

# CHAPTER - 3



## Literature Review

## **LITERATURE REVIEW**

The curiosity to understand and establish the relationship among capital structure, ownership structure and corporate performance is not a new one. Since long time back it has been a topic of sheer interest for many scholars and the empirical evidence relating to the impact of capital structure and ownership pattern on financial performance of companies is sufficient in numbers. A comprehensive understanding of the empirical views needs a thorough review of related literatures on this topic. In this chapter we give a detailed description on the various empirical investigations carried out in this direction across the world under the following sub-headings:

### **3.1 Capital Structure and Corporate Performance**

The decision relating to determination of an optimum capital structure is known to be a challenging issue for many business corporations whether being small, medium or large. The decision is so crucial because, there are high theoretical acceptance and empirically evidences on the effect of capital structure or the magnitude of leverage on the corporate performance including profitability and market valuation.

Long before, **Smith (1776)** expresses great concern over the opportunistic behaviour of managers as the employed agents of the owners. According to him, in a firm with separated ownership and control, the managers can't be sensibly assumed to be as anxious and vigilant as the partners in a partnership business. **Berle and Means (1932)** also describe the existence of agency crisis due to the separation of ownership

from control. More specifically, **Wipperfurth (1966)** investigate the relationship between financial leverage and firm value. The researcher uses debt to equity ratio as a measure of financial leverage whereas ratio of earnings to market value of common stock as performance indicator. The findings of the study inferred a positive effect of debt on firm value.

In a more formal approach, **Jensen and Meckling (1976)** describe the issue under agency cost theory. The theory postulates that a high degree of leverage is supposed to normalize agency cost by curtailing managerial opportunism and disciplining managers to act in line with the best interest of the firm. Now, this further results into improved operational efficiency and performance of firms. Conversely, **Myers (1977)** disapproves the view of **Jensen and Meckling (1976)** and refers high debt as a potential source of clash of interest between equity and debt holders as a result of default risk which brings another agency cost. It creates a problem, which Myers termed as “underinvestment” or “debt overhang problem”. Therefore, debt may create over-restrictions on investments and ultimately unfavourably affect firm performance. However, **Grossman and Hart (1982)** support the view of **Jensen and Meckling (1976)** and explain how debt can act as a disciplinary instrument through creating incentive effects from the threat of liquidation which further restrains managerial opportunism.

Further, **Barry (1977)** carries out a doctoral research on the reasons why companies change their leverage or capital structure and whether they do it with the aim of reaching at point of optimum capital structure. The study finds very limited evidence on the existence of a targeted optimum capital structure as proposed by the static trade-off theory of capital structure. Rather, the study findings strongly endorse the view of pecking order theory that there is no such targeted capital structure exists for

a firm. Nevertheless, **Blanchard et al. (1994)** show how the management of a publicly held company carelessly uses access cash flows from business. According to them, the wasteful spending of cash flows out of self-interest in unprofitable avenues like acquisitions of unrelated firms and other activities many times can't add any incremental value to the firm. In such situation debt which brings fixed payment obligations for the business is highly supposed to restrict the wasteful use of funds by management (**Jensen, 1986**). But, this fixed committed payout may sometimes put over-restrictions on managers in investments and there is a possibility that out of these over-restrictions, managers start forgoing economically viable and profitable projects (**Stulz, 1990**). In this case, the use of debt may bring in an adverse effect on financial performance.

Apart from these, as interest on debt is exempted from corporate tax so use of debt reasonably cuts the overall cost of capital for a firm (**Modigliani and Miller, 1958**). At the same time, additional debt comes with additional bankruptcy cost and therefore in case when bankruptcy cost becomes higher than the benefits of tax exempted interest, financial performance is supposed to worsen. Therefore, a firm must go with a proper cost-benefit analysis while using additional debt capital (**Harris and Raviv, 1991**). According to **Modigliani and Miller (1958)** under the assumption of absence of taxes and transaction costs debt does not affect firm value and the value of levered firm equals to the value of unlevered firm.

Notably, **Agrawal and Knoeber (1996)** carry out a very prominent research investigation in this direction. The researchers make an attempt to find out the important instruments those can restrained owners-managers agency problem. Among a number of factors studied, the researchers find leverage as one of the crucial factor that can be used as a instrument to curtail agency costs and improve corporate

performance. Again, **Krishnan and Moyer (1997)** make an eminent research on the effect of capital structure on financial performance of companies. The study makes a cross-country investigation where it considers a total of 81 companies from four countries namely Malaysia, Singapore, Hong Kong and Korea. The study also tries to examine whether the capital structure and performance of companies are affected by the country origin of the companies. Finally, the study finds no such significant relationship between capital structure and financial performance of the sampled companies. Interestingly, the country origins of the companies are found to be important factor for both capital structure and financial performance. The study again evidences the effect corporate taxes on the decisions relating to capital structure of such corporations when the effect of country origin is controlled. To conclude, the study to some extent endorses the view of static trade-off theory of capital structure and also disapproves the postulation of pecking order theory as not such effect is evidenced in the analysis of the sample firms.

Coming to the context of the studies of 21<sup>st</sup> century, **Holz (2002)**, in context of the state owned enterprises of China, establishes a positive relationship between capital structure and firm performance. Based on the findings, the study suggests that in China the industrial state owned enterprises related reforms that put forward debt alleviation strategy are misguided. A few years later, **Abor (2005)** based on the analysis of data of companies listed on Ghana Stock Exchange (GSE) shows how the access borrowing cost of long-term debt overweighs the interest tax shield leads to exposure of bankruptcy risk and low firm performance measured by ROE. More specifically, the study confirms a positive relationship between short-term debt to total assets (SDTA) and ROE and a negative relationship between long-term debt to total assets (LDTA) and ROE.

In addition to this, **Campello (2006)** addresses an important research question that whether use of debt capital hurts or boosts performance in context of product markets. The study uses a sample of 115 industries for the period of 30 years. The study finds that a moderate level of debt can lead to improved firm performance due to relative-to-rivals sales gain. However, higher indebtedness may lead to underperformance in product market. Moreover, **Rao et al. (2007)** in their study on 93 non-financial Oman companies listed on Muscat Securities Market (MSM) reach at the conclusion that the tax savings from using debt becomes insufficient to meet the cost of debt and the cost of debt found to be greater than the rate of return. This was due to the high borrowing costs in Oman economy and the presence of an under-developed debt market in the economy. Therefore, finally use of debt is found to have negative impact on the financial performance of Oman firms. Concurrently, **Abor (2007)** tests the effect of leverage on financial performance of Small and Medium Sized Enterprises (SMEs) from Ghana and South Africa. The study concludes that by and large, capital structure has a significant and negative impact on the performance of SMEs of the concerned markets. The study specifically finds long-term debt to be detrimental to the performance of the firms.

Again, **Zeitun and Tian (2007)** make an attempt to establish the empirical association between capital structure and firm performance in context of 167 non-financial Jordanian companies during the period of 1989 to 2003. The study uses return on equity (ROE), return on assets (ROA) etc. and Tobin's Q, market to book value ratio (MBVR) etc. as measures of accounting and market related performance of Jordanian companies respectively. The study using panel data regression analysis establish a significant and negative relationship between capital structure and both of the measures of firm performance. However, the study interestingly establishes a

positive relationship between SDTA and one of the measures of market performance i.e. Tobin's Q. The study additionally notes that both the leverage and financial performance of Jordanian companies have significantly increased during the Gulf Crisis 1990-1991 and having controlled the effect of the macroeconomic and some regional factors, the crisis had a positive impact on the Jordanian firms' performance.

Later on, **Mahakud and Misra (2009)** examine the relationship between leverage on financial performance though using a panel data set constructed from a sample of 5258 Indian companies for the period 2000-01 to 2006-07. The study uses ROCE, EPS, ROE and EVA as proxies for financial performance of the sample firms. The study considers the leverage ratio measured by total debt to equity ratio as the main explanatory variable of the study. Applying dynamic panel data model through GMM method, the study finds leverage to have statistically significant and negative effect on all the measures of financial performance used in the study. The study finally concludes that restriction that is made on financial flexibility through the use of debt ultimately exert an unfavourable impact on the financial performance of Indian companies. Besides, the study suggests the Indian companies to maintain a low leverage ratio because, interest rates burden on managers may bring down the level of confidence of the investors in the debt market out of fear of higher interest burden on managers in future which is supposed to reduce the shareholders value. Moreover, the researchers also advise Indian investors to invest in low leverage firms. At the same time, **Boodhoo (2009)** studies on the determinants of capital structure and the way use of debt capital impacts the financial performance of companies. The study based on its objectives uses the accounting data of a sample consists of 40 Mauritian companies listed on the Stock Exchange of Mauritius. The study chooses the companies from six different industries from the Mauritian economy. Based on the findings, the study

infers that use of debt up to a certain threshold negatively affects companies' financial performance and after that level the tax deductibility of debt interest outweighs the cost of financial distress arises out of the use of debt and ultimately exerts a positive impact on financial performance of Mauritian companies. Therefore, the study documents a non-linear relationship between capital structure and the financial performance of the sample companies. Another concurrent study by **El-Sayed Ebaid (2009)** investigates the relationship between capital structure choices made by non-financial listed Egyptian companies and their performance for the period of 1997 to 2005. The study employs multiple regression analysis to explore the statistical association between the variables. The study finally concludes that, capital structure choices by the firms is sometimes either weakly or may not be related with their performance.

Considering the relationship between capital structure and firm performance as an unresolved issue in Nigeria, **David and Olorunfemi (2010)** make a serious attempt to analyse the nexus in context of Nigerian Petroleum Industry for the period of 1999 to 2005. The study introduces debt-equity ratio and earnings per share (EPS) as measure of leverage and performance respectively. It also introduces dividend per share as another dependent variable to test the effect of leverage on dividend payouts. The study using panel data regression analysis, including fixed effect, random effect and maximum likelihood estimation documents a positive impact of leverage ratio on the financial performance and dividend per share of Nigerian petroleum companies. The study based on its findings suggests Nigerian petroleum companies to increase the degree of leverage through the use of debt in the capital structure to strive and gain benefits out of it. Moreover, **Margaritis and Psillaki (2010)** carry out a popular research investigation on the effect of leverage on firm performance across varied

industries by using a sample consisting, the French manufacturing companies. The study endorses the agency cost theory developed by **Jensen and Meckling (1976)** and shows how firms' efficiency is improved over the period of investigation with increased degree of leverage.

