Evaluating The Performance of the Commercial Banks In Georgia

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Abstract

Banking sector is the most important component of financial system. Development of banking system contributes to the stability and sustainable economic growth. While banks determine policies for profit maximization, they should make efforts to create liquidity and security margins to minimize risk. Therefore, determination of factors affecting the profitability of banks is an important issue in order to identify their policies applied. This study investigates the impact of bank-specific and macroeconomic determinants on profitability of 14 private and commercial banks in Georgia where banks tend to be largest part of financial system with free market system and liberalization policies as in other transition economies for 2009-2013 period by panel data analysis. Return on asset (ROA), return on equity (ROE) and net interest margin (NIM) that have been widely used in the earlier literature as profitability measures were employed. The results indicate that the most important bank-specific determinants are net loans, nonperforming loans and capital adequacy ratio. The other bank specific determinants, asset size and credit to deposit ratio have statistically insignificant impact on profitability of the banks. On the other hand, while one of two macroeconomic determinants of profitability, money supply (M2), has positive significant impact at 10% significance level, other macroeconomic determinant, inflation rate, has insignificant impact on profitability performance levels of the banks included in the study.

Keywords: Georgia, bank profitability, panel data analysis, commercial banks

1.   Introduction

The growth of the financial sector has undoubtedly been the most important impact on the success of any country's economy for many years. The incidents occurred in financial sector have become affected not only to own situation, but also on the entire economic system after a while. While the ongoing free market system and capitalism in all over the world have led new actors to enter into finance world with the globalization, they have given rise to the deep crises in the banking which is backbone of the financial sector, particularly, in the developing countries where required infrastructure and political environment have not been ready yet. Therefore, many countries have to devote a large portion of the national income to pay the crisis bill and growth rate in these countries has been negatively influenced. This dynamic situation has also affected Georgia which gained independence after the collapse of Soviet Union and establishments of all institutions and organizations of free market economy have been accelerated in the last fifteen years. In developing countries like Georgia, banks play a major role in financial development. Banking issues have usually dominated the reform agenda in transition economies because banks tend to be largest part of financial system in most transition economies and banks were only financial institution in the past. Georgia had two alternatives; first one was building a banking system, and second was creation of a new banking system. Georgia preferred the second route (Mercan, 2006).

Banking reform in Georgia started in the late 1980s when the country was still a part of the Soviet Union, but substantive changes occurred only after the country gained independence. In 1991 a two-tier banking system was introduced when the Gosbank branch in Georgia became the National Bank of Georgia (NBG) and the five state-owned specialized banks (Eximbank, Sberbank, Agroprombank, Promstroibank and Zhilsotsbank) were privatized (Amaghlobeli et al, 2010). The banking system in Georgia was in complete chaos in 1994. Assets were emaciated, bad loans were prominent in bank portfolios, public confidence was devastated and banks were subject to no real supervision. The country experienced full-scale disintermediation that left banks without attractive investment opportunities and little to invest. On top of all these, banks were often poorly managed and corrupted (Mercan, 2006).

Reforms in the banking system of Georgia were urgent. This process was launched mainly based on the assistance of the International Monetary Fund, World Bank, European Bank of Reconstruction and Development and other international financial institutions. The measures taken by the NBG aimed at recovery of general

macroeconomic stabilization, tightening banking system regulation, restructuring ex-state banks and further their privatization. The Parliament of Georgia adopted Organic Law of Georgia On the National Bank of Georgia on June 23 1995 and in February 1996, legislated Law On Activities of the Commercial Banks which strengthened the independence of the NBG and granted it more authority to suspend licensing of the banking activities to those organizations that failed to meet prudential norms The bank supervision policy of the NBG was based on the 25 Key Principles of Efficient Banking Supervision developed by Basel Committee of Banking Supervision recognized by the whole world. Furthermore, new rules and procedures to regulate banking activities were introduced that envisaged creation of a new system of assets classification to precisely identify credit risks, to bring external and internal auditing in order and to differentiate conflict of interests in the banking activities. As a result of aforementioned changes, the number of commercial banks in Georgia reduced by 173 units only during three years (1994-1997) (Georgian Banking System Development Strategy for 2006-2009) .

