Profitability, Liquidity and Efficiency of Rural Banks: Evidence from Ghana

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Abstract

The purpose of this study is to look at the profitability, liquidity and efficiency of Asante Akyem rural bank (AARB) from 2007 to 2011. It became necessary that an in-depth study is conducted into the performance of the bank because of the fact that the financial systems across Ghana are becoming increasingly competitive in nature which puts the profitability of the bank in question. Data was drawn from both primary and secondary sources. With the exception of the year 2010, the bank achieved growth in its profitability for the rest of the years. Profitability increased gradually but was very significant in 2011 where the increase over the previous year alone was more than 230%. Asante Akyem rural bank would not be able to withstand heavy financial shocks because it has a weak liquidity status. AARB has not been much efficient in its operations. Issues like poor management and weak internal controls as well as loan repayment default were identified as some of the factors undermining the efficiency of the bank. Recommendations such as to identify and further engage in profitable investments such as mortgaging, purchase of shares of reputable organizations etc. in order to increase profitability of the bank and also providing more training programs in business strategy and organizational management to both the employees as well as the management team to ensure efficiency in their operations were made.

Key words: Profitability; Liquidity; Efficiency

1.0 Introduction

The performance of banks, for some years now, has been of immense interest for both academic and business purposes. The increasingly growing competition in the financial sector makes it very crucial for individual and corporate investors, financial and non-financial institutions and all other stakeholders to continue to research into this field. The operation of a bank has become so sophisticated, and its survival and growth depends to a large extent on innovativeness and pro-activity, which can possibly be achieved through a critical analysis of the banking business environment in an economy.

The global shift to a knowledge economy and the increase in competitive pressures in the market place have placed the focus on intangible factors as the most critical factors in having a competitive edge (Quaicoo, 2001). A lot of factors including management of knowledge, attracting the required labour, developing attractive products, developing and retaining talent in the banking sector etc. are highly crucial to the success of any bank. There is thus the continuous need to do an assessment to find out one's position in the market. Market share for companies keep on changing especially in economies where there is stiff competition. This is not different in the banking sector where, as the days go by, a lot of new banks spring up whiles the existing ones also strive to expand through various measures such as mergers and acquisition. The appraisal of banks therefore has a positive implication for their direction and growth.

In Ghana, the growing competitive nature of the banking industry coupled with the rippling effect of the global financial crisis poses a lot of threats to the survival of most financial institutions. Considering the state of affairs with regards to the financial sector both internationally and locally, one wonders if Asante Akyem Rural Bank can continue to be profitable (Bhaktapada, 2007). It is against this background that the researchers want to assess the profitability, liquidity and efficiency of Asante Akyem Rural Bank operations from 2007 to 2011 financial years. This study is necessary that a review about the banks performance is made to identify its strengths, weaknesses, opportunities and threats so that appropriate policies and recommendations could be implemented to ensure the continuous growth of the Bank.

2.0 LITERATURE REVIEW

2.1 Financial Performance

Financial performance is an individual measure of how well a business can use assets from its primary mode and generate revenues. This term is also used as a universal measure of a business's overall financial health over a stated period of time, and can be used to evaluate similar businesses across the same industry (Scores Mazher, 2003). It is also the measuring the outcomes of a business's operations and policies in monetary terms. These outcomes are reflected in the business's return on assets, return on investment, value added, etc.

In recent increasingly global and competitive business setting, it's not sufficient to know where you wish your company to go (Avkiran, 1995). One must plan quicker and do more with potentially less resources and budget. At the same time, one must be extremely resourceful and more accurate with every decision, while obeying with regulatory requirements (Chien and Danw, 2004).

Being accountable for growth, profitability, shareholder value, regulatory compliance, strategy, and investor relations, managers must prioritize strategic objectives, amend plans based on operational and financial changes, and allow all stakeholders to make more planned decisions. Accepting changes to business performance needs monitoring, risk assessment, analysis, timely reporting, and action based on information coming from many diverse sections of the organization – including vendors, external partners and customers (Elizabeth and Ellot, 2004).

