

A STUDY ON FINANCIAL PERFORMANCE OF ANDHRA BANK THROUGH CAMEL APPROACH

Dr. KRISHNA BANANA*

M.com, Mphil, Ph.D

V.RAMA KRISHNA RAO CHEPURI**

M.B.A., M.Com, M.Phil. UGC-NET, (Ph.D)

* Asst. Professor, Dept. of Commerce & Bus. Admn., Acharya Nagajuna University Ongole Campus, Ongole, Prakasam(Dt.), A.P, India. Ph: 7731014888, **Email:drkrishnabanana@gmail.com**

** Research Scholar (ANU), Asst. Professor, Dept. of Business Administration, St. Ann's College of Engineering & Technology: Chirala-523187, A.P. Ph:09985287778, **Email:krishnachevuri@gmail.com**

Abstract:

The growth of an economy is widely dependent upon deployment as well as optimum utilization of resources and most importantly operational effectiveness of the various sectors, of which banking sector plays a very important role. Performance evaluation of the banking sector is an effective measure and indicator to check the reliability of economic activities of an economy. CAMEL approach is an effective tool to assess the relative financial strength of a bank and to suggest necessary measures to overcome weaknesses of a bank. The present study focuses on the evaluation of the performance of Andhra Bank with CAMEL model. The study adopts an analytical and descriptive research design. The data for a period of 10 years i.e., 2007-08 to 2016-17 have been collected from the annual reports of the bank. Sixteen variables as supported by the existing literature related to CAMEL model are used in the study. The study identified that the bank is maintaining consistency in capital, deep dwindle in the quality of the asset, the productivity and profit per employee reduced, continuous decrease in earnings and liquidity. The growth of deposits, net profit and number of branches are measured through Compound Annual Growth Rate. The net profit presented a negative cumulative growth rate of -11.28%. Hence it is advised to improve profit by minimizing expenditure.

Keywords: Performance, CAMEL, Productivity, Profitability and Capital

Introduction:

Finance is the life blood of trade, commerce and industry. Now-a-days, banking sector acts as the backbone of modern business. Development of any country mainly depends upon the banking system. A bank is a financial institution which deals with deposits and advances and other related services. It receives money from those who want to save in the form of deposits and it lends money to those who need it. It deals with deposits and advances and other related services like lending money to grow the economy. Banks act as bridge between the people who save and people who want to borrow i.e., It receives money from those people who want to save as deposits and it lends money to those who want to borrow it. The money you deposited in bank will not be idle. It will grow by means of interest to your bank account they will earn interest in return for lending out the same money to borrowers. This would ensure smooth money flow to develop our economy. To improve the interest of the depositors the RBI decided to monitor and observe the performance of banks time to time.

CAMEL model:

In the 1980s, CAMEL rating system was first introduced by U.S. supervisory authorities as a system of rating for on-site examinations of banking institutions. Under this system, each banking institution subject to on-site examination is evaluated on the basis of five (now six) critical dimensions relating to its operations and performance, which are referred to as the component factors. These are Capital, Asset Quality, Management, Earnings and Liquidity used to reflect the financial performance, financial condition, operating soundness and regulatory compliance of the banking institution. A sixth component relating to Sensitivity to market risk has been added to the CAMEL rating to make the rating system more risk-focused.

Padmanabhan committee set up by the RBI in the year 1995 to suggest changes in the system of supervision of banks was of the opinion that the existing rating pattern was inadequate and unrealistic in as much as raising NPA's and frauds could not be curbed. Hence, it recommended that the rating of banks should be modeled on the internationally accepted 'CAMEL' rating system, which was recognised as highly effective. The committee also suggested the incorporation of 'system and control' as an additional factor in the rating mechanism. The RBI accepted the recommendations and decided to implement the new rating model known as 'CAMELS' rating system for evaluating the performance of banks.

The "CAMELS" rating system is used by the rating agencies also, for evaluating the performance of banks when they opt for public issue, issue of bonds, etc. such rating made by the rating agencies helps the investors make an assessment of the current financial position of the banks. The six parameters are...

- C – Capital Adequacy
- A – Asset Quality

- M – Management Efficiency
- E - Earnings of the bank
- L – Liquidity of the bank
- S – Systems & Control of the bank

Each rating factor will be scored on a scale of 1 to 5. Based on the individual scores for each one of the six areas, an overall rating of the banks on a five score scale A to E will be given. The ratings are....