Furthermore, **San and Heng (2011)** investigate on the relationship between capital structure and financial performance of 49 construction companies listed on Main Board of Bursa, Malaysia before and during the 2007 financial crisis. The study classifies the sample companies into big, medium and small size companies and uses financial data for the period of 2005 to 2008. The study introduces a number of variables like long-term debt to capital ratio, debt to equity ratio, debt to capital ratio etc. to represent capital structure of such Malaysian companies. Besides, the financial performance of the companies is measured by ROCE, ROE, operating margin and few other variables. Using ordinary least square model, the study documents that, for big companies return on capital employed has significant and positive relationship with capital structure measured by debt to equity market value. EPS has a positive relationship with long-term debt to capital ratio and inverse relationship with debt to capital ratio. For medium companies, operating margin and long-term debt to common equity are found to have positive statistical relationship. Finally, for small companies EPS is found to be negatively associated with debt to capital ratio. At last, the study admits that as the accounting policies and other aspects like annual closing of accounts are different among the sample companies so the accuracy of the results is supposed to be hampered. Besides, according to the researchers, a time-series analysis considering long study period and inclusion of some other suitable variables of capital structure may produce more concrete findings.

In another notable empirical inquiry in the context of Germany, **Stiglbauer (2011)** considers a sample of 80 companies those are listed in the HDAX index. The study introduces debt ratio to represent leverage and a set of dependent variables as measures of company's performance such as, ROA, ROE, market to book value ratio etc. Applying content analysis and simultaneous equation analysis the study suggests a statistically positive relationship between degree of leverage maintained by the companies and financial performance measured by market to book value ratio. The study concludes with the view that, capital structure is one of the crucial corporate governance factors towards the financial performance of HDAX listed companies of Germany. Besides, using a sample consisting of 36 blue-chip companies listed on the Baltic stock exchanges for the period of 2007-10, **Bistrova et al. (2011)** make an empirical inquiry into the impact of capital structure choices on the profitability represented by ROA and ROE. The study based on its findings confirms that for companies operating in the Baltic countries, lower the leverage higher is the profitability. In this regard, the study endorses the proposition of pecking order theory which says that a firm should preferably rely on equity capital i.e. self-generated funds.

Yet again, **Pratheepkanth (2011)** in context of Sri Lanka examines into the capital structure- financial performance nexus considering the companies those are listed and traded on the Colombo Stock Exchange for the period of five years from 2005 to 2009. The study through correlation and regression estimations finds that capital structure has a significantly adverse effect on the financial performance measured by return on investment (ROI) and ROA of the sampled companies. However, a weak positive correlation between capital structure and gross profit is evidenced in the

correlation analysis. Finally, the study concludes that, the Sri Lankan companies are mostly relying on debt capital which is detrimental to their profitability.

After a year, **Sharma (2012)** tries to interlink leverage with value of firm in context of companies from Indian pharmaceutical industry. The study uses a sample consists of 12 pharmaceutical companies those are listed on the National Stock Exchange (NSE) of India from 2005 to 2011. The companies are chosen by considering their volume of market capitalization as on 1<sup>st</sup> April, 2005. The study finally documents that, the magnitude of financial leverage of Indian Pharmaceutical companies does not significantly affect their overall cost of capital. The financial leverage of firms is also not found to affect their market value. Likewise, **Kar (2012)** makes a cross-country investigation to explore the relevance of capital structure towards profitability and a few other non-financial measures of performance of 782 micro-finance institutions chosen from 92 countries for the period 2000–2007. The study employs GMM and IV estimations along with instruments to establish the statistical association between the set of dependent and independent variable(s). Finally, the study in line with agency theory finds that, increasing leverage among the firms brings profit-efficiency while decreasing leverage causes lowering of cost efficiency. Regarding other measures of performance, the study does not find any evidence of the impact of capital structure on the breadth of outreach and increase in women's participation as loan clients for the microfinance institutions. In the concurrent period, **Pouraghajan et al. (2012)** make an attempt to provide some empirical insights on the effect of capital structure measured when measured by debt ratio on the financial performance of 80 firms listed on Tehran Stock Exchange. The study is carried out for the period of 2006-10 and sample companies are chosen from 12 industries. The study using correlation and regression analysis suggests significantly negative relationship between capital

structure and accounting performance of Iranian firms measured by ROA and ROE. The study based on the findings suggest that, debt needs to be considered as a crucial factor towards determining financial performance and as during the considered study period, the mean debt ratio of the firms is more than sixty-five percent, therefore the Iranian firms may think of lowering their leverage ratio to improve financial performance.

Similarly, **Norvaisiene (2012)** examines how capital structure is related with the performance of Baltic firms for the period of 2002 to 2011. The study based on its findings concludes that increasing level of financial indebtedness negatively affects the profitability of in companies of Baltic countries. The study also documents that the role debt towards efficiency in asset management is quite ambiguous and it is negatively related to capital asset turnover and also total asset turnover of the sampled companies.

Moreover, **Jiraporn et al. (2012)** in their empirical investigation documents an interesting observation that the effect of changes in the capital structure of companies on financial performance is moderated by the dominance or power of Chief Executive Officer (CEO). The study suggests the capital structure to be inversely related to financial performance of companies with powerful CEO. It is observed that, dominative effect of powerful CEO intensifies agency crisis which leads to lower firm value. Furthermore, **Gardner et al. (2012)** in context of Malaysia examine the effect of leverage on firm performance as a part of their research. The study uses 82 companies those are listed on the Malaysian ACE Market for the period of 2007 to 2009. Using correlation and multiple regressions estimations the researchers find a positive relationship between leverage and firm performance measured by Tobin's Q ratio.

Additionally, **Akinlo and Asaolu (2012)** investigate the impact of leverage on the profitability of Nigerian firms. The study considers a sample of sixty-six non-financial firms purposively chosen from the listed firms of Nigerian Stock Exchange (NSE) for the period of 1999 to 2007. The firms chosen in the sample belong to fifteen different industries from Nigerian economy. The study uses chi-square test including panel data regression estimation and finds leverage to have a negative impact on the profitability of the sample firms. The study suggests Nigerian firms to reduce their debt ratio i.e. use of debt capital to improve profitability.

Again, **Memon et al. (2012)** focus on the textiles sector to understand the statistical association between capital structure and corporate financial performance. The researchers choose 141 textile companies from Pakistan and analyze the data of Balance Sheet Analysis (BSA). BSA is a document which was issued by State Bank of Pakistan from 2004-2009. The study applying log linear regression model arrive at the conclusion that, the firms under the textile sector of the country failed to choose a judicious mix of debt and equity and therefore they are operating with a non-optimum level of capital structure which leads them to poor financial performance. Based on the findings, the researchers suggest the corporate managers and financial analysts to seriously involve themselves on designing optimum capital structure.

Moreover, **Abu-Rub (2012)** looks into the effect of leverage on the financial performance of 28 companies listed on Palestine Stock Exchange during 2006 to 2010. The study finds the capital structure of the Palestine firms to exert favourable influence on their financial performance. Likewise, **Pratt (2012)** makes a stringent analysis on the relevance of capital structure towards valuation of firm considering a long time frame i.e. from 1970 to 2010. The study suggests an unfavourable impact of leverage on firm value. The study observes that after the Tax Reform Act of 1986 the

interest tax shield value considerably declines which results into negative impact of use of debt on firm market valuation. Finally, the findings of this study go against the trade-off theory and suggest firms to keep them underleveraged to retain market value.

Another contemporary study by **Soumadi and Hayajneh (2012)** in context of 76 Jordanian firms including 53 industrial and 23 service corporation for the period of 2001-2006 finds that, there is no such significant difference in financial performance between two sets of firms, one having high financial leverage and the other having low financial leverage. However, specifically measuring the effect of financial leverage on performance and value of the sampled companies, the study finds a statistically significant and negative impact when they are measured by ROE and Tobin's Q respectively.

In a quite similar attempt, an empirical study by **Muritala (2012)** tries to explore the relationship between capital structure and performance for a sample consisting 10 manufacturing companies quoted on the Nigerian Stock Exchange for the period of 2000-2010. The study confirms a statistically significant and negative impact of use of debt on the performance measure ROA of the sample companies.

Quite subsequently, **Nazir and Saita (2013)** in context of Pakistan make an attempt to examine the effect of capital structure or leverage on the agency cost of companies. The study considers a sample consisting 265 non-financial companies those are listed on Karachi stock exchange during the period of 2004-2009. The study uses general & administrative expenses to sales ratio to measure the agency cost which arises out of conflict of interest between management and shareholders. The study applies both pool and panel data regression analyses and finds that almost all the proxies used for leverage are significantly affecting the agency cost of Pakistani companies measured

by general & administrative expenses to sales ratio. The study finally endorses the existing view on the role of debt as a disciplinary device for lowering managerial discretionary expenses and improving firm performance. The study finally admits its limitations and accepts the fact that agency cost may also be affected by a set of other factors which may include ownership structure and concentration, board size of the companies etc.

Besides, the empirical investigation of **Chisti et al. (2013)** tries to establish the interrelationship between capital structure variables like debt to equity ratio, debt to assets ratio etc. on the profitability in context of automobile companies in India for the period of 2007-08 to 2011-12. The study simply uses correlation matrix to test the relationship and finds debt equity ratio to have statistically significant and negative correlation with the profitability of the sampled firms. Interestingly, another measure of capital structure i.e. debt to assets ratio is seen to be positively associated with profitability. Besides, the study also evidences that the interest coverage ratio is positively correlated with the measure of profitability.

One of the famous empirical investigations on the effect of leverage on financial performance of companies is carried out by **Gonzalez (2013)**. The study makes a very comprehensive approach to establish the empirical relationship through a cross-country analysis of 10,375 firms selected from 39 countries. The study applies the widely recognised generalized-method-of-moments (GMM) estimation which is suitable for dynamic panel data analysis developed by Arellano and Bond (1991). The study finds a negative impact of leverage on the operating performance of the sample firms due to the fact that, the cost of increased financial distress arising out of increased debt outweighing the benefit of debt as a controlling instrument towards managerial opportunistic activities. Besides, one of the crucial findings of the study is

that the actual impact of leverage on the operating performance of the concerned firm is significantly depending on the legal origin and other factors like the financial structure and development of the respective country. In this regard, companies those are belonging to French civil law countries are found to reveal a favourable impact of leverage on operating performance in a situation when the industry is in downturn. Finally, the study concludes that the dominance between the financial distress effect and controlling effect in regard to the use of debt is attached with the above mentioned factors. Again, **Adewale and Ajibola (2013)** analyse the impact of capital structure on firm performance in context of some selected manufacturing companies of Nigeria. Considering a study period of eleven years i.e. from 2002 to 2012 and applying panel least square estimation, the study finds a statistically positive effect of debt ratio on the performance of Nigerian companies measured by ROI and ROE.

