CHAPTER - 2

REVIEW OF LITERATURE

“If you would understand anything, observe its beginning and its development”

Aristole

2.1 Introduction

New ideas can’t blossom in any field without critical analysis of previous work done by researchers. Once new ideas are stretched, it gives new dimensions to the thinking of researchers. A limited number of studies have been conducted related to impact of operating efficiency on firm value. Most of the available literature at national and international level is related to Banking sector. A critical review has been made on the available studies that guide for developing new dimensions in firm valuation. The review on available studies has been done in chronological order in this chapter and some major gaps have been identified in the approach of researchers which has been discussed in the next chapter.

Allen and Rai (1996)\(^1\) focus on operational cost efficiency of banks. Research has been conducted on 785 observations of 195 banks from 15 countries across a time period of 5 years (Year 1988 –Year 1992). A stochastic cost frontier has been applied. They found that large banks in separated banking countries (countries that prohibit functional integration of commercial and investment banking) have significantly less efficient operations than any other bank group. The results of study revealed that for all financial firms across all countries, the input X- inefficiencies re more prevalent than output inefficiencies.

Chu. S.F and Lim G.H. (1998)\(^2\) analyzed profit efficiency of 6 Singapore listed banks for the period of 1992 -1996 by applying Data Envelopment Analysis (DEA) as an analysis tool. They found the correlation between changes in share prices and changes in Profit efficiency is a statistically significant 0.75. They also concluded that market over- reacts to changes in profit efficiencies. Improvements in profit efficiency caused a bull run,
leading to high prices while falls in Profit efficiency scores led to massive sell-offs sending prices tumbling down.

Altunbas, Y et al (2001) concluded that scale economies are widespread for smallest banks and are in range between 5% - 7%. They found that X – inefficiency appear to vary across different markets, bank sizes and over time. The results indicated that Europe’s largest banks benefit from technical progress. Technical progress reduced total cost by 3% per annum across European banking markets between “1989 – 1997”.

Fairfield and Yohn (2001) examined whether the fundamental decomposition of return on assets is useful in forecasting profitability of firms? Return on assets has been defined on the basis of net operating income (before any financing costs or investment income) in the numerator and net operating assets (operating assets net of operating liabilities) in the denominator. Relative contribution of asset turnover and profit margin to total operating profitability has been examined in the research. They conducted the research to examine whether the year-to-year changes in asset turnover and profit margin provide incremental information over the change in total return on assets for forecasts of the change in return on assets one year ahead. They found that disaggregation of return on assets can be used to improve forecasts of profitability. They also concluded that it is the change in the components of profitability rather than the current mix that is informative about future changes in profitability and analysts and investors should focus on changes in asset turnover to improve forecasts of future profitability.

Nissim and Penman (2001) focus on structured financial statement analysis that facilitates forecasting and valuation. The study involves an analysis of profitability and growth. The study revealed the financial ratio as the information to forecast the future drivers like future residual earnings, free cash flow and dividend. Financial ratios and their drivers have been identified through the research work.

Beccalli, Casu and Girardone (2002) examined the relationship between estimated banks’ efficiencies and their share prices. They investigated the influence of X - efficiency on the share price of banks in five European markets in year 2000. Data
Envelopment Analysis (DEA) and Stochastic Frontier Approach (SFA) have been applied to measure the cost efficiency of banks by taking a sample of European banks listed in the year 2000. Stock performance of each bank has been regressed on early change of frontier change measures. The results suggested that change in banks’ share price reflect percentage changes in cost efficiency and the stocks of cost efficient banks tend to outperform their inefficient counterparts.

Milind (2003)\(^7\) concluded that foreign banks are much more efficient as a group in use of inputs of staff and deposits as compared to public or private sector banks. The study recommends that the existing policy of bringing down non-performing assets as well as curtailing the establishment expenditure through voluntary retirement scheme for bank staff and rationalization of rural branches are steps in the right direction that could help Indian banks improve efficiency over a period of time so as to achieve world best practice. The study used the latest available published data for the year 1997-98 compiled by the Indian Banks’ Association (IBA, 1999). The results revealed that mean efficiency score that is lower than the world mean implies that there is a need for Indian banks to further improve efficiency so as to achieve world best practice. The government also needs to help banks by creating an appropriate policy environment that promotes efficiency.

