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Performance & Estimation of Culled Banking Stocks

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ABSTRACT

The Indian stock market is very volatile and stock market indices shows the economic growth of any country. In the globalized market, stock market is not free from imperfections, so investment decision plays very important role for maximizing the wealth and profit. Selection of any stocks based upon associated risk and expected return on investment. In the present Indian scenario, Banking sectors are playing crucial role especially after demonetization and the fluctuation during 2014-18 is huge in stock prices of bank, Therefore this segment of stock prices has been taken for the study. The aim of this paper is to gauge the risk & return associated with selected stocks of banking sector, listed at BSE as per their market capitalization. This study is an attempt to analyze the trend of these sector specific stocks.

Keywords: Stocks, Market Capitalization, Risk, Return, Trend Analysis.

INTRODUCTION:

The financial system of any country plays very crucial role in economic development. Whereas Investment in financial market decides the profit and growth of any company and fluctuation in stock prices is the reflection of According to Reserve Bank of India (RBI) Indian banking system is very structured and regulated. Indian banking industry has recently witnessed the roll out of innovative banking models like payments and small finance banks. RBI's new measures may go a long way in helping the restructuring of the domestic banking industry. The digital payments revolution will trigger massive changes in the way credit is disbursed in India. Role of Financial Market is very crucial in flow of cash in public, Likewise, Selection of
In August 2017, Global rating agency Moody's announced that its outlook for the Indian banking system was stable. In November 2017, Global rating agency Moody's upgraded four Indian banks from Baa3 to Baa2.

REVIEW OF LITERATURE:

Sunil Rashinker (2014), analyzed the market risk associated with nationalized banking stocks. The findings proved that few stock prices were going up at the odd timings even the market was going down. Likewise, State bank of India, Industrial Development Bank and Syndicate bank is showing negative Beta value which implies that these stocks moved against the market and less affected by market risk.
Shaini Naveen & T. Mallikarjunappa (2016), in their study on Comparative analysis of risk and return for stock of CNX Nifty, found that all banks have positive beta value and the few stock prices of banks moves in reverse direction and few move along with market.
Jaspal Singh & Kiranpreet kaur (2015), has done an empirical analysis on Adding value to value stocks in Indian Stock market. The results of his study reveals that the mean market adjusted return of stocks, F score is significantly larger than the portfolio of value stocks which comprises that an investor could constitute a hybrid portfolio and generate positive return by selling expected losers stocks and buying expected winner stocks.
P. Naveen & K. Neeraja (2018), found in their study of risk and return analysis of equity shares in banking sector, that among the 5 banks-Central Bank of India, ICICI Bank, HDFC Bank, Syndicate Bank, State Bank of India, HDFC bank has experienced the highest returns and lowest risk and syndicate bank has the higher risk when

compared with all.

Patjoshi, P. (2016), done a research study for analyzing risk and return of Indian banks for duration 2001-15 and Correlation analysis reveals that Sensex returns have high positive correlation with Axis bank return. But on the other hand a negative correlation with ICICI bank. This study reveals that for the period of 15 years the Banking stocks were moving in the same direction of the Sensex except the ICICI bank returns.

SCOPE OF THE STUDY:

The study covers market risk associated with State Bank of India, ICICI Bank, HDFC Bank, Axis Bank, IndusInd Bank and Kotak Mahindra Bank, listed in BSE. The duration of the study was taken for financial year (2013 to 2018), for past five year's performance to compute the unsystematic risk (std. deviation) and systematic risk (Beta) of selected bank stocks. This study is also helpful for the investors to observe the trends of Indian banking sector stocks and analyze the valuation of stocks on the basis of actual and expected return by (CAPM model) for investment. Capital Asset Pricing Model (CAPM) is used to analyze whether a particular listed stock is undervalued or overvalued for investment purpose.

RESEARCH METHODOLOGY:

Objectives:

1. To estimate the systematic and unsystematic risk associated with culled banking stocks.
2. To study the Banking stocks movement with respect to Sensex.
3. To analyze the valuation of culled banking stocks.

