Profitability Analysis of Banks: Comparative Study of Domestic and Foreign Banks in Kosovo

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Abstract:

Purpose: The purpose of this study is to compare the financial performance of domestic and foreign banks in the banking sector of Kosovo over the period 2008-2018. In order to evaluate the financial performance of banks in Kosovo, both domestic and foreign ones, we have analyzed the financial reviews of these banks for 10 years (2008-2018), subsequently drawing the financial reports.

Design/Methodology/Approach: To give an answer to the research question whether banks with foreign capital in Kosovo are more profitable than banks with local capital we have firstly reviewed the literature to find out what different authors have found in recent researches concerning this area and the methods and models used in collecting, processing and analyzing data. The processing of the data of the above-mentioned reports has been done by the STATA software program, specifically using linear regression, Fixed Effect, Random Effect, Hausman Taylor Regression and GMM modelling.

Findings: Based on the empirical results of this study, we conclude that all independent variables (return on equity, net sales to net assets ratio, profit margin ratio) are significant at 5% level of statistical confidence. Return on equity and profit margin have a positive impact on increasing the return on assets of commercial banks in Kosovo, while increasing the ratio of net sales / net assets has a negative impact on return on assets.

Practical Implications: This paper will provide a detailed analysis of the profitability of commercial banks in Kosovo, and through comparative analysis will determine which banks are most profitable, those with foreign capital or banks with domestic capital.

Originality/Value: This research paper highlights an empirical analysis based on real data, financial reports of the Central Bank of Kosovo and on the financial statements of commercial banks in Kosovo. Given that these results are evident, they are a good reflection for all decision-makers in regulating and supervising commercial banks.

Keywords: Foreign and domestic banks in Kosovo, financial indicators, profitability indicator.

JEL code: G2, G21, G0, G01, G1, G11, G3, G32.

Paper type: Research article.

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1. Introduction

The banking system in Kosovo is a relatively new system with a rapid development since 1999. The entire banking system in Kosovo is privatized, and foreign entities own most of the capital (8 out of 10 banks). The number of foreign banks increased especially in 2008, when two new banks were added. Banks with foreign capital also have the largest share of the assets in the system (about 90%), whereas local-owned banks cover only 10% of total assets. Financial institutions have marked a strong growth for a relatively short period of time (Cristea and Thalassinos, 2016; Thalassinos et al., 2013). Commercial banks have covered the entire territory of Kosovo while local banks expanded the correspondence network with foreign banks. Two emerging-capital banks introduced new banking products such as ATMs, E-banking and POS terminals. Deposits have had an average annual growth of 20% and are consisted as main source of funds in these institutions. Despite a marked increase in the last three years, the annual growth rate in the balance of banks has not exceeded the 7% change considering lending to non-financial sectors. In spite of the large achievements in this sector for a short period, local commercial banks faced new challenges, given the limitations in management skills for building and developing operational strategies, tracking new products and still reducing and controlling the administration’s expenditure as a condition for their survival.

2. Literature Review

Organizational services in general, and financial services are the main factors of the growth and success of projects in both industrial and developing countries (Akhmadeev et al., 2018; Arize et al., 2018; Rupeika-Apoga et al., 2018). However, commercial banks are pleased to offer customers a full range of excellent international banking services in and out of Kosovo. The main objective of Kosovo’s commercial banks is to focus on commercial services and money management. As a matter of fact, Kosovo has always had a nationwide development policy, prudent to reach a wide geographical distribution of investments to ensure that all regions of Kosovo can share the benefits and can narrow down any gap in the standard of living.

