# The Impact of Internal Factors on Bank Profitability in Kosovo

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**Abstract:** Commercial banks play an important role in the economic development and financial stability; therefore this study investigated the influence of internal factors in the profitability of commercial banks in Kosovo. Based on the literature review, a crucial internal factor on the profitability of banks in Kosovo was deemed: the repayment of assets (ROA) as a measure of profitability influenced by other independent variables, such as: bank size, capital adequacy, loan and liquidity risk. The aim of this study is to investigate the empirical relation between internal factors determining bank profitability and profitability as a dependent variable. The empirical analysis is based on the data of commercial banks in Kosovo published in the period 2010-2014. The data were analysed with SPSS 21 version, and the hypotheses were tested by means of correlation and linear regression. The findings of the study proved that commercial banks in Kosovo could enlarge their profitability by increasing the level of bank loaning and other investments, except for managing risk and liquidity properly.

**Key words**: Bank profitability; bank size; liquidity; bank loans;

**JEL Classification**: G21; G24

## 1. Introduction

In the framework of financial institutions commercial banks play a very important role; they have a great impact on economic development and financial stability. During 2007 - 2008 there was a rapid development of the banking sector in Kosovo, which contributed to the establishment a higher level of competition (Luboteni, 2013). A total of ten commercial banks operate in Kosovo's market, eight of which are foreign, while two are local (BQK, 2014). Kosovo's banking system has undergone major changes since its establishment until today, changes

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that were affected by the introduction of new banks in the market, changes in technology and increased competition (Ahmeti, Hoti & Alshiqi, 2014, p. 2). Relying on the role of the banking sector in the country's economic development and that Kosovo is a country with an underdeveloped economy, it was decided that this paper would examine the impact of internal factors on bank profitability. The definition of internal factors which influence bank profitability is assessed in different ways by world-known authors. Therefore, in this research repayment of assets (ROA) was set as a measure of bank profitability, while internal factors affecting it were considered: bank size, liquidity risk, capital and sufficiency of bank loans. The purpose of this paper is to examine the empirical relation between internal factors determining bank profitability and profitability as a dependent variable. The empirical analysis is based on data, or rather on the financial statements published by eight commercial banks in Kosovo during the period 2010 -2014. The number of observations included in the analysis was 38.

The study is divided into seven parts, where the introduction is followed by the literature review section, showing the opinion of world-known authors in relation with the factors determining bank profitability. The third section will provide information on the methodology and empirical model, while the fourth section includes research hypotheses. Description of variables and results of the research will be presented at the fifth and sixth section, and finally a summary and conclusion will end this research.

## 2. Literature Review

Numerous studies have been undertaken by various authors on the determinants of bank profitability. Nevertheless, this study will focus mainly on the factors which were considered in this research the determinants of profitability.

According to (Syafri, 2012, p. 237), the factors that have an impact on bank profitability may be external and internal. Based on the same source, external factors may all be factors that are not under the control of the bank, such as: competition, government regulations, money supply and inflation. Internal determinants of bank profitability are considered the factors that are influenced by management decisions and the bank policy objectives (Staikouras & Wood, 2004, p. 57).

As cited in (Luboteni, 2008, pp. 124 -125) the determining factor of profitability of commercial banks is effective management. According to the same source, it is worth mentioning that effective management differentiates successful banks from other banks. The author considers the reimbursement rate by assets and rates of return to capital markets as a measure of bank profitability.

Another research on the determinants of bank profitability was undertaken by (Adeusi, Kolapo, Aluko, 2014, pp. 4 -17) in Nigeria. They focused their analysis on internal and macroeconomic factors, where the cash return on assets (ROA), dependent on capital adequacy, asset quality, management efficiency, liquidity, inflation and gross internal product were used as variables that represent bank profitability. This research used as a sample the data of 14 commercial banks from 2000 to 2013. From the final results, the authors concluded that the main determinants of bank profitability were: asset quality, management efficiency and GDP, which had a significant impact on bank profitability. Nonetheless, the authors also did not rule out the importance of capital adequacy and inflation rate on bank profitability.

