CHARACTERISTICS OF TOP MANAGEMENT INFLUENCING FIRM PERFORMANCE: A SYSTEMATIC REVIEW

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ABSTRACT

Considerable amount of research has investigated the influence of various characteristic of top executives on firm performance. Despite the proliferation of the research in exploring the impact of top executives' characteristics on firm performance, the literature is fragmented and disparate. The present study aims to provide a holistic understanding of the influence of several characteristic of the top management at various strategic levels including board members, CEOs and TMTs on the performance of the firm. An integrative framework is developed that facilitates in gaining an overview of the field to help identify the future directions.

Keywords: Board; CEO; TMT; Firm performance

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Introduction

Top echelon or the group of people at the top of an organization significantly influence strategy formulation, implementation and performance of firm and thus has been the focus of attention for strategic management theorists (Cannella Jr & Monroe, 1997; Cannella et al., 2009). Top management provide various resources like human capital resources that can be utilized for gaining and sustaining competitive advantage (Castanias & Helfat, 1991). Upper echelon theory has clarified the ambiguities and has suggested that the specific characteristics and leadership of top managers make a difference and play a significant role in strategy formulation and performance (Waldman & Yammarino, 1999).

Hambrick and Mason's (1984) seminal paper on 'upper echelons (UE)', has highlighted the influence the top management has in developing corporate strategy, innovation adoption, firm performance. The experience, values, personalities and various other attributes of executives influence the interpretation of the contextual factors and thus consequently effect the choices they make. They affect the strategy formulation as well as the implementation (Galbraith, 1986). Moreover, they also play a significant role in creating the context that influence the choice of strategy. While talking about Upper Echelon, mostly the role of board in influencing the organizational performance is ignored. Because of the multiplicity of executive roles, activities and courses of action, along with the overload and ambiguity of the information, there are mixed reviews about how various attributes and characteristics of board members executives influence the organization and its performance.

Generally, board structure or composition has not gained ample attention in influencing the firm performance. Mostly board has been associated with the function of governance and monitoring. But effective monitoring leads to increased level of firm performance. Hence, board plays a substantial role in influencing firm performance, though indirectly.

Therefore, this paper aims to further strengthen the point of view that top executives influence the organizational outcomes considerably by identifying the top management or executive's attributes which affect the organizational outcome or firm performance. It consolidates the literature on top management including board of directors, CEOs and TMTs to gain a holistic understanding of the characteristics and attributes of top management that influence the firm performance directly or indirectly.

Background

The influence of top executives including board members, CEOs and TMTs on firm performance has been one of the most widely researched area. Most of the research has addressed TMTs including both CEO and top management groups. TMT has been defined as 'the relatively small group of influential executives at the apex of organization which constitutes usually CEO and those who report directly to him/ her' (Cannella et al., 2008). The cognitive frames of executives are a function of their demographic characteristics (Hambrick, 2007), therefore they influence the organizational outcome and performance (Carpenter & Fredrickson, 2001; Nielsen & Nielsen, 2013; Sanders & Carpenter, 1998). CEO personality (Nadkarni & Herrmann, 2010), job tenure (Simsek, 2007), leadership style (Agle et al., 2006; Waldman & Yammarino, 1999; Zhu & He, 2014), CEO power and various other factors affect the performance of the firm either directly or indirectly. Moreover, TMT heterogeneity and diversity with respect to functional background, nationality as well as TMT pay structure also affect firm performance(Carpenter & Sanders, 2002; Cohen & Bailey, 1997; Hambrick, Misangyi, et al., 2015).

The field of strategic management has given a lot of attention to the to the kinds of managers and their choice of strategy in influencing organizational outcomes (Szilagyi Jr & Schweiger, 1984) but the influence of board members on firm performance has not gained that much attention. By law, the function of board of director is to manage the business and affairs of the corporation (Klein, 1998). The primary role of board is to oversee the long-term investment strategy of the firm. The second role of the board is to minimize the possible conflict between shareholders and managers (Fama & Jensen, 1983). Thus, their main function is to facilitate and advise strategic decision making and monitoring. If these are performed effectively then it will lead to higher firm performance (Jensen & Murphy, 1989). And for effectively performing the functions of governance and monitoring, boards should be objective, have technical expertise, access to relevant information and relative power (Hambrick, Misangyi, et al., 2015). On the other hand, the influence of board size, board diversity, outside board members etc. on firm performance is not straight forward. Various contextual factors moderate their relationship.

Hence this review helps in identifying the various characteristics of board members that effect the firm performance and moreover it helps in identifying the CEO and TMTs characteristics which impacts firm performance either directly or indirectly. It also helps in elaborating the mechanism through which these characteristic affect firm performance by delineating the moderators and mediating variables under.

Methodology

In order to consolidate the fragmented literature on the effect of board of directors, CEO and TMT on firm performance, the systematic review approach was adopted. This approach was adopted as it provides a holistic view and facilitates in advancing the field. Moreover, this methodology is considered as a transparent, structured and organized way to replicate (Bouncken et al., 2015).

To identify the articles for the review, keyword search was carried out from Academy of management review, Academy of management journal, Strategic management journal, Journal of internal business studies, Journal of business economics and management and Journal of management studies. These journals were selected on the basis of their high ISI ranking (based on five-year impact factor) in the management discipline. The relevant articles were identified then using the keyword search for each journal. The keywords used to do the initial search were CEO, TMT, chief executive, Board of directors, top management and top manager. These keywords tend to cover all the article pertaining the research relevant to the top management, and has been used by prior research as well (Georgakakis et al., 2019). The keywords were searched either in title, abstract, keywords or full text.