In 1998 and 1999 the effect of the currency financial crisis in Georgia was very significant. The Georgian currency was permanently and sharply devaluated. Large number of small banks collapsed during the financial crisis. Many of them had significant outstanding debts, but this weakness could not touch the whole banking sector. In 1998 more than 150 banks had deprived licensee. But take into account that more than 80% of the clients 'deposits was sound and secure, the banking system crisis only spread out over Georgia (Gelaschwili and Nastansky, 2009). Russian-Georgian war in 2008 and global financial crisis in 2008/2009 forced economic growth down even turned into economic shrinkage. These events were impediments for foreign investment entries to Georgia and banking sector was negatively influenced from this tension. Individuals withdrawn their savings and deposits from the banks and credit extension was slowdown rapidly. To avoid a crisis and to let the banks to satisfy the claims of the customers smoothly, the required reserves of commercial banks were reduced from 13% to 5 % in November 2008. The objective behind was to stimulate the national economy, rather than to implement the strict monetary policy measures (Gelaschwili and Nastansky, 2009). However, Georgia succeeded to minimize the losses of financial crisis and the war against Russia by reducing the number of commercial banks, returning public banks to private banks, improving bank services, applying auditing policies and procedures consistent with international standards into practice, rising quality standards, establishing reliable competitive environment (Alsırt, 2009). So, there was no commercial bank in Georgia fell into state of insolvency.

Today, the banking system in Georgia is consistent with modern banking rules and free market conditions. Moreover, there is an intensive competition in gaining a share of the growing financial market and the entry of new banks to the Georgian banking sector contributes to the development of competitions for innovations and introductions of new bank products in the market.

The goal in this study is to analyze the impacts of bank-specific and macroeconomic determinants on the profitability of commercial banks in the Georgian banking system. In this way, this investigation will call attention to the factors that maintain profitability and efficiency of the banking system. The bank-specific determinants of profitability that will be examined consist of ratio of total loans to total assets nonperforming loans to total loans, bank's asset size and credit to deposit ratio. As for the macroeconomic determinants, we will evaluate the impact of money supply (M2) and inflation rate. The remainder of the paper is organized as follows: subsequently, section two presents revision of the relevant literature. Section three examines performance of Georgian banking system in the period of 2009-2013. Section four expresses definition of performance criterion, bank-specific and macroeconomic determinants of profitability used in this study. Finally, section five presents methodology and findings and concludes.

2. Literature Review

When we look at literature about the profitability of banks, it is seen that some researchers applied the profitability analyses on various banks of different countries and some of them focused on banks of a single country, to investigate the profitability and performance values using different methods and approaches. Demirgüç-Kunt and Huizinga (1999) studied 80 countries in the years 1988-1995 and they reported that banks which have higher capital intensity also have greater return margin and banks are less profitable in the countries where sector intensity is very high. Their research revealed that the banks with foreign capital are more profitable in the developing countries and there is a positive relationship between inflation and profitability. The same researchers (2000) proved in the other study that the bank profitability is less in the countries where the development of stock markets is weak.

Naceur (2003) examined the impact of bank's characteristics, financial structure and macroeconomic indicators

on bank's net interest margins and profitability in the Tunisian banking industry for 1980-2000 period. Researcher found that while macroeconomic indicators, such as inflation and growth rate have no impact on net interest margin and profitability of Tunisian banks, stock market development has a positive effect on bank profitability and size has mostly negative effect on the net interest margins.

Taşkın (2011) analyzed the macroeconomic and bank specific determinants of bank performance in Turkish banking industry for 1995-2009 period. Performance factors used in this study were return on assets, return on equity and net interest margin. Findings obtained from the study shown that bank performance is mostly affected by bank-specific factors, but macroeconomic factors do not have statistically significant effects on the performance. 2001 crisis lived in Turkey has negative effect on the performance of the banking system.

Tan and Floros (2012) evaluated the determinants of bank profitability in China using the data of 101 banks in the years 2003-2009 by means of two step generalized methods of moments (GMM) estimators. Empirical results exhibited that there is a positive relationship between bank profitability, cost efficiency, banking sector development, stock market development and inflation in China. The authors reported that low profitability can be explained by higher volume of non-traditional activity and higher taxation and confirmed that there is a competitive environment in the Chinese banking industry.

Safarli and Gumush (2012) in their paper used CAMELS performance rating system and panel data analysis for examining the relationship between performance of Azerbaijan banking system and macroeconomic factors in the period of 2003-2008. Their empirical results indicated that performance of banks decreased from 2005 to 2008, and inflation and GDP are negative related with performance of banking system. Thagunna and Poudel (2013) developed a performance model for measuring relative efficiency and potential improvement capabilities of Nepali Banks. They used data envelopment analysis (DEA) in period of 2007-08 and 2010-11. They found that both the ownership type and the asset size of a bank don't affect its efficiency.

