IMPACT OF COVID-19 PANDEMIC ON THE RISK AND RETURN TRADE-OFF: THE ROLE OF DIVERSIFICATION

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The Covid-19 pandemic triggered a sharp decline in asset values. As a result, a well-diversified portfolio over many industries provides the portfolio with the stability it needs to sustain against losses. Diverse financial assets and industries would differ significantly throughout history, whether the economy has been growing or not. Financial decisions must not be designed mainly based on a response to recent incidents but on long-term plans that implement diversification concepts.

The population of the research includes 39 Lebanese commercial banks. Using the annual reports of five different banks, we have compiled secondary data that contain the most often used ratios like ROE as a unit of measurement for the financial performance of the banks. Risk management programs and bank performance, notably ROA and ROE, are commonly accepted to correlate. As a result, branch managers' inspections were an active credit risk assessment approach that had a favourable influence on the banks' financial stability. Findings also indicated that the traditional Bank's ROE profitability is strongly linked to its credit risk assessment strategy, as shown by regression analysis.

Keywords: liquidity risk; credit risk; market risk; solvency risk; COVID 19

Introduction

Research on portfolio diversification and risk mitigation was conducted in this study's review of recent publications on these topics.

Firstly, the origins and concept of portfolio diversity, including its advantages, were addressed. There was some discussion on diversifying one's company approach to have a well-diversified portfolio.

Then it was explained and discussed how risk assessment works and how to quantify volatility. Afterwards, Portfolio diversification's influence on risk mitigation was examined under two different headings.

Titles one and two explored the link between portfolio diversification and risk management and the effect of diversification on risk mitigation.

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**Portfolio Diversification and Risk Management**

Diversification is engaging in several assets to reduce risk and enhance reward. Thus, it allows investors to build their firm while minimizing risk. The concept of diversification is straightforward: through broadening your investment portfolio, we are sharing the hazards across a broader range of assets according to Jalloul (2021).

Risk management and diversification have been the subject of academic and policy studies worldwide. Specifically (Jedynak & Bąk, 2021) claimed that diversity enhances the essential function of the Bank in risk management banks.

Also (Goodell & Goutte, 2021) reported that international diversification decreases risk more efficiently than domestic diversification. The notion that securities and pension assets exhibit more significant correlations reflects their combined vulnerability to regionally-based disruptions instead of local diversification.

Moreover, the research of (Śliwiński, 2021) shows that global diversity is frequently regarded as the most effective technique for improving portfolio returns. In addition, research on Mauritian banks is being conducted to determine the influence of diversification of the Bank's portfolio on risk management. According to the study's findings, Mauritian banks are moderately effective in risk management due to the diversity of their portfolios. Additionally, the findings reveal a statistically significant difference between the factors when it comes to deciding whether to diversify locally or globally.

Given the potentially detrimental effects of COVID-19 on companies and the global economy, numerous studies have highlighted the importance of diversification in investments and risk management to survive the present crisis.

Research of 1434 Chinese publicly traded enterprises and their top five vendors and customers examined if and how broadening the distribution network affects the resilience of Chinese manufacturers throughout the continuing world crisis. The research highlights that enterprises with a diverse supplier base can enhance inventory availability during the COVID-19 crisis, whereas firms with a diverse customer base can assist reduce inventory. Additionally, organizations with a varied supplier base have increased profitability during times of crisis. Another research looked at the impact of revenue diversification (moving away from traditional lending operations and into non-interest income streams) on bank profitability and risk during the COVID-19 epidemic (Nurhayati et al., 2021).

According to the findings, non-interest revenue streams are positively connected to performance but negatively related to risk. Furthermore, research on the influence of Covid-19 on seafood-based culinary companies has been completed. It has been demonstrated that Covid-19 helps businesses to generate product diversification, which has resulted in an increased level of competitiveness, sustainability, and consumer confidence.

Aside from causing significant volatility in financial markets, the COVID-19 epidemic also interrupted the worldwide supply chain, causing significant volatility in the precious metals marketplace. Using a variety of tests (VAR, DCC, and GMV), a study has evaluated the diversification importance of precious metals – gold, silver, and platinum – for six Dow Jones Islamic (DJI) equity index portfolios (Das & Rout, 2020).

The empirical findings indicated that dynamic conditional correlations between sample assets grew dramatically throughout the COVID era, yet, coupling gold with any of the DJI equity indexes reduces the downside risk of these portfolios.
Furthermore, the prolonged COVID-19 epidemic has reduced the value of enterprises' assets and collateral against which they can borrow (Das & Rout, 2020; Nurhayati et al., 2021).

