Financial Ratio Analysis -Reviewing the Financial Performance of ZANACO Bank (2013-2015)

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Abstract

This research set out to review the financial performance of ZANACO bank from the year 2013 to 2015 using financial ratios. Three (3) ratios were adopted to establish its financial soundness namely; the profitability, solvency and liquidity ratio. The liquidity ratios used were the cash ratio, quick ratio and the current ratio. The results from these ratios showed the bank was quite liquid and was able to convert its assets to cash easily as the ratios were above one (1) except the cash ratio. The profitability ratios used included the return on asset, return on equity and the net profit margin. It was discovered that though the ratios were not constant an average ratio of them showed the bank is making profits from its services. The last but not the least ratio done was the solvency ratios. The ratios were in favour of the banking meeting its long-term obligations except the debt to equity. All in all, all ratios suggested the bank was financially sound during the period 2013 to 2015.

Keywords: Financial Ratios, Financial Statements, Financial Ratio Analysis.

Introduction

Preamble

Financial ratios are used for a host of reasons ranging from analyzing the financial trends of a business over a period of time, comparing the financial performance of business to its competitors and also in helping management with making strategic decisions. The Australian Shareholders' Association (2010) defines financial ratios as tools that aid with the interpretation of results, comparison of past financial years of a business and to other business.

The four (4) main ratios utilized by businesses include; the liquidity, solvency, activity and profitability ratios. All a play unique role in establishing a certain pattern with regard to what a business wants to uncover.

Benjamin Graham is said to have been the first to popularize the theory of financial analysis (Australian Shareholders' Association, 2010). Financial analysis plays a key role in revealing the firms' strengths and weaknesses. Bajkoswki (1999) states financial analysis comprises of utilizing analytical tools and techniques on financial statements with the intent to quantify the operating and financial state of a business. The reason of undertaking an analysis depends on the users' needs.

The study of this research will be based on ZANACO bank. Zambia National Commercial Bank, which is often referred to as (ZANACO) is a licensed commercial bank established in the year 1969 (ZANACO Annual Report, 2016). The bank is located in the City of Lusaka precisely in the central business district with Arise BV of the Netherlands being the majority shareholder owning 45.59% of the bank.

Problem statement

Banks play a vital role in the financial system and economy of a country. As a key player in the financial system, banks set aside resources from savers to borrowers in an efficient way.

As such, several parties like management, owners, government, lenders, suppliers, investors, customers and the general public would be interested in the operations and financial information i.e. financial statements of the bank. The ACCOUNTINGVERSE (2018) article states that

For owners, their interest in such information would help them in making sound decisions with regard to their investment. Management on the other hand will require such information to help with strategic decisions of the bank. Lenders with that financial information of the bank in their hands will know the solvency of it. Employees too would find this information useful in the sense of that it would give an insight if the bank is able to pay salaries or not, Equipped with such information i.e. financial information, they aforementioned parties would be interested to know how stable the bank is with regard to its financial soundness and the bank strengths and weaknesses in comparison to its competitors in the same industry.

Henceforth, through the use of financial ratios and financial analysis, interested parties will be able to know how financially sound the bank is and its position in the industry in comparison to its competitors.

Aim of study

The aim of the study is analysing the financial performance of the ZANACO bank.

Objective of study

The objectives of the study are listed as follows

1. To evaluate the profitability, liquidity and solvency of ZANACO bank.

2. To study the growth trend of the ZANACO bank during the study period.

3. To recommend measures, based on the research results, to enhance further the financial execution of ZANACO bank.

4. To investigate the financial elements that could be the determinant of the current financial position of ZANACO bank.

Limitation of study

The limitations of the study include

1. Only a selected few ratios were used to determine the financial soundness of ZANACO bank.

2. A short study period of four (4) years was evaluated i.e. 2013-2015.

3. The study was limited to secondary data i.e. ZANACO annual reports.

Scope of study

This piece of study will be based on the financial statements of ZANACO bank from the year 2013-2016. The study will additionally look to analyze the financial statements by utilizing the financial ratios i.e. liquidity, solvency, activity and profitability. Not all ratios will be used with just a select few from each of the aforementioned ratios. A comparison of the financial soundness for each year will be done to determine the financial trend. A summary on the scope of study has been bulleted below for easier understanding.