Type of Research: Descriptive in Nature

Sources of Data Collection:

To study the performance of Indian banking stocks, entire banking sector was considered as universe of the study. The sample of six banks listed in BSE Sensex were selected purposefully to achieve the objectives. Secondary data have been used for data analysis from BSE Website.

Method of Data Analysis:

To achieve the research objective BSE Sensex index has taken as dependent variable and other banking stock indices as independent variable. Systematic risk (Beta) and unsystematic risk (standard deviation) is calculated for the listed six banking stocks in BSE. Correlation and descriptive statistics has used, for culled banking stocks with respect to market (BSE Sensex) for providing an investor's view.

Table 1: Relationship between Culled Banking Stocks & Sensex

	Mean		**Standard Deviation**		**Correlation**
	Axis Bank	**Sensex**	**Axis Bank**	**Sensex**	
2013-14	1220.67	20262.74	199.42	1092.32	0.481
2014-15	802.33	26814.47	588.77	2077.12	-0.694
2015-16	492.41	26275.63	68.32	1425.86	0.932
2016-17	506.27	27572.79	42.14	1109.52	0.381
2017-18	526.83	32587.66	26.54	1689.14	0.824
	HDFC Bank	**Sensex**	**HDFC Bank**	**Sensex**	
2013-14	658.33	20262.73	45.53	1092.31	0.694
2014-15	905.84	26814.47	112.36	2077.12	0.935
2015-16	1055.37	26275.63	41.17	1425.86	0.523
2016-17	1256.3	27572.79	89.35	1109.52	0.94
2017-18	1792.09	32587.66	128.77	1689.14	0.92
	ICICI Bank	**Sensex**	**ICICI Bank**	**Sensex**	
2013-14	1045.9	20262.73	128.28	1092.31	0.671
2014-15	1108.45	26814.47	578.11	2077.12	-0.431
2015-16	273.05	26275.63	40.1	1425.86	0.935
2016-17	259.55	27572.79	14.16	1109.52	0.744

	Mean		Standard Deviation		Correlation
2017-18	303.17	32587.66	22.11	1689.14	0.693
	IndusInd Bank	**Sensex**	**IndusInd Bank**	**Sensex**	
2013-14	428.09	20262.73	52.19	1092.31	0.353
2014-15	690.8	26814.47	152.05	2077.12	0.892
2015-16	907.18	26275.63	54.18	1425.86	0.135
2016-17	1182.52	27572.79	103.35	1109.52	0.923
2017-18	1629.18	32587.66	108.44	1689.14	0.735
	Kotak Mahindra Bank	**Sensex**	**Kotak Mahindra Bank**	**Sensex**	
2013-14	712.61	20262.73	47.49	1092.31	0.544
2014-15	1097.91	26814.47	200.29	2077.12	0.922
2015-16	850.86	26275.63	316.68	1425.86	0.574
2016-17	776.17	27572.79	44.01	1109.52	0.907
2017-18	1008.34	32587.66	57.23	1689.14	0.907
	SBI	**Sensex**	**SBI**	**Sensex**	
2013-14	2922.75	20262.73	3845.26	1092.31	-0.483
2014-15	1571.9	26814.47	1131.2	2077.12	-0.664
2015-16	234.2	26275.63	38.34	1425.86	0.941
2016-17	244.38	27572.79	28.97	1109.52	0.784
2017-18	288.55	32587.66	24.02	1689.14	0.382

Source: secondary data collected from BSE website and author has calculated the variables with MS Excel

