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# A Literature Review on Intellectual Capital and Corporate Governance Effect on Company's Performance

**Deepika Bansal*, Shveta Singh****

**Abstract** *This paper examines the impact of intellectual capital and corporate governance on company's performance in the world on the basis of previous studies. The study particularly focuses on how intellectual capital and its components such as human capital, structural capital and corporate governance variables such as board structure, ownership structure influence company's performance. The review paper comprises of seven important parts. The first part of the paper reviews the literature on financial performance of companies. Second section reviews the literature on intellectual capital. Third part summarizes the literature on components of intellectual capital. Fourth section reviews the literature on corporate governance. Fifth section studies the literature on components of corporate governance. Sixth and seventh section studies the influence of intellectual capital and corporate governance variables on company's performance. The study reveals that intellectual capital has significant relation with company's performance and is an efficient indicator of long run performance of companies. Evidence also proves that corporate governance variables such as board size, number of committees, board meetings and ownership structure influence the performance of company's both positively and negatively.*

**Keywords** *Intellectual Capital, Company's Performance, Board Structure, Ownership Structure*

## INTRODUCTION

Long-term growth and sustainable development of an economy is interlinked with good decisions and remarkable performance of the industries. Before liberalisation era (1991) to present state, contribution of the industries in India's GDP during 1960 to 1980 was 3.5% which increased to 5.4% during 1980 to 1990 while during 1990 to 2000 it was 4.4% and it rose to 6.4% during 2000-2009 (Business Maps of India.com, 2011). In 2017 contribution of the industries in India's GDP was 7.1% (Hindustan Times, 2017), which clearly indicates the role of industries in the growth of GDP, therefore more attention is required to be given to the industries.

Growth of industries is measured by their performance. The word performance is derived from the word 'parfourmen', which means 'to do' or 'to render'. It refers to the act of performing, accomplishment and execution of the financial activity. In broader sense performance refers to the degree to which an achievement has been accomplished (Matar et al., 2018). According to Robert Alban (1978) "The word 'performance' is used to mean the efforts extended to achieve the targets efficiently and effectively. The achievement of targets involves the integrated use of human, financial and natural resources." The concept of performance is associated with variety of dimensions ranging from profitability to output generation to market performance (Firer et al., 2003).

In order to perform outstandingly and to encourage long run profitability, industries must base their activities on accurate and credible information available related to all internal and external conditions (factors) under which the industries act. Qualities of managers action depend on the ability of successfully identifying all those elements that can be used productively for enhancing the performance and results of the industries (Burja, 2011). A Single factor cannot show each and every aspect of industry performance and therefore the use of various factors allow the better analysis of financial and market performance of the industries (Omondi et al., 2013). Therefore, the present study is an attempt to review the relevant and existing literature on the factors affecting the performance of the industries. It would add to all stakeholders understanding to know the factors that are essential for the successful running of the industries.

## LITERATURE REVIEW

In line with our objectives of this paper we provide a brief summary of research conducted in the area of impact of Intellectual Capital and Corporate Governance on firm's performance. Reviewing the present literature is very essential in order to get important knowledge related to field and to provide a platform for future research.

* Junior Research Fellow (UGC), Haryana School of Business, GJU S&T, Hisar, India.
Email: deepikaaggarwal2701@gmail.com
** Associate Professor, Haryana School of Business, GJU S&T, Hisar, India. Email: shvetachahal@gmail.com

## Financial Performance of Companies

Financial performance is the central element for any profit-based organisation. Financial performance measures the financial health of the industries and brings to light the performance of the leaders and executives of the industries (Matar et al., 2018). Financial performance of industries can be measured in terms of ROA (Return on Assets), ROE (Return on Equity), EP (Employee productivity), ATO (Asset Turnover Ratio) etc (Pal and Soriya, 2012; Ghosh and Mondal, 2009; Firer and Williams, 2003).