After the initial keyword search, the resulting articles were sifted to identify empirical or conceptual papers that observed the relationship of top management i.e., board of directors, CEO and TMT, with the firm performance. Initially all six keywords were used but after observing the redundancy, the keywords of TMT, CEO and board of directors were used for subsequent searches. The initial search through each keyword for the respective journal produced around 6304 articles. After going through the titles and abstracts of these articles, 46 articles were short listed for the review. Table attached in appendix A presents the key findings of the papers included in the review.

Findings

The following section presents the findings in the form of characteristics of board, CEOs and TMT that potentially influence firm performance. Figure 1 presents a framework showing the characteristics of board members, CEOs and TMTs influencing the firm performance through various mediators and in the presence of moderators.

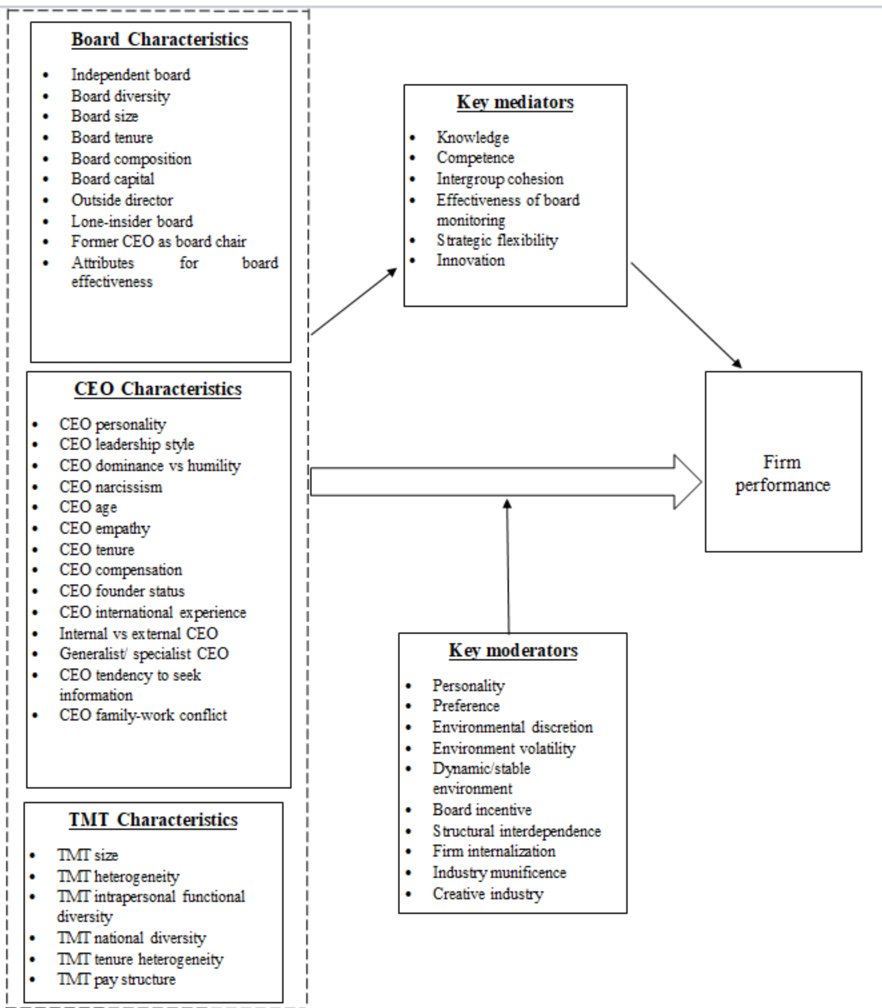

Figure 1: Board, CEO and TMT characteristics influencing firm performance

Boards characteristics and firm performance

Board of directors have been mostly described as the connecting link between firm's shareholders and the managers of the organization (Mintzberg, 1983). Considering this notion, board has been considered at the 'apex of the firm's decision control system' (Fama & Jensen, 1983). They can be regarded as large, elite and episodic decision making group who encounter complex, uncertain and multifaceted tasks (Forbes & Milliken, 1999; Jackson, 1992). They are involved in monitoring and influencing a strategy but do not play a part in implementing it, like TMT do (Fama & Jensen, 1983).

Following section presents characteristics of the board members which affect the firm performance. They have been listed in figure 1 as well.

Independent board. Independent and separate board chairs can provide significant and vital resources to their CEOs. Separate board chairs can offer guidance, counselling and extra resources to the CEO and top managers (Lorsch & Zelleke, 2005). Separate board chairs are found to explain nine percent of the variance in firm performance (Withers & Fitza, 2017)

Board Diversity. The influence of board diversity on the firm's outcomes has not been very definitive. On one hand, *job related diversity* will be positively associated with skills, functional knowledge and cognitive conflict but on the other hand, it will also affect the board's cohesion negatively which can deteriorate the boar's effectiveness (Forbes & Milliken, 1999). Moreover, demographic diversity is correlated with the difference in attitudes and language (O'Reilly III et al., 1989; Wiersema & Bantel, 1992) which results in weaker psychological ties (Shaw, 1981).

The job-related diversity among the board members is positively associated with the existence of functional area knowledge and skills on the board. Moreover, it is also associated with the cognitive conflict but that also weakens the cohesiveness of the board and the effective use of the skills and knowledge (Forbes & Milliken, 1999). As the demographic diversity increases, the difference in attitude and language also increases, which leads to less mutually satisfying interactions and psychological ties that are weaker in strength (Shaw, 1981). Also since boards are usually large groups that meet only occasionally and episodically, it is highly unlikely that they get the time to settle the differences that causes the rift and eventually board cohesiveness suffers.

