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# Non-Financial Parameters of Strategic Investment Decision-Making and Their Impact on Corporate Financial Performance

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### Abstract

The paper aim to explore the parameters of strategic investment decision-making (SIDM) and the significance of those parameters in explaining corporate financial performance. The study shows that strategic planning emphasis significantly and positively influenced profitability growth rate and share price growth rate in log-linear analysis. Moreover, there are indications that middle management emphasis suggests share price growth and financial success can relate to both strategic and operative considerations. The study further depicts that financial analysis as a SIDM emphasis might not independently predict firm performance. The study enriches literature regarding impact of nonfinancial parameters of SID on corporate financial performance.

# Introduction

Strategic investments are substantial investments involving high risks and produce outcomes that are often difficult to quantify (Alkaraan & Northcott, 2013). Nevertheless, they have a significant impact on the shortterm and long-term financial performances of the firms (Carr et al., 2010). Different contextual factors ranging from organizational to strategic drive strategic investment decisions (SID). Most of the previous studies have focused on the relationship between financial planning and financial performance of firms to measure the effectiveness of SID (Atik, 2012, Carr et al., 2010). However, there is limited research on the non-financial parameters of strategic investment decision-making and their impact on corporate financial performance.

Different non-financial estimates that has been used for estimating SID have also been challenged. From this perspective, it is necessary to identify novel parameters for estimating the non-financial performance of SID. The present study aimed to identify these parameters (e.g., the level of management and strategic planning) of SID that influence corporate performance. The financial performance parameters that were explored include e.g. share price growth rate, profitability and revenue growth rates. The study investigated the research question: *Are different nonfinancial parameters of strategic investment decision*- making have any impact on corporates' financial performance?

An exploratory factor analysis approach has been used to identify the parameters of SID, while regression models estimated to find the impact of those parameters and financial performance of firms (Alkaraan & Northcott, 2013, Alkaraan & Northcott, 2015, Hundal, 2017). The study shows that strategic planning, middle management, and toplevel management influence revenue growth rate, share price growth, and Tobin's q Proxy in different regression models. The study further shows that strategy parameters and middle management level parameters together (holistically) influenced revenue growth rate. Furthermore, some parameters related to SID do not influence corporate financial performance, such as the profitability growth rate and total assets growth rate in the linear regression model.

The literature suggests that the strategic objectives or corporate policies of an organization drive the SID process (Alakaraan & Northcott, 2013, Hundal, 2017). Such evidence was substantiated in this present study because orienting with the corporate policies and moving towards a competitive advantage could be considered a function of the top management level. it has been observed that top management level attributes might not have influenced the financial performance of the firms directly in terms of RGR, TAGR, and SPGR but it influenced Tobin's q proxy. Hence, it is not surprising that organizational quality, organizational culture, market leadership, strategic fit, innovation, and company image could be considered a function of the top management level initiatives that drive SID. The study suggests that firms need to strengthen their top management level based on strategic investment decisions which could promise growth of the firms over the long run to attract investments from investors.

# **Literature Review**

The literature review aimed to identify the possible strategic decision-making parameters and fiscal attributes that have remained underutilized or unexplored in explaining SID.

Strategic Investment Decisions: Domain and Perspectives

Strategic investment decisions (SID) include mergers and acquisitions, launching new products, installing novel manufacturing processes, transitioning to new business models, and radical production capability. Strategic investments are the part of capital investments that form the long-term commitments of corporate policies that lock the corporation with technologies, products, and markets (Desai et al., 2011). Further, financial analysis is an important part of the strategic decision-making process that impacts the competitive advantage of a firm (Atik, 2012). The literature on capital investment differentiates between investment decisions that are operational and strategic. Operational decisions are readily conceptualized by top-level managers and directors because the risks and the likely outcomes of the same are well understood (Hundal, 2017).

