Determinants of Commercial Bank performance in Zimbabwe

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Essay submitted partial fulfilment of the requirements **MPF_AFIN** Finance (Basics)

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MASARYK UNIVERSITY

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October 2015

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1.1 INTRODUCTION

Commercial banks in Zimbabwe play a critical intermediation role of transferring funds from the surplus units to deficit units. Therefore monitoring their performance and factors that influence the performance of commercial banks is of paramount importance for policy formulation and thus to the economy of Zimbabwe. The purpose of this short essay is to determine the factors that affect commercial bank performance in Zimbabwe and to achieve this purpose, a short overview of commercial banks in Zimbabwe is given, then commercial bank performance was measured using three measures (return on asset, return on equity and net interest margin), and then factors that influence performance are elaborated. Lastly to determine the relationship between commercial bank performance and the factors, a pooled ordinary square regression model was done using GRETL.

1.2 OVERVIEW OF COMMERCIAL BANK IN ZIMBABWE

They are thirteen (13) commercial banks in Zimbabwe which are governed by Companies Act [Chapter 24:03] and Banking Act of Zimbabwe [Chapter 24:20]. Table 1 shows the commercial banks in Zimbabwe as of 2015 and the year they were founded, whether listed or not listed on Zimbabwe Stock Exchange and their ownership structure. According to Reserve Bank Zimbabwe (2013), 54% of commercial banks are owned by foreigners, 31% are owned by locals and 15% are owned by the government. Out of 13 commercial banks in Zimbabwe, five (5) of them listed on Zimbabwe stock exchange.

Table 1 Commercial Bank in Zimbabwe in 2015

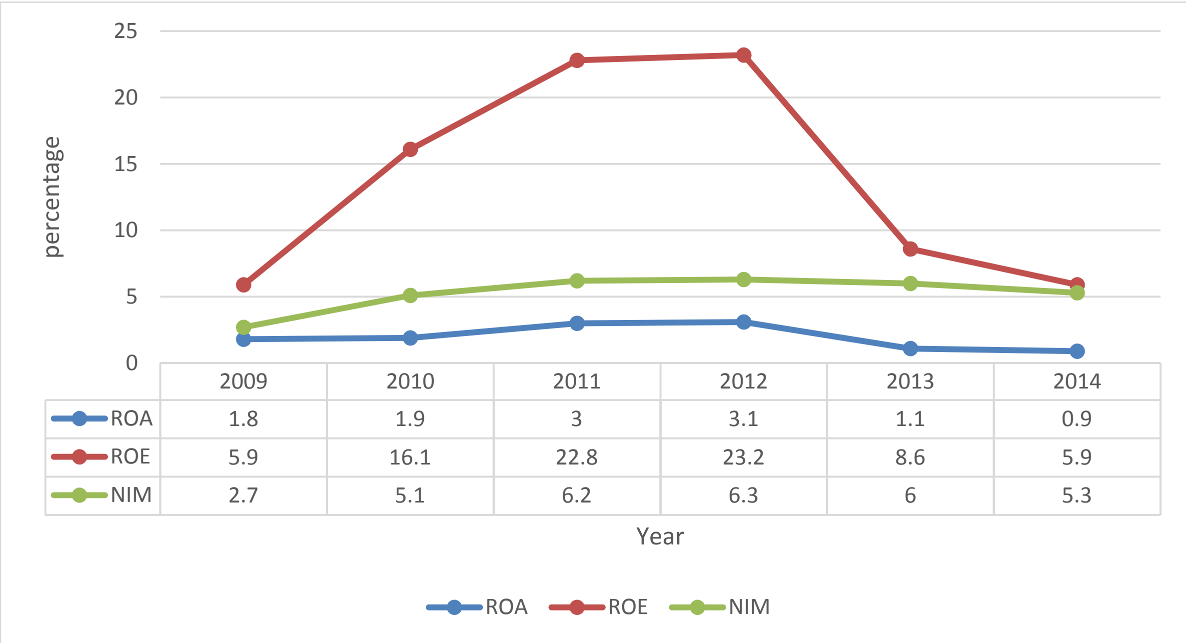
Commercial Banks		Founded	ZSE	Ownership structure
1	Agribank	1999	No	Significant government shareholding
2	Banc ABC	1997	No	Significant foreign shareholding
3	Barclays Bank of Zimbabwe	1912	Yes	Significant foreign shareholding
4	CBZ Bank limited	1980	Yes	Indigenous privately owned
5	Ecobank Ecobank	2002	No	Significant foreign shareholding
6	FBC Bank Limited	1997	Yes	Indigenous privately owned
7	MBCA Bank limited	1956	No	Significant foreign shareholding
8	Metbank	1999	No	Significant foreign shareholding
9	NMB Bank Limited	1992	Yes	Indigenous privately owned
10	Stanbic Zimbabwe Limited	1992	No	Significant foreign shareholding
11	Standard chartered bank	1892	No	Significant foreign shareholding
12	Steward Bank (Previously TNB)	2009	No	Indigenous privately owned
13	ZB Bank Limited	1951	Yes	Significant government shareholding

Source: Reserve Bank Zimbabwe (2013)