Concurrently, **Olokoyo (2013)** inquires into the empirical relationship between capital structure and financial performance in context of Nigeria taking a sample of 101 non-financial companies chosen from 26 subsectors. The study introduces a number of variables like ROI, ROA and ROE to proxy accounting performance. Besides, the study also introduces P/E ratio and Tobin's Q to measure market performance. The study applies panel data regression estimation to establish the relationship between the set of dependent and independent variables. Applying the panel data regression analysis, the study finally documents a significant and negative relationship between leverage measured by TDTA ratio and accounting performance of Nigerian companies. However, a favourable impact of financial leverage on the market performance is observed in the study. The study based on its contradictory findings between accounting and market performance measures, suggest Nigerian companies

to focus on their real operational efficiency to match the accounting performance with market valuation of their shares.

**Goyal (2013)** investigates into the actual empirical association between capital structure and profitability in context of the National Stock Exchange (NSE) listed public sector banks of India. The study considers a period of five years i.e. from 2008 to 2012 and uses short-term debt to capital, long-term debt to capital and total debt to capital ratio as proxies of capital structure. To represent the profitability of the public sector banks, the study introduces ROA, ROE and EPS. The regression results suggest a significantly positive impact of capital structure when measured by short term debt to capital on all the measures of bank's profitability. Besides, the other two proxies of capital structure are found to have negative effect the profitability of Indian public sector banks. Finally, the study recommends future research directions where it gives importance to consideration of longer study period, use of more broad sample and doing comparative analysis between domestic and foreign banks to have a more valid and comprehensive picture on the issue. Again, **Boroujeni et al. (2013)** examine the relevance of capital structure towards firm performance in context of Iran. The study constructs a sample of 123 non-financial and non-investment companies listed and traded on the Tehran Stock Exchange (TSE) of Iran for the period of 2001-2008. The study uses total debt to total assets ratio as measure of leverage to represent capital structure. Besides, the study represents firm performance by ROA. The study applies multivariable regression estimation along with test of normality, autocorrelation and variance homogeneity. Based on the results obtained, the study infers that, capital structure has a significant and positive relationship with the financial performance of Iranian companies. Moreover, **Chung et al. (2013)** make an attempt to examine the relevance of capital structure policy for firms towards their survival in the market.

The study considers the oil exploration firms and uses panel data estimation technique. According to the findings of the study, capital structure does not bear much linkage with the survival probability of firms. Moreover, the study also disapproves the idea of an optimum capital structure and support the irrelevance approach of capital structure.

Again, **Thomas (2013)** examines the capital structure-performance relationship in context of 21 Indian cement companies for the period of 2003-04 to 2007-08. The study presents the movement of total leverage and EPS over the years and concludes that the EPS is increasing over the considered time period with decreasing total leverage.

Besides, **Parka and Jang (2013)** consider the need for a comprehensive study on the interrelationship among leverage, free cash flow, diversification of companies and financial performance of firm. The study analyses data of 308 restaurant companies for the period of 1995 to 2008. Using two-stage least square and three-stage least square regression estimation techniques the study finds that free cash flow causes an increase in the both related and unrelated type of diversification entropies. The study also confirms that the debt can be sensibly used as an effective instrument to limit the managerial discretions in using the free cash flow and to improve firm financial performance. Another study by **Iavorskyi (2013)** examines the effect of capital structure on firm performance in context of Ukraine market for the period of 2001-2010. The study confirms that, the relation between debt financing and company's financial performance is negative and for Ukraine companies the free cash flow theory or trade-off theory of capital structure do not hold good rather the view pecking order theory is more applicable for these companies.

As part of an empirical investigation, **Brendea (2014)** analyses the effect of capital structure on the financial performance of listed Romanian firms for the period of 2007 to 2011. The study considers ROA to proxy performance of the companies. Besides, it uses debt ratio as a measure of capital structure. Finally, using Arellano and Bond (1991) model for dynamic panel data estimation, the study suggests an unfavourable impact of use of debt in the capital structure on the financial performance of the firms when measured by ROA. Based on the findings, the study endorses the ‘new pecking order theory’ in line with **Chen (2004)**. Further, **Javeed et al. (2014)** make an attempt to unveil the dubious relationship between capital structure and firm value, taking a sample of 155 non-financial companies listed at Karachi Stock Exchange from 2008 to 2012. By employing the fixed effect regression method on the balanced panel data the study suggests a positive impact of capital structure or magnitude of leverage measured by TDTA on Tobin’s Q. Again, **Agnihotri (2014)** makes an important investigation on how are the capital structure decision and overall cost of capital depending on the corporate strategy that a firm is pursuing. The study finds that a firm should finance its low-cost and unrelated diversification strategies through debt as it would lower the overall cost of capital of the firm. However, when the firm is pursuing a risky strategy like differentiation and innovation then it should finance through them through issuing equity capital in order to maintain the cost of capital at its minimum level. Finally, the study suggests that, the nature of funding would be depending on the industry growth in case when the firm is pursuing a hybrid and related diversification strategy. According to the study, when the industry is going through a volatile condition it would be better to rely on equity financing under a hybrid and related diversification strategy. However, for matured industries, debt financing is supposed to lower the overall cost of capital.

Yet again, **Loncan and Caldeira (2014)** work on establishing the interrelationship among capital structure of firms, cash holdings and financial performance. The study constructs a sample considering all the non-financial companies those are listed and traded on the Sao Paulo Stock Exchange of Brazil for the period of 2002 and 2012. The study employs fixed effect estimation under panel data regression analysis to establish the desired relationship. The study finally documents cash holdings to be negatively related to both short and long-termed debt. Regarding the relationship between capital structure and firm value, the study suggests a significant and inverse relationship between both the forms of debt and the value of Brazilian firms.

Besides, **Ismail (2014)** in an empirical inquiry in context of Malaysia attempts to establish the statistical association between leverage, size of firm and financial performance. The study considers a sample of 245 main board listed companies' for the period of 1999 – 2002 representing the post-economic crisis period. The study uses total debt to total equity ratio as a measure of leverage. The study applying panel pool regression estimation finds no evidence on any statistical association between leverage and value of Malaysian companies measured by Economic Value Added (EVA).

Similarly, **Banerjee and De (2014)** examine whether capital structure is a significant determinant of firm profitability in context of steel and iron industry in India. The study constructs a sample of 130 Indian iron and steel companies listed and traded in the Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) of India for the period of 1999–2000 to 2010–2011. The study based on multiple regression analysis suggests that leverage negatively affects the profitability of Indian iron and steel companies both in the pre-recession and post-recession period. Therefore, capital

structure is found to be an important determinant of profitability for the companies those belong to the iron and steel industry of India.

The effect of capital structure on the financial performance is examined by **Hasan et al. (2014)** in context of Bangladesh. The study considers 36 Bangladeshi companies listed on Dhaka Stock Exchange for the period 2007 to 2012. The study introduces EPS, ROE and ROA, Tobin's Q as dependent variables to measure firm performance. The study based on pooled panel data estimation technique confirms that, EPS has a significant and positive relationship with SDTA ratio. The study also documents significant and negative relationship between capital structure and financial performance measured by ROA. However, the study does evidence any significant association between capital structure and financial performance measured by ROE and Tobin's Q.

Furthermore, **Mwangi et al. (2014)** explore the empirical association between capital structure and firm performance measured by ROA and ROE. The study uses a sample of 42 non-financial companies which are listed and traded on Nairobi Securities Exchange (NSE) of Kenya for the period of 2006-2012. Based on the results obtained from the feasible generalised least square regression estimation, the study documents a statistically significant and negative association between capital structure and financial performance measured by both ROA and ROE of Kenyan non-financial companies. Based on the findings of the study, the researchers recommend the Kenyan corporate managers to reduce their reliance on long-term debt capital as a source of finance.

**Amara and Aziz (2014)** in context of Pakistan make an attempt to interlink capital structure with firm performance of 33 companies form the food sector those listed on Karachi Stock Exchange of Pakistan. The study considers debt to equity ratio, SDTA

ratio and long-term debt to total assets ratio to represent capital structure of the sample companies. Regarding firm performance, the study introduces EPS and ROA. The study applies Prais-Winsten regression estimation after testing heteroskedasticity, multicollinearity, contemporaneous and auto correlation. Based on the results, the study documents a statistically significant and negative impact of debt to equity ratio on the financial performance of the sample companies. However, relationship between performance and other two measures of capital structure is found to be statistically insignificant. Based on the study results, the researchers conclude that, the food companies in Pakistan need to find an optimum debt-equity mix to maximise their financial performance. The study endorses the view of static trade-off theory of capital structure.

**Vatavu (2015)** examines the impact of debt on the financial performance of 196 Romanian manufacturing firms listed on the Bucharest Stock Exchange over a period of eight-years from 2003 to 2010. The study observes that, the sampled firms are performing well when they are using equity capital instead of issuing debt. Therefore, the study actually finds an inverse relationship between magnitude of leverage and financial performance of firms.

Later on, **Nassar (2016)** tries to produce some empirical evidence on the effect of capital structure on financial performance in context of Turkey. The study uses the financial statements of 136 on Istanbul Stock Exchange listed companies for the period of 2005-20012. The study uses TDTA ratio as a proxy of capital structure and ROA, ROE and EPS as the measures of financial performance. Using multivariate regression analysis, the study suggests that capital structure has significant and negative effect on all the three measures of financial performance of the sample companies. Finally, the study suggests further empirical investigation including

business risk and sales growth of the companies. As per the researcher, a comparative study on large and small companies may also be very useful to draw meaningful inferences. Concurrently, the study of **Awais et al. (2016)** uses a sample of 69 non-financial companies listed and traded on the Karachi Stock Exchange of Pakistan during the of 2004 to 2012. The study considers TDTA, SDTA and LDTA ratio as measures of capital structure. Besides, ROA, ROE, EPS and Tobin's Q are used to measured corporate performance. Finally, based on regression analysis using STATA, the study documents a negative relationship between the measures of capital structure and performance of Pakistani non-financial companies. Again, **Chadha and Sharma (2016)** use a sample of 422 Indian manufacturing companies those are listed and traded on Bombay Stock Exchange for a period of 10 years i.e. 2003–2004 to 2012–2013. The study applies ratio analysis and panel data regression estimation to show the trend of capital structure and to establish the relationship between the variables. The study based on its data analysis demonstrate that the Indian manufacturing firms hold substantial debt in their capital structure and companies are seen to be inclined towards use of debt capital to finance their assets and operations. Notably, the study using fixed effect estimation under panel data analysis, does not find evidence of any significant relationship between leverage and firm value in context of Indian manufacturing firms.

