The impact of Asset Quality on Profitability of commercial Banks in Kuwait

Bellaouar Slimane, Bouglimea Aicha

Abstract— Asset quality management has recently received much attention in the banking industry. The aim of this study is to examine the effects of loan quality on bank profitability in Kuwait using data obtained from the annual reports and accounts of the two largest banks listed on the Kuwait Stock Exchange based on market capitalization with a sample interval for the period from 2002 to 2013, using the return on assets and return on equity ratio as proxies for bank profitability.

A panel regression model is employed to examine if bank asset quality and profitability are positively correlated. The results showed that a bad asset ratio is negatively associated with banking profitability. The results further support the hypothesis that higher quality of loan processing activities before loan approval is required to process problematic loans, and thus higher banking profitability will be.

Index Terms— Asset Quality, Loan, Profitability, commercial Banks, panel data

I. INTRODUCTION

Financial stability in economy is largely dependent on the stability and the resilience of the banking system. To accomplish banking stability, banks are required to maintain quality bank assets that aid in achieving profitability.

Bank asset quality is one of the main issues for banking research. Almost all their search on bankruptcy has agreed that a huge amount of nonperforming loans exists before banks go bankrupt. The Asset Quality rating reflects the quantity of existing and potential credit risk associated with the loan and investment portfolios, other estate owned, and other assets, as well as off-balance sheet transactions. The ability of management to identify, measure, monitor, and control credit risk is also reflected here. The quality of assets is an important parameter to gauge the strength of the bank.

The objective of this paper is to analyze the impact of assets quality on profitability of commercial banks in Kuwait over the period 2002 to 2013. The study utilized bank level data over the selected period. It used balanced panel data regression analysis to analyze the impact of assets quality which determines profitability of two top Kuwait banks in terms of asset base. It also adds knowledge on the Kuwait banking sector which is important for researchers, the government, general public, the bank owners and other financial institutions and also for policy makers. The results will improve the policies of management practices which help to enhance banking sector profitability.

II. LITERATURE REVIEW

Generally, the primary goal for any bank is to maximize the profit. Therefore, bank provides financing in the aim of earning income. However, the results of profit depend on the uses of bank financing and the degree of risks that might be exposed.

Risks are closely related to uncertainty and probability of losses. Therefore, higher credit risk provides lower quality of assets, and higher nonperforming assets (Paras and Housang, 2011). Credit risk is the risk that an asset or a loan becomes irrecoverable in the case of outright default, or the risk of delay in the servicing of the loan. Credit risk can have rippling effect thus leading to insolvency (Bessis, 2002).

Asset quality depends on the quality of credit evaluation, monitoring and collection within each bank, and could be improved by collateralizing the loans, having adequate provisions against potential losses, or avoiding asset concentration on one geographical or economic sector. Meanwhile, any analysis of asset quality needs to take into account indicators of the likelihood of borrowers to repay their loans. The loan-performance relationship depends significantly on the expected change of the economy. During a strong economy, only a small percentage of the loans will default, and the bank’s profit will rise. On the other hand, the bank could be severely damaged during a weak economy, because several borrowers are likely to default on their loans (Bachir, 2003).

From the management accounting perspective, bank asset quality and operating performance are positively related because if a bank’s asset quality is insufficient such will have to increase its bad debt losses as well as expend more resources on the collection of non-performing loans (Abata, 2014).

III. DATA AND METHODOLOGY

3.1 Data Source:
The data are obtained from the bank’s financial statements and websites.

3.2 Sample
The population for this research comprises all the commercial banks operating in Kuwait between 2002 and 2013. A sample, taken from two commercial banks, Gulf- Bank and Burgan Bank, was selected based on the value of their total assets at the end of the 2013 financial year.

3.3 Variables Used in the Study
There are two broad approaches used to measure bank performance, the accounting approach, which makes use of...
financial ratios and econometric techniques. Traditionally accounting methods, primarily based on the use of financial ratios, have been employed for assessing bank performance (Ncube, 2009). The most common measure of bank performance is profitability. Profitability is measured using the following criteria:

Return on Assets (ROA) = net profit/total assets shows the ability of management to acquire deposits at a reasonable cost and invest them in profitable investments (Ahmed, 2009). This ratio indicates how much net income is generated per dinar of assets. The higher the ROA, the more profit the bank will earn.

Return on Equity (ROE) = net profit/ total equity. ROE is the most important indicator of a bank’s profitability and growth potential. It is the rate of return to shareholders or the percentage return on each dinar of equity invested in the bank. These two ratios are considered by Sinkey (2002) as the best measures of a bank’s profitability. These two ratios were used by others, such as Williams (2003), Kosmidou (2008), and Sufian and Habibullah (2009).

This study uses nonperforming loans as independent variable in order to measure the ability of assets to generate profit, and to describe the capacity of bank in spreading risks and recovering default loans (Assets Quality).

