Journal of Positive School Psychology http://journalppw.com
2022, Vol. 6, No. 6, 8916-8925

The Impact Of Banking Merger On Jordanian Commercial Banks Efficiency And Profitability

Thair Kaddumi[1] , Mohammed Ali Al-Rimawi[2]

[1]*Department of Finance and Banking Sciences, Faculty of Business, Applied Science Private University, Amman, Jordan. E-mail: thair_lion@asu.edu.jo*
[2]*Applied Science Private University, Amman, Jordan. E-mail: rimawi79@gmail.com*

Abstract

Banking merger is one of the most important transformations that the financial and banking sector has witnessed globally, as it is one of the basic manifestations of globalization. As for Jordan, it was noted that there are limited cases of banking mergers so far, thus, commercial banks still suffer from many problems such as weak competitiveness, lack of sound management, and appropriate level of technological level, which affected their performance and profitability. Therefore, this paper aims at exploring the impact of banking merger on the efficiency and profitability of Jordanian commercial banks. To achieve this objective, a quantitative approach was adopted through the questionnaires that were distributed to 380 employees in Jordanian commercial banks, who worked in banks before and after mergers. Data were analyzed using SPSS. The results showed that there is a significant impact of banking merger on the efficiency of Jordanian commercial banks, as well as there is a significant impact of banking merger on the profitability of Jordanian commercial banks. This paper recommended the necessity of activating the banking merger process more between Jordanian commercial banks in order to avoid the problems and obstacles facing the banking business.

Keywords: Merger, Efficiency, Profitability, Jordanian, Commercial Banks**.**

JEL: G14, G21, G34

I. Introduction

The banking system is considered one of the main pillars of the Jordanian economy, through the achievement of macroeconomic goals and the implementation of monetary and financial policies (Al-Hroot, Al-Qudah & Alkharabsha, 2020). However, there are some problems that confront the banking sector, based on the bank's ability to commit towards providing financial liquidity to its customers; inside and outside the country and its ability to achieve satisfactory profit levels for shareholders (Bekhet, Alsmadi & Khudari, 2021). Banking merger is one of the best solutions to address some banking and economic problems, as the merger in general works to address some failures within banks by taking advantage of the positiveness of other banks, as the major benefit accrues to the banks in particular and to the overall economy in general (Coccorese & Ferri, 2020). Banking merger is a form of expansion that aims at maximizing profit by taking advantage of economies of scale, as well as targets growth and expansion internally and externally (Braggion, Dwarkasing & Moore, 2022). Furthermore, banking merger seeks to create large banking entities capable of mobilizing more financial resources needed to finance large projects, which leads to improving banks' efficiency and achieving more profits, which are necessary for the banks' survival, continuity and sustainability (Galariotis et al., 2021).

There is no doubt that the modernization and development of the banking system has become an urgent necessity in the current stage, to accomplish the course of banking reforms and enable Jordanian commercial banks to gain competitive elements to raise their performance and adapt to the developments and challenges of globalization (Al-Slehat & Altameemi, 2021). In view of the of the Jordanian banking system performance fluctuation, the idea of banking merger was strengthened, as a solution to purify and improve the banking system performance, which would enhance the profitability of banks and provide better services. So this paper aims at exploring the impact of banking merger on the efficiency and profitability of Jordanian commercial banks.