Regarding Kosovo’s banking market it continues to be characterized by a relatively high degree of concentration, although the continued growth of small banks activity has influenced the concentration rate following the downward tendency in recent years. Considering the banking risk in Kosovo, we can see that all services performed by commercial banks such as credit services are exposed to high risk. The banking sector of Kosovo is composed of activities of commercial banks only. In recent years, the number of banks has gradually increased to eight. They are: NLB Bank, Bank for Business, Economic Bank, Raiffeisen Bank, ProCredit Bank, TEB Bank, National Commercial Bank, Commercial Banka AD Beograd with its activity in Mitrovica (north) and Gracanica.
Lending remains their main activity, as it must be considered that demand for money in a transition country is significantly higher than the money supply, so the importance of lending remains high (Pasaman, 2017; Ugurlu et al., 2014). A major priority of the banking system in Kosovo is that the main sources of financing of the banking sector are deposits and domestic borrowings. They represent about 70-80% of all liabilities. Out of the total number of commercial banks in Kosovo, six of them are foreign-owned and only two are local banks with domestic capital, the Economic Bank and the Bank for Business. The financial performance of banks has been centering the attention of many scholars since the very beginning. Measurement of bank performance, especially for commercial banks, has been well researched and has received greater attention in recent years.

Claessens, Demirguc-Kunt and Huizinga (2001) studied the performance of domestic and foreign banks in eighty countries including developing and developed countries from 1988 to 1995. They weighted up how the difference in net profit, total spending, paid taxes and profitability varies between domestic and foreign banks and realized that foreign banks function better in the period of profitability in developing countries, but this is quite contrasting in developed countries.

Awdeh (2005) analyzed the differences in the profitability determinants of domestic and foreign banks operating in Lebanon between 1993 and 2003. The study notes that foreign banks are more profitable than all domestic banks despite operating on the same market. In addition, domestic banks and the determinants of the profitability of foreign banks have been noted to be different. The study also shows that foreign banks are less affected by the local macroeconomic factors than domestic banks. Chantapong (2005) studying the performance of domestic and foreign banks in Thailand concluded that foreign banks are more profitable than the average profit of domestic banks. Kraft, Hofler and Payne (2006) studied the Croatian banking system and found that new private and privatized banks are not more efficient than public banks and that privatization does not immediately improve efficiency, while foreign banks are significantly more efficient than all domestic banks. Toçi (2009) studied the efficiency of banks in Southeast Europe with a special reference to Kosovo, using non-parametric methodologies. He indicated that foreign banks were more efficient than the domestic ones.

In addition, Goldberg, Deges and Kinney (1999) found out that in Argentina and Mexico foreign banks showed a stronger credit growth, sensitive to economic signals compared to domestic banks. Lending activities of foreign banks were accompanied by an increase in loan sector growth and a lower volatility of this growth (Thalassinos and Grima, 2020; Thalassinos and Thalassinos, 2018). Briefly, foreign ownership of domestic financial institutions contributes positively to the overall level and stability of domestic loan. Nimalathasan (2008) compared the financial performance of domestic, foreign, private and state banks operating in Bangladesh. As a result of the 1999-2006 survey data, it came out that foreign banks have shown to have a higher performance than domestic banks regarding liquidity, profitability and interest
income. Alam, Raza and Akram (2011) compared the performance of state and local banks operating in Pakistan between 2006 and 2009 with the help of financial reports. The result of the analysis showed that domestic banks have a larger asset size than state-owned banks. In addition, it has been concluded that foreign banks have a better performance in terms of profitability and liquidity than domestic banks. Similar results have been obtained in Latvia in the work of Rupeika-Apoga et al. (2018) and in the works of Thalassinos et al. (2015a; 2015b) for Greece.

Azam and Siddiqui (2012) analyzed and compared the profitability of domestic and foreign banks based on a quarterly data sample of 36 commercial banks in Pakistan during 2004 and 2010. The sample was divided into three categories: domestic banks under Government control, domestic banks under private control and foreign banks. They found that foreign banks were more profitable than both types of domestic banks. Their results also showed that domestic and foreign banks had different determinants of profitability. In other words, the factors that are important in determining the profitability of domestic banks are not necessarily important for foreign banks. But it is the opposite situation in the developed countries where local banks are more profitable than foreign banks.

