A Study on Financial Capability of Public Sector Banks in India

Yogita M Patil, Dr. S.S. Jadhav Research Scholar, SRTM University, Nanded

Abstract: India is one of the emerging economies of the world. In this modern era, the growth of India is not only subjected to its dependency on Agro Products, although it covers a large part of our economy since we are the world leader in the milk production and second largest wheat producer in the world. But, with the increase in the financial literacy among the citizens of the country our exposure towards various financial products have also increased which is helping the economy boom in ways we couldn't even imagine 10 years back. Banks which are an integral part of an economy acts as a bridge between the general public and the economic parameters of a country. This paper focuses on the overall financial capability of the Public Sector Banks in India, metric used for analysis of the financial capability is Piotrowski's F Score, the higher the score the better the Financial Strength of a bank. The period of the study is 2018 – 2022 and the research is only subjected to 5 Public Sector Banks viz, Bank of Baroda, Punjab National Bank, Union Bank of India, Bank of India, and State Bank of India. Entire Interpretation and Analysis of Data is based on Secondary Sources via MoneyControl.

Keywords: Financial Stability, Public Sector Banks, Financial Inclusion, F-Score

INTRODUCTION

The word "bank" is used and communicated frequently and extensively. The Bengali equivalent of the English word "bank" is "finance". It was impossible to pinpoint the exact moment, place, or method at which the English term "bank" came into being. Even beyond the eleventh century, the history surrounding the "Bank's" beginnings is unclear and has been conjectured. Some writers claim that the word "bank" originated from "banco," "bancus," "banque," or "banc," all of which refer to a bench that mediaeval European money-lenders and money-changers used to display their coins on. In any case, this word has been associated with banks since the Middle Ages. A long stool or bench was claimed to be replaced by Bank, Bangke, etc. throughout the Scandinavian and Middle European countries, according to German author W. Frankace. Once more, the words "banque" and "Bangko" from Dutch and French were used to denote stools and benches before the word "bank" was coined.

Bank refers to a commercial bank and its operations in everyday speech. The Central Bank is a distinct organisation with distinct duties. A bank's role is to gather public deposits and lend those deposits for the growth of commerce, industry, trade, and agriculture. Bank gets interest on loans and advances from depositors at higher rates than it pays to depositors. In contemporary banking, the bank engages in a wide range of additional operations, such as the creation of debts and money, the transfer of funds from one nation to another, the expansion of international trade, the safekeeping of assets, etc. Thus, the Bank generates profits by carrying out a variety of activities.

In the past, a commercial bank was created for business purposes. Commercial banks led to the development of modern banking. According to Professor Roger, a "commercial bank" is a bank that deals with money and its equivalent in order to make a profit. The Central Bank oversees both the banking system and the money market. A central bank's main job is to support the government in developing economic policy, managing the money market, and overseeing bank credit.

For a company or bank to succeed, its finances must be strong. It is a crucial element needed for a business to survive, develop, and eventually repay capital to shareholders. Financial strength, at its most fundamental, is the capacity to make enough money to cover expenses, pay back debt, and return capital.

The Piotroski F-score, which ranges from 0 to 9, is used to evaluate the strength of a company's financial standing. Financial investors use the score to identify the best-value stocks (nine being the best). The score bears Joseph Piotroski's name, a professor of accounting at Stanford. A business is strong if it has a Piotroski F-score between 8 and 9. Firms with an F-score of 0–2 on the other hand, are weak. Varying economic sectors may have different average Piotroski F-score values (e.g., manufacturing, finance, etc.). This should be considered when contrasting businesses with various expertise.