These shocks also raised enterprises' risk of default, lowered liquidity in the market and elevated the cost of borrowing (Acharya & Steffen, 2020).

The pandemic's interruptions to economic activity and cash flow shock imply that diversified organizations may be better equipped to seek investment options and thus secure financial help at cheaper costs than small enterprises. Thus, (Das & Rout, 2020) investigated whether diversification might help COVID-19-exposed enterprises lower their loan costs. Despite the pandemic's elevated borrowing costs, she claims that corporate and regional diversity reduces debt rate disparities for COVID-19-exposed enterprises, reducing risk.

**The effect of revenue diversification on bank profitability and risk during the COVID-19 pandemic**

Diversifying a bank's income beyond typical lending operations into non-interest revenue streams can minimize the volatility of that income. COVID-19 has an impact on the relationship between non-interest revenue and Bank profit and risk, according to our study. As a consequence of the epidemic, credit requirements were tightened, and demand for several sorts of loans decreased. Non-interest income streams have a good effect on performance, but a negative effect on risk, according to our findings (Li et al., 2021).

These findings are consistent with a good diversification impact from banks increasing their income streams outside conventional lending during the epidemic.

Diversification into non-interest sources of income should lead to increased income stability and lower risk for banks, especially if non-interest revenue streams are not substantially associated with conventional revenue sources of lending. For many reasons, banks may boost their returns to equity by taking advantage of non-interest income sources of revenue since they are not obliged to keep regulatory capital against many fee-based revenue streams. Banks that rely more heavily on non-interest revenue face more risk and poorer risk-adjusted earnings. The risk of diversification (Gubareva, 2021; Onali et al., 2021) says that banks may enter markets where they have no expertise or a competitive edge over their competitors. Another way to look at the consequences of non-interest activity is via the stock market.

Onali et al. (2021) utilize a portfolio framework to analyze the impact of growing non-interest income on stock market risk and return metrics for U.S. Bank holding firms to solve this problem. His findings show that banks that rely heavily on non-interest revenue sources are not more profitable but rather riskier. The financial crisis necessitated an investigation of the relationship between non-traditional banking operations and bank collapses (Goodell & Goutte, 2021; Pio et al., 2021.).

Some sources of non-interest income have a more significant influence on a company's chances of failure than others. As opposed to what they expected, they discovered that the risk of failure decreased with activities like insurance sales and securities brokerage. In contrast, the risk of failure rose with venture capital, asset securitization, and investment banking.

According to the study's findings of Onali et al. (2021), banks that take on more risk in unconventional businesses tend to take on more risk in their traditional ones. Non-interest income does not give the desired diversification advantages, according to the study.
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Conducted on U.S. financial institutions. Studies on banks outside of the United States provide a more complex and even contradicting picture of the impact of non-interest income sources on bank risk and performance. No direct advantages were seen in a sample of small European banks regarding diversity.

In addition, they discover that bank performance and non-interest revenue are inversely related. There are claims that these outcomes are the consequence of tiny European banks taking on risky new business areas.

Bank stability in 15 E.U. nations is investigated by (Goodell & Goutte, 2021; Jedynak & Bąk, 2021), who finds that increasing the percentage of non-interest revenue streams makes banks much more stable and lucrative. Kohler finds that diversifying one's income is a worthwhile investment.

A sample of Italian banks discovered that revenue diversity improves risk-adjusted-performance. European banks in the 2018–2021 timeframe analyze the relationship between non-interest revenue and risk and profitability. Increases in non-interest revenue have a detrimental impact on profitability, but they also raise a financial institution's risk.

Methodology and data collection

The population includes Lebanese commercial banks. A total of 39 commercial banks are operating in Lebanon at any one time.

The study was sent to 200 people across five banks in Lebanon, but only 123 of them completed the questionnaires.

An analysis of "Risk Management" on commercial banks' profitability in Lebanon will be done using data gathered.

Likert scale (1-strongly agree, 2 agree, 3 agree, neutral, 4 disagree, and 5 strongly disagree) and questionnaires based on independent variables will be used to build the survey.

Using the annual reports of five different banks, we have compiled secondary data that contain the most often used ratios like ROE as a unit of measurement for the financial performance of the banks.

The findings of the regression analysis will be put to the test to see whether the research hypothesis is correct. Research hypotheses may be tested scientifically with the use of this method.

