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THE EFFECT OF EFFICIENCY AND LIQUIDITY ON THE PROFITABILITY OF THE SAUDI COMMERCIAL BANKS

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ABSTRACT: *This study aimed at finding the effect of efficiency and liquidity on the profitability of the Saudi Commercial Banks. The profitability as a dependent variable is measured by return on assets, return on equity, operating profit Ratio, net interest margin ratio and net interest income ratio. Meanwhile, the efficiency and liquidity as independent variable are measured by Cost to income, Loans to total assets, total customer deposits to total assets and Loans to deposits. The study sample included 12 banks for the period 2014 to 2020. A set of statistical tools and financial indicators were used to test the validity of hypotheses. The results indicated that first, second and fifth hypothesis were rejected and third and fourth were accepted. The study recommend that Saudi commercial banks should focus more on liquidity and follow appropriate policies to gain more profitability. Finally, more studies and research work are required in the same field.*

KEYWORDS: assets, equity, profitability, liquidity, deposits, loans.

INTRODUCTION

Banks represent the backbone of economic activity, through the money deposited with them, projects are financed, investments in various fields, financial mediation role between the deficit and the surplus owners. Financial resources, seeks to achieve the highest possible return with minimum potential risks.The banking industry of Saudi Arabia has witnessed technological developments in the field of communication and globalization, and an increase in the number of branches and dealers, which led to an increase in the volume of transactions in banks, which ultimately led to the intensification of competition between these banks with regard to the quality of the banking services provided, as well as their diversification, attention to the banking sector was a duty and a necessity.

The subject of efficiency and profitability analysis is of great importance for any economic or financial institution, especially in the current period. In which the world is witnessing the collapse and bankruptcy of many companies, as well as in light of the openness to the world. Financial analysis is the extent to which activities contribute to creating value or the effectiveness in the use of financial resources or the institution's ability to achieve its financial goals at the lowest possible cost, and providing liquidity to pay off its obligations and achieve a good rate of return at the lowest cost.

Bank liquidity is one of the most important assets owned by banks, through which the bank's funds are invested and increase its profits, and the success of banks depends on the extent of its ability

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to manage the bank liquidity that it owns, which is generated mostly by the deposits, whether they come from individuals or other institutions and banks. Banks manage its liquidity and directing it towards the investment with the aim of maximizing profitability and achieving its objectives. The liquidity is one of the important aspects that concern the management of banks and financial companies in the exercise of their administrative duties. Liquidity refers to the balance between current assets in their monetary form or their convertibility to cash (current assets) and liabilities as for profitability, which is the relationship between the profits achieved by projects. Achieving and maximizing profits is one of the basic goals, if not the main goal that the banks seek. As achieving such profits, enables them to maintain its continuity and survival, strengthening its financial position, increasing its ownership rights, enhancing its solvency and liquidity, which increases its ability to face risks.

Efficiency and liquidity are one of the continuous daily challenges facing all commercial banks managements. It is known that the lack of adequate liquidity will help commercial banks avoid bankruptcy. On the other hand, maintaining high liquidity that exceeds the actual need will cause freezing money that could have been employed in profitable operations. The issue of efficiency and liquidity is one of the most important topics concerned to commercial banks, because the main operations of commercial banks are cash flow and efficiency and liquidity will enable them to meet its obligations and fulfill the basic requirements of its clients. International and local banking laws stipulate that commercial banks must keep minimum liquidity percentage, which allows the bank to invest and use its financial resources in the right way.

Furthermore, the global economy faced a real financial crisis in 2007-2008 that ravaged the economies of all countries. Liquidity crisis led to the collapse of many banks and the decline of stock markets, and its impact extended to the economies of Arab countries and the economy of the Kingdom of Saudi Arabia as part of the global system.

The COVID-19 pandemic has created an unprecedented humanitarian and health crisis. The measures necessary to contain the virus have caused an economic downturn and uncertainty in the financial system. The latest issue of the Global Financial Stability Report shows that the financial system is already severely affected, and the intensification of the crisis effected the global financial stability.