Table 2: Valuation of Stocks using CAPM Model

S. No.	Company Name	Year	Beta	Expected Return by CAPM (ER=Rf+B(Rm-Rf))	Actual Return	Difference between Expected and Actual Return	Overvalued/ Undervalued
1	Axis Bank	2013-14	0.087814	0.092	-0.021	0.113	Undervalued
		2014-15	-0.196718	0.056	-0.631	0.687	Undervalued
		2015-16	0.0446567	0.080	-0.2171	0.297	Undervalued
		2016-17	0.0144705	0.082	0.0392	0.042	Undervalued
		2017-18	0.0129468	0.077	-0.0003	0.078	Undervalued
2	HDFC Bank	2013-14	0.0289275	0.089	0.0977	-0.009	Overvalued
		2014-15	0.050578	0.095	0.4241	-0.329	Overvalued
		2015-16	0.015101	0.085	0.0828	0.002	Undervalued
		2016-17	0.0756985	0.086	0.2724	-0.186	Overvalued
		2017-18	0.0701353	0.079	0.2265	-0.148	Overvalued
3	ICICI Bank	2013-14	0.0788017	0.092	0.071	0.021	Undervalued
		2014-15	-0.119957	0.068	-0.746	0.814	Undervalued
		2015-16	0.0262954	0.083	-0.285	0.368	Undervalued
		2016-17	0.0094951	0.081	0.171	-0.090	Overvalued
		2017-18	0.009071	0.077	-0.001	0.078	Undervalued
4	IndusInd Bank	2013-14	0.0168662	0.088	0.072	0.016	Undervalued
		2014-15	0.0652965	0.097	0.8423	-0.745	Overvalued
		2015-16	0.0051297	0.086	0.1743	-0.088	Overvalued
		2016-17	0.085976	0.087	0.3433	-0.256	Overvalued
		2017-18	0.0471858	0.078	0.322	-0.244	Overvalued
5	Kotak Mahindra Bank	2013-14	0.0236513	0.088	0.1026	-0.014	Overvalued
		2014-15	0.0889055	0.101	0.6347	-0.533	Overvalued
		2015-16	0.127484	0.068	-0.4894	0.557	Undervalued
		2016-17	0.0359769	0.083	0.2186	-0.135	Overvalued
		2017-18	0.0307302	0.078	0.163	-0.085	Overvalued
6	SBI	2013-14	-1.700305	-0.016	-0.1527	0.137	Undervalued

S. No.	Company Name	Year	Beta	Expected Return by CAPM (ER=Rf+B(Rm-Rf))	Actual Return	Difference between Expected and Actual Return	Overvalued/ Undervalued
		2014-15	-0.361615	0.029	-0.8715	0.901	Undervalued
		2015-16	0.0253026	0.083	-0.2805	0.364	Undervalued
		2016-17	0.0204705	0.082	0.5485	-0.466	Overvalued
		2017-18	0.0054321	0.077	0.1362	-0.059	Overvalued

Source: secondary data collected from BSE Website and Author has applied formulas in MS Excel to calculate risk

Regression Model:

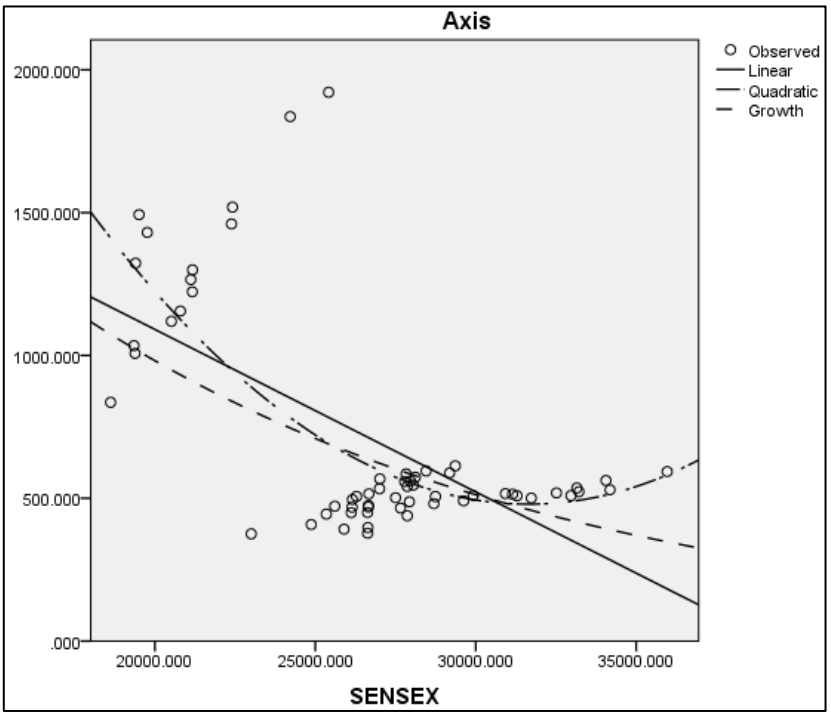
I. AXIS BANK

Table 3 : Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
SENSEX	-6.505E-5	.000	-.620	-6.018	.000
(Constant)	8.190	.292		28.035	.000

Source: SPSS Software is used The dependent variable is (Axis).

