. Authors identified the factor and determinants that influence the profitability of banks. The data was taken for the period 2004-2008. The data was collected from top ten banks of Pakistan. Pooled Ordinary least Square model was used. The factors were ROA, deposit, loans and equity. The results the high influence on profitability other than assets.³⁷ Used DEA and multivariate regression analysis to analyze the efficiency of banking sector of Thailand. The data was used for the year 1999- 2008. The results showed that high capitalization and higher loan intensity affects the banks efficiency.³⁸. Reviewed the growth strategy and its impact on the performance of microfinance sector of Pakistan. Study shows that at the beginning intensive growth strategy is better as it improves performance efficiency and productivity. Usage of extensive strategy increased cost on infrastructure and

management of branches. Outreach is only up to urban areas and financial performance is very weak.³⁹ Studied the determinants of commercial banks of UAE between foreign and national banks. Data was collected for the year 1887- 2002. Regression analysis was used to find the results. For national banks, banks size, bank portfolio showed significant results for national banks. Capital productivity, economic conditions and capitalization should more significant results for foreign banks while liquidity showed negative results.⁴⁰ Studied that Islamic banks, internal factors like, expenditure, invested funds, liquidity and profit-sharing ratio and funds borrowed are highly co-related. Rate of interest, market share and bank size are also correlated with the income of the banks.⁴¹ Analyzed the question that whether microfinance banks can remain financially sustainable while providing services to the poor community. For this purpose, panel data was used using OLS regression. Studies showed that GDP has no significant relationship with performance. So, microfinance banks are helpful even in low GDP growth.⁴², examined the financials of four commercial microfinance banks including Grameen Bank Bangladesh, Bank of Khyber Pakistan, Banco Solidario Ecuador and Mibanco Peru for the year 2001-005. The results showed that all four banks were showing increase in ROA and ROE. But Grameen and Bok both were showing negative net interest margin. The bank main purposes are both providing loans and self-sufficiency. International funding and training to credit agents are necessary.

Hypothesis:

The hypotheses which we are going to investigate are given below.

H1= there is a significant relation b/w Bank Size and profitability of Islamic banks of Pakistan

H2= there is a significant relation b/w Asset Management and profitability of Islamic banks of Pakistan

H3= there is a significant relation b/w Operating Efficiency and profitability of Islamic banks of Pakistan

H4= there is an significant relation b/w Capital Adequacy Ratio and profitability of Islamic banks of Pakistan

H5= there is an significant relation b/w Banks Age and profitability of Islamic banks of Pakistan

Theoretical framework

Theoretical framework shows that financial performance of the dependent variable where the performance is calculated by its indicators as; Return on Assets (ROA). On the other hand the Islamic banks determinants are the independent variable which is clear from the model that determinants been indicated by Bank size (BS), Assets management (AM), Operating Efficiency (OE), Capital Adequacy ratio (CAR), Bank Age (BA) and the external factors are; Gross domestic product (GDP) and the Inflation Rate (IR). The banks determinants have any impact on the financial performance it is our main objective of the study, and these determinants been selected from the past literature.

Data collection and Sample of the study:

Data is based on secondary data. Data was collected from reports of the Islamic banks for the year 2008-2018. Only Islamic Banking Annual report is used for the study. The data will be yearly data and the study is quantitative in nature. In this study, multiple regression tests were used for the relationship between independent and dependent variables. . There are 5 Full-fledged Islamic banks there are is dependent variables and five independent variables.

