

The Mediating Role of Firm Innovativeness between Top Management Team Diversity and Sustainable Firm Performance of Non-Financial Listed Companies of Pakistan

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The main aim of the current study is to determine the role of top management team diversity (TMTD) on sustainable firm performance (SP) with the use of firm innovativeness as mediating variable of non-financial listed companies of Pakistan. Current study used total 242 questionnaires and PLS-SEM technique used for analysis purpose. The simple random sampling technique followed for data collection from top team management in non-financial companies Pakistan. the outcomes of this study elucidate that TMDT has an impact over firm innovativeness. Firm innovativeness boosts up the firm sustainable firm performance. In addition, Firm innovativeness explains the relationship between TMDT and sustainable firm performance This study shows of the non-financial listed companies that TMDT, firm innovativeness significantly measures sustainable firm performance. The researcher paid fewer attention in the area of firm innovativeness to determine the sustainable firm performance. The current study is quite use full for management researchers, practitioners and policymakers.

Keywords: Diversity, sustainable firm performance, non-financial listed companies

INTRODUCTION

The extremely complex knowledge and information held by members of Top Management Teams (TMTs) is crucial for a firm's success (Chen, Kang, & Butler, 2019). Though, this knowledge needs comprehensive and esteemed thoughtful of the attributes of the TMTs and the way they link, to attain the well-planned goals involved in a management process (Lampaki & Papadakis, 2019). The significance of the management role played by TMTs members has been recognised as the commencement of the century (Crossland & Hambrick, 2011; Lin & Kuo, 2007)

So, developed and developing nations are presently faced with various challenges and opportunities due to globalization. As a result, businesses are intensely evolving for better competitive advantage in this increasingly global environment (Ulrich, Brockbank, Younger, Nyman & Allen, 2009, Bokhari & Khan, 2019). Over the years, TMTs has been postulated as a potential determinant of firm strategic decision for sustainable performance (Spreitzer & Porath, 2012, Khan & Afzal, 2020), and extensive research shows positive relationship between innovativeness and firm's competitiveness in contemporary business environment (Katsikeas, Leonidou & Zeriti, 2016; Shabbir, 2015, Khan, Hussain & Ali, 2019).

Drawing upon the importance of attaining sustainable performance, it is contended that for long-term firm sustainability, innovativeness is one of the drivers of sustainable competitive advantage in today's marketplace (Kasemsap, 2014), and, TMTs members are the key donors to the growth of firm's sustainability through "the triple bottom line" (TBL) dimensions of economic, social, and eco-friendly aids (Rajala & Moller, 2014). Hence,

researchers and practitioners are concerned about, the role of TMTs characteristics in relation to innovativeness and firm's performance (Talke, Salomo & Rost, 2010; Li, Maggitti, Smith, Tesluk & Katila, 2012; M. R., & Simonetti, B. 2020).

The significance of corporate sustainability for firm higher viable advantage has been highlighted by earlier literature (M. R., & Simonetti, B. 2020, Auzair, 2014). Moreover, it has been claimed that in directive to attain continuous progress, there is an essential for determining sustainable firm performance yonder financial measure; and, firms requires to address three measurements of firm sustainable performance, which are economic, social and environmental (Khan & Afzal, 2020; Rahman, 2010; Sayem, 2012). However, many of the extant review on firm performance mainly considered the financial aspect of firm performance, such as: Campbell and Minguez-Vera (2008), Certo, Lester, Dalton and Dalton (2006), and Talke, Salomo and Kock (2011). Others emphasize that firm performance would also contain other features of the performance as well financial performance such as environmental performance (Fauzi, Svensson & Rahman, 2010). Therefore, Svensson and Rahman (2010) suggest that upcoming studies should focus on sustainability concept, which shelters economic, social and environmental aspects, in order to reach sustainable firm performance (Ashraf, Iqbal, & Akhtar, 2019).

Moreover, according to Hambrick and Mason (1984) emphasize that sustainable firm performance is the consequence of firm strategic decisions, made with the influence of TMTs structure. So, the significance of firm's top leaders are extensively known, firm strategic decisions and selections made by TMTs are alleged to comparatively encouragement by the characteristics of