II. An Overview of Jordanian commercial banks

Jordanian commercial banks have a wide position in the Jordanian economy, due to their great responsibility in investing and saving for individuals and large, medium and small enterprises, as it is the basis for the process of turning the economic wheel in all its economic and social dimensions (Al-Eitan, Al-Own, & Bani-Khalid, 2022). Jordanian Commercial Banks provides its customers with a comprehensive range of innovative and distinguished financial products and services, through its extensive network of branches and ATMs that rely on the highest levels of advanced technology, to meet the diverse banking needs (Bekhet et al., 2021). In addition to retail banking, they provide corporate banking, private banking, investment, and treasury services. Commercial banks are financial deposit and intermediary institutions that receive and attract funds from depositors and then undertake to re-employ and invest them according to the limits of safety and liquidity that must be available, striving behind this to achieve profits, like other commercial institutions (Al Zaidanin, 2020). Banks accepts deposits of various types, such as current and time deposits, it then grants loans and finance import and export operations, in addition to carrying out financial transfers world-wide (Al-Slehat & Altameemi, 2021). Commercial banks are considered profit oriented institutions, as the main objective of their establishment, in addition to playing the role of financial intermediary between depositors and investors, is to achieve profits at the lowest possible cost (Al-Qudah, 2021). This objective is completely different from the objectives of the Central Bank, which are represented in supervision, control, guidance, issuance of legal money, and implementation of the directions and applications of the state's monetary policy. The number of banks operating in Jordan is 25, including 16 local Jordanian banks, which are divided into 13 commercial banks and 3 Islamic banks, in addition to 9 foreign banks, including 8 commercial banks and one Islamic bank (Al-Slehat, 2021).

III. Literature Review

The term banking merger is used to express the union of two or more entities, despite the multiplicity of methods included in this concept. Kobayashi & Bremer (2022) defined it as a union between two or more existing entities, partially or completely, due to the presence of a consensus in their will or interests, so that it becomes one entity, with the aim of improving the capacity of the merged banks in general. Banking merger can also be considered as the merger that occurs as a result of a comprehensive and integrated study that dealt well with its parts, elements and dimensions, provided that it contributes to the formation of an economic unit as a result of the joining of two or more economic units and the demise of the separate legal personality of each of them. Banks aim from mergers to create a new banking entity that has a higher competitive ability, and is able to provide more necessary financial resources, which provides investment opportunities with greater returns and less risk (Ahmad et al., 2022).

Many researchers have mentioned the advantages and benefits of banking merger. Kazeem, Ademola & Ogunlokun (2022) explained that banking merger contributes to diversifying the employment portfolio, as a result of pooling resources that allow a greater extent of employment, which leads to reducing banking risks and securing the flow of revenues. Moreover, Vanwalleghem, Yildirim & Mukanya (2020) illustrated that banking merger contributes to avoiding financial difficulties or liquidation, so some banks resort to merging with strong banks due to their inability to cover the serious capital increase imposed by the monetary authorities or their inability to compete. In addition, one of the most important advantages of a banking merger is the diversification and improvement of the level of services provided, and the opening of new markets, which helps to achieve economies of scale and tax advantages (Gupta, Kadyan & Bhasin, 2021).

Economists and bankers attach great importance to banking efficiency as a means of evaluating the performance of the individual banking institution on the one hand, and as a tool for testing the efficacy of government policies and legal legislation and its impact on the financial and banking sector on the other hand (Blanco-Oliver, 2021). Banking efficiency can be expressed as the extent to which the unit is able to allocate and direct its various resources in order to achieve the maximum possible profits and the least losses (Tyas & Rusydiana, 2021). Moreover, it is defined as achieving the largest possible achievement of the set goals with the necessary improvements or developments according to the future vision, with the least amount of human, material and financial resources, and reducing the waste of productive energy (Milenković et al., 2022). Where an efficient banking institution is known as the one that can direct the available economic resources towards achieving the largest possible amount of returns with the least possible amount of waste, that is, the successful control of its physical and human energy, its achievement of the optimum size and its presentation of a range of financial products (Rakshit & Bardhan, 2022). Efficiency standards are considered useful and important analytical tools that are used to analyze business results (Phan et al., 2019). With the continuous development of the banking industry, the importance of financial analysis is evident, which has become used and benefited by all economic and social activities such as banks, projects, financing companies, investors, savers, and commercial and industrial companies (Coccorese & Ferri, 2020). For banks, financial analysis is considered one of the foundations of sound financial planning and control to measure banking efficiency, as it includes a detailed study of the data contained in the financial statements and the study of business results and financial performance, where the data and financial statements are analyzed in different ways, including vertical analysis, horizontal analysis and analysis of financial ratios to determine the results of business (Kazeem et al., 2022).