Results and Discussion

The result explains the performance of the banks has direct effect due to independent variables Pakistan's perspective and to obtain the required results multiple regression model is applied. The probability value of the independent variable asset management which is 0.003 explains that it has strong significant impact on the dependent variable at 1% significant level but the co-efficient value explains that there is negative relationship between them and if there is increase of unit 1 or decrease in the independent variable it will affect the dependent variable by -0.1977 units. Hence on the basis of the above results we accept its alternative hypothesis and reject its null hypothesis. The second independent variable of the study which is operating efficiency of Islamic banks explains that it also has statistically strong significant impact on the dependent variable of the study at 1% significance level and the coefficient value explains that they have positive relationship between them and if there is an increase of 1 unit or decrease in the operating efficiency of Islamic banks of Pakistan it will increase or decrease the

dependent variable of Islamic banks of Pakistan by 0.524 units. So, on the basis of the above results we accept its alternative hypothesis and reject its null hypothesis. The third independent variable of the study has not significant relationship which is capital adequacy ratio with the dependent variable of the study because the probability value of it is 0.405 which means that it is greater than 5% so we accept its null hypothesis and the reject its alternative. The fourth independent variable of the study which is total assets of Islamic banks explains that it also has statistically strong significant impact on the dependent variable of the study at 1% significance level and the coefficient value explains that they have positive relationship between them and if there is 1 unit increase or decrease in total assets of Islamic banks of Pakistan it will increase or decrease the dependent variable of Islamic banks of Pakistan by 0.01557 units. So, on the basis of the above results we accept its alternative hypothesis and reject its null hypothesis. The fifth independent variable of the study which is bank age of Islamic banks has statistically strong relationship and impact the dependent variable of the study at 1% significance level and the coefficient value explains that they have positive relationship between them and if there is increase of 1 unit or decrease in bank age of Islamic banks of Pakistan it will increase or decrease the dependent variable of Islamic banks of Pakistan by 0.01508 units. So, on the basis of the above results we accept its alternative hypothesis and reject its null hypothesis. Moreover, the r-squared value explains the fitness of the whole model in this case it is a good fit model and around 69.42% of variation in the dependent variable is explained by the independent variables of the study. The Probability (F-statistics) value explains that the overall model is significant at 1% significance level.

Conclusion:

Pakistan is a developing country where approx. 50% population is living below poverty rate. Banks are the major component of an economy and Islamic banks can play strong role in economy growth. Pakistani economy is passing through many ups and downs since last many decades. To tackle internal and external factors for growth and profitability is a big challenge for Islamic banks. The empirical results of Islamic banks in Pakistan shows that there is significant relationship

Limitation of the study:

- The current research study only limited to the Islamic banks
- The research only limited to the few years of Islamic banks
- The is no comparative study with the conventional banks
- The study research study only checks few determinants of Islamic banks
- The research study only checks the internal determinant of the Islamic banks
- Due to unavailability of annual reports, few banks data are not included.
- The study could be improved by comparing it with the different countries by using different framework but availability of previous published studies in comparison was limited.

Future direction of the study:

The current research study is to check the impact the Islamic banks determinant of the performance of Islamic banks.

The 1st direction for the further study is to investigate the both internal and external determinant of the Islamic bank's performance.

The 2nd future direction the further study is the comparative study with the other country.

The 3rd direction for the further research study is the comparative study with the conventional banks of the Pakistan. For the Further research also on the other performance variables such as ROI, ROE and EPS.

Formula:

$$ROA = \alpha + \beta_1 BS + \beta_2 AM + \beta_3 OE + \beta_4 CAR + \beta_5 BA + \beta_6 GDP + \beta_7 IR + \epsilon \dots$$

References

¹ Shahzad, Muhammad Asghar, Atiquzzafar Khan, Mohammad Tahir Mansoori, and Asim Ehsan. "Sharī'ah Governance in Islamic Banking Institutions in Pakistan: An Empirical Investigation." *Journal of Islamic Business and Management* 10 (2020): 28-42.