REVIEW OF LITERATURE

The impact of this single index F Score measure is observed to be statistically significant when applied to future stock valuation rather than on the future stock return at least at 5% level of significance. The result here affirms that future stock performance of firms having higher book to market value would be better for the firms having higher F score as against the firms having lower F Score. These results lend support to our second set of alternative hypotheses at least at 10% level of significance. (Tripathy & Pani, January, 2017)

The book to market effect is probably one of the oldest effects which has been investigated in financial markets. The bigger the book to market ratio is, the more fundamentally cheap is the stock of the firm. Literature suggests that investors overreact to growth aspects for growth stocks, and value stocks remain thus undervalued. (De Bondt & Thaler, 1987)

While (Jegadeesh & Titman, 1993) report that in an intermediate horizon of three to twelve months, past winners continue to outperform past losers.

As the high BM firm managers suffers from credibility issue, their forward-looking positive information disclosure fails to change the mood of capital market. (Koch, 2002)

(Fama & French, 1992) affirm that firm's book to market, characterised as a variable, measures the financial distress and in turn future stream of returns of the stock required to be fairly compensated for risk. This high future return attribution to high BM stock emanates from both market efficiency and inefficiency. On one hand literature evidences a strong positive relation between BM, leverage, financial leverage, and other risk-based measures, which ensure the contribution of market efficiency. Empirical evidence also suggests that market doesn't fully incorporate historical financial information into price formation in future, which shows the inefficiency of the market (Piotroski, 2000)

The high BM stocks are often mispriced and these stocks surprise with their quarterly earnings and dividends, which remains un-noticed by the market participants (Porta, Lakonishok, Shelifer, & Vishany, 1997). In Turkey between 2001 and 2009, (Erol, Baklaci, Aydo Aum, & Tunc, 2014) compared the performance of Islamic banks to that of regular banks. The findings demonstrated that Islamic banks outperformed conventional banks in terms of profitability and asset management ratios, but lagged in terms of sensitivity to market risk criteria. For the years 1998 to 2007, (Mathuva, 2009) looked studied the correlations between profitability, capital adequacy ratio, and cost income ratio (CIR). According to the study, capital adequacy has a variety of effects on the bank's profitability.

For the years 2006 to 2015, (Singh & Seth, 2017) looked at the capital adequacy performance of India's commercial and public sector banks. Except for the Central Bank of India, all the banks were determined to have strong capital adequacy positions.

Asian markets have been studied by Kang and Ding (2005) where they found financially

strong firms determined by F Score usually outperform weak firms

OBJECTIVE AND RESEARCH METHODOLOGY

The main objective of this paper is to evaluate the financial performance of the selected public sector banks in India and to investigate the main elements that influence those bank's financial strength. In order to learn more about the current state of the phenomenon and to characterise "What Existing" in terms of variables, the current study is both descriptive and exploratory in nature. Out of the banks listed on the NSE, the top five public sector banks are State Bank of India, Punjab National Bank, Union Bank of India, Bank of India and Bank of Baroda.

This study is solely based on secondary data that was gathered from the Reserve Bank of India and the annual reports and ratios were retrieved from MoneyControl. The data available for analysis is for a period of five years starting from 2018 to 2022. The financial soundness of the chosen banks has been examined using the Piotroski's F Score which is obtained by taking into consideration the 9 parameters viz., Positive Net Income, Positive Return on Assets (ROA), Cash Flow from Operations (CFO) greater than Net Income, Lower Amount of Long-Term Debt, Higher Current Ratio, No New Shares issued in the Last year, Higher Gross Margin and Higher Current Account Savings Account (CASA). Higher the Piotroski F – Score, the better is the Financial Strength of the Bank which concludes that 9 being the best score and 0 being the worst. section. The selection of the indicators is as per the par which were coined by J. Piotroski in his paper. All the chosen indicators are appropriate for the study.

