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How Banks Can Leverage Credit Risk Evaluation to Improve Financial Performance

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Abstract

The research aims to examine the impact of credit risk evaluation on the financial performance of American and European commercial banks during the period 2017-2021. A set of 37 commercial banks were selected to represent the entire banking industry of those two continents. To measure this relationship, two mathematical models were created. Research has revealed that credit risk evaluation influences the financial performance of the American and European commercial banks as represented by ROE and ROA. The study also concludes that the credit risk evaluation indicators analyzed in this study have a substantial effect on the financial performance of American and European commercial banks. The study suggests banks enhance their credit risk evaluation to generate more profits. It also cites the indicators of non-performing loans or gross loans, provision for facilities loss/net facilities, as well as the leverage ratio as significant in determining credit risk evaluation. Banks must put together strategies that will not only limit the banks' exposure to credit risk, but also enhance the banks' performance, as well as competitiveness. Further research can be conducted in developing nations to understand the impact of credit risk evaluation in such economies.

Key terms: credit risk, financial performance, commercial banks

JEL Classification: G21, G32

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1. Introduction

As part of managing risk, banks are subjected to various types of risks. The main goal of banking management is to enhance shareholder wealth, so banks should evaluate cash flows and assumed risks, and then direct their financial resources in various areas of utilization (Amakobe, 2015). Credit risk is among the most major risks for banks, as credit is among the primary sources of income in commercial banks. The management of risk associated with that credit thus affects the banks' profitability. Credit risk evaluation is important in banks because it can affect financial performance, existence and development of the banks (Gupta *et al.*, 2019).

While credit risk evaluation is extremely important for banks, very little research has been conducted in terms of its impact on financial performance, even more so in regard to European and American markets. Thus, there is a big gap that this study aims to address. The research aims to answer the following primary questions:

Do credit risk evaluation affect the financial performance of American and European commercial banks in 2017-2021?

The study addresses a set of the following research questions:

1. *What exactly are the signs of credit risk control?*
2. *What exactly are the indices of financial performance of banks (profitability)?*
3. *Does credit risk evaluation impact the banks' economic results (profitability)?*

Objective of the research. The primary purpose of the research is to evaluate the effect of credit risk evaluation signs (especially capital adequacy, credit interest/credit facilities, facilities loss/net facilities, leverage ratio, non-performing loans/gross loans) on the American and European commercial banks' financial performance during the period 2017-2021.

The study is arranged as follows: In section one, we present an in-depth review of the literature on the effect of credit risk evaluation on financial results. In section two, we outline the methodological approaches used in this research, whereas section three provides the analysis of research hypotheses and shows the contribution of research results to the supply of a new addition to prior studies. The conclusion section provides the significance of these results for decision makers in American and European commercial banks, and the suggestions made by the researchers.

2. Literature review

This section covers several theoretical and empirical literature on the impact of credit risk evaluation on monetary performance and presents an overview of American and European commercial banks, and finally provides research theory.

2.1. Theoretical literature

Risk will be the position where the return of an asset differs from the expected return. Risk means the potential for losing the initial investment, and the quantity of passions accrued on it (Delgosha *et al.*, 2020). Credit risk will be the risk that a borrower defaults and does not honor its obligation to service debt. It can occur if the counterpart is not able to pay or cannot pay promptly.

Investopedia suggests credit risk will be the chance of loss or principal associated with a monetary incentive due to a borrower's failure to repay a mortgage or usually meet a contractual obligation (Indriasari *et al.*, 2019). Credit risk arises anytime a borrower expects to take potential cash flows to spend a present debt. Investors are compensated for assuming credit risk through interest payments from the borrower or maybe issuer of a debt obligation, and credit risk is strongly linked with the possible return of an asset, probably the most important being that the yields on bonds correlated clearly to their perceived credit risk (Boumlik & Bahaj, 2017).