Obeidat et al (2013) analyzed the most important internal and external variables that contributed toward the profitability of the Islamic banks in Jordan over the period 1997- 2006 employing robust for various regression models. Findings obtained from the study shown that the most important internal determinants of profitability are total deposit, cost of deposits, total expenditures, Mudaraba loans and restricted investment deposits, the main external determinants are the money supply and market share. Baltacı (2014) investigated the relationship between the profitability of Turkish banks in the sector and macro-economic variables using the sectorial data of 31 banks in period of 2001-2011. As a result of his analysis, a positive relationship between bank profitability, inflation and indicators of crisis has been found.

Helhel and Varshalomidze (2014) used CAMELS rating system to evaluate the performance and efficiency of the Georgian banking sector. In this study, six domestic private commercial banks for the period 2007 to 2013 were analyzed using eighteen financial ratios. It was emerged that after the war with Russia and economic crises during 2008-2009 period, none of the banks involved in this research could obtain an improvement in terms of each component and provide an improvement in their performance.

3. Georgian Banking Sector

The privatization of the banking system had already begun in 1994. The commercial banks had been established as state banks before special laws on commercial banks were enacted. These were difficult years. The lack of regulation and supervision, absence of professional administrators and low capital requirements facilitated the process of the foundation of new private banks. State owned banks were turned into joint stock companies. There were about 226 banks in Georgia at the end of 1995.In that year the NBG (National Bank of Georgia) and the government had constituted a number of policies to ensure development and effectiveness of banking system. As a result of NBG tightening policies, the number of commercial bank had dropped to 26 at the beginning of 2002.The financial structure of the banking system had changed dramatically to comply with minimum capital requirements.

Nowadays the Georgian banking system consists of 21 commercial banks (in the year of 2010/2012 it had been 19). 17 of them were founded under the participation of foreign financial institutions. If we look at the profitability of the banking system in Georgia taking the ratio of ROA, ROE and NIM into consideration banking sector has positively drawn a line as seen in Figure 1. The 2008-2009 economic crisis and the war against Russia led to deterioration of banking loan quality, increase in provision for loan losses. At the same time, rise in the costs incurred to attract deposits and high proportion of liquid assets negatively affected the banking

sector's profitability. The situation was reversed at the beginning of 2010. The provision cost for loan losses went down and banks experienced faster credit than liquid assets growth, so the profitability of the banking system increased in 2010 and 2011 (Annual Report 2010). The most important reasons were improvement in asset quality that covered the amount of potential losses stemmed from decreasing interest rates, positive change in structure of liquid assets and increased efficiency of bank expenses that dropped the expense-to-revenue ratio, also expansion of the total credit portfolio (Annual Report 2011). The banking system remained profitable in 2012, but profitability had declined compared to the previous year. The decline in profitability in 2012 compared to the previous year was due to several factors such as an increase of loan loss reserves, a slowdown of loan portfolio growth and increase of provision expenses and deterioration of loan quality (Annual Report 2012). The profitability of the banking system in 2013 was positively affected not only by the dynamics of loan loss reserves, but also by the growth of assets and subsequent increase in effectiveness due to economies of scale.
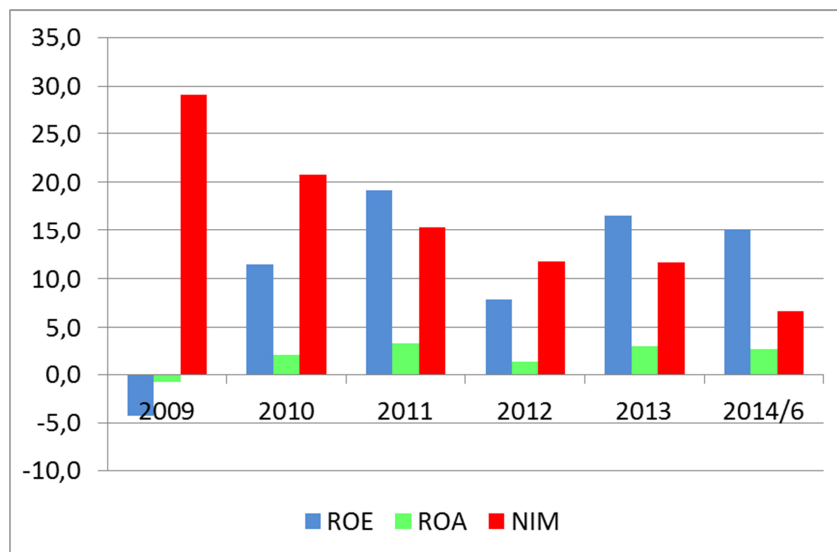

