



The effect of credit risk indicators on the profitability of banks in the Arab gulf countries

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Abstract:

The purpose of this study is to investigate the effect of credit risk indicators on the Arab gulfs countries banks Profitability over the period of 2015 to 2017. The banking credit risk was calculated using non-performing loans ratio effecting banks profitability indicators like net income and by using fixed effect and random effect model analyses, the study found that increasing in non-performing loans ratio will decrease the net income in gulf banks, the study also found that personal loans represent the largest share of loans granted in gulf banks. Also the study recommends the importance of developing the capabilities of credit departments in commercial banks in dealing with bad loans, and studying the financial statements and borrowers in terms of type of activity, and conducting economic feasibility studies before granting loans to large companies

Paper type: Research paper

Keywords: Gulf Banks, Loan Loose Provision, Non-Performing Loans, Credit Risk, Arab Gulf Countries Banks

1. Introduction:

Despite the difficult times and slowing global growth, the economic outlook for the gulf Arab countries remains positive, as governments take the initiative to boost economic growth, improve the ability of consumers, and implement major reforms to attract investors.

Global trade tensions are likely to affect the rate of economic growth in the gulf Arab countries indirectly, as the region may be affected secondarily due to the possibility of low global crude oil prices, as a result of the slowdown in trade and logistics industries, and tariffs, but the economies of countries may not be affected the gulf of world Trade war shocks; This is because of the strength of the economies of these countries.

There is no doubt that the recent increases in united states of America interest rates have had a negative impact on the economies of gulf Arab countries due to the policy of linking their currencies to the US dollar, by restricting expansion plans for governments, increasing borrowing costs and weakening private sector growth .. However, given the Fed's shift towards a slowdown in raising interest rates, borrowing costs are likely to decrease for a longer period this year. which leads to the promotion of economic growth in the region.

Financial systems in the gulf Arab countries have evolved significantly in recent years, mainly due to the banking sector, with a fertile field for further progress, as mentioned by the International monetary Fund, where financial safety indicators indicate that banking systems are in good shape, It has strong capitalization and sufficient liquidity, and its ability to absorb potential shocks.

Although the consequences of credit risk indicators like non-performing loans in recent years remain a challenge for the banking sector in the gulf Arab countries, the percentage of non-performing loans is expected to remain constant by the end of the year, and any major shocks in the banking system in the gulf Arab countries are unlikely to occur¹

2. Research Problem

Based on what has been explained above, the problem of the study is to measure the effect of Credit Risk indicators like non performing loans on the Arab gulfs countries banks profitability.

2.1 Research Questions:

- What are Credit Risk indicators?
- What is non-performing loans?
- What is deposits volume in Arab gulfs countries banks?
- What is total volume of loans in Arab gulfs countries banks?
- What is total volume of sectorial distribution of bank loans in Arab gulfs countries banks and non-performing loans ratio?

2.2 Research Methodology:

In this study, the analytical descriptive approach and statistical approach has been relied upon as being the most appropriate to the nature of the topic, and the researcher used to measure the effect credit risk indicators like non-performing

¹ Hussien abo saaq , July 2019 ,article published in Riyadh newspaper

loans on the net profit of commercial banks , The model included sectional time series - over time period (2015-2017) For the following variables :-

- Independent variable: Credit risk (will be measured by non-performing loans ratio in Gulfs Countries banks)
- non -performing loans ratio = non-performing loans divide on total bank loans
- Dependent variable: net profit (will be measured by net income in gulfs Countries banks)

2.3 Importance of Research

the study derives its importance from the position that the banking sector occupies in economics

countries as the backbone of economic life, and is considered the subject credit risk indicators like non-performing loans from the most important topics raised in the areas of research and discussion in the banking and financial sector, especially after the world witnessed an acute financial crisis, non-performing bank loans were one of the most important factors that contributed to its exacerbation and spread, and from this study came to highlight the reality of credit risk indicators like non-performing loans in commercial banks in the Arab gulf countries and their effect on the performance of these the last is an attempt to find practical ways to address this problem.

.2.4 Research Limitation

- Availability of Data for some years.