RESULTS AND ANALYSIS

Based on the Piotroski's F Score, the financial strength of the chosen banks will be examined in this

CRITERIA 01: POSITIVE NET INCOME

TABLE 01: Positive Net Income							
Particulars	2018-19	2019-20	2020-21	2021-22			
Bank of Baroda	₹ 2,999	-₹ 145	₹ 512	₹ 6,246			
Punjab National Bank	₹ 2,558	₹ 10,389	₹ 1,789	₹ 1,524			
Union Bank of India	₹ 2,288	₹ 2,402	₹ 3,359	₹ 2,381			
Bank of India	₹ 576	₹ 2,568	₹ 5,128	₹ 1,207			
State Bank of India	₹ 7,409	₹ 13,626	₹ 5,922	₹ 11,266			

As per Table 01, the Bank of Baroda only had a decrease in the year 2019 – 20 others than that, all the banks have showed a positive net income for the selected period i.e., 2018 to 2022. According to Piotroski F Model, 1 Point will be awarded if the Bank has a Positive Net Income and 0 if not. Which will be demonstrated in the next table.

Referring to Table 01, Bank of Baroda for the year 2019 - 20 have a negative net income due to which 0 point will be awarded to Bank of Baroda. The points are reflected in Table 02 as per the norms of Piotroski F – Score.

TABLE 02: F – Score for Positive Net Income							
Particulars	2018-19	2019-20	2020-21	2021-22	Overall		
Bank of Baroda	1	0	1	1	0.75		
Punjab National Bank	1	1	1	1	1		
Union Bank of India	1	1	1	1	1		
Bank of India	1	1	1	1	1		
State Bank of India	1	1	1	1	1		

CRITERIA 02: POSITIVE RETURN ON ASSETS

TABLE 03: Positive Return on Assets							
Particulars	2018-19	2019-20	2020-21	2021-22			
Bank of Baroda	0.38%	-0.06%	0.05%	0.46%			
Punjab National Bank	0.34%	1.26%	0.15%	0.08%			
Union Bank of India	0.48%	0.02%	0.82%	0.18%			
Bank of India	0.10%	0.40%	0.74%	0.18%			
State Bank of India	0.13%	0.47%	-0.01%	0.19%			

As per Table 03, the Bank of Baroda only had a decrease in the year 2019 - 20 and State Bank of India in the year 2020 - 21 others than that, all the banks have showed a positive return on assets for the

selected period i.e., 2018 to 2022. According to Piotroski F Model, 1 Point will be awarded if the Bank has a Positive Return on Assets and 0 if not. Which will be demonstrated in the next table. Referring to Table 04, Bank of Baroda for the year 2019 - 20 have a negative return on assets and State Bank of India for 2020 - 21 have a negative Return on Assets due to which 0 point will be awarded to

Bank of Baroda and State Bank of India. The points are reflected in Table 04 as per the norms of Piotroski F - Score.

TABLE 04: F – Score for Positive Return on Assets								
Particulars	articulars 2018-19 2019-20 2020-21 2021-22 Overall							
Bank of Baroda	1	0	1	1	0.75			
Punjab National Bank	1	1	1	1	1			
Union Bank of India	1	1	1	1	1			
Bank of India	1	1	1	1	1			
State Bank of India	1	1	0	1	0.75			

CRITERIA 03: POSITIVE OPERATING CASHFLOW

TABLE 05: Positive Operating Cashflow							
Particulars	2018-19	2019-20	2020-21	2021-22			
Bank of Baroda	₹ 58,242	₹ 2,968	-₹ 2,406	₹ 7,418			
Punjab National Bank	-₹ 34,017	₹21,414	₹ 13,982	₹ 18,693			
Union Bank of India	-₹137	-₹ 7,604	₹ 28,208	₹ 15,811			
Bank of India	-₹ 1,852	₹ 4,391	₹ 42,695	-₹ 73,354			
State Bank of India	₹ 1,26,063	-₹ 5,628	₹ 65,990	-₹ 32,224			

As per Table 05, the Bank of Baroda only had a decrease in the year 2020 - 21, State Bank of India in the year 2019 - 20 and 2021 - 22, Punjab National Bank in the year 2018 - 19, Union Bank of India in 2018 - 19, 2019 - 20 and Bank of India in 2021 - 22 others than that, all the banks have showed a positive return on assets for the selected period i.e., 2018 to 2022. According to Piotroski F Model, 1 Point will be awarded if the Bank has a Positive Operating Cashflow and 0 if not. Which will be demonstrated in the next table.