Credit risk describes the likelihood of damage because a borrower fails to make payments on any sort of debt. Credit risk evaluation, meanwhile, is the process of mitigating those losses by comprehending the adequacy of both a bank's capital and loan loss reserves at any time – a method which is challenging for financial institutions (Munar *et al.*, 2014). Credit risk denotes the chance that a borrower will default on any debt by failing to make the payments required. The chance is largely the lender, and has also lost principal, interest, disruption to money flows, and improved collection costs.

Good management of credit risk is inextricably connected to the improvement of banking technology, which will enable increasing decision-making; concurrently lower the price of managing credit risk. This requires a total foundation of contractors and partners (Yu & Song, 2020). Credit risk is one of the substantial chances of banks by the dynamics of their activities. Through good management of credit risk exposure, banks not only support the viability and success of their own business, but also help with the systemic balance and effective allocation of capital in the economy. "The default of a few clients could lead to an enormous loss for the bank."

(Wong & Wong, 2020) The Basel Committee has defined it as a primary source of risk in the first phase of the Basel Accord.

2.2. Empirical review

You will find many investigations on the impact of credit risk evaluation on monetary performance, and how could the useful credit risk evaluation help minimize the potential for failure and limit the uncertainty of getting the necessary financial performance (Radmehr & Bazmara, 2017). Research helps support the notion that there are many of these good connections between highly effective credit risk evaluation and banks' earnings, as well as several of these studies help support the idea that there is a bad relationship between them, as follows. Hajiheydari *et al.* (2021) attempted to analyze the outcome of liquidity, recognition, then capital on bank performance in the banks of Europe. They discovered that we had good threat management actions, as well as use of these banks' rules and laws.

It was discovered that the signaled non-performing loans effected on earnings as assessed by return on equity (ROE) much more than capital adequacy ratio (CAR), and the outcome of credit risk evaluation on profitability was not exactly the same for all the banks contained in their study (Hajiheydari *et al.*, 2021). It was discovered that the lack of good credit risk evaluation led to the banking crisis, along with insufficient threat management methods, triggered the financial problem (Hassani *et al.*, 2018). It was suggested that the bigger the banks' earnings were, the more they were affected by other variables, apart from credit, non-performing loans (Indriasari *et al.*, 2019). It was discovered that credit risk evaluation impacted earnings in a fair degree. The consequences of the credit risk were investigated, along with other risk elements, on the banks' economic performance. They discovered a strong relationship between risk pieces and the banks' economic performance. The connection between credit risk and the banks' profits was examined. They found a good relationship between credit risk and bank profitability (Sun *et al.*, 2014).

The impact of credit risk evaluation methods on the banks' performance of unsecured loans (Mungai & Bayat, 2018) was investigated. They realized that the financial risk of a banking business may well lead to restrictions on a bank's potential to meet its business objectives (Sproviero, 2020). It was demonstrated that the impact of credit risk on the bank performance assessed by return on assets (ROA) was cross-sectional invariant, although the level to which specific banks were affected was not provided by the technique for evaluation used in the research (Amakobe, 2015).

The different credit risk evaluation indications which affected the banks' economic performance (Keskar *et al.*, 2021) were explored. He discovered that the biggest signal that impacted the bank's economic performance was the default rate. It was sought to evaluate different details relevant to credit risk evaluation, as it impacts the banks' economic performance (Gupta *et al.*, 2019). They realized each of these parameters had an inverse effect on the banks' financial performance. Nevertheless, the default rate was probably the best predictor of bank monetary performance, on the contrary of another sign of credit risk control (Srivastava *et al.*, 2017). It was discovered that credit risk evaluation impacted the banks' earnings, and suggested management must be careful in creating a credit policy that may not adversely impact profitability (Hassani *et al.*, 2018). It was realized that liquidity and bank measurement clearly depend on the effectiveness of credit risk control. It was realized that risk management signs (doubt loans, then capital asset ratio) affected the bank's efficiency. It was proved that much less discreet lending affected badly on total interest margin (Al-Dmour *et al.*, 2021). It was proved that credit risk indicators adversely affected the bank's efficiency. It was realized that good credit risk evaluation impacted the bank's economic performance, as well as capital adequacy (Hassani *et al.*, 2018).