Moreover, board *racial diversity* is positively associated with firm performance through innovation and firm reputation. Diversity of information that comes from the networks minority is expected to lead to innovation which consequently influence the firm performance. Moreover, due to information asymmetry, general public make judgements about the reputation of the firm through their actions and symbols. Hence, having racially diverse board provides signal to the outsiders that the firm is well-positioned and this positive reputation of the firm leads to enhanced firm performance (Miller & del Carmen Triana, 2009).

Board Size. Board size also plays a significant role in influencing the board effectiveness. Relatively large sized boars are expected to have more knowledge, skill, experience and varied perspectives but they are more likely to face conflict as well. Since boards meet episodically only, it is highly unlikely that they get time to resolve differences and improve cohesiveness. Large sized board groups also face difficulty in maintaining the effort norms, owing to the possibility of social loafing (Forbes & Milliken, 1999; Latané et al., 1979).

Therefore, board size is bound to influence the effectiveness of the board and hence the firm performance, but other contextual factors will determine if it will influence in appositive way or a negative way.

Board Tenure. Board members that have worked collectively for a longer duration are expected to have gained familiarity with other members as well as the skills and knowledge specific to that firm. This leads to improved cohesiveness and better utilization of knowledge and skills. Nevertheless, such board members are also expected to experience reduced cognitive conflict as working collectively for longer duration enables them to build a shared understanding of the issues they face. While the board members who have worked for only a shorter period of time are more likely to have diverse and varied perspectives about various issues and problems (Forbes & Milliken, 1999).

Board Composition. Specifically considering the venture directors, who have substantial financial incentives and possess deeper knowledge of industry as compared to the public firm directors, more founding directors on the board result in more engagement in monitoring function. Moreover, the increased number of independent directors result in reduced engagement of venture board in monitoring as it is a time intensive activity for which they do not have any incentive to perform. Independent directors are more focused towards advising CEO (Garg, 2013).

Additionally, monitoring through venture boards has curvilinear relation with firm performance as unwarranted board monitoring tends to reduce effectiveness of venture executives. Since ventures are required to constantly adapt in ambiguous and uncertain market, excessive board monitoring may influence venture performance adversely (Eisenhardt, 1989; Garg, 2013).

Board capital. Board capital (both human and relational) is positively associated with their effectiveness. Boards which lack the relevant capital do not have the capability to determine the appropriate course of action to conduct performance appraisal and identify successors effectively (Zald, 1969). Furthermore, board compensation or board incentive moderate the association of board capital and board monitoring and thus board effectiveness (Hillman & Dalziel, 2003). Incentives and adequate compensation impact the board to utilize the capital in monitoring effectively by aligning their goals and interests with those of the shareholders (Hillman & Dalziel, 2003).

Outside directors. Outside directors, who are often known as the 'non-management members of the board (Johnson et al., 1996), are positively correlated with performance of the firm. Outside directors who have certain relationship with the firm, i.e., affiliate directors are more helpful in maintaining and facilitating ties between firm and stakeholders. Moreover, they influence firm performance by bringing and utilizing resources from other organizations (Quigley & Hambrick, 2012).

Moreover, the directors who are associated with the firm through relationship or as a stakeholder mostly have a motivation to work efficiently to improve the image of the firm (Dalton et al., 1998; Hillman & Dalziel, 2003)

Lone insider Board. A lone-insider board in a firm is correlated with decreased performance (Zorn et al., 2017). When the information is inadequate or constrained, the independent directors are not well-equipped to provide effective advise and counselling (Baysinger & Hoskisson, 1990). Without the inside key informants, even experience autonomous or independent directors face challenges in utilizing their capabilities and expertise (Mitchell, 2004; Nicholson & Kiel, 2004). Therefore, lone-insider boards tend to be at a loss of having the benefits of being insider and hence experience lower level of performance (Zorn et al., 2017).

Former CEO as board chair. Retaining the previous CEO as board chair is inversely associated with post-succession strategic change. Retained predecessors are expected to be resistant to change and new initiatives. Therefore, CEOs who report to their predecessors will be mostly involved in smaller strategic change as compared to those who are not working under their predecessors (Quigley & Hambrick, 2012). When an earlier CEO is retained as a board member, the inclination towards change, either positive or negative, is reduced. If the board member is independent, he/she is able to diverge from the past and bring about a drastic change (Quigley & Hambrick, 2012).

Attributes for board effectiveness. Firms having more effective boards are found to demonstrate relatively higher level of performance (Payne et al., 2009) and various attributes and characteristics influence the effectiveness of board.

Corporate boards having the ability to be objective and the technical expertise are better able to comprehend the issues and evaluate options and make decisions effectively. Moreover, information from the environment plays an important role in the success as the board with relevant and quality information will be able to influence the business effectively. Similarly, board with more power, which refers to the relative power also impacts the way board decisions are accepted and implemented by the other members of the firm, will also affect the team effectiveness and thus firm performance. Director ownership also serves as an incentive and provides motivation mechanism. But extremely high and extremely low levels of ownership have been associated with deteriorated effectiveness. Moreover, the eagerness to excel on behalf of the shareholders also serves as the motivator. Furthermore, as board members are involved in multitude of activities, corporate boards that spend substantial amount of time and attention on board related activities are proven to be more effective (Hambrick, Misangyi, et al., 2015; Payne et al., 2009).

Hence, corporate boards with independence, technical expertise, access to relevant and important information, more power in comparison to CEO, adequate ownership, motivation to excel and those who spend substantial time on board related activities will be more effective (Payne et al., 2009).

CEO characteristics and firm performance

CEO is the highest-ranking executive inside a firm who is primarily responsible for making strategic as well as corporate decisions and managing overall operations and the resources. Executives are responsible for making various kind of choices for the company and they have the capability to substantially alter the organization (Cannella et al., 2008). Various characteristics of CEOs that possible influence the firm performance have been identified through literature and are listed below.