Demonstrating operational achievement involves closing the gap connecting strategy and operational implementation by cascading company objectives down into department related metrics; enabling intuitive modeling, ensuring accountability; monitoring, and analysis; and reorganization implementation of strategy-guided plans. Information needs to be accessible when the organization requires it to generate a competitive edge and permit larger control of company functions (Watson and Head, 2007).

Improved business strategies and processes have the potential to significantly increase financial performances. The problem is that often a purported solution to improve strategies and processes is explored and/or implemented before knowing the real question. In addition, these solutions are seldom linked to improvements in the key drivers of financial performance. By not knowing the real question and linkage to financial performance, the likelihood of a successful implementation is low. Moreover, it is nearly impossible to ascertain if there is an improvement in financial performance.

2.2 Profitability

Compared with other signs, trends in profitability can be more complex to understand, for example strangely high profitability can reproduce extreme risk taking (Hilbers et al, 2000). A business is organic it survives and grows. Therefore it's important it profit is earned. The fact that profit is important does not necessary means that every activity initiated by management of an institution aimed at maximizing profit no matter the social consequences. Thus profit maximization becomes the sole mission of some banks that the cost of employees, customers and society are disregarded with impunity (Watson and Head, 1998). These ratio provide not only means of measuring relative business efficiency but also focus attention on whether an adequate return has been earned in accordance with the expectations of the bank on the capital invested.

It is therefore necessary that enough profit must be earned to maintain the activities of the business to be able obtain funds for investors for expansion and growth to make a payment towards the social overheads for the wellbeing of the society (Drunker, 1968). Profit is the disparity between expenses and revenue over a period of time normally one year. The bank will not have any if it fails to make enough profits. The financial manager is therefore tasked to continuously evaluate the efficiency of the institution in terms of profit. The profitability is intended to measure the working efficiency of the business. Also management of the organization, creditors and shareholders are also interested in the bank. Creditors wish for interest and refund of principal frequently. Shareholders will want to get a required rate of returns on the investment. All these obligations can be met when the banks earn enough profits. There are two types of profitability ratios:

1 profitability in relation to sales

2 profitability in relation to investment

2.3 Liquidity

Primarily solvent financial companies may be driven in the direction of closure by poor executive of temporary liquidity. Indicators should capture large maturity mismatches and cover funding sources (Hilbers et al, 2000). Liquidity ratios determine the capability of the business to meet its short-term obligations. Analyst of liquidity demands the preparation cash budget and fund flow statements. Thus liquidity emphasize on the connection between other current assets and cash to current obligation, provide a quick measure of liquidity. Current assets should be manage efficiently for safe guarding against the dangers of illiquidity and risk, a large investment in current assets under certainty would signify a little rate of return on investment of the business, as surplus investment in current assets will not earn enough return.

However, a small investment in current assets would mean interrupted operations of the bank leading to inability to pay creditors. The bank should make sure that it does not experience from lack of liquidity and also it does not have excess liquidity.

Failure of the bank to meet its obligation due to insufficient liquidity will lead to poor credit worthiness, loss of creditor's confidence, or at times legal fail resulting in the closure of the bank. However, a very high rate of liquidity is inappropriate, since idle assets aim nothing. The bulk of the bank capital would be unnecessary tied up in current assets. It is therefore necessary to come to a convert balance between lack of liquidity and high liquidity (Hilbers et al, 2000).

The common ratios use to find the extent of liquidity or lack of is current ratio, Current assets including cash, marketable securities debtors and inventories and prepaid expenses. Current liabilities include creditors, bill payable , accrued expenses, short term bank loan (deposits) income tax and long-standing debt maturing in the present year as an acceptable rule, current ratio of 2 - 1 or more is considered satisfactory.