2.5 Research Period

- Research Period: from 2015 Till 2017
- Research Sample: The Researcher took the commercial banks in Saudi Arabia and United Arab Emirates and Kuwait, and excluded other banks in gulf countries because of the lack of data for the banks of these countries

3. Literature Review and Related Studies and Theoretical framework:-

3.1: - Credit Risk Conceptual Definitions :-

- Credit risk: It is the probability that credit transactions will be defaulted by loans or financial derivatives, and that Due to the failure of creditors to pay the principal and the interest accrued within the specified time period, and as a result of the lack of experience, the lack of efficiency of the boards of directors, the presence of low liquidity ratios, and weak supervision by the central bank²
- Non- Performing Loans (NPL): indicates how banks manage their credit risk because it defines the proportion of loan losses amount in relation to total loan amount, and equal non-performing loans divide on total bank loans.³
- Credit Facilities: Credit extended by the banking system in the form of loans and advances, bills discounted and overdrafts.⁴

² Afriyie & Akotey, 2012

³ Hosna et al, 2009

⁴ <https://www.investopedia.com/terms/c/creditfacility.asp>

3.2 Net Profit Conceptual Definitions :

- **Net Profit for a business:** - represents the net income after subtracting, interest, taxes and all expenses and cost.⁵

- **Profitability ratios:** These ratios reflect the bank's efficiency in making its investment and financial decisions, as one of the goals of banks is to achieve the highest profit return through good profit management. There are a group of ratios related to measuring the profitability ratio, which is as follows: the ratio of return on assets, as there is a direct relationship between the total return with the size of the assets invested, the rate of return on property rights represented by the extent of the exploitation of the funds of the owned banks, their ability to generate profits from them, the rate of return on the invested money and the percentage of the total Profit to sales and the percentage of return on sales⁶

3.3 Literature Review:-

- **N.Gorter (2001),:** The Treatment of Credit Risk Indicators like Nonperforming Loans in Macroeconomic Statistics⁷

the study addressed the topic of credit risk indicators like non-performing loans in statistics and data macroeconomics, among which its objectives are to provide identification and indicators of bad loans and highlight their size, it also aimed at addressing amortization of bad loans and addressing interest on them and this study found these factors affected on all sector

- **Dr. Dadan Abdul Ghani (2007),** Measuring and Evaluating Financial Performance in Institutions Economic⁸

The study aimed to analyse the impact of using credit mitigation techniques on the value of banks, which include: principles of good lending, market segmentation, and portfolio diversification Credit and credit insurance, credit supervision and bank strategy. The researcher concluded that there is a positive effect between the bank's value and credit risk mitigation, and recommended a necessity maintaining the composition and quality of the credit portfolio and reducing its risks within the levels acceptable measures to preserve the value of the bank and reduce the risk of credit portfolio and default credit.

- **Khaled S., (2013),** "Determinants of Non-Performing Loans: Evidence from the Jordanian Banking Sector", Journal of Finance and Bank Management.

The determinants of non-performing loans were identified in Jordanian banks, using the cross-sectional data methodology for the period (2008 -2012). the results showed that the most important factors that cause loans to falter in commercial banks are the size of non-performing loans in previous years (the variable was included to address the problem of correlation in random errors) add a self-variable Serial correlation loans provided by banks, as it was found that the high volume of loans in Jordan may contribute to the high percentage of non-performing loans.

⁵ <https://investinganswers.com/dictionary/n/net-income>

⁶ Al-Rubaie , rady 2011

⁷ - N.Gorter (2001) : The Treatment of Credit Risk Indicators like Nonperforming Loans in Macroeconomic Statistics⁷

⁸ Dr. Dadan Abdul Ghani (2007), Measuring and Evaluating Financial Performance in Institutions Economic.

4. Answers of questions and quantitative and descriptive analysis:

Question 1: what is deposits volume in Arab gulfs countries banks?