San, Theng and Heng (2011) analyzed data and compared the efficiency of domestic and foreign banks operating in Malaysia. The data used were for 9 local banks and 12 foreign banks between 2002 and 2009. The result of the analysis showed that domestic banks were more efficient and had more management competencies than foreign banks. Sufian (2006) investigated the efficiency of 15 Malaysian banks offering Islamic banking products and services over the period 2001-2004. The results showed that local Islamic banks showed higher technical efficiency compared to those of their foreign colleagues. Elyor (2009) analyzed and compared the performance of domestic and foreign commercial banks operating in Malaysia. Based on data of the period 2004-2008, it resulted that foreign banks had strong capital, but domestic banks were more profitable.

Berger, DeYoung, Genay and Udell (2000) found out that domestic banks were more efficient than foreign banks in developed countries, while foreign banks were more efficient than domestic banks in developing countries. They have developed two alternative hypotheses to explain these results: (i) the advantage of home; (ii) the global scope. Under the home domain advantage hypothesis, foreign banks face disadvantages from factors such as cultural differences, geographic distances, staff monitoring and market structure. This explains the overall result of inferior efficiency of foreign banks. On the other hand, foreign banks can take advantage of their global priorities. According to the first form of the hypothesis of global advantage, foreign banks of several nations can operate successfully in the host country. However, the evidence so far has rejected this hypothesis.

According to the "limited form of the global advantage hypothesis" some banks from few countries can overcome the disadvantages resulting from the foreigner
responsibility and thus act effectively in the host country. As discussed above, the results of some studies help to identify that a group of banks from some countries operating in some other countries can be so efficient and profitable. Therefore, the limited form of global advantage hypothesis is worth of further investigations in alternative locations (Berger, DeYoung, Genay and Udell, 2000).

3. Research Analysis

To continue to research it is required to present the available data used (Tables1-4):

**Table 1. Report of assets in banks of domestic and foreign capital in Kosovo (ROA)**

| Banks                  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Economic Bank          | 1.2% | 0.5% | 1.1% | 0.6% | -0.4%| 0.1% | -1.8%| 0.6% | 0.5% | 2.0% | 2.0% |
| Bank for Business      | -    | -    | -    | -    | -    | -    | 0.01%| 1.3% | 1.4% | 2.5% |      |

**Banks with foreign capital**

| National Commercial Bank | 1.4% | 1.6% | 0.9% | 1.6% | 1.5% | 1.3% | 1.4% | 1.5% | 1.8% | 1.9% |      |
| Raiffeisen Bank          | 2.8% | 3.0% | 2.5% | 1.0% | 1.9% | 1.9% | 2.2% | 2.1% | 2.0% | 2.2% | 1.9% |
| NLB Bank                 | -    | -    | -    | -    | -    | -    | 0.01%| 1.3% | 1.4% | 2.5% |      |
| TEB Bank                 | -    | -    | -    | -    | 0.1% | 1.1% | 1.4% | 0.8% | 2.6% | 4.2% | 4.2% |
| ProCredit Bank           | -    | -    | -    | -    | -    | -    | 2.3% | 2.0% | 1.8% | 2.3% | 2.0% |

**Source:** Authors' calculations (2019).

**Table 2. Report of capital ratio to Kosovo's commercial banks (ROE)**

| Banks                  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Economic Bank          | 0.5% | 2.8% | 8.5% | 5.3% | -5.4%| 1.7% | -25.3%| 9.5% | 6.9% | 21.9%| 21.2%|
| Bank for Business      | -    | -    | -    | -    | -    | -    | -    | 0.2% | 15.4%| 17.0%| 26.1%|