Referring to Table 06, Bank of Baroda had a decrease in the year 2020 - 21, State Bank of India in the year 2019 - 20 and 2021 - 22, Punjab National Bank in the year 2018 - 19, Union Bank of India in 2018 - 19, 2019 - 20 and Bank of India in 2021 - 22 with respect to Operating Cashflow due to which 0 point will be awarded to all the Negative Operating Cashflow and vice versa. The points are reflected in Table 06 as per the norms of Piotroski F – Score.

TABLE 06: F – Score for Positive Operating Cashflow							
Particulars	2018-19 2019-20 2020-21 2021-22 Overall						
Bank of Baroda	1	1	0	1	0.75		
Punjab National Bank	0	1	1	1	0.75		
Union Bank of India	0	0	1	1	0.50		
Bank of India	0	1	1	0	0.50		
State Bank of India	1	0	1	0	0.50		

CRITERIA 04: CASHFLOW FROM OPERATIONS GREATER THAN NET INCOME

TABLE 07: Cashflow from Operating greater than Net Income							
Criteria - 04	2022	2021	2020	2019	2018		
Bank of Baroda	-₹ 1,169	-₹ 2,341	₹ 577	-₹ 2,536	-₹ 57,779		
Punjab National Bank	₹ 16,256	-₹ 913	-₹ 13,106	-₹ 24,131	₹ 12,444		
Union Bank of India	₹ 31,129	₹ 17,699	-₹ 7,150	₹ 2,856	₹ 5,281		
Bank of India	-₹ 38,892	₹ 35,669	-₹ 1,898	-₹ 3,721	-₹ 1,293		
State Bank of India	₹ 26,018	₹ 69,508	₹ 9,440	₹ 28,694	-₹ 89,960		

Referring to Table 07, Bank of Baroda have Cashflow from Operations greater than Net Income only in the year 2020. For Punjab National Bank it is year 2022 and 2018 in which Cashflow from Operations are greater than Net Income. Union bank only in the year 2020 shows a greater Net Income than Cashflow from Operations. However, Bank of India only in the year 2021 have greater Cashflow from Operations than Net Income. Lastly, State Bank of India didn't have greater Cashflow from Operations than Net Income in the year 2018 only. Based on the above Table. In Table 08, points are awarded 0 if Cashflow from Operations are lesser than Net Income and 1 if Cashflow from Operations are greater than Net Income. Compilation of F - Score on this basis could be demonstrated further.

TABLE 08: F – Score for Cashflow from Operations greater than Net Income							
Particulars	2022	2021	2020	2019	2018	Overall	
Bank of Baroda	0	0	1	0	0	0.20	
Punjab National Bank	1	0	0	0	1	0.40	
Union Bank of India	1	1	0	1	1	0.80	
Bank of India	0	1	0	0	0	0.20	
State Bank of India	1	1	1	1	0	0.80	

TABLE 09: Lower Amount of Long-Term Debt							
Particulars	2018-19 2019-20 2020-21 2021-2						
Bank of Baroda	₹ 37,052	-₹ 26,222	₹ 25,868	₹ 4,630			
Punjab National Bank	₹ 2,841	-₹ 7,385	₹ 10,900	-₹ 21,525			
Union Bank of India	-₹ 658	-₹ 649	₹ 9,623	-₹ 2,817			
Bank of India	-₹ 5,704	-₹ 7,288	-₹ 4,489	₹ 653			
State Bank of India	₹ 8,746	₹ 1,02,642	-₹ 88,362	₹ 40,875			

CRITERIA 05: LOWER AMOUNT OF LONG-TERM DEBT

According to Table 09, Bank of Baroda have a lower amount of Long-Term Debt in the year 2019-20. For Punjab National Bank it is the year 2019-20 and 2021-22 when they have Lower Amount of Long-Term Debt, For Union Bank of India other than year 2020-21, they have lower amount of Long-Term Debt in all the years. Bank of India other than year 2021-22 have lower amount of Long-Term Debt in

all the years. State Bank of India have lower amount of Long-Term Debt only in the year 2020-21.

