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Abstract

handling by concentrating on two competing strategies—Defenders and Prospectors. Multiple

The findings also demonstrate how business strategy affects cash holdings and firm value, complementing previous research on Pakistani firms.

Keywords: Cash holding, Defenders, Prospectors, Speed of Adjustment SOA.

Introduction

Cash is considered an important asset. Worldwide, many companies have increased their cash holdings. According to Deloitte's report, "2.8 trillion of cash is griped by the top 1000 non-financial firms, globally". In finance, cash holding is grasping attention day by day. More specifically, corporations mention a specific amount in the balance sheet. According to Azmat (2014), In US-traded firms, cash plus securities of the market exceed 13% of whole assets. Value and demand for money depend on the environmental changes in the firm, either internally or externally. Since the value of cash does not remain constant. There is no doubt that for the maintenance of liquidity, firms choose cash holding (Almeida et al., 2014). The earliest study by (Opler et al., 1999) has motivated other scholars to study the factors of cash holding. While beside this increased interest, there is always a scarcity of research on explaining scientific journals from an international viewpoint (Da Cruz et al., 2019).

Military heritage was the first to introduce the business strategy. Later, it gained popularity in daily newspapers and journals by combining investment, corporate, and advertising strategies. Business strategy develops companies of different sizes and shapes. It leads to a difference that can move the company towards success. Business strategy has two main approaches: structure-conduct performance (S-C-P) and resource-based performance (R-B-P) Veliyath et al., (1994)—a firm acts as a legal entity, a customer and a supplier.

Customer for the inputs and supplier of goods and products. If it acts like a customer, it will focus on optimising consumer surplus, and as a supplier, it will optimise the revenues. That firm's management directly influences its capability to increase its value. For investment in a firm, investors look after two main things: firm value and profitability. The managers must manage the funds that the investor invests in the firm to gain profitability or for its increment. The investment return and dividend payment from the firm's profitability can both be indicators of a firm's capability. Firms with increased profitability are more accepted to invest than those with decreased profitability. According to (Hambrick, 1983), if a firm's forecasts are good as if it has high profitability, it will create a positive sentiment for shareholders that the firm's value is good. Firms profit is courage for the company's investors still. Investors also want to know about what is future expectations.

According to the trade-off hypothesis of (Eaton & Kortum, 2012), corporations seek to balance the benefits of debt financing (such as tax breaks) with the costs (such as bankruptcy and agency charges). Conferring to (Hasan et al., 2015), the pecking order hypothesis, because of asymmetric information costs, businesses have a hierarchy of preferred finance sources, favouring internal financing (retained earnings) above external financing (debt and equity).

This study explores the relationship between business strategy, cash holding, and firm value in Pakistani companies. While extensive research exists in developed countries like the United States, there is a significant gap in understanding this relationship in developing economies like Pakistan. The study investigates whether Pakistani firms classified as prospectors tend to hold more cash than defender firms. Additionally, it aims to determine whether the market value is higher for defender or prospector firms and whether defender firms have lower actual-to-targeted cash holding. In developed economies, prospectors and defenders have well-defined business strategies, with prospectors focusing on innovation and expansion, while defenders prioritise stability and efficiency. However, the implications of these strategies on cash holding and firm value in the unique context of Pakistan remain largely unexplored. This study is motivated to fill this research gap and provide valuable insights for researchers, policymakers, and practitioners in the Pakistani business environment. By understanding how business strategy influences cash holding practices and firm value, the research aims to shed light on critical aspects determining the financial health and performance of companies in Pakistan

1.2 Objectives of the study

The primary intent of this study is to examine the cash management techniques of defenders and prospectors, contrasting strategic orientations in organisations. The examination intends to ascertain if defenders often sustain more cash holdings than prospectors, who may emphasise expansion and innovation. The study also seeks to analyse the degree of nonconformity between actual and target cash holdings for both categories, emphasising whether defenders exhibit lesser departures from their target cash levels than prospectors. The research assesses which strategic group—defenders or prospectors—attains the higher market value, thereby elucidating the financial consequences of their distinct cash management strategies.