1. Identify problem statement of study

2. Identify aim and objective of study

- 3. Review related literature
- 4. Collect secondary data

5. Analyze the data using the identified financial ratios

6. Provide recommendations if any

Hypothesis of the study

1. Presumed that the financial performance of ZANACO bank is similar i.e. from 2013-2015.

2. Presumed that the financial performance of ZANACO bank is not similar i.e. 2013-2015.

Research methodology

Introduction

The third chapter of the research is the methodology. This section of the study will look to achieve the set objectives set for this research. It additionally sets out the steps in which results will be achieved.

Study and research design

The research design adopted for this study was an analytical and descriptive approach. Analytical research is using information that is available to decipher, assess and evaluate material and ultimately explain its complexity.

Data collection

The data collected i.e. financial reports were acquired through secondary research on the bank's website. The financial reports were obtained from the years 2013 to 2016. The published reports were audited and scrutinized by various stakeholders.

Secondary data

The significant wellspring of information for this research was gathered through balance sheet and the income statement of ZANACO Bank of a multi-year time frame from 2013-2015. Descriptive research is utilized in this research since it will guarantee the minimization of inclination and boost of unwavering quality of information gathered. The researcher needed to utilize certainty and data officially accessible through financial statements of prior years and break down these to make basic assessment of the accessible material. Henceforth by making the sort of the examination led to be both descriptive and analytical in nature.

Sample size/population

This is a case study based on ZANACO bank. So, the research work was restricted to only ZANACO bank hence the sample size of this study is one (1).

Statistical tools

The researcher used the following tools to present and analyze data.

a) Data Presentation; Tables and Graphs

b) Data Analysis; Microsoft Excel 2010

Data analysis

The research used most of the ratios utilized to make critical assessments of banks. It shows the distinctive advances such as selection of financial reports, Identification of balance sheet, income statement and cash flow statement, ratio analysis, mathematical calculation, statistical analysis of bank financial report and year by year comparison.

First step of model, a selection of financial reports is made. The annual financial report presents financial data of a company's position, operating performance, and funds flow for an accounting period. We utilize the yearly announcing of bank in 2013 to 2015.

Second step of model, the author distinguishes the income statement, cash flow statement, balance sheet from the financial reports. The third step of model, the ratios to be utilized under the profitability, liquidity and solvency ratios are identified.

The Forth venture of model, was utilizing mathematical calculations of the banks figure from the balance sheet, income statement, cash flow statement and the equity statement. "Financial Calculators" were used to determine the results from the financial ratio calculations. Graphical analysis for evaluation of bank using Microsoft Excel is employed and finally study compares the results to manipulate objectives.

Reliability and validity

Reliability means the consistency of the research results; if there were two different observers doing the research, would the results still be the same? Validity is a measurement of the authenticity of the research results backing up to reliability (Website of University of California, n.d.). The data can be defined as reliable and valid as the pieces of data used are official income statements and balance sheets that are regulated by the Finnish laws. The formulas used were also from one main source, which increases the reliability and validity of the research and also brings consistency. The temporal cross section analysis results highly depended on the industry averages so it can be kept valid as well as it is set in a certain frame at all times. There might be researcher-dependent aspects in the time series analysis, as it is only based on the writer's own interpretations.

Analysis of results

Introduction

This section of the study will analyse the computed data and make sense of it. The ratios discussed under this section include the

a) Liquidity Ratio

- b) Solvency Ratio and
- c) Profitability Ratio

Tables and graphs have been provided for easier illustration for the reader.

Liquidity ratios

Liquidity ratios basically show the ability of a business to meet its short-term financial obligation (Tugas, 2012). It's as a result of its definition that the liquidity ratio is also known as the short-term solvency ratio (Class Notes-Financial Management, 2017). It's suggested by Lan (2012) that after profitability ratios, liquidity ratios are said to be the next most widely used by creditors. Under the liquidity ratios, only the current ratio, quick ratio and cash ratio were calculated.

Current ratio

The current ratio is mainly used to show the firm's ability to pay back its short-term obligations. In other words, it's a sign of a firm's liquidity.

The current ratio for the year 2013, 2014 and 2015 was computed as 1.15, 1.19 and 1.18 respectively. The mean ratio for the computed years was calculated as 1.17.