Profitability and its maximization is considered one of the main objectives that commercial banks aim to achieve, which greatly affects the extent of their ability to maintain their continuity and strengthen their financial position (Isayas, 2022). In order to achieve the main objective of commercial banks in maximizing their profitability, banks resort to increasing the volume of revenues or reducing costs to the lowest level, which leads to an increase in capital, equity and market value of shares (Ahmad et al., 2022). Commercial banks work to achieve their profitability goal through a set of decisions related to how commercial banks use the available resources to acquire various types of assets (Braggion et al., 2022). In other words, the impact of the investment decision on profitability appears through the optimal distribution of available resources on various types of assets in a manner that balances the appropriate investment in each item of assets without an increase that leads to disruption of resources, in order to enable commercial banks to achieve the best possible return without sacrificing liquidity (Kobayashi & Bremer, 2022). On the other hand, the impact of the financing decision on profitability is reflected by arranging the sources of funds from deposits, owners’ rights and debts in a way that enables project owners to obtain the largest possible return (Musah, Abdulai & Baffour, 2020). It can be said that profitability is a strategic goal that enables banks from growth and continuity, because losses and the inability to make a profit will eventually lead to the erosion of the owners’ rights and consequently to liquidation (Rakshit & Bardhan, 2022).

IV. Research Framework:

The trend towards banking merger and the formation of banking conglomerates is a general phenomenon within the banking sector, aimed at facing the challenges imposed by globalization, trade liberalization policy, and capital adequacy requirements (Gupta et al., 2021). In addition, measuring the relative efficiency of commercial banks operating in Jordan is one of the important trends to determine the strengths and weaknesses of these banks with regard to the latent capabilities that they possess, or those that they need, which entails reconsidering the policies and work procedures followed in order to maximize the use of its latent capabilities to develop its financial performance (Al-Hroot et al., 2020); Kilani, (2014); Al-Gasaymeh (2016). There are a number of obstacles that affect the process of achieving and improving profitability in Jordanian commercial banks, some of which are the result of the bank’s internal environment, such as those related to property rights, the size of assets and cash liquidity (Al-Eitan et al., 2022). While other factors arise from the external environment surrounding the bank resulting from the decisions issued by the Central Bank, such as the change in the interest rate and the amount of reserves required for each bank listed on the Amman Stock Exchange (Al-Slehat, 2021). Based on that, the researcher raises the following two main questions:

- **Is there any impact of banking merger on the efficiency of Jordanian commercial banks?**
- **Is there any impact of banking merger on the profitability of Jordanian commercial banks?**

Based on the above, the following are the summary of research hypotheses developed based on extensive literature review, as this research consists of 2 major hypotheses:

H_1: There is a significant impact of banking merger on Jordanian commercial banks efficiency.

H_2: There is a significant impact of banking merger on Jordanian commercial banks profitability.

V. Research Methodology

In this research, the quantitative survey was adopted in order to capture the opinions of research sample regarding research variables, as well as to provide more substantial facts about the phenomena under study. To achieve the objective of this research, a random sample of 380 employees in the Jordanian commercial banks was selected, who worked in banks before and after mergers. The primary source data used in this paper was collected using questionnaire, which designed with the goals and objectives of research in mind. The questionnaire form is one of the most popular tools used in the quantitative survey, which is defined as a way to understand the research problem by asking several questions related to each other, and the questions revolve around the content of the problem (Lu et al., 2021). In this research, online open-ended questionnaires, which are a structured set of questions that a respondent answers online, was generally adopted. In the time of Corona, it is considered one of the most widespread and best ways to communicate with respondents because it takes time and costs less than the traditional method of collecting information through personal interaction, where data is collected and stored in a database, to be evaluated and analyzed by a specialist in statistical analysis. Online surveys enjoy high confidentiality, which helps encourage respondents to give their opinion completely honestly, without fear or anxiety, so one of the most important features of online surveys is the honesty and flexibility of the respondents.