Literature Review

2.1 Business strategy and cash holding

The decision which helps the organisation for best performance are included in its business strategy. The most suitable plan for the business was provided by (Miles, 1978) and (Bentley et al., 2013). According to (Ifada et al., 2020), Business problems should be examined as how firms

create values and bring new ideas to satisfy their customers compared to competitors. As explained by (Khatib et al., 2022), the prospector's innovative products and analyses are busy understanding the basis behind the success of prospectors to improve their strategy. Down to defenders, they are not interested in taking the risk; they only enjoy the benefit of the consumer's preferences, for their best quality and less cost. (Miles, 1978) explained that prospectors bring revolution to the industry. Defenders do not focus on innovation and focus more on execution (Habib et al., 2021; Narver et al., 2004).

According to the theory (Miles, 1978), defenders and prospectors have different views, and they will maintain cash holdings according to their views; for a first research question, let us assume that a firm has a strategy, i.e. (prospectors or defenders). The different methods in both policies in market exploitation, product exploitation, and risk aversion result in the prospectors using more cash than the defenders.

H1: Prospectors collect more cash holding than a defender.

2.2 Business strategy, Cash holdings, and firm value

Cash holding's impact on firm value has been examined numerous times, but results still need to be determined. Managers always want the ideal cash holding level to increase the firm value, and if there is any difference, it will damage the firm value (Hasan et al., 2015). With trade-off theory, the optimum level of cash can be maintained; it provides a balance between holding cash and marginal benefits (Habib et al., 2021). The ordering hypothesis shows that internal financing can reduce marginal benefits (Da Cruz et al., 2019). (Bortoluzzi et al., 2020) they have explained that agency costs could also be removed by internal funding. Transaction costs can easily be removed by internal cash holding. (Hasan et al., 2015) examined how firms change their decisions by the change in stages of the firm's life cycle. Another study (Herusetya & Suryadinata, 2022) shows the negative correlation between cash holding and market worth for a firm. The study (Maury, 2022) shows that more cash holding positively affects a firm's value. This finding supports the pecking order theory; higher cash reserves can reduce the cost of irregular evidence. By merging all approaches, let us assume that cash holding value is higher for defenders than prospectors.

H2: The market value of cash holding is lower for the prospector than the defender.

2.3 Business strategy, Cash holdings, speed of adjustment (SOA)

Different readings are conducted in cash holdings to appoint the level in the trade-off theory of capital structure (Tello-Leal et al., 2018). With most of the methods and techniques, the preceding readings display that firms adjust cash according to their goal. An approach is introduced by (Opler et al., 1999), with CH-SOA significant as 26%. Firms adjust their cash to the optimum level positively, but CH-SOA is inadequate; there is always a distribution between (22% - 43%) (Dittmar & Duchin, 2015). If firms have less cash holding, the targeted manager avoids and restricts external financing and definitely will increase the SOA of cash holding.

Similarly, if an organisation has more cash holding than the optimum degree, the managers work on detecting the marginal value of cash. Moreover, the study (Orlova & Rao, 2018) spreads the work by introducing the meaning of bookkeeping for the relevance of Cash holdings SOA. In (Miles, 1978), it is explained that prospectors are involved in continuous innovation, trying to make some new big thing. They follow exploitation of the market and high cash flow instability, which leads to suffering from higher agency cost transaction costs than defenders. Thus, prospectors are assumed to need more cash, resulting in higher deviation in ideal cash levels of the firm's cash reserves.

H3: The actual target cash holding deviation is more for prospectors than defenders.

METHODOLOGY

All the companies listed in PSX are included as the population. In Pakistan Stock Exchange, there are more than 100 companies. The current study is going to use KSE-listed 200 firms from the year 2011 to 2020. Moreover, the study uses non-financial firms

3.1 Variable Description:

Variables	Indicators	Measurement
Dependent variable		
Cash holding	CASH	$\frac{\text{Cash}}{\text{Total assets}}$ (Habib et al., 2021)
Firm value (Market-to-book ratio)	MV	$\frac{\text{The market value of assets}}{\text{Total assets}}$ (Azmat, 2014)
Independent variable		
Business Strategy	BS	(Bentley et al., 2013)
Research & Development	R, D	$\frac{\text{Total expenditure on R\&D}}{\text{Sales ratio}}$ (Opler et al., 1999) $\text{Sales ratio} = \frac{\text{Sales}}{\text{Total assets}}$
Production Efficiency	P&E	$\frac{\text{No. of Employees}}{\text{Sales}}$ (Farrell, 1957)
Historical growth	HG	Yearly changes in total assets (Orlova & Rao, 2018)
Market efforts and commitments	MC	$\frac{\text{Selling \& Admin expense}}{\text{Sales ratio}}$ (Narver et al., 2004)
Stability	ST	S. D (no. of employees) (Maury, 2022)
Technological efficiency	TI	$\frac{\text{Property, Plant and Equipment}}{\text{Total assets}}$ (Sun et al., 2021)
Control variable		
Leverage	LEV	$\frac{\text{Total debts}}{\text{Total assets}}$ (Kalcheva & Lins, 2007)
Net working capital to assets	NWC	$\frac{\text{Current assets} - \text{cash} - \text{current liabilities}}{\text{Total assets}}$ (Salehi et al., 2020)
Cash flow to assets	C.FLOW	$\frac{\text{Total debts}}{\text{Total assets}}$ (Opler et al., 1999)
Firm Size	SIZE	Natural logarithm of total assets (Shoham & Lev, 2015)