2.4 Management Efficiency

Sound management is a key to bank performance but it is complex to measure. It is mainly a qualitative factor appropriate to individual organizations. Some indicators however can be used, for instance efficiency measure serve as an indicator of management soundness. The fact that firm efficiency is not an easy concept to measure does not mean that workforce management cannot be measured in an organization. Company keep data about the total number of employees, average time to fill - in days, average base salary and Global turnover Ratio (Roldan, 2001). Workforce management is known to be art rather than science. Therefore universal tools have not been developed to manage workforce management and its relation to generate revenue or earnings. The most important asset in an organization is the employee hence the ability to use those assets to generate revenue or earnings becomes a keystone in managing the financial affairs of an organization (Roldan, 2001). Growth in NRB, earning per employee and expenses ratio has been developed to measure this relationships. Again organization developing employee performance benchmarking as part of the growing trend for ensuring best practices implementation and the achievement and maintenance of competitiveness in the market place. How organizations use models such as Economic value Added (EVA) and Return on Investment makes it possible to examine the performance of a bank.

3.0 Methodology

To make this study successful, data was drawn from both primary and secondary sources. Basically, the secondary sources included financial statements of Asante Akyem Rural bank from the period 2007 to 2011 as well as other printed documents of the bank. However, the electronic and print media also served as an important source of retrieving data for this exercise.
The primary source involved the use of an interview guide to interview key officials of the bank to provide reasons for the identified trends in the operations of the banks. Financial ratios were calculated to determine the profitability, liquidity and efficiency of the bank for the various years under study. Analytical tools like frequency tables were used to give a clearer representation of the issues.

4.0 DISCUSSIONS

PROFITABILITY OF THE AARB FROM 2007 TO 2011

Here, discussions will be limited to gross profit margin, net profit margin and return on assets because of their suitability in the analysis of the financial performance of a bank.

Gross Profit Margin (GPM)

The gross margin is not an accurate estimate of the business's pricing strategy but it does give a good signal of financial health. Without a sufficient gross margin, a business will be incapable to pay its working and other operating cost and develop for the future. Gross Profit Margin demonstrates to us how well-organized the executive is in using its labor and raw materials in the procedure of production. The formula for calculating the gross profit margin is represented below;

$$\text{Formula for GPM} = \frac{\text{Interest income} - \text{Interest Expense}}{\text{Interest income}}$$

TABLE 1: GROSS PROFIT MARGIN OF AARB FROM 2007-2011

YEARS	YEAR 2007	YEAR 2008	YEAR 2009	YEAR 2010	YEAR 2011
PERCENTAGES	87%	88.40%	89.80%	88.50%	92.20%

SOURCE: FIELDWORK

Gross profit margin of AARB has been encouraging from 2007 to 2011. The year 2011 recorded the highest percentage of 92.2%. Asante Akyem Rural Bank recorded the lowest Gross profit margin in the year 2007 with percentage of 87%. Looking at Gross profit margin of AARB for various years understudy, it was observed that GPM had been increasing from year to year except in 2010 which recorded a fall in percentage. It was also observed that interest income was more than interest expense for all the years under review. It was evident from the profit and loss accounts for the various years under consideration that interest expenses were properly managed. The percentage increase in interest expense as compared to the interest income was low and even in some of the years, it rather fell. The greater the deference between interest income and interest expense, the better the company's GPM. This decline in gross profit margin in 2010 as said by management was attributed to high interest payment on debt and the inability to recover substantial amount of the loans granted to customers in 2010.

Net Profit Margin (NPM)

This measure is a sign of how efficient a business is at cost control. The higher the NPM is, the more efficient the business is at converting revenue into real profit. The NPM is a good means of comparing businesses in the same industry, since such businesses are usually subject to similar company conditions. However, the NPM's are also a good means to evaluate businesses in different industries in order to gauge which industries are comparatively more beneficial. Below is the formula.

$$\text{The formula of Net Profit Margin} = \frac{\text{Profit after Tax}}{\text{Interest Income}}$$

TABLE 2: **NET PROFIT MARGIN OF AARB FROM 2007-2011**

YEARS	YR 2007	YR 2008	YR 2009	YR 2010	YR 2011
PERCENTAGES	24%	29.70%	23.20%	24.50%	39.00%

SOURCE: FIELDWORK

The net profit margin shows how income from interest earnings in excess of interest expense has contributed to the net profit of the AARB. This ratio has taken into account only interest income. The net profit margin of Asante Akyem Rural Bank has been fluctuating over the period under study with 2011 recording the highest percentage of 39%. It is followed by 2008 with a percentage of 29.7%. The lowest net profit margin for the period was 23.2% in 2009. This rise and fall in net profit margin was due to rise and fall in depreciation charges as well as operating expenses for the period under review.