William and Segal (2004)\(^8\) examined the linkage of cost inefficiency and cross-sectional variation in firm profitability in the U.S. life insurance industry. Investigation has been made on the relationship between organizational form, inefficiency and profitability by applying Panel data analysis on 136 life insurance companies of US. The results show that cost inefficiency in the life insurance industry is substantial relative to profitability and that inefficiency is negatively associated with profitability measures such as the return on equity. The analysis of inefficiency and organizational form suggested that stock (shareholder-owned) companies are as efficient and profitable as mutual (policyholder-owned) companies.

Ioannidis, Molyneux and Pasiouras (2007)\(^9\) examined the relationship between bank efficiency change and stock price returns. The impact of Cost and profit efficiency on stock return has been tested on a sample of 260 banks operating in 19 Asian and Latin
American countries between 2000 and 2006. The results represented a positive and robust relationship between profit efficiency changes and stock returns has been applied. The result revealed that profit efficiency better explains bank stock returns compared to traditional accounting profits measures (ROE) and profit efficiency measures include useful information for shareholders wishing to explain bank stock returns.

Staikourasa, Mamatzakis and Koutsomanoli-filippakia (2007)\textsuperscript{10} analyzed the operating performance of the banking industry for the SEE region of seven SEE countries (Albania, Bosnia-Herzegovina, Bulgaria, Croatia, FYR of Macedonia, Romania, and Serbia & Montenegro) with 76 banks over the period 1998-2003. The dependent variable has been measured as total operating expenses divided by total assets to form a per unit cost measure (OE). Seven bank-specific variables i.e. loans to total assets (L/A), loan loss reserves to gross loans (LLR/L), cash and due from banks to total assets (C/A), equity to total assets (E/A), bank deposits to customer and short-term funding (D/F), a variable capturing bank’s age (AGE), and total assets to count for size effects (TA) (alternatively a bank’s market share to capture market power) are included. The results revealed that operating expenses have decreased in all SEE banking sectors over the examined period, except for the FYR of Macedonia and Serbia & Montenegro on average are improving their operating performance over time. The study found that operating expenses and their components (personnel expenses and administrative expenses) are still at very high levels compared with those of the banks’ European counterparts. Investigation also has been made on the relationship between operating performance and various bank, market and macro specific characteristics. The results found that Operating performance is positively related to loan quality and the asset size or the bank’s market share and negatively related to liquidity, the loan ratio and the bank’s age. The research revealed that negative relationship between operating performance and banks’ age and suggested that older and mostly newly privatized, state-owned banks have inherited significant cost inefficiencies from the old regime and there is a need to intensify reform efforts to improve operating performance. Further analysis for the cost components confirms these results and shows that systematic differences in bank operating performance across the SEE countries exist.
Subramanyam and Venkatachalam (2007)\textsuperscript{11} examined the relative importance of earnings and operating cash flows in equity valuation. Intrinsic value has been calculated for all the firms available in Compustat database in 2004 for a period of 1998 – 2000. Operating cash flow and earnings are used as variables. Results revealed that earnings outperform operating cash flows in predicting future earnings. Future earnings and future operating cash flows have been used in extant research as ad hoc predictive criteria.

Vruwink, Quirin and Bryan (2007)\textsuperscript{12} used market value of equity to calculate additional expected return on the basis of firm size. They found that as compared to large cap index portfolio, mid cap, small cap and mini cap did not show any additional return. The results found that expected profitability of Sales and long term debt are equal important to firms’ earnings in explaining stock return.

Abdul Majid and Sufian (2008)\textsuperscript{13} studied the relationship between China banks’ efficiency and their share price performance. Annual share price returns of banks have taken for each year between 1997 and 2006. Efficiency of banks estimated through Data Envelopment Analysis (DEA). The relationship between bank efficiency and share price performance is examined by regressing bank share returns against bank efficiency estimates derived from the DEA Window Analysis method. The empirical findings suggested that large China banks have exhibited higher technical and pure technical efficiency levels compared to their small and medium size bank counterparts, while the medium sized banks have exhibited higher scale efficiency.

Jin and Zhenhu (2008)\textsuperscript{14} examined the relationship between firms’ stock price movement in Chinese stock market and their operating performance. It has been determined to what extent stock prices in Chinese stock market are driven by operating performance of firms. Top 10\% of the total firms listed in Shangai stock market has been selected as sample for the research. Five years (1996 -2000) has been taken for research. The variables (Total asset turnover ratio, Change in earning per share, profit margin, Return on assets, Return on equity and change in sales) have been used a proxy for the operating performance of firms. Annual return of firms has been used as dependent variable. Simple and multiple regression tests have been applied on the data to analyze the
relationship. The results revealed that firm performance measure had some explanatory power of stock price changes in first two years of research. Explanatory power of stock price movements had declined as stock price went up. It also has been indicated by the results that macro economic factors also had significant impact on change in stock price during the testing period.

