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# Critical Investigation of Performance and Profitability: An Analysis of Axis Bank

Dr. Hiteksha S. Joshi, PhD, M.B.A. (Finance),

Assistant Professor at NRIBM, GLS University, Ahmedabad, India.

## **ABSTRACT**

Equity analysis seeks to assess whether a company shares can be to appreciate from their current market value. Thus, generally what equity analysis truly seeks to do is to ascertain the inherent value of a shares and compare it with its current market price to determine whether you should buy it or not. Thus paper is intended to investigate fundamental and technical analysis and represents fair picture of company's profitability and performance. For conducting this research last five years data s taken i.e Apr- 2012 to Mar- 2017. Result of the study indicates that Axis bank is fundamentally and technically strong so investor may choose this stock.

**Keywords**: Bank performance, Moving average, Relativity strength Index, PEG ratio.

## **INTRODUCTION:**

Real worth of share may not always be reflecting in the market. The value of shares either undervalued or overvalued based on performance of banks purview. In a nutshell, you can think about fundamental analysis as it's more logical and pragmatic part of investing in which you are looking at financial soundness of a company and its business prospects. Fundamental analysis promises greaterrewards than technical analysis even so it is not free from short comings. Investors need to know the trend of the share value fluctuation and stability of share price movement. As advocated by economist, we have understood that market condition under which we operates are not perfect. So we can assume that equity analysis may generate superior return in comparison with Market.

### LITERATURE REVIEW:

(Paul & Mitra, 2015) Have done technical analysis to identify and forecast price fluctuation in share market. Four major banks of India used as sample and these banks represents around 80% shares in bank nifty. For concluding study moving average and other technical tools were applied.

(choudhri, 2014) Studied impact of word of mouth in retail banking industry. Main objective the study is to find relationship between service quality and their dimension level. For conducting this research SERVQUAL model was used to judge customers perception of service quality. Result of the study reveals that attitude is the most important factor in word of mouth.

(Bhattacharyya & Pal, 2013) Estimated technical efficiency of Indian commercial banks for ten years. They have used generalized stochastic production frontier to study effect of financial reforms and technical efficiency. Result of the study revealed that public commercial banks are more efficient in comparison of private and foreign bank. As well ratio of effectiveness in public bank is around 64%.

(Raiyani & Bhatasna, 2013) Examined technical efficiency of Indian banks with five input variables which includes deposits, net worth, fixed assets and operating efficiency. Researcher have used around forty nine banks of India as a sample and determined score of all this banks based on efficiency level.

(Baidya & Mitra, 2012) Used data envelopment analysis to study technical efficiency of public sector banks. Banks were given ranks for efficiency using DEA analysis. They concluded that higher efficiency must have

good operating efficiency and strong fundamentals.

(Chowdhury, 2012) Focused on reforms took place after 1991. Through this reforms Indian banks got strengths and more flexibility. Indian banking system is a strong outlet which can best perform in financial crisis and economic upset. He concluded that Indian banks are facing challenges because of globalization and changes in banking norms and standards.

(Monea, 2011) Identified a set of indicators such of expense dynamics and structure and income dynamics and structure. As a sample two commercial banks and two Romanian banks were taken. Research study is centered on return on equity, equity multilayer, and return on assets, net assets margin and expense to income ratio.

(Ramachandran & Kavitha, 2009) Divided banking sector in three different categories i.e. Nationalized bank, SBI group banks and private banks of India. Step wise multiple regression analysis was used for ten years, again duration of ten years divided in two groups. Result indicates major factors like capital adequacy ratio, expense ratio and interest expense ratio.

(Bodla & Verma, 2007) Identified key determinant variables of profitability in banking industry. Using multivariate regression model and sample size of twelve years data, attempt was made to identify key determinants in public sector banks. Variables of the study were credit/Debit ration, operating expenses, Non-performing assets, profit per employees and many more.

(Goddard, Molyneux, & Wilson, 2004)Examined profitability of European banks from early nineties. For research cross sectional analysis, dynamic panel model and time series were used. Though there is competitive pressure in the market abnormal profit was observed in the study as well there is positive relationship between profitability and capital assets ratio.

## **OBJECTIVES OF THE STUDY:**

- To Identify market trends shown by AXIS Bank on the basis of Oscillators
- To evaluate the financial performance of Axis Bank through fundamental analysis.
- To understand various model of equity valuation and its performances.