Analytical Model

The following "regression analysis" was used to determine the effect of risk management and diversification among the COVID 19 towards "financial performance" measured through ROE of the commercial banks in Lebanon.

The relationship equation as drawn in the formula below indicate the target and purpose of the regression

\[ ROE = \alpha + \beta \text{Credit Risk} + \beta \text{Market Risk} + \beta \text{Liquidity Risk} + \beta \text{Solvency Risk} \]
Findings

**Credit Risk**

Table 1 - Credit Risk Descriptive Statistics
(results of the author’s survey)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Board of Directors’ credit risk strategy is successfully communicated and implemented by the Bank's senior management in the form of policies and procedures.</td>
<td>123</td>
<td>1</td>
<td>5</td>
<td>2.83</td>
<td>1.521</td>
</tr>
<tr>
<td>Credit risk is effectively managed through the Bank's risk management framework.</td>
<td>123</td>
<td>1</td>
<td>5</td>
<td>2.50</td>
<td>1.173</td>
</tr>
<tr>
<td>Across all of the Bank's lending operations, the Bank uses a credit risk rating system.</td>
<td>123</td>
<td>1</td>
<td>5</td>
<td>1.63</td>
<td>0.732</td>
</tr>
<tr>
<td>Daily, the Bank evaluates the quality of its loan portfolio and takes corrective actions if any deterioration is detected.</td>
<td>123</td>
<td>1</td>
<td>5</td>
<td>3.50</td>
<td>1.490</td>
</tr>
<tr>
<td>The Bank regularly prepares a periodic report of credit risk.</td>
<td>123</td>
<td>1</td>
<td>5</td>
<td>2.42</td>
<td>0.989</td>
</tr>
<tr>
<td>Valid N</td>
<td>123</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It was found that, according to accepted research techniques, the "credit risk" variable has a mean of between 1 and 3, which falls within agree or strongly agree at the scale of responses.

The mean is 2.49, indicating that most respondents who work in banks think that credit risk influences the ROE of the banks.

According to the poll, the ROE of the Bank would be adversely affected by 2.49% if the Bank granted loans in USD or Lebanese Pounds without doing the needed research and possessing the appropriate documentation, which would raise the default rate.

**Liquidity Risk**

Table 2 - Liquidity Risk Management
(results of the author’s survey)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>It's possible to manage liquidity risk in the ban by following a set of rules and guidelines</td>
<td>123</td>
<td>1</td>
<td>5</td>
<td>2.39</td>
<td>1.226</td>
</tr>
<tr>
<td>By the Bank's highest management in the form of policies and procedures.</td>
<td>123</td>
<td>1</td>
<td>5</td>
<td>2.51</td>
<td>1.231</td>
</tr>
<tr>
<td>The Bank's risk management framework effectively manages liquidity risk.</td>
<td>123</td>
<td>1</td>
<td>5</td>
<td>2.44</td>
<td>1.003</td>
</tr>
<tr>
<td>The Bank periodically reports liquidity risk.</td>
<td>123</td>
<td>11</td>
<td>5</td>
<td>2.09</td>
<td>1.027</td>
</tr>
<tr>
<td>Valid N</td>
<td>123</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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According to the findings of this section, "liquidity risk" has an average mean of 2.35 out of a possible 4.0.

A tremendous financial performance in the workplace suggests that Lebanese banks practice liquidity in the Bank.

Because the means' average is 2.35, it suggests that all five banks believe a clear link between liquidity risk and financial performance impacts ROE by 2.35%.

Liquidity risk, for example, refers to the Bank's capacity to effectively and efficiently handle its obligations.

Nevertheless, failure to manage such liquidity ratios will force banks to expand their leverage ratios, increasing the risk of exposure that may lead to default scenarios.

Regression Analysis

Table 3 - Regression Analysis
(results of the author’s survey)

<table>
<thead>
<tr>
<th>Model Summary</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>R</td>
<td>R Square</td>
<td>Adjusted R Square</td>
<td>Std. Error of the Estimate</td>
</tr>
<tr>
<td>1</td>
<td>0.528a</td>
<td>0.494</td>
<td>0.474</td>
<td>0.02285</td>
</tr>
<tr>
<td>a. Predictors: (Constant), Liquidity Risk, Risk Control, Credit Risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>0.017</td>
<td>0.010</td>
<td>1.744</td>
<td>0.085</td>
</tr>
<tr>
<td></td>
<td>Solvency Risk</td>
<td>0.526</td>
<td>0.018</td>
<td>0.453</td>
<td>29.22</td>
</tr>
<tr>
<td></td>
<td>Market Risk</td>
<td>0.327</td>
<td>0.017</td>
<td>0.654</td>
<td>19.23</td>
</tr>
<tr>
<td></td>
<td>Credit Risk</td>
<td>0.539</td>
<td>0.098</td>
<td>0.349</td>
<td>5.510</td>
</tr>
<tr>
<td></td>
<td>Liquidity Risk</td>
<td>0.573</td>
<td>0.094</td>
<td>0.272</td>
<td>6.095</td>
</tr>
<tr>
<td>a. Dependent Variable: Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