CEO personality. The personality of a CEO is expected to influence his strategic flexibility, which eventually affects the firm performance. Conscientious CEOs do not have the ability to adapt according to the changing contexts. Furthermore, emotionally stable CEOs have high self-confidence and are not afraid to adopt drastic changes and hence are more strategically flexible. Optimum level of CEO agreeableness is generally most suitable for maximum strategic flexibility as there must be a balance between employee concern and having a voice that is required to build a change. Extraversion is positively associated with strategic flexibility as extrovert CEOs are better able to initiate implementation of new strategies by overcoming the resistance. Finally, CEOs who are more open to new experiences are likely to be more strategically flexible.

Therefore, CEO conscientiousness, emotional stability, agreeableness, extraversion and openness to experience influence the strategic flexibility. Strategic flexibility enables in taking advantage of the firm opportunities and thus allows for achievement of high performance (Nadkarni & Herrmann, 2010)

CEO leadership style. Perception of CEO charisma and organizational performance are directly associated with each other (Agle et al., 2006; Waldman & Yammarino, 1999). Charismatic leader helps the followers to identify the opportunities and provide hope and confidence to pursue them (Shamir & Howell, 1999). Moreover, charismatic leadership results in improved cohesion among TMT members. This relationship is even more strong in the context of high uncertainty. Under the unstable and risky conditions, leaders take on symbolic importance(Agle et al., 2006). Charismatic attributes of CEO will influence the lower hierarchical levels and they also tend to display similar leadership styles which consequently results in improved group cohesion and increased organizational member effort. Intergroup cohesion will result in increased organizational performance eventually (Waldman & Yammarino, 1999). Hence, CEO charisma is positively associated with subsequent firm performance. Furthermore, CEO, through his/her charismatic image influences the stakeholders' identification which then affects their decision to participate (Fanelli & Misangyi, 2006).

Transformational leadership style of CEO generally enhances employee human capital which is then directly associated with firm performance. Transformational leadership style influences and shapes the positive characteristics of employees and enhances the association between human capital and firm performance (Zhu & He, 2014).

CEO Dominance vs humility. Dominance of CEO is inversely related to the performance of the firm specifically in an uncertain environment (Haleblian & Finkelstein, 1993). When the environment is stable and the tasks are relatively simple, the performance would be determined by a single competent individual (Hill, 1982). But on the other hand, in uncertain conditions and turbulent environment, substantial information processing is required (Daft et al., 1988). So, having a dominant CEO would hinder the distribution of power which is required for broader participation and information sharing for taking decisions in uncertain conditions. Therefore, CEO dominance is likely to be associated with lower level of performance in uncertain environment (Haleblian & Finkelstein, 1993).

Furthermore, it has also been observed that the firms having dominant CEOs have generally deviant strategy as compared to the industry and thus extreme performance. The extreme performance could be in positive direction or the negative direction, i.e., big win or big loss. As deviant strategy is less tested, it is relatively risky as compared to conformist strategy, therefore it can either result into a success or a failure. But this relationship is moderated by board power. Having a powerful board moderates or more specifically weakens the relationship between dominant CEO and performance extremeness (Tang et al., 2011). CEO power also moderates the relationship between board composition ad firm performance. Outside director dominating boards might not always produce beneficial results, but CEO power should be considered and taken into account while conducting boards (Combs et al., 2007).

On the other hand, it has been observed that firms with humble CEOs perform better. The main reason for this is not the actual improved performance but the expectation discount. If everything else is held constant, then the expectations from the firms with humble CEOs are lower which consequently results in enhanced market performance (Petrenko et al., 2019).

The firms having more humble CEOs are observed to have better market performance. This 'better market performance' is not because of that fact that they performed better but due to the lower expectations from them. Firms with humble CEOs experience the privilege of expectation discount which already sets the stage which is easier to meet or beat and hence the resulting outcome is improved market performance (Petrenko et al., 2019).

Hence, the firms with humble CEOs receive lower expected earnings per share which sets the stage at a lower level and firm's actual earnings per share relative to the expectation are increased which leads to improved market performance (Doyle et al., 2006).

CEO narcissism. Narcissist CEOs are more likely to initiate more radical and innovative visions and are less likely to be concerned about the risk factor or limitations. As narcissists possess an amplified sense of control and they wish to expand their power and influence. Hence, they are more likely to be the pioneers in radical innovations. Based on this logic, CEO narcissism is directly associated with entrepreneurial orientation and since higher risk is associated with higher gain or loss- CEO narcissism influences the performance variance or extreme performance indirectly through entrepreneurial orientation.

Moreover, narcissist CEOs are also more likely to initiate ambitious visions without the fear of risk or limitations of resources. Generally, narcissists are fond of expanding power and influence, thus they are more likely to be the pioneers in adopting innovations and pushing the firm towards new avenues. Therefore, CEO narcissism will influence the entrepreneurial orientation in a positive way (Wales et al., 2013).

CEO age. CEO age is inversely related to sales growth and profitability, but on the other hand, it also suggests a trade-off between managerial approaches and perspectives of younger and older CEOs and is directly associated with increased probability of survival. This relationship is more relevant and stronger in service and creative industries, which are more reliant on human capital (Belenzon et al., 2019). With respect to performance, CEOs age has a negative influence on firm performance as younger owners are more likely to seek self-fulfillment and financial independence which leads to firm growth and higher firm performance. Older CEOs might want to maintain stability but in the other hand younger CEOs are more inclined to work with younger investors and thus creativity is also enhanced through young CEOs (Packalen & Bhattacharya, 2015).

Furthermore, the negative association of CEO age and firm performance could be weakened in a stable environment as it is more predictable (Eisenhardt & Martin, 2000) and with the passage of time CEOs enhance the understanding of the environment which consequently leads to better performance (Belenzon et al., 2019).