In this research, the questionnaire survey was constructed based on the findings of the literature review conducted on previous researches, therefore, the questionnaire was consisted of two sections, the first section will be related to personal demographic data, including gender, age, and job experience, while the second section will be divided into three major sub-sections, namely, banking merger, the efficiency, and the profitability, whereby each sub-section includes (20) questions. In addition, the questions were in the form of multiple choice, as the Likert scale was used to measure the survey questions; as it is characterized by its ease of design, application, correction, and a high degree of stability and reliability. In this research, Statistical Package for Social Sciences (SPSS) was used to analyze the data extracted from the questionnaire, as it is a program that deals with the analysis of statistical information in the field of sociology and is therefore known and used by a large group of researchers (Sun, 2019). The rationale for using SPSS is to build the framework of research variables, which is one of the best methods used to test multivariate models, because it gives the researcher the possibility to test the relationship between these variables at once as well as to determine how appropriate the framework is for the data collected through the quality indicators of conformity.

Given the frequency of the study respondents, which is 380, the Table 1 below shows the summary of socio-demographic characteristics of the respondents. As the number of males reached 201 respondents (79.3%), while the number of female reached 179 respondents (20.8%). Furthermore, the number of respondents of the age distribution of 18 to 29 was 106 respondents (27.9%), while age group from 30 to 39 was 141 (37.1%). Meanwhile, age group from 40-49 was 97 respondents (25.6%), and lastly age group above 50 years old was 36 respondents (9.4%). With respect to job experience, majority of the respondents have more than 10 years of working experience accounted for 181 respondents (47.7%), followed by respondents with years of job experience from 0 to 5 was 108 respondents (28.4%), and from 6 to 10 of job experience was 91 respondents (23.9%).

Table 1: Summary of Socio-demographic characteristics of the respondents (N= 380)

Variable	N (%)
Gender	
Male	201 (52.9%)
Female	179 (47.1%)

Age	
20-29	106 (27.9%)
30-39	141 (37.1%)
40-49	97 (25.6%)
50 years and above	36 (9.40%)
Job Experience	
0-5 Years	108 (28.4%)
6-10 Years	91 (23.9%)
More than 10 Years	181 (47.7%)

VI. Research Analysis and Results

In this research, validity was tested by the expert review method at the initial stage of questionnaire development (Weakley et al., 2021). The initial questionnaire form was distributed to a number of specialists to judge the extent to which the questionnaire paragraphs conform to their content and objectives and review the clarity of the statements. Also, the Cronbach alpha equation was applied to verify the reliability of the questionnaire. Although there are no standards for the appropriate alpha values, in practice, Cronbach alpha that above 0.6 and below 0.7 is considered low and reliable, the value above 0.7 and below 0.8 is considered moderate, as the general rule is that reliability greater than 0.8 are considered as high (Kaur et al., 2021). Referring to the Table 2, it is clear that the overall reliability of the questionnaire was excellent, as the value of Cronbach's coefficient alpha was (0.897), which means that it is acceptable from a statistical point of view. Regarding the value of Cronbach's alpha coefficient for the study variables, the values for bank merger, efficiency, and profitability were (0.891), (0.880) & (0.881) respectively, that is, they were greater than (0.60), so the questionnaire items can be judged as stable and valid for statistical analysis.

Table 2: Cronbach's Alpha for the Questionnaire.

Scale	Item number	Cronbach's Alpha (%)
Banking Merger	20	0.891
Efficiency	20	0.880
Profitability	20	0.881
Entire Questionnaire	60	0.897

In addition, the appropriateness of data for factor analysis was verified. In this regard, in order to proceed data with factor analysis, Kaiser (1970) explained that the value of The Kaiser-Meyer Olkin (KMO) test should be between 0.8 and 1 to be adequate, as well as the value of Bartlett (1937) test should be statistically significant, which means that factor analysis is valid. In addition, The Total Variance Explained was used to investigate the variance is divided among possible factors. As shown in the Table 3 below, the value of the KMO test equals to 0.846, which is acceptable, meaning that the sample is adequate. Also, the value of Bartlett's test is less than 0.05, which confirms the validity of factor analysis. Regarding the total variance explained for research variables, it is clear from the Table 4 that research variables contribute together to 86.113% of the total variance of test scores.

Table 3: The Kaiser-Meyer Olkin (KMO) and Bartlett's Test for Research Variables.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.846
Bartlett's Test of Sphericity	Approx. Chi-Square	1679.161
	df	3
	Sig.	0.000

Table 4: Total Variance Explained for Research Variables.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.643	86.113	88.084	1.125	86.113	88.084
2	0.227	7.565	95.649			
3	0.131	4.351	100.000			

In order to test research hypotheses, regression analysis was used, as follows:

H_1: There is a significant impact of banking merger on Jordanian commercial banks efficiency.