TMTs (Hambrick & Mason, 1984). Scholars have argued that the focus of research today is to ascertain the impact of TMTD on firm performance (Hambrick, 2007; Talke, Salomo & Rost, 2010). Previous studies which examined correlation of TMTD, and firm performance have concluded that there is strong relationship between firm performance and TMTD (Salomo & Kock, 2011, M. R., & Simonetti, B. 2020). In relations of TMTD, past researchers have looked into unlike types of TMTD like race, gender, age, education, practical responsibility and also experience of the industry (Jenssen & Nybakk, 2013; Salomo & Kock, 2011, M. R., & Simonetti, B. 2020). Though, these studies have mostly tested the influence of each perspective of diversity distinctly as independent variables, and from western contexts and perspectives. Thus, studies, which examine the influence of all different types of diversity concurrently on firm performance in each of their studies, are still limited. The current study intends to fill the gap of knowledge by bringing significant influence TMTD on sustainable firm performance with mediating role of firm innovativeness. Furthermore, although extensive research has been carried out to examine the influence of TMTD on firm performance (Marimuthu & Kolandaisamy, 2009; Boone & Hendriks, 2009). Being innovative is vital for any company's existence. However, this decision might be inspired by the distinctiveness of employees such as education level (Kemp, Folkerlinga, Jong & Wubben, 2003). these relationships possibly depend on mediating variable such firm innovativeness (Talke, Salomo & Rost, 2010). Although there has been a number of researches on the influence of TMTD on sustainable firm performance, yet little empirical research has been done on the effect of firm innovativeness, as the mediating variable between TMTD and sustainable firm performance.

LITERATURE REVIEW

Sustainable firm performance

The aim of boosting the performance has been established in utmost studies requiring the considerate of viable survival of a firm and answer from its environment adaptation (Khan & Afzal, 2020; March & Sutton, 1997). the performance of the firm has been pointedly considered and described from numerous views and it raises according to firm context that concentrations on work, people, firm structure, firm capability to exploit resources and firm ability for goal accomplishment (Gavrea, Iliés & Stegorean, 2011).

Many firms are realized to have social, environmental and economic influence, which is renowned as sustainability that impacts of people, societies and also the natural environment, either intended or unintended. The notion of sustainability has been described and clarified in numerous ways and circumstances of firm sustainability are explained in the three scopes of firm performance, namely: an economic "financial", a social "people" and an environmental "planet" performance (Sayem, 2012; Khan, 2019; Khan & Afzal, 2020). Financial performance states to financial viability or the mark to which a firm accomplishes its economic and financial goals (Muller, 1986) and social performance is the "business firms configurations or principles of social responsibility, processes of social responsiveness policies programs and observable outcomes as they relate to the firm's

societal relationship" (Wood, 1991). The environmental performance beside mentions to the level of effect a firm makes on the natural environment (Moore, 2010). Hockerts (2002) has also states that sustainability "represents the potential of societal progression in the direction of an impartial and wealthy world in which the natural environment and our cultural triumphs are well maintained for generations to come (Sultana, Syed, & Riaz, 2021).

Top Management Team Diversity (TMTD)

Academic attention on TMTs come from the altercation that decision makers discuss, exchange philosophies, and take decisions as a group (Webb, 2009). As like, the amounts of studies have focused on the significances of numerous forms of TMTD on firm decisions and performance (M. R., & Simonetti, B. 2020). Primarily, it is the commitment of management to grow the sustainable firm's performance since performance is the key objective of stakeholders particularly about firm's financial performance. Empirically, indicate TMTD has a greater influence on the strategic choice of firms to emphasis on innovation fields (Talke, & Salom, 2010). According to Cornell, (1987), a firm can possibly accomplish improved sales, reduced costs, decreased financial risk, greater volume of investments from financial markets, and enhanced reputation, all of which will eventually rise returns and firm's financial performance. Also, as superior financial performance carries progress in wealth of the shareholders, Dean (1999) claims that well financial performance will pay to healthier opportunities to expand social performance and sustainability. From previous studies on diversity, Kramer (1991) argues that certain characteristics could behave differently depending on the context while it is assume that all diversity aspects are equally important (Lau & Murnighan, 1998). Also, it is undoubtedly illustrations that diversity is vital to firm where racial diversity affects performance and within a appropriate context, possibly leading to the gaining of competitive advantage (Richard, 2000).

Firm Innovativeness

Being innovative is vital for any company's existence. However, this decision might be inspired by the distinctiveness of employees such as education level (Kemp, Folkerlinga, Jong & Wubben, 2003). Looking at different definitions of innovation, Gupta, Tesluk and Taylor (2007) claimed that innovation is not just a result or fresh idea, but a process of the emergence of fresh idea. Innovation practices in firms are taken as core component in order to endure in the competitive marketplace (Asad, Rizwan, Shah, & Munir, 2018). Moreover, earlier studies of innovation have mainly ignored prospective consequences of corporate governance issue on strategic ranges, and thus on innovative management results (Talke, Salomo & Rost, 2010, Khan et al, 2019, Khan & Ali, 2018). Talke, Salomo and Kock (2011) suggested that firms need to ensure the diversity in their TMTs members enables an active innovation placement. Besides, Carter, Simkins and Simpson (2003) advocate that TMTD may expand creativity in innovation, which may in turn initiate an active decision making. Most TMTs members frequently reveal identical features where majority are male, elder, and with similar industrial background (Talke, Salomo & Kock, 2011), and it has

been proven that TMTD strongly influence firm’s strategic emphasis on innovation (Talke, Salomo & Rost, 2010). Hence, with increasing TMTD which positively influences firms’ strategic decisions, therefore firms need to re-examine their prime candidate profiles.