Based on Table 09, Table 10 is formulated for all the years if a bank has Lower Amount of Long-Term Debt 1 point to be awarded at par with Piotroski score and vice versa. If a bank is having a negative amount only than score of 1 is to be provided to it for that particular year or else.

TABLE 10: F – Score for Lower Amount of Long-Term Debt							
Particulars	2018-19 2019-20 2020-21 2021-22 Overall						
Bank of Baroda	0	1	0	0	0.25		
Punjab National Bank	0	1	0	1	0.50		
Union Bank of India	1	1	0	1	0.75		
Bank of India	1	1	1	0	0.75		
State Bank of India	0	0	1	0	0.25		

CRITERIA 06: HIGHER CURRENT RATIO

TABLE 11: Higher Current Ratio								
Particulars	2018-19	2018-19 2019-20 2020-21 2021-						
Bank of Baroda	-0.01	0.46	0.97	-1.30				
Punjab National Bank	0.05	-0.21	0.52	0.58				
Union Bank of India	0.04	0.10	1.21	0.33				
Bank of India	0.17	0.37	0.36	11.65				
State Bank of India	-0.29	0.51	-0.30	0.40				

As per Table 11, it could be concluded that, Bank of Baroda have negative change in Current Ratio for the year 2018-19 and 2021-22. On the other hand, for Punjab National Bank, it is the year 2019-20 when it has negative change in Current Ratio. State Bank of India have negative change in Current Ratio for the yar 2018-19 and 2020-21. Other than that, for all the years changes in the Current Ratio are higher. Interpreting the Table 11, for Table 12, 1 point will be given if the change in the Current Ratio is higher than the previous year else 0 point shall be assigned.

<u> </u>					
TABLE 12: F – Score for Higher Current Ratio					
Particulars	2018-19	2019-20	2020-21	2021-22	Overall
Bank of Baroda	0	1	1	0	0.50

© May 2024 | IJIRT | Volume 10 Issue 12 | ISSN: 2349-6002

Punjab National Bank	1	0	1	1	0.75
Union Bank of India	1	1	1	1	1
Bank of India	1	1	1	1	1
State Bank of India	1	1	0	1	0.75

TABLE 13: Change in Share Capital								
Particulars	2018-19	2019-20	2020-21	2021-22				
Bank of Baroda	₹0	₹ 395	₹110	₹0				
Punjab National Bank	₹ 368	₹ 427	₹ 748	₹ 107				
Union Bank of India	₹ 595	₹ 1,659	₹ 2,984	₹ 428				
Bank of India	₹1,017	₹ 517	₹0	₹ 827				
State Bank of India	₹0	₹0	₹0	₹0				

CRITERIA 07: CHANGE IN SHARE CAPITAL

Referring to Table 13, Bank of Baroda in the year 2018-19 and 2021-22, also Bank of India 2020-21 and State Bank of India in all the years haven't issued any new share capital hence no change in share capital. Other than that, for all the years Share Capital have been issued for all the years.

For the same, in Table 13 referring to Table 14, 1 point to be given if there is no change in the Share Capital as per the Piotroski F Score. The results of which can be demonstrated as further.