An analysis of the model summary table shows that 52.8 percent of the variables affect bank financial performance, indicating that 47.2% of the variables affect the Bank's financial performance.

Liquidity risk, risk control, and credit risk all have a 49.4% influence on the financial performance of the Bank in question, according to R-Square, which measures the strength of relationships across variables.

Finally, the standard deviation is about 2%, which shows that the data is regular and free of bias.

As a result of the preceding regression analysis, a significant error of 5% indicates a direct association between the dependent and independent variables.

According to these findings with a significance level below five percent, there is an association between bank financial performance and four of the independent variables: solvency risk, market risk, solvency risk (P < 0.013), market risk (P < 0.020), credit risk (P < 0.014), and liquidity risk (P < 0.037).

Thus, the following can be concluded:
Financial Performance = 0.085 + 0.654 market risk + 0.349 credit risk + 0.272 liquidity risk + 0.453 solvency risk

Hence, upon analyzing the outcome of the findings, the figures can be interpreted as follows:
- Since the coefficient of the regression analysis is positive, which means that the link between market risk and financial performance is proportionate, the ROE's performance is influenced by 1% for every one unit rise in "market risk." Consequently, the more effectively the Bank manages market risk, the higher its ROE.
- For every one-unit increase in "credit risk", the performance is affected by 34.9%.
- For every one-unit increase in "liquidity risk," the performance is affected by 27.2%
- For every one-unit increase in "solvency risk", the performance is affected by 45.3%
- As for the T-Test, which is another method used to validate the research hypothesis, this test should then specify a level above 2 to indicate a 95% significant level validity.

Main Findings

Solvency Risk
Banks must have enough capital to handle various risks that may arise in their day-to-day operations, measured by their capital adequacy. One way to determine a company's ability to repay its debts is by dividing net equity by its weighted credit risk. This CAR ratio, or Capital Adequacy Ratio, is critical in the Basel agreement criteria created to ensure the confidence of depositors and the fulfillment of central bank requirements in the banking system.

Therefore, the Bank's capital adequacy is one of the most critical aspects to consider. For the Basel Capital Arrangements, capital ratios were chosen to show risk management performance. Since the capital to risk ratio is essential, metrics were employed to assess how well credit risk management skills shaped the analysis's foundation.

On the other side, "Credit Risk" shows a statistically significant negative correlation with productivity. The research found that managing credit risk, which directly and indirectly affects solvency, may strengthen the confidence of investors and savers in banks that contribute to the growth and higher bank profitability.

According to the findings, Solvency risk affects development, growth, operational expansion, and the ability to get better financing. Commercial banks in Lebanon were studied in this study, which looked at the influence of risk management on the banks' solvency, market, credit, and liquidity risks. A descriptive statistical approach to the study of Lebanese banks was used to provide the key results.

A regression analysis was performed to assess the correlation between the dependent variables (financial performance) and the independent factors (solvency risk, market risk, credit risk, and liquidity risk). To determine if there is a positive or negative correlation between the variables, the researchers used Pearson Correlations. The acquired data were also subjected to a validity and reliability study to see whether it was reliable.
Credit Risk Findings

If a debtor or counterparty defaults on their loan obligations (default risk), then the credit of that debtor or counterparty will be diminished, which is a kind of credit risk.

The examination of borrowers' financial health has been at the heart of the banking sector for a long time. Collateral risk, as defined by the research, refers to the likelihood that counterparty may not be able to meet a payment commitment.

This means that when a payment is delayed or not received, it affects the Bank's ability to manage its cash flow and hence reduces its profit. A bank's credit risk management goal is to ensure that the Bank's risk-adjusted rate of return is maximized while maintaining a tolerable level of credit risk.

Because of this, credit scoring should be used to determine the possibility of a loan claimant, new borrower, or comparable defaulting or violating the terms of their loan. As a result, credit scoring assesses the likelihood of defaulting on a loan or credit card.