Scott & Arias (2011, pp. 214-225) in their research "Banking Profitability Determinants" used two main elements affecting the profitability banks, i.e. funds return on assets (ROA) as an internal factor, and GDP internal as an external one. The analysis was based on data taken from five banks of a higher level in the United States for the past 5 years. At the end of the analysis the authors came to the conclusion that all banks had an increase in their average weighted return of assets, despite the decrease of GDP per capita.

The research of (Staikouras, Wood, 2004, pp. 59-67) on the determinants of bank profitability includes 685 European banks. Their analysis focused on the following variables: return on assets ROA assets, loan risk, capital adequacy, capital risk, interest rate variability, the size of the bank, efficiency as a measure of cost, the interest rate, the rate of GDP growth, and the income per capita gross for each European country. Finally, the authors concluded that the capital adequacy of the bank size affect positively bank profitability, while the risk of loans and capital risk were inversely related to bank profitability. As for the macroeconomic variables, the interest rates had a positive effect while the variability of the interest rate and GDP growth rate had a negative effect on bank profitability. The authors (Alexiou,, Sofoklis, 2009, pp. 102-113) have conducted a research analysing the data from the six largest banks in Greece for a three month period during 2000-2007. The above mentioned authors in their model building for determining bank profitability and performance considered the return on equity (ROE) as a representative of profitability, on the other hand as an important element for analysis were considered: loan risk, which is defined as the risk of financial losses from non-respect of the obligations of the borrower, the bank capital, the size of the bank, the risk of liquidity, cost efficiency and productivity. On the other hand, macroeconomic determinants were considered the rate of inflation, interest rates, GDP and private consumption. From this analysis, the authors concluded that bank size and productivity had a positive and significant connection with bank profitability and loan risk, efficiency as measured by cost and liquidity risk had a significant negative relation with bank profitability. Relying on macroeconomic

variable, inflation rate and private consumption had a positive correlation in bank profitability and on questions about GDP research, the results proved his influence as insignificant in the bank profitability.

In the study of (Ayanda, Christopher, Mudashiru, 2013, pp. 163-176) conducted in Nigeria for First Bank, during the period 1980 to 2010, was designed this model for research: as dependent variables the deemed rate of return on assets (ROA), the rate of return on equity (ROE) and the marginal lending rate (NIM), and as independent variables were considered: capital adequacy, bank size, liquidity risk, loan risk, management efficiency and effectiveness of work. The macroeconomic variables that were incorporated in the model were: the real growth rate of GDP, money supply and inflation rate. Through their empirical research the authors concluded that a shortage of capital, liquidity risk and loan risk had a negative relation with profitability, bank size had no impact on bank profitability, while the efficiency of the management had a positive relation with bank profitability. In the context of macroeconomic variables only the money supply can be calculated as the determinant of banks profitability because it had a significant relation on profitability, while two other variables, the rate of inflation and GDP resulted not to be determinants of profitability.

Eliona Gremi's (Gremi, 2013) study conducted on the impact of internal factors on bank profitability in Albania was based on data of 12 most important banks in the country for the period 2005-2012. The variables that were used in this study were: rate of return on assets ROA, the size of the bank, bank loans, loan risk and bank deposits. From the results of this study the author comes to the conclusion that: bank loans, bank deposits and bank interest had a positive correlation with profitability, whereas loan risk had a negative relation.

## 3. Research Methodology and Econometric Model

Secondary sources, such as balance sheet and income statement from a total of eight commercial banks in Kosovo were used for this study. Data were obtained from annual reports, audit reports and financial statements of banks published on their official websites, for the period 2010-2014[1] which included a total of 38 observations.

Based on the literature review, internal elements with the greatest impact on bank profitability in Kosovo were considered: the return of funds from assets (ROA), which is used in almost all empirical studies as a measure of profitability. According to the econometric model profitability was considered as a dependent variable being influenced by other independent variables: the size of banks, capital

[1] An exception from this period is ISbank which was established in November of 2012.

adequacy, loan risk and liquidity risk. The data processing in this study will be done with SPSS program. The study hypothesis will be tested by correlation and linear regression.