Table 5: Results of the Regression Analysis – The impact of banking merger on the efficiency of Jordanian commercial banks.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.623	1	9.256	33.569	.000b
	Residual	33.219	379	.896		
	Total	42.526	380			

It is clear from the Table 5 that the simple regression model to represent the impact of banking merger on the efficiency of Jordanian commercial banks is significant. Moreover, the table shows that Sig. value is 0.000, which is less than 0.05, leading to acceptance of the first hypothesis (H1).

H_2: There is a significant impact of banking merger on Jordanian commercial banks profitability.

Table 6: Results of the Regression Analysis – The impact of banking merger on the profitability of Jordanian commercial banks.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.236	1	7.236	36.259	.000b
	Residual	18.563	379	.255		
	Total	42.397	380			

It is clear from the Table 6 that the simple regression model to represent the impact of banking merger on the profitability of Jordanian commercial banks is significant. Moreover, the table shows that Sig. value is 0.000, which is less than 0.05, leading to acceptance of the second hypothesis (H2).

VII. Discussion

Banking merger is one of the means of facing the challenges of the Financial Services Trade Liberalization Agreement, which requires opening financial services markets in banks, insurance companies and the stock market. It is noteworthy that the signatory countries own 95% of the global financial services markets, which gave them the character of global competition. The merger requires that Jordanian commercial banks be aware of the real responsibility of the merger in order to avoid the reasons for the failure of this merger. Therefore, the merger decision must be subject to economic, marketing, legal, social, cooperative, and human studies, and to address the existing imbalances within the banks wishing to merge. Based on the results that have been reached, the merger strategy represents one of the solutions for banks that are experiencing financial difficulties or anticipating failure, with the obligation to define an appropriate regulatory and supervisory framework for the merger process that provides protection for the bank's assets after the merger to enable it to carry out its activities more effectively.

The results illustrated that there is a significant impact of banking merger on the efficiency of Jordanian commercial banks. This result is consistent with Galariotis et al. (2021); Kazeem et al. (2022); Coccorese & Ferri (2020). From research point of view, the merger of small and medium-sized banks in Jordan into large-sized banks will contribute to creating strong banking entities that raise their operational efficiency and achieve a good investment return for their shareholders and are able to compete locally with their extension outside Jordan, where they become a strategic partner for the state and its institutions. This merger, which contributes to the accumulation of accumulated experiences, is able to provide the best services to individuals, companies, government institutions, wealth management, and provide large-sized and long-term loans to implement the stimulus plan to supporting economic development. One of the main reasons for the failure of banking merger in Jordan is that the ownership of smallest and medium-sized banks belongs to families that own strategic shares in the capital, and these shares contributed to their ownership of strategic and important decisions, and consequently their lack of agreement to merge with other banks. The banking merger enables the formation of large-sized banking units capable of participating in a large proportion in financing development plans due to the appropriate facilities it provides. At the same time, it is able to obtain technical and administrative expertise that enables it to improve banking services more efficiently and at a lower cost. This research shows that the merger process in Jordanian commercial banks may lead to a significant improvement in the ability of those banks to meet their monetary obligations towards depositors, as banking merger has a positive impact on the activity of banks, by rationalizing the use of resources in lending and investment operations.

This paper aims at exploring the impact of banking merger on the efficiency and profitability of Jordanian commercial banks. Through results of the statistical analysis of the study sample, which numbered 380 employees in Jordanian commercial banks, the results illustrated that there is a significant impact of banking merger on the efficiency of Jordanian commercial banks, as well as there is a significant impact of banking merger on the profitability of Jordanian commercial banks. In light of these results, this paper recommended the necessity of activating the banking merger process more between Jordanian commercial banks in order to avoid the problems and obstacles facing the banking business, this can be done by forming a special department concerned with the process of evaluating the conditions of commercial banks and studying the merger process in a scientific manner, with the need to carry out prior and deep studies of the merger process and the prospects for the banking process in the future, which reflects positively on the