It was revealed that credit risk control influenced the bank's earnings, and that effective threat management was essential to the bank for achieving monetary soundness (Shakya & Smys, 2021). It was revealed that credit risk evaluation had an impact on the bank's profits. It was discovered that non-performing loans had a positive impact on the bank's profitability, as assessed by ROE and ROA (Bedeley & Iyer, 2014). It was revealed that the

variables of credit risk evaluation impacted on the bank's profitability. This analysis improves several existing reports, in that it investigates the overall and sub-total impact of credit risk evaluation and its indicators on the financial performance of American and European industrial banks, applying specific signs of credit risk control.

2.3. Research hypotheses

According to the research problem and its objectives, the hypotheses could be formulated as follows:

H_1: The capital adequacy ratio influences the financial performance (expressed by ROE and ROA) of American and European commercial banks.

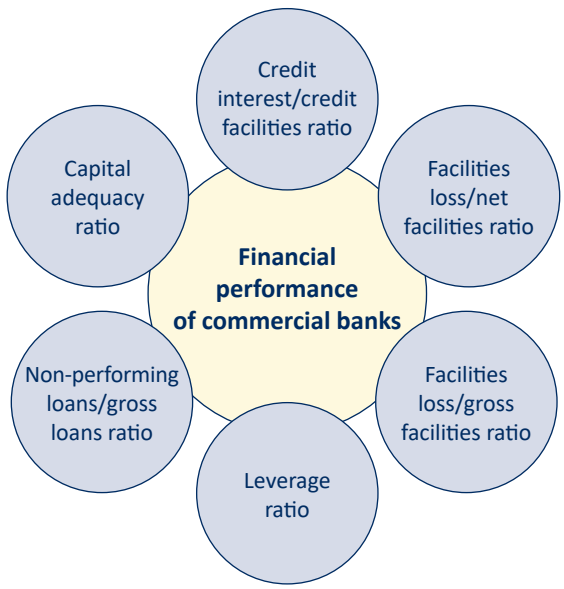
H_2: The credit interest/credit facilities ratio influences financial performance.

H_3: The facilities loss/net facilities ratio influences financial performance.

H_4: The facilities loss/gross facilities ratio influences financial performance.

H_5: The leverage ratio influences financial performance.

H_6: The non-performing loans/gross loans ratio influences financial performance.



Research model

Source: Authors.

3. The model and methodology

This analysis improves on several current investigations, in that it uses numerous credit risk evaluations, as well as economic results indices, to determine the impact of the credit risk evaluation on the economic performance of American and European commercial banks. Additionally, it increases the current literature by offering a brand-new inclusion to the prior literature regarding the impact of credit risk evaluation on the financial performance of American and European commercial banks.

3.1. Research information

This investigation seeks to check out the impact of credit risk evaluation on the financial performance of American and European commercial banks. Information from annual reports of American and European industrial banks has been utilized to evaluate because of the research years (2017-2021). The board regression design was used to calculate the impact of credit risk evaluation signals (capital adequacy ratio, credit interest/credit facilities ratio, facilities loss/net facilities ratio, facilities loss/gross facilities ratio, leverage ratio, non-performing loans/gross loans ratio) on the banks' economic performance.

3.2. Model specification

The following designs stand for the impact of credit risk evaluation on the monetary performance, as follows:

$$Y_1 = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4 + a_5X_5 + a_6X_6 \quad (1)$$

$$Y_2 = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4 + a_5X_5 + a_6X_6 \quad (2)$$

wherever Y_1, Y_2 stand for the industrial banks profitability assessed by ROE and ROA respectively; X_1: the capital adequacy ratio; X_2: credit interest/credit facilities ratio; X_3: provision for facilities loss/net facilities ratio; X_4: the influence ratio; X_5: non-performing loans/gross loans ratio; a_1, a_2, a_3, a_4 and a_5: stand for the coefficient's values of the five impartial variables, respectively; a_0: belongs to the valuation of the vertical portion (and comparable to the importance of the reliant variables if the values of the impartial variables coefficients are identical to zero).