Return on Assets (ROA)

Return on assets is an indicator of how beneficial a business is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Return on assets is used to show how the assets of an organization have been used to generate net profit.

$$\text{Return on Assets (ROA)} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

TABLE 3: **RETURN ON ASSETS OF AARB FROM 2007-2011**

YEARS	YR 2007	YR 2008	YR 2009	YR 2010	YR 2011
PERCENTAGES	4%	3.50%	2.90%	2.40%	4.10%

SOURCE: FIELDWORK

The return on assets of Asante Akyem Rural Bank was 3.8% in 2007. It started declining and reached 2.4% in 2006 after which there was a sharp increased in 2011 with percentage of 4.1%. Between 2007 and 2011, the bank's assets were poorly managed and this resulted in the generation profit. Management's responded that the payment of severance and high cost of operating expenses accounted for the rise and fall in return on assets for the period under review.

LIQUIDITY OF THE BANK FROM 2007 TO 2011

Liquidity ratios offer information about a business's capability to meet its temporary financial commitments. They are of particular interest to those expanding immediate credit to a firm. Higher liquidity levels show that we can simply meet present commitments. There are several kinds of ratios to monitor liquidity but this research will make use of current and cash ratios.

Current Ratio

Current Ratio is just current assets divided by current liabilities. Current assets include accounts receivable, cash, marketable securities, prepaid items and inventories. Current liabilities include notes payable, accounts payable, salaries payable, current maturity of long-term obligations, taxes payable and other current accruals.

Current ratio measures the relationship between current assets and current liabilities. The standard ratio should be 2:1 meaning for every one cedi of current liabilities, the company has two cedis worth current assets. The minimum acceptable current ratio is obviously 1:1 because anything less than that would be alarming and would mean that the firm's current assets would be less than its current liabilities. A current ratio of 1.5 or greater is usually sufficient to meet short term needs. Below depicts the situation of the current ratio for Asante Akyem Rural Bank.

$$\text{CURRENT RATIO} = \frac{\text{CURRENT ASSETS}}{\text{CURRENT LIABILITIES}}$$

TABLE 4: **CURRENT RATIO OF AARB FROM 2007-2011**

YEARS	YR 2007	YR 2008	YR 2009	YR 2010	YR 2011
RATIOS	1.1	1.2	1.2	1.2	1.2

SOURCE: FIELDWORK

Asante Akyem rural bank recorded the lowest current ratio of 1.1 in 2007 as a result of high liability incurred due to inefficiency, poor management and fraud. The bank recorded a constant current ratio of 1:2 for the period 2008 to 2011. This is due to the fact that there was reduction in current liabilities as a result of reduction in deposits.

The higher the current ratio, the greater the margin of safety and the larger the amount of current assets in relation to current liabilities, the greater the bank's ability to meet its current obligations. In the case of AARB, it will not be able to meet all its obligation should the need arises. This means that AARB would not be able to withstand greater financial shocks since its current ratio revolves around the minimum acceptable ratio which is not safe place to operate.

CASH RATIO

The cash ratio is an indicator of a business's liquidity and measures the sum of cash, invested funds or cash equivalents there are in current assets to envelop current liabilities. For a bank, this is the cash held by the bank as a percentage of deposits in the bank. The cash ratio determines the degree to which an entity can swiftly liquidate assets and cover temporary liabilities, and therefore is of interest to short-term creditors.

$$\text{CASH RATIO} = \frac{\text{CASH \& BANK BALANCES}}{\text{DEPOSITS}}$$

TABLE 5: **CASH RATIO OF AARB FROM 2007-2011**

YEARS	YR 2007	YR 2008	YR 2009	YR 2010	YR 2011
RATIOS	59.00%	40.90%	21.60%	19.30%	17.10%

SOURCE: FIELDWORK

Asante Akyem rural bank recorded the highest cash ratio of 59% in 2007 and this reduced to 40.90% in 2008. The bank recorded its lowest cash ratio of 17.10% in 2011