- A – Basically sound in every respect
- B – Fundamentally sound but with moderate weakness.
- C – Has financial, operational, or compliance weakness that give cause for supervisory concern.
- D – Has serious or immoderate financial, operational and managerial weakness that could impair future liability.
- E – Has critical financial weakness that renders the possibility of failure high in the near concern.

Andhra bank profile:

"Andhra Bank" was founded by the eminent freedom fighter and a multifaceted genius, Dr. Bhogaraju Pattabhi Sitaramayya. The Bank was registered on 20th November 1923 and commenced business on 28th November 1923 with a paid up capital of Rs 1.00 lakh and an authorized capital of Rs 10.00 lakhs Dr Bhogaraju Pattabhi Sitaramayya was born on 24th November 1880 in Gundugolanu village, West Godavari District in Andhra Pradesh. He was a renowned Freedom Fighter and a very illustrious personality. The present managing director & CEO of the bank is Suresh N Patel.

The bank is operating its business with 2908 branches out of which 729 branches in metro area, 663 branches in urban area, 771 branches in semi-urban area, and 745 branches in rural area and with 4 extension counters. The total workforce of the bank by the end of 2016-17 is 20923, out of which 10,843 are officers, 5,762 clerks and 4,318 employees are working as supporting staff.

During this decade i.e., from 2007-08 to 2016-17, the bank experienced different changes, total business increased from 83,993 crores to 3,39,673 crores, the total deposit increased from 49,437 crores to 1,95,441 crores, the total advances increased from 34,232.38 crores to 1,36,846.33 crores, the total investments to total assets ratio changed from 26.33% to 27.07%, net interest margin increased from 2.86% to 3.07%, net NPA to total assets ratio changed from 0.09% to 4.66%, average yield on advances changed from 10.81% to 9.77%, the debt to equity ratio changed from 6.09% to 5.3%, the net profit changed from 575.54 crores to 174.33 crores and interest income changed from 4,289.86 crores to 18,027.41 crores.

Literature Review:

Gupta and Kaur (2008) examined the performance of Indian private Sector banks by using CAMEL model and by assigning rating to the top five and bottom five banks. The CAMEL model revealed that HDFC was at its higher position of all private sectors banks in India succeeded by the Karur Vysya and the Tamilnad Mercantile Bank.

Mathuva (2009) exclaimed the relationship between Cost Income Ratio (CIR), Capital Adequacy Ratio (CAR) and profitability for the period 1998 to 2007. The study found that capital adequacy had differential impact on the profitability of the bank.

Siva and Natarajan (2011) empirically tested the applicability of CAMEL and its consequential impact on the performance of SBI Groups. The study found that CAMEL scanning helps the bank to diagnose its financial health and alert the bank to take preventive steps for its sustainability.

Prasad et al. (2011) have used CAMEL model to examine the performance of Indian public sector banks for the period 2006 – 2010 and to rate the banks according to their performance. After analysis they ranked Andhra bank as first and Central bank of India was ranked at the bottom most position.

Chaudhry and Singh (2012) analyzed the impact of the financial reforms on the soundness of Indian Banking through its impact on the asset quality. The study identified the key players as risk management, NPA levels, effective cost management and financial inclusion.

Aspal and Malhotra (2013) conducted a study with the objective of evaluating the financial performance of Indian public sector banks, excluding State Bank Group, for the period of 2007-11. The Bank of Baroda was ranked at the first position due to its better performance in the areas of liquidity and asset quality, whereas, United Bank of India was ranked at the bottom most position due to its management inefficiency, poor assets and earning quality.

Rostami (2015) analyzed the impact of each parameter of CAMELS model on the performance of Iranian banks. Q-Tobin's ratio was used as performance indicator in this study. It was found that there was significant relation between each category of camel model and Q-Tobin's ratio as bank's performance ratio.

Objectives of the study:

1. To analyse the financial performance of the bank through CAMEL model.
2. To measure the growth of Andhra Bank in the last decade.