In addition, the results illustrated that there is a significant impact of banking merger on the profitability of Jordanian commercial banks. This result is consistent with Ahmed et al. (2022); Kobayashi & Bremer (2022); Musah et al. (2020); Tuna and Al-Mahadin (2021). This research confirms that profitability is one of the main objectives that Jordanian commercial banks seek to achieve, which greatly affects their ability to maintain their continuity and strengthen their financial position, as well as enhance their solvency and liquidity. The Commercial Bank seeks to direct investment to sources that achieve the maximum profit so that they can pay the interests due to depositors and meet other obligations, and achieve appropriate profit rates sufficient to form the necessary reserves to strengthen the financial position of the bank, and to distribute appropriate profits to the owners of the bank's capital. Moreover, banking merger contributes to the search for new opportunities and services provided by the bank in new sectors and activities for new clients or for existing clients, which positively reflects on improving the profitability of banks. From another angle, the revenue growth analysis helps determine the extent to which the new entity after the merger will be able to create the required synergy in generating additional profits, as the revenue growth rate of the new entity is calculated compared to each of the two banking entities separately. The earnings per share growth is judged on whether the merger has benefited the shareholders or not.

VIII. Summery / Suggestions

merged banks and allows them to benefit from the positive advantages of banking merger. In addition to raising the efficiency of recruitment and investment for the merged banks to obtain a better result from behind the merger process.

IX. Suggestions

This research has limitations, as it was limited to the opinions of employees in Jordanian commercial banks, so it is possible for future studies to focus on the case study method, by selecting two banks that were merged, with the aim of analyzing the financial performance data of the merged bank. This is done through a comparison to measure the most important financial indicators before the bank merger with their results after the merger, relying mainly on the bank's annual financial reports. Moreover, this study was limited to studying the impact of banking merger on efficiency and profitability. In this regard, other factors that are strongly affected by banking merger can be investigated, such as loan prices, small business lending, stock price, and bank valuation.

References

1. Ahmed, S., Talreja, S., Shah, M. A., & Asad, M. (2022). Peeking Beyond Profitability: Effects of Merger and Acquisition on Microeconomic Indicators in Banking Industry. Journal of Business Administration and Management Sciences (JOBAMS), 4(1), 31-41.
2. Al Zaidanin, J. (2020). A study on Financial Performance of the Jordanian Commercial Banks using the CAMEL Model and Panel Data Approach. International Journal of Finance & Banking Studies (2147-4486), 9(4), 111-130.
3. Al-Eitan, G. N., Al-Own, B., & Bani-Khalid, T. (2022). Financial Inclusion Indicators Affect Profitability of Jordanian Commercial Banks: Panel Data Analysis. Economies, 10(2), 38.
4. Al-Gasaymeh (2016). Bank Efficiency Determinant: Evidence From the Gulf Cooperation Council Countries. Journal in International Business and Finance. 38: 214-223
5. Al-Hroot, Y. A., Al-Qudah, L. A., & Alkharabsha, F. I. (2020). The impact of horizontal mergers on the performance of the Jordanian banking sector. The Journal of Asian Finance, Economics, and Business, 7(7), 49-58.
6. Al-Qudah, A. (2021). The determinants of lending interest rates of Jordanian listed commercial banks. Accounting, 7(4), 719-726.
7. Al-Slehat, Z. A. F., & Altameemi, A. F. (2021). The relationship between non-interest revenue and sustainable growth rate: A case study of commercial banks in Jordan. The Journal of Asian Finance, Economics and Business, 8(5), 99-108.
8. Bekhet, H. A., Alsmadi, A. M., & Khudari, M. (2021). Dynamic Linkages between Profitability and Its Determinants: Empirical Evidence from Jordanian Commercial Banks. The Journal of Asian Finance, Economics and Business, 8(6), 687-700.
9. Blanco-Oliver, A. (2021). Banking reforms and bank efficiency: Evidence for the collapse of Spanish savings banks. International Review of Economics & Finance, 74, 334-347.
10. Braggion, F., Dwarkasing, N., & Moore, L. (2022). Value creating mergers: British bank consolidation, 1885–1925. Explorations in Economic History, 83, 101422.
11. Coccorese, P., & Ferri, G. (2020). Are mergers among cooperative banks worth a dime? Evidence on efficiency effects of M&As in Italy. Economic Modelling, 84, 147-164.
12. Galariotis, E., Kosmidou, K., Kousenidis, D., Lazaridou, E., & Papapanagiotou, T. (2021). Measuring the effects of M&As on Eurozone bank efficiency: An innovative approach on concentration and credibility impacts. Annals of

Operations Research, 306(1), 343-368.