In fact, Asante Akyem rural bank's cash ratio is not encouraging. The trend as depicted in the graph above shows a continuous fall in cash ratio throughout the study period. As a banking institution it is extremely dangerous to exhibit such a trend in cash ratio considering the fact that unexpected withdrawals could be made which can lead to bank failure. With the current state of percentages of cash ratios, it is obvious that the bank will be faced with liquidity problems in case of any slightest financial shock.

EFFICIENCY OF THE BANKS OPERATIONS FROM 2007 TO 2011

No matter the type of business an organization is in, it must put in assets to achieve its activities. Efficiency ratios measure how efficiently a business utilizes these assets, as well as how well it executives its responsibility. The efficiency ratio is the customary measure for bank output. At its simplest, it is the cost needed to produce each dollar of revenue. Its simplicity is a benefit, but the ratio constantly requires a company context. Here discussions will be centered on operating expense ratio, income per employee and expenses per employee.

Operating Expense Ratio (OER)

The operating expense ratio is the ratio between the total operating expenses (TOE) and operating income or the effective gross income for an income producing property. The operating expense ratio illustrates the proportion of a property's income that is being used to settle operational and maintenance expenses. Below is the operating expense ratio for Asante Akyem Rural Bank.

$$\text{OPERATING EXPENSE RATIO} = \frac{\text{OPERATING EXPENSE}}{\text{OPERATING INCOME}} \times 100$$

TABLE 6: **OPERATING EXPENSE RATIO OF AARB FROM 2007-2011**

YEARS	YR 2007	YR 2008	YR 2009	YR 2010	YR 2011
PERCENTAGES	65%	73.30%	75.10%	76.60%	70.10%

SOURCE: FIELDWORK

From 2007 to 2010, the OER of AARB rose annually from 65% to 76.6% and fell to 70.1% in 2011. One can clearly see that much of the bank's income was being spent on maintenance and operational expenses as the years went by. For instance the least of the OER of AARB, 65% which was recorded in 2003 indicates that 65% of the bank's income was spent on maintenance and operational expenses whiles it rose to 76.6% in 2006 and fell to 70.1% in 2011. The most worrying factor was the yearly increase in the proportion of the bank's income on expenses.

This, according to management was because of high expenditure on employees. Much of the cost was incurred in the recovery of loans through the purchasing of computers, vehicles and cost on monitoring exercises. Again, during that period there was inefficiency in the AARB, which therefore increased the cost on administration and operation. For instance, the lowest operating expense ratio of 65% in 2007 was as a result of the bank reducing cost on administration, interest expenses and operational expenses in general.

Income per Employee (IPE)

This amount (calculated by dividing net pre-tax income by the number of employees at the company) gives an investor some clues about how efficient a company is at turning an employee's efforts into profits. The fact that this measure of management efficiency is at least 10% below the industry average is definitely a caution sign. It could indicate that the company's products are taking more hours to sell than competitors', perhaps because customers don't understand what makes the product so special. Or, it could mean that the product is taking longer to produce than is common elsewhere in the industry, or that employees are so disgruntled that they are quitting your services, leaving the company with big expenses for training and inexperienced staff running the show. Thus, this ratio has the tendency to unveil the shortfalls of your staff for the necessary action to be taken. Below is the income per employee for AARB.

$$\text{INCOME PER EMPLOYEE (IPE)} = \frac{\text{NET INCOME}}{\text{NO. OF EMPLOYEES}}$$

TABLE 7: **INCOME PER EMPLOYEE RATIO OF AARB FROM 2007-2011**

YEARS	YR 2007	YR 2008	YR 2009	YR 2010	YR 2011
AMOUNT(GH¢)	2200	1800	1400	1200	2300

SOURCE: FIELDWORK

Income per Employee is considered an indicator of management efficiency. Income per employee looks at the ratio of operating income to the number of employees required to produce that level of income. Therefore income per employee measures management's ability to use their employee resources effectively to create profits for the company.