$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \mu$

Y - return of funds from assets (ROA- net income / total assets)

X1 - bank size (BS - natural logarithm of total assets)

X2 - capital adequacy (CA - total equity / total assets)

X3 - bank loans (BL - total loans / total assets)

X4 - liquidity risk (LR - total loans / total deposits)

$\mu$ - coefficient of errors

## 4. Hypothesis

The main objective of this study is to find a relationship between variables defined in the paper as a determinant of bank profitability and profitability itself. Four hypotheses were set which will be tested by the above-mentioned tests. Similar assumptions are tested by many other authors worldwide.

H1: There is a positive correlation between the bank size and profitability

H2: There is a negative correlation between bank capital and profitability

H3: There is a positive correlation between bank lending and profitability

H4: There is a negative correlation between liquidity Risk and profitability

## 5. Description of Variables

ROA - return of funds from assets in our study was defined as the dependent variable. ROA was calculated by putting into ratio the net profit ratio with total assets, and at the same time it is used as a measure of bank profitability. In short return on assets shows how income generated from investments in capital or assets (Syafri, 2012, p. 11).

BS - bank size is calculated by natural logarithm of total bank assets. In reviewing the literature, we noticed several studies where the size of the bank appears positive and negative about probability. Another positive and significant relation to bank profitability was tested by (Staikouras, Wood, 2004), (Pasiouras & Kosmidou, 2007) and (Syafri, 2012).

CA - capital adequacy was calculated by the ratio of the capital with the total of assets. This indicator measures the financial sustainability of the bank, namely the capacity of the bank to cover possible losses from various risks (Roman, Dănuleţiu, 2013, p. 582). Based on the browsed literature, capital adequacy has a positive connection with the bank profitability, which was tested in the report by (Staikouras, Wood, 2004), (Roman, Dănuleţiu, 2013), (Gremi, 2013). The negative correlation, on the other hand, was tested by (Saône, 2011; Ali et al., 2011; Qin & Pastory, 2012).

BL - Bank loans were calculated by the ratio of total loans in ratio with total assets and are simultaneously interpreted as a source of income and as a measure of liquidity assets (Davydenko, 2010, p. 13). The study intended to test a positive relationship with bank profitability based on the more loans banks give, the more opportunities they will have to generate revenues.

LR - Liquidity risk relates to the bank ability to respond to unforeseen needs for financial resources. Effective liquidity management enables the bank to have the chance to answer all customers' needs even when the bank is in the financial disadvantage, non-effective liquidity management can lead to serious consequences. Liquidity risk calculations were calculated by the ratio of total loans to the total of deposits. It was aimed to test a negative report on the bank profitability relying on the fact that if banks keep large amounts of money without investing in the market, there will be a negative effect on profitability. (Ayanda, Christopher & Mudashiru, 2013).

## 6. Results of Survey Analysis

### 6.1. Description of Statistical Results

Statistic results of the data are presented in Table 1, indicating the minimal, maximal, average and standard deviation values of each variable.

Return of assets from assets (ROA) for the eight banks in Kosovo, for the period 2010-2014, has an average value of 0.008; the maximum value is 0.031, the minimum value -0.044 with a standard deviation of 0.014. Therefore it results in a very low variability from average.

Another variable is the size of the bank (BS) for the same period has the following values: 20.50 maximum value, minimum value 15.80, the average value is 19.15 while the standard deviation for this variable is 1.09. This average deviation occurs due to the establishment a new bank in Kosovo in 2012, and it is normal that in the first year the value of bank assets is not great. Capital adequacy another variable which was used as a factor affecting bank profitability in the statistical analysis showed the following values: minimum value 0.064, maximum value 0.941, the

average value, standard deviation 0.160 and 0.160. Statistical values of bank loan variables are: Minimum value 0.000, the maximum value is 0.836; the average value is 0.657 with a standard deviation 0.155. Liquidity risk has a minimum and maximum value of 0.000 to 10.132, while the average value 1.07 has a 1.534 standard deviation. The establishment of a new bank had influenced in almost all variables at the end of 2012, but a higher impact of liquidity risk was noticed, considering that liquidity risk was calculated higher than the ratio of loans to deposits. The newly established bank in its first year of establishment had no bank loans and had a very low level to deposits due to lack of market.