Figure A



II. HDFC BANK

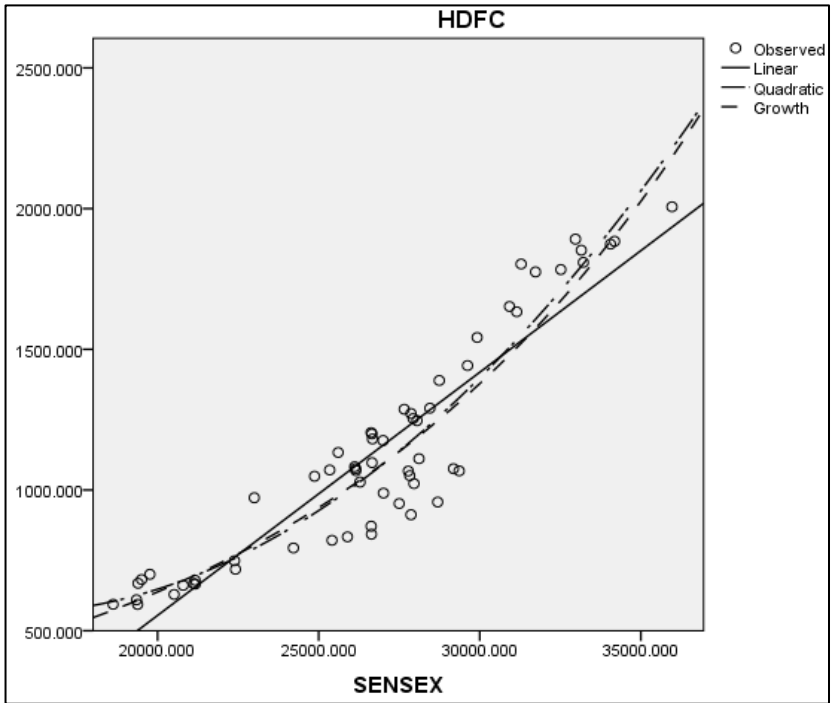
Table 4: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1173.830	128.587		-9.129	.000
	SENSEX	.086	.005	.922	18.164	.000

Source: SPSS software is used.