Research framework.

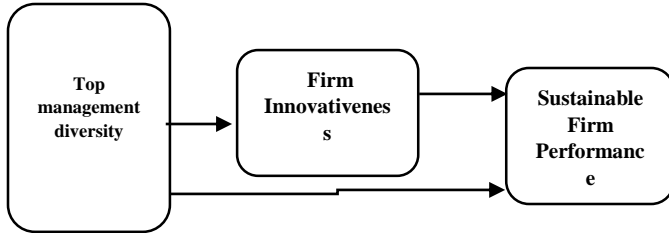


Figure 1; Theoretical Framework

The following hypotheses are formulated

- (i) There is significant relationship between TMTD and sustainable firm performance
- (ii) There is significant relationship between TMTD and firm innovativeness
- (iii) There is significant relationship between firm innovativeness and sustainable firm performance.

RESEARCH METHODOLOGY

A quantitative approach is adopted to examine the relationship between TMTD and sustainable firm performance; the mediating role of firm innovativeness. This study focuses on firms invested by Pakistan Stock Exchange (PSX). Since the required information to be obtained consist of the companies’ TMT diversity, firm innovativeness, sustainable performance. The unit of analysis selected is organization. Data was collected through a set of questionnaires, from the targeted respondent from the Top Management Team members which consist of the General Manager and other top members in the organization’s hierarchy representing the organization’s TMT. Through random sampling the sample size of the study selected 180 non-financial companies among a population of 363 non-financial companies. The sampling procedure was carried out by using a random sampling technique. Total 480 questionnaires were distributed, we received 242 responses, thus achieving a response rate of 50 percent. The main source of instrument measure the variables were adopted TMTD (Elsaid (2012); Rao and Bagali (2014), firm innovativeness (Ruvio, et al. 2014), sustainable firm performance (Suprawan 2015).This study uses 7-point Likert scale. For analyses using Smart PLS 3.0 (Henseler, Ringle, & Sarstedt, 2015). PLS-SEM has become a progressively practical method, in the field of academic research (Hair et. al., 2012). In spite of its extensive application, PLS-SEM is known as a key multivariate analysis method to estimate complex cause-effect relationship models with latent variables and does not require a higher sample or normal distribution of data (Hair, Black, Babin, & Anderson, 2010).

DATA ANALYSIS AND OUTCOMES

Measurement model

Table,1 illustrates the assessment of construct reliability and convergent validity for the variables in this study. All reflective constructs exhibit composite reliability (CR) is greater than the

recommended threshold value of 0.7. These are good indicators that all constructs possess internal consistency. In addition, after removing items with low loadings, these constructs also demonstrate adequate convergent validity. All constructs have AVE ranging from 0.509 to 0.529, which are above, commonly suggested threshold value of 0.5 for average variance extracted (AVE). AVE values indicate that the items loaded to the respective constructs can explain more than 50 per cent of their corresponding (reflective) indicators variance (hair,et.al,2015).

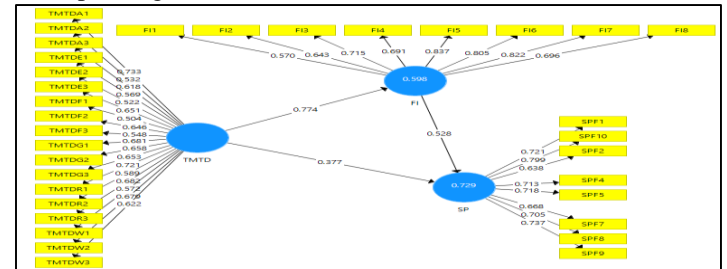


Figure 2 measurement model

Table 1; Measurement model finding

Items	factor loading	AVE	CR	Cronbach's Alpha
FI1	0.570	0.529	0.898	0.869
FI2	0.643			
FI3	0.715			
FI4	0.691			
FI5	0.837			
FI6	0.805			
FI7	0.822			
FI8	0.696			
SPF1	0.721	0.512	0.867	0.863
SPF10	0.799			
SPF2	0.638			
SPF4	0.713			
SPF5	0.718			
SPF7	0.668			
SPF8	0.705			
SPF9	0.737			
TMTDA1	0.733			
TMTDA2	0.532			
TMTDA3	0.618			
TMTDE1	0.569			
TMTDE2	0.522			
TMTDE3	0.651			
TMTDF1	0.504			
TMTDF2	0.646			
TMTDF3	0.548			
TMTDG1	0.681			
TMTDG2	0.658			
TMTDG3	0.653			
TMTDR1	0.721			
TMTDR2	0.589			
TMTDR3	0.682			
TMTDW1	0.572			
TMTDW2	0.679			
TMTDW3	0.622			