The empirical inquiry of **Mouna et al. (2017)** represents a serious attempt to analyze the statistical relationship between leverage and corporate performance in context of 53 Moroccan companies for the period of 2014 to 2016. The study uses total liabilities to total assets ratio and total liabilities to total equity ratio to represent leverage. Based on the panel data regression analysis, the study documents a significant and negative impact of leverage on the profitability measured by ROA and ROE of the sampled

firms. The researchers based on the findings of the study reject the trade-off hypothesis and support the pecking order hypothesis and consequently suggest the Moroccan companies to rely more on equity capital and less on externally borrowed funds. Another recent past study by **Ameen and Shahzadi (2017)** examines the impact of capital structure on profitability of cement companies in Pakistan. A sample consists of 18 cement companies listed on the Karachi Stock Exchange for the period of 2006 to 2015 has been selected for the analysis. Debt ratio i.e. total liability to total assets ratio and long-term debt to assets ratio are found to have statistically negative effect on ROA and ROE. Besides, the SDTA ratio is found to be positively related with ROE. Besides, **Bortych (2017)** examines the impact of capital structure on the corporate performance of Dutch companies. The study tries to find the difference in the results between private and public companies. It employs fixed effect regression model to arrive at the results and finally finds that, capital structure impacts the performance of the sampled private companies significantly and positively. However, the use of long-term debt is found to have negatively associated with the performance measured by ROA of such firms. According to the researcher, this may be due to underinvestment effect and high flotation cost. On the other hand, in case of public companies, capital structure is found to be positively impacting firm performance. Notably, the study finds short-term debt to have negative impact on the ROA of public companies. Moreover, **Pandey and Sahu (2017a)** make an empirical examination on how capital structure affects firm performance and value. The study constructs a sample of 56 manufacturing companies listed and traded on BSE 200 index of Bombay Stock Exchange of India for the period of 2011-16. The study uses debt-equity ratio to measure the financial leverage of the sample firms. Besides, to measure firm performance the study uses ROE and to represent firm market value the

study introduces Tobin's Q. The results of fixed effect model under panel data estimation suggest a statistically significant and negative effect of financial leverage on the performance and valuation of Indian manufacturing firms. The study based on its findings suggest Indian corporate managers to consider the decision on capital structuring a crucial and challenging one and to maintain the degree of financial leverage at a possibly low level to prevent deterioration in financial performance.

**Nenu et al. (2018)** examine the relationship between leverage and corporate performance in context of listed companies of Bucharest Stock Exchange for the period of 2000-2016. Applying two-step system GMM method, the study documents a statistically significant and positive relationship of leverage with share price volatility. Besides, the study also finds that firm profitability is negatively associated with both the short-term and the long-term debt ratio. In addition to this, **Ibhagui and Olokoyo (2018)** carry out an esteemed research on how the degree of leverage effect corporate performance and value and whether this effect is moderated by firm size. The researcher uses a sample of 101 listed firms from Nigeria market between 2003 and 2007 to construct a panel data set. The study explores a very important and crucial fact regarding leverage-performance relationship. It shows that leverage is negatively related with performance of Nigerian firms and effect of leverage on performance is contingent to firm size as expected. The unfavourable impact of leverage on performance is much prominent for small-sized firms and that the severity of negative effect diminishes with increase in firm size.

Most recently, the effect of leverage on corporate financial performance is tested by **Ganiyu et al. (2019)** through dynamic panel data analysis of 115 non-financial listed firms from Nigeria. The study interestingly documents a non-linear effect of debt capital on the performance of the sampled firms. More specifically, the study finds

that debt capital positively impacts firm performance at its moderate level but when excessive debt is used, the effect turns into negative. Another most recent empirical study by **Singh and Bagga (2019)** examines the statistical association between capital structure and the profitability of Nifty Fifty companies listed and traded on National Stock Exchange (NSE) of India from 2008 to 2017. The researchers introduce debt-equity ratio to proxy capital structure and ROA & ROE to represent firms' profitability. The study adopts panel data regression estimation and establishes a positive relationship between capital structure and the profitability of NSE listed firms.

Thus, from the rigorous review of the existing literatures developed on the relationship between capital structure and corporate performance, it can be stated that, innumerable research studies has been carried out in this directions in different countries across the world. However, the pattern of relationship between the variables is found to be different for different country perspectives and time frame of the studies. So, it is true that we finally reach to an inconclusive state where the relationship between these two variables cannot be confirmed. In fact, it is better to say that, the relationship between these variables is highly contingent to factors like economic perspective, time period considered for the study, methodology adopted etc. Now, we proceed to the important empirical investigations carried out with the aim to interlink ownership structure with the corporate financial performance.

### **3.2. Ownership Structure and Corporate Performance**

The ownership structure-corporate performance nexus has been the topic of high interest and also an ongoing debate in the corporate finance literature. The

relationship between these two variables is theoretically complex and empirically dubious in nature. The ownership-performance relationship has been widely explored in context of various developed markets and more recently in context of a few emerging market economies, but has been largely unexplored in India's recent regulatory and economic framework. Notably, the earlier studied on ownership-firm performance relationship has been mostly conducted in the light of concentration or dispersion of ownership and the role of large and minority owners. The various forms or composition of ownership have gained considerable research interest only since last two decades.

Let us first start with the studies which consider the ownership concentration or dispersion, block-holding and majority shareholders ownership etc. while interlinking ownership structure with firm performance.

Research on ownership-performance nexus in publicly held corporation dates back to the study of **Berle and Means (1932)**. According to them, the business corporations in the U.S. those are operating with a dispersed ownership structure with more concentrated ownership in the hands of insiders or managers, tends to underperform. Following this, **Jensen and Meckling (1976)** develop the agency theory showing the managerial ownership can minimise the agency cost by limiting managerial incentives and helps in aligning the interests of managers & shareholders. However, in contrast to agency hypothesis, nearly after a decade the eminent empirical study carried out by **Demsetz and Lehn (1985)** in context of 511 U.S. corporations documents no such significant relationship between ownership concentration and corporate financial performance. Furthermore, **Shleifer and Vishny (1986, 1988)** carry out two eminent researches on ownership structure and firm performance including the agency issue. According to their studies, the presence of large shareholder or group, having the

dominance over the management, exert significant impact on the management of affairs of a corporation by virtue of high controlling ability. It further leads to minimization in agency cost and therefore improved firm performance. In line with these evidences, the eminent empirical research carried out by **Wruck (1989)** also suggests that block-holdings or increased concentration of equity ownership positively effect on corporate performance. Further the researcher shows that the relationship is non monotonic on abnormal market returns.

However, in another study, **Leech and Leahy (1991)** examine the ownership-performance relationship in context of large British companies. The study first identifies that the concentration of ownership in companies significantly dependent on diversifiable risk, size of firm and product diversification. In contrast to the previous evidences, the study suggests that higher dispersion of ownership leads to higher market value, profit margin and growth of companies. Later on, **Mudambi and Nicosia (1998)** conduct their research work among U.K. financial industry with two major objectives. First, they try to assess the impact of concentrated ownership structure and the degree of control on company performance. Secondly, they review the impact of managerial ownership on firm performance keeping the convergence-of-interest and entrenchment hypotheses in consideration. Data of a sample of 111 companies including banks, insurance and merchant banks etc. in UK over the period of 1992 to 1994 are used for the empirical analysis. Regression results show that ownership concentration measured by Herfindahl index is negatively related with firm performance. The study finally suggests that ownership concentration is not necessarily related with degree of control. The regression results also conform that the managerial ownership has a non-monotonic relationship with performance.

Quite Subsequently, **Thomsen and Pedersen (2000)** examine the impact of ownership structure on shareholders' value and profitability among the largest European companies. The researchers survey the ownership structures of 435 non-financial companies belongs to twelve European nations in the year 1990. The study finds that, ownership concentration in form of largest ownership, up to a certain point can positively contribute towards shareholders' value measured by MBVR and profitability measured by ROA. However, after the threshold point which is identified as eighty three percent, the effect gradually turns into negative. Besides, an important finding of the study is that, when the largest owner is an institution, the effect on shareholders' value is very strong. Therefore, the study covers two important aspects of ownership-performance nexus; first it establishes the role of large owner and secondly, it shows the relevance of ownership identity. Just after a year, **Demsetz and Villalonga (2001)** carry out an eminent research on the effect of ownership structure on the performance of 223 companies from the United States (U.S.). The study based on its findings infers that, the ownership structure of such companies is not significantly related to their performance. The study concludes that while diffused ownership pattern brings about agency crisis, it also simultaneously yields some compensating advantages which ultimately off-set such crisis.

Again, **Gedajlovic and Shapiro (2002)** try to gauge out the actual statistical association ownership concentration on the financial performance of companies. The researches choose a set of 334 Japanese companies for the period of 1986-91. The study finally suggests a positive relationship between ownership concentration and performance of such sampled firms. Based on the study results, the researcher endorses the agency theory on ownership structure proposed by **Jensen and Meckling (1976)**. Furthermore, **Miguel et al. (2004)** establish the statistical

relationship between concentrated ownership structure and value of firm. The study uses an unbalanced panel data of 135 Spanish companies for the period of 1990 to 1999. The researchers measure ownership concentration by considering the total shareholding of significant shareholders. The study uses two variables i.e. ownership concentration and the squared of ownership concentration to determine the two-fold effect of concentrated ownership structure on firm value measured by Tobin's Q. The study based on dynamic panel data analysis under GMM framework establishes a non-linear (bell-shaped) relationship between ownership concentration and value of the Spanish companies. The study specifies that, up to a threshold of eighty three percent of ownership by significant shareholders the monitoring effect is operational but after this threshold point the expropriation effect becomes more intense leads to lower firm value.