Data analysis & interpretation:

Capital Adequacy:

Capital base of financial institutions facilitates depositors in forming their risk perception about the organization. Also, it is a significant factor for financial managers to maintain adequate levels of capitalization. Capital adequacy is very useful for a bank to conserve & protect stakeholders' confidence and prevent the bank from bankruptcy. Reserve Bank of India prescribes banks to maintain a minimum Capital to risk-weighted Assets Ratio (CRAR) of 9 % with regard to credit risk, market risk and operational risk on an ongoing basis, as against 8 % prescribed in Basel documents. For the study the following ratios are considered

1. Capital adequacy ratio
2. Debt to equity ratio
3. Coverage ratio

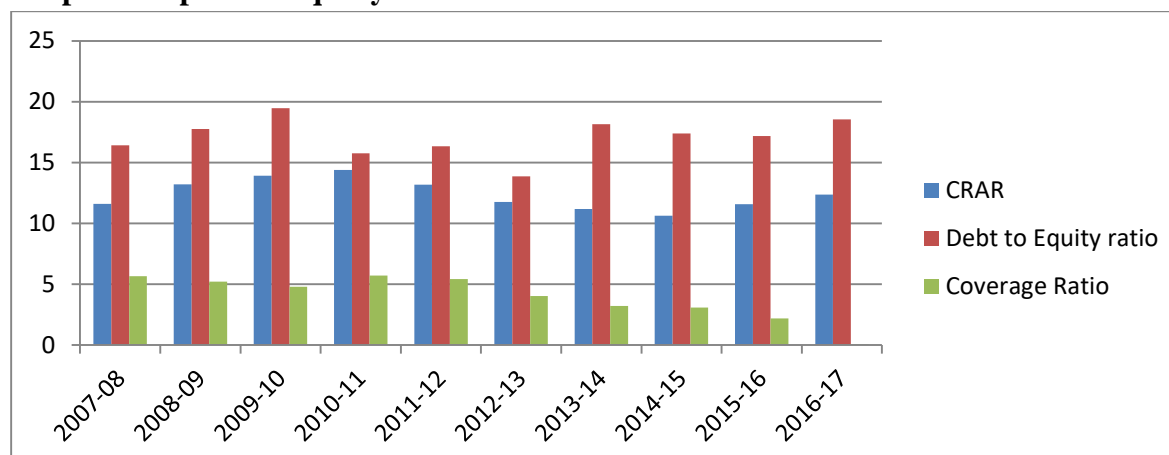
Table 1: Capital adequacy of ANDHRA BANK

Year	CRAR	Debt to Equity ratio	Coverage Ratio
2007-08	11.61	16.41	5.65
2008-09	13.22	17.77	5.21
2009-10	13.93	19.48	4.78
2010-11	14.38	15.77	5.71
2011-12	13.18	16.33	5.41
2012-13	11.76	13.86	4.02
2013-14	11.18	18.15	3.22
2014-15	10.63	17.39	3.08
2015-16	11.58	17.18	2.18
2016-17	12.38	18.54	0.06
Average	12.38	17.08	3.93
Standard deviation	1.24	1.58	1.82

Source: calculations are based on annual reports data

Capital is needed to meet the needs of bank. Study of capital position of the bank reveals its position to meet the unexpected risk. The CRAR of the bank is under control. The Coverage ratio measures the availability of capital to meet risk of loss asset.

The coverage ratio of the bank is continuously decreasing in the entire study period; it is 5.65 in 2008 and decreased to 0.06 in the year 2017. The proportion of debt is also slightly changed to higher position. The bank should try to improve the coverage ratio. The variation is low in CRAR and it is high in Coverage ratio.

Graph 1: Capital Adequacy of Andhra Bank**Asset Quality:**

Asset quality determines the healthiness of financial institutions against loss of value in the assets as asset impairment risks the solvency of the financial institutions. The weakening value of assets has a spillover effect, as losses are eventually written-off against capital, which eventually expose the earning capacity of the institution. For the study, the following ratios have been used to measure asset quality.