In order to maintain the stability of the global financial system and support the global economy, the central banks of various countries of the world were the first line of defense. They have greatly eased monetary policy by lowering policy rates – which have taken them to historically low levels in the case of advanced economies. Half of central banks in emerging markets and lower-income countries have also cut key interest rates. Also, central banks have provided additional liquidity to the financial system through open market operations.

Based on these facts and the previous studies, the main problem of the study arises by answering the following question: Is there an effect of efficiency and liquidity on the profitability of the Saudi Commercial Banks? In addition, the main objective of the study is to find the effect of efficiency and liquidity on the profitability of the Saudi Commercial Banks. The importance of study can be

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summarized as efficiency and liquidity are linked to the existence of the bank and its growth, as well as its important indicator for the customers in evaluating banks. Efficiency, liquidity and profitability are among the most important pillars on which any commercial bank depends, so the failure in either of them will lead to the loss of depositors,' confidence and the weakness of the bank's financial position.

The commercial banking sector in the Kingdom of Saudi Arabia has a significant impact on most economic sectors and finance, as they play a vital role in supporting the development of these sectors. The success of the commercial banking sector and its progress depends on several criteria, the most important of which is the growth of profitability in a manner commensurate with the growth of economic and financial developments. They play an important and prominent role in financing investment operations, both public and private. Commercial banks keep millions of deposits of individuals, companies, governments, private and public institutions, and investment bodies.

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Theoretical Framework

1- Liquidity Ratio: It means the liquidity available in the institution, through which the institution can meet its obligations in short term. There are several measures to measure the liquidity ratio, among which current ratio and quick ratio.

2- Profitability ratio: This ratio gives indications of the extent to which the institution is able to generate profits through sales or an investment. Among the profitability ratios are:

-Return on assets (ROA): is an indicator that measures the company's profitability relative to its total assets. Return on assets gives an idea of how efficient management is in using its assets to achieve profits. Return on assets is calculated by dividing the company's annual profits by its total assets as a percentage, sometimes referred to as "return on investment".

-The rate of return on equity (ROE): measures the ratio of a company's profit to the total equity of its shareholders. This rate is calculated by dividing the company's net profit by the total shareholders' equity.

3- Operating profit: It is the profit earned from the company's operations only, and therefore we do not deduct interest and taxes when calculating it, and we also do not add to it any investment profit from outside the company's operations, such as profits resulting from shares owned in other companies.

4- Net interest income: is the difference between the interest income that the bank receives from lending activities and the interest payments that the bank pays to depositors. That is, subtract the interest earned from the interest paid. For banks, assets typically include business and personal loans, mortgages, construction loans, and investment securities. Liabilities mainly consist of customer deposits.

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5- The net interest margin: is a ratio that measures how well a company invests its money compared to its expenditures on the same investments. A negative value indicates that the company has not made the optimal investment decision because the interest expense exceeds the amount of returns generated by the investments.

6- The cost-to-income ratio; divide the organization's operating expenses by its operating income for the same period. Operating expenses in this context include all costs of running a business such as fixed costs (rent, mortgage, insurance, utilities, property taxes etc.) and administrative expenses (salaries, stationery, marketing costs). Revenue includes sales receipts, fee income, and interest earned on loans

7- Operational efficiency: is basically measures the efficiency of profit earned as a function of operating costs. The higher the operational efficiency, the higher the profitability or investment of the company; Because the firm is able to generate greater income or returns at the same or lower cost than the alternative. In financial markets, operational efficiency occurs when transaction costs and fees are reduced.

8- Total loans to total assets (Total Debt to Total Assets): is the most important measure of the ratio of loans used in capital to finance assets and the higher the ratio, the higher the risk in the company.

9- The loan-to-deposit ratio: is used to assess a bank's liquidity by comparing a bank's total loans to its total deposits for the same period.

Literature Review

Many previous researchers have conducted theoretical studies regarding the effect of financial ratios on firm value. Kurnia et al. (2020) stated that financial ratios have an effect on firm value, while Husna and Satria. (2019) stated that Return on Asset (ROA) has an effect firm value, while Debt to Asset Ratio (DAR) and Current Ratio (CR) does not affect firm value.