CEO empathy. CEOs empathy is vital for effectively managing the crisis situations. It is positively linked with decision making in critical situations up to certain extent (König et al., 2020) as an empathetic CEO will be able to recognize and identify possible warning in an emerging critical situation more readily. But on the other hand, an empathetic CEO is also unable to avoid or detect the false alarms. Hence CEO empathy is positively associated with decision making in critical situations but when the empathy increases, the relationship starts getting negative (König et al., 2020).

CEO tenure. CEO tenure influences the performance but indirectly. CEO job tenure affects TMT risk taking tendencies which is directly related to the firm's pursuit of entrepreneurial initiatives. And the firm's pursuit of entrepreneurial initiatives is directly associated with its performance (Simsek, 2007).

The performance of short tenured CEO is generally expected to be low but sometimes CEOs are consciously appointed for a short period of time. Under the stable environmental conditions, the decline of the performance is usually delayed. On the contrary, if the environment is dynamic, the CEOs commitment to a his/her notions and restricted information processing might become a liability and the performance starts declining sooner (Hambrick & Fukutomi, 1991).

Therefore, the environmental context moderates the relationship between CEO tenure and the performance.

CEO compensation. Although, it is a general perception that executive pay adds to the cost of the firm but it has motivational effect as well. Executive pay tends to motivate subsequent efforts and hence improves the performance (Buck et al., 2008). CEO pay level is also associated positively with the TMT pay structure which contributes in behavioral integration and alignment of efforts towards the enhancement of firm's performance. Therefore, the alignment of top executives' interest and pay with the TMT long-term pay structure produces a positive influence (Carpenter & Sanders, 2002).

CEO attention. Under the dynamic environmental conditions, the more the CEO is focused towards the task sectors of external environment and innovation related internal function, the more he/ she is able to contribute towards improved performance. As it provides the necessary information and knowledge about how to integrate and match organizational strengths and capabilities with the environmental conditions (Garg et al., 2003).

Therefore, when the environment is more dynamic and uncertain, scrutinizing the internal functions related with innovation increases and an increased CEO scanning of the external task environment will be associated with improved firm performance (Garg et al., 2003).

CEO founder status. Keeping in view the size of the firm, the founder CEO is positively associated with firm performance of smaller firms. But on the other hand if the size is not small, the founder CEO and his/her continued management, may pose to be an obstacle in firm performance (Jayaraman et al., 2000).

CEO international experience. International experience enhances the international knowledge and general competencies of the executive. International knowledge directly influences the firm performance and the competencies also contributes towards better firm performance both directly and indirectly (Le & Kroll, 2017).

Moreover, time spent abroad impacts the strategic change which further affects firm performance. The longer an executive has spent the time in a foreign country, the varied experience and knowledge he/ she is able to gain (Godart et al., 2015)

In addition to that, the number of countries moderates the association between international experience and firm performance in a positive manner. The multi-country experience leads to enhanced cognitive skills as compared to the single-country experience as they are able to accommodate experience and accommodate different worldviews. But this relationship will be further moderated by the time spent in each country. As an executive must have spent a substantial amount of time in each country to gain the experience and knowledge from that country (Leung et al., 2008; Maddux & Galinsky, 2009).

Therefore, the length of international experience and the number of countries jointly influence the performance of the firm. Furthermore, more internationally grounded CEOs impact the firm performance through strategic change. CEOs can utilize global networks for partnerships to effectively pan and execute strategic change. Hence, the association between CEOs duration of international experience and firm performance is mediated by strategic change (Le & Kroll, 2017).

Internal vs External CEO. The consequences of outside CEO have received ambivalent views. But there are certain conditions under which the benefits associated with outside CEO balances and even outweigh the costs associated with it. When the external CEO resembles the other executive team members socio-demographically then he/she is likely to have positive impact on firm performance. Moreover, when outside CEO possesses a diverse range of experience gained through various industries or countries throughout his tenure, he is more likely to outweigh the cost and lead to improved firm performance (Georgakakis & Ruigrok, 2013). Hence, the impact of a new outside CEO cannot be considered in isolation but other contextual factors influence and moderates its effect on firm performance.

Generalist vs specialist CEO. Generalist CEOs are the ones who possess broad set of skills and knowledge, while specialist CEOs possess limited range of knowledge and skills. As compared to specialist CEO, generalist CEOs are more inclined towards involving in unrelated acquisition. The performance of acquisition will be positive if the CEOs human capital matches with the type of the acquisition (related or unrelated), as engaging with activities that match with the CEOs knowledge and skills will reduce the struggle and risk involved in implementing unfamiliar strategic action. Therefore, generalist CEOs tend to be more involved in related acquisitions and specialist CEOs, on the other hand will be more interested in engaging in internal development (Chen et al., 2020).

CEO tendency to seek information. The CEOs advise seeking attitude towards the executives of other firms is associated with enhanced firm performance as other executives are able to offer different perspectives on the strategic issues the CEO face. Moreover, this relationship will be valid if the executive is not related to the CEO or they do not share a common functional background. The CEOs who seek advice from the executives with whom they do not share any common tie are more likely to perform better and influence performance in a positive way (McDonald et al., 2008).

CEO family-work conflict. Drawing upon the conservation of resource theory (COR), it has been observed that CEO family work conflict is negatively associated with firm performance. Performance of the firm suffers when CEO experience a high conflict in family and work domain as it influences the strategic decision-making capabilities negatively. Moreover, the CEOs possessing high core self-evaluation are able to reduce this conflict or manage it in a better way and thus experience an improved strategic decision making ability and consequently enhanced performance (Reina et al., 2013).