TABLE 14: F – Score for Higher Current Ratio									
Particulars	2018-19 2019-20 2020-21 2021-22 Overall								
Bank of Baroda	1	0	0	1	0.50				
Punjab National Bank	0	0	0	0	0.00				
Union Bank of India	0	0	0	0	0.00				
Bank of India	0	0	1	0	0.25				
State Bank of India	1	1	1	1	1.00				

CRITERIA 08: HIGHER GROSS MARGIN

TABLE 15: Higher Gross Margin							
Particulars 2018-19 2019-20 2020-21							
Bank of Baroda	-8.65%	-1.40%	-3.55%	8.68%			
Punjab National Bank	10.70%	16.92%	3.03%	2.00%			
Union Bank of India	9.17%	-0.31%	7.58%	3.79%			
Bank of India	4.86%	3.38%	9.90%	0.94%			
State Bank of India	6.56%	-0.49%	-0.19%	2.01%			

Referring to Table 15, Bank of Baroda have a lower Gross Margin from 2018-19 to 2020-21. Also, Union Bank of India have a lower Gross Margin in 2019-20. Lastly, State Bank of India have a lower Gross Margin in 2019-20 and 2020-21. Other than that, for all the years, Gross Margin for all the banks is on the higher side.

Accordingly in Table 16, 1 point to be given to Higher Gross Margin in corresponding years and 0 if the Gross Margin is lower. Which could be demonstrated as follows.

TABLE 16: F – Score for Higher Current Ratio									
Particulars 2018-19 2019-20 2020-21 2021-22 Overall									
Bank of Baroda	0	1	0	1	0.25				
Punjab National Bank	1	1	1	1	1.00				
Union Bank of India	1	0	1	1	0.75				
Bank of India	1	1	1	1	1.00				
State Bank of India	1	0	0	1	0.50				

CRITERIA 09: HIGHER CURRENT ACCOUNT SAVINGS ACCOUNT (CASA)

TABLE 17: Higher Current Account Savings Account (CASA)							
Particulars 2018-19 2019-20 2020-21 20							
Bank of Baroda	1.00%	0.00%	1.99%	0.85%			
Punjab National Bank	1.17%	0.72%	1.58%	2.01%			
Union Bank of India	2.03%	-0.51%	0.80%	0.21%			
Bank of India	1.84%	0.61%	0.18%	3.36%			

State Bank of India	-44.45%	44.17%	1.23%	-0.89%

As per Table 17, Union Bank of India in 2019-20, State Bank of India in 2018-19 and 2021-22 have a lower CASA in the corresponding years. Other than that, for all the years, all the banks have registered higher CASA. Taking into consideration Table 17, in Table 18 1 point to be given to higher CASA and 0 if CASA have decreased over the corresponding year. The demonstration of it can be discussed further in the table.

TABLE 18: F – Score for Higher Current Ratio									
Particulars 2018-19 2019-20 2020-21 2021-22 Overall									
Bank of Baroda	1	1	1	1	1.00				
Punjab National Bank	1	1	1	1	1.00				
Union Bank of India	1	0	1	1	0.75				
Bank of India	1	1	1	1	1.00				
State Bank of India	0	1	1	0	0.50				

OVERALL EVALUATION

Based on all the Nine Criteria discussed to calculate the Piotroski F Score. It was observed that, Bank of India (BOI) have the better financial stability and obtained the first spot followed by Union Bank of India which acquired the second spot. Punjab National Bank have been at the third spot in the terms of financial strength. State Bank of India (SBI) obtained the fourth position and Bank of Baroda (BOB) grabbed the last spot with the least capable in the terms of financial strength. The results can be further analysed below. The Table 19 contains a consolidated Piotroski F-Score based on all the Nine Criteria.