Dependent Variable: HDFC

Figure B



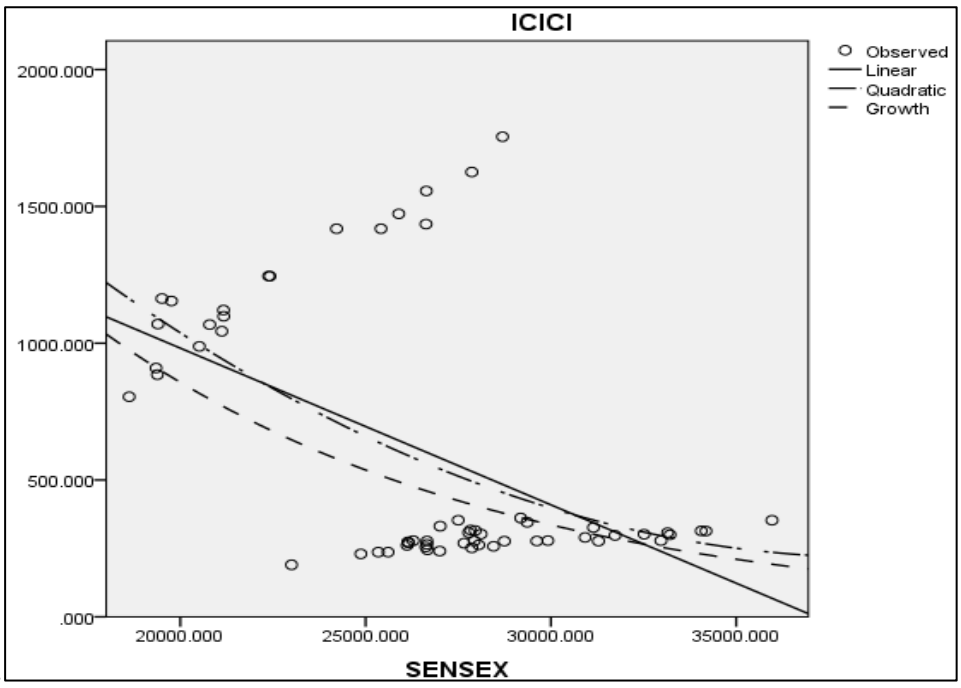
II. ICICI Bank

Table 5: Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
SENSEX	-9.363E-5	.000	-.561	-5.158	.000
(Constant)	8.626	.491		17.579	.000

Source: SPSS Software is used
The dependent variable is ln (ICICI).

Figure C.



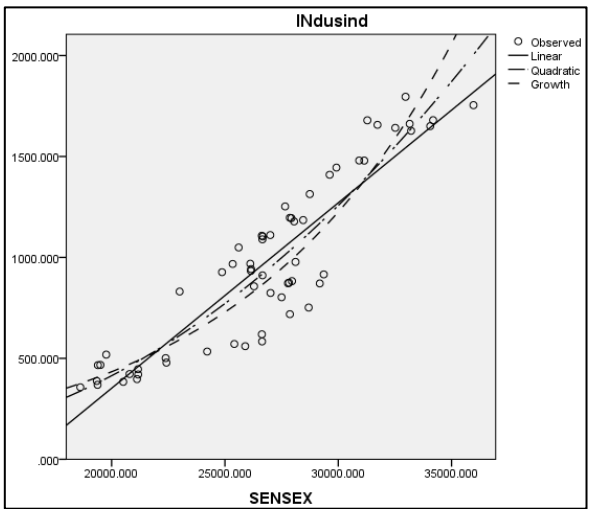
III. INDUSIND BANK

Table 6: Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
SENSEX	.000	.000	.913	17.095	.000
(Constant)	3.996	.164		24.335	.000

Source: SPSS Software is used
The dependent variable is ln(INdusind).

Figure D.



V. KOTAK MAHINDRA BANK

Table 7: Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
SENSEX	3.262E-5	.000	.594	5.618	.000
(Constant)	5.892	.157		37.536	.000

Source: SPSS Software is used
The dependent variable is ln (Kotak).

Figure E.