R&D to sales	R, D	$\frac{\text{R\&D Expenses}}{\text{sales}}$ (Opler et al., 1999)
Capital expenditures to asset	CAPEX	$\frac{\text{Capital expenditure}}{\text{Total assets}}$ (Ferreira & Vilela, 2004)
Debt issuance	DI	$\frac{\text{long term debts}}{\text{Total assets}}$ (Fernandes & Gonenc, 2016)
Equity issuance	EI	$\frac{\text{Total equity}}{\text{Total assets}}$ (Bentley et al., 2013)
Herfindahl-Hirschman Index	HHI	The sum of squares of all market shares (Ifada et al., 2020)
Industry cash flow risk	IR	Average variance of firm cash flow (Queku et al., 2022)
Dividend dummy	DIV	for a year in which the dividend is paid and 0 for unpaid (Opler et al., 1999)
Loss dummy	LOSS	1 when ROE is negative, 0 when ROE is positive (Jiraporn et al., 2011)

3.2 Statistical model:

3.2.1 Business strategy and cash holding model:

The analysis is based on the findings of (Opler et al., 1999) and (Serrasqueiro et al., 2022) investigations into variables persuading a company's cash holdings. Suppose year as well as industry fixed effects are kept under control. In that case, multiple regression analysis verifies that enterprises utilising prospectors and defender strategies exhibit different cash-holding behaviours. We created the following model to examine how the business strategy affected liquidity.:

$$Cash_{i,t} = \beta_0 + \beta_1 Strategy_{i,t} + \beta_2 Controls_{i,t} + Industry\ fixed\ effect + Year\ fixed\ effect + \in_{i,t}$$

The coefficients $\boldsymbol{\beta_0}$ are regarded as a diversion $\boldsymbol{\beta_1}$ is used to measure business strategy, $\boldsymbol{\beta_2}$ is used to measure control variables and $\varepsilon_{i,t}$ is used to estimate errors. Cash stands for cash holdings for each firm I, and strategy indicates the appropriate composite score at time t.

3.2.2 Business strategy and firm value model:

According to research (Dittmar & Mahrt-Smith, 2007; Fama & French, 1998), the MB ratio is a dependent variable in multiple valuation studies linking accounting net worth to firm market value. To be more precise, control variables are used to regress company value on a cash basis. The model is described as follows and takes into account how the cash ratio has changed during the previous and coming year:

$$M_{i,t} = \beta_0 + \beta_1 Cash_{i,t} + \beta_2 dCash_{it-1} + \beta_3 dCash_{i,t+1} + \beta_4 Strategy_{i,t} + \beta_5 Strategy_{i,t-1} + \beta_6 Strategy_{i,t+1} + \beta_7 Controls_{i,t} + \beta_8 Controls_{i,t-1} + \beta_9 Controls_{i,t+1} + Industry\ fixed\ effect + Year\ fixed\ effect$$

The dependent variable, $\mathbf{M_{i,t}}$ Symbolises the company's market value, represented by the market-to-book ratio. $\mathbf{Cash_{i,t}}$, represents current cash holding. However, the previous 1-year change in the firm's cash levels is shown by $\mathbf{dCash_{i,t-1}}$, and upcoming 1-year changes in the company's cash levels are represented by $\mathbf{dCash_{i,t+1}}$.