1. Net NPA to net Assets ratio
2. Government securities to total Investments ratio
3. Net NPA to Total Assets ratio

Table 2: asset quality of Andhra bank

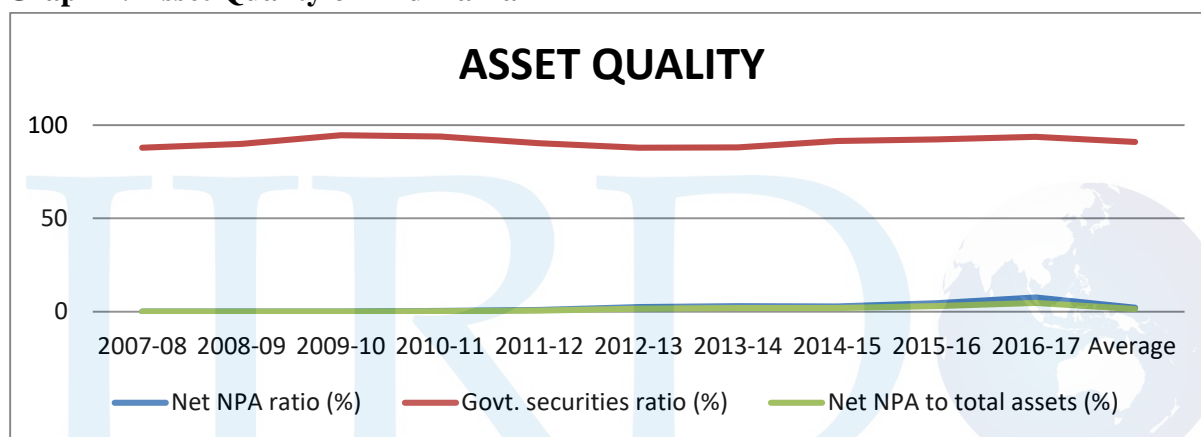
Year	Net NPA ratio (%)	Govt. securities ratio (%)	Net NPA to total assets (%)
2007-08	0.15	87.84	0.09
2008-09	0.18	89.97	0.12
2009-10	0.17	94.55	0.11
2010-11	0.38	93.87	0.25
2011-12	0.91	90.21	0.60
2012-13	2.45	87.82	1.65
2013-14	3.11	88.04	2.00
2014-15	2.93	91.41	1.99
2015-16	4.61	92.21	3.02
2016-17	7.57	93.59	4.66
Average	2.24	90.95	1.44
Standard deviation	2.43	2.57	1.52

Source: calculations are based on annual reports data

The quality of assets will be measured through the analysis of the bank advances. The assets are divided into standard, substandard, doubtful and loss assets based on the criteria given by the RBI. To measure the quality of the assets, the Net NPA ratio, proportion of government ratio and proportion of Net NPA to total assets are useful.

The statistics shows that the growth in the Net NPA portion is abnormal which is 0.15% in 2008 and increased to 7.57% in the year 2016-2017. Net NPA to total assets is also abnormally changed from 0.09% (2007-08) to 4.66% (2016-2017). The proportion of Government Securities is increasing marginally, which indicates reasonable share of Government securities in total assets. The bank should concentrate and control the growth of Non Performing Assets (NPA).

Graph 2: Asset Quality of Andhra Bank



Management Efficiency:

Management efficiency, another indispensable component of the CAMEL framework, means adherence to set norms, knack to plan and be proactive in the dynamic environment, leadership, innovativeness and administrative competence of the bank. The following ratios have been considered for measuring management efficiency

1. Total advances to total deposits ratio
2. Business per employee in lakhs
3. Profit per employee in lakhs

Table 3: Management efficiency of Andhra Bank

Year	Total advances ratio (%)	Business per employee (in lakhs)	Profit per employee (in lakhs)
2007-08	69.25	540.23	4.30
2008-09	74.32	625.78	4.58
2009-10	72.29	769.32	7.32
2010-11	77.51	959.45	8.99
2011-12	79.01	1153.88	8.91