Table 1 : Total Volume Of Deposits (Figures in millions Dollar) ⁹

Country	2016	2017	2018
United Arab Emirates	366,984	386,080	415,445
Saudi Arabia	431,203	431,750	442,956
Kuwait	133,309	138,935	143,987
Average	310,499	318,922	334,129
Other Arab Countries	1,937,161	2,013,213	2,058,079

Commercial banks in Saudi Arabia acquired the largest share of total deposits in Arab banks, as they reached 21.5 % in 2018 compared to 21.4 % in 2017. while the united Arab emirates ranked second with a share of 20.2% % in 2018 compared to 19.2% in the year 2017

Question 2: what is total volume of credit facilities in arab gulfs countries banks?

Table 2 :Total Volume Of loans (Figures in Millions Dollar)¹⁰

Country	2016	2017	2018
United Arab Emirates	396,028	395,561	410,972
Saudi Arabia	435,441	464,741	491,924
Kuwait	113,061	139,327	140,997
Average	314,843	333,210	347,964
Other Arab Countries	2,071,408	2,054,716	2,142,359

Saudi Arabia is one of the largest Arab countries in providing credit facilities, as it reached its share of the total credit facilities in the Arab countries is about 23%The equivalent of 491 billion USD in 2018. The united arab emirates ranked second by 19.2 % in 2018.

Question 3: What is total volume of sectoral distribution of bank loans in arab gulfs countries banks and non-performing loans Ratio?

⁹ Source **Table 1**: Consolidated Arab Economic Report Survey (2019), Arab Monetary Fund.

¹⁰ Source **Table 2**: Consolidated Arab Economic Report Survey (2019), Arab Monetary Fund.

Table 3 :Total Volume Of sectoral distribution of bank loans (Figures in Millions Dollar)¹¹

Country	Item	2015	2016	2017	NPL Ratio(2017)
Saudi Arabia	Personal loans	31.2%	32.3%	33.4%	Non-Performing Loans Ratio for all sectors in 2017 = 1.6%
	Agriculture	1%	1%	1.1%	
	Industry	13.1%	13.4%	12.6%	
	Commercial	18.7%	17.5%	16.7%	
	Real Estate	9.4%	8.9%	8.5%	
	others	26.4%	27%	27.7%	
Kuwait	Personal loans	21.5%	21.9%	22.3%	Non-Performing Loans Ratio for all sectors in 2017 = 1.9%
	Agriculture	0.2%	0.2%	0.2%	
	Industry	14.8%	15.9	15.7	
	Commercial	10%	10.1%	10%	
	Real Estate	21.4%	19.6%	18.9%	
	others	32.1%	32.3%	33%	
United Arab Emirates	Personal loans	29%	28.6%	27.2%	Non-Performing Loans Ratio for all sectors in 2017 = 10.8%
	Agriculture	0.1%	0.1%	0.1%	
	Industry	6.8%	6.6%	--	
	Commercial	11.5%	10.3%	10.4%	
	Real Estate	16.5%	17.5%	19.9%	
	others	36.1%	36.9%	42.4%	

Commercial and real estate loans ranked second as a proportion of total loans In gulfs countries banks after personal loans , and non-performing loans ratio for all sectors in Saudi Arabia 2017 equal 1.6% , and for Kuwait equal 1.9% , and for united Arab emirates = 10.8% loans defaulted in the manufacturing industries and the sector commercial, as well as sector Agricultural "despite the decrease in the share of loans directed to the agricultural sector and Personal loans (including credit cards) hold the highest stake of the total loans offered in the Arab gulf countries banks

Net income for all Saudi banks in 2015 equal 42 billion riyals approximately , and in 2016 equal 41 billion riyals, and in 2017 equal 44 billion riyals approximately, and net income for all Kuwaiti banks in 2015 equal 750 million dinar approximately , and in 2016 equal 780 million dinar and in 2017 equal 800 million dinar.

¹¹ Source Table 3: Consolidated Arab Economic Report Survey (2019), Arab Monetary Fund.