Considering the fact that, ownership structures vary considerably across Europe, **Kirchmaier and Grant (2005)** examine the impact of forms of ownership on firm performance by considering five major European economy, namely Germany, France, UK, Spain and Italy. The ownership structures of the sampled firms are categorized into widely held firms, de-facto control firms and legal control firms. The study finally documents that dominant shareholders destroy firm value. In a concurrent attempt, **Selarka (2005)** provides some important empirical insights on the ownership concentration-firm value relationship in India corporate sector. The study finds that, ownership concentration by minority shareholders does not significantly contribute to firm value and therefore their monitoring effect is not operational in Indian corporate firms. Besides, the largest two minority shareholders are found to increase the firm value at lower proportion of ownership and vice versa.

At the same time, **Earle et al. (2005)** explore the concentration-performance relationship of firms listed and traded on the Budapest Stock Exchange. The study employing the fixed effect estimation under panel data analysis documents that the largest shareholders are having very strong influence towards increasing the profitability and operational efficiency of the sampled firms. However, the impact of total block-holdings on the firm performance is not found to be statistically significant. However, when the individual effect of the largest block-holder is controlled, the marginal effect of additional blocks is found to be negative. Finally, the researchers conclude that the marginal cost of concentration is overweighing the benefits due to the involvement of multiple players.

Later on, **Kapopoulos and Lazaretou (2007)** examine the statistical relationship between ownership pattern and financial performance in context of Greek. The study uses a sample of 175 Greek listed companies. The study based on OLS and 2-OLS estimations confirms that, as the ownership of Greek firms becomes concentrated the performance measured by Tobin's Q improves. Similar effect on performance is evidenced for managerial ownership type in such firms.

Similarly, **Perrini et al. (2008)** study the impact of forms of ownership like concentrated ownership and managerial shareholding in context of 297 Italian companies for the period of 2000 to 2003. The study applies ordinary least square (OLS) and 2SLS regression estimations and finds that, ownership concentration measured by the shareholding of five largest owners is positively impacting firm performance. Interestingly, managerial shareholding is found to have positive effect on financial performance of such Italian firms only when the ownership is non-concentrated i.e. dispersed. The study concludes that, the large owners are using their

dominative position opportunistically by employing managers who would only work in line with their personal interests.

Moreover, **Omran et al. (2008)** make a sincere attempt to empirically identify determinants of ownership concentration and find out the relationship between ownership concentration and performance of 304 Arabian firms chosen from a variety of sectors of the economy. The study establishes that ownership concentration of Arabian companies is negatively related to quality of legal protection. Therefore, ownership concentration is found more where the legal protection is weak and vice-versa. Besides, ownership concentration is not identified as a significant determinant financial performance of the sampled companies.

In another study, **Zeitun (2009)** tries to interlink ownership structure with corporate performance and failure. The study constructs a sample taking 167 Jordanian companies for the period of 1989 to 2006. The study measures ownership concentration by considering two variables; one representing the ownership by largest five shareholders and another through using Herfindahl Index of ownership concentration. The study considers a shareholder as concentration only when it holds at least five percent of a company's share. Besides, the study also uses a number of ownership structure like government ownership, institutional shareholding etc. Applying panel data regression model the study establishes ownership concentration measured by ownership of largest five shareholders is negatively correlated with firm performance measured by ROA and Tobin's Q and positively correlated with MBVR. Besides, ownership concentration measured by Herfindahl Index is not found to have any significant correlation with any measures of corporate performance used in the study. However, institutional shareholding is found to have a negative relationship with corporate performance measured by ROA and positive relationship with MBVR.

The study finally suspects a non-linear relationship between ownership concentration and performance of Jordanian companies.

The study of **Bruton et al. (2010)** gives insights into the impact of concentrated ownership, types of block-holders (namely venture capitalists and business angels) and their effects on IPO performance in two nations, United Kingdom a common law country and France, a civil law country. The study supports the arguments of agency theory and states that the concentrated ownership boosts IPOs' performance. The research also shows that the impact on performance depends on the types of private equity investors and countries legal environment. The business angels are found to have a significant value-enhancing effect on the firms while venture capitalists have a negative effect on performance. Again, **Margaritis and Psillaki (2010)** examine how ownership structure plays important role towards agency crisis and financial performance of French manufacturing companies which belong to different industries. In context of chemical industries, the study finds clear evidence in support of the hypothesis that firms having more ownership concentration suffer from less agency costs. However, the study does not document any statistically significant association between ownership structure and performance of companies belong to textiles and computers industries.

Looking at the lack of consensus among the researchers on the relationship between forms of ownership and performance of firms, **Tsegba and Ezi-Herbert (2011)** make a serious effort to carry out a research on the issue in context of 73 Nigerian listed companies of Nigerian Stock Exchange. The study covers a period of 2001 to 2007 and applies OLS method to arrive at the desired results. Based on the findings, the study concludes that, the dominant shareholders, ownership concentration and foreign equity ownership are not significantly related to financial performance of Nigerian

firms when measured by market price per share (MPS) and EPS. However, the study suggests an inverse relationship between insider ownership and firm performance. The researchers referring to the study results suggest the Nigerian corporate to rethink on the relevance and use of ownership types mentioned above as the corporate governance mechanisms for a firm. Besides, the ownership by insiders is also recommended to be closely monitored and controlled in such firms. In a quite similar attempt, **Stiglbauer (2011)** studies the effect of ownership structure on corporate governance and performance of 80 German listed firms in 2007. The study finds an insignificant impact of ownership concentration on firm performance measures by ROE. Besides, the study also establishes negative relationship between free-float and the MBVR and also free-float and total shareholder return. Concurrently, **Liang et al. (2011)** examine the relationship between ownership and corporate financial performance in perspective of Taiwan's publicly listed companies for the period of 1999 to 2008. Insider ownership concentration and institutional ownership concentration are considered as the independent variable. ROA and industry-adjusted ROA are introduced as performance variable. Simultaneous equations model is used by the researchers to analyze the data collected on the sampled firms. The finding of the study confirms that institutional ownership, rather than insider ownership, is negatively and significantly related to performance of Taiwanese listed firms.

Again, **Srivastava (2011)** examines the effect of ownership pattern on the accounting and market performance of firms in context of 98 companies listed and traded in the BSE 100 index of the Bombay Stock Exchange of India. The study observes high degree of ownership concentration in such Indian companies. Based on the regression results, the study documents a statistically significant association between dispersed ownership pattern and the accounting performance of the sampled companies

measured by ROA and ROE. However, the study does not find any evidence on the relationship between ownership pattern and the market performance of the sampled companies.

As a quite subsequent attempt, **Fauzi and Locke (2012)** examine the effect of various forms of ownership like managerial shareholding, directors shareholding, block-holding etc. on the performance of 79 listed companies of New Zealand belonging to six industries including primary, property, service, energy, goods and investment for the period of 2007 to 2011. The study considers ROA and Tobin's Q as a proxy of firm performance. The results of GMM estimation suggest that, managerial ownership in such firms has a significant and positive impact on the performance measures. However, increase in block-holdings is seen to exert unfavourable impact on the performance of New Zealand firms. Besides, **Mangena et al. (2012)** conduct an empirical examination on the relationship between ownership concentration and few other corporate governance parameters on the performance of companies listed in Zimbabwe Stock Exchange for the period of 2000 to 2005. The study splits the study period into pre and post presidential election periods i.e. 2000 to 2002 and 2003 to 2005 to capture the effect of changes in political landscape. The study applies system GMM estimation and finds a positive relationship between ownership concentration and performance of firms only during the post-presidential election period. The study based on its findings concludes that, the nature of the companies' political environment is a crucial determinant towards the relationship between ownership structure and firm performance in Zimbabwe. In a quite different approach, **Kang and Kim (2012)** in their study in China considers 6588 non-financial firm-year observations from the firms listed on the Shenzhen Stock Exchange or Shanghai Stock Exchange from 1994 to 2002. The study tries to explore how change in

ownership structure from purely government holding to partially government holding can affect firm performance. The partially government controlled firms which they called Marketized State Owned Enterprises (MSOEs) were found to perform better than the purely government controlled firms or State Owned Enterprises (SOEs). Evidence was also found regarding the possibility of less expropriation of minority shareholders due to the presence of ownership concentration of a controlling shareholder.

Looking at the rapid privatization in the Chinese economy, **Huang and Boateng (2013)** examine the impact of state ownership on performance of real estate sector. 101 firms listed on Shenzhen and Shanghai stock exchange for the period of 1999 to 2010 are taken as the study sample. Moreover, the study period is further divided into two parts, one covers booming period (2005–2010) and another covers the period before the boom (1999–2004). Proportion of the state shares, tradable A-shares, legal person shares, management shares and ownership concentration are used as independent variable. The study uses Tobin's Q to proxy the firm performance. The study finds that relatively higher state shareholding is associated with poor performance in the pre-boom years and better performance in the booming years. On the other hand legal person shareholdings, management shareholding and ownership concentration are found to positively influence the performance of Chinese real estate firms. At the same time, **Caixe and Krauter (2013)** document some crucial evidence relating to the non-linear impact of ownership concentration on the performance of 237 non-financial publicly traded firms from Brazilian economy. The researchers use a study period of ten years which covers a period of 2001 to 2010. Applying dynamic regression estimation under System-GMM framework, the study finds that as the participation of the largest shareholder in cash flow rights increases, the market

performance measured by Tobin's Q of the Brazilian companies increases and effect continues until the ownership by the largest shareholder touches 53.99 percent. For another performance measurement variable called enterprise value to total assets ratio, the optimum concentration is noted to be 51.85 percent. Therefore, the study concludes that, in Brazilian non-financial companies, both the effect of ownership concentration i.e. efficient monitoring and minority shareholders' expropriation co-exist.

Later on, this study of **Brendea (2014)** investigates the impact of ownership concentration on the performance and capital structure in context of 69 Romanian listed companies during the period 2007- 2011. It involves a two stage analysis, where in first stage firm performance represented by ROA is considered as exploratory variable and ownership concentration and debt equity ratio are taken as the explanatory variables. In the second stage of the study, debt equity ratio is considered as exploratory variable and the ROA and ownership concentration are taken as explanatory variables. In both cases asset tangibility and firm size are considered as moderating variables. The findings of the study suggest that the effect of ownership concentration on firm performance is insignificant. However, the performance of Romanian firms is influenced positively by debt equity ratio and firm size.