## Intellectual Capital

Intellectual capital is generally considered as intangible asset of the firm (Nadeem et al., 2016; Kehelwalatenna, 2016; Chen et al., 2005; Petty and Guthrie, 2000) which is gaining importance as the strategic knowledge related asset for generating sustainable competitive advantage and superior performance of the firm (Chen et al., 2005; Barney, 1991). Furthermore, due to the inception of intellectual capital resources modern organizations can make their strategies to face the competition prevailing in the market while not being entirely dependent at the diminishing level of physical resources which are scarce in nature (Kehelwalatenna, 2016). IC is the combination of those intangible assets which play an important role in the creation of wealth for the firm but have no disclosure in the balance sheet of the firm (Nadeem et al., 2016). Rastogi (2003) considered IC as "a dynamic chain of a company's structural capital, human capital and knowledge management". Roos et al. (1997) argued that IC can be linked to other disciplines like company strategy and production of measurement tools. Chen et al. (2005) considered the human capital as an important variable of Intellectual Capital and described a unique feature of this capital, that, it does not remain in the organization when employees exit the organization. A conceptual definition, given by Organisation for Economic-Cooperation and Development (OECD), described intellectual capital as "the economic value of two categories of intangible assets of a company: structural capital and human capital" (OECD, 1999). IC can be assigned a monetary value, which may serve as a representative for the purpose of value measurement and their comparison (Chan, 2009). There has been a widespread research on IC that has generated various number of methods for classification and measurement of the concept. Petrash's (1996) provided Value Platform model that describes the IC as the total of human capital, customer capital and organisational capital. Haanes and Lowendahl (1997) measured the IC as a combination of relational and competence resources. The Danish Confederation of Trade Unions (1999) summarises IC as system, people and market. Public (2000b) provided Value Added Intellectual Coefficient (VAIC) model for measuring IC. This model focused on three dimensions for explaining IC: human capital efficiency, structural capital efficiency and capital employed efficiency. Many researchers have been applied the model proposed by Public such as (Janosevic et al., 2013; Hudgins, 2014; Chan, 2009) etc.

Generally various researchers during the study in the field of Intellectual capital have found three main dimensions of IC that are: human capital (HC), customer capital (CC) and structural capital (SC).

### Human Capital

Simply human capital is the stock of knowledge possessed by an individual working in an organisation (Bontis, 1998). Bontis et al. (2000) have argued that it is employee's commitment, attitude, motivation and skills that generates IC for the firms. Roos et al. (1997) have stated that employees through their intellectual agility change their work practices into meaningful solutions to various problems that exists in the organisation. As per Ahangar (2011) HC is the important and largest intangible asset of the firm as it confirms the provisions of goods and services which are required for the solution of customers problems.

### Structural Capital

Structural capital is that knowledge that remains in the organisation when employees leave the organisation (Roos et al., 1997). It includes non-human knowledge such as organisational charts, strategies, process manuals and routines (Bontis et al., 2000). Bontis (1998) has provided that intellectual capital do not reach to its fullest capability if the organisation has poor procedural system for tracking its actions. Structural capital helps the organisation to have a supportive and cooperative structure through which individual can try and learn new things (Bontis et al., 2000). According to Chen et al. (2005) SC comprises innovative capital, organisational infrastructure and relational capital.

### Customer Capital

In simple words knowledge placed in marketing channel and the relationship with customers which is developed by an organization during conducting its business represents customer capital (Bontis et al., 2000). According to Bontis (1998) customer capital is the potential of an organisation due to intangibles which are external to a firm. Kaplan and Norton (1996) has identified that in present scenario, focus of service profit chain is to build relationship between customer satisfaction, employee satisfaction, customer commitment and financial performance of the firms. Customer loyalty

and commitment can be projected by the measurement of employee's loyalty and commitment (Horibe, 1999).

VAIC method mentioned above gives information about the efficiency of tangible and intangible assets in creation of value for the firms. This model adopted an assumption that without the support of physical and financial capital IC cannot work independently and successfully (Tseng & Goo, 2005; Seetharaman et al., 2004). VAIC method is defined as follows:

VAIC = HCE + SCE + CEE

HCE represents human capital efficiency

SCE represents structural capital efficiency

CEE represents capital employed efficiency (physical capital efficiency).