4.1 Determinants of Credit risk indicators like Non-Performing Loans in Gulfs Countries banks:

Table 4: Reasons for defaulting personal loans, and Corporate Loans ¹²

Reasons For Not paying Loans according importance	Personal loans	Corporate Loans
1	dismissing the employee from work	weak feasibility study presented to the bank
2	decrease customer income	weak customer capabilities
3	customers' commitment to more than one loan	reasons related to external economic and competitive factors
4	reschedule the loan and increase the interest rate after the scheduling	provide inaccurate information about the project
5	economic conditions	using loans for the purpose for which they not were granted

Experts at central banks pointed out that the most important reasons for the failure of personal loans is dismissing the employee from work. While, in second place, the income of the client was reduced as one of the reasons non-payment of personal loans. they also pointed out that there are other reasons for the failure of loans It is the retirement, death or illness of the client, as well as the lack of study and follow-up of the customer's file in form Sufficient by those in Corporate loans or Weak customer capabilities ¹³

5. Statically analysis:

It is used to measure the effect of credit risk indicators kike non-performing loans on the net profit of commercial banks , by using the statistical program cross sectional time series for the group of Arab countries around which sufficient data are available , the model included sectional time series - over time period (2015-2017) for the following variables:

- net profits in gulfs countries banks
- non-performing loans gulfs countries banks
- A methodology was applied (fixed Effect) and (random effect) to measure effect of non-performing loans on net profits in gulfs countries banks (sample of research) In addition, cross-sectional time heteroskedasticity test was required by using Pearson test and it turns out that the two models are free from the problem of heterogeneity.
- Independent variable :Credit risk (will be measured by non-performing loans ratio in Gulfs Countries banks)
- non-performing loans ratio = non-performing loans divide on total bank loans.

¹² Source : Loan Failure Questionnaire in Arab Countries (2018), Arab Monetary Fund.

¹³ Jamal Qasim Hassan (2019) Economic studies: nonperforming loans and their impact on the banking sector in Arab countries, , Arab Monetary Fund

- dependent variable: net profit and it measured by net income in gulfs countries banks
- research sample: the researcher took the commercial banks in Saudi Arabia and unedited Arab Emirates and Kuwait, and excluded other banks in gulf countries, because of the lack of data for the banks of these countries

5.1 Estimate Fixed Effect and Random Effect Model:-

Ensure that non-performing loans have an adverse effect on net profit, as it reached the value of the parameter coefficient (- 0.108), as the variable is statistically while the non-performing loan variable (P-Value = 0.013 significant, according to statistic) , and using a test houseman test it was found that the fixed effect methodology gives better results

Table (5) Statistical Analysis ¹⁴

Dependent variable Net profits in Gulfs Countries banks	Fixed Effect Model	Random Effect model
Non-Performing Loans Gulfs Countries banks	- 0.108 *(0.013)	-0.0105 *** (0.000)
Coefficient of determination	92.1%	97.3%

*Indicates that the variable was significant up to 5 percent

*** Significant variable

Correlation coefficient between net profits and non-performing loans in Saudi Arabia banks equal - 0.354 , and Correlation coefficient between net profits and non-performing loans in Kuwait banks equal - 0.721, and correlation coefficient between net profits and non-performing loans in united Arab emirates banks equal - 0.521

5. Conclusions

- Emphasizing the negative effects of credit risk indicators like non-performing loans on commercial banks in general and its adverse effect on the net profits of commercial banks.
- Experts at central banks pointed out that the most important reasons for the failure of personal loans is dismissing the employee from work, and in the corporate loans the most important reasons for the failure weak feasibility study presented to the bank
- Personal loans (including credit cards) hold the highest stake of the total loans offered in the Arab gulf countries.