Figure 1. The Profitability of The Banking System in Georgia

Figure 2 shows the Tier 1 Capital that is one of two capital adequacy measurements. The banking system in Georgia has been adequately capitalized with respect to the required minimum level according to Basel I and NBG's capital requirements.
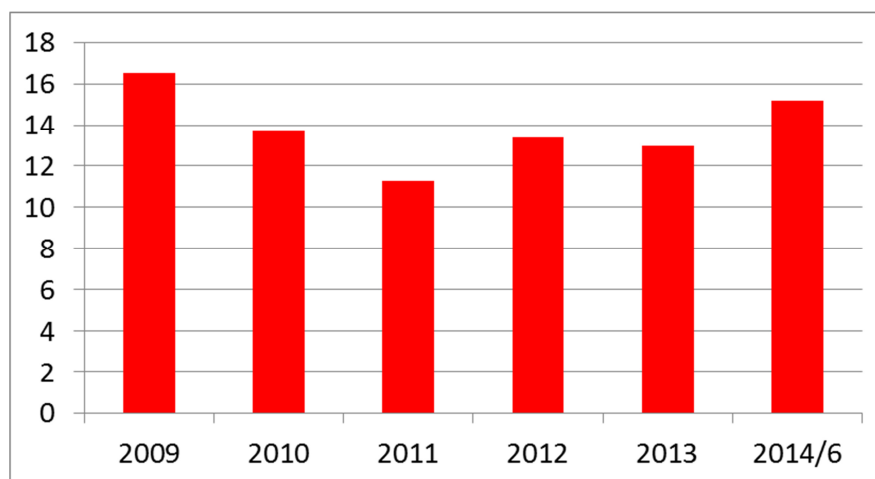

Figure 2. Tier 1 Capital

As shown in Figure 3, the revitalization of the banking sector is reflected in the fact that the share of non-performing loans in the total portfolio decreased from 17.9 % in 2009 to 12.5 % in 2010. After the recovery of the system in 2010, the tendency of improving portfolio quality continued in 2011. The share of non-performing loans in the total portfolio dropped to 8.6% at the end of 2011. It increased insignificantly in 2012 amounting to 9.3% in parallel with banking sector profitability shrinkage compared to the previous year, which is mainly explained by an increase in loan loss reserves. It can also be noted that the relative improvement of non-

performing loans in 2013 was observed due to growth of the portfolio, stability of the exchange rate and reduction of interest rates, which rendered debt services easier for many borrowers (Annual Report 2013).
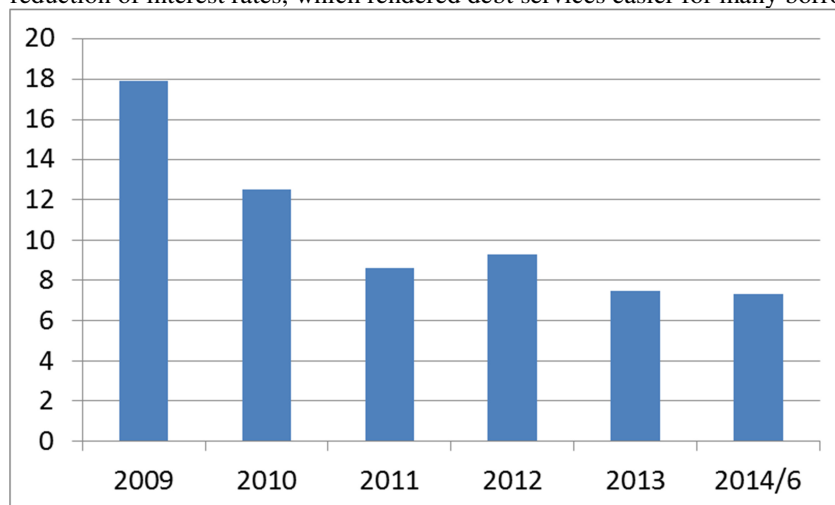