TMT characteristics and firm performance

TMT is defined as 'the relatively small group of most influential executives at the apex of the organization'. These usually include CEO or general manager and the ones who directly report to him (Finkelstein et al., 2009). As it been suggested and proven that demographic characteristics of executives can be used as a proxy of their operationalize the cognitive frames (Hambrick, 2007) and various studies have examined the influence of various attributes on organizational performance. This section presents the various characteristics of top management teams (excluding CEO) that possibly influence the firm performance.

TMT size. TMT size is directly related to firm performance specifically in dynamic or uncertain environment. Under the conditions of stable environment, the top managerial input will not have a substantial influence on the firm performance. The inefficiencies associated with the larger team size will be balanced out by the benefits it can offer in turbulent conditions (Haleblian & Finkelstein, 1993).

Moreover, the level of discretion of managers in strategic decision making also moderates the association between TMT size and firm performance. Under the conditions of low-discretion environment, team size might not get translated into performance outcome (Haleblian & Finkelstein, 1993).

TMT heterogeneity. The TMT demographic heterogeneity and the range of backgrounds of the TMT members influence the firms' dominant rationality which is more tolerant and welcoming towards new ideas and alternate viewpoints (Gunz & Jalland, 1996). Moreover, when the TMT heterogeneity of a firm is closer to the dominant heterogeneity in the competitive group, it is more likely to perform better (Pegels et al., 2000). This similarity in TMT characteristics may persist because of the firms' inclination to adopt a certain combination of managerial resources that is considered socially desirable in the environment they compete (DiMaggio & Powel, 1983).

TMT intrapersonal functional diversity. Intrapersonal functional diversity refers to the average range of functional experience of TMT members (Bunderson & Sutcliffe, 2002). It increases the information sharing within the group and enhances the sensemaking capabilities which leads to better integration of available information and consequently improved decision making abilities (Bunderson & Sutcliffe, 2002).

However, the correlation between TMT intrapersonal functional diversity and firm performance is moderated by TMT colocation as distributed groups are more prone to experiences biases because of less face-to-face interaction. Although technology plays a significant role in bridging the gap between distributed group members but it is unable to overcome the interaction challenges which distributed teams face (Hinds & Bailey, 2003).

TMT national diversity. TMT national diversity is positively associated with firm performance as national diversity leads to increased access of information and diverse experiences which lead to improved quality of decisions (Nielsen & Nielsen, 2013).

This association is moderated by the TMT tenure as well. Nationally diverse teams are expected to have lower performance initially because of less effective interaction but over a period of time the interaction and cohesion improve and the diverse groups perform better by exchanging various perspectives and alternatives. Therefore, TMT tenure interacts with TMT functional diversity to influence firm performance in a positive way (Nielsen & Nielsen, 2013).

Moreover, nationally diverse teams can utilize their institutionalized and embedded experiences to overcome to coordination issues. Furthermore, munificent environment can help the firm to safeguard from external threats and capitalize on the wider range of choices available due to the diversity. Hence, TMT national diversity directly impacts the performance and this association is even stronger in the presence of long tenured TMT groups, highly internalized firms and munificent environment (Nielsen & Nielsen, 2013).

TMT Tenure heterogeneity. Under the dynamic environmental conditions, TMT tenure heterogeneity influences the firm performance positively. As during the dynamic environmental conditions, a broad level of environmental scanning and generation of creative and innovative ideas is required along with a organizational pragmatism. These qualities or characteristics can be offered by a team that is heterogeneous with respect to tenure (Hambrick et al., 1996; Hambrick, Humphrey, et al., 2015).

Moreover, this relationship is even strengthened in the presence of structural dependence. The degree to which horizontal, vertical and reward interdependence exists among TMT members, the group members will have an incentive and reason to interact effectively. While on the other hand, if the group members do not have these three forms of interdependence among them, they will have little or no opportunity to interact and influence each other (Hambrick, Humphrey, et al., 2015).

TMT pay structure. TMTs pay structure helps in aligning the interests of the top executives with those of the shareholders and facilitates in integrating the top team. The external alignment of the of TMT members pay is directly associated with subsequent firm performance (Carpenter & Sanders, 2002). The extent to which the interest of the shareholders has been accounted for while developing the pay structure is referred to as external alignment.

External alignment refers to the degree to which the TMT compensation takes into account the interest of the shareholders, i.e., increasing the fraction of the TMT compensation that is paid in the long run so that the pay is dependent upon the future performance of the firm (Jensen and Murphy, 1990).

Conclusion

This paper contributes to our understanding of the impact of the executives of a firm on the organizational performance. It provides a holistic view of the various characteristics of board members, CEO and TMTs which influence the firm performance. This review also highlights few contextual factors and possible mediators and moderators that affect the relationship of the executive characteristics with firm performance. After meticulous review of the studies, it has been proposed that larger board size and independent board chairs possessing the ability to be objective, access to relevant information, increased relative power, adequate ownership, motivation to excel, job-related and racial diversity, board affiliation with firm and those who have worked together for a long period of time and are expected to influence the firm performance in a positive way. Moreover, CEOs who are less conscientious, emotionally stable, adequately agreeable, extravert, open to new experience, possess charismatic or transformational leadership abilities, more humble, empathetic, less dominant, slightly narcissistic, relatively younger and those having international experience are more likely to influence firm performance in a positive way. CEO compensation, tenure and work family conflict also affect the outcome of the firm. Similarly, considering top management teams, the TMT size, intrapersonal functional heterogeneity, national diversity, tenure heterogeneity and pay structure affects the performance of the firm. Furthermore, various contextual factors like group cohesiveness, strategic flexibility and dynamic/stable environment etc. moderates these relationships. There are few factors which have produced inconsistent results as their influence on performance is not definitive but dependent on various contextual factors. Review helps in integrating the literature regarding how the top leaders of various levels impact firm performance. It highlights the significance of board members' characteristics as well in influencing the performance.