Asante Akyem rural bank recorded its highest income per employee of GH¢ 2300 in 2011, followed by GH¢ 2200 in 2007. Year 2008 and 2009 recorded GH¢ 1800 and GH¢ 1400 respectively. The bank recorded its lowest income per employee of GH¢ 1200 in 2010.

Management explained that year 2011 recorded the highest income per employee because of high supervision by the Agency managers and introduction of computers to facilitate the activities of the workers. Again, most of the new agencies had by then found their feet and making gains. The bank also recorded its lowest income per employee in the year 2010 because of poor internal supervision on the part of agency managers.

Expenses per Employee (EPE)

This ratio shows the average cost incurred on each employee of an organization. It helps to check excess expenditure on the human resources of a company. This also ensures efficient allocation of a company's resources since over expenditure on the human resources will effectively be control.

$$\text{EXPENSES PER EMPLOYEE} = \frac{\text{TOTAL EXPENSES}}{\text{NO. OF EMPLOYEES}}$$

TABLE 8: **EXPENSES PER EMPLOYEE RATIO OF AARB FROM 2007-2011**

YEARS	YR 2007	YR 2008	YR 2009	YR 2010	YR 2011
AMOUNT(GH¢)	7600	6000	6100	5900	7800

SOURCE: FIELDWORK

Asante Akyem rural bank recorded its highest expense per employee of GH¢ 7800 in 2011, followed by GH¢ 7600 in 2007. Year 2008 and 2009 recorded GH¢ 6000 and GH¢ 6100 respectively. The bank recorded its lowest expense per employee of GH¢ 5900 in 2010. In all, expense per employee was very high under the period of study and far exceeded the income per employee for all the years.
According to the management, year 2011 recorded the highest expense per employee because the bank undertook a massive training for its staff and the total number of staff also increased. The bank also recorded its lowest expense per employee in the year 2010 because of good internal control measures employed to avoid waste.

FINDINGS

With the exception of the year 2010, the bank achieved growth in its profitability for the rest of the years. Profitability increased gradually but was very significant in 2011 where the increase over the previous year alone was more than 230%. Asante Akyem rural bank would not be able to withstand heavy financial shocks because it has a weak liquidity status. Throughout the period under study it was observed that the bank was not holding enough easily liquidated assets and/or cash and for that matter would not be able to meet slightly increased short term financial obligations. AARB has not been much efficient in its operations. Issues like poor management and weak internal controls as well as loan repayment default were identified as some of the factors undermining the efficiency of the bank.
One distinguishing issue was that, in spite of some of the identified and enumerated findings and problems, year 2011 was marked with a total transformation and improvement in all spheres of the bank's operation. Year 2011 saw a significant improvement in profitability, liquidity and efficiency in the activities of the bank.

CONCLUSION

Banks all over the world have had to continually serve the purpose of an intermediary between lenders and borrowers due to the complexities in exchanging financial resources. Borrowers would have had to move from one person to another in such of loans notwithstanding the insecurities, informalities and the arbitral nature that transactions would have been conducted.

The presence and impact of banks in any given economy is so crucial that governments all over the world make conscious efforts to regulate their operations. In developed countries, banks offer wider range of services and competition is very keen. However, in less developed countries such as Ghana, the banking industry is not so much developed and fewer services with a lot of limitations are offered.

Asante Akyem rural bank, with an initial aim of providing banking services to the rural farmers within the District, has gone through great metamorphosis to become a fully blown bank, competing with other banks to survive. Notwithstanding the upward trend in profitability, throughout the period under study, the bank has been confronted with a lot of challenges such as running near bankruptcy or collapse, loans defaults and fraud, poor management and weak internal controls etc. These among others greatly affected the performance of the bank and have greatly retarded its growth and development. With the growing challenges in the banking industry and the financial sector as a whole coupled with the global financial crisis that has hit majority of the economies in the world, it is imperative that the Asante Akyem rural bank strives to be very critical on the bank's operations and adopt prudent financial management to position itself to be very competitive.

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