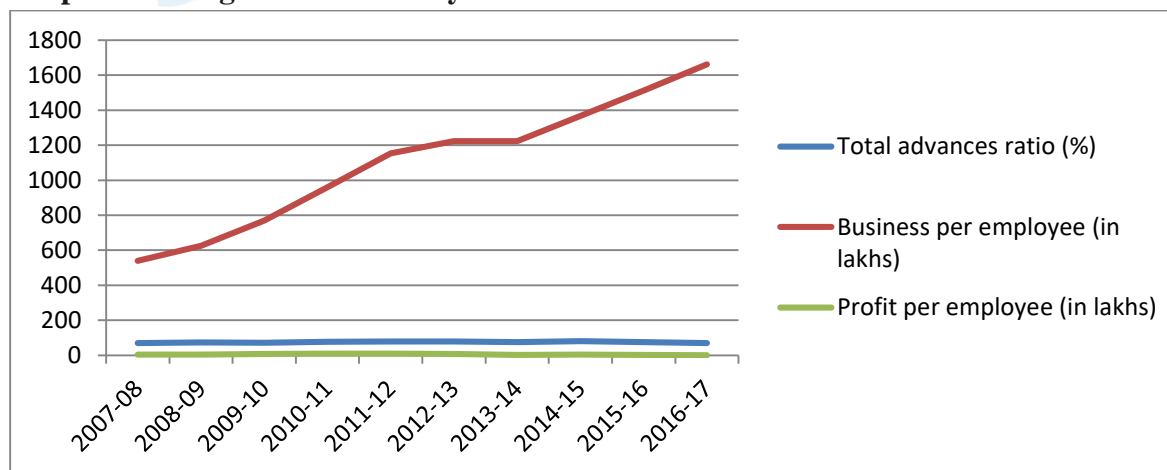
2012-13	79.46	1222.4	7.8
2013-14	75.88	1223.35	2.33
2014-15	81.25	1367.4	3.45
2015-16	75.03	1511.58	2.89
2016-17	70.01	1661.44	0.90
Average	75.40	1103.48	5.14
Standard deviation	4.03	373.63	2.89

Source: calculations are based on annual reports data

To be successful, the management should play active participation in utilizing the resources, satisfying employees, motivating the employees and bringing the desired performance from the employees is necessary. To measure the efficiency of the management three ratios are used i.e., total advances to total deposits ratio, Business per employee and Profit per employee. The total deposits ratio measures the extent of converting the deposits into advances, second ratio measures the productivity of employee and the third ratio measure the profit gained by the employee.

The statistics revealed that the management is able to turn on 75% of its deposits into advances and it is 81.25% in the year 2014-2015. The productivity of the employee is also increased from 540.23 lakhs (2007-08) to 1661.44 lakhs in the year 2016-17. The average productivity of the employee is also stood at 1103.48 lakhs. The bank is able to get more business per employee but it failed to bring more profits from it. The profit per employee is decreasing from 2014 onwards and comes to 0.9 lakhs in the year 2017. The bank should concentrate and take necessary measures to improve the profit per employee.

Graph 3: Management Efficiency of Andhra Bank



Earning Quality:

The quality of earnings represents the sustainability and growth of future earnings, value of a bank's lucrativeness and its competency to maintain quality and earn consistently. Earnings and

profitability are examined as against interest rate policies and adequacy of provisioning. The single best indicator used to gauge earning is the Return on Assets (ROA), which is net income after taxes to total asset ratio. The following ratios have been used to measure the earnings of the bank

1. Return on Asset (ROA)
2. Interest Spread to Total Assets ratio
3. Total income to Total Assets ratio

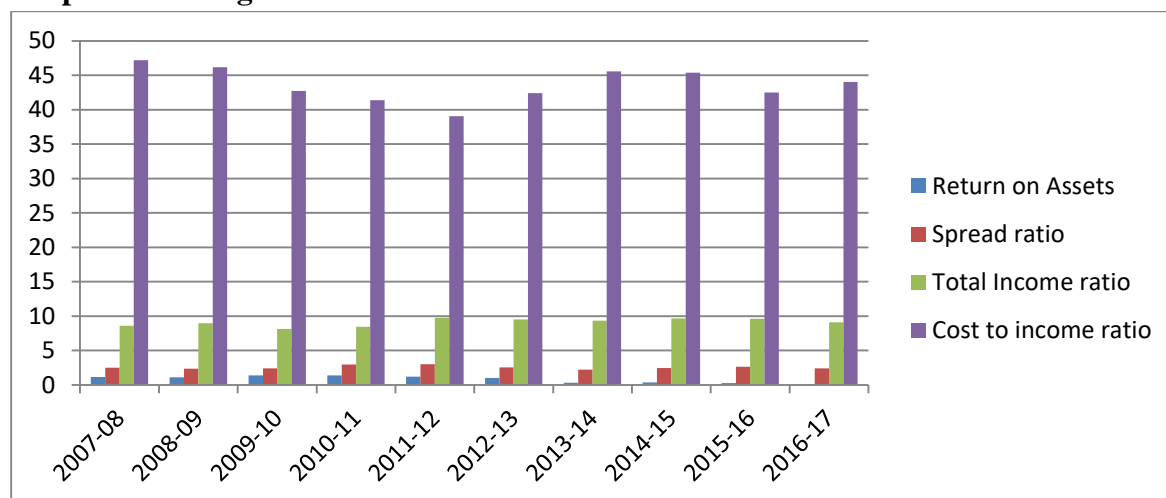
Table 4: Earning ability of Andhra Bank (in %)