**Banks with foreign capital**

| National Commercial Bank | 26.7%| 23.3%| 13.7%| 21.0%| 21.2%| 16.7%| 18.2%| 17.8%| 16.9%| 16.7%|      |
| Raiffeisen Bank          | 25.5%| 24.9%| 20.3%| 8.6% | 35.9%| 12.5%| 14.2%| 14.2%| 12.8%| 14.8%| 13.8%|
| NLB Bank                 | -    | -    | -    | -    | 12.4%| 11.4%| 10.5%| 7.1% | 10.5%| 13.1%| 18.8%|
| TEB Bank                 | -    | -    | -    | -    | 1.9% | 14.9%| 19.8%| 12.4%| 27.2%| 32.5%| 25.5%|
| ProCredit Bank           | -    | -    | -    | -    | -    | 18.4%| 16.7%| 15.1%| 19.4%| 17.7%|      |

**Source:** Authors' calculations (2019).
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Table 3. Report of net sales to net assets in commercial banks in Kosovo

| Banks                      | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Banks with domestic capital|      |      |      |      |      |      |      |      |      |      |      |
| Economic Bank              | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% |
| Bank for Business          | -    | -    | -    | -    | -    | -    | -    | 1.2% | 1.1% | 1.1% | 1.1% |
| Banks with foreign capital |      |      |      |      |      |      |      |      |      |      |      |
| National Commercial Bank   | -    | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% |
| Raiffeisen Bank            | 1.2% | 1.2% | 1.2% | 1.2% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% |
| NLB Bank                   | -    | -    | -    | -    | -    | -    | -    | 0.2% | 16.7%| 21.8%| 42.1%|
| TEB Bank                   | -    | -    | -    | -    | -    | -    | -    | 1.2% | 1.2% | 1.1% | 1.1% |
| ProCredit Bank             | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |

Source: Authors’ calculations (2019).

Table 4. Margin profit ratio in commercial banks of Kosovo

| Banks                      | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Banks with domestic capital|      |      |      |      |      |      |      |      |      |      |      |
| Economic Bank              | 18.3%| 8.1% | 17.3%| 8.7% | -    | 6.7% | 1.7% | -24.3%| 9.4% | 7.4% | 27.3%| 33.9%|
| Bank for Business          | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0.2% | 16.7%| 21.8%| 42.1%|
| Banks with foreign capital |      |      |      |      |      |      |      |      |      |      |      |
| National Commercial Bank   | -    | 18.7%| 27.0%| 15.4%| 23.9%| 23.8%| 21.9%| 25.5%| 30.5%| 38.9%| 47.2%|
| Raiffeisen Bank            | 32.6%| 32.7%| 25.1%| 12.4%| 27.8%| 24.7%| 29.7%| 34.9%| 44.1%| 43.0%|      |
| NLB Bank                   | -    | -    | -    | -    | 15.9%| 17.4%| 21.9%| 23.4%| 30.5%| 31.2%| 40.5%|
| TEB Bank                   | -    | -    | -    | -    | 2.1% | 13.3%| 18.4%| 10.4%| 29.0%| 53.3%| 60.3%|
| ProCredit Bank             | -    | -    | -    | -    | -    | -    | 25.1%| 23.5%| 26.2%| 39.8%| 41.0%|

Source: Authors’ calculations (2019).

3.1 Methodology and Specification

During this research we have used some highly effective methods and techniques which attempt to clarify the impact of selected profitability ratios on Return on Assets (ROA), through linear regression, fixed effect, random effect analysis, Hausman Taylor and GMM model. These models define the relationships between the two variables and are used to evaluate the dependent variable (Y) based on the independent variable(s) (X).

Dependent variable (Y) is the projected or estimated variable which should be predicted or explained by another variable. The independent variable (X) is the variable that provides the basis for the rating. By this variable, the prediction or explanation of the dependent variable is made. More specifically, using econometric...
models, we will test the impact of the Return on Equity (ROE), net sales to net assets ratio, profit margin ratio as independent variables in the dependent variable which is the Return on Assets (ROA). In the beginning we will make the specification of the econometric models and the method of evaluation and after the specification of the models, the data will be analyzed in the empirical work madding the calculation of the econometric models and the interpretation of the results. Also, in this section, the validity of the hypotheses defined in the introduction of this article will be evaluated (Table 5):

| Variable | Description | Source of data |
|----------|-------------|----------------|
| ROA      | Return on assets is a dependable variable | Annual Banks reports |
| ROE      | Return on equities | Annual Banks reports |
| NS/NA    | Net sales to net assets ratio | Annual Banks reports |
| MP       | Margin profit ratio | Annual Banks reports |