3.2.3 Business strategy and speed of adjustment of cash holdings:

A 2-step approach GMM estimator is used in this study to analyse SOA and cash holdings independently, following the studies of (Blundell & Bond, 1998; Orlova & Rao, 2018). The resulting model depicts the dynamics of holding cash by modelling the speed of adjustment towards an endogenously defined goal cash ratio:

$$Cash_{i,t} = \alpha_0 + (1-\alpha) Cash_{i,t-1} + \beta_1 Strategy_{i,t-1} + \beta_2 Controls_{i,t-1} + Industry\ fixed\ effects + Year\ fixed\ effects + \in_{i,t}$$

$\mathbf{Cash_{i,t}}$ Represents the cash reserve that varies from a time previous **t-1** to current **t**, and $\mathbf{Cash_{i,t-1}}$ Represents the actual cash ratio of the firm and the year **t**. The speed of adjustment for an optimal ratio is shown by the coefficient (1-a), which ranges from 0 to 1 and measures a firm's capacity to modify the optimal cash reserve from its target cash reserves. The SOA is the percentage change among target cash and earlier measured cash over time.

Analysis

4.1 Descriptive Statistics

The descriptive statistics of 958 observations are shown in Table 1. According to the descriptive statistics of Table 1, Cash and cash equivalents account for 42% of total assets in the analysed companies, with a standard deviation of 76%. Regarding independent variables, the average leverage ratio of businesses between 2011 and 2020 was 61.6%, indicating that businesses primarily used internal funds rather than loans to finance their operations or expansionary activities. While average capital expenditures represent 76.1% of total assets, the short-term liquid asset growth rate measured by net working capital is only a tiny 0.8%. The average R&D intensity per firm is 2.9%, and the market value of a firm is 72 times the book value of its assets.

4.1.1 Table 1 Overall Firms

Variable	Obs	Mean	Std. Dev.	Min	Max
CASH	951	0.042	0.076	0.000	0.576
BS	738	18.783	3.547	8.000	30.000
LEV	952	0.616	0.411	0.045	2.459
NWC	952	0.008	0.399	-1.831	0.797
C.FLOW	952	0.036	0.113	-0.316	0.395
SIZE	952	15.307	1.763	8.785	20.179

MV	899	0.727	1.001	0.000	5.567
R, D	871	0.029	0.189	0.000	1.519
CAPEX	950	0.761	0.424	0.000	2.567
ROA	952	0.040	0.087	-0.256	0.304
LOSS	970	0.329	0.470	0.000	1.000
HHI	952	0.183	0.147	0.000	1.000
IR	952	-0.231	5.920	-28.431	28.609
DIV	958	0.462	0.499	0.000	1.000

Note: Based on the average of 952 observations, this table represents the descriptive statistics of overall firms

The following table shows the descriptive statistics for the firm using the defender's strategy. The table consists of 265 observations. Firms employing the defender's strategy had cash and cash equivalents totalling 6.5% of total assets, with a standard deviation of 9.3%, smaller than the general business statistics of 42%. The average leverage ratio was 54.3%, with a minimum value of 0.45 and a maximum of 2.45, showing that companies rely on internal and external funding. Capital expenditure shows 54.6% of its total assets, while liquid assets are 14% measured by net working capital. While R&D intensity is 1%, these firms move with the same strategy and are not involved in innovation.

4.1.2 Table 2 Defenders

Variable	Obs	Mean	Std. Dev.	Min	Max
CASH	265	0.065	0.093	0.001	0.420
BS	265	15.049	1.788	8.000	17.000
LEV	265	0.543	0.235	0.045	2.459
NWC	265	0.140	0.272	-1.831	0.797
C.FLOW	265	0.059	0.111	-0.316	0.395
SIZE	265	15.573	1.561	11.449	19.192
MV	256	0.906	1.096	0.000	5.567
R, D	265	0.001	0.010	0.000	0.116
CAPEX	265	0.546	0.274	0.000	1.419
ROA	265	0.054	0.079	-0.256	0.304
LOSS	265	0.219	0.414	0.000	1.000
HHI	265	0.174	0.095	0.000	0.638
IR	265	-0.421	5.216	-28.431	28.609
DIV	265	0.555	0.498	0.000	1.000

Note: Descriptive statistics for financial variables based on a sample of 265 observations, including cash-scaled dividend, book-to-market ratio, leverage, net working capital, cash flow, firm size, market-to-book ratio, return on assets, and more.

Table 3 represents the descriptive statistics of the firms with prospector strategy. Two hundred thirty-six observations are shown in this table. These firms' cash and cash equivalent is 25% with a standard deviation of 4%, which shows that the prospector's strategy firms have more cash than the defenders. The average leverage ratio is 60.9%, which means firms mainly rely on internal financing. From its total assets, the firms have 88.5% capital expenditure while the net working capital is (56%) which shows that the firm's current assets are not enough to pay all its current liabilities.