Figure 3. Non-performing Loans to Total Gross Loans

During the years 2009-2013 the ratio of deposits, assets and loans to GDP increased continuously due to economic upturn as seen in Figure 4. Overall, it can be said that the banking system overcame adverse effects of the 2008 economic shocks and the subsequent 2009 recession. Thus, these indicators, which belong to the important signs of financial sector development, demonstrate how much the financial and the real sector of economy are integrated. The high scale of integration of banking into the economy can be described by adequate public confidence, progressive economic development and formal economy.
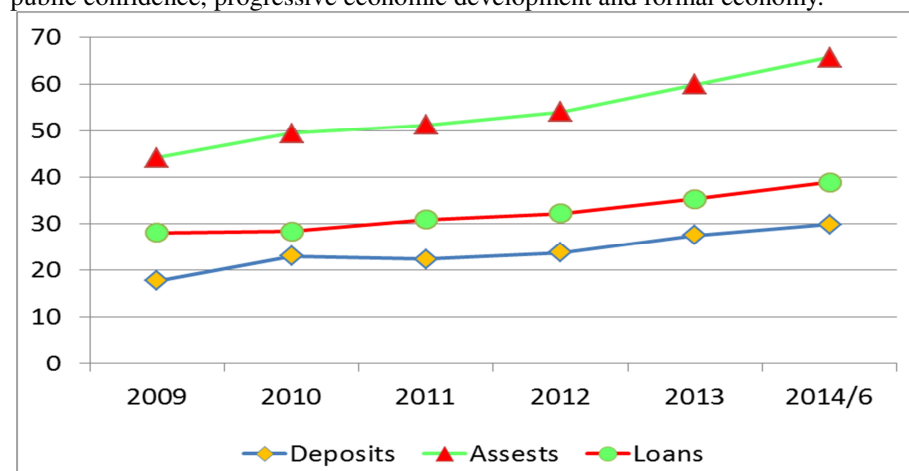

Figure 4. Share of Monetary Aggregates of Commercial Banks in GDP(%).

4. Performance Criterion and Their Determinants

Ability to support the present and future operations of a bank depends on the quality of its earnings and profitability profile, in absorbing losses through strengthening of capital base and adequate payments of dividends to its shareholders (Shar et al 2011). In this study, the position of profitability has been measured with the means of return on asset (ROA), return on equity (ROE) and net interest margin (NIM). Return on asset (ROA) is a comprehensive measure of overall bank performance from an accounting perspective (Jha and Hui, 2012). This ratio measures the ability of a bank management to generate income by utilizing company assets at their disposal. In other words, it shows how efficiently the resources of the company are used to generate the income. It further indicates the efficiency of a company management in generating net income from all the resources of the institution (Ally, 2013).

The other performance criterion, return on equity (ROE), is a central measure of banking industry, which is used to allocate capital inside and across divisions. It is defined as the ratio of pre-tax profit to equity. ROE is not only the main measure of bank performance, but also it drives the allocation of resources across and inside bank divisions (Moussu, 2013).

The interest paid to depositor and the interest received from borrower creates a spread called interest margin on banks, since they pay lower interest to the depositors and receive higher interest from borrowers as usual. In this sense, net interest margin is the difference between interest earned and interest expended by a bank divided by its total assets (Tarus et al 2012). Net interest margin is determined by some variables such as special or general public financial sector policies, financial liberalization and innovation, taxation (direct/indirect), non-price mechanisms, the weight of public sector in financial system, the conditions for free entry to financial market and free exit from financial market (Kaya 2001).

This study analyzes the determinants of return on asset, return on equity and net interest margin one by one.

Bank Specific Determinants

The ratios derived from balance sheet and income statement of commercial banks have been used as bank specific determinants of profitability. These ratios are as follows:

Nonperforming Loans Rate (NPL)

Nonperforming loans are loans that do not produce income for the bank that owns them. Loans become nonperforming when borrowers stop making payments and the loans have been default over 90 days. This ratio indicates how much of it isn't repaid to bank. A larger (or increasing) NPL ratio means poor asset quality and more risk for loan portfolio.

Net Loans Rate (NLTA)

It measures total loans outstanding as a percentage of total assets. In general, as long as the deposits converted into loans, net interest margin and profitability rise further. However, a bank may be exposed to higher defaults with higher ratio and the profitability of it is expected to fall down.

Capital Adequacy Ratio (CAR)

Capital adequacy ratio is a measure of the amount of a bank's capital expressed as a percentage of its weighted credit risk exposure. An international standard which recommends minimum capital adequacy ratio has been developed to ensure banks can absorb a reasonable level of losses before becoming insolvent (Reserve Bank of New Zealand, 2007). This ratio ensures that the banks do not expand their business volume without having adequate capital. Thus, it protects depositors and provides the efficiency of the financial system.

Asset Size (BATA)

Asset size of a bank is one of the important determinants of performance. The reason of this is that asset size reduces the cost and process time of information collected in the economies of scale (Ata, 2009).

Credit to Deposit Ratio (CRDP)

It indicates how much of a bank's core funds have been used for lending which the main banking activity is. This ratio is the first indicator of the healthy bank. A very low ratio indicates that banks do not make use of their resources efficiently. If the ratio is above a certain level, it indicates a pressure on resources (Nayak, 2012). In addition, a high level of ratio may also drop a hint about capital adequacy issues forcing banks to increase their capital in order to prevent asset-liability mismatches.