Moreover, operational decisions could be executed through routine or programmed decision-making processes (Alkaraan & Northcott, 2013). Operational decisions primarily involve the reallocation of existing assets or investments across activities, products, the promotion, or services and in markets that are closely aligned with the current operations of the organization. Therefore, operational decisions primarily focus on maintaining the current and routine activities of the organization rather than initiating novel, innovative, and risky endeavors for the overall growth and financial performance of firms in the future ((Desai et al., 2011). On the contrary, strategic investment decisions orient an organization toward a new strategic direction primarily for a long-term objective. SID is defined as a decision over an investment, which has a significant potential for improving the corporate performance of an organization (Desai et al., 2011).

#### Managerial Control, their Attributes and SID

The evidence suggests that SID has a strong correlation with strategic management. Most of the research on SID has evaluated it in terms of financial performance of firms which is often erroneous because the impact of SID is often realized over the long term. Few studies have reported the role of management control on SID (Hundal, 2017, Asgari et al., 2010). The primary objective of management control is to ensure that managerial behavior is in line with organizational strategies (Baker et al., 2011). In this regard, Alkaraan and Northcott (2007) evaluated pre-decision control mechanisms to guide investment decisions. The pre-decision control strategies include authorization levels, investment goals, setting hurdle rates and fiscal limits, and defining the points of analysis for the growth and performance of firms (Elbanna & Child, 2007). Desai et al. (2011) has shown that most organizations (89.2%) had a formal procedure for evaluating strategic decisions and lower-level managers are involved in the SID process. Financial analysis has been the major guiding framework for strategic decision-making, as depicted by 74.1 % of the respondents. However, the respondents (95%) have been suggested that a strategic investment decision could be rejected even if it met the expected financial return if not aligned with the competitive strategy of the firm (Desai et al., 2011).

Managerial processes take place during the determination of strategic issues related to the identification of alternatives in the SID (Asgari et al., 2010). Managerial judgment in the SID context pivots around corporate context, organizational culture, managerial experience, technical knowledge, managerial and leadership styles, and discretionary powers of the top management. Managers often play a significant role in speculating measures of corporate firm performance, such as cash flows, demand-supply logistics, and competition. Rational managers could apprehend or cope with complexities by using rule-of-thethumb tenets that ensure an acceptable level of financial performance by avoiding selective bias (Dean & Sharfman, 1993). However, rules of the thumb for managerial processes rarely incorporate financial analysis in the SID process (Elbanna & Naguib, 2009). The hypothesis developed based on managerial control (middle management), and SID is:

**H1:** Middle-Management initiated decisions related to SID can independently and significantly predict financial performance and growth opportunities of firms.

#### Strategic Planning and SID

Managerial judgments in the SID dominate as the key decision strategy, especially in firms that operate in hightech and highly competitive or highly dynamic environments (Asgari et al., 2010). Hence, managers should not only base their SID based on pre-decision controls and intuitive judgments but also for the post-decision control phenomenon such as project performance review (PPR) (Von Zedtwitz, 2003). PPR is a feedback system that informs managerial experiences on capital investment outcomes either in terms of financial performance or growth characteristics of a firm which foster their learning process (Desai et al., 2011). The hypothesis framed based on strategic planning is:

*H2:* Strategy planning parameters related to SID can independently and significantly predict financial performance and growth opportunities of firms.

# *Opportunities for Growth (Tobin's q) as a measure of SID*

There is inclusive evidence regarding the growth opportunity of a firm as a moderator of its effectiveness of strategic investment decisions. Growth opportunity is a more significant predictor of an effective SID than the financial performance (Pilotte, 1992). It was contended that firms lacking appropriate growth opportunities, announcements of increase, or reduction in capital investments could have a negative or positive impact on the return of the shareholders. In this regard, Tobin's q is often considered a measure of the growth opportunities for firms. It is defined as the market value for a firm standardized by the replacement cost of its assets (Desai et al., 2011). Firms often lack growth opportunities due to the limitations and disturbances in their external environment, such as location in declining industry niches. Desai et al. (2011) estimated Tobin q for the year ending just before the capital investment announcement, while the dependent variable considered was the abnormal return of the firm. The findings suggested that standardized abnormal stock returns were positively influenced by high q (>1) increase in capital investment dummy and negatively by high q (>1) decrease in capital investment dummy (Desai et al., 2011). The hypothesis that has been tested based on growth opportunity is:

*H3:* Top-management initiated decisions related to SID can independently and significantly predict financial performance and growth opportunities of firms.