**Table 1. Statistical description of the factors determining bank profitability**

| Descriptive Statistics | | | | | |
|---|---|---|---|---|---|
| | N | Min. | Max. | Mean | Std. Dev. |
| Return of assets (ROA) | 38 | -.0440 | .0314 | .008445 | .0146053 |
| Bank size (BS) | 38 | 15.8070 | 20.5060 | 19.258763 | 1.0939190 |
| Capital adequacy (CA) | 38 | .0648 | .9410 | .134511 | .1604934 |
| Bank loans (BL) | 38 | .0000 | .8365 | .657018 | .1557994 |
| Liquidity risk (LR) | 38 | .0000 | 10.1329 | 1.074268 | 1.5346567 |
| Valid N (listwise) | 38 | | | | |

*Source: calculated by the author*

### 6.2. Empirical Results from the Analysis of Data

Empirical results will be used to test the hypothesis that we raised; initially the hypothesis will be test by correlation - person coefficient where the dependent variable ROA will be set on ratio with independent variables BS, CA, BL and LR defined in the model.

Based on the results on table no. 2, displaying bank profitability compared to bank size, it is shown that the coefficient of significance p = 0.000 is less than 0.01, which means that there is a relationship between them. While the Pearson coefficient tells us the solidity of the connection between them, from the table we see that r = 0.816 which means that these two variables have a very close relation since r> 0.49 and this is also understood by signs that the link between them is positive. Through this H1 is proved: bank size has a positive correlation with bank profitability.

**Table 2. The ratio between bank size and profitability**

| | | ROA | BS |
|---|---|---|---|
| ROA | Pearson Correlation | 1 | .816** |
| | Sig. (2-tailed) | | .000 |
| | N | 38 | 38 |
| BS | Pearson Correlation | .816** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 38 | 38 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

*Source: calculated by the author*

Table No. 3 shows the relation between capital adequacy and bank profitability. From the results it can be understood that the coefficient of significance p = 001 which means that p <0.01 this confirms that the relationship between these variables is important. While Pearson coefficient r = - 0.50 confirms that connection between these variables is strong (r> 0.49) and through the sign it can be concluded that the relationship is negative. Based on this result it was possible to prove H2: There is a negative relationship between capital adequacy and bank profitability.

**Table 3. The ratio between capital adequacy and bank profitability**

| | | ROA | CA |
|---|---|---|---|
| ROA | Pearson Correlation | 1 | -.500** |
| | Sig. (2-tailed) | | .001 |
| | N | 38 | 38 |
| CA | Pearson Correlation | -.500** | 1 |
| | Sig. (2-tailed) | .001 | |
| | N | 38 | 38 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

*Source: calculated by the author*

The results of Table no. 4 show a significant link between bank loan and bank profitability since coefficient p = 0.000 p <0.01. The connection between these two variables is strong, this is confirmed by the coefficient of Pearson correlation r = 0.608, as well as by the positive sign of the coefficient r it is proven that their relationship is positive, thus confirming H3: There is a positive relationship between bank loan and bank profitability.

**Table 4. The relationship between bank loan and profitability**

| | | ROA | BL |
|---|---|---|---|
| ROA | Pearson Correlation | 1 | .608** |
| | Sig. (2-tailed) | | .000 |
| | N | 38 | 38 |
| BL | Pearson Correlation | .608** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 38 | 38 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

*Source: calculated by the author*

The last report of this study is presented in Table no.5 showing the link between liquidity risk and bank profitability. The results prove a positive relation between them, p = 0.000 with a great hardness and r = - 0.570 with a negative relationship. The result above supports the last hypothesis H4: There is a negative relationship between liquidity risk and bank profitability.

**Table 5. The ratio between liquidity risk and bank profitability**

| | | ROA | LR |
|---|---|---|---|
| ROA | Pearson Correlation | 1 | -.570** |
| | Sig. (2-tailed) | | .000 |
| | N | 38 | 38 |
| LR | Pearson Correlation | -.570** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 38 | 38 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

*Source: calculated by the author*

### 6.3. Regression Model

The results of the regression model, in which we presented the report of profitability as the dependent variable for the bank size, loan risk, capital and sufficiency of bank loan as independent variables are as follows.