In another attempt, the study of **Dwaikat and Queiri (2014)** focuses on establishing the empirical association between ownership structure especially concentrated ownership structure and managerial shareholding on the ROA and Tobin's Q of 31 companies those are listed and traded on the Palestine Stock Exchange during 2008 to 2012. The study measures ownership concentration by taking the sum of total ownership by shareholders having at least five percent of stock ownership. The study finally finds that, insider ownership measured by ownership of executive managers

and directors has a significant and positive relationship with the financial performance of companies measured by ROA and Tobin's Q. The concentrated ownership structure is found to be negatively related with the performance measures of the sampled companies. Likewise, **Vintila et al. (2014)** undertakes a panel data analysis for companies listed and traded on the Bucharest Stock Exchange (BSE) to understand the effect of ownership concentration and ownership origin on the performance. The study confirms a non-linear relationship between the proportion of equity owned by the two largest owners and the three largest owners, when considered individually, and firm value. Regarding the ownership origin, the results provide evidence for a positive relationship between the residence of the largest shareholder and value of firms.

Again, in context of Pakistan, **Javeed et al. (2014)** empirically test the impact of various parameters of corporate governance on firm value. The researchers also examine the statistical association between capital structure and corporate governance parameters. For the purpose of empirical analysis, 155 non-financial companies listed at Karachi Stock Exchange for the period of 2008 to 2012 are sampled. TDTA ratio is taken as the proxy of capital structure. On the other hand corporate governance of firm is measured through board size, board independence, CEO duality, managerial ownership and ownership concentration. Finally the dependent variable i.e. firm value is measured by using Tobin's Q ratio. Looking at the nature of data, panel regression estimation is employed to estimate the impact of independent variable on the dependent one. The results of the study find that in case of the parameters of corporate governance, only the board independence and ownership concentration measures are found to be affecting firm value significantly with positive sign. Regarding the impact

of leverage on governance measures, the study does not document any significant effect.

The significance of ownership structure towards corporate performance is also the focal point of research of **Soufeljil et al. (2016)**. The researchers for the purpose of the study construct a sample consisting 51 companies listed and traded on Tunis stock exchange from 2008 to 2012. The study documents a statistically significant and positive impact of ownership concentration on the performance of the sampled firm measured by ROA. Again, ownership by foreign investors and institutional investors' shareholding are also found in the study to have significantly positive impact on the performance of Tunisian companies during the considered study period. Again, the study of **Najjar (2016)** uses a sample consisting of 83 non-financial companies listed on Amman Stock Exchange (ASE) for the period 2005-2013 to test the statistical relationship between ownership pattern and corporate performance. The study again corroborates a favourable impact of concentrated ownership structure on the value of Jordanian companies. In a quite distinct approach, the study of **Wang (2016)** in context of Chinese market approves a non-linear effect of block-holder ownership on corporate value. The study shows how the market value of companies first decreases with increase in the proportion of block-holdings and then improves as block-holders own more equities.

**Abbasi et al. (2017)** in context of 78 firms listed and traded on the Tehran Stock Exchange for a period of 7 years from 2007- 2013 try to interlink ownership concentration with firm performance. The study based on multiple regression and panel data estimation techniques documents a statistically significant and positive association between ownership concentration and financial performance of the sampled companies. Quite similarly, the empirical investigation conducted by **Yasser**

**and Mamun (2017)** introduces Hirschman–Herfindahl index to proxy ownership concentration while interlinking it with performance in context of Pakistan. The study finally approves the efficient monitoring role of majority owners and their positive contribution towards economic profit and market-based performance of Pakistani companies.

In the recent past, **Mittal and Anjala (2018)** explore the relationship between ownership structure and financial performance taking a sample of 178 non-financial companies listed and traded on National Stock Exchange (NSE) of India for the period of 2008 to 2015. The study evidences a significantly positive impact of ownership concentration on firm performance and value. According to this research, more substantial stake in the hands of promoter seems to foster greater access of funds for firms' initial investment requirements and thereby results into larger scale of operation resulting into improved firm performance. Besides, one of the eminent studies of the recent decade is carried out by **Altamash and Saha (2018)** in context of India. The study using a sample of 236 Indian manufacturing firms tries to establish the nature of empirical relationship between ownership concentration and firm value. The study also tries to understand that how investors' protection matters towards this ownership-value nexus. Using OLS, FEM and two steps GMM estimations, the study confirms a U-shaped relationship between ownership concentration and firm value. It is also interestingly documented that, that investor protection quality considerably moderate the ownership concentration–performance nexus in Indian manufacturing sector.

Most recently, **Pandey and Sahu (2019a)** make an attempt empirically establish the relationship between ownership concentration especially in the hands of promoters and the value of Indian manufacturing companies. The study measures the firm value

of the sampled firms by using Tobin's Q ratio. Based on panel data regression estimation, the study establishes a positive effect of concentrated ownership structure on the value of Indian manufacturing companies. The study finally concludes that, in Indian manufacturing companies the giant promoters play significant role in form of efficient monitoring and controlling the activities of management and their opportunistic behaviour which leads to better firm performance.

So far we discuss about the studies which mainly or in some measure involves the examination of relationship between ownership concentration, block-holding or majority owners' shareholdings and corporate financial performance. Now, let us proceed to the important empirical investigations which involve an analysis of the statistical association between various forms or composition of ownership and corporate performance. We start with the important studies conducted mainly focusing on the role of institutional investors ownership towards corporate financial performance in context of different emerging and emerged markets.

To start with, **McConnell and Servaes (1990)** carry out a famous empirical investigation on the relationship between institutional ownership, insider ownership and financial performance of companies. The study makes an in-depth statistical analysis and confirms a curvilinear relationship between insider ownership and corporate performance. The study also establishes a significantly positive relationship between fraction of stock owned by institutional investors and performance measured by Tobin's Q. Finally, the study concludes that, corporate value is a function of corporate equity ownership structure. Similarly, **Chaganti and Damanpour (1991)** try to explain the relationship between outside institutional shareholdings, firm's capital structure and performance. For the purpose of the study 40 U.S. manufacturing firms are chosen as a sample for the period of three years. The study shows how the

proportion of outside institutional ownership significantly affects capital structure and corporate performance. A few years later, **Craswell et al. (1997)** empirically test the statistical association between insider ownership and institutional shareholders' ownership in context of Australian market. The study constructs a sample consisting 349 publicly traded Australian companies for the year 1986 and 1989. The study establishes a curvilinear relationship between insider or managerial shareholding and corporate performance where the relationship is found to be inconsistent across companies. Besides, regarding institutional shareholding, the study does not evidence any significant contribution of this ownership type on the corporate performance of Australian companies.

Later on, **Kumar (2004)** analyses a set of panel data on Indian corporate firms to establish the ownership-performance nexus. The study observes high cross-sectional variations in performance in Indian companies. Regarding the ownership-performance relationship, the study confirms a non-linear effect of managerial and institutional investors' shareholding on the corporate financial performance. The financial institutions are found to play active monitoring role when they hold at least fifteen percent of company's ownership. The study also finds a significant influence of dominant shareholders on performance of Indian companies. As a subsequent attempt, considering the increasing participation and role of institutional investors in the U.S. capital market, **Tsai (2005)** in his dissertation work tries to examine the effect of such investors on the financial performance of the companies from the casino, restaurant and hotel sectors for the period of 1999-2003. The study finds that for the companies belonging to restaurant and casino sector firm performance and percentage of institutional shareholding are significantly dependent upon each other. However, the

study after controlling the firm specific variables finds no evidence on the statistical relationship between institutional ownership and performance of firms in hotel sector.

The ownership-performance nexus also becomes the research interest of **Douma et al. (2006)** in context of 1005 BSE listed companies of India. The study measures firm performance by ROA and Q ratio. The study based on the analysis of data finds foreign institutional investors shareholdings in the Indian firms has no such clear cut impact on the performance measures used in the study. Based on this finding the study suggests the researchers, those establish a statistical relationship between foreign institutional ownership and Indian firms' performance need to do further reviews on the same. The study also endorses the need to treat foreign portfolio or intuitional ownership and foreign direct ownership separately while statistically linking foreign ownership with firm performance. The study also documents a positive impact of block-holdings by domestic corporations and financial institutions on firm performance and the monitoring ability of the former is found to be higher than the latter kind of ownership. Concurrently, **Patibandla (2006)** examines the effect of the of foreign equity ownership on firm performance in Indian corporate sector. The empirical analysis is based on firm of 11 Indian industries for the period of 1989 to 1999. This paper separately treats foreign investors and government-owned local financial institutions as large investors. The empirical results of the study show that foreign investors contribute positively towards corporate performance of Indian corporations. But regarding the ownership of government financial institutions, the effect is found to be negative. The researcher finally suggest to reducing the participation of government financial institutions and to encourage foreign investors with an effective regulatory framework to improve corporate governance and performance.

Afterwards, **Tsai and Gu (2007)** in context of U.S. examine the actual statistical association between institutional investors' ownership and firm performance in the restaurant industry for the period of 1999 to 2003. The researchers consider the endogeneity issue relating to ownership structure and employ a simultaneous equation framework to gauge out the relationship between the two variables. The study approves the favourable role of institutional ownership on performance of U.S. firms. In a distinct attempt, the famous study by **Ghosh (2007)** gives important insights into the relationship between institutional ownership and corporate performance in India. The study shows how the external monitoring efforts from the part of banks complement the internal monitoring by management and increase in the external monitoring leads to a rise in the incentive of managers to monitor the activities of the business efficiently. However, more specific analysis produces quite different findings and shows the complementary effect is not found in small sized companies. Another concurrent study by **Farooque et al. (2007)** makes an empirical investigation with the objective to produce evidence on the ownership-performance association of companies in context of Bangladesh. The study constructs an unbalanced pooled sample consisting 660 firm-years for the period of 1995 to 2001. The study based on ordinary least square estimation confirms that there is no statistically significant effect of ownership structure in forms of government shareholdings, shareholding by the board of directors and public shareholding etc. on the financial performance of Bangladeshi companies measured by ROA and Tobin's Q. However, the study finds a non-linear U-shaped effect of institutional ownership type on companies' performance which implies that the institutional investors are playing effective monitoring role only after holding a substantial proportion of companies' ownership.