- ² Menicucci, Elisa, and Guido Paolucci. "The determinants of bank profitability: empirical evidence from European banking sector." *Journal of financial reporting and Accounting* (2016).
- ³ Rajan, Raghuram G., and Luigi Zingales. "What do we know about capital structure? Some evidence from international data." *The journal of Finance* 50, no. 5 (1995): 1421-1460.
- ⁴ Ali, Muhammad, and Syed Ali Raza. "Service quality perception and customer satisfaction in Islamic banks of Pakistan: the modified SERVQUAL model." *Total Quality Management & Business Excellence* 28, no. 5-6 (2017): 559-577.
- ⁵ Alharbi, Ahmad T. "Determinants of Islamic banks' profitability: international evidence." *International Journal of Islamic and Middle Eastern Finance and Management* (2017).
- ⁶ Khan, M. M. S., Ijaz, F., & Aslam, E. (2014). Determinants of profitability of Islamic banking industry: An evidence from Pakistan. *Business & Economic Review*, 6(2), 27-46.
- ⁷ Ali, Khizer, Muhammad Farhan Akhtar, and Shama Sadaqat. "Financial and non-financial business risk perspectives—empirical evidence from commercial banks." *Middle Eastern Finance and Economics* 11, no. 11 (2011): 150-160.
- ⁸ Ali, Khizer, Muhammad Farhan Akhtar, and Shama Sadaqat. "Financial and non-financial business risk perspectives—empirical evidence from commercial banks." *Middle Eastern Finance and Economics* 11, no. 11 (2011): 150-160.
- ⁹ Oljira, Alemayehu, Fenet Belay, OCSSCO Oromia Credit, and S. C. Saving. "Performance of Formal Rural Financial Institutions in Ethiopia: Country Review."
- ¹⁰ Sufian, Fadzlan, and Muzafar Shah Habibullah. "Bank specific and macroeconomic determinants of bank profitability: Empirical evidence from the China banking sector." *Frontiers of Economics in China* 4, no. 2 (2009): 274-291.
- ¹¹ Bourke, Philip. "Concentration and other determinants of bank profitability in Europe, North America and Australia." *Journal of Banking & Finance* 13, no. 1 (1989): 65-79.
- ¹² Sufian, Fadzlan, and Muzafar Shah Habibullah. "Bank specific and macroeconomic determinants of bank profitability: Empirical evidence from the China banking sector." *Frontiers of Economics in China* 4, no. 2 (2009): 274-291.

- ¹³ Sufian, Fadzlan, and Muzafar Shah Habibullah. "Bank specific and macroeconomic determinants of bank profitability: Empirical evidence from the China banking sector." *Frontiers of Economics in China* 4, no. 2 (2009): 274-291.
- ¹⁴ Haron, Sudin. "Competition and other external determinants of the profitability of Islamic banks." *Islamic Economic Studies* 4, no. 1 (1996).
- ¹⁵ Haslem, John A. "A statistical analysis of the relative profitability of commercial banks." *The Journal of finance* 23, no. 1 (1968): 167-176.
- ¹⁶ Hester, Donald D., and John F. Zoellner. "The relation between bank portfolios and earnings: an econometric analysis." *The review of Economics and Statistics* (1966): 372-386.
- ¹⁷ Naceur, Samy Ben. "The determinants of the Tunisian banking industry profitability: Panel evidence." *Universite Libre de Tunis working papers* 10 (2003): 2003.
- ¹⁸ Rauf, Shahnaz A., and Tahir Mahmood. "Growth and performance of microfinance in Pakistan." *Pakistan economic and social review* (2009): 99-122.
- ¹⁹ Okpara, Godwin Chigozie. "Microfinance banks and poverty alleviation in Nigeria." *Journal of Sustainable development in Africa* 12, no. 6 (2010): 177-191.
- ²⁰ Koutsomanoli-Filippaki, Anastasia, Dimitris Margaritis, and Christos Staikouras. "Profit efficiency under a directional technology distance function approach." *Managerial Finance* (2009).
- ²¹ Hester, Donald D., and John F. Zoellner. "The relation between bank portfolios and earnings: an econometric analysis." *The review of Economics and Statistics* (1966): 372-386.
- ²² Ugur, Zeynep. "Commercial banks and microfinance." *CUREJ-College Undergraduate Research Electronic Journal* (2006): 35.
- ²³ Hassan Al-Tamimi, Hussein A. "The determinants of the UAE commercial banks' performance: a comparison of the national and foreign banks." *Journal of Transnational Management* 10, no. 4 (2006): 35-47.
- ²⁴ Vernon, Jack R. "Separation of ownership and control and profit rates, the evidence from banking: Comment." *Journal of Financial and Quantitative Analysis* 6, no. 1 (1971): 615-625.