4.1.3 Table 3 Prospectors:

Variable	Obs	Mean	Std. Dev.	Min	Max
CASH	236	0.025	0.040	0.000	0.215
BS	236	22.754	1.886	21.000	30.000
LEV	236	0.609	0.399	0.045	2.459
NWC	236	-0.056	0.323	-1.276	0.797
C.FLOW	236	0.019	0.107	-0.316	0.387
SIZE	236	15.444	1.61	11.695	20.179
MV	229	0.665	0.977	0.000	5.567
R, D	236	0.093	0.335	0.000	1.519
CAPEX	236	0.885	0.370	0.000	2.567
ROA	236	0.028	0.086	-0.256	0.304
LOSS	236	0.381	0.487	0.000	1.000
HHI	236	0.196	0.178	0.031	1.000
IR	236	0.117	6.434	-28.431	28.609
DIV	236	0.386	0.488	0.000	1.000

Note: This table represents Summary statistics for financial variables from a dataset of 236 observations, such as cash scaled dividend, book-to-market ratio, leverage, net working capital, cash flow, company size, market-to-book ratio, return on assets, and more.

4.2 Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1. CASH	1.000													
2. BS	0.263*	1.000												
3. LEV	-0.030	0.123*	1.000											
4. NWC	0.289*	0.294*	0.772*	1.000										
5. C.FLOW	0.344*	0.183*	0.418*	0.483*	1.000									
6. SIZE	0.132*	-0.023	0.188*	0.042	0.129*	1.000								
7. MV	0.351*	0.158*	0.142*	0.333*	0.508*	-0.043	1.000							
8. R, D	0.109*	0.206*	0.094*	0.101*	0.136*	0.131*	0.322*	1.000						
9. CAPEX	0.143*	0.456*	0.455*	0.482*	0.301*	0.186*	0.155*	-0.041	1.000					
10. ROA	0.259*	0.162*	0.415*	0.473*	0.960*	0.202*	0.428*	0.097*	0.279*	1.000				
11. LD	0.198*	0.159*	0.400*	0.445*	0.626*	0.236*	0.239*	0.076*	0.220*	0.665*	1.000			
12. HHI	0.114*	0.019	0.049	-0.033	0.101*	-0.040	0.131*	0.024	-0.028	0.051	-0.043	1.000		
13. IR	-0.038	0.007	0.057	0.097*	0.087*	0.143*	-0.015	0.001	0.007	0.103*	0.090*	0.035	1.000	
14. DIV	0.184*	0.160*	0.381*	0.437*	0.580*	0.339*	0.232*	0.097*	0.293*	0.592*	0.589*	-0.012	-0.060	1.000

Note: This table represents pairwise correlation. For the definition of variables, refer to Table 4.1 significance of values is defined as *** p<0.01, ** p<0.05, * p<0.1

4.3 Main Results

Table 5 displays the findings of our primary investigation, considering diverse company strategies. For the overall sample, the total number of observations stood at 719, with an R-squares of 0.132, while for defenders and prospectors, the total number of observations was 845, with R-squares of 0.112 and 0.114, respectively.

The results show a positive relationship between leverage and cash ratio regarding control variables, which agrees with our prediction. (Opler et al., 1999) reported that net working capital was estimated to be negative and significant at a 1% level. This is counter to what they discovered. The results of (Opler et al., 1999) are supported by Table 5, which also reveals a positive and statistically significant correlation between cash holdings and the cash flow to assets ratio at the 1% level for the entire sample but 10% for prospectors and defenders. Our findings support past studies that the companies operating in highly uncertain cash flow industries hold onto more capital out of a precautionary purpose (Opler et al., 1999) (Bruneel et al., 2010).

Additionally, firm size negatively impacts cash holdings. Larger companies typically have better Credit ratings and more convenient access to outside funding, making it more difficult for small enterprises to raise debt (Opler et al., 1999). Results demonstrate that, at the 5% level, capital investments and acquisition activities significantly negatively influence a firm's cash holdings.

On the other hand, the market-to-book ratio's estimated coefficients are negative and insignificant for the overall sample but stood significant at a 10% level for prospectors and defenders. At the 1% level, R&D intensity is statistically significant and positive. Corporate cash holdings are also negatively impacted by net equity issuance; this effect is substantial for the total sample (5%) but not for prospectors and defenders. We discover that the HHI-measured industry competition has a positive, statistically significant impact on cash holdings. Finally, the study shows that corporate cash holdings positively correlate with dividend-payer dummies (divided) and negatively correlated with loss-payer dummies.