Macroeconomic Determinants

The structure of the financial markets, economic situation of the countries, political & legal reforms could be affective on performance of banks. In this study, annual inflation rate and M2 money supply growth have been used as macroeconomic determinants of profitability. These ratios are as follows:

Inflation Rate (INF)

Inflation which is very important in the country's economy could affect both of cost and profitability of the banks. Guru et al.(2002) found that there is a positive relationship between bank profitability and inflation rate. Perry (1992), nonetheless, revealed that the impact of inflation on banking performance depends on whether inflation is anticipated or unanticipated. If inflation is fully anticipated and interest rates are adjusted accordingly, a positive impact on profitability will be seen. If unexpected raises in inflation occur, it leads to cash flow difficulties for borrowers which can yield to premature termination of loan arrangements and speed up loan losses.

M2 (Money Supply)
Money supply indicates the amount of money available in the financial market and its amount depends on monetary policy pursued. Obeidat et al (2013) revealed that money supply (M2) has a significant positive impact on the banks' profitability levels. This study employed for the Islamic banks in Jordan is also consistent with the study of Mamatzakis and Remoundos (2003). Their study proved that there is positive impact of money supply (M2YRF) on profitability of banks.

5. Methodology and Empirical Analysis

The purpose of this study is to evaluate the factors affecting the performance of the Georgian commercial banks. Since data are not available for all banks through the years, the study embraces fourteen commercial banks which were established before 2009 and can be acquired data and Data used in investigation have been mainly obtained from the financial indices of commercial banks published by National Bank of Georgia and yearly economic survey. Panel data method that combines horizontal cross section and time series analysis was used to test the significance of variables on the performance of Georgian commercial banks. The profitability ratios (ROA and ROE) and net interest margin ratio (NIM) demonstrating efficiency of the banking system have been assumed as dependent variables while non-performing loan ratio (NPL), capital adequacy ratio (CAR), net loans to total asset (NLTA), bank asset to total banking sector asset (BATA), credit to deposit ratio (CRDP), annual inflation rate (INF) and money supply (M2) have been independent variables.

The performance of Georgian banks with the panel data that includes 14 banks from 2009 to 2013 has been measured according to the Equation 1 based on study of Demirgüc-Kunt and Huizanga (2000).

$$BP_{i,j} = f(makro_t, Bank_{i,t}) + \varepsilon_{i,t} \tag{1}$$

where

$BP_{i,t}$; i bank's performance in year t

$makro_t$; Macroeconomic variables in year t

$Bank_{i,t}$; i bank's specific variables in year t

ε_{it} ; idiosyncratic error term

Other macroeconomic factors such as growth rate (GDP), 12 month treasury bill interest rate (INT) couldn't be included due to multicollinearity problem of them with the macroeconomic independent variables (INF and M2) involved in the study. Table 1 shows descriptive statistics of all ratios used in the study. The mean value of ROE, ROA and NIM, profitability indicators of all banks, are 2.6%, 0.2% and 7.3% respectively during the period of 2009-2013. Minimum values of profitability indicators (ROE, ROA and NIM) were observed during the 2008-2009 global crises and the war with Russia. The mean value of capital adequacy ratio that embodies financial power for shock absorption and credit activity is above the minimum requirements determined by Basel I, even the banking sector remained adequately capitalized in 2009. The share of non-performing loans in the total portfolio decreased significantly after the economic recession of 2009, equals to the 37.4% on average.

Table 1 Descriptive Variables

	ROE	ROA	NIM	NPL	CAR	NLTA	BATA	CRDP
Mean	0.026	0.002	0.073	0.374	0.279	0.561	0.115	2.482
Median	0.073	0.016	0.055	0.457	0.177	0.591	0.026	1.105
Maximum	0.284	0.120	0.880	0.758	2.770	0.816	3.277	52
Minimum	-0.555	-0.164	-0.172	0.003	0.009	0.011	0.001	0.268
Std. Dev.	0.169	0.041	0.109	0.251	0.398	0.159	0.397	6.265

The correlation matrix that describes correlation among the independent variables is shown in Table 2. The correlation coefficients reveal the relations and also manifest the high multicollinearity problems that may occur among the variables used in the model. In this respect, if there is high correlation (+- 0.90 and higher) among variables, they cannot have been estimated in the same equation. They must take in different equations. As can be seen in Table 2, there isn't any multicollinearity among independent variables. These values imply that independent variables can contribute to an estimation of the dependent variables.