#### Total Assets Growth Rate and its relation to SID

The total assets growth rate is another measure of the financial performance of firms based on strategic investment decisions. The evidence suggests that firms experience low returns after periods of higher growth in assets due to mispricing and optimal investment. One study examined 26 emerging markets during the period 2005 to 2013 that included the fluctuations in the global financial crisis (Alkaraan, 2015). The study found a stronger effect on asset growth during the years of crisis compared to other years. The effect was also stronger for firms with small and medium stock turnover and firms operating with industries with small R&D intensity. These findings once again suggested that R& D intensity, which is a marker of pre-decision control for strategic investment decisions and growth opportunities of a firm, significantly influences asset growth. The study further explained that asset growth has been perceived for emerging markets only and that too during the years of financial crisis even with low protection for the shareholders and creditors. The authors explained the paradox based on the mispricing hypothesis (Alkaraan, 2015). The hypothesis developed based on solely financial performance and SID is:

*H4:* Financial analysis parameters related to SID can independently and significantly predict financial performance and growth opportunities of firms.

### Strategic Investment Decision and Financial Performance of Firms

In one study, Kaur and Kaur (2019) reported that strategic investment decisions impacted the market value of firms and firm-specific variables. Their report based on BSE-500 firms that include the companies enlisted with the Bombay Stock Exchange in India. The authors explored 581 strategic investment decisions of 217 firms that were sorted into seven categories. Kaur and Kaur (2019) concluded that SID provides a positive signal to the investors because they perceive value with the announcements of such decisions. Researchers estimated the proportion of firm value that is contributed by the growth options, and the relationship between Growth Option Value (GOV) to corporate investments. Tong et al. (2012) reported that Tobin's q is significantly correlated positively with corporate firm performance and GOV (p<0.001). Kaur and Kaur (2019) showed that firm-specific variables were a major moderator for attracting investments with the announcement of strategic investment decisions. These findings implicated that the financial performance of firms is not directly driven by strategic investment decisions but by their interaction with Tobin's q or growth opportunities.

Hundal et al. (2020) explored various SID parameters such as level and nature of directorships, market capitalization, debt-to-equity ratio, trade intensity, and R& D parameters. Hundal et al. (2020) showed that median directorship level was negatively related to Tobin's q while promoter's ownership proportion and promoter Director's proportion, market capitalization, and trade intensity significantly influenced Tobin's q. However, only foreign directorship and R& D activities were significantly related to Market to Book value ratio, which is a measure of corporate firm performance. On the other hand, ROA was influenced by market capitalization and directorship level. These findings suggested that the SID parameters such as managerial control (directorship level), R&D activities, and financial analysis variables (market capitalization and trade intensity) significantly influenced growth opportunities of firms as well as corporate firm performance parameters. Hence, the financial performance of firms is significantly driven by various financial and the non-financial parameters as a part of the strategic investment decision. The hypothesis developed based on financial performance and SID on a holistically is:

**H5:** Strategic planning, financial analysis, middlemanagement, and top-management related parameters together can predict financial performance and growth opportunities of firms

# **Data and Methodology**

The study based on quantitative data, involving both primary and secondary data resources. The primary data has been used as survey responses while secondary data included extant literature, annual reports and share market data. A survey has been conducted in Pakistani-listed manufacturing firms during March-June 2018. The survey has been collected via personal visits to companies' head offices, and an e-mail invitation request has been sent. A total of 190 companies was approached from 142 companies responded from which 128 were valid responses. So, the response rate was 67.36%. All the participants were directly engaged in the strategic decision-making process. Further, an analysis made about the financial performance indicators based on financial statement data; change figures has been obtained from 2017 and 2018. Data related to gross revenue variations, Net profit fluctuations, equity changes, and overall asset changes has been taken from annual reports of the companies. Finally, to view the market changes, the stock market price change from July 2017 to September 2019 was taken as a key variable.