The F - test explains the relationship between independent variables the values of tolerance and VIF values. From the results shown in the table below, it can be noticed that the lower value of tolerance is 0.288, which means that is higher than 0.10 and higher value of VIF is 3.467, which is also lower than the value of allowing 10. Since the values are within the allowable limits it shows that the model is acceptable, reaffirming that the independent variables do not have a connection between them.

**Table 6. The influence of variance factor – F**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | (Constant) | | |
| | Bank Size (BS) | .477 | 2.096 |
| | Liquidity Risk (LR) | .766 | 1.305 |
| | Capital Adequacy (CA) | .311 | 3.215 |
| | Bank Loan (BL) | .288 | 3.467 |

*Source: calculated by the author*

The summarizing model of regression displays the values of R, $R^2$, $R^2r$ regulation and standard errors. Relying on tab.nr 7 it can be observed that the value R is 0.869, the value of $R^2$ is 0.755 and adjusted $R^2$ value is 0.725. If correct $R^2$ is converted into percentage it can be concluded that 72.5% percent of the changes in bank profitability are explained by independent variables defined in the model.

**Table 7. Assessment of the model**

| Model Summary[b] | | | | |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .869[a] | .755 | .725 | .0076613 |
| a. Predictors: (Constant), BS, BL, LR, CA | | | | |
| b. Dependent Variable: ROA | | | | |

*Source: calculated by the author*

ANOVA statistical results presented in Table no.8 show a significance of the model since coefficient p = 0.000 i.e. p <0.0005 and all the values of the explanatory variables are different from 0.

**Table 8. Results of the ANOVA regression**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | .006 | 4 | .001 | 25.367 | .000[b] |
| | Residual | .002 | 33 | .000 | | |
| | Total | .008 | 37 | | | |
| a. Dependent Variable: ROA | | | | | | |
| b. Predictors: (Constant), BL, LK, BS, CA | | | | | | |

*Source: Calculated by the author*

Table no.9 shows statistical values for each independent variable in the model. Based on the following data, Beta coefficient is independent variables: the size of the bank 0.672, 0.317 liquidity risk, capital adequacy 0.280 and 0.272 bank loan. This shows that the highest impact on bank profitability based on the amount of beta coefficient has: bank size, liquidity risk then two other variables capital adequacy and bank loan. In the last column of this table are presented coefficient sig, where the first two variables, the size of the bank and the liquidity risk coefficient p <0.05, which mean that the contribution of these has a high statistical significance on bank profitability. While the value of sig coefficient. p> 0.05 per variables: capital adequacy and bank loans, confirms that the contribution of these two variables on bank profitability has not a high statistical significance.

**Table 9. Evaluation of each independent variable in the equation**

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -.181 | .031 | | -5.946 | .000 |
| | BS | .009 | .002 | .672 | 5.387 | .000 |
| | LR | -.003 | .001 | -.317 | -3.214 | .003 |
| | CA | .025 | .014 | .280 | 1.810 | .079 |
| | BL | .026 | .015 | .272 | 1.695 | .099 |

*Source: calculated by the author*

## 7. Discussion and Conclusion

This study aimed to investigate the empirical relation between internal factors determining bank profitability and profitability as a dependent variable. The research was based on annual data of eight commercial banks in Kosovo during the period 2010 – 2014, and included a total of 38 observations.

The empirical analysis pointed out that the four independent variables: capital size, liquidity risk, capital adequacy and bank loans, which were tested separately with the dependent variable profitability, had a strong, significant relation with each-other. Bank size and bank loans had a positive correlation with profitability, which means that the larger the bank wealth and the loan level, the higher bank profitability is. A negative relation was confirmed between loan risk and capital adequacy with bank profitability which means that the higher the level of the bank capital adequacy, the lower the bank profitability will be. This relation was

discussed by many authors because if the bank maintains a low level of capital without investing normally this will reflect a higher level of profitability, but at the same time it will face a risk of high liquidity level, which prevents banks to cover potential losses. From the results of linear regression analysis where presented are the interactions of independent variables in relation with dependent variable, it can be stated that bank size and loan risk had a significant impact on bank profitability, while the influence of two other variables, capital adequacy and bank lending had minor importance. Based on what was said above it can be concluded that commercial banks in Kosovo can increase the level of profitability by raising the level of bank lending and other investments, as well as by managing correctly their risk and liquidity. Future researches of this nature intend to extend the study incorporating other important factors, internal and external ones, which influence bank profitability, such as: interest rates, exchange rates, management of costs, inflation rate and the rate of GDP.