Table 2 Correlation Matrix

	ROE	ROA	NIM	NPL	CAR	NLTA	BATA	CRDP	INF	M2
ROE	1.00									
ROA	0.86	1.00								
NIM	0.31	0.38	1.00							
NPL	0.01	0.01	-0.01	1.00						
CAR	-0.19	-0.46	-0.01	-0.16	1.00					
NLTA	0.43	0.44	0.23	0.29	-0.49	1.00				
BATA	-0.03	-0.15	-0.06	-0.05	0.37	-0.18	1.00			
CRDP	-0.02	-0.01	0.14	-0.15	0.01	0.21	-0.06	1.00		
INF	-0.09	-0.13	0.06	-0.02	0.03	0.14	0.11	-0.07	1.00	
M2	0.33	0.36	-0.06	0.09	-0.18	0.29	-0.08	-0.15	-0.40	1.00

In this study, we developed panel data using fixed effect and random effect model. The third panel data analysis, pooled regression model, was not applied due to the ignorance of heterogeneity that may exist among fourteen banks included in this study. The fixed effect model approves heterogeneity among fourteen banks by allowing having its own intercept value. It controls for all time-invariant differences among the banks, so the estimated coefficients of the fixed effect models cannot be biased because of omitted time-invariant characteristics. In random effect model, the variation across banks is assumed to be random and uncorrelated with the independent variables included in the model (Reyna, 2007). If we have reason to think that differences across banks have some impacts on our dependent variables, we should use random effects. The most important advantage of random effects is that time invariant variables are included. On the other hand, the intercept absorbs these invariant variables.

Haussmann test is applied to decide either fixed affects model or random affects model to be used. The null hypothesis is that random effect model is appropriate, and the alternative hypothesis is that fixed effect model is appropriate. Results of the Haussmann Test are presented in Table 3.

Table 3: Results of Haussmann Test

Cross Section Random	Chi-Sq-Std	Chi-Sq-Df	Probability
ROE	0.978073	7	0.9643
ROA	1.254.645	7	0.9896
NIM	2.077.945	7	0.9554

As can be seen from Table 3, the probability value of all dependent variables are greater than 0.05 (significance level). This means that we cannot reject null hypothesis, rather we accept null hypothesis. In other words, random effect model is appropriate for each three dependent variables. So, we estimate random effect model. The results of random effect model are shown in Table 4.

Table 4: Performance Determinants of Banks

	Dependent Variables								
	ROE			ROA			NIM		
	Coefficient	t-stat	p-value	Coefficient	t-stat	p-value	Coefficient	t-stat	p-value
NPL	-0.095	-0.951	0.345	-0.424	-1.266	0.033**	-0.033	-0.558	0.578
CAR	0.021	0.331	0.742	-0.332	2.338	0.018**	0.045	1.045	0.299
NLTA	0.488	2.927	0.048**	0.574	2.056	0.036**	0.242	2.149	0.035**
BATA	0.010	0.204	0.839	0.003	0.262	0.786	-0.021	-0.571	0.569
CRDP	-0.002	-0.726	0.471	-0.001	-0.442	0.648	0.001	0.220	0.826
INF	0.219	0.438	0.662	-0.001	-0.009	0.992	0.207	0.542	0.589
M2	0.235	1.719	0.090*	0.1899	1.782	0.079*	-0.010	-0.661	0.508
C	-0.570	-1.017	0.313	-0.052	-0.386	0.701	-0.237	-0.556	0.580

**,

* significant level at %5 and %10, respectively

R-Squared	0.641	0.556	0.502
Adjusted R-Squared	0.426	0.402	0.386
S.E of regression	0.145	0.035	0.109
F-statistics	2.865	1.014	1.014
Durbin Watson Stat.	2.192	2.274	3.252

The results show that the ratio of net loans to total assets seems to be statistically significant determinant of ROE, ROA and NIM at 5% level. Their relationship with NLTA is positive. That means 0.488-point, 0.074 and 0.242 increase in NLTA will result in an increase of 1 point of ROE, ROA and NIM, respectively. This result is not consistent with Obeidat, et al (2013). They proved that the impact of net loan to total asset ratio on Islamic banks' profitability (ROA) is statistically insignificant. On the other hand, a significant positive relationship between NIM and NLTA was supported by Hawtrey and Liang (2008). The main indication of this finding is that the higher loan ratio makes the Georgian banks more profitable. In addition, as banks increase in volume of lending, they may prefer to increase interest margin to avoid risk.