# STATISTICAL TOOLS:

- > The tools of technical analysis/Oscillators (MACD, ROC and RSI) have been used.
  - MACD (Moving average convergence divergence) It has been calculated by taking short-term moving average of five months for five years.
  - ROC (Rate of Change)
  - RSI (Relative Strength Index )
- ➤ Ratio Analysis
  - PGE ratio: PEG is a valuation ratio used for detraining the relative tradeoff between the price of stock, EPS (Earning per Share) and expected growth.

# DATA ANALYSIS AND INTERPRETATION:

Table I: Annual Data

			Axis Bank		Rs. In Cr.		
	2016	2015	2014	2013	2012		
Equity Share Capital	476.57	474.1	469.84	467.95	413.2		
Total Share Capital	476.57	474.1	469.84	467.95	413.2		
Reserves and Surplus	52,688.34	44,202.41	37,750.64	32,639.91	22,395.34		
Total Reserves and Surplus	52,688.34	44,202.41	37,750.64	32,639.91	22,395.34		
Total Shareholders' Funds	53,164.91	44,676.52	38,220.49	33,107.86	22,808.54		
Deposits	357,967.56	322,441.94	280,944.56	252,613.59	220,104.30		
Borrowings	99,226.38	79,758.27	50,290.94	43,951.10	34,071.67		
Other Liabilities and Provisions	15,108.77	15,055.67	13,788.89	10,888.11	8,643.28		
Total Capital and Liabilities	525,467.62	461,932.39	383,244.89	340,560.66	285,627.79		
ASSETS							
Cash and Balances with Reserve Bank of India	22,361.15	19,818.84	17,041.32	14,792.09	10,702.92		

			Axis Bank		Rs. In Cr.
Balances with Banks Money at Call and Short Notice	10,964.29	16,280.19	11,197.38	5,642.87	3,230.99
Investments	122,006.20	132,342.83	113,548.43	113,737.54	93,192.09
Advances	338,773.72	281,083.03	230,066.76	196,965.96	169,759.54
Fixed Assets	3,523.17	2,514.31	2,410.21	2,355.64	2,259.33
Other Assets	27,839.08	9,893.19	8,980.79	7,066.56	6,482.93
Total Assets	525,467.62	461,932.39	383,244.89	340,560.66	285,627.79
P/L Before Tax	12,393.75	11,056.83	9,348.63	7,552.69	6,287.84
Tax	4,170.09	3,699.01	3,130.96	2,373.26	2,045.63
P/L After Tax from Ordinary Activities	8,223.66	7,357.82	6,217.67	5,179.43	4,242.21

Table II: PEG Ratio:

	Axis bank								
Year	MP	EPS (curren t yr.)	PE	Earning Growth Rate % (next year)	PEG	PEG >1	PEG =1	PEG <1	Status
2012	224.52	110.7	2.02855	73.47358	0.027609				Under value
2013	301.04	110.7	2.71991	52.57979	0.051729				under value
2014	223.91	132.3	1.69205	37.62759	0.044969				under value
2015	590.6	31.04	19.0270	26.92738	0.706607				under value
2016	408.15	34.51	11.8270	19.27	0.613752				under value
2017	528.15	19.27	27.4078	13.79016	1.987496				over value

# **Interpretation:**

PROJECTED EPS: EPS\*(1+GROWTH RATE)

19.27\*(1+0.1379) = 21.9273

Here as represented in table:1 P/E is higher than the growth rate so it is negative considered. When the P/E rate exceeds the growth rate, is considered a negative. So the stock is said to be overpriced. The projected Earnings per Share (EPS) of the security is estimated to be Rs. 21.9273.

**Table III: Ratio Analysis** 

					(Rs. In Cr.)
Particulars	2016	2015	2014	2013	2012
EPS	34.59	31.18	132.56	119.67	102.94
Book Value/share (rs.)	223.12	188.47	813.47	707.5	551.99
Dividend/Share (Rs.)	5	4.6	20	18	16
Operating Revenue / Share (Rs.)	172.01	149.67	652.16	580.88	532.3
Net Profit/Share (Rs.)	34.51	31.04	132.33	110.68	102.67
Net Profit Margin (%)	20.06	20.73	20.29	19.05	19.28
Operating Profit Margin (%)	-2.8	-2.83	-3.87	-5.04	-5.35
Return on Assets (%)	1.56	1.59	1.62	1.52	1.48
Return on Equity / Networth (%)	15.46	16.46	16.26	15.64	18.59
Price To Book Value (X)	1.99	2.97	1.8	1.84	2.08
Retention Ratios (%)	85.51	85.21	84.88	83.7	84.48
Earnings Yield (X)	0.08	0.06	0.09	0.09	0.09
Capital Adequacy Ratios (%)	15	15	15	16	17
Equity Dividend Rate (%)	250	230	230	200	180