The first method provides the outcome on the recognition of risk managing signs on the performance of the American and European industrial banks assessed by ROA. The second method provides the outcome on the recognition of risk managing signs on the performance of the American and European industrial banks assessed by ROE.

3.3. The variables functional definition

The impartial variables symbolize the credit risk evaluation signs, including the following variables:

1. *The capital adequacy ratio;*
2. *Credit interest/credit facilities ratio;*
3. *Provision for facilities loss/net facilities ratio;*
4. *The leverage ratio;*
5. *Non-performing loans/gross loans ratio.*

The dependent variables symbolize the profitability measured by ROE and ROA.

Table 1. Variables definition & measurement units

No.	Description	Abbreviation variables	Measurement
1	Capital adequacy ratio	CAR	*Tier 1 capital + Tier 2 capital/Risk weighted assets*
2	Credit interest/credit facilities	CI/CF	Percentage of credit interests that have been paid on the granted facilities
3	Provision for facilities loss/net facilities	FL/NF	Percentage of provision for facilities loss out of net facilities
4	Leverage ratio	LR	Total debt/Total equity
5	The level of non-performing loans/gross loans	NPL/GL	Non-performing loans/gross loans and advances
6	Return on assets	ROA	Net income/Total assets
7	Return on equity	ROE	Net income/Total equity

Source: Authors.

3.4. Data evaluation

This analysis pertains the descriptive, quantitative, descriptive proportions, as well as econometrics analysis methods in identifying the impact of recognition chance managing on the banks' economic performance throughout the time period 2017-2021, incorporating the evaluation of the credit risk signs, as well as the earnings proportions, cross sectional evaluation, regression evaluation, correlation evaluation, as well as check (F-Fisher) analysis, that are getting approximated by the board squares technique (PLS), by way of using the

statistical system (E-Views) on the cross sectional information associated with signs of profitability and credit risk throughout the study period, dependent on the annual reports, so that the American and European business-related banks, and the appropriate earlier scientific studies should be done on business banks along with other firms in various sectors across the planet. Wherever research attempts to look at the overall and sub-complete impact of credit risk evaluation on the financial performance of banks, it uses partial indicators of credit risk.

4. Statistical analysis and interpretation

4.1. Descriptive analysis

Table 2. Descriptive analysis result of the research variables

	ROA (%)	ROE (%)	Capital adequacy ratio	Credit interest/credit facilities	Facilities loss/net facilities	Leverage ratio	NPL/gross loans
Mean	0.014	0.102	0.139	11.066	0.164	0.792	0.590
Median	0.013	0.093	0.134	10.989	0.137	0.790	0.338
Maximum	0.046	0.369	0.297	19.823	1.379	0.854	4.842
Minimum	-0.002	-0.013	0.099	0.101	-0.884	0.722	0.058
Observations	185	185	185	185	185	185	185

Source: Authors.

The descriptive analysis of American and European commercial banks taken part in the study is as follows: Concerning financial performance indicators, the typical ROA (1.4%) and the common ROE (10.2%) had been very low, which indicates that nearly all American and European commercial banks have a better ROE than ROA. Typically, the capital adequacy ratio equates to 0.139, as well as credit interest/credit facilities – 0.11, which suggests commercial banks charge excessive interest rates on the granted facilities, while provision for facilities loss/net facilities equals 0.164, the leverage ratio – 0.792, and non-performing loans/gross loans – 0.59.

4.2. Multicollinearity test

The question of multicollinearity can show when a few variables are likely to be extremely correlated. This was evaluated by looking at the correlation matrix.