The current ratio ratios were above one (1) for the years calculated. This means the bank has more assets than liabilities in their possession. In other words, the bank is able to meet its short-term financial obligations.

A graph showing the trend of the current ratio is shown below.



Figure 1. Trend of current ratios

A table tabulating the results is shown below.

Table 1. Current ratio value

Current ratio		
Year	Ratio	
2013	1.15	
2014	1.19	
2015	1.18	
Mean	1.17	

Quick ratio

The quick ratio or the acid test ratio is a liquidity ratio that forms a relationship between liquid current assets and current liabilities (Financial Management-Class Notes, 2017).

The quick ratios for the years 2013, 2014 and 2015 were calculated as 1.15, 1.19 and 1.18 respectively. The mean ratio was calculated as 1.17.

The quick ratios for the years calculated was above one (1). This eludes to conclusion that the bank is able to able to convert its assets to cash in a period of ninety (90) days. The graph below shows the trend of the quick ratios.



Figure 2. Trend of quick ratios

Table 2. O	uick ratio	values
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Quick ratio	
Year	Ratio
2013	1.15
2014	1.19
2015	1.18
Mean	1.17

Cash ratio

The aim of this ratio is to check the immediate available cash to satisfy the short-term obligations. The cash ratio is also known as the cash coverage ratio. The cash ratio for the years 2013, 2014, and 2015 was found as 0.16, 0.22 and 0.26 respectively. The mean cash ratio was calculated as 0.22. The cash ratio was below one (1) for all the years calculated. This shows the bank does not have enough cash and cash equivalents to meet its financial obligations (My Accounting Course, 2018).

The trend of the cash ratio is shown on the graph below.



Figure 3. Trend of cash ratio: A table tabulating the results is shown below

Table 3. Cash ratio values

Cash ratio	
Year	Ratio
2013	0.16
2014	0.22
2015	0.26
Mean	0.22

Profitability ratios

Profitability ratios are a class of budgetary measurements that are utilized to survey a business' capacity to create profit in respect to its related costs. Profitability ratios are measured in two (2) ways. The first being profitability in relation to sales and the second being profitability in relation to investment. The profitability ratios computed under this section include; the return on assets, return on equity and the net profit margin ratio.

Return on assets (ROA)

In the simplest form, this ratio measures how effective a company's asset can generate revenue. With this ratio, the firm is able to know what it can do with what it has in its possession.

It was noted the ROA ratio was decreasing as the years increased. The year2013 was recorded to have had the highest computed ratio. The ratios were recorded as 16.03%, 12.87% and 8.87% for the years 2013, 2014 and 2015 respectively. The mean ratio was calculated as 12.59%. A ratio greater than 5% is considered good. The bank's ROA was greater than 5% so the bank is more appealing to investors has it shows it is utilizing its assets well to generate large amounts of income.

The trend of the ROA is shown on the graph below.





Table 4. Return	n on	asset	values
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Return on assets		
Year	Ratio	
2013	16.03	
2014	12.87	
2015	8.87	
Mean	12.59207	

Return on equity (ROE)

The ROE ratio measures the ability to raise profits from the investments of stockholders. The ROE ratios similarly to the ROA ratio was decreasing as the years increased. Again similarly, 2013 recorded the highest ratio. The year 2013 recorded a ratio of 21.47%, 2014 was 14.28 and 2015 was recorded as 11.30. Research says a ratio between 15% and 20% is considered good. So, a look at the ratios show only the year 2013 had a good ROE ratio. Though the years 2014 and 2015 don't fit the criteria of being considered good, the mean ratio of 15.68 is. A decline in the ROE ratio could mean the profits being generated from equity is less as they bank might be generating more income from debt financing or from its assets.

The trend of the ROE is graphed below



Figure 5. Trend of the ROE ratio

A table tabulating the results is shown below

Table 5. Return on equity values

Return on equity		
Year	Ratio	
2013	21.47	
2014	14.28	
2015	11.30	
Mean	15.68227	

Net profit margin (NPM)

The net profit margin is a profitability ratio that measures the net income to the net revenue (Lan, 2012). The trend of the NPM ratio shows a decline as the year's progress. The highest ratio was recorded in 2013 as 22.24% and the lowest in 2015 as 11.01% while 2014 was in the middle with a ratio of 14.70. The mean ratio was calculated as 15.98%. A decline in the NPM ratio could be a result of an increase in competition in the banking industry. The trend of NPM ratio is shown below





Table 6. Net profit margin values

Net profit margin	
Year	Ratio
2013	22.24
2014	14.70
2015	11.01
Mean	15.98428

Solvency ratios

Solvency ratios are known to determine the ability of a firm to meets its long-term financial obligations. Analysis of solvency ratios gives an indication on the on the firm's levels of financial leverage.