Year	Return on Assets	Spread ratio	Total Income ratio	Cost to income ratio
2007-08	1.16	2.50	8.60	47.18
2008-09	1.09	2.37	8.96	46.16
2009-10	1.39	2.42	8.12	42.72
2010-11	1.36	2.95	8.43	41.40
2011-12	1.19	3.00	9.76	39.06
2012-13	0.99	2.56	9.54	42.40
2013-14	0.29	2.23	9.34	45.56
2014-15	0.38	2.45	9.64	45.37
2015-16	0.28	2.66	9.60	42.49
2016-17	0.08	2.40	9.10	44.03
Average	0.82	2.55	9.10	43.63
Standard deviation	0.50	0.24	0.56	2.48

Source: calculations are based on annual reports data

The success of any business is measured through the earnings only. Earnings are the measure for success of any bank. Comfortable earning will boost the morale of employee and enhances the job security. The earnings are measured through ratios like return on Assets, Spread to total Assets, Total income to Total Assets and the proportion of expenditure made by the bank for every one rupee of income. The bank experience a negative trend in the Return on Assets as it decreased year by year from 2010 onwards.

The bank stood with 1.39 in the year 2010 and it is 0.08 in the year 2017. It reveals that returns are significantly decreasing. The bank is able to maintain a balance between the interest income and interest expenditure. The standard deviation stood at 0.24 in the spread ratio. Total income to total assets ratio also revealed a stable performance and the standard deviation stood at 0.56. The bank is also able to maintain consistency in the cost to income. The average stood at 43.63. The overall earnings ability of the bank is decreasing year by year.

Graph 4: Earnings of Andhra Bank**Liquidity:**

In case of an adequate liquidity position, the institution can obtain sufficient funds, either by increasing liabilities or by converting its assets to cash quickly at a reasonable cost. The following ratios have been used to measure the liquidity

1. Cash to Total Assets ratio
2. Government Securities to Total Assets ratio
3. Total Investments to Total Deposits ratio

Table 5: Liquidity of Andhra Bank

Year	Cash to Total Assets Ratio	Govt. securities to Total Assets Ratio	Total Investments to total Deposits Ratio
2007-08	0.78	23.12	30.13
2008-09	0.64	22.22	28.47
2009-10	0.48	21.84	26.87
2010-11	0.42	20.86	26.26
2011-12	0.38	21.39	27.99
2012-13	0.43	22.54	30.39
2013-14	0.31	23.86	31.97
2014-15	0.36	22.95	30.39
2015-16	0.44	24.84	30.90
2016-17	0.43	25.15	30.54
Average	0.46	22.87	29.39
Standard deviation	0.14	1.41	1.87

Source: calculations are based on annual reports data

To have goodwill and to maintain good creditworthiness of the bank it is important to maintain good liquid funds. Cash and cash equalities are readily available funds to meet the expenditures; the proportion of government securities and total investments in total deposits also indicates the availability of funds. The study of liquidity is based on cash to total assets, Government securities to total assets and Investments to total assets. The bank is able to maintain on an average 0.46 percentage of cash to total assets. The bank balances the reserve throughout the study period. The standard deviation of this ratio is 0.14.