Moreover, the model external constancy was checked with the assistance of discriminant validity which is specified in Table 2 by via AVE square root

Table 2; Discriminant validity

Variables	FI	SP	TMTD
FI	0.728		
SP	0.82	0.714	
TMTD	0.774	0.786	0.625

Structural model

The current study has been utilized the bootstrapping to evaluate the structural model. For the current method is supposed as one of the best potential process to complete the test and analyze (Hayes, 2010). Moreover, Hair et al., (2014) recommended that bootstrapping method of PLS-SEM is best for direct effect in quantitative studies.

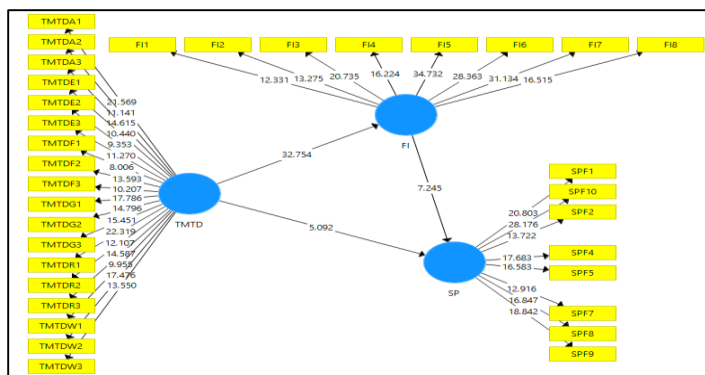


Figure 3; Structural Model

Table 3; Direct relationships

hypo	paths	Coff.	Standard Deviation (STDEV)	T-value	P Value
H1	TMTD -> SP	0.377	0.074	5.092	0.000
H2	TMTD -> FI	0.774	0.024	32.75	0.000
H3	FI -> SP	0.528	0.073	7.245	0.000

Variance Explained (R²)

R² states the variations of the dependent variable that all independent variables described. Table 4 determines that 59% FI described by TMTD, While, 72%, SP explained, due to TMTD.

Table 4; R-Square

Total	R Square
FI	0.598
SP	0.729

Predictive Relevance (Q²)

For the technique using the blindfolding, present study used Stone-Geisser test for Q² (Stone, 1974). The cross validated redundancy value (Q²) should be higher than zero (Henseler et al., 2015). Table 5 indicates that Q² is 0.340 and 0.288 which is greater than acceptable value.

Table 5; Predictive Relevance (Q²)

	Q ²
FI	0.288
SP	0.340

Empirical results and discussion

The aim of this research is to indicate the mediating role of FI between TMTD and SP of non-financial listed companies in Pakistan. Moreover, indicates the direct effect of TMTD and SP. Table shows TMTD has a positive influence on SP (t = 5.092, p < 0.05) and supported H1. The outcomes are consistent with the earlier studies of (Boone & Hendriks, 2009; Dezsó & Ross, 2012). TMTD has a positive influence on FI (t = 32.5, p < 0.05) and accepted H2. The outcomes are like a prior study (Turan & Ascigil, 2014). Besides, FI significantly and mediates the association between TMTD and SP (t = 7.24, p < 0.05) and supported H3. The outcomes are in line with previous studies (Turan & Ascigil, 2014, Ruiz-Jimenez & Fuentes-Fuentes, 2015).

CONCLUSION

This study outcomes shows that TMTD has a significant positive impact on SP. Moreover, Firm innovativeness has a significantly mediate the relationship between TMTD and SP. Hence, this research concludes that non-financial companies boost their sustainable firm performance by concentrating these elements of top management team diversity, firm innovativeness, and sustainable firm performance. The current study made some tremendous theoretical contributions by concentrating on firm innovativeness as mediating variable with top management team

diversity and sustainable firm performance. Furthermore, the current study incorporates TMTD, FI and OP in only study as overlooked in earlier literature. In applied term, the findings of this current study give numerous tremendous assistances in a practical sense to non-financial listed companies.

Limitations and suggestions

The present study attentions on Pakistani non-financial listed companies and give a significant contribution to the existing literature, but the outcome of this research cannot be applied in the entire world. Later, there is an essential to explore supplementary current research model in the financial companies in Pakistan also in other countries. Moreover, future studies should consider the innovation culture as moderating or mediating variables.

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