The only ratios computed under the solvency ratios were the debt to asset ratio, debt to capital ratio and the debt to equity ratio.

Debt to asset ratio

This ratio is a form of solvency or leverage ratio that measures the aggregate of assets financed by creditors rather than investors. In short, it highlights the level of assets that are supported by borrowing compared to the level of assets that are supported by the investors.

The debt to asset ratio for the years 2013, 2014 and 2015 was almost generally the same. The ratios were recorded as follows; 0.88, 0.85 and 0.87 for the years 2013, 2014 and 2015 respectively with the mean ratio recorded as 0.86. It was discovered that the debt to asset ratio for all the years computed was less than one (1).

This means the bank has more assets than liabilities and has the ability to meets its obligations buy selling off assets (My Accounting Course, 2018).

The trend of the DTA ratio is shown below:





A table tabulating the results is shown below:

 Table 7. Debt to asset values

Debt to asset	
Year	Ratio
2013	0.88
2014	0.85
2015	0.87
Mean	0.864801

Debt to capital

The debt to capital ratio is a solvency ratio that measures the proportion at which the firm finances its operations as compared to capital.

The debt to capital ratio for the years 2013, 2014 and 2015 was almost generally the same. The ratios were recorded as follows; 0.88, 0.85 and 0.87 for the years 2013, 2014 and 2015 respectively with the mean ratio recorded as 0.86.

The ratios for the bank were all less than one (1) which shows the bank carries more capital than debt and as such, the bank is more manageable and more attractive to investors to invest in and for creditors to loan the bank.

The trend of the debt to capital ratios is shown below



Figure 8. Trend of the debt to capital ratio

A table tabulating the results is shown below

Debt to capital		
Year	Ratio	
2013	0.88	
2014	0.85	
2015	0.87	
Mean	0.864801	

Table 8. Debt to capital values

Debt to equity

The debt to equity ratio is a comparison of the firms' debt to equity. Fraser and Ormiston (2004) describe the ratio as one that establishes the risk of a firm's capital structure with regard to the relationship between the cash funded by investors and creditors.

The debt to equity ratios for 2013, 2014 and 2015 were calculated as 7.04, 5.66 and 6.64 respectively. The mean debt to equity ratio was calculated as 6.44.

The debts to equity ratios are greater than one (1) which implies the creditor is more active in funding the operations of the firm than the investors (My Accounting Course, 2018).

The drop in the year 2014 would mean investors had a more active role in investing in the bank than the other computed years.

The trend of the debt to equity ratio is shown below.





A table tabulating the results is shown below.

Table 9. Debt to equity vales

Debt to Equity		
Year	Ratio	
2013	7.04	
2014	5.66	
2015	6.64	
Mean	6.443415	

Conclusion

This research was set out to review the financial performance of ZANACO bank from the years 2013 to 2015 through the use of financial ratios. A few ratios were implemented to help determine the bank's financial soundness. Ratios like the profitability, solvency and the liquidity were done on the financial statements. From the results obtained, the stated conclusions were drawn.

1) A look at the liquidity ratios shows that the bank during the period of 2013 to 2015 was able to meet its short-term financial obligations. The ratios for the current and quick ratio were all above one (1). Though the bank was able to meet its short-term obligations with its assets, it was not able to meet its short-term obligations using only money as the cash ratios were all below one (1).

2) Reviewing the profitability ratios for the bank for the period 2013 to 2015 for the return on asset ratio shows the bank was effectively utilising its asset to generate revenue. All ratios from 2013 to 2015 were recorded above the threshold of 5%. A look at the return on equity ratio for the same period of 2013 to 2015 reveals the bank was able to retain profits from the stockholder's investments. Though the ratio was declining by the year the average ratio (15.68%) for the period was between 15% and 20% was is the acceptable threshold. The net profit margin ratio for the ratio showed a decrease in the year 2014 and a further decrease in 2015 as compared to 2013. This might have been a result of increased competition in the banking industry. Nonetheless, the bank was still profitable.