In addition to that, **Bhattacharya and Graham (2007)** investigate the relationship between institutional ownership and performance of the corporations of Finland. For the purpose of analysis 116 firms are selected as the sample for the year of 2004. Firm performance is measured through Tobin's Q. Besides, leverage, capital expenditure, market risk and firm size are taken as the control variable. Furthermore, the study considers nine industry specific dummies which include industries like information technology, consumer discretionary, healthcare industry, telecommunications, real estate etc. to ensure robust results. To establish the actual empirical relationship three stage least squares method is employed by the researchers. The study finally finds that proportion of ownership held by institutional investors has a significant and negative effect on firm performance. Later on, **Khan (2008)** tries to empirically understand the effect of institutional shareholding on the financial performance through effective monitoring and increasing quality of management in Indian corporations. The findings of the study reveal the role of institutional investors towards the board of directors meetings, promoting management practices, increasing productivity & efficiency and ensuring smooth functioning of the company has been dissatisfactory. Further, the study also finds that the role of institutions like pension funds and mutual funds are not so active in corporate governance.

Moreover, **An et al. (2009)** make a sincere attempt towards advancing the extant literature on the relationship between ownership type and corporate performance in context of 12 publicly-traded newspaper companies for the period of 1988 to 2000. The study based on its findings endorse the fact that, institutional investors' shareholding which includes the share ownership by banks, asset management companies and insurance companies in a particular year is negatively related with the profitability of the subsequent years when profitability is measured by ROA and ROE

of the sampled companies. The study finally reach to the conclusion that, the concerned institutional investors are not working as activists rather they are compromising the organizational overall interest for their other business relationship with the firms. Therefore, the study in line with **Brickley et al. (1988)** and **Pound (1988)** finally endorses the conflict of interest hypothesis regarding the relationship between institutional ownership and firm performance.

In context of the European market **Baert and Vennet (2009)** examine relationship between shareholding by financial institutions and the performance of firms. As the sample of the study 2851 non-financial listed companies from EU15 for the period 1997-2006 are selected. The dependent variable i.e. firm performance is measured by the Tobin's Q. Based on the empirical analysis, the study corroborates that there is a negative relationship between shareholding by financial institution and the market value of firms. The researchers also state that the results of the study disapprove the active monitoring role of institutional investors in non-financial listed European companies.

Quite subsequently, **Sahuta and Gharbi (2010)** focus on the French market to establish the interrelationship between institutional ownership and corporate performance measured by Tobin's Q. The study follows a very strong research method and involves useful econometric tools to arrive at the results. Based on the rigorous econometric analysis, the study evidences the present of institutional shareholders activism in French companies which ultimately has a favourable impact on financial performance. The study also states that, the relationship between these two variables is bilateral.

After a couple of years, **Striewe et al. (2013)** in their empirical investigation in context of 155 real estate investment trusts (REITs) from United States for the period

of 1998 to 2010 try to understand, how the institutional ownership can affect their performance. The study applies Fama-MacBeth firm fixed-effects estimation and two-stage least squares fixed-effects regression estimation to arrive at the results. Based on statistical analysis of data, the study confirms a positive relationship between institutional ownership and performance of REITs measured by ROA. The institutional shareholding also found to have favourable impact on the market value of the sampled firms when measured by Tobin's Q. An increase in institutional ownership is found to affect ROA within five quarters and Tobin's Q within three quarters.

Concurrently, **Ting (2013)** emphasises on both, the impact of insiders' and institutional shareholding on the corporate financial performance in context of Taiwan. Based on the findings of the study, the researcher confirms a statistically significant and positive association between both the forms of ownership and performance of Taiwan firms. Moreover, based on the results, the study concludes that in the Taiwan firms the efficient monitoring effect is more powerful than the convergence of interest effect.

The empirical inquiry by **Boroujeni et al. (2013)** in context of 123 Iranian companies listed and traded on Tehran Stock Exchange for the period of 2001 to 2008 shows, how the forms of ownership can significantly determine the corporate financial performance. The study specifically shows that, the proportion of ownership by institutional shareholders contribute significantly and positively towards performance of the sampled firms measured by ROA. The study based on the results endorses the efficient monitoring effect generated by the institutional investors on the procedures and activities of the Iranian companies.

A few years later, **Asadi and Pahlevan (2016)** make a statistical examination on the relationship between ownership structure and firm performance in context of 102 companies listed on Tehran Stock Exchange for five year from 2007 to 2011. The study applies multiple mean comparison tests and analysis of variance i.e. ANOVA to arrive at the results. Based on the statistical and econometric analysis, the study confirms the various commonly used performance measures like ROA, ROE, MBVR and Market Value Added (MVA) are the functions of ownership structure. More specifically, the study shows that the public ownership and institutional investors' ownership are positively influencing all the above mentioned measures of corporate performance.

With the objective to find out the ownership-performance relationship in context of Indonesia, the study of **Saleh et al. (2017)** uses a sample of 40 property and real estate firms during the period 2010–2015. The study employs FEM and REM model under panel data estimation to arrive at the results. Based on the panel data regression results, the study approves the role of institutional investors on the performance of Indonesian property and real estate firms for the considered period. Besides, managerial shareholdings also found to have some bearings on corporate performance. Again, in the recent past, **Zraiq and Fadzil (2018)** inquire the ownership-performance relationship in context of Jordan. Applying OLS regression model the researcher finds that forms of ownership have crucial relevance towards corporate performance. The study specifically establishes a statistically positive impact of foreign ownership and family ownership on performance of Jordanian companies.

In a most recent attempt, **El-Habashy (2019)** inquires into the effect of the composition and concentration of ownership and firm performance in context of 40

most active Egyptian non-financial companies for the period of 2009 to 2014. The study uses ROA, ROE and Tobin's Q to measure firm performance. Based on the data analysis, the study documents a significantly positive relationship between proportion of institutional ownership and the financial performance of the sampled firms. However, equity ownership by managers and ownership concentration are found insignificant to the accounting and market-based performance of the firms.

Now, there are some important empirical investigation those specifically concentrated on the role of promoters towards the operational efficiency and financial performance of companies. We discuss such important literatures as below:

The empirical investigation by **Chakrabarti (2005)** focuses on Indian corporate sector to make a study on various aspects of corporate governance and highlights the presence of pyramiding and tunneling effect of promoters' stock ownership in Indian companies. Later on, **Rao and Guha (2006)** focus on the ownership pattern of Indian companies especially of the family controlled firms. For the purpose of the study, the researcher make a review of the ownership patterns of Indian companies which are primarily family controlled or group affiliates for the period 2002-03 to 2003-04. The pattern of ownership of such companies is shown by using various charts and tables. They observe that substantial portion of shareholdings of Indian companies is owned by promoters and their affiliates. They also find that on an average, a quarter of the ownership stake is owned by institutional investors who are believed to be better monitor of corporate affairs. Individual small shareholders are found to be relatively marginal in terms of control and ownership percentage and do not have considerable participation in corporate decision making. Another crucial fact that the study identifies is that, the introduction of postal ballot with the objective of reducing the

cozen power of the promoters remains ineffective. The researchers suggest the SEBI guidelines and companies act in relation to governance to be much more stringent.

Notably, **Haldar and Rao (2011)** analyse the interrelationship between ownership structure and performance of firms in context of Indian market. The study considers companies listed on BSE 500 index of India for the period of 2001 to 2008. The study applies panel data regression analysis and more specifically fixed effect and random effect estimation to arrive at the results. Based on the data analysis, the study finds that ownership by promoters in those companies has a positive impact on the financial performance measured ROA, ROCE and Tobin's Q. The study clearly infers that non-promoter ownership doesn't significantly contribute to the performance of Indian companies. Besides, according the results of the study, some unobserved firm characteristics can explain a large fraction of Indian companies' financial performance. Moreover, **Nakanoa and Nguyen (2013)** examine the effect of foreign ownership on the performance of electronics industry in Japan. The study measures financial performance by using two variables i.e. ROA and Tobin's Q. The study documents a positive impact of foreign investors' ownership on the financial performance of Japanese electronics companies. Concurrently, the empirical investigation by **Gugnani (2013)** tries to explore the statistical association between a number of corporate governance parameters like board composition, board size, promoters' holding etc. and firm performance. Considering the listed Indian manufacturing companies for the period of 2005 to 12 and employing OLS method, the study confirms that corporate performance is positively related to promoters' shareholding.

At a subsequent stage, **Tawiah et al. (2015)** aim at establishing the relationship between promoters' shareholding and corporate value. The researchers take a total of

125 observations from 25 listed Indian firms out of Nifty 50 companies for the period of 2009-13. Interestingly, the study documents an inverse relationship between proportion of share ownership by promoters' and shareholders' wealth. Again, **Bansal and Singh (2015)** undertake research efforts to empirically establish the ownership-performance nexus in context of India. The study uses a sample consisting of 137 publically listed companies belong to the FMCG sector of Indian economy. The study measures corporate performance by ROA and employs paired sample T-test and ANCOVA to arrive at the results. Based on the analysis of the concerned data, the study finds a significantly positive impact of promoters' ownership on the corporate performance in Indian FMCG sector. The researchers further state that, the results relating to the relationship between promoters' shareholding and corporate performance signify the alignment of interest hypothesis.

Later on, **Ting et al. (2016)** in context of Malaysian market shows how the performance of 201 listed companies for the period of 2002-2011 affected significantly with the type of ownership. The study especially shows a statistically significant and positive relationship between family ownership, foreign ownership etc. and the performance of the sampled companies. Besides, the study interestingly documents the moderating effect of research and development (R&D) activities on the ownership-performance nexus. Likewise, **Nazir and Malhotra (2016)** using panel data of BSE 100 index companies try to empirically establish the ownership-performance relationship. The findings of the empirical investigation by the researchers confirm that the non-promoter ownership and non-promoter non-institutional shareholding have no significant impact on the performance measured by EPS. Moreover, promoters' ownership, non-promoter ownership and non-promoter non-institutional shareholding are found to be significantly related to the performance

measure ROI. The ownership by promoter and non-promoter institutions is found to be irrelevant to profit after tax (PAT). Besides, the study also confirms the existence of concentrated ownership in Indian companies.

The study of **Pandey and Sahu (2017b)** in context of Indian manufacturing sector applies panel data regression estimation to test the impact of various forms of ownership including domestic promoters' ownership, foreign promoters' ownership and institutional shareholding on the corporate performance measured by return on assets and return on net worth . The study based on the results of fixed effect model confirms that domestic promoters' shareholding has a significant and positive impact on both the measures of firm performance. The ownership by foreign promoters is also found to affect one of the performance variable i.e. ROA of Indian manufacturing firms. The institutional shareholding is also found to have favourable impact on firm performance. Based on the study findings, the researchers infer that effect of active monitoring from the part of promoters and institutional investors is present in Indian manufacturing sector which leads to generation of an incentive effect on their operational efficiency and performance. Similarly, aiming at establishing the relationship between ownership structure and firm value, **Mishra and Kapil (2017)** construct a sample of 391 Indian companies from CRISIL NSE Index (CNX) 500 companies listed and traded on National Stock Exchange (NSE). The study points out statistically significant and positive relationship between promoter shareholding and Tobin's Q. The study also infers that proportion of promoters' ownership affects performance of the sample companies differently at varied levels of ownership by promoters.