The estimation of prospectors is negative (-0.00230), contrary to our hypotheses. The coefficient of defenders, in contrast, is positive (0.00586). Finally, the explanatory variable estimates are consistent with previous research conclusions. Further, Table 5's findings do not support the hypothesis that defenders will pursue a more aggressive cash-holding strategy than prospectors. The general outcomes from Table 5 are displayed below.

4.3.1 Table 5 Cash holding and business Strategy

VARIABLES	(1) Overall sample	(2) Prospectors	(3) Defenders
BS	-0.000570		
	(0.000718)		
LEV	0.0278*	0.0257*	0.0249*
	(0.0153)	(0.0141)	(0.0141)
NWC	0.0618***	0.0486***	0.0485***
	(0.0146)	(0.0130)	(0.0130)
C.FLOW	0.246***	0.126*	0.124*
	(0.0808)	(0.0739)	(0.0738)
SIZE	-0.0108**	-0.0111***	-0.0118***
	(0.00444)	(0.00403)	(0.00400)
MB	-0.00443	-0.00461*	-0.00499*
	(0.00285)	(0.00265)	(0.00266)
R, D	0.00503	0.0140	0.0145
	(0.0162)	(0.0145)	(0.0145)
CAPEX	-0.0267**	-0.0232**	-0.0224**

	(0.0106)	(0.0101)	(0.00994)
ROA	-0.206**	-0.0718	-0.0675
	(0.0976)	(0.0906)	(0.0906)
LD	-0.00188	-0.00664	-0.00583
	(0.00516)	(0.00497)	(0.00500)
HHI	0.151***	0.183***	0.181***
	(0.0383)	(0.0367)	(0.0365)
IR	-0.000116	5.51e-05	6.73e-05
	(0.000249)	(0.000257)	(0.000257)
DIV	0.00323	0.00198	0.00235
	(0.00498)	(0.00490)	(0.00490)
prospectors		-0.00230	
		(0.00431)	
Defenders			0.00586
			(0.00415)
Constant	0.194***	0.182***	0.191***
	(0.0725)	(0.0658)	(0.0652)
Observations	719	845	845
R-squared	0.132	0.112	0.114
Number of code	89	93	93
Industry Effects	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes
Hausman Test	0.345	0.674	0.465

Note: The standard errors are accounted for in brackets. ***, **, *, specify significance at respective levels of 1%, 5%, and 10%.

We will examine how the business strategy affects the utilisation and value of a company's liquid assets. As shown in Table 6, a cash rupee's worth is less than one (Rs. -0.976 for the typical firm). However, it is still negligible, indicating that the value of a firm is only marginally decreased by the accumulation of cash. We divided the sample into several strategy types in columns (2) and (3) and reported each type's impact on the firm's market value. The results recommend that the cash value decreases when businesses are on the defender's strategy. The corporate cash holdings coefficient for the group of defenders is specifically negative and significant statistically at 10%; one more rupee in cash is typically worth -1.085 rupees.

However, 10% of businesses that use an innovation-oriented strategy (prospectors) provide statistically significant proof. The cash value also decreased to -1.102, but the decrease in defenders was lower than that of prospectors, which supports our second hypothesis. This means that the market value of cash holdings for defenders is higher.

4.3.2 Table 6: The firm value of cash and business strategy

VARIABLES	(1) Overall	(2) defender	(3) Prospectors
CASH	-0.976	-1.085*	-1.102*
	(0.692)	(0.654)	(0.655)
L.CASH	0.444	0.381	0.383
	(0.634)	(0.569)	(0.570)
F.CASH	-0.545	-0.847	-0.853
	(0.663)	(0.615)	(0.618)
BS	-0.00139		