**References**

Adeusi, O.S, Kolapo, T.F, Aluko, O.A. (2014). Determinants of commercial banks' profitability, panel evidence from Nigeria. *International Journal of Economics, Commerce and Management, II* (12), 4-17.

Ahmeti, S, Hoti, A. & Alshiqi, S. (2014). Analysis of Financial Performance in the Banking System in Kosovo - the Period 2006-2012. *Journal of Knowledge Management, Economics and Information Technology, IV* (2), 2.

Alexiou, C. & Sofoklis, V. (2009). Determinants of Bank Profitability: Evidence from the Greek Banking Sector. *Economic Annals, IV* (182), 102-113.

Ayanda, M.A, Christopher, I. & Mudashiru, A.M. (2013). Determinants Of Banks' Profitability in a Developing Economy: Evidence from Nigerian Banking Industry. *Interdisciplinary Journal of Contemporary Research In Business, 4* (9), 163-176.

BQK (2014). *Sistemi Financiar, Informata mujore/Financial System. Monthly information.* Prishtine: Banka Qendrore e Kosoves.

Davydenko, A. (2010). Determinants of Bank Profitability in Ukraine. *Undergraduate Economic Review, 7* (1), 13.

Gremi, E. (2013). Internal Factors Affecting Albanian Banking Profitability. *Academic Journal of Interdisciplinary Studies, II* (9).

Haron, S. (2004). Determinants of Islamic Bank Profitability. *Global Journal of Finance and Economics, I* (1).

Luboteni, G. (2013). *Bank and Business Banking.* Prishtine.

Luboteni, G. (2008). *Menaxhmenti Bankar/Banking management.* Prishtine: Universiteti i Prishtines, Fakulteti Ekonomik.

Roman, A. & Dănuleţiu, E.A. (2013). An Empirical Analysis of the Determinants of Bank Profitability in Romania. *Annales Universitatis Apulensis Series Oeconomica, 15* (2), 582.

Scott, W.J. & Arias, C.J. (2011). Banking Profitability Determinants. *Business Intelligence Journal, IV* (2), 214-225.

Staikouras, K.CH. & Wood, E.G. (2004). The Determinants of European Bank Profitability. *International Business & Economics Research Journal, 3*, 59-67.

Syafri, M. (2012, 9 7-8). Factors Affecting Bank Profitability in Indonesia. *The 2012 International Conference on Business and Management*, 237.

Sufian, F. & Chong, R.R. (2008). Determinants of Bank Profitability in a Developing Economy: Empirical Evidence from the Philippines. *Asian Academy of Management Journal of Accounting and Finance*. Vol. IV. No. 2.

All, Z. (2014). Determinants of Banks' Profitability in a Developing Economy: Empirical Evidence from Tanzania. *European Journal of Business and Management. Vol. VI, No. 31.*

Ana, K., Blanka, S. & Roberto, E. (2011). Determinants of Bank Profitability in Croatia. *Croatian Operational Research Review (CRORR), Vol. 2.*

Kanwal, S. & Nadeem, M. (2013). The Impact of Macroeconomic Variables on the Profitability of Listed Commercial Banks in Pakistan. *European Journal of Business and Social Sciences, Vol. 2, No. 9.*

Nahang, F. & Araghi, K.M. (2013). Internal factors affecting the profitability of City Banks. *International Research Journal of Applied and Basic Sciences.* Vol, 5 (12).

Duraj, B. & Moci, E. (2015). Factors influencing the bank profitability – empirical evidence from Albania. *Asian Economic and Financial Review, Vol. V. No. 3.*

Almazari, A.A. (2014). Impact of Internal Factors on Bank Profitability: Comparative Study between Saudi Arabia and Jordan. *Journal of Applied Finance & Banking, Vol. 4, no. 1.*