## Corporate Governance

Corporate governance is termed to a set of customs, policies, laws, processes and institutions which affects the way of direction, administration and control of an organisation (Tsai et al., 2013). Corporate governance issue has become a considerably significant topic in the developed economy like Europe and United States in the last two decades (Dwivedi & Jain, 2005). Making strong corporate governance practices is essential to foster the confidence of investors, especially with the corporations fall down like Maxwell Publishing Group and WorldCom etc (Bhatt & Bhattacharya, 2015). In present scenario, it is the quality of governance that plays significant role in the survival and accomplishing competitive advantage by an organization. Corporate governance helps in reinforcement of property rights, reduces cost of capital and transaction cost which develops the capital market. Fragile practices of corporate governance reduce the confidence of investors that can lead to discouragement of outside investment. Considering such remarkable importance of corporate governance, Jackling and Johl (2009) has stated that significant changes occurred in the codes and guidelines of governance structure for improvement purpose (e.g. Corporate Governance Code in UK, OECD Code and Sarbanes-Oxley Act). Different countries have different impact of corporate governance due to disparate structure of corporate governance resulting from dissimilar economic, social and regulatory conditions (Rouf, 2011). With the formulation of economic reforms such as liberalization and globalization of 1990, Indian economy has been transforming itself into a new economy which resulted in the increased attention on corporate governance in the developing countries as well (Dwivedi & Jain, 2005). In 1990, many reforms were undertaken in India to improve the framework of corporate governance, one of the important events that has taken place is the formation of SEBI (Securities and Exchange Board of India) in 1992. Suggestion of rules and regulations for making good governance practices of organizations is provided by various committee formed as a part of SEBI (Palaniappan, 2017). Listing agreement followed this by making clause 49 (Kumar & Singh, 2013). Corporate governance approach, auditing and accounting of India is different from US as well as Chinese model. After the happening of Satyam scam, India has taken lot of steps regarding board characteristics. After the implementation of clause 49, it is mandatory for all companies to follow the recommendations provided by it. Listing agreement of independent director for listed companies under clause 49 was implemented on Jan 1, 2006. Due to this norm, various shuffles at the board level were done by the companies. Therefore, Board structure is considered as the significant aspect of corporate governance worldwide and abundant literature on the relationship of governance with performance of the firms is present (Hermalin & Weisbach, 1991; Pearce & Zahra, 1992). Organisations which has good corporate policy in managing and organizing its ownership structure has good corporate governance system (Saleh et al., 2017). Therefore, ownership structure of the firm is the most researchable concept of governance issue and various studies considered this concept of governance (Dwivedi & Jain, 2005; Morck et al., 1988; and Fauzi & Locke, 2012).

### Board Structure

Board of directors, considered to be an important institution, that removes the agency problems which may generate due to separation of ownership and control (Fauzi & Locke, 2012). The management body of a firm has responsibility for making suggestion and implementation of important policies. But such policies are not always followed by shareholders which results in the generation of agency problem between shareholders and management. Board of directors is the only authority that mitigate such problem in a firm.

Since board of directors is the largest decision-making group in a firm, therefore board size has the potential to affect the effectiveness of board and their decision-taking process (Dwivedi & Jain, 2005). Whenever any strategic change occurred in an organization, board size found to have a relation with such change.

While considering board size, it is suggested by Coles et al. (2008) that more outside directors are present in case of larger boards. In India, Clause 49 of the Listing agreement provided that if the executive director serve as chairman of the company, then such company should have 50 percent of its directors as independent and if company have chairman who is non-executive than independent director should be one-third in the number (Mishra & Mohanty, 2013). Presence of independent directors in the board is an important source to reduce the divergence between shareholders and management (Arora & Sharma, 2016).

Number of board meetings represent the board of directors' involvement in the function of monitoring. Firm can recover from its poor performance by increasing the frequency of meetings (Vafeas, 1999). Frequently held meetings enable the directors to discuss the important issue and perform the monitor function effectively which can lead to better coordination in the performance of their duties (Palaniappan, 2017). Due to availability of limited time of togetherness, non-executive directors do not always use such time for exchange of ideas, discussion with management and with themselves which results in failure of such meeting (Vafeas, 1999).

Consideration of committee's aspects are beneficial because board of directors' forms part of committees. According to NZSC (2004), there are remuneration and audit committees in a company which look after the work of remuneration set up for directors and executive officers and audit of financial accounts. Committees provide the assurance that the company carried out its financial procedure in a well-planned manner and fair compensation is given to directors which remove agency problem. Corporate governance principles suggest that there should be independent work of audit committee and while performing their duties professional skills must be used (Obradovich & Gill, 2013). Nomination committee is also there who work for the appointment of such non-executive directors whose interest are similar with the interest of shareholders which mitigate the agency problems (Fauzi & Locke, 2012).