	(0.0125)		
L.BS	0.00689		
	(0.0114)		
F.BS	0.0198*		
	(0.0113)		
LEV	0.308	0.0636	0.0710
	(0.273)	(0.233)	(0.235)
NWC	0.209	0.0773	0.0922
	(0.271)	(0.213)	(0.215)
C.FLOW	4.614***	4.725***	4.646***
	(1.343)	(1.175)	(1.184)
SIZE	-0.637***	-0.460***	-0.461***
	(0.0809)	(0.0671)	(0.0686)
R, D	1.290***	1.595***	1.583***
	(0.247)	(0.234)	(0.238)
CAPEX	-0.129	-0.143	-0.155
	(0.170)	(0.153)	(0.155)
ROA	-2.198	-2.879**	-2.701*
	(1.609)	(1.453)	(1.463)
LOSS	-0.00746	0.0582	0.0458
	(0.0856)	(0.0781)	(0.0780)
HI	0.388	-0.0625	-0.289
	(0.749)	(0.595)	(0.608)
IR	0.00501	0.00323	0.00322
	(0.00377)	(0.00384)	(0.00386)
DIV	-0.0877	-0.0395	-0.0352
	(0.0789)	(0.0742)	(0.0746)
Defenders		-0.0868	
		(0.0660)	
L.defenders		0.138**	
		(0.0613)	
F.defenders		-0.0350	
		(0.0660)	
Prospectors			0.0150
			(0.0659)
L.prospectors			0.0564
			(0.0658)
F.prospectors			0.0714
			(0.0650)
Constant	9.988***	7.911***	7.917***
	(1.286)	(1.094)	(1.114)
Observations	547	677	677
R-squared	0.298	0.264	0.257
Number of code	85	93	93
Industry Effects	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes
Hausman test	0.234	0.435	0.126

Note: The standard errors are accounted for in brackets. ***, **, *, specify significance at the respective levels of 1%, 5%, and 10%.

The following table represents the econometric model number 3 using GMM. The GMM technique is applied to give more accurate results when the error term is correlated with the independent variables. The first column in Table 7 shows the result of 719 observations.

The estimation outcomes of the cash ratio's adjustment model to the equilibrium level are shown in Speed of Adjustment. In columns (1), (2), and (3), the whole sample, defenders, and prospectors are each given consideration. As shown in Table 6, most factors influencing cash holdings serve as substantial alternatives for evenness cash volume. The coefficient of lag cash is statistically significant and positive across all subsamples, suggesting that defenders and prospectors dynamically amend their holding of cash to achieve appropriate levels. Our entire sample's empirical analysis gives a coefficient of 0.385. As a result, the model's description yields a normal adjustment coefficient of 0.615. The results are consistent through theoretical basis and earlier empirical research for the entire sample and the subsamples. In particular, we discover that the following variables are significant statistically at level 1% and positively correlated with cash holdings: leverage, net working capital, cash flows, dividend, and the sum of the square of all market shares HHI. Though they are significant statistically at level 1% and inversely correlated with cash holdings, business strategy size and return on assets are both large.

Prospectors have an SOA of 65%, while Defenders have an SOA of 64.7%. Since defenders keep a more significant cash surplus, it makes sense that their cash would respond to targets more slowly than prospectors. Our findings about the rapidity of cash holdings' adjustments align with earlier research by (Orlova & Rao, 2018; Subramaniam et al., 2011). The outcome of GMM (difference) and GMM (system) are incredibly compatible through previous empirical outcomes. Results show that cash holdings of recent years are substantial as well as positive drivers of the existing year level of cash, suggesting that firms have a target cash level. These results support our third hypothesis.

4.3.3 Table 7 Speed of adjustment of cash and business strategy

VARIABLES	(1) overall data	(2) Defenders	(3) Prospectors
L.CASH	0.385***	0.353***	0.350***
	(0.0101)	(0.0114)	(0.0112)
Speed of adjustment	0.615	0.647	0.65
BS	-0.000490***		
	(0.000148)		
LEV	0.0639***	0.0518***	0.0580***
	(0.00779)	(0.00789)	(0.00756)
NWC	0.0963***	0.0893***	0.0930***
	(0.00874)	(0.00919)	(0.00899)
C.FLOW	0.116***	0.106***	0.113***
	(0.0206)	(0.0188)	(0.0198)
SIZE	-0.0212***	-0.0207***	-0.0209***
	(0.00141)	(0.00156)	(0.00159)
MB	-0.000669	0.000679	-0.000132
	(0.00108)	(0.000965)	(0.000991)
R, D	-0.00768**	-0.000204	-0.00149
	(0.00323)	(0.00409)	(0.00375)
CAPEX	-0.00423*	-0.00760*	-0.00807**
	(0.00219)	(0.00391)	(0.00397)
ROA	-0.0737***	-0.0786***	-0.0902***
	(0.0202)	(0.0195)	(0.0203)
LOSS	0.00283*	0.00346**	0.00287**