# **Interpretation:**

The operating revenue per share of the Bank increased by 172.01 Rs. To 149.67 Rs. from last year. It is reflecting the stability of the Bank's earnings. From the operating profit ratio it is found that the ratio is highly

satisfactory during the considered financial years. The highest ratio recorded is -2.8 in the year 2015 and the lowest is -5.35 in the year 2012.

From the return on Assets it is found that the ratio calculated for the considered financial years is good. The ratio is satisfactory as the return on investment is effective and good, comparing the previous years.

From the retention ratio it is found that the ratio is satisfactory.

Based on latest financial disclosure AXIS Bank Limited has Return on Equity of 15.46%. This is lower than that of the sector, and significantly quite lower than that of Return on Equity industry.

Capital adequacy ratio of the AXIS Bank was well with 15% for the year2016, above prescribed by RBI.

# Technical analysis:

As per annexure: II monthly closing price is taken for examination of fluctuation in stock price, using ROC, MACD and RSI.

ROC (Rate of change)

80

60

40

20

20

301.04

481.02

323.06

40

234.03

244.53

258.73

268.73

278.83

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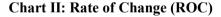
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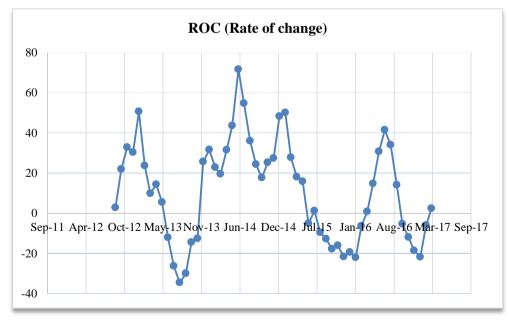
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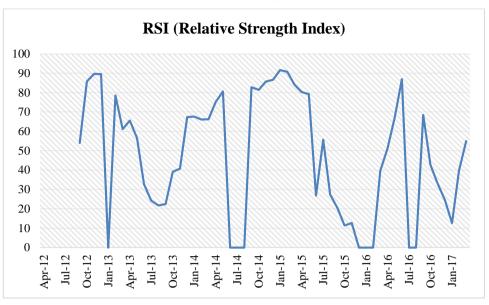
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**Chart I: Moving Average Convergence and Divergence (MACD)** 







**Chart III: Relative Strength Index (RSI)** 

# **Interpretation:**

ROC shows the percentage difference between the current price and the price and periods ago. It measures the percentage change in price over a given period. The higher the percentage change in price the higher the ROC RSI measures the relative strength of a security against itself. It is scaled to oscillate between 0 and 100 with high values (> 70) showing an overbought market and low values (< 30) showing an oversold market.( RSI > 70, Sell Signal) (RSI < 30, Buy Signal)

RSI is 54.99 which means the trend is shows bullish signal and from this one can predict that in near future price of the stock may increase.

## **CONCLUSION:**

Here, study is meant to do analysis of axis bank which is done through fundamental and technical indicators. PEG ratio gives true position and valuation of the stock. Moving average analysis can help when the prices appear to move rather haphazardly and be very volatile. A moving average is a smoothed presentation of underlying historical data.

By analyzing all this statistical tools, conclusion can be derived that AXIS bank is one of the good option which investor can choose. Study reveals that RSI and PEG ratio indicates investors will gain in near future.

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#### **ANNEXURE: I**

#### Formulas:

- ➤ Operating Profit Margin (%)=operating income/ total revenue
- ➤ Net Profit Margin (%)=net profit/total revenue
- ➤ Return on Equity / Net worth (%) = net income / shareholders' equity
- > EPS = (profit-dividend) / no of outstanding shares
- ➤ DIVIDEND PAYOUT RATIO = dividend/ net income
- ➤ DIVIDEND YIELD =annual dividend / current stock price
- ➤ P/E RATIO = MP/EPS
- $\triangleright$  ROE = PAT/ Net worth
- ➤ Net Worth = Share Capital + Reserve and Surplus
- ➤ ROA=Net income/Total Asset
- > PE ratio = Market Price per Share/ EPS
- ➤ Book value = Net worth Preference dividend / Total number of equity shares
- ➤ DIVIDEND PER SHARE=DPS/EPS
- ➤ Debt Equity Ratio=Total liabilities/Shareholders Equity
- ➤ CURRENT RATIO =CURRENT ASSET/CURRENT LIABILITY
- ➤ Net profit margin = Net income/Sales revenue
- ➤ Dividend payout ratio = Dividend per share / EPS \* 100
- ➤ Earnings Retention Ratio = (net income-dividends)/net income