Respondents answered the questions in the survey questionnaire using the Likert scale values from 1 to 5(1 =strongly disagree to 5 = strongly agree). The survey data has been first analysed by using the SPSS 24 for correlation and for exploratory factor analysis (EFA). The inferential statistics for the present study include different logistic regression models with parameters for the financial performance of firms (revenue growth rate, total assets growth rate, and share price growth) and growth opportunities of the firms (Tobin's-q proxy and probability growth rate) as the dependent variables and SID parameters (financial analysis, middle management, top management, and strategy planning) as the independent variables. Four sets of regression models have been considered for the analysis: log-log regression model, log-linear regression models, linear-log regression models, and linear-linear regression models. All sets have been used to explain all possible perspectives of the analysis.

#### Variable (dependent and independent)

There are following dependent and independent used in this study:

Table 1. Dependent Variables (D)
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Variable(Financial	Definition				
parameters)					
Profitability Growth	Ratio of difference of net profit				
Rate (PGR)	2018 & 2017 to net profit 2017				
Revenue Growth Rate	Ratio of difference of sales				
(RGR)	2018& 2017 to sales 2017				
Total Assets Growth	Ratio of Assets growth with				
Rate (TAGR)	time				
Tobin Q-Proxy (TQP)	Sum of market value of equity				
	plus book value of debt, divided				
	by book value of assets.				
Share Price Growth	The growth June 2017 to				
Rate (SPGR)	September 2019				

Table2. Independent Variables (IV)

Variable (Non-Financial parameter)	Explanation
Strategy(F1)	Strategies divided into sections; a, b, c, l and n
Middle Management (F2)	Managers sections; e, f, & g
Financial Analysis (F3)	Finance sections; h, i and k
Top Management (F4)	Top managers sections; d, j and m

# Results

The regression models that have been tested in this study are based on this equation:

Y = B1 + B2\*X1 + B3\*X2 + B4\*X3 + B5\*X4

Where, Y = PGR, RGR, TAGR, TQP, SPGR (separate dependent variable for each regression model), and where B1 to B5= standardized beta coefficients, and where

X1= Strategy, X2= Middle Management, X3= Financial Analysis, and X4= Top Management factor.

There are the following results study has drawn based on field survey, annual report and share market data.

 Table 3. Descriptive statistic: Parameters of Strategic

 Investment decision-making

Factors	Mean	Std. Deviation	Analysis N
SP1	3.945	0.776	128
SP2	3.890	0.805	128
SP3	3.460	1.163	128
SP4	3.843	0.942	128
SP5	3.406	0.951	128
IM1	2.890	1.275	128
IM2	3.179	1.139	128
IM3	3.125	1.019	128
FA1	3.812	0.858	128
FA2	3.851	1.035	128
FA3	3.945	0.881	128
ITM1	4.039	1.022	128
ITM2	3.960	1.037	128
ITM3	3.656	0.917	128

The descriptive statistics have indicated that the participants perceived decision from the top management as the major driver of SID (mean =4.03), while it was lowest for those mediated by the middle management (mean=2.89). On the other hand, certain strategic planning parameters and financial analysis parameters have been also considered as important to top management decisions for driving SID (mean: 3.94 versus 4.03). The independent variables were sorted into different categories of SID (financial, strategic, middle management, and top management) through principal component analysis and factor loadings. The exploratory factor analysis (EFA)for PCA and factor loadings were carried out based on the outputs of the KMO and Bartlett's tests (Table 2).

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Kaiser-Meyer-Olkin	0.57	
Sampling Adequacy.		
Bartlett's Test of	654.94	
Sphericity	Square	
	df	91
	Sig.	.000

As the KMO was >0.5, it is contended that the 14 independent variables could be sufficiently sorted into principal components such as financial analysis, strategic planning, middle management, and top management parameters. Similarly, the level of significance of Bartlett's test (p<0.05) suggested that the correlation matrix between the independent variables is not an identity matrix. Hence,

the independent variables have been considered for the study are adequate for structure detection. These assumptions further substantiated the rationality for EFA.