13. Gupta, S., Kadyan, S., & Bhasin, N. K. (2021). Analytical Study of Behavioral Finance in Bank Merger: Impact of Digitalization. Academy of Accounting and Financial Studies Journal, 25, 1-17.

14. Isayas, Y. N. (2022). Determinants of banks' profitability: Empirical evidence from banks in Ethiopia. Cogent Economics & Finance, 10(1), 2031433.

15. Kaur, M., Sidhu, T. K., Mahajan, R., & Kaur, P. (2021). Evaluation of the institutional educational environment by using the dundee ready educational environment measure. International Journal of Applied and Basic Medical Research, 11(2), 85.

16. Kazeem, B. L., Ademola, A. O., & Ogunlokun, A. D. (2022). Effect of Banks Merger and Acquisition on The Nigeria's Economic Growth: A Comparative Analysis of Pre and Post Performance. Gomal University Journal of Research, 38(1), 27-38.

17. Kilani, Q. (2014). The Impact of Microcredit on (ROA) & (ROE) Ratios of Jordanian Banks. International Journal of Academic Research. 6(5).

18. Kobayashi, A., & Bremer, M. (2022). Lessons from mergers and acquisitions of regional banks in Japan: What does the stock market think?. Journal of the Japanese and International Economies, 64, 101202.

19. Lu, M., Cui, T., Huang, Z., Zhao, H., Li, T., & Wang, K. (2021). A Systematic Review of Questionnaire-Based Quantitative Research on MOOCs. The International Review of Research in Open and Distributed Learning, 22(2), 285-313.

20. Milenković, N., Radovanov, B., Kalaš, B., & Horvat, A. M. (2022). External Two Stage DEA Analysis of Bank Efficiency in West Balkan Countries. Sustainability, 14(2), 978.

21. Musah, A., Abdulai, M., & Baffour, H. (2020). The Effect of Mergers and Acquisitions on Bank Performance in Ghana. Asian Journal of Economics and Empirical Research, 7(1), 36-45.

22. Phan, H. T., Anwar, S., Alexander, W. R. J., & Phan, H. T. M. (2019). Competition, efficiency and stability: An empirical study of East Asian commercial banks. The North American Journal of Economics and Finance, 50, 100990.

23. Rakshit, B., & Bardhan, S. (2022). An empirical investigation of the effects of competition, efficiency and risk-taking on profitability: An application in Indian banking. Journal of Economics and Business, 118, 106022.

24. Sun, Z. (2019). A study on the educational use of statistical package for the social sciences. International Journal of Frontiers in Engineering Technology, 1(1).

25. Tuna, G. and Al-Mahadin, H. (2021). Does interest rate and its volatility affect banking sector development? Empirical evidence from emerging market economies. Research in International Business and Finance. Vol. (58): 1-11.

26. Tyas, A. A., & Rusydiana, A. S. (2021). The Pre-Merger Efficiency of Banks: Evidence in Indonesia State-Owned Islamic Banks. JEBIS (Jurnal Ekonomi dan Bisnis Islam). Journal Of Islamic Economics and Business, 7(1), 1-13.

27. Vanwalleghem, D., Yildirim, C., & Mukanya, A. (2020). Leveraging local knowledge or global advantage: Cross border bank mergers and acquisitions in Africa. Emerging Markets Review, 42, 100656.

28. Weakley, J., Morrison, M., García-Ramos, A., Johnston, R., James, L., & Cole, M. H. (2021). The validity and reliability of commercially available resistance training monitoring devices: a systematic review. Sports medicine, 51(3), 443-502.