Managerial Implications

The findings of this review can be utilized by firm stakeholders in a meaningful and applicable way. The findings suggest that the few characteristics of top executives influence the firm performance variably. Hence the environmental conditions should be observed and analyzed and there should be a fit between the executive's attributes and environmental context to produce a positive influence on performance.

Theoretical Implications

While the influence of various characteristics and attributes of upper echelon on organization and its performance has received a lot of attention, role of board has gained relatively less importance. Also, the evidence is scattered. This review adds to the literature by consolidating the research and provides a comprehensive understanding of the influence of various attributes of top management or executives, including board of directors, CEOs and TMTs, on firm performance.

Limitations and Future Research Directions

This review has several limitations. First of all, the review should be expanded by incorporating the relevant articles from more journals. Secondly, there had been few relationships that have ambivalent results. Additional review should be conducted to explore the association of those specific characteristics with firm performance.

Furthermore, a meta-analytic review should be conducted. It is considered better than the narrative review of literature as it provides the opportunity to critically evaluate and combine the results of studies (Fagard et al., 1996). Variance decomposition method could be utilized as well to identify the salience and proportion of influence of these characteristics on firm performance.

Moreover, future research should explore the influence of the variables that have ambivalent effect on firm performance. For instance, gender related diversity on firm performance. Miller & Triana (2009) found insignificant effect of gender diversity on innovation and firm performance (Miller & del Carmen Triana, 2009). But this relationship should be explored further to identify the missing moderators or mediators.

Finally, the characteristics of board members, CEOs and TMTs should be considered in conjunction with each other. It should be explored that which combination of board, CEO and TMT characteristics will maximize the performance or which characteristics will not work together and will possibly deteriorate the performance. Various combinations and configurations of these characteristics should be explored. The interaction of all three levels of leadership should be explored.

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Appendix A

S. No.	Study	Journal	Strategic leader Level	Key arguments related to CEO/TMT (pertinent findings)
1	(Luciano et al., 2020)	Academy of management Review	TMT-Board	Independent TMTs → Group and task performance → Firm performance Dependent TMTs → Group and task performance → Firm performance
2	(Waldman & Yammarino, 1999)	Academy of management Review	CEO-TMT	Adaptive culture → Leaders' charismatic behavior Charismatic relationships between CEO and TMT → TMT cohesion and effort moderated by perceived environmental volatility
3	(Gunz & Jalland, 1996)	Academy of management Review	TMT	Intended strategies influenced by Top managers' characteristics Demographic heterogeneity and background → Firms' dominant rationality
4	(König et al., 2020)	Academy of management Review	CEO	Empathic CEOs → recognition of warning signs, access to critical information, greater stakeholders' appreciation, higher degree of commitment to heal organization's rational system
5	(Forbes & Milliken, 1999)	Academy of management Review	Board	Board effort norms, knowledge skills, cognitive conflict → Board task performance Cognitive conflict → Board cohesiveness Cohesiveness → Board task performance is moderated by cognitive conflict Job-related diversity → functional area knowledge Job-related diversity → Board cohesiveness
6	(Fanelli & Misangyi, 2006)	Academy of management Review	CEO	CEO charisma → outside key stakeholders → organizational effectiveness
7	(Hambrick & Fukutomi, 1991)	Academy of management Review	CEO	Stable environment → Gradual performance downturn of CEO Dynamic environment → Steeper performance downturn of CEO
8	(Lynall et al., 2003)	Academy of management Review	CEO	Board formed in entrepreneurial stage + dominant external financier → Reduced CEO dominant power Board formed in collectivity stage + dominant external financier → Reduced CEO dominant power Board formed in formalization and control + dominant external financier → Reduced CEO dominant power
9	(Hambrick, Misangyi, et al., 2015)	Academy of management Review	Director	Independence, expertise, bandwidth, and motivation → Director being an effective monitor Director being an effective monitor → reduced likelihood of governance failure
10	(Garg, 2013)	Academy of	CEO,	Founder CEO → Higher degree engagement in monitoring,

		management Review	directors, board	focused more on strategic decision of the board Non-founder CEO → Lower degree engagement in monitoring, focused more on level of effort by the board Venture stage → monitoring by venture board (U shaped relationship) Founder directors → Higher degree engagement in monitoring Independent directors → Higher degree engagement in monitoring Higher number of Venture capital (VC) directors → Higher degree engagement in monitoring
11	(Hillman & Dalziel, 2003)	Academy of management Review	Board	Board capital → provision of resources Board capital → Monitoring Board incentive moderates the relationship Board capital → Monitoring Board equity compensation positively affects Board capital → Monitoring Board equity compensation positively affects Board capital → Provision of resources Board dependence negatively affects Board capital → Monitoring Board dependence positively affects Board capital → Provision of resources
12	(Tasheva & Hillman, 2019)	Academy of management Review	Board	Personal range in human capital ←→ Team diversity Personal range in social capital ←→ Team diversity Personal range in demographic characteristics ←→ Team level demographic diversity
13	(Baysinger & Hoskisson, 1990)	Academy of management Review	Board	Outsider-dominant board → Increased focus on short-term profits, reduced high risk-return strategies Financial controls → High level of diversification Strategic controls → Low level of diversification
14	(Haleblian & Finkelstein, 1993)	Academy of management Review	TMT size – CEO dominance	Top management team size → firm performance In turbulent environment CEO dominance negatively affects firm performance High discretion environment positively moderates CEO dominance and team size → firm performance
15	(Richard et al., 2019)	Strategic Management Journal	TMT	Relationship based faultlines → subgroup cohesion, reduces TMT ability to initiate change Task-related faultlines →inter-subgroup knowledge-sharing, improves TMT ability to initiate change.
16	(Steinbach et al., 2017)	Strategic Management Journal	TMT	Heterogeneity →manager–shareholder interest alignment TMT performance-contingent incentives → manager-shareholder interest alignment
17	(Hambrick, Humphrey, et al.,	Strategic Management	TMT	Structural independence resolves ambiguities regarding effects of TMT heterogeneity.