**Ding Yuan et al (2008)** made a comparison on the performance of family-owned and state-owned listed firms for performance measures. They used five variables (1) revenue per employee, (2) revenue per unit of cost, (3) net profit per employee, (4) return on assets (ROA), (5) market-to-book ratio. The results revealed that family-owned firms are also more aggressive in using financial leverage and their total leverage is significantly higher than that of SOEs.

**Kosmidou and Zopounidis (2008)** used financial ratio analysis to evaluate the performance of 14 commercial banks and 16 cooperative banks operating in Greece over the period 2003-2004 by applying multi-criteria Promethee method. The Promethee method can be considered as an extension of the CAMEL rating system which is widely used in the assessment of banking performance. The results indicated that commercial banks are tending to increase their accounts, to attract more customers and ameliorate their financial indices, thereby becoming more competitive and maximizing their profits. There are banks that are increasing their profits and market shares considerably while others are reporting deteriorating financial indices.

**Nixon, Roth and Saporoschenko (2008)** investigated the informational content of very large, highly publicized, insider stock purchases. They calculated abnormal share returns and abnormal operating performance using a carefully constructed benchmark of control firms. The results revealed that large insider purchases do not precede abnormally positive performance and large insider purchases are associated with negative future performance, both share performance and operating performance. Additional findings suggested that long-term share underperformance is driven by firms with Tobin's q less than one.
Hays, Lurgio and Gilbert, Jr. (2009)\textsuperscript{18} investigated the difference between high efficiency and low efficiency banks on the basis of efficiency ratio by applying multiple discriminant analysis. They examined the performance of low efficiency vs. high efficiency community banks using data from year-end 2006-2008 using a sample of 739 low efficiency banks and 674 high efficiency banks. High vs. low efficiency is defined in terms of the efficiency ratio, a commonly used measure of bank performance. The results revealed that asset quality is an important issue for banks. They concluded that community banks should focus on liquidity ratio, salaries to average assets and equity capital to asset ratio.

Baik et al (2010)\textsuperscript{19} analyzed the relation between operational efficiency and firm performance. They also measured whether the operating efficiency derived from frontier analysis improved profitability forecast and whether capital market participants impound the predictive information in the efficiency measure? Study has been done from the year 1976 to year 2008. The results revealed that frontier analysis based efficiency change measures are positively associated with current and future profitability changes. The findings of the research also suggested that efficiency changes are positively related to future return and the firms which improve their efficiency show high profitability changes in current and future areas.

Chen and Karim (2010)\textsuperscript{20} analysed the effects of profitability and equity capital on bank efficiency of commercial banks in the developing countries. They used stochastic frontier approach is used in the first stage of the analysis to obtain cost and profit efficiency scores. In the second stage, the efficiency scores obtained are regressed with a measure of bank's equity capital and profitability by using the Tobit regression model. The results show that equity to total assets ratio has a negative effect on efficiency indicating that either the use of debts in financing bank operations or less regulatory condition contribute to higher efficiency. The results also found that return on assets have a positive effect on profit efficiency suggesting the needs for efficient utilization of banks assets.

Cronje Tom and Beer (2010)\textsuperscript{21} focus to segregate the pricing of shares in terms of market and firm specific factors with the intention to quantify the association of relative
bank efficiency and earnings performance with the pricing of South African bank shares. The research study was based on financial and share price information of the nine listed banking groups in South Africa from 1999 to 2009. The study draws a parallel between the actual significance of measured efficiency and earnings per share (EPS) with share pricing and quantified FIR. Within this context the comparative significance of measured efficiency and EPS has been explored to investigate the Efficient Market Hypothesis (EMH) prevalence. An analysis of efficiency and share price relationships at different financial year time points revealed a semi-strong form of the EMH in both the pre- Global Financial Crises (GFC) and GFC periods. This shows that the application of an active investment strategy by investors based on efficiency measures may be beneficial. The impact of EPS as contributing determinant of share prices increased during the GFC period compared to the pre-GFC period but reflects a strong form of the EMH.