Table 3. The correlation matrix

Variables	Capital adequacy	Credit interest/credit facilities	Facilities loss/net facilities	Leverage ratio	NPL/gross loans
Capital adequacy	1.00	-0.05	0.05	-0.20	-0.15
Credit interest/credit facilities	-0.05	1.00	-0.02	0.02	0.00
Facilities loss/net facilities	0.05	-0.02	1.00	-0.07	0.05
Leverage ratio	-0.20	0.02	-0.07	1.00	-0.11
NPL/gross loans	-0.15	0.00	0.05	-0.11	1.00

Source: Authors.

The matrix of correlation coefficients shows that there is no multicollinearity among the independent variables of research, in which the maximum correlation coefficient of -0.20 is detected via a correlation between leverage ratio and capital adequacy. The researchers look at this percent inside the appropriate limits.

4.3. Unit root test results

A stationary set of explicatory variables, variables as well as dependent variables for research designs, was evaluated with the enhanced Dickey-Fuller (ADF) test. The Table 4 shows the results that suggest that at the very first level, there is the rejection of the unit root null hypothesis of the stationary of research variables.

Table 4. The results of unit root tests

Variables	ADF statistics	*p*-value	Order of integration
Capital adequacy ratio	-9.97	0	I (1)
Credit interest/credit facilities	-6.21	0	I (1)
Provision for facilities loss/net facilities	-9.90	0	I (1)
Leverage ratio	-10.53	0	I (1)
Non-performing loans/gross loans	-7.50	0	I (1)
ROA	-13.52	0	I (1)
ROE	-11.39	0	I (1)

Source: Authors.

4.4. Testing for the suitability of research versions

To analyze the suitability of the many regression designs for analysis, by utilizing the distribution (F-statistic) test, among the following hypotheses is rejected:

H_0: The three designs are not appropriate, once the impartial variables do not impact the dependent variables.

H_1: The three models are appropriate once the independent variables influence the dependent variables.

The choice guideline is as follows:

Accept H_0 if (Sig. F) > 5%.

Accept H_1 if (Sig. F) < 5%.

Table 5. F-statistic values and their Sig. of the research models

Model No.	F-statistic	Sig. F-statistic	The decision
1st model	6.01	0.0000	The model is suitable.
2nd model	4.21	0.0000	The model is suitable.

Source: Authors.

The outputs of the analysis (Sig. Then F) are equivalent to 0.000, so we embrace the idea that the alternative and the models employed are appropriate. What this means is that credit risk evaluation impacts the economic performance of banks. The total discordance in the reliant variables described (R-squared) by the impartial variables is as follows:

Table 6. The total divergence in the dependent variables

Model No.	R-squared	Adjusted R^2	Sig. R^2	The decision
1st model	0.59	0.49	0.0000	Suitable
2nd model	0.67	0.60	0.0000	Suitable

Source: Authors.

The entire divergence in the earnings assessed by ROA, due to the modification of the impartial variables, equals 59%, and the dedication coefficient equates to 49%. The entire divergence in the earnings assessed by ROE, due to the modification of the impartial variables, equals 67%, and the dedication coefficient equates to 60%.

4.5. The correlation evaluation test

To analyze the correlation between the analysis variables, we must acknowledge the following hypothesis:

H_0: There's not a statistically substantial correlation between the credit risk managing and success in American and European business-related banks.

H_1: There's a statistically substantial correlation between the credit risk managing and success in American and European business-related banks.

The choice guideline is as follows:

Accept H_0 if (Sig. R) > 5%.

Accept H_1 if (Sig. R) < 5%.

The evaluation outputs demonstrate that the substantial correlation (Sig. R) equates to 0.000, which implies that there is a statistically substantial correlation between the recognition of risk managing and banks economic performance.