Table 5. Component Matrix for Factor Loadings

Variable	F1	F2	F3	F4
ITM3	0.781			
IM2	0.765			
IM1	0.702			
IM3	0.545	0.542		
SP2		0.824		
SP3		0.778		
SP1		0.632	0.424	
FA1		0.519	0.466	
ITM2			0.853	
ITM1			0.801	
FA3			0.420	
SP5				0.725
SP4				-0.662
FA2				0.584
Eigenvalues	2.653	2.468	2.089	1.602
Proportion				
of variance	18.95	17.632	14.923	11.443
explained				

Factor loadings carried out with the correlation matrix helped to identify the set of independent variables that could explain each of the principal components distinctly and significantly. The factor loadings for the different independent variables (table3) sorted the 14 independent variables into strategic planning variables (n=5), middlemanagement level variables (n=3), financial analysis variables (n=3), and top management level variables (n=3) (table 3). The factor loadings for the respective variables have suggested that strategic investment decisions are largely biased on strategic planning parameters rather than on management decisions or the financial performance of the firms.

#### **Regression** Analysis

Table 6: Log-Log regression parameters of SIDM and their influence on corporate financial performance.

IV	PGR	RGR	TAGR	ТОР	SPGR
11	0.163	0.885	0.256	0.455	0.061
F1	(1.41)	(-0.14)	(1.14)	(0.75)	(2.92) *
F2	0.317 (-1.01)	0.820 (0.23)	0.361 (-0.92)	0.637 (-0.47)	0.065 (-2.86)*
F3	0.876 (0.16)	0.978 (0.03)	0.801 (-0.25)	0.533 (-0.63)	0.115 (2.10)
F4	0.928 (-0.09)	0.831 (-0.24)	0.210 (-1.26)	0.550 (-0.60)	0.890 (0.15)
Constant	0.199 (-1.30)	0.004 (-2.93) ***	0.015 (-2.48) **	0.109 (-1.62)	0.058 (-2.99)*
$\mathbb{R}^2$	0.027	0.002	0.033	0.019	0.751
Adjusted R <sup>2</sup>	0.025	0.042	0.008	0.026	0.419

The log-log regression models considered a logarithmic transformation of the values of both the dependent variables and independent variables. However, the log-log models depicted that share price growth rate is the only dependent variable that has been found influenced by strategy parameters and middle-management related parameters. Whereas four out of the five parameters for firm growth or corporate firm performance (PGR, RGR, TAGR, and TQP) are not related to the SID parameters which is quite unlikely as per the existing literature. While the former has a positive influence on SPGR, the latter shows a negatively influenced SPGR (B=2.93, p<0.1 and B=-2.8, p<0.1, respectively). However, the level of significance of the referred relationships is very weak as they are significant at the level of 0.1. These findings are not surprising because the logarithmic transformations of the independent variables might have lowered their effect size on the dependent variables. These assumptions are further substantiated by the coefficient of determination values (R-square and adjusted R-square) which are extremely low as well as the significance level of the constants of the regression analyses that have been found to be significant in most of the models (table 4). The R-square and adjusted R-square values for the various log-log models range from 0.2% to 75% and 0.8% to 41.9%, respectively which suggested that the goodness-of-fit of the models for the sample and population have been low to moderate. Although the goodness-of-fit parameters were low for the referred regression models, it could be contended that the models are specific to the industry segment that was considered in this study.

Table 7: Log-linear regression SIDM parameters influence on corporate financial performance

IV	PGR	RGR	TAG R	TQP	SPGR
	0.050	0.598	0.323	0.592	0.064
F1	(1.99)**	(-0.53)	(0.99)	(0.54)	(2.88)*
F2	0.337 (-0.97)	0.548 (0.60)	0.362 (-0.92)	0.998 (0.02)	0.074 (-2.69)*
F3	0.787 (0.27)	0.986 (-0.02)	0.754 (-0.32)	0.609 (-0.51)	0.142 (1.98)
F4	0.896 (0.13)	0.864 (-0.17)	0.150 (-1.45)	0.566 (-0.58)	0.935 (-0.09)
Constant	0.071 (-1.84) *	0.004 (-2.98) ***	0.022 (-2.33) **	0.67 (-1.85)*	0.056 (-3.04)*
R <sup>2</sup>	0.051	0.006	0.036	0.013	0.749
Adjusted R <sup>2</sup>	0.001	-0.037	-0.004	-0.033	0.415