- ²⁵ Demirgüç-Kunt, Ash, and Harry Huizinga. "Determinants of commercial bank interest margins and profitability: some international evidence." *The World Bank Economic Review* 13, no. 2 (1999): 379-408.
- ²⁶ Ayadi, Inès, and Abderrazak Ellouze. "The determinants of the Tunisian banking performance; A panel data analysis." *International Journal of Economics and Finance* 7, no. 1 (2015): 262-272.
- ²⁷ Ahmad, Nawaz, and Mohsin Ali. "Impact of capital structure on firm's financial performance: Cement industry of Pakistan." *European Journal of Business and Management* 8, no. 4 (2016).
- ²⁸ Ali, Syed Atif, Azam Shafique, Amir Razi, and Umair Aslam. "Determinants of profitability of Islamic banks, A case study of Pakistan." *Interdisciplinary Journal of Contemporary Research in Business* 3, no. 11 (2012): 86-99.
- ²⁹ Bashir, Abdel-Hameed M. "Determinants of profitability in Islamic banks: Some evidence from the Middle East." *Islamic economic studies* 11, no. 1 (2003).
- ³⁰ Zaman, Saira Javaid Jamil Anwar Khalid. "Determinants of bank profitability in Pakistan: Internal factor analysis." *Journal of Yaşar University* 6, no. 23 (2011): 3794.
- ³¹ Vong, Pou Iu, and Hoi Si Chan. "Determinants of bank profitability in Macao." *Macau Monetary Research Bulletin* 12, no. 6 (2009): 93-113.
- ³² Kwast, Myron L., and John T. Rose. "Pricing, operating efficiency, and profitability among large commercial banks." *Journal of Banking & Finance* 6, no. 2 (1982): 233-254.
- ³³ Bourke, Philip. "Concentration and other determinants of bank profitability in Europe, North America and Australia." *Journal of Banking & Finance* 13, no. 1 (1989): 65-79.
- ³⁴ Bourke, Philip. "Concentration and other determinants of bank profitability in Europe, North America and Australia." *Journal of Banking & Finance* 13, no. 1 (1989): 65-79.
- ³⁵ Bourke, Philip. "Concentration and other determinants of bank profitability in Europe, North America and Australia." *Journal of Banking & Finance* 13, no. 1 (1989): 65-79.
- ³⁶ Ugur, Zeynep. "Commercial banks and microfinance." *CUREJ-College Undergraduate Research Electronic Journal* (2006): 35.
- ³⁷ Bourke, Philip. "Concentration and other determinants of bank profitability in Europe, North America and Australia." *Journal of Banking & Finance* 13, no. 1 (1989): 65-79.

- ³⁸ Sufian, Fadzlan, and Royfaizal Razali Chong. "DETERMINANTS OF BANK PROFITABILITY IN A DEVELOPING ECONOMY: EMPIRICAL EVIDENCE FROM THE PHILIPPINES." *Asian Academy of Management Journal of Accounting & Finance* 4, no. 2 (2008).
- ³⁹ Daniel, John, Esteban Vázquez Cano, and Mercè Gisbert Cervera. "The future of MOOCs: Adaptive learning or business model?." *International Journal of Educational Technology in Higher Education* 12, no. 1 (2015): 64-73.
- ⁴⁰ Zaman, Saira Javaid Jamil Anwar Khalid. "Determinants of bank profitability in Pakistan: Internal factor analysis." *Journal of Yaşar University* 6, no. 23 (2011): 3794.
- ⁴¹ Bourke, Philip. "Concentration and other determinants of bank profitability in Europe, North America and Australia." *Journal of Banking & Finance* 13, no. 1 (1989): 65-79.
- ⁴² Ayadi, Inès, and Abderrazak Ellouze. "The determinants of the Tunisian banking performance; A panel data analysis." *International Journal of Economics and Finance* 7, no. 1 (2015): 262-272.