	(0.00148)	(0.00150)	(0.00143)
HHI	0.123***	0.116***	0.118***
	(0.0142)	(0.0146)	(0.0149)
IR	0.000120*	0.000197***	0.000155**
	(6.55e-05)	(6.59e-05)	(6.86e-05)
DIV	0.0157***	0.0163***	0.0160***
	(0.00119)	(0.00124)	(0.00120)
Defenders		0.00350***	
		(0.000917)	
Prospectors			-0.00252**
			(0.000995)
Constant	0.295***	0.286***	0.288***
	(0.0224)	(0.0259)	(0.0270)
Observations	719	756	756
Number of code	89	93	93
Industry effects	Yes	Yes	Yes
Year Effects	Yes	Yes	Yes
Sargan Test	0.234	0.345	0.457
Abond Test	0.321	0.234	0.764

Note(s): This table summarises our findings using Blundell and Bond's (1998) GMM estimate approach. Moreover, the standard errors are shown in brackets; 1%, 5%, and 10% significance levels are denoted by the ***, **, and *, respectively. Also provided are the p-values for testing the autocorrelations of two orders.

5. Discussion

The ongoing study demonstrates how the business strategy affects corporate cash holdings and the firm's value. The study illustrates how the business strategy on the Pakistan Stock Market from 2011 to 2021 affects corporate cash holdings and the firm's value in the Pakistan Stock Market from 2011 – 2021. To construct a strategy index, we have employed the theoretical background of (Miles, 1978), following (Bentley et al., 2013). This study distinguishes two corporate strategies of defenders and prospectors on grounding the investment patterns and resource allocations. We have employed multiple regression analyses and investigated the relationship between corporate cash holdings and business strategy. We have employed three hypotheses and the first hypothesis we have tested is that prospectors collect more cash holdings than defenders. (Hambrick, 1983; Miles, 1978) Favoured prospectors' ongoing involvement in new product creation and market expansion, and they hold less cash. Conversely, defenders emphasise operating efficiency and cost reduction more than they do on innovation. That is why they use less cash. Wu and Lu (2012) studied disfavours and stated that holding cash may cause loss opportunity cost, while (Almeida et al., 2014) stated that corporations have higher investment opportunities by holding liquid assets. Our results concluded that defenders expect to peruse more cash than prospectors.

The second discussed part is about cash holdings market value, whether defenders have more cash holdings market value than prospectors. The influence of cash holdings on corporate value has been the subject of numerous empirical studies, although the results are still controversial. Theoretical and empirical studies show that various businesses have diverse financial constraints and varying levels of cash demand. Several scholars have investigated how different financial policies affect the additional dollar's cash value, e.g. (Dittmar & Mahrt-Smith, 2007; Faulkender & Wang, 2006). According to their empirical findings, the market values one dollar less than its marginal worth of one dollar in cash. The findings from (Kalcheva and Lins (2007) support that

a company's market value and cash holdings are inversely correlated. According to data from another Pinkowitz and Williamson study from 2007, an organisation's operating performance positively impacts surplus cash holding. Our results are consistent with the results of (Kalcheva & Lins, 2007), which show a negative relation between cash holding and market-to-book ratio, and our results support our Second hypothesis that market cash holdings deviation is more significant for defenders than prospectors.

The third and last argument is whether Prospectors are likelier to possess actual target cash than defenders. Many researchers have examined cash holdings to establish the appropriate level in light of the trade-off theory. According to trade-off theory, Businesses should consider the advantages and disadvantages of keeping cash on hand to develop the best cash levels (Ferreira & Vilela, 2004b; Opler et al., 1999). Therefore, once enterprises deviate significantly from the ideal level, they anticipated to boost the reserves of cash to the appropriate level. Prospectors should pursue frequent market and product exploitation, more flexibility, and more volatility of cash flow, according to the (Miles, 1978) theoretical framework. Therefore, defenders are more likely than prospectors to experience increased transaction costs, asymmetry in the information available, and higher agency costs. Consequently, we predict that more (less) cash requirements for defenders (prospectors) should result in greater (less) divergence from the ideal level of the firm's cash reserves. This study demonstrates that prospectors' actual cash holdings deviate more from their target values than do defenders'

6. Conclusion

6.1 Findings

In this study, we investigated the impact of business strategy on cash-holding policies and firm value in the context of Pakistani firms. We used the strategy typology (Miles, 1978) proposed to categorise firms into Prospector and Defender groups based on their strategic orientations. The study shows that a company's strategic orientation dramatically impacts how much cash it decides to hold. Aggressive growth firms typically have more enormous cash reserves to exploit investment possibilities and mitigate risks. On the