In the first regression model with PGR as the dependent variable, it depicts that strategy parameters significantly influence PGR at the 0.01 level of significance. On the contrary, the constant of the regression model is significant only at the 0.1 level of significance. This finding suggests that the chances of other SID parameters affecting PGR apart from those considered in the regression model are minimal. Hence, it could be inferred that strategy planning parameters related to SID could independently and significantly predict PGR value of firms (p < 0.05). However, it might not be conclusively inferred that the SID parameters that have been considered for the first regression model could together (holistically) influence PGR because the constant of the regression model is almost significant (p<0.1). In the second regression model with revenue growth rate as the dependent variable, none of the SID parameters that have been considered in the regression model seem to influence RGR either independently or holistically. The findings are further substantiated by the level of significance of the constant of the second regression model which are less than 0.01. Therefore, it has been inferred that there could be other SID parameters apart from those considered in the regression analysis to have influenced RGR. The findings with the third and fourth regression models that considered TAGR and TQP as the dependent variables are like RGR. These findings imply that SID parameters (that were considered in this study) cannot significantly predict RGR, TAGR, and TQP.

However, an interesting finding has been noted with Tobin's-q Proxy (TQP). The finding is substantiated by the almost significant level of the constant (p<0.1) which implied that there could be other SID parameters apart from the ones considered in this study that might predict TQP. These assumptions are not surprising because previous studies have shown that TQP is strongly related with the SID parameters as well as with the financial performance of firms (Tong, 2012). Nevertheless, the relationship between the independent variables and SPGR that observed with the loglog linear models has been maintained in the log-linear regression model too. Hence, it could be inferred that middle management level and strategy planning parameters significantly influenced SPGR. The R-square values for the various log-linear models range from 0.6% to 75% which suggested that the goodness-of-fit of the models for the sample and population have been low to moderate.

Table 8: Linear-log regression output of parameters of SIDM and influence on corporate financial performance

IV	PGR	RGR	TAGR	TQP	SPGR
F1	0.310	0.067	0.775	0.899	0.270
	(1.02)	(-1.85)*	(-0.29)	(-0.13)	(-1.11)
F2	0.209	0.028	0.392	0.131	0.694
	(1.26)	(2.23)**	(0.86)	(-1.52)	(0.39)
F3	0.832	0.096	0.245	0.744	0.433
	(0.21)	(-1.68)*	(-1.17)	(0.33)	(-0.78)
F4	0.773	0.880	0.208	0.021	0.584
	(0.30)	(-0.15)	(-1.27)	(-2.3)**	(-0.55)
Constant	0.697	0.064	0.012	0.011	0.179
	(0.39)	(1.87)*	(2.54)**	(2.59)*	(-1.35)
<b>R</b> <sup>2</sup>	0.018	0.054	0.035	0.067	0.019
Adjusted R <sup>2</sup>	-0.015	0.022	0.003	0.035	-0.014

On the contrary, the linear-log model (table 6) depicts that the p-value of the ANOVA is significant at the level of 0.1 (p=0.082) for the regression of RGR on the independent

variables. The beta-coefficients for the respective regression model further shows that middle management level attributes significantly and positively influence RGR along with financial analysis parameters and strategy parameters both of which negatively and significantly influence the RGR. The linear-log regression models further depict that top management level attributes significantly influenced TQP but in a negative manner. It could be possible that the decisions taken by the top management might not have been successful for the desired or timely growth of the companies that were considered in this study. Nevertheless, the regression of TQP on the SID variables in the linear-log model confirmed the role of managerial control decisions in ensuring the growth of the company. The linear-log model substantiates the hypothesis that strategic planning, financial analysis, middle-management, and top-management related parameters could holistically predict the RGR of firms (p<0.05).