TABLE 19: Consolidated F - Score								
Criteria	Particulars	BOB	PNB	UNBK	BOI	SBI		
01	Positive Net Income	0.8	1.0	1.0	1.0	1.0		
02	Positive ROA	0.8	1.0	1.0	1.0	0.8		
03	Positive Operating Cash Flow	0.8	0.8	0.5	0.5	0.5		
04	CFO greater than Net Income	0.2	0.4	0.8	0.2	0.8		
05	Lower Amount of Long - Term Debt	0.3	0.5	0.8	0.8	0.3		
06	Higher Current Ratio	0.5	0.8	1.0	1.0	0.8		
07	No New Shares Issued in Last Year	0.5	0.0	0.0	0.3	1.0		
08	Higher Gross Margin	0.3	1.0	0.8	1.0	0.5		
09	Higher CASA	1.0	1.0	0.8	1.0	0.5		
	F - Score (Total) 5.0 6.4 6.6 6.7 6.1							

Piotroski F – Score is used in the stock market analysis in order to obtain the financial strength of a company. This model is calculated on the quarter or the yearly basis. However, since the data was available for five years ranging 2018 to 2022. The weighted average score for all the banks have been

calculated in order to find the robustness in the $\rm F-Score$ for a long term.

The higher, the better. If a bank is having a higher F-Score, the better is the financial strength of a company.



The graph 01 shows the overall financial strength of the selected public sector banks. Since all the scores are more than 5 which indicates that the overall financial strength of the selected public sector banks is satisfactory. This indicates the overall economy of the nation is at the stable rate and there are negligible chances of bankruptcy or downfall in the economic position of the selected banking sector units soon.

CONCLUSIONS AND SUGGESTIONS

Bank of India with the weighted average Piotroski F – Score of 6.7 for the period ranging 2018 to 2022 is the most financially capable bank. Followed by Union Bank of India with F – Score of 6.6, Punjab National Bank being at the third spot with a F – Score of 6.4. State Bank of India have an overall F – Score of 6.1 which keeps it on the fourth spot. However, Bank of Baroda was the weakest amongst the five selected banks with the overall F – Score of 5.0.

The study was conducted on one parameter that is the Piotroski F – Score. The scope of the study could be further widened which could give the more concrete and robust outcomes. Like the data in this study is only taken for a period of five years which could be taken for 10 years or further checking the deeper connection between the Financial Strength of the selected banks. Also, other parameters like the Altman's Z Score for bankruptcy and Montier's C Score for window dressing of the accounting information can also be tested.

BIBLIOGRAPHY

[1] De Bondt, W. F., & Thaler, R. (1987). Further Evidence on Investor overreaction and stock market seasonality. *The Journal of Finance*, 557-581.

- [2] Erol, C., Baklaci, F., Aydo Aum, H., & Tunc, G. (2014). Performance comparison of Islamic (participation) banks and commercial banks in Turkish Banking Sector. *EuroMed Journal of Business*, 9(2), 114 - 128.
- [3] Fama, E. F., & French, K. R. (1992). The Cross Section of Expected Stock Returns. *The Journal* of Finance, 427-465.
- [4] Jegadeesh, N., & Titman, S. (1993). Returns to buying winners and selling losers: Implications for Stock Market Efficiency. *The Journal of Finance*, 65-91.
- [5] Koch, A. S. (2002). FInancial Distress and the Credibility of Management Earnings Foecarsts.
- [6] Mathuva, D. M. (2009). Capital Adequacy, Cost Income Ration and the Performance of Commercial banks: The Kenyan Scenario. *The International Journal of Applied Economics and Finance*, 3(2), 35 - 47.
- [7] Piotroski, J. (2000). Value of Investing: The use of historical financial statement information to seperate einnrers from losers. *Journal of Accounting Research*, 1-41.
- [8] Porta, R. L., Lakonishok, J., Shelifer, A., & Vishany, R. (1997). Good News for Value Stocks: Further Evidence on Market Efficiency. *The Journal of Finance*, 859-874.
- [9] Singh, J. P., & Seth, M. (2017). An Inclusive Study on Capital Adequacy Performance of Selected Public Sector and Private Sector Banks in India. *International Journal of Multifaceted* and Multilingual Studies, 3(10).
- [10] Tripathy, T., & Pani, B. (January, 2017). Effect of F Score on Stock Performance: Evidence

from Indian Equity Market. *International Journal of Economics and Finance*, 89-99.

382