Jihadi, M et al. (2021), The study aimed to examine the effect of liquidity, activity, leverage, and profitability on firm value, as well as the effect of disclosure of corporate social responsibility (CSR). The results show that the ratios of liquidity, activity, leverage, and profitability are significant to firm value in accordance with the initial hypothesis of the study.

Maria et al. (2020), The paper aimed to analyze the determinants of profitability and bank efficiency in the Iberian Peninsula. To achieve the proposed objective, a sample of 66 Portuguese and Spanish banks was analyzed. The results point out that the banking performance, measured in terms of profitability and efficiency is influenced by internal management variables, but also by the macroeconomic environment. More interestingly, and new in the Iberian banking sector literature, the results prove a positive and negative non-linear relationship between bank size and their levels of profitability and efficiency, respectively

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Dahiyat et al. (2021), The study aimed to examine the impact of liquidity and solvency management on the financial performance of Jordanian manufacturing companies listed on the Amman Stock Exchange. The results show a statistically significant impact of independent and control variables (liquidity and solvency management and the size of the company) on financial performance, while the detailed results of the hypotheses indicate that liquidity has an insignificant reverse impact on financial performance.

Sujan et al. (2020), The research aimed to investigate the effect of banks' liquidity on its profitability. Therefore, it can be concluded that, in general, liquidity has a significant effect on the profitability in the commercial banking sector of Bangladesh.

Mishra, R. (2019), The paper investigated the relationship between liquidity and profitability of Nepalese commercial banks. The findings of this paper are based on a study conducted on the selected banks. Hence, the results show that ADBL and NABIL have good liquidity position and profitability position. Therefore, the results are valid for banking sector.

Md. Sharif Hassan. (2021), The study has undergone a comparative analysis on the financial performance of 1st, 2nd and 3rd generation banks of Bangladesh from 2008 to 2019. The result of the hypothesis suggested that all the three generation banks exhibit a standard positive result in the area of profitability ratios, liquidity ratios and capital adequacy ratio, thus reflecting the financial soundness of all the three generation banks

Muriithi and Muigai. (2017) analysed the effect of operational risk on profitability of commercial banks in Kenya. Operational risk was measured by cost income ratio while profitability by return on equity. Results state that cost income is negatively associated with bank profitability both in long run and short run.

Meanwhile according to Ekinci, R and Poyraz,G. (2019) which used Return on Asset (ROA) and Return on Equity (ROE) as proxies for financial performance indicators and Non-Performing Loans (NPL's) as credit risk indicators found that there is a negative relationship between credit risk and ROA as well as between credit risk and ROE.

RESEARCH METHODOLOGY

In order to achieve the main objectives and answer the questions of the study the research data were collected which are based on secondary data, obtained from the annual reports of sample banks and other information have been collected from the websites of the different articles and papers. The descriptive analytical method was used, which is commensurate with the nature of this study. Collecting, describing and analyzing data of the financial statements of the sample banks were applied and then using the appropriate statistical method to analyze the data based on a program SPSS. The study sample was selected from the commercial Saudi banks which are 12 banks for the period 2014 to 2020. The descriptive analytical method and a set of statistical tools and financial indicators were used to test the validity of its hypotheses, as well as simple regression, correlation analysis and ANOVA were used to test the influence of independent variables on the

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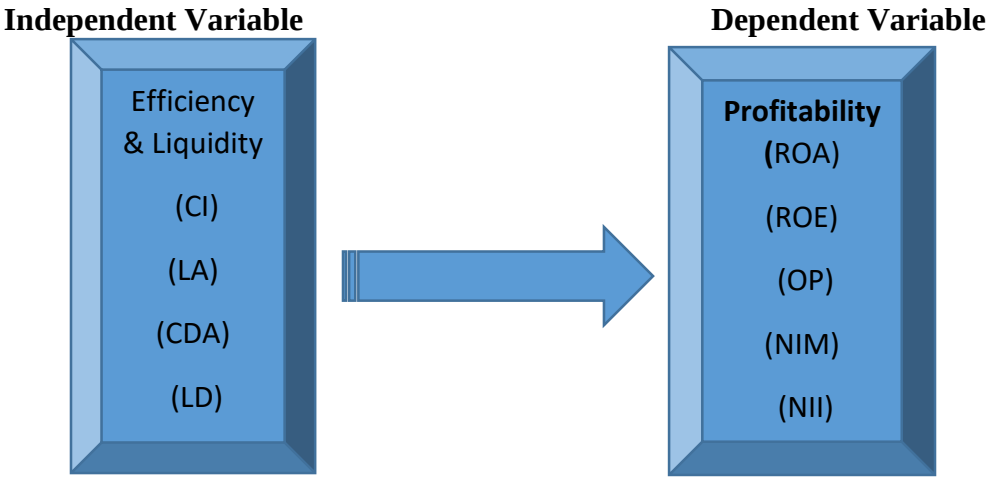
dependent variables and determine the most influential variable. The following conceptual framework was formulated to show the study variables:

Figure.1



Based on the previous literatures, the following four models are formulated and presented here:

ROA= β0+ β1 CE/NI + β2 LA/TA + β3 CD/TA + β4 LA/CD + ε…….. (1)

ROE= β0+ β1 CE/NI + β2 LA/TA + β3 CD/TA + β4 LA/CD + ε ……..…….. (2)

OP= β0+ β1 CE/NI + β2 LA/TA + β3 CD/TA + β4 LA/CD + ε ……...…….. (3)

NIM= β0+ β1 CE/NI + β2 LA/TA + β3 CD/TA + β4 LA/CD + ε ……..….. (4)

NII= β0+ β1 CE/NI + β2 LA/TA + β3 CD/TA + β4 LA/CD + ε ……..…….. (5)

Where, α, is constant, β1, β2, β3 β4 and β5 are coefficients of variables, ∈, is error term.

In conformity with the main objectives of the study, the following hypotheses have been formulated to be tested in this study:

HO: Major Hypothesis:

Efficiency & Liquidity does not significantly affect the profitability of the Saudi Commercial Banks.

Sub-hypotheses:

HO1: Cost to income does not significantly affect the profitability of the Saudi Commercial Banks.

HO2: Loans to total assets does not significantly affect the profitability of the Saudi Commercial Banks.

H03: Total customer deposits to total assets does not significantly affect the profitability of the Saudi Commercial Banks.

HO4: Loans to deposits does not significantly affect the profitability of the Saudi Commercial Banks.

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RESULTS AND FINDINGS

Descriptive Analysis

Table.1 presents the descriptive analysis of all the variables of the study. The number of observations for the study stood at 84. Profitability, which is proxied by (ROA), (ROE), (OP), (NIM) and (NII) reflects a mean of 0.017, 0.112, 0.036, 0.028, 2.46 respectively with a standard deviation fluctuation of 0.0106, 0.57, 0.009, 0.018, 7.70 respectively. These figures reveal low profitability in respect to listed Saudi Banks except for (NII). The results indicate low level of dispersion from the mean value of profitability ratios recorded within the period of study. The low level of dispersion between the minimum and maximum values, which stood at -0.0208 and 0.752 respectively for (ROA). Meanwhile, the level of dispersion between the minimum and maximum values for (ROE), (OP), (NIM) and (NII) stood at -.08210, .00239, .01644, -4.39702 respectively as minimum values. Maximum values stood at 0.276, 0.054, 0.186, 70.82. It is observed the value for (NII) is very high as compared to other values.

As well as, the result of the descriptive analysis in respect to efficiency and liquidity ratios (CI) further reflects a mean of 1.00 with a standard deviation fluctuation of 3.06. This indicates that (CI) stood at 1.00 during the period of investigation. Furthermore, the results indicate that there is a low dispersion from the mean value of (CI), the maximum value within the study period is 23.39 with a minimum of 0.038.

The result of the descriptive analysis in respect to (LA) reflects a mean of 0.538 with a standard deviation fluctuation of .188 during the period under investigation. The results further indicate that there is a low dispersion from the mean value of (LA) recorded within the period of study. The maximum (LA) recorded within the study period is 0.707 with a minimum of 0.024.

Furthermore, the result of the descriptive analysis in respect to reflects (CDA) a mean of 0.74 with a standard deviation fluctuation of 0.096 during the period under investigation. The results further indicate that there is a low dispersion from the mean value of (CDA) recorded within the period of study. The maximum value of (CDA) recorded within the study period is 0.83 with a minimum of 0.025.