The referred model also substantiates the hypothesis that top-management initiated decisions related to SID could independently and significantly predict growth opportunities of firms (p<0.05). The regression model of TQP on the SID parameters exhibited that the constant was significant at the 0.1 level, which suggests that there could be other SID parameters that could have influenced the TQP of the firms. Such assumptions are not surprising because Tong (2012) showed that growth opportunities are often a complex function of market value and capital investment. However, such parameters are not included in this study. The R-square and adjusted R-square values for the various linear-log models range from 1.2% to 6.7% and -0.014% to 2.2%, respectively which suggested that the goodness-of-fit of the models for the sample and population have been very low.

Table 9: Linear-Linear regression parameters of SIDM and their influence on corporate financial performance

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IV	PGR	RGR	TAGR	TQP	SPGR
<b>F1</b>	0.266	0.162	0.871	0.817	0.468
ГІ	(1.12)	(-1.41)	(-0.16)	(-0.23)	(-0.73)
БЭ	0.200	0.060	0.397	0.193	0.825
ГД	(1.29)	(1.90)*	(0.85)	(-1.31)	(0.22)
E2	0.968	0.108	0.384	0.588	0.618
r s	(0.04)	(-1.62)	(-0.87)	(0.54)	(-0.50)
<b>F</b> 4	0.619	0.694	0.164	0.042	0.397
F4	(0.50)	(-0.39)	(-1.40)	(-2.06)	(-0.85)
Constant	0.701	0.071	0.026	0.040	0.123
Constant	(0.39)	(1.82)*	(2.26)**	(2.08)	(-1.55)
$\mathbb{R}^2$	0.022	0.050	0.033	0.047	0.014
Adjusted	-	0.018	0.001	0.014	-0.019
$\mathbf{R}^2$	0.011	0.010	0.001	0.014	-0.019

Whereas, the linear-linear regression models (table 7) exhibit only one substantial level of significance for the individual beta-coefficients between RGR and middle management which has shown it significance in linear log model as well. This result shows that middle management performance has impact revenue growth rate. The other SID

parameters and corporate performance parameters have not shown any significance. Further, the adjusted  $R^2$  of two models is negative which means that profit growth rate and share price growth rate models have very low explanatory power. This problem can be addressed in future results by examine these variables again or further increase the number of responses. Hence, it is justified to conduct regression models without logarithmic transformations of the SID and financial performance parameters. Finally, the evidence suggests that SID parameters often influence various financial parameters of firms, such as return on assets, return on equity, total assets, and net profit margin.

# Discussion

Various contextual factors influence strategic investment decisions that range from organizational to managerial and from financial to leadership (Alkaraan & Northcott, 2013). Studies suggest that the type of investment decision significantly influences the outcomes of SID. For example, new business investments and marketing investments are less rational compared to capital equipment investments and restructuring of the organization for assessing the outcomes of SID (Atik, 2012). As most of the SID parameters are often based on intangible measures, incomplete information leads to decision uncertainties to influence SID (Desai et al., 2011). The uncertainties might increase the procedural rationality of decisions as there could be a need for or undertaking sophisticated financial analysis and greater information-seeking behavior. Firms with high decision uncertainty reduce procedural rationality. In the present study, the regression model of RGR on SID parameters depicted a negative relation between the two. Therefore, it could be possible participants might have questioned the procedural rationality of the investment decisions, which could have impacted SID and the financial performance of firms (Alkaraan, 2015).

The literature suggests that the strategic objectives or corporate policies of an organization drive the SID process (Alakaraan & Northcott, 2013, Hundal, 2017). Such evidence was substantiated in this present study because orienting with the corporate policies and moving towards a competitive advantage could be considered a function of the top management level. In the linear-log regression models, it was observed that top management level attributes might not have influenced the financial performance of the firms directly in terms of RGR, TAGR, and SPGR but it influenced Tobin's q proxy. Therefore, it could be postulated that corporate policies at the top management level influence growth opportunity of the firms, which then influences the financial performance of the firms, especially over the long run (Tong et al., 2012). In the present study, the financial parameters for SID did not influence financial performance parameters of the firms (except for revenue growth rate) independently and significantly. Even for RGR, the financial analysis parameters could have interacted with other SID

parameters such as middle management and strategy parameters to influence RGR (p=0.082). These findings suggested that the necessity of non-financial parameters in SID.