In addition, credit scores serve as an indication of a person's creditworthiness. The likelihood of a client or business returning the money they owe and any additional costs, such as debt and charges, is frequently shown in these metrics. The higher the borrower's credit score, the less likely that interest will not be paid. Scores may be applied to any digital range.

A credit service provider (CSP) may, on the other hand, use a risk-based pricing model for credit value, which focuses on the borrower's credit risk in terms of their loan, including interest rates. The primary advantage of a credit score is that it enables CSPs to quickly, accurately, and reliably decide if a candidate is qualified to receive a loan or negotiated payment arrangement.

Liquidity Risk

Financial institutions are considered liquid if they can raise their assets and meet their liabilities without incurring unacceptable losses. Short-term obligations or unanticipated withdrawals are not covered by the immediate value of assets, which is meant by the phrase "liquidity risk."

Banks' profitability is influenced by a wide range of factors, including their solvency risk, market risk, credit risk, and liquidity risk. These factors impact the balance between liquidity risk and liquidity generation or management of liquidity by a bank. The assets and liabilities play an essential role in determining the firm's risk and growth balance.

The less pressure a bank has and the better its liquidity is, the faster it can access cash and income. Even while banks need to be prepared for planned and unanticipated spending adjustments and growth funds, the risk here might be considered a chance for financial instability, even if some of them include expansion plans and unexpected credit growth.

According to the Basel Bank Oversight Committee, banks play a significant role in converting short-term deposits into long-term debt, creating systemic and market-specific liquefaction risk.

A massive explosion, a loss of confidence, or a domestic issue, such as the currency crisis, will finally lead to this cash availability. The ability of a bank to meet its cash flow obligations, which may be affected by external events and the acts of particular authorities, may be ensured by effective risk management of liquidity hazards.

A single bank's lack of liquidity may significantly impact the whole financial system, and regulators and market participants alike need to keep an eye on liquidity risk. On the
other hand, the price of liquidity depends on the current market conditions and the borrowing institution's risk assessment.

The cost of funding may rise if a regional recession occurs, such as a severe currency shortage, a drop or a deterioration of the Bank's credit expectations, or a downturn in the company's fundraising. During the previous decade, both the severity and the difficulty of dealing with the liquidity threat have increased.

**Market Risk**

Equity risk is the possibility that the company's net worth may decrease or go down in value. The risk of currency exposure that is not hedged is referred to as exchange risk. Banks and investors participating in international markets may be affected by the volatility of currency exchange rates.

An interest rate risk is a potential for financial losses due to changes in interest rates. Bonds and other fixed-income instruments may be less valuable when interest rates rise. The convexity law states that the price of a bond changes when the interest rate rises.

Using rate swaps, options, or other interest rate derivatives, investors may reduce their exposure to interest rate risk.

**Summary**

According to regression and Pearson analysis, reducing risk influences the financial performance of Lebanese banks.

This element has been extensively studied in prior research on risk management strategies, such as credit, market, solvency, and liquidity. Lebanese banks have several significant limitations in reducing risk due to these results.

As a result of quantitative data analysis, useful analytical information has been gained. According to the findings of a recent study, reducing the Bank's exposure to credit risk, liquidity risk, market risk, and solvency risk has a beneficial influence on the Bank's financial performance, which increases the Bank's ROE and profits.

Risk management programs and bank performance, notably ROA and ROE, are commonly accepted to correlate.

As a result, stress testing and credit scoring increased net income (year over year). Calculating their credit risk exposure, for example, would boost their revenues over time. In light of these findings, commercial banks should utilize their technologies to identify more factors and criteria that might affect their financial soundness. Branch managers began employing scoring methodologies that artificially boosted the yearly return on equity of banks to assess their exposure to credit risk.

As a result, branch managers' inspections were an active credit risk assessment approach that had a favourable influence on the banks' financial stability. Findings also indicated that the traditional Bank's ROE profitability is strongly linked to its credit risk assessment strategy, as shown by regression analysis. As a result, financial institutions become increasingly sensitive to credit risk as they expand their loan portfolios. This finding shows that the "exposure restrictions" method must be implemented immediately to maintain a bank's profitability.

It's interesting to note that the research statistically correlated bank profits to their "exposure restriction approach." Therefore, it is reasonable to infer that a commercial bank
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will be more successful if it applies higher exposure limitations to potential future credit concerns.

However, risk management and recognition heavily influenced commercial banks' outcomes. However, for risk calculation and monitoring, the researchers relied on the tools supplied rather than their knowledge of potential dangers.