Irsova and Havranek (2010)\textsuperscript{22} investigated the causes of variations in the reported efficiency estimates through a meta-regression analysis consisting of 32 studies that provide 53 models for the USA. The explanatory meta-regression analysis was conducted using Tobit, OLS, IRLS and pseudo-panel random-effects methods, computed with heteroskedasticity-robust standard errors. The positive impact on efficiency can be explained by the broader comparison of institutions—studies with a lower number of banks as observations made the selection according to a limit of minimum assets of a particular bank (e.g., according to the bank size). It has been witnessed from the results that commercial banking is on average 14\% less efficient than all banks (specialized or not). The role and share of participation of commercial banks on the US credit market has evolved and increased the US banking sector reports significant differences in the efficiency types. Banks find it harder to keep efficiency in profits than in costs, which provides a justification for separate comparisons of cost and profit efficiencies.

Jog Vijay \textit{et al} (2010)\textsuperscript{23} studied whether firm value, operating performance, and stock performance of the Canadian firms which have issued restricted voting shares (RVS) is different from comparable non-RVS firms. Test has been conducted on two competing hypotheses – the controlling shareholder expropriation hypothesis and the investor protection and substitution hypothesis for the Canadian RVS firms. Based on a ten-year
Impact of Operating Efficiency on Valuation of Firm

Panel data sample and extensive robustness tests, They do not find that the RVS firms have lower firm value, operating performance or stock performance than the non-RVS firms in Canada. There was also no evidence of shareholder value expropriation in key financial decisions, such as mergers and acquisitions and dividend payments. The study did not support the controlling shareholder expropriation hypothesis in the Canadian RVS firms. The study concluded that the RVS structure in Canadian firms is influenced by the nature of these firms and the regulatory environment in Canada that protects minority shareholders from wealth appropriation.

Kumbirai and Webb (2010)24 investigated the performance of South Africa’s commercial banking sector for the period 2005-2009 by measuring the profitability, liquidity and credit quality performance through financial ratios. They examined whether the difference in performance of the banks in 2005-2006 is statistically different from that of 2008-2009. The study found that overall bank performance increased considerably in the first two years of the analysis. A significant change in trend is noticed at the onset of the global financial crisis in 2007, reaching its peak during 2008-2009. This resulted in falling profitability, low liquidity and deteriorating credit quality in the South African Banking sector. no significant differences were observed between the overall performances of the commercial banks in South Africa during the two periods in terms of liquidity and credit quality. This is supported by the null hypothesis of the equality of the means being accepted on liquidity and credit quality and rejected on all three profitability ratios. The study observed that bank performance deteriorated during 2008-2009 as the banks’ operating environment deteriorated due to the global financial crisis and a slowing economy. One of the reasons that have been found is increasing bank operating costs and reduced incomes amid the global financial crisis. Furthermore in these recessionary times, when corporate and private clients find it hard to service their debts, the level of the provision for loan losses and bad debts increased

Nixon Terry. D et al (2010)25 analyzed the operating performance and change in firm characteristics around open market repurchase announcements. They found that announcement of open market repurchase of shares vary according to the firm’s investment opportunity. New evidence has been provided on the underlying motives and
consequences of open market repurchase plans, changes in operating performance and changes in several key firm characteristics are measured around open market share repurchase announcements. The results revealed that neither high q firms nor low q firms experience an increase in operating performance following open market repurchase announcements.

**Abdullah Al Qudah (2011)** examined the impact of privatization on firms’ efficiency and performance by applying panel data analysis on a sample of 23 Jordanian privatized firms through the period 1992-2005. The results revealed a positive correlation between privatization and operating efficiency and performance as measured by market value ratio. This finding is consistent with most of the existing evidences on the impact of privatization on performance and efficiency. He also concluded that strategic partner has a positive and significant impact on privatized firms operating efficiency and market value. Liquidity has a positive impact on privatized firms’ operating efficiency and performance. The study reveals that openness of the economy is also a factor that affects privatized firms operating efficiency and performance.

**Aftab et al (2011)** examined the relationship between bank efficiency and share performance. The research has been based upon the seven commercial banks listed in Karachi Stock Exchange (KSE) over the period 2003 to 2007. Operating expenses and interest expenses have been used as inputs and net profit has been used output in the research. Data analysis comprised three steps. First cumulative annual share returns (CASR) has been calculated then Data Envelopment Analysis (DEA) has been applied to measure bank efficiency and finally share performance is regressed over change in efficiency. The results revealed that a positive and significant link exists between change in annual bank efficiency and share performance.