**Source:** Authors’ calculations (2019).

Using the simple linear regression method, (OLS) tests the impact of Return on Asset (ROA) of each one of the independent variables. The basic objective of this regression is to estimate or predict the average value of a variable Y (dependent variable) based on the values of the other variable (independent variable) X. Therefore, the specification of the linear regression model is as follows:

\[ Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + U_i \]  \( (1) \)

Where:

- Y - represents the dependent variables (variables that are clarified, endogenous, predicted, etc.), in our case the dependent variable is ROA;
- X - represents the independent variables (exogenous, predicting, etc.), in our case as independent variables are considered the ROE, the ratio of net sales to net assets and the profit margin ratio;
- \( B_0, B_1, B_2 \) and \( B_3 \) are call parameters or coefficients of evaluation where \( B_0 \) is the constant parameter, while \( B_1, B_2 \) and \( B_3 \) are the parameters of the independent variables;
- \( U_i \) is a stochastic or error term variable. It contains all the factors or variables that are not predicted in the model and it is a random and unobserved variable that poses positive and negative values. Stochastic error indicates that there are other factors that affect the dependent variable.

Hence, the specification of the Fixed Effect, Random Effect, Hausman Taylor and GMM Model specifications is as follows:

\[ Y_{it} = \beta_1X_{it} + ai + uit \]  \( (2) \)
Where:

- \( \alpha_i (i = 1 \ldots n) \) is an unknown intercept for each entity (n-specific entity);
- \( Y_{it} \) is the dependent variable, where \( i = \) entity and \( t = \) time;
- \( X_{it} \) represents independent variables;
- \( \beta_1 \) is the coefficient for independent variables;
- \( u_{it} \) is standard error.

4. Results

Model 1 (linear regression): Based on other studies, if the regression analysis with the independent variables being ROE, NS/NA, MP do not yield specific and concrete results, then a mechanical constraint (B1) is obtained, in this specific case is 0.44 for banks with domestic capital and -7.08 for banks with foreign capital, but in our case the results are measurable so this is not necessary (Table 6):

| Dependent Variable (ROA) | Linear regression (Model 1) |
|--------------------------|----------------------------|
| Banks with domestic capital in Kosovo | Banks with foreign capital in Kosovo |
| Independent variables: | Coefficients | Probability | Coefficients | Probability |
| Constant (\( \beta_0 \)) | .4417781 | 0.538 | -7.089852 | 0.000 |
| ROE | .0327115 | 0.002 | .0223808 | 0.005 |
| NS/NA | -.3699276 | 0.566 | 6.176522 | 0.000 |
| MP | .0400138 | 0.000 | .0592835 | 0.000 |
| R² corrected | 0.9939 | | 0.9134 |

Source: Authors’ calculations (2019).

Therefore, based on the results obtained from the regression model for Banks with domestic capital, we can conclude that if the independent variable "Return on Equity" (ROE) increases by 1%, it will affect the dependent variable "Return on Assets" (ROA) by 3%, with p-value less than 5% so the result is significant. "Net sales to net assets" have no significance and a negative impact on the dependent variable ROA, a 1% increase would cause a decrease by -0.36. Also, 1% growth of the independent variable "Profit Margin" will affect the dependent variable by 4% with p-value less than 5%, so the result is significant.

Regarding banks with foreign capital, we can see that the three variables taken in the study are significant at 5% level, which implies that they have an impact on the dependent variable ROA. Looking at the results of this model we see that 1% increase of the independent variable ROE, will affect the dependent variable ROA by 2.2% with p-value less than 5% so the result is significant.
Also, if the independent variable "Net sales to net assets ratio" increases by 1%, it will affect the dependent variable by 6.17 with p-value less than 5%, so the result is significant. And if the independent variable "Profit Margin" increases by 1%, it will affect the dependent variable by 5.9% with p-value less than 5%, so the result is significant.