1.3 COMMERCIAL BANKS PERFORMANCE

'*To understand how well a bank is doing, there is a need to start by looking at a bank's income statement, the description of the sources of income and expenses that affect the bank's profitability'* (Mishkin & Eakins 2014, p.452). Therefore in order to determine commercial bank performance in Zimbabwe, statement of comprehensive income are used, but to enable comparability with other commercial banks in other countries, commercial banks performance are further measured by calculating return on asset(ROA), return on equity (ROE) and net interest margin. In addition, economic measures such economic value added (EVA) and risk adjusted return on capital (RAROC). Market based measures of performance also used by investors to evaluate performance of commercial bank and they are four market based measures of performance which include total share return (TSR), price/earnings ratio (P/E), price to book value (P/B) and Credit Default Swap. Because of the availability of data, return on asset (ROA), return on equity (ROE) and net interest margin are the popular measures which were used to measure commercial bank performance. Table 4 in appendices shows how these ratios are calculated. The return on asset (ROA), return on equity and net interest margin from 2009 to 2014 were calculated and graphically represented as shown in Figure 1. There was an increase in ROA, ROE and NIM from 2009 to 2012 and then ROA and ROE plummeted to 1.1% and 8.6% respectively in 2013. On the other hand net interest margin remained stable throughout the years under review.

Figure 1: Commercial bank performance



Source: Annual financial statements

1.4 FACTORS THAT AFFECT COMMERCIAL BANK PERFOMANCE

According to Roman & Tomuleasa (2012); Ali et al. (2011); Kosmidou et al. (2005) and Tamimi, (2010) commercial bank performance is influenced by several factors which can be categorised as internal determinants and external determinants. Other researchers like Abdullah, Parvez and Ayreen,(2014) and Athanasoglou et al. (2005) prefer to categorise them into bank specific, industry specific and macroeconomics determinants. As shown in Table 2 bank specific factors include bank size, credit risk, diversification, management efficiency capital adequacy and liquidity. External factors can further be divided into gross domestic product (GDP), inflation and interest rates. As shown in the Table 2, these factors can have either positive or negative impact on commercial bank performance. In order to quantify these qualitative factors, financial ratios are used and 3 shows the ratios that can be used for different factors.

Table 2 External and internal determinants and proxy ratios

Factor	Proxy measure	Presumed relationship with bank profitability
Bank size	Natural logarithm of total asset	Positive or negative
Credit risk	Loan loss provision/ total Loans	Negative
Diversification	Non-interest income to total asset	Positive
Management efficiency	Cost to income ratio	Negative
Capital adequacy	Capital base/Total weighted assets	Positive or negative
Gross domestic product	GDP growth rate	Positive
Inflation	Inflation rate	Positive or negative
Interest fluctuations	interest	Positive or negative

Source: Said & Tumin (2011)

1.5 RELATIONSHIP BETWEEN PERFOMANCE AND FACTORS

In order determine the relationship between bank performance and its factors a pooled ordinary square regression model was done using GRETL. The dependent variable used was the return on asset and the factors listed on Table 1. After the pooled ordinary square regression model was run, it was found that management efficiency, credit risk, and deposit growth are negatively related to ROA. Looking at p-value, management efficiency, diversification, credit risk, capital and GDP growth rate are significantly related to ROA at 5% confidence interval and bank size, deposit growth and liquidity are not significantly related to ROA. Looking at the r squared, 63.73% of variation in the dependent variable is explained by the model.

Table 3 Pooled OLS

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
constant	-9.77	8.63	-1.13	0.26	
Management efficiency	-0.04	0.01	-3.25	0.00	***
Diversification	0.25	0.06	3.87	0.00	***
Deposit growth	-0.01	0.00	-1.65	0.10	
Credit risk	-0.32	0.12	-2.61	0.01	**
Capital adequacy	0.09	0.03	3.21	0.00	***
Liquidity	0.02	0.01	1.70	0.10	
GDP growth rate	0.18	0.06	2.98	0.00	***
Bank size	0.45	0.36	1.25	0.22	
R-squared	0.6373				
Adjusted R-squared	0.5728				

Source: Own source

1.6 SUMMARY

They are several factors that influence commercial bank performance like management efficiency, diversification, deposit growth, credit risk, capital adequacy, liquidity, competition, inflation, GDP growth rate and bank size, but after the Pooled OLS it was found out that in Zimbabwe, commercial bank performance is significantly related to management efficiency, diversification, credit risk, capital and GDP growth rate.

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APPENDICES

Table 4 Formula sheet

A	**Performance measurement**	
1	Return on asset(ROA)	$$ROA = \frac{\text{net income}}{\text{average total assets}}$$
B	**Bank specific determinants**	
1	Net interest margin(NIM)	$$\text{NIM} = \frac{\text{net interest income}}{\text{Total earning assets}}$$
2.	Capital adequacy	$$\text{CA} = \frac{total\ equity}{risk\ based\ asset}$$
3	Management efficiency	$$Expense\ ratio = \frac{Operating\ expense}{Average\ asset}$$
4	Cost funds	$$\text{CF} = \frac{Interest\ expense}{Average\ interest\ bearing\ liabilities\ and\ non\ interest\ bearing\ deposits}$$
5	Yield on earning asset (YOEA)	$$\text{YOEA} = \frac{Interest\ income}{Average\ earning\ asset}$$
6	Diversification	$$\text{Diversification} = \frac{non - interest\ income}{total\ assets}$$
7	Credit risk	$$\text{loan} - \text{loss provision to loan} = \frac{\text{Charge for impairment}}{\text{loan advance}}$$
8	Liquidity	$$\text{Liquidity} = \frac{\text{liquid asset}}{\text{total deposits}}$$