**Gaio and Rapaso (2011)** found a positive and significant relation between firm valuation and an aggregate earnings quality measure was found that was based on seven earnings attributes (accruals quality, persistence, predictability, smoothness, value relevance, timeliness, and conservatism). This relation is particularly strong for firms with greater investment opportunities and more need for external finance, and for firms in low
investor protection countries. Thus, firms are able to compensate for a weak legal environment by adopting higher earnings quality standards, particularly when they need to gain access to global capital markets. The findings suggested that firms with higher earnings quality are valued more highly in stock markets and also supporting the idea that investors require a premium for the information risk associated with lower quality earnings.

Hager et al (2011) introduced a link between banks relative competitive position and operating efficiency through examining the financial profile of the highly versus the lowly competitive banks. Twenty four Egyptian commercial banks have been studied for the period 2001-2008. Asset quality, capital adequacy, credit risk, liquidity and profitability has been considered as the independent variables and operating efficiency has been considered as dependent variable. The statistical methodology utilizes the benefits of the “Partial Adjustment Model” that measures the extent to which bank financial performance affects its operating efficiency. The results show that in the highly competitive banks, the operating efficiency is positively and significantly affected by the asset quality, capital adequacy, credit risk and liquidity of banks. The findings of study provide clear evidence that the highly competitive banks in Egypt are distinguished from lowly competitive banks through their carefully-designed financial policies.

Hao et al (2011) found that investment growth increases the value impact of earnings, in terms of a steeper slope in the value-earnings relation, for high profitability firms (consistent with positive NPV growth), but mostly it has no significant effect on the slope for low profitability firms (zero NPV growth), with the effect becoming significantly negative for extreme low-profitability firms (negative NPV growth). Second, growth also exhibits varying effects across firms on the relation between equity value and equity book value. Given earnings, investment growth increases the slope of this relation for low profitability firms but reduces the slope for high profitability firms, causing equity value to be a non-monotonic function of equity book value over a wide profitability range. In contrast, holding profitability (instead of earnings) constant, equity value uniformly increases with book value, and growth increases the slope of this relation. The study
extended and modified the existing views on how equity value is connected to accounting data.

Seetharaman and Raj (2011) conducted a statistical test to examine the impact of EPS on the stock prices of Public Bank Barhad, a listed bank in Malaysia. Time series analysis has been performed for the period of 19 years by using SPSS. The results suggested that very strong positive correlation exist between EPS of Public Bank Barhad and its stock price. It also has been witnessed in the results that there is significant impact of earnings announcement on the performance of stock price of Public Bank Barhad.

Swirsky and Islam (2011) examined the effect of changes in firm's market share on market valuation of earnings and growth opportunities during the period preceding the 2001 recession. Multiple regression models have been used to test different hypotheses contained in this study. Empirical results indicate that the link between current performance and future performance is significantly enhanced in the presence of market share gains. The results support that the market incrementally prices the earnings of firms that are increasing market share when the market perceives future growth opportunities to be greater relative to when growth opportunities are perceived to be fewer.

Dawar Varun (2012) examined the value relevance of financial variables like earnings, book value, dividends, debt and capital expenditure over the period from 2001-2010 in Indian stock market. He determined the extent to which stock prices are supported by fundamentals in Indian FMCG companies. The results of this study indicate that fundamental variables play an important role in stock pricing in Indian FMCG companies. The study provides support for the value relevance of dividend and investment policy suggesting that earnings distributed as dividends have a greater impact on firm value than does earning retained within the firm confirming the signaling effect of dividend policy. The study finds that dividend policy and investment policy are value relevant and helps provide a signal regarding the market information not contained in accounting publications. The study however fails to establish the value relevance of capital structure in Indian FMCG sector context.
Dhanapal C. and G. Ganeshan (2012)\textsuperscript{34} examined the variables like total deposits, total advances, total assets, NPA’s, total incomes and operating profit and various ratios such as Return on Assets, Spread to Total Assets NPA to Net Advances, PA to Total Assets, Capital Adequacy ratio over a period of 5 years from 2006-07 to 2010-11 of 21 public sector banks in India. The study shows that NPA, Total Income, Total Expenses and Spread are the most significant factors influencing the operational profit. The results show that there is a significant relationship between profitability and six independent variables. Except Capital Adequacy ratio all others are significantly influencing the profitability. NPA to Total Assets and ROA are key factors as they highest positive coefficient. Similarly, NPA to Net Advances are key factors as it has highest negative co-efficient. The stepwise regression reveals that cost to income is the dominant factor for tuning the profitability