6. Recommendations

- The necessity of adopting a correct credit policy by banks in the Arab gulf countries

¹⁴ Table (7) Statistical Analysis analyzed by researcher

- Facilitating administrative procedures to ensure collection of guarantees by banks and financial institutions Arab gulfs countries banks
- Commitment to prudential control standards and work to adopt the built-in control standard on risks granting loans based on collateral and based on credit scoring in Arab gulfs countries banks
- Emphasizing the importance of developing the capabilities of credit departments in commercial banks in dealing with non-performing loans and studying the data of institutions and people borrowers in terms of type of activity, how to use the loan in Arab gulfs countries banks
- Monitor the borrower's circumstances, such as monitoring his financial situation and general economic conditions in Arab gulfs countries banks
- Continuing reforms aimed at enhancing the safety and durability of the banking sector, to help reduce non-performing loans in Arab gulfs countries banks

7. References:-

- Al-Rubaie, Rady Mohamed Abdel-Halim.(2011) Banking Governance and its Impact on Performance and Risk. Amman, Jordan: Al-Yazouri Publishing and Distribution House
- Al-Zubaidi, Hamzah Mahmoud (2002) Bank Credit Management and Credit Analysis. The first edition. Al-Warraaq Institution for Publishing and Distribution. Amman Jordan
- The Treatment of Credit Risk Indicators like Nonperforming Loans in Macroeconomic Statistics, IMF working paper, Statistical department, International Monetary Fund, December
- Afriyie, H. O. and Akotey, J.O. (2012). "Credit risk management and profitability of selected rural banks in ghana", Faculty of Economics and Business Administration, Catholic University College of Ghana . (On-Line), available on:<http://www.econrsa.org/system/files/workshops/papers/2012/afriyie-credit-risk-management.pdf>
- Basel Committee on Banking Supervision (2000). Principles for the Management of Credit Risk , Bank for International Settlements, Basel. (On-Line), available on: <http://www.bis.org/publ/bcbs75.pdf>
- Dadan Abdul Ghani (2007), Measuring and Evaluating Financial Performance in Institutions Economic - Towards establishing an early warning model using financial simulation, The Faculty of Economics. Commercial and Management Sciences, University of Algeria, unpublished thesis,

- Hosna, A., Bakaeva, M. and Sun Juanjuan (2009), “Credit Risk Management and Profitability in Commercial Banks”, Master Degree Project No. 2009:36, School of Business, Economics and Law, University of Gothenburg
- Hussien Abo saaq (4 July 2019) ,article published in Riyadh newspaper
- Khaled S, (2013), “Determinants of Non-Performing Loans: Evidence from the Jordanian Banking Sector”, Journal of Finance and Bank Management.
- Jamal Qasim Hassan(2019) Non performing loans and their impact on the banking sector in Arab countries,Economic studies, , Arab Monetary Fund

Websites :-

- 1) <http://www.sama.gov.sa>
- 2) <http://www.aleqt.com>
- 3) <https://www.tadawul.com.sa>
- 4) <https://www.argaam.com>
- 5) <https://www.investopedia.com/>
- 6) <https://investinganswers.com/dictionary/n/net-income>
- 7) Loan Failure Questionnaire in Arab Countries (2018), Arab Monetary Fund.
- 8) <http://www.alriyadh.com/>

أثر مؤشرات مخاطر الائتمان على ربحية البنوك في دول الخليج العربي

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المستخلص:

الغرض من هذه الدراسة هو دراسة تأثير مؤشرات مخاطر الائتمان على ربحية بنوك دول الخليج العربية خلال الفترة من 2015 إلى 2017. تم حساب مخاطر الائتمان المصرفي باستخدام نسبة القروض المتعثرة التي تؤثر على مؤشرات ربحية البنوك مثل صافي الدخل ، وباستخدام تحليلات نموذج الأثر الثابت والعشوائي ، وجدت الدراسة أن الزيادة في نسبة القروض غير المتعثرة ستقلل صافي الدخل في هذه البنوك، كما وجدت الدراسة أن القروض الشخصية تمثل أكبر حصة من القروض الممنوحة في بنوك دول الخليج العربي . كما أوصت الدراسة بأهمية تطوير قدرات إدارات الائتمان في البنوك للتعامل مع القروض المتعثرة ودراسة القوائم المالية والمقترضين من حيث نوع النشاط ، وإجراء دراسات الجدوى الاقتصادية قبل منح القروض للشركات الكبيرة.

المصطلحات الرئيسية للبحث : القروض المتعثرة ، مخصص خسائر القروض ، نسبة القروض المتعثرة ، البنوك في دول الخليج العربي