3) The solvency ratios which measure the bank's ability to meet its long-term financial obligations showed were in favour of the bank particularly the debt to asset ratio and the debt to capital ratio. The debt to asset ratio values of the bank for the period 2013 to 2015 was all below one (1). Meaning, the bank during the said period had more assets than liabilities and as such was able to meet its long-term obligations. The debts to capital ratio similarly to the debt to asset ratio were also below one (1) and as such the bank was able to finance its operations more through capital than debt. On the other hand, the debts

to equity ratio were all above one (1) hence, the bank during the period 2013 to 2015 had more funding from creditors than investors.

4) This research supports the first hypothesis that the financial performance for most ratios was the same.

5) An overall look at the ratios for the period 2013 to 2015 shows the bank was financially sound.

Recommendations

For the bank to further improve on its profits, it can

1) Open up more branches. This will increase its clientele and with proper management of the branch, profits are likely to follow.

2) The bank can also venture into different sectors such as agriculture, manufacturing etc. to give them a wider portfolio and an array of customers from different industries.

References

[1]. Arkan, T., (2016). 'The Importance of Financial Ratios in Predicting Stock Price Trends: A Case Study in Emerging Markets'. pp. 13-26.

[2]. Bajkowski, J., (1999). 'Financial Ratio Analysis'.

[3]. Baran, D., et al., (2016). 'Financial Analysis of a Selected Company'. 24(37).

[4]. Carr, P. et al., (2004). 'Using a Team Project to Introduce Financial Statement Analysis'. *Journal of Business Administration Online*, 2(2).

[5]. Costea, D.P. and Hostiuc, F., (2009). 'The Liquidity Ratios and Their Significance in the Financial Equilibrium of the Firms'. 9(1).

[6]. Gadoiu, M., 'Advantages and Limitations of Financial Ratios Used in The Financial Diagnosis of the Enterprise' 13(2).

[7]. Hosee N., et al., (2017). 'The Contribution of Financial Ratios Analysis on Effective Decision Making in Commercial Banks'. *International Journal of Management and Applied Science*, 3(6).

[8]. Kumar, R.B., (2015). 'Financial Performance Evaluation – A Case Study of Bharat Heavy Electricals Limited'. *EPRA International Journal of Economic and Business Review*, 3(11).

[9]. Kuvek, T. and Pervan, I., (2013). 'The Relative Importance of Financial Ratios and Non-Financial Variables in Predicting of Insolvency'. Croatian Operational Research Review, 4.

[10]. Lan, J., (2012). 'Financial Ratios for Analyzing A Company's Strengths and Weaknesses'.

[11]. Nuhu, M., (2014). 'Role of Ratio Analysis in Business Decisions: A Case Study NBC Maiduguri Plant'. *Journal of Educational and Social Research*, 4(5).

[12]. Ravinder, D. and Anitha, M., (2013). 'Financial Analysis – A Study'. *Journal of Economics and Finance*, 2(3), pp. 10-12.

[13]. Ryan, A.H., (1996). 'The Use of Financial Ratios as Measures of Risk in The Determination of Bid-Ask Spread'. *Journal of Financial Strategic Decisions*, 9(2).

[14]. Sangeetha, S., et al. (2017). 'A Study on Financial Performance Analysis of Ashok Leylang'. *International Journal of Applied Research*, 3(3), pp. 159-161.

[15]. Sanni, M., et al., (2014). 'Financial Ratios as Performance Measure: A Comparison of IFRS and Nigerian GAAP'. Accounting and Management Information Systems, 13(1), pp. 82-97.

[16]. Saxena, V., (2016). 'Emerging Importance of Financial Statement Analysis'. *International Journal of Commerce and Management Research*, 2(2), pp. 1-5.

[17]. Stice, J.D. and Stice, E.K., (2014). 'The Balance Sheet and Notes to Financial Statement'.

[18]. Tugas, C.F., (2012). 'A Comparative Analysis of the Financial Ratios of Listed Firms Belonging to the Education Subsector in the Philippines for the Years 2009-2011'. *International Journal of Business and Social Science*, 3(21).