Dhillon and Vaccharajani (2012)\textsuperscript{35} observed that although a high profit margin is a test of better performance a low margin does not necessarily imply a lower rate of return on investments/assets turnover. Therefore, the overall operating efficiency of an organization can be accessed on the basis of a combination of the two. It implies that the performance of an organization can be enhanced either by generating additional sales volume per rupee of investment or by escalating the profit margin per rupee of sales. The improvement both in profitability and activity is the indicator of all-round efficiency in the operations and fund utilization. The results show that there is an insignificant positive correlation between operational efficiency and overall profitability of the company.

Goel Sandeep (2012)\textsuperscript{36} analyzed how well a company uses its assets and liabilities internally whereas solvency aspect is used to measure long term obligations of the company on the basis of operational efficiency. Operational efficiency ratios (Asset turnover, Inventory turnover Debtors turnover) and solvency ratios (Debt equity Ratio and Interest coverage ratio) has been used for the analysis. Correlation analysis also has been used to establish and study the relationship between the liquidity and solvency performance. The results concluded that the relatively low efficiency observed in firms is important to increasing the solvency and hence the increased working capital
requirements associated with long-term debt have not impaired the ability of firm to remain efficient and profitable.

**Baresa et al (2013)** found that fundamental analysis is one of the most widely used methods for estimating price movements of securities which essentially analyses the impact of micro and macro-economic factors on the business of the corporation in order to predict future economic and financial effects. Fundamental analysis also examine various financial statements with the aim to asses a real value of company's stock. On the market, investors have equally available information, but only the most apprehensive are awarded for finding best opportunities. Findings revealed that professional traders do not trade purely on the economic fundamentals but when making decisions.

**Gaganis et al (2013)** investigated whether the capital value the efficiency of firms. Listed insurance firms in 52 companies have been analyzed during the period of year 2002-2008 to measure the impact of efficiency change over the stock return. The results revealed a positive and statistically significant relationship between current and past profit efficiency changes and market adjusted stock returns. It has been clearly evident that cost efficiency changes are related to stock returns.

**Lim Steve C. (2013)** revealed that majority of correlations among components of shareholder profitability and operating profitability are positive. The correlations are negative for sustainable operating income and unsustainable operating income as well as for operating profitability and financing profitability. These negative correlations may be the results of baking out one component profitability from the aggregate profitability to get the other component profitability. However, the results indicate a positive correlation between changes in operating profitability and changes in financing profitability. The study revealed that the sustainable portion of operating profitability has a stronger association with annual stock returns than the unsustainable portion. This finding contributes to the literature by extending the two popular methods of breaking down operating profitability (DuPont analysis and operating liability leverage) into sustainable versus unsustainable operating income. Identification has been made in the paper that the conditional persistence as one of the empirical attributes that affects the valuation
usefulness of disaggregated accounting profitability. They found that the disaggregation is more useful in firms with significant differences in the conditional persistence of disaggregated components than in other firms.

**Vardar Gulin (2013)** examined the relationship between bank efficiency estimates and stock performance. He also determined whether cost efficiency or profit efficiency estimate is a primary determinant of the bank stock return on the basis of a sample of 39 banks from seven transition countries over the period 1995-2006. Panel data analysis is employed in order to analyze the association between the efficiency of transition countries’ banks and their stock price performance. It has been suggested by the regression results that profit efficiency changes have a positive and statistically significant impact on stock returns. It also has been witnessed from the analysis that cost efficiency changes have a negative and statistically significant impact on stock returns. It has been found that cost efficiency of banks can’t provide high return to investors
2.2 Concluding Remarks

“The past is always a rebuke to the present”

Robert Penn Warren

Critical review has been made on the basis of available previous research studies. It has been observed that all the researchers focused on financial sector in their research studies. Other economic sectors have been ignored while evaluation of the impact of operating efficiency on firm value. Some major gaps have been identified in terms of variables and research approach of researchers, which have been discussed in the next chapter. A new approach has been discussed to fill the identified gaps and has been applied to provide new dimensions to research in next chapters.
REFERENCES