The result of the descriptive analysis in respect to reflects (LD) a mean of 0.73 with a standard deviation fluctuation of 0.23 during the period under investigation. The results further indicate that there is a low dispersion from the mean value of (LD) recorded within the period of study. The maximum value of (LD) recorded within the study period is 1.03with a minimum of 0.11.

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Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
ROA	84	.09603	-.02083	.07521	.0169789	.01064652	1.020	.263	12.304	.520
ROE	84	.35840	-.08210	.27630	.1119249	.05740737	-.366	.263	1.951	.520
OP	84	.05231	.00239	.05471	.0356605	.00862597	-1.138	.263	2.821	.520
NIM	84	.17048	.01644	.18692	.0284972	.01814659	8.200	.263	72.139	.520
NII	84	75.21340	-4.39702	70.81638	2.4601240	7.70019179	8.636	.263	77.344	.520
CI	84	23.35766	.03824	23.39589	1.0013918	3.05652470	6.197	.263	40.620	.520
LA	84	.68341	.02365	.70706	.5384062	.18843500	-1.549	.263	.896	.520
CDA	84	.80692	.02528	.83220	.7372166	.09582866	-5.208	.263	36.898	.520
LD	84	.91408	.11309	1.02717	.7327392	.23486381	-1.717	.263	1.546	.520
Valid N (listwise)	84									

Correlation Analysis

The correlation coefficient's values ranges between -1.0 which indicates a strong negative correlation and +1.0 which indicates a strong positive correlation. The values range nearly or close to zero indicates weak or no linear relationship. The linear correlations among the independent variables which is represented by (CI), (LA), (CDA) and (LD) and dependent variables which are represented by (ROA), (ROE), (OP), (NIM) and (NII) are measured as below:

Table (2)

Pearson Correlations

		ROA	ROE	OP	NIM	NII	CI	LA	CDA	LD
ROA	Pearson Correlation	1								
	Sig. (2-tailed)									
ROE	Pearson Correlation	.677**	1							
	Sig. (2-tailed)	.000								
OP	Pearson Correlation	-.002	.130	1						
	Sig. (2-tailed)	.982	.237							
NIM	Pearson Correlation	-.032	.013	.066	1					
	Sig. (2-tailed)	.774	.906	.550						
NII	Pearson Correlation	-.175	-.228*	-.007	.001	1				
	Sig. (2-tailed)	.111	.037	.948	.996					
CI	Pearson Correlation	-.282**	-.367**	-.021	-.008	.837**	1			
	Sig. (2-tailed)	.009	.001	.846	.942	.000				
LA	Pearson Correlation	-.148	-.070	-.202	-.056	.036	-.048	1		
	Sig. (2-tailed)	.180	.525	.065	.610	.748	.665			
CDA	Pearson Correlation	-.234*	.398**	.059	.080	-.005	-.159	.355**	1	
	Sig. (2-tailed)	.032	.000	.593	.470	.964	.148	.001		
LD	Pearson Correlation	.016	-.213	-.249*	-.093	.043	.002	.898**	-.080	1
	Sig. (2-tailed)	.886	.052	.022	.398	.698	.986	.000	.469	
	N	84	84	84	84	84	84	84	84	84

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

It is revealed from the analysis that inter-correlation values between selected variables of efficiency, liquidity and profitability to be mixed (both positive and negative). The 'r' values were found to be negative but significant between profitability variable as measured by ROA and efficiency and liquidity variables as measured by CI (-0.282**) and LA (-.148), and CDA (-.234*) whereas the correlation between ROA and

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efficiency & liquidity variable as measured by LD was found to be positive (.016) and significant. Similarly, the correlation between profitability variable as measured by ROE and efficiency, liquidity variables as measured by CI (-.367**) and LA (-.070), LD (-.213) were found negative and insignificant but CDA (.398**) was positive and significant, whereas the correlation between OP and efficiency and liquidity variable as measured by CI (-.021) and LA (-.202) and LD (-.249*) was found to be negative but not significant but CDA (.059) was positive and significant. NIM as one of the profitability variable showed negative relationship with efficiency and liquidity ratios CI (-.008) LA (-.056) LD (-.093) but showed positive correlation with CDA (.080). NII another profitability variable showed positive relationship with efficiency and liquidity ratios CI (.837**) LA (.036) LD (.043) but showed negative correlation with CDA (-.005). It is apparent from the table that the correlation values were found to be statistically insignificant between all the independent and dependent variables individually used in the study.