R squared statistic is 99.39% for local banks and 91.34% for foreign banks indicating that the model is important and that 99.39% of profit changeability of local banks is explained by the variance of the factors used in this study as determinants of the bank profitability, and 91.34% of foreign bank profit changeability measured by ROA is explained by the variance of the factors used as determinants in this study (Table 6).

**Model 2 (Fixed Effect):** Concerning results obtained from the fixed effects model for local banks the coefficients for the variables "Return on Equity" and "Margin Profit" have p-values less than 5% and are statistically significant. A 1% increase in the independent variable "Return on Equity" would affect 4% the dependent variable ROA, while 1% increase in the independent variable "Profit Margin" would affect 3% the dependent variable ROA. "Net sales to net assets ratio" has no significance and has a negative impact on the dependent variable ROA (Table 7):

**Table 7. Presentation of the results obtained from the fixed effects model**

| Dependent variable (ROA) | Fixed Effect (Model 2) |
|--------------------------|------------------------|
| Banks with domestic capital in Kosovo | Banks with foreign capital in Kosovo |
| Independent variables: | Coefficients | Probability | Coefficients | Probability |
| Constant (βₒ) | .1725918 | 0.865 | -5.864763 | 0.000 |
| ROE | .0333685 | 0.003 | .0268243 | 0.002 |
| NS/NA | -.1294995 | 0.887 | 5.085955 | 0.000 |
| MP | .0401184 | 0.000 | .055842 | 0.000 |

Source: Authors' calculations (2019).

Regarding foreign banks we see that all the variables used in this paper have p-value less than 5%, so they are significant and the results show that 1% increase of the independent variables "Return on Equity" would affect the dependent variable ROA by 2%, while 1% increase in the independent variable "Net sales to net assets ratio" would affect 5.08 the dependent variable ROA, and 1% increase in the variable "Profit Margin" would affect 5% the dependent variable ROA (Table 7).

**Model 3 (Random Effect):** Random effect on local capital banks shows that "Return on Equity" and "Margin Profit" have p-value less than 5%, causing significance and 1% increase in the variable "Return on Equity" affects 3% the dependent variable ROA, while 1% increase in the independent variable "Margin Profit" affects 4% the dependent variable ROA. Regarding independent variable "Net sales to net assets" this variable has no significance and adversely affects the dependent variables ROA,
where 1% increase in this variable causes a decrease of -0.36 in the dependent variable ROA (Table 8).

While in foreign banks all variables used in this study have p-value less than 5% and are significant, 1% increase in the independent variable "Return on Equity" affects 2% the dependent variable ROA, while 1% increase in the independent variable "Net sales to net assets" affects 6.17% the dependent variable ROA, and 1% increase in the independent variable "Margin Profit" affects 5% the variable dependent ROA (Table 8).

**Table 8. Presentation of the results obtained from the random effect model**

| Dependent variable ROA (Return on assets) | Random Effect (Model 3) | Banks with domestic capital in Kosovo | Banks with foreign capital in Kosovo |
|-----------------------------------------|-------------------------|-------------------------------------|-------------------------------------|
| Independent variables:                  | Coefficients | Probability | Coefficients | Probability |
| Constant ($\beta_o$)                    | .4417781    | 0.525       | -7.089852    | 0.000       |
| ROE                                     | .0327115    | 0.000       | .0223808     | 0.003       |
| NS/NA                                   | -.3699276   | 0.554       | 6.176522     | 0.000       |
| MP                                      | .0400138    | 0.000       | .0592835     | 0.000       |

**Source:** Authors' calculations (2019).

**Model 4 (Hausman Taylor):** Hausman Taylor's results in local equity banks confirms the outcome in the preliminary models for the independent variable "Net sales to net assets", thus showing the negative impact on the dependent variable "Return on Assets" where 1% increase in this variable causes a decrease of -0.12 in ROA, while the independent variables "Return on Equity" and "Margin Profit" have p-values less than 5% being significant. A 1% increase in "Return on Equity" contributes to 3% in the dependent variable ROA (Table 9).