As for the nonperforming loans ratio, it is negatively significant with ROA at 5% level, but seems to be statistically insignificant with ROE and NIM. Concerning ROA and nonperforming loans ratio, our result is consistent with Baltaci (2014) and Srairi (2010). On the other hand, our finding, insignificant relation between this measure and the other determinants of profitability, ROE and NIM is inconsistent with those of Taskın (2011) who found significant impact of this variable on NIM and ROE. This means that Georgian commercial banks, which failed to monitor their credit loans, tend to be less profitable due to poor asset quality.

Table 4 shows that capital adequacy ratio (CAR) is negatively significant with ROA at 5% level while this ratio is insignificant impact on ROE and NIM. It is clear that as bank capital increases, rate of revenue obtained from capital decline. Thus, improper calculation of weighted risk exposure made CAR to be negatively correlated with ROA. The finding about negative relationship between CAR and ROA supports the study of Jha and Hui (2012). In the same study, Jha and Hui (2012) also reported significant positive relationship between CAR and ROE, which contradicts the finding of our study.

As for the impact of money supply growth (M2), it seems to be statistically positive significant determinant of ROE and ROA at 10% level. This result is inconsistent with findings of Ata (2009) who found significant negative impact for this variable on ROA, but falls into line with Obeidat et al (2013) who found that there is a significant and positive relationship between M2 and ROA.

To summarize our findings: bank specific determinants of profitability for commercial banking in Georgia were found that they are net loans, nonperforming loans and capital adequacy ratio. The other bank specific determinants, asset size and credit to deposit ratio have statistically insignificant impact on profitability of banks. One of two macroeconomic determinants of profitability included in this study, money supply (M2) had statistically positive impact at 10% significance level, the other variable, and namely inflation rate had statistically insignificant impact on profitability. Some of the studies which were carried out in the literature are inconsistent with some of our findings such as studies of Ata (2009), Safarli and Gumush (2012), Baltaci(2014), Tan and Floros (2012) and Naceur (2003). Ata (2009) found that as credit to deposit ratio and bank size increase, profitability rate is affected positively. Safarli and Gumush (2012) found in their study that inflation rate is negatively related with performance of banking system. Naceur (2003) found that there is insignificant relationship between inflation and NIM and bank size has mostly negative effect on the NIM.

Conclusion
The banking system in Georgia has been in the process of recovery and self-renewal after the Russian-Georgian war in 2008 and the global financial crisis in 2008/2009. The enrichment of financial and operational structure of the banking system, permanent efficiency and competitiveness have been intended as part of the restructuring program. Therefore, the evaluations of efficiency and profitability of banking system become important. In this study, the bank-specific and macroeconomic determinants of banking system profitability in Georgia were studied and searched taking earlier literature with the aim of identifying these determinants that impact the profitability of commercial banks over the period 2009-2013. Data of 14 private and commercial banks were gathered from financial statements and annual reports of banks. Panel data analysis was employed using fixed and random effect model. It was found that random effect model is appropriate for each three dependent

variables that are ROA, ROE and NIM by means of Haussman test. Our results show that the most important bank-specific determinants were net loans, nonperforming loans and capital adequacy ratio. In particular, the ratio of net loans to total assets was positively significant determinant of all dependent variables at a significance level of 5%. On the other hand, nonperforming loans and capital adequacy ratio were negatively significant with ROA at a level of 5%, but statistically insignificant with ROE and NIM. Bank specific other determinants such as asset size and credit to deposit ratio, were statistically insignificant impact on profitability of Georgian commercial banks.

As for the macroeconomic determinants of profitability of Georgian banks in the scope of our study, our findings demonstrate that money supply (M2) has positive significant impact on the profitability performance levels of the banks at 10% significance level included in the study. Other macroeconomic determinant, inflation rate, has insignificant impact on profitability. There were some limitations that affect the results of analysis and constrain the generalization of the findings. First, all banks in Georgia were not included in this study due to data unavailability. Second, study covers only the period 2009-2013. If data were available for earlier years, results would have been more generalized and sufficient. Third, the results obtained from the study are limited in terms of methodology using panel data model. This research recommends policy makers and bank stakeholders to consider the effects of these variables when promoting various administrative, operational and investment strategy.

The extended part of this study is being held in order to compare the financial performances of domestic and foreign capital banks in Georgia. Additionally, authors aim to analyze the period before and after the crisis to make comparison of Georgian banking system. Meanwhile, near future aim is comparing the performance of Georgian banking system with other transition countries located in Central and Eastern Europe. Different analyses are also going to be applied to cross check the results.

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