Graph 5: Liquidity of Andhra Bank

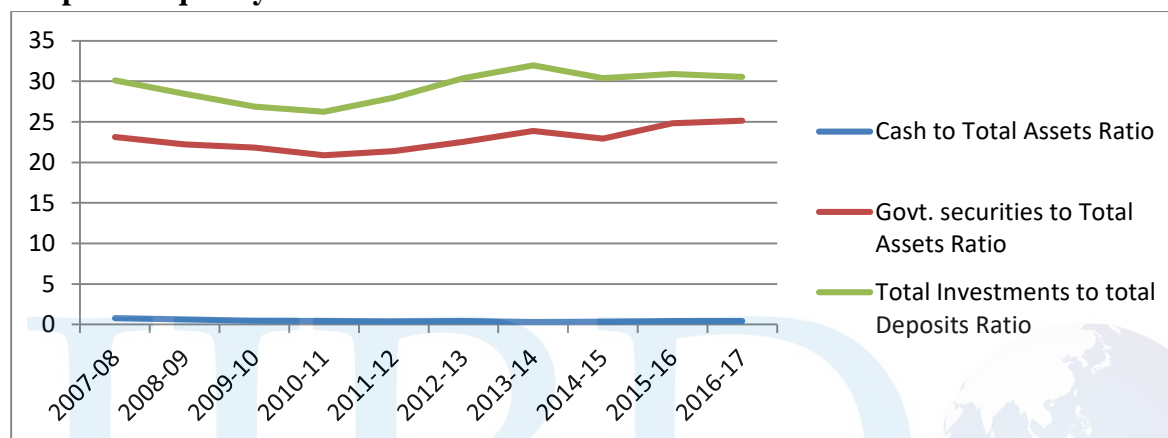


Table 6: The growth of Andhra Bank in Business & Network

Year	Business in crores				Net work	
	Total deposits	Total Advances	Total turnover	Profit after tax	No. of Branches	Delivery channels
2007-08	49437	34556	83993	576	1366	2128
2008-09	59390	44428	103818	653	1432	2248
2009-10	77688	56506	134194	1046	1557	2502
2010-11	92156	72155	164311	1267	1632	2676
2011-12	105851	84684	190535	1345	1712	2821
2012-13	123796	100137	223933	1289	1867	3125
2013-14	141845	110649	252494	436	2114	4009
2014-15	155012	129576	284588	639	2507	4782
2015-16	174302	136371	310673	540	2803	6477
2016-17	195441	144232	339673	174	2908	6875
CAGR	14.74%	15.36%	15.00%	-11.28%	7.85%	12.44%

The growth of the bank is measured through different variables like deposits, advances, turnover, net profit, number of branches and number of delivery channels. The first four variables measures the growth in the business and rest of the two measures the network of the bank.

The compound annual growth rate is taken to measure the growth of the bank in all the selected variable. The statistics reveals that the business turnover is in positive growth but the profits are in negative growth of -11.28%. The bank is also presented positive growth in network i.e., number of branches and number of channels.

Conclusion: The study is undertaken to know the financial performance of the bank based on the last 10 years data i.e. from 2008 to 2017. The bank is maintaining sufficient capital as it reflects consistency in the amount of capital and proportion of debt in equity. According to CAMEL's approach bank is not performing well as asset quality, management efficiency and earnings are decreasing year by year. Hence it is recommended to take necessary actions to control NPA and to improve profitability of the bank.

References:

Journals:

1. Aspal, P. K. and Malhotra, N. (2013): "Performance Appraisal of Indian Public Sector Banks", World Journal of Social Sciences, Vol. 3, No. 3, pp. 71 – 88.
2. Chaudhry, Sahila and Singh, Sultan (2012): "Impact of Reforms on the Asset Quality in Indian Banking", International Journal of Multidisciplinary Vol. 5(2): pg. 17-24
3. Gupta, R. (2008), A CAMEL Model Analysis of Private Sector Banks in India, Journal of Gyan Management, 2(1), pp.3-8.
4. Kwan, S. and Eisenbeis, R. (1997), Bank Risk, Capitalization and Operating Efficiency, Journal of Financial Services Research, 12(2/3), pp.117-131.
5. Mathuva, D. M. (2009). Capital adequacy, cost income ratio and the performance of commercial banks: The Kenyan Scenario. The International journal of applied economics and Finance, 3(2), 35-47.
6. Rostami, M. (2015). Determination of CAMELS model on bank's performance. International journal of multidisciplinary research and development, e-ISSN, 2349- 4182.
7. Sarker, A. (2005), "CAMEL Rating System in the Context of Islamic Banking: A Proposed „S“ for Shariah Framework". Journal of Islamic Economics and Finance, Vol.1(1): pg. 78-84.
8. Siva, S & Natarajan, P (2011): "CAMEL Rating Scanning (CRS) of SBI Groups", Journal of Banking Financial Services and Insurance Research, vol. 1, no. 7, pp. 1-17.

Web sites:

1. <https://www.andhrabank.in/Download/AnnualReport2016-17.pdf>
2. <https://www.andhrabank.in/English/AnnualReport.aspx>
3. <https://www.andhrabank.in/English/GenTheBank.aspx>
4. <http://www.ibef.org/industry/banking-india.aspx>
5. <http://www.iba.org.in/>
6. <http://www.rbi.org.in/home.aspx>