	2015)	Journal		Structural interdependence moderates TMT heterogeneity → firm performance
18	(Nielsen & Nielsen, 2013)	Strategic Management Journal	TMT – national diversity	TMT nationality diversity → performance Moderators: Tenure, Internationalization, munificent environment TMT nationality diversity → firm performance. TMT tenure positively moderates TMT nationality diversity → firm performance Industry munificence positively moderates TMT nationality diversity → corporate performance
19	(Hutzschenreuter & Horstkotte, 2013)	Strategic Management Journal	TMT	Task related faultline strength within TMTs moderates Added product scope per time period → firm profitability Biodemographic faultline strength within TMTs moderates Added product scope per time period → firm profitability
20	(Simsek, 2007)	Strategic Management Journal	CEO tenure	CEO tenure → TMT risk taking → performance CEO tenure → Entrepreneurial initiatives → performance
21	(Carpenter & Sanders, 2002)	Strategic Management Journal	TMT	The external alignment of TMT member pay (i.e., long-term pay structure) will be positively related to subsequent firm performance. - The internal alignment of TMT member pay will be positively related to subsequent firm performance
22	(Pegels et al., 2000)	Strategic Management Journal	TMT heterogeneity	we argue that the closer the TMT heterogeneity of a firm is to the dominant heterogeneity in the competitive interaction group, the better it performs
23	(Chen et al., 2020)	Strategic Management Journal	CEO	Generalist vs specialist CEO → number of acquisitions Generalist CEO → unrelated acquisitions CEO's human capital + type of acquisition → acquisition performance
24	(Petrenko et al., 2019)	Strategic Management Journal	CEO	Humble CEO → better market performance
25	(Belenzon et al., 2019)	Strategic Management Journal	CEO	Age of CEO → lower investments, lower sales growth, lower profitability Age of CEO → higher probability of survival
26	(Zorn et al., 2017)	Strategic Management Journal	Independent/ Lone-insider board	Lone-insider board → excess CEO pay, large CEO – team pay gap Lone-insider board → financial misconduct, decreased performance
27	(Withers & Fitza, 2017)	Strategic Management Journal	Board chair effect	Separate board chairs → provision of resources
28	(Garg et al., 2003)	Strategic Management Journal	CEO	CEO attention to task → functional innovation and higher performance

29	(Jayaraman et al., 2000)	Strategic Management Journal	CEO founder status	CEO founder status → firm performance Moderated by firm size and age
30	(Quigley & Hambrick, 2012)	Strategic Management Journal	CEO	CEO's limited authority → fewer strategic changes CEO without predecessors → Larger strategic changes
31	(Cannella Jr et al., 2008)	Academy of Management Journal	TMT	TMT intrapersonal diversity → firm performance TMT member colocation → firm performance
32	(Nadkarni & Herrmann, 2010)	Academy of Management Journal	CEO	CEO personality → strategic flexibility → firm performance
33	(Agle et al., 2006)	Academy of Management Journal	TMT	TMT perception of CEO → organizational performance
34	(McDonald et al., 2008)	Academy of Management Journal	CEO	Governance factors in agency theory → CEO's tendencies to seek advice contracts
35	(Reina et al., 2013)	Academy of Management Journal	CEO	CEO family-work conflict → decision making comprehensiveness → firm performance Core self-evaluation moderates CEO family-work conflict → decision making comprehensiveness → firm performance
36	(Georgakakis & Ruigrok, 2013)	Academy of Management Journal	CEO	Outside succession is suitable when: CEO demographics ←→ executive team members demographics Diverse experience of CEO from other industries and countries
37	(Zhu & He, 2014)	Academy of Management Journal	CEO	CEO transformation leadership → employee human capital → firm performance CEO transformation leadership → strategic innovation orientation → employee human capital Customer focus strategy moderates Employee human capital → firm performance
38	(Christensen et al., 2015)	Academy of Management Journal	CEO	CEO → performance management behavior → firm performance CEO performance management → flourishing TMT climate TMT climate → job attitude
39	(Le & Kroll, 2017)	Journal of International Business Studies	CEO	IR components → executive's international knowledge, general competencies International knowledge → firm performance General competences → strategic change → firm

				performance
40	(Buck et al., 2008)	Journal of International Business Studies	Executive	Executives pay → past and current firm performance
41	(Georgakakis & Ruigrok, 2013)	Journal of Management Studies	CEO	Outside CEO benefits when CEO demographics ←→ incumbent executives' demographics CEO has a variety of experience Hired by firm operating in munificent industry
42	(Tang et al., 2011)	Journal of Management Studies	CEO	Dominant CEO → deviant strategy from industrial norms → extreme performance
43	(Wales et al., 2013)	Journal of Management Studies	CEO	CEO narcissism → entrepreneurial orientation → firm performance variance
44	(Payne et al., 2009)	Journal of Management Studies	Board attributes	Team effectiveness → higher level of board effectiveness → corporate performance
45	(Combs et al., 2007)	Journal of Management Studies	CEO power	Boards dominated by outside directors → shareholders performance
46	(Miller & del Carmen Triana, 2009)	Journal of Management Studies	Board	Board racial diversity → firm reputation, innovation Board racial diversity → reputation innovation → firm performance Board gender diversity → firm innovation