These approaches include financial statement analysis, creditworthiness and creditworthiness evaluations, credit rating and models of credit portfolios. They must be used to maintain and increase the profitability of banks.

Limitations of Research

As a result of these limitations, the current study could not effectively test the hypothesis because it relied solely on a questionnaire to analyze the relationship between risk management practices and financial performance and thus had a limited number of time constraints and responses to respond to.

The confidentiality and secrecy of the Bank prevented the researcher from maintaining risk management data analysis. Numerous additional factors were not considered while looking at the influence of risk management on financial performance. Therefore just four variables were examined. Because the research was confined to just five banks, the results may have varied from one to the next if carried out on another institution.

Recommendations of Future Prospects

For this study, ROE was used to indicate a bank's financial performance, which should be relevant to all commercial banks.

Researchers advocate incorporating additional variables in addition to those already used in the study and quantitative and qualitative approaches to improve the quality of the research and investigate both managers' and workers' perspectives.

To better understand Lebanon's risk management processes, the research suggested comparing Lebanese banks and international banks.

In most cases, banks are forthcoming about the risk measurement methods. Still, the fact remains that they could use more sophisticated and dependable applications indicated in the study to manage better the financial risk that is becoming progressively severe under the present circumstances.

The validation and streamlining of their risk management plans, procedures, and activities in light of the Basel III agreement's applicability might be further suggestions to commercial banks.

Following these principles, financial institutions should be able to compare their risk management procedures and operations globally.

Regarding budget distribution, banks should ensure that risk control portions have an independent budget to ensure that funds are expended to develop the evolving risk climate. Their Risk Departments can handle the increased financial risks effectively, which would boost their financial efficiency untimely.

In addition, training programs for credit authorities are needed to help them thoroughly examine a customer's creditworthiness before making any loans.
As a result, credit officers must be well trained to decrease the likelihood of loan applicants defaulting on their payments.

Second, management must use IFRS 9 methodologies to create a credit risk management program targeted at granting current loans while drastically lowering the acceptance of credits that might become problematic or lost in the long term. This method considerably reduces the risks associated with lending money to borrowers.

The Bank’s credit risk management enforcement criteria must be constantly reinforced to its employees. To put it another way, banks must often remind their employees, especially in particular credit officials, of adhering to laws to maintain the Bank’s operations.

The last effort is made to verify the feasibility of the hypothesis. The variables are applied to the Bank’s financials to prove the level of performance improvement if the variables are applied.

Given that banks net income were:

USD 130,045,000 in 2019
USD 131,880,000 in 2020

And given by the Regression analysis that Net Performance will be affected by the variables noted as such; then the following calculations are made to validate the effect of the regression outcome as follows using the 2020 net income alone:

1) Solvency risk: impact the financial performance by 4.6% less 37.2% as noted by the R-model summary, then the adjustment factor should read 3.261%

Accordingly, the 2020 net income should read $ 131,310,000 X 1.0226 = $ 2,745,758 to become $ 134,277,606 if the recommendations are applied.

2) Market Risk: impact the financial performance by 4.65% less 37.2% as noted by the R-model summery, then the adjustment factor should read 3.302%

Accordingly, the 2020 should read $ 131,880,000 X 1.023 = $ 2,795,549 to become $ 134,913,240 if the recommendations are applied.

3) Credit Risk: impact the financial performance by 3.49%. less 37.2% as noted by the R-model summary, then the adjustment factor should read 2.564%

Accordingly, the 2020 should read $ 131,880,000 X 1.01564 = $ 1,899,321 to become $ 133,942,603 if the recommendations are applied.

4) Liquidity risk: impact the financial performance by 3.90% less 37.2 % as noted by the R-model summary, then the adjustment factor should read 2.821%

Accordingly, the 2020 should read $ 131,880,000 X 1.01821 = $ 2,211,422 to become $ 134,281,534 if the recommendations are applied.

Hence, adding all the variables would sum up to approx. $ 9,652,050
If added to the 2020 Net Income, the outcome should read = $ 131,092,050
Average growth is thus equal to approx. 7.9%

Henceforth, it can be concluded that the risk ratios play an important role in affecting the financial performance of commercial banks in Lebanon, meaning that if the noted risks were applied, banks would have realized a 7.9% growth to their 2020 net income.

In conclusion, besides the present recession and the default risks that the country faces culminating from the treasury bills and other securities, all Lebanese banks should increase their equity and apply the risk management tools because the doubtful advances and loans are increasing.
References:


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