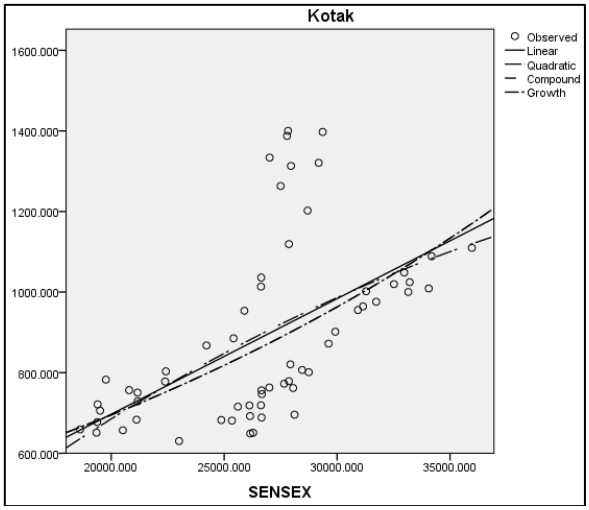


Table 8: Coefficients

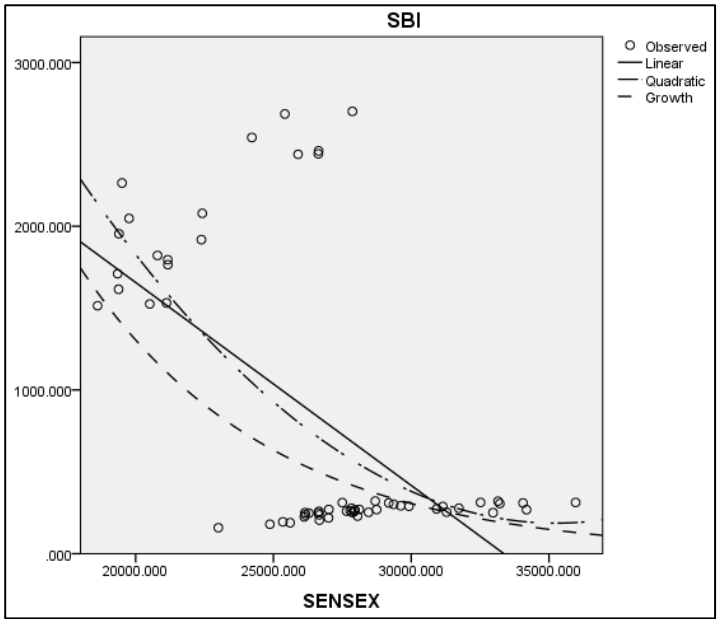
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	4136.190	579.243		7.141	.000	2976.709	5295.671
	SENSEX	-.124	.021	-.605	-5.785	.000	-.167	-.081

Source: SPSS Software used

a. Dependent Variable: SBI

VI. SBI

Figure F.



FINDINGS:

1. As per the results shown in table 1, there is a positive Correlation between the stocks of HDFC Bank (Fig B), IndusInd Bank (Fig D) and Kotak Mahindra Bank (Fig E) with the movement of Sensex in past five years. Whereas, remaining stocks of Axis Bank (Fig A) and ICICI Bank (Fig C) are showing negative correlation with the movement of Sensex for year 2014-15 only and SBI Bank is showing negative correlation for two years from 2013 to 2015. This study interprets that most of the time banking stocks are moving in the same direction in tandem with Sensex.
2. When expected return is more than Actual return, the stock considered as undervalued, which implies an investor should buy the stock. In case of overvalued stocks, when expected return is less than actual return, an investor should sell the stock. As per the historical data analysis by using CAPM method (table 2) of past five years Axis Bank and ICICI bank stocks seems undervalued consistently. Probably these investors must buy these culled stocks. On the other side, HDFC bank, IndusInd Bank and Kotak Bank stocks seems overvalued, so investor must sell the stocks to earn profit. Whereas, SBI has shown mixed effect of undervalued in 3 years (FY 2013- FY16) and overvalued (FY 2017 & FY 2018) for 2 years moderate return. So investors can hold these stocks to analyze the market in long run.
3. As per the Regression analysis, regression line has been drawn to predict the future prices, result interprets that as per figure 1.1 Axis Bank is showing upward curve means is Sensex goes up then stock prices of Axis bank will goes up, which indicates positive sentiments with market.

CONCLUSION:

This research study indicates that Sensex and Banking stocks are mostly, moving in the same direction only few exceptions were there for 1-2 year in which few culled stocks were showing negative return when market

indices went up. Major Banks as HDFC Bank, IndusInd bank and Kotak Mahindra bank is having similar trend as per the market indices. Likewise, this study interprets that these banking stocks moves in the same pattern of bull and bear market. These stocks have given consistently good returns so investor can buy these stocks for booking profit.

Axis bank returns are constantly declining and showing negative return since 2013, so investors should not buy these stocks. Unsystematic risk and systematic risk is also high for Axis bank. Likewise, table 2 interprets by using CAPM model that undervalued stocks like Axis bank, ICICI bank are showing negative returns so this is right time to buy. Moreover, HDFC and IndusInd bank stocks are overvalued in last five years which indicates that investors should hold these stocks or sell at the peak market indices for high returns. SBI is showing negative trend with market indices and sometimes overvalued and sometimes shows undervalued, indicates to hold these stocks as any strong conclusion could not be drawn. This study must be helpful for analyzing banking stocks trend with respect to Sensex and investors can take investment decision on the basis of past five years analysis.

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