Model Estimation

Table (3)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
ROA	.706[a]	.499	.473	.00772546	.499	19.658	4	79	.000	1.371
ROE	.660a	.436	.407	.04419126	.436	15.267	4	79	.000	1.407
OP	.257a	.066	.019	.00854437	.066	1.398	4	79	.242	1.570
NIM	.125a	.016	-.034	.01845515	.016	.312	4	79	.869	1.955
NII	.870a	.757	.745	3.88775845	.757	61.650	4	79	.000	1.825

a. Predictors: (Constant), LD, CI, CDA, LA
b. Dependent Variable: ROA, ROE, OP, NIM, NII

The results indicate the existence of a statistically significant impact of efficiency and liquidity on profitability of the Saudi banks (combined) on ROA, as it is clear from the value of specification of the five predictor variables in the above model, it reveals that the ability to predict the profitability. (R square=.499, .436, .066, .016, and .757 respectively). R square value of .499 denotes that 49.9 % of observed variability in ROA which can be explained by the differences in the independent variables. Remaining 50.1% variance in the return on assets which is attributed to other variables. Based on Table 3, the coefficient of determination R square is equal to 0.499. It can be concluded that the efficiency and liquidity ratios has effect on ROA

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Based on the statistical test, a variable efficiency and liquidity significantly has an effect on profitability. So this means greater efficiency and liquidity means more efficient turnover of assets and or the greater the rate of return on its assets so that it will have an impact on profitability or corporate profits will increase measured by ROA. In the same way, R square for ROE denotes 43.6% which can be explained by the differences in the independent variables. Remaining 56.4% variance in the return on equity which is attributed to other variables. R square for OP, NIM, NII, 0.066, 0.016, .757 respectively, which can be explained by the differences in the independent variables. Remaining 93.4%,98.4%, 24.3%. respectively. Efficiency and liquidity showed positive impact on (ROE), (OP) and (NII) and it was very high on (NII), but it shows a low effect on (NIM). The results of this research together with research studied by Saleem and Rehman (2011) showed a significant result between the variables.

The model summary shows that, the values of adjusted R square .473, .407, .019, -.034 and .745 are slightly less than the value of R square. By testing the model summary in conjunction with ANOVA (F–value) indicates that the model explains the most possible combination of predictor variables that could contribute to the relationship with the dependent variables.The F-statistic is used to test the overall significance of model. The Durbin–Watson test statistic is used to detect the presence of auto correlation in this model. If the value of the test statistic is closer to 2, it means that the model has no auto correlation. The statistic test values are close to 2 indicating that the specific model is free from auto correlation. The joint effect of all coefficient is significant which means that overall efficiency and liquidity has impact the profitability of these utilities. Therefore, the research hypothesis is significant at 5% level and therefore it is accepted.

Table(4)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1-ROA	Regression	.005	4	.001	19.658	.000[b]
	Residual	.005	79	.000		
	Total	.009	83			
2-ROE	Regression	.119	4	.030	15.267	.000[b]
	Residual	.154	79	.002		
	Total	.274	83			
3-OP	Regression	.000	4	.000	1.398	.242[b]
	Residual	.006	79	.000		
	Total	.006	83			
4-NIM	Regression	.000	4	.000	.312	.869[b]
	Residual	.027	79	.000		
	Total	.027	83			
5-NII	Regression	3727.257	4	931.814	61.650	.000[b]
	Residual	1194.059	79	15.115		
	Total	4921.315	83			

a. Dependent Variable: : ROA, ROE, OP, NIM, NII
b. Predictors: (Constant), LD, CI, CDA, LA

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Testing Hypotheses

Table 4 reveals the test of one-way ANOVA analysis for the study variables. The null hypothesis (H0) will be tested using F-test. F-test was used to evaluate the overall significance of the model. The level of significance (α) used is five per cent (5%) at 0.05. Decision rule for the F-test is such compares the confidence level and the p-value of the parameter estimates.