## Ownership Structure

Ownership structure is the most important subject of corporate governance (Fazlzadeh et al., 2011). As mentioned above, corporate governance is an essential source of development and growth of an organisation, therefore, it becomes highly significant to study the concept of ownership structure. Proportion of ownership of different parties in the equity capital of the company is referred as ownership structure (Manna et al., 2016). Owner's identity and ownership concentration are two important dimensions of ownership structure (Saleh et al., 2017). Ownership concentration gives the information about the right of largest shareholder in capital of the company and owner identity gives qualitative information on the character of controlling shareholders of the company (Saleh et al., 2017).

Major groups who are the shareholders of Indian company includes non-resident Indian, institutional investors, promoters, foreign institutional investors, other companies and group. At present scenario, it is the institutional investors who become significant players in financial market. Their importance in corporate governance is increasing in United States, that is observed from their increasing volume of company's equity that is controlled by them (Tsai & Gu, 2007). Institutional Investors are those organisations which invest large volume of money in companies. Banks, mutual funds, venture capital funds, insurance companies and non-banking financial companies forms institutional investors (Manna et al., 2016). Institutional ownership is measured by percentage of shares held by organisation or institutions divided by total shares issued by the company (Arora & Sharma, 2016). Various decisions are taken by different shareholders by executing their consequent powers that may lead to have an effect on firm performance (Manna et al., 2016).

## Intellectual Capital and Performance of Companies

Various number of studies such as (Firer & Williams, 2003; Chen et al., 2005; Ting & Lean, 2009; Wang, 2008; Kamath, 2007) etc have considered how intellectual capital has its impact on corporate financial performance. Most of the studies revealed that there exists a positive relation between IC components and company's financial performance. Kamath (2007) estimated the impact of human capital and physical capital on value-based performance of 98 scheduled commercial banks performing in India during 2000-2004. The study found that various differences exist in performance of different types of banks due to presence of differences in human capital. Chen et al. (2005) conducted their study in Taiwan, in order to generate insights into relationship between market value, financial performance and IC. The study concluded that high profitability and market value is the result of better value creation efficiency that is IC. Similar results were found by Alipour (2012); Nadeem et al. (2016). Wang and Chang (2005) studied the impact of IC on performance of information technology firms listed in Taiwan by using Partial Least Square model. The study found that performance of the firms is directly impacted by innovation capital, customer capital and process capital while human capital has its indirect impact on performance by impacting other variables. Similarly, Firer and Williams (2003) carried out an empirical study on 75 South African firms to investigate the relation between intellectual capital components and corporate profitability, productivity and market value. The results of the study showed that market value of firms is positively affected by physical capital. A study was done by Ting and Lean (2009) involving financial institutions of Malaysia in order to determine how IC has its impact on financial performance of sector from 1999 to 2007. Their study predicted that it is IC efficiency that increases the performance of the firms. Meditinos et al. (2011) have tried to examined the effect of intellectual capital on financial and market value of Greek listed firms during 2006-2008. The study provided the opposite results compared to previous studies about positive relation between IC and

firm performance. The study also generated that only human capital efficiency increases the performance. Another study carried out by Hudgins (2014) on 11 insurance companies have established that only structural capital has significant relation with performance of the firms. Pal and Soriya (2012) analysed the impact of IC on Indian Pharmaceutical and Textile sector and found that IC affects profitability but no relation was found between IC and productivity and market value of the firms. Janosevic et al. (2013) defined no significant relationship between IC and net profit. According to Kehelwalatenna (2016) IC has inconsistent effect on performance of New-York listed banks. The above studies generated the following proposition:

Proposition 1: Intellectual capital does have a varying impact on performance of companies.