Top management level attributes such as qualification. experience, risk-taking qualities also influence strategic investment decisions. These assumptions were substantiated by the present study, which showed that top management level attributes negatively influenced Tobin's q Proxy. The type of directorship significantly impacted the financial performance of firms mostly by moderating the growth parameters (Alkaraan & Northcott, 2013). It was further revealed that firm size often interacted with the type of directorship in influencing the SID and financial performance of firms. One study showed that foreign directors significantly influenced corporate firm performance when the size of the firm was large. These findings are a clear indication that autonomy and predecision control of the top management might be a significant determinant of SID and the financial performance of the firms (Alkaraan & Northcott, 2013). From the perspective of the present study, it could be contended that the top management level did not have adequate autonomy or engaged in pre-decision control to influence either the growth opportunities or the financial performance of the firms. Such assumptions were further substantiated by the observation that the middle management level attributes significantly influenced share price growth rate and revenue growth rate.

Moreover, it is contended that SID is not only the results of rationality but is a function of various and sequential choices made by different actors under different contexts at different levels and for different objectives (Alkaraan & Northcott, 2013). With such assumptions, the CEO is often considered the major actor for SID related to mergers and acquisitions, but it is up to the decision-making process of the middle-management level to ensure that the corporate decision of a merger or acquisition remains successful in the long run in terms of financial performance over the long run. The present study reported a novel finding in relating the type of managerial control in the SID process and the fiscal or growth parameters of the firm that they are likely to influence. The present study identified three financial performance parameters for assessing SID; revenue growth rate, share price growth rate, and Tobin's q proxy. Since these estimates are often a function on the return on assets and net profit margin, the findings of the present study on the fiscal performance as estimates of SID are reliable and reproducible irrespective of the size of the firms. However, the present study depicted novel findings in terms of relating the financial performance parameters with specific SID.

The present study did not explore the interaction between the strategic investment decisions, which translate into financial performance or growth opportunity of the firms. Nevertheless, the study is in line with the postulate that strategic investment decisions are not only a function of sound economic analysis coupled with the development of managerial judgments and business excellence but also to intuitive decisions of the stakeholders that ensure economic rationality of such decisions. The survey data presented in this study identified the dynamics of strategic investment decisions in Pakistani firms and their correlates on corporate firm performance. The findings suggested that Pakistani firms need to strengthen its top management level based strategic investment decisions, which could promise growth of the firms over the long run for attracting investments from the investors. The firms should also focus on strategic parameters and improve the proficiency of middle management level to ensure a steady growth in the share prices. The present study provided a comprehensive picture on the non-financial parameters of SID that are determinants of corporate financial performance in Pakistani firms. The study could add to the literature regarding the impact of SID on novel parameters for gauging the financial performance of Pakistani firms.

# Conclusion

The present study showed that strategic investment decisions include a combination of financial and nonfinancial parameters. The non-financial parameters such as managerial control, management level, and strategic planning either alone or in combination with financial parameters (financial analysis) influences corporate firm performance as well as the growth opportunities of the firm. The study has shown that the growth opportunities of a firm are more controlled by the top management level compared to the middle-management level. The study further depicts that financial analysis as a SID parameter might not independently predict firm performance. However, the observation might be applicable to the Pakistani firms only because the study did not include corporate firms from other nations. Nevertheless, the present study is first of its kind to evaluate the non-financial parameters of SID that are determinants of corporate firm performance in Pakistani firms. The study suggested that firms need to strengthen its top management based strategic investment decisions which could promise growth of the firms over the long run. These findings could aid the recruitment of senior professionals when the corporate firms are aiming to grow by inculcating competitive advantage.

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