**Table 9. Results from the Hausman Taylor Regression model**

| Dependent variable ROA (Return on assets) | Hausman Taylor (Model 4) | Banks with domestic capital in Kosovo | Banks with foreign capital in Kosovo |
|-----------------------------------------|-------------------------|-------------------------------------|-------------------------------------|
| Independent variables:                  | Coefficients | Probability | Coefficients | Probability |
| Constant ($\beta_o$)                    | .2148722    | 0.816       | -6.738801    | 0.000       |
| ROE                                     | .0333685    | 0.000       | .0259147     | 0.001       |
| NS/NA                                   | -.1294995   | 0.884       | 5.616225     | 0.000       |
| MP                                      | .0401184    | 0.000       | .0572927     | 0.000       |
| CODE                                    | -.0333792   | 0.691       | .056136      | 0.089       |

**Source:** Authors' calculations (2019).
A 1% increase in the independent variable "Margin Profit" affects by 4% in the dependent variable ROA. While in foreign equity banks, the variables used in this article have p-values less than 5% so, they are significant. A 1% increase in the independent variable "Return on Equity" affects by 2% the dependent variable ROA. A 1% increase in the independent variable "Net sales to net assets" contributes to 5.61% in ROA. Also, 1% increase in the independent variable "Margin Profit" contributes a 5% increase in ROA (Table 9).

Model 5 (GMM Model): From the GMM model outcomes in domestic capital banks show that the independent variables "Return on Equity" and "Margin Profit" have p-values less than 5%, so statistically significant. A 1% increase in the independent variable "Return on Equity" affects the growth of the dependent variable ROA by 3%, and 1% increase of the independent variable "Margin Profit" affects by 3% the dependent variables ROA. With respect to other variable "Net sales to net assets" this variable has p-value greater than 5% so it is not significant (Table 10).

| Dependent variable ROA (Return on assets) | GMM Model (Model 5) |
|-------------------------------------------|---------------------|
| Banks with domestic capital in Kosovo     | Banks with foreign capital in Kosovo |
| Independent variables:                   | Coefficients | Probability | Coefficients | Probability |
| Constant ($\beta_0$)                     | 0            | 0           | 0            | 0           |
| ROA                                       | .0211716     | 0.669       | .2488269     | 0.000       |
| ROE                                       | .0387723     | 0.003       | .0340204     | 0.000       |
| NS/NA                                     | -.4505417    | 0.731       | 3.824598     | 0.000       |
| MP                                        | .0346721     | 0.001       | .0446618     | 0.000       |
| CODE                                      | .4276455     | 0.717       | -1.025328    | 0.000       |

Source: Authors’ calculations (2019).

Concerning this model with foreign capital banks, we see that all variables used in this article have p-values less than 5% being significant, 1% increase of the independent variable "Return on Equity" will affect by 3% the dependent variable ROA, while 1% increase in the independent variable "Net sales to net assets" will affect by 3.82% the dependent variable ROA. Also 1% increase in the independent variable "Margin Profit" will affect by 4% increase the dependent variable ROA (Table 10). Out of all the models analyzed in this paper, we find that the independent variable "Net sales of net assets" has a p-value more than 5% in domestic banks and is not significant due to the small number of local banks that operate in Kosovo.

5. Conclusion

Based on the results obtained from data analysis in all the above-mentioned models we note that the independent variable "Margin profit" has an impact on the dependent variable ROA for about 1% higher for the foreign capital banks than to those with
local capital. Since the country of Kosovo is a developing country then the research hypothesis as has been set at the beginning of this study has been approved.

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