The effect of domestic promoters' shareholding on the performance of firms is tried to be understood by **Pandey and Sahu (2017c)**. The study uses ROA and ROCE to

measures corporate financial performance. Based on the results obtained from panel data regression analysis, the study establishes a highly significant and positive effect of domestic promoters ownership on all the proxies used in the study. The researchers conclude that, the findings of the study go in line with the supposition of active monitoring and supervisory role of promoters.

Lastly we discuss the literatures those involves examination of statistical relationship between a few other important forms of ownership and corporate performance. To start with, **Lauterbach and Vaninsky (1999)** perform an empirical analysis on 280 Israeli companies listed in Tel-Aviv Stock Exchange for the year 1994. The study employs the Data Envelopment Analysis for purpose of analyzing the concerned data. Results of the study suggest that when the firms are controlled and run by owner-manager they are underperforming in generating net income and on the other hand when the firms are managed by a professional (non-owner) manager they are performing well in this regard.

Besides, **Welch (2003)** examines the relationship between ownership type and firm performance in context of listed companies of Australia. The study based on the result of OLS model suggests that ownership structure has crucial relevance towards the performance of the sampled firms. The study also tests the non-linear effect of managerial ownership on the performance and finds no such strong evidence on the non-linearity in the relationship of the two variables.

Notably, **Pant and Pattanayak (2007)** focus on 1,833 companies those are listed and traded on Bombay Stock Exchange for the period of 2000 to 2004. The study confirms that the relationship between proportion of insider ownership and firm value measured by Tobin's Q is non-monotonic. More specifically, the study suggests a cubic relationship between the variables.

Again, **Alam (2008)** investigates the impact of ownership pattern on the financial performance of hospitals in context of the State of Washington over the period 1980 to 2003. This study evaluates three groups of hospitals which are classified by the ownership structure and these are government, for-profit and not-for-profit companies. The sample consists of 125 hospitals in the State of Washington out of which 51 are government, 61 are not-for-profit, and 13 are for-profit hospitals. The results of the study show that the ownership structure is statistically associated with corporate performance and there are significant differences in the financial performance among the three groups of hospitals. The results show that not-for profit hospitals are performing better than both the government and for-profit hospitals even after controlling for other important financial and non-financial factors.

The empirical investigation of **Lafuente et al. (2009)** in context of 163 Spanish manufacturing companies for the period 1996 to 2000 attempt to interlink ownership concentration with firm performance measured by ROA and ROE. The study infers that the composition of ownership is more important than concentration of ownership for better monitoring and improving firm performance. It is also found that when the shares are hold by multi-national corporations the effect on performance becomes more favourable.

Later on, **Park and Jang (2010)** make an attempt to extend the literature on the linkage between shareholding by insiders and corporate performance in context of restaurant industry. The study analysis the data of 251 restaurants using cross-sectional and 2SLS-GMM estimation and establishes a quadratic relationship between the concerned variables. To be more specific, the entrenchment and convergence-of-interest, both the effects are found to co-exist in such sample firms. The performance

measured by Tobin's Q is found to increase until the insider ownership touches forty percent and after this threshold the performance decreases.

At a subsequent stage, **Ruan et al. (2011)** using a sample of 197 China's civilian-run firms listed on the Shanghai and the Shenzhen Stock Exchange between 2002 and 2007, try to explore the impact of managerial stock ownership on corporate financial performance through capital structure choices. The independent variable, managerial shareholding is measured by taking proportion of stake of all board members and leverage ratio is measured by TDTA ratio. The firm performance is measured through Tobin's Q. The findings of the study confirm a non-linear association between firm value and managerial ownership. Besides, it is also evidenced that, within the managerial ownership range 18 to 46 percent, the leverage ratio increases along with enhancement of managerial ownership.

Just after a year, **Chen et al. (2012)** examine the nexus between managerial shareholding and corporate performance in context of listed tourist hotels of Taiwan. Seven tourist hotels listed on the Taiwan Stock Exchange are taken as sample. Quarterly data of these sampled hotel companies are collected for a period of 52 quarters from 1997 to of 2009. Findings of the study state that insider managerial ownership significantly impact corporate financial performance when it is measured through ROA, ROE and Tobin's Q. Further, compared to managers' shareholding, directors' shareholding has a more significant impact on performance of hotel of Taiwan. They also find an inverted U-shape relationship between insider managerial shareholding, directors' shareholding and hotel performance which indicates that both the variables initially boost up financial performance up to an optimal threshold point and therefore the results support the convergence-of-interests hypothesis. Concurrently, **Wellalage and Locke (2012)** study the impact of ownership type on

the performance of firms in context of Sri Lanka. The study uses 152 Colombo Stock Exchange listed non-financial companies for the period of 2004 to 2009. The study introduces ROA and Tobin's Q as proxies of accounting and market-based performance of such firms. The study finally documents an inverse-U shaped relationship between insider shareholding the performance of firms in Sri Lanka. The study based on its findings infers that, for the Sri Lankan firms lower insider shareholding results into misalignment of interest between managers and owners whereas higher insider shareholding promotes managerial entrenchment effect which leads to lower firm performance.

Quite subsequently, **Kerpagam et al. (2013)** explore the role of Indian promoters' and foreign promoters' and other forms of ownership on firm performance. The study considers BSE listed companies for the period of 2007-11 to establish the relationship. The results of ordinary least square estimation suggest insignificant relationship between ownership structure variables and corporate performance. Again, **Colombo et al. (2013)** explore the relationship between ownership structure and high-tech entrepreneurial firms' performance in context of Italy. For the purpose of empirical investigation the article considers 255 Italian unlisted high-tech entrepreneurial firms for the period of 1994 to 2003. Number of owner-cum-managers, number of non-manager individual shareholders of firm are considered as independent variables. The study uses the proxy total factor productivity (TFP) growth to measure corporate performance. The researchers assess the effect of ownership structure on TFP growth through system GMM estimator for panel data. The study finds that the firms with higher number of owner-managers exhibit better performance. The researchers also conclude that the individual shareholders do not significantly influence corporate financial performance.

Moreover, **Michel et al. (2014)** make an attempt to find out the relationship between percentage of public float and post-IPO returns, considering a sample of 1801 IPOs. They find a quadratic (U-shaped) relationship between these two variables. This U-shaped relationship is explained by the trade-off between the incentive of insiders or actual owner and their controlling power or ownership. The U-shaped relationship reveals that, when the public float through IPO increases, the incentives to the insiders decrease due to comparatively smaller post-IPO ownership, leads to lower post-IPO returns. At the same time, higher public float leads to increase in the ownership of public which makes them stronger in governing or monitoring the performance of the firm. Finally, the researchers reach into the conclusion that, firm performs best either when it floats very little to the public through IPOs or when it sells most of its stock in the IPOs.

Therefore, similar to the capital structure-performance relationship, the research efforts directed towards empirically establishing ownership-performance relationship also lead us to heterogeneous findings. Reviewing the existing set of literatures on this topic it is well understood that the statistical relationship between these two variables is subject to many firm specific and external factors like size of firm, country perspective, time frame of the study, country origin of the equity holders etc. So, there is always room of producing for fresh empirical evidence in context of a specific country.

### **3.3 Research Gap**

The researchers rigorously review the important and relevant studies among the vast set of literatures existing in the domain of corporate finance and governance. The various research efforts at domestic and international academia directed towards the

relationship between capital structure, ownership structure and corporate performance are extensively studied for the purpose of finding the research gap and developing the research questions. During the process of literature survey, the researchers find a gamete of empirical studies undertaken in the aforesaid directions which are very much resourceful, insightful, enriching for the scholars of the domain. Some of the studies like Berle and Means (1932), Jensen and Meckling's (1976), Grossman and Hart (1982), Myers (1977) etc. are recognized as path-breaking researches and therefore, very famous in the domain of corporate finance and governance. Among these, the study of Berle and Means (1932) and Jensen and Meckling's (1976) are recognized as the pioneering research in this domain of knowledge. Therefore, acknowledging the invaluable research efforts undertaken by these and other researchers we identify some crucial research gaps which are tried to be addressed in this empirical investigation.

Firstly, the extensive set of corporate governance literatures foster inconclusive findings and equivocal evidences regarding the relationship between capital structure, ownership structure, agency problem and performance of firms in different emerging and emerged markets' perspectives. Another noteworthy point is that, the ownership concentration is mostly measured by the three or five largest block holder(s). But, in India, the largest five block-holders may constitute a shareholder having very insignificant stake in a firm; say less than five per cent. So, to be more practical, following Selarka (2005), this study sets a threshold of five percent for considering an ownership as concentrated. Besides, by introducing Herfindahl-Hirschman Index the study also captures the differential impact exerted by two large shareholders with different proportion of ownership in a firm (Curry and George, 1983). Lastly, during literature review it is found that most of studies on capital structure, ownership

structure and firm performance have applied quite erratic research methods and econometric techniques to arrive at the results. For example, as a major part of data analysis application of correlation, simple linear regression and static panel data approaches without robustness tests are mostly found. Considering the need for quite robust econometric analysis, the study introduces both static panel data model and dynamic panel data estimation under two step Generalized Methods of Moments (GMM) Framework suggested by **Arellano-Bond (1991)**.

Another most crucial observation that we made during the review of the existing set of literature is that, only a circumscribed number of studies like **Thomsen and Pedersen (2000)**, **Earle et al. (2005)**, **Caixe and Krauter (2013)** etc. have considered the specific role of the largest shareholders on resolving or otherwise instigating agency crisis, affecting operational efficiency and moderating corporate performance. This study finds it highly important, especially in case of Indian manufacturing sector, to gauge out the role played by largest shareholders on the corporate performance and valuation. Having felt the importance of largest shareholder, the study test the effect of the same on the performance of Indian manufacturing companies though the application of dynamic panel data estimation.

Last but not the least, only a few literatures devoted to ownership-performance relationship considered the non-linearity issue. Looking at the need to test the non-linear effect especially of ownership concentration on firm performance, the study also estimates the quadratic relationship under the dynamic panel data model.