## Board Structure and Performance of Companies

As mentioned above board structure is an important aspect of corporate governance that affects the performance of companies. Kathuria and Dash (1999) analysed the relationship between board size and financial performance of the companies considering data of 504 companies that belonged to 18 industries. The study found that board size played a significant role in affecting the corporate financial performance. Similar results were provided by Jackling and Johl (2009); Sharma (2013); Manna et al. (2016). Sharma (2013) revealed that on an average 55% of board members of companies are independent and it should be improved for better performance. Bonn et al. (2004) made a comparative study by assessing the impact of board size, no. of female directors, no. of outside directors and age of directors on performance of Australian and Japanese firms. The study concluded that board size has negative influence on Japanese firm's performance and has no influence on Australian firm performance. The study also found that no. of outside and female directors do not influence Japanese's firm performance as compared to Australian firms' performance where performance is positively influenced by both type of board characteristics. Jackling and Johl (2009) do not support the resource dependency theory and argued that no relationship exist between board meeting frequency and firm performance. Fauzi and Locke (2012) investigated the influence of board structure on 79 firms listed in New Zealand. The study found that board size and board committees have significant relationship with firm financial performance. The study does not support agency theory and predicted that higher proportion of independent directors have negative influence on financial performance of companies. Obradovich and Gill (2013) carried out their study on 333 manufacturing and service firms listed in New York to see the effect of corporate governance and financial leverage on financial performance of both companies. The study reversed the results of previous studies and found that increasing size of board has led to lowers the value of both type of firms. The study also showed that presence of audit committee in a firm has positive influence on firm value. Bhatt and Bhattacharya (2015) examined the impact of board structure on performance of Information Technology firms in India from 2006 to 2011. The study found that no. of independent directors and board meetings have no relation with firm's performance but performance of firms is increasing with increasing size of board. Gunasekar and Dinesh (2014) made a comparison of State-owned enterprises (SOE) and private sectors firms in relation with influence of board features on their performance. The study concluded that board size and no. of independent directors has negative impact on performance of SOE but has positive influence on the performance of their private counter parts. On the basis of above studies following proposition is developed:

Proposition 2: Board structure does have a varying impact on performance of companies.

## Ownership Structure and Performance of Companies

The relationship that exist between company's ownership structure and firm performance has been an important subject to study. Various empirical studies were carried out to study this relationship that have generated mixed results. Singhania et al. (2015) conducted a study on performance of 254 Indian firms. They analysed the impact of foreign direct investment, venture capital and private firms on firm's performance. The study found that by using these three forms of foreign firm can increase its performance. Manna et al. (2016) presented in their study that due to presence of foreign promoters shareholders and institutional shareholders, management uses the funds efficiently which increases the performance of the firms. Kumar and Singh (2013) evaluated how firm performance is affected by promoter's ownership. The study concluded that more than 40% shareholding of promoters plays significant role in increasing firm value. Similarly, Mishra and Kapil (2017) assessed the effect of various forms of ownership structure on performance of 391 Indian companies from 2010-2014. The study concluded that with the increasing stake of promoter's holdings firm's performance increases. The study also found that foreign institutional ownership and institutional ownership have positive relation with Tobin's Q and have no relation with ROA. A study done by Maquieira et al. (2011) argued opposite results of various previous studies. His study found that both corporate diversification and corporate performance are positively related. Opposite results were predicted by Han and Suk, 1998. They studied the impact of ownership structure of 301 firms for 1988-

1992 and found that institutional ownership has positive relation with firm performance. Barontini and Caprio (2006) evaluated the impact of ownership structure on firm's performance collecting data from 675 public companies that belonged to 11 countries. The study highlighted that family-controlled firms have positive performance. Tam and Tan (2007) analysed the impact of ownership type on the performance of top 150 firms listed in Malaysia. The study found that performance of the firms is affected by the ownership concentration. Hence, the following proposition is developed:

Proposition 3: Ownership structure does have a varying impact on performance of companies.

## CONCLUSION

After considering the above studies related to impact of intellectual capital and corporate governance on performance of the companies, it has been observed that knowing the impact of these two factors on performance of the companies is significant for all stakeholder. It has particular importance for developing countries where industries are the benchmark for the growth of countries. With the growth of knowledge intensive companies in the world, the role played by intellectual capital in generation of performance of companies has gained momentum. The studies highlight that efficient management of intellectual capital enhances the performance and soundness of the firms. The studies also show that both the pillars of corporate governance, board structure and ownership structure have varying impact on performance of the companies. In most of the cases board size found to be significant variable that affect the performance of companies. Usually along with board size, board meetings, number of committees and institutional investors also influence performance of the companies. Therefore, policy makers are suggested to analyse the impact of both these factors before making any policy related to company.

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