According to Gujarati & Potter (2009) as cited in Ajayi, Ajayi, Enimola & Orugun (2019), if the p-value is less than the confidence level, the null hypothesis is rejected. The Sig or p-value for the first hypothesis is 0.000 which is less than α=0.05, level of significance, hence the first hypothesis is rejected. The p-value for the second hypothesis is 0.000 which is less than 0.05, level of significance, hence the second hypothesis is rejected. The p-value value for the third hypothesis is 0.242 which is greater than 0.05, Hence the third hypothesis is accepted and the alternative hypothesis is rejected. The p-value for the fourth hypothesis is 0.869 which is greater than 0.05, Hence the fourth hypothesis is accepted and the alternative hypothesis is rejected. The p-value for the fifth hypothesis is 0.000 which is less than 0.05, level of significance, hence the hypothesis is rejected. According to Table 4, as the calculated value of F is found to be significant, the overall fitness of the model got achieved.

Table (5)
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1-	ROA (Constant)	-.178	.031		-5.746	.000
	CI	-.001	.000	-.211	-2.567	.012
	LA	-.344	.047	-6.086	-7.312	.000
	CDA	.261	.041	2.348	6.357	.000
	LD	.257	.035	5.672	7.266	.000
2-	ROE (Constant)	-.782	.177		-4.415	.000
	CI	-.004	.002	-.236	-2.704	.008
	LA	-1.230	.269	-4.036	-4.571	.000
	CDA	1.246	.235	2.080	5.310	.000
	LD	.875	.202	3.580	4.323	.000
3-	OP (Constant)	.055	.034		1.599	.114
	CI	-6.998E-5	.000	-.025	-.221	.826
	LA	.023	.052	.508	.447	.656
	CDA	-.016	.045	-.183	-.363	.718
	LD	-.026	.039	-.720	-.676	.501
4-	NIM (Constant)	-61.286	15.573		-3.935	.000
	CI	2.260	.144	.897	15.678	.000
	LA	-81.840	23.666	-2.003	-3.458	.001
	CDA	80.584	20.647	1.003	3.903	.000
	LD	62.967	17.807	1.921	3.536	.001
5-	NII (Constant)	-61.286	15.573		-3.935	.000
	CI	2.260	.144	.897	15.678	.000
	LA	-81.840	23.666	-2.003	-3.458	.001
	CDA	80.584	20.647	1.003	3.903	.000
	LD	62.967	17.807	1.921	3.536	.001

a. Dependent Variable: ROA, ROE, OP, NIM, NII

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The coefficients of regression for all the independent variables were negative except for OP, showing that there is a negative relationship between (profitability measure) and the explanatory variables (efficiency and liquidity measures, i.e., LD, CI, CDA, LA) in the case of the Saudi commercial banks.

CONCLUSION AND RECOMMENDATION

The study answered the main question of the study that is the effect of efficiency and liquidity on the profitability of the Saudi Commercial Banks. Efficiency, liquidity and profitability are among the most important pillars on which any commercial banks depends, so that, the failure in either of them will lead to the loss of depositors' confidence and the weakness of the bank's financial position.

The commercial banking sector in the Kingdom of Saudi Arabia has a significant impact on most economic sectors and finance, as they play a vital role in supporting the development of these sectors. The test of one-way ANOVA analysis for the study variables was used to test the hypotheses and it was indicated that the first, second and fifth hypothesis were rejected, and third and fourth were accepted.

In light of the study results, it is recommended that banks should not have excess liquidity as it harms banks profitability. Also, the pursuit of high profit without considering the level of liquidity can expose the bank to liquidity risk. Thus, banks can reach the optimal level of liquidity with minimum requirements, and avoid shortages or financial hardships.
Therefore, the researchers recommend the following:
- Saudi commercial banks should make a balance between liquidity and profitability to avoid falling into deficit.
- The Saudi commercial banks must follow appropriate policies to better manage their liquidity, while working on achieving profitability.
- Conducting more studies and research are required on a larger scale to include all banks activities in the Kingdom of Saudi Arabia.

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