The study hypotheses test:

To look at the entire perturbation in each of the two dependent variables clarified by the impartial variables, we accept among the following hypotheses:

H_0: The credit risk evaluation effect on financial performance of banks is not statistically significant.

H_1: The credit risk evaluation effect on financial performance of banks is significant statistically.

Table 7. Coefficients of the independent variables of the 1st model

Variables	Coefficients	Sig. t
X_1	-0.0051	0.7505
X_2	0.0001	0.4732
X_3	-0.0041	0.0295
X_4	-0.0812	0.0092
X_5	0.0026	0.0023
Constant	0.0819	0.0043

Source: Authors.

Depending on the coefficients of the earlier mentioned table, the regression equation of financial performance based on return on equity will be composed as follows:

$$Y_1 = 0.0819 - 0.0051 * X_1 + 0.0001 * X_2 - 0.0041 * X_3 - 0.0812 * X_4 + 0.0026 * X_5$$

When ROA analyzes financial performance, the hypotheses try to give the following results:

1. There is a favorable effect on the financial performance of banks of non-performing loans/gross loans ratio.

2. There is a detrimental effect on the financial performance of the banks of the leverage ratio, as well as provision for facilities loss or net facilities ratio.

3. There is no effect of capital adequacy ratio, credit interest/credit facilities ratio on the financial performance of the banks.

Table 8. Coefficients of the independent variables of the 2nd model

Variables	Coefficients	Sig. t
X_1	-0.1836	0.2062
X_2	0.0016	0.2861

Variables	Coefficients	Sig. t
X_3	-0.0334	0.0110
X_4	0.0418	0.7812
X_5	0.0223	0.0002
Constant	0.0812	0.0001

Source: Authors.

Using the coefficients values within the family table previously mentioned, the regression situation of the monetary results analyzed by return on assets will be drafted as follows:

$$Y_2 = 0.0812 - 0.1836 * X_1 + 0.0016 * X_2 - 0.034 * X_3 + 0.0418 * X_4 + 0.0223 * X_5$$

If financial performance is based on ROE, the hypothesis test gives the following results:

1. There is a positive impact on the financial performance of banks of non-performing loans/gross loans ratio.

2. There's a detrimental impact on the financial performance of the banks of the leverage ratio, as well as provision for facilities loss or net facilities ratio.

3. There is no effect of capital adequacy ratio, credit interest/credit facilities ratio, and leverage ratio on the financial performance of financial institutions.

5. Findings

The study aims to evaluate the result of credit risk evaluation on the financial performance of American and European commercial banks by identifying the indicators of financial performance and credit risk ratios throughout the period 2017-2021, in that it examines the sub-total and overall impact of credit risk signs on the financial performance of banks using certain partial signs of credit risk. Ethical findings reveal that there is a beneficial effect on the financial performance of non-performing loans/gross loans ratio, as well as a negative impact of the provision for facilities loss/net facilities ratio on financial performance, and no impact of capital adequacy ratio, as well as the credit interest/credit facilities ratio on the banks' financial performance when analyzed by ROA.

This is in agreement with Babar *et al.* (2019) who discovered that non-performing loans/gross loans have beneficial effects on the financial performance of companies as assessed by ROE and ROA, along with Hajiheydari *et al.* (2021), who concluded that the capital adequacy ratio has no impact on credit risk evaluation.

This is in contrast with results from Al-Dmour *et al.* (2021), who discovered that the ratio of capital to total risk assets has a positive impact on financial performance. In their results, Bedeley showed that credit risk evaluation has a positive effect on financial performance (Bedeley & Iyer, 2014). It was demonstrated that good credit risk evaluation has a good impact on bank financial performance (Keskar *et al.*, 2021). She additionally discovered a positive impact of non-performing loans/gross loans ratio, as well as the negative impact of provision for facilities loss or net facilities ratio on the financial performance of the bank. This conclusion would be in accordance with the results of Babar *et al.* (2019) and is in opposition to the results of Keskar *et al.* (2021), who discovered that non-performing loans, along with other indicators, have an optimistic impact on the bank's economic results.