#### ANNEXURE: II

Trend Analysis of the Share Prices of AXIS BANK on the basis of Oscillators (monthly basis) from April, 2012 to March, 2017

	axis bank			
Months	Monthly closing price	MACD (Moving average convergence divergence)	ROC (Rate of change)	RSI (Relative Strength Index)
Apr-12	221.32			
May-12	194.31			
Jun-12	194.2			
Jul-12	208.29			
Aug-12	199.98	203.62		
Sep-12	227.35	204.826	2.724562	53.92
Oct-12	236.95	213.354	21.94432	85.84
Nov-12	258	226.114	32.85273	89.67
Dec-12	271.3	238.716	30.25109	89.56
Jan-13	301.04	258.928	50.53505	0.00
Feb-13	280.93	269.644	23.56719	78.56
Mar-13	260.25	274.304	9.833298	61.11
Apr-13	294.86	281.676	14.28682	65.56
May-13	286.13	284.642	5.466273	56.51
Jun-13	264.61	277.356	-12.1014	32.76
Jul-13	206.89	262.548	-26.3553	24.16
Aug-13	170.15	244.528	-34.6206	21.72
Sep-13	206.21	226.798	-30.0651	22.43
Oct-13	244.58	218.488	-14.5214	39.09
Nov-13	231.06	211.778	-12.679	40.80
Dec-13	259.93	222.386	25.63681	67.27

	axis bank			
3.5 .3	Monthly	MACD (Moving average	ROC (Rate	RSI (Relative
Months	closing price	convergence divergence)	of change)	Strength Index)
Jan-14	223.91	233.138	31.59565	67.59
Feb-14	253.18	242.532	22.77775	66.08
Mar-14	292.23	252.062	19.48238	66.24
Apr-14	303.84	266.618	31.49831	75.13
May-14	373.11	289.254	43.54249	80.55
Jun-14	384.28	321.328	71.62253	0.00
Jul-14	391.85	349.062	54.77131	0.00
Aug-14	397.3	370.076	35.95456	0.00
Sep-14	377.8	384.868	24.34176	82.74
Oct-14	438.75	397.996	17.59267	81.36
Nov-14	481.05	417.35	25.18216	85.64
Dec-14	498.9	438.76	27.31913	86.65
Jan-15	588.7	477.04	48.17518	91.54
Feb-15	567.15	514.91	50.11911	90.73
Mar-15	560.4	539.24	27.7265	84.12
Apr-15	567.85	556.6	18.04386	80.26
May-15	577.85	572.39	15.82481	79.12
Jun-15	558.65	566.38	-5.10447	26.87
Jul-15	573.75	567.7	1.163713	55.64
Aug-15	506.7	556.96	-9.58244	27.40
Sep-15	495.55	542.5	-12.7322	20.49
Oct-15	474.95	521.92	-17.8074	11.34
Nov-15	468.85	503.96	-16.0745	12.58
Dec-15	449.5	479.11	-21.6558	0.00
Jan-16	408.15	459.4	-19.4494	0.00
Feb-16	386.05	437.5	-22.0967	0.00
Mar-16	444.55	431.42	-6.40067	39.69
Apr-16	472.25	432.1	0.725179	51.01
May-16	515.6	445.32	14.70523	67.12
Jun-16	533.45	470.38	30.6995	86.96
Jul-16	546.05	502.38	41.44541	0.00
Aug-16	595.65	532.6	33.98943	0.00
Sep-16	538.75	545.9	14.08152	68.44
Oct-16	487.8	540.34	-5.39178	42.60
Nov-16	469.75	527.6	-11.9411	33.07
Dec-16	444.15	507.22	-18.6613	24.66
Jan-17	465.9	481.27	-21.7829	12.55
Feb-17	506.15	474.75	-6.05104	39.59
Mar-17	499.05	477	2.306273	54.99