Explanations of dependent and independent variables along with their proxies are specified in Table 1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Symbol</th>
<th>Equations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Assets Ratio</td>
<td>ROA</td>
<td>net profit/total assets</td>
</tr>
<tr>
<td>Non-performing Loans Ratio</td>
<td>NPL</td>
<td>Non-performing Loans/total Loans</td>
</tr>
<tr>
<td>Return on Equity Ratio</td>
<td>ROE</td>
<td>net profit/total equity</td>
</tr>
</tbody>
</table>

3.4 Empirical Model

The study uses panel data due to the advantage that it has. It helps to study the behavior of each bank over time and across space (Baltagi, 2005). A linear regression model is issued to determine the relative importance (sensitivity) of explanatory variable in affecting the profitability of bank.

The general linear regression model is:

\[ Y_{it} = c \beta X_{it} + \mu_{it} \] (1)

where: \( Y_{it} \)- dependent variable observed for i-th bank at time t; \( X_{it} \)- one independent variable; \( \beta \)- the coefficient for explanatory variable; i= 2,…,N; \( c \) is a constant term; \( \mu \) - error term of the model. Starting from the general model and taking into account the selected variables, the empirical model used in our study is:

\[ ROAi = c + \beta 2NPLi \] (2)

Equation (2) is used alternatively for the two main indicators of bank profitability, respectively Return on Average Assets (ROA) and Return on Average Equity (ROE).

3.5 Hypothesis.

H0- There is a relationship between assets quality and bank profitability.

3.6 Empirical Findings

The coefficient of the ratio non-performing loans to total loans is negative, and significant in both profitability equations. The results are in accordance with those obtained by Demirgüç-Kunt and Huizinga (1997), high value of the indicator could also mean a possible deterioration of the bank assets’ quality with a negative effect upon profitability.

Model 1 Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.764</td>
<td>0.71</td>
<td>4.17</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), NPL
b. Dependent Variable: ROA

Regression Coefficients a

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1.91</td>
<td>0.488</td>
<td>0.0008</td>
</tr>
<tr>
<td>ASSETS QUALITY</td>
<td>-0.29</td>
<td>0.28</td>
<td>0.0093</td>
</tr>
</tbody>
</table>

The model above represents the relationship between the dependent variable; ROA and the independent variable NPL. From the above model, the correlation (R) value of 0.764 indicates the existence of a strong correlation among the specified variables. Similarly, the regression value of the independent variable showed that the ROA is negative and there could be a significant relationship. The Durbin Watson test statistic of serial correlation value of 2.4 showed that there is no autocorrelation among the successive values of the variables in the model. Hence, we accept the null hypothesis, that there is a relationship between bank asset quality and its profitability.

Model 2 Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0.778</td>
<td>0.5371</td>
<td>3.22</td>
</tr>
</tbody>
</table>

A. Predictors: (Constant), NPL
B. Dependent Variable: ROE

Regression Coefficients a

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>13.99802</td>
<td>2.136</td>
<td>0.0000</td>
</tr>
<tr>
<td>ASSETS QUALITY</td>
<td>-0.29</td>
<td>0.28</td>
<td>0.003</td>
</tr>
</tbody>
</table>

The model above shows the relationship between the ROE and NPL, with the correlation (R) value of 0.778 indicates a negative correlation while a significant determination value (Sig) of 0.003 indicates that ROE can be explained by NPL.
The Durbin Watson statistic measure of serial correlation value of 2.11 indicates that there is no autocorrelation among the successive values of the variables in the model. Hence, we accept the null hypothesis that there is relationship between bank loans and its profitability. It is clear from this analysis that there is a strong positive relationship between good asset quality and profitability, with the coefficient correlation being 0.778. This means banks that monitor their credit loans tend to be more profitable than those that pay less attention to assets quality and vice-versa. This is in line with the theory that increased exposure to credit risk is normally associated with decreased bank profitability.

**CONCLUSION**

This research investigated the effect of assets quality on Kuwait commercial banks profitability over the period 2002 to 2013. The study used secondary panel data obtained from annual reports of Kuwait bank publications. The regression analysis was done using the Panel Least Squares method. The findings revealed that the ratio of assets quality is positive and thus there is a significant relationship between assets quality and profitability in the two Kuwait commercial banks, GulfBank and Burgan Bank. These two commercial banks are needed to set up policies that can increase their assets since this has a potential factor in increasing their profitability.

Commercial banks have to regularly assess whether their operations meet the criteria ensuring asset quality by forecasting the safety of the bank and timely avoiding many problems. Assessment of asset quality allows determining the necessary amount of reserves, determining the indicator of asset quality, and the quality of assets in the end influences the profitability of bank operations because the amount of delayed payment either is already affecting the profitability or will do so in the near future.

**REFERENCES**