The evaluation additionally showed that an impact of the credit interest/credit facilities ratio, as well as the leverage ratio, on the financial performance of the bank, as assessed by ROE, was found. This outcome is in accordance with the results of Yu and Song (2020), who did not discover an effect of recognition and non-performing loans on the bank's economic performance.

The cumulative effect of credit risk evaluation on financial results is statistically significant, as shown by the computed F-statistic, as well as its probability (0.0000) of research versions. The research suggests that

credit risk evaluation has a detrimental impact on the financial performance of banks, as assessed by ROE and ROA. This finding is consistent with the research by Shakya and Smys (2021), which discovered an impact of credit risk evaluation on profitability, as assessed by ROE and ROA.

6. Conclusions

The primary aim of this study is to look at the impact of credit risk evaluation on the financial performance of banks, by identifying credit risk evaluation, as well as financial performance indicators, and to locate empirical proof of the extent to which credit risk evaluation impacts the financial performance of banks and how banks can improve their financial performance ratios. The effect of competent credit risk evaluation on profitability is a matter of debate and disagreement.

The research shows that the ratio of non-performing loans to gross loans is used to determine the efficiency and suitability of the banks' credit risk evaluation. This ratio provides a positive impact. This outcome was opposite to the expectation that the non-performing loans ratio would have a damaging effect on the bank's performance. Ethical results demonstrate a good impact of non-performing loan products on bank profitability (Munar *et al.*, 2014). This shows that the non-performing loans ratio has a beneficial effect on profits, despite many owed loan payments. Americans and Europeans must therefore establish effective arrangements to manage credit risk.

Results also show that the capital adequacy ratio, credit interest/the leverage and credit facilities ratio do not affect the earnings of American and European industrial banks as assessed by ROE, suggesting that other factors, such as credit interest or credit facilities, as well as the leverage ratio, affect profitability of banks. Banks serious about improving profitability should pay more attention to other variables apart from these. Researchers discovered that the leverage ratio adversely contributes to banks' profitability, so debt should heavily fund businesses (Hassani *et al.*, 2018). Large financial leverage increases company debt services, therefore, liabilities, which could adversely affect company performance. This does not support the belief that financial leverage is among the greatest ways a company can increase its profit. Increased debt percentages within the capital structure could increase or reduce ROE. A business with high earnings prefers debt, as it leads to higher returns for its owners.

She added that the credit risk evaluation indicators considered in this study are crucial variables in establishing profitability of American and European commercial banks. The study has the following suggestions, based on the results of the empirical evaluation, that could help improve credit risk evaluation and achieve profitability (Radmehr & Bazmara, 2017). Therefore, American and European commercial banks must consider the signs of non-performing loans/gross loans, provision for facilities loss/net facilities, and leverage ratio, which were discovered to be considerable in determining credit risk evaluation.

Additionally, banks must establish sufficient credit risk evaluation policies by imposing stringent credit estimations before giving loans to clients, as well as banks, must also establish a good credit risk environment in designing a good credit risk evaluation process. Having an appropriate credit administration that involves monitoring, processing, along with adequate controls over credit risk, is essential under a good credit granting process. To create a good credit risk evaluation process, banks must set up a suitable credit risk environment. Operating within a good credit granting procedure, maintaining an adequate credit administration, which requires monitoring, processing and enough controls over credit risk.

Banks should develop and place techniques that will restrict the banks' exposure to credit risk, but also improve the performance and competitiveness of the banks. Furthermore, banks must create appropriate credit risk evaluation approaches by performing a sound credit assessment before providing loans to clients.

Further research should be conducted to determine long term impacts of implementing credit risk evaluation methods in consumer banks not in developed countries, but also in developing countries. The additional research will strengthen the understanding and also encourage managers to take initiatives to improve their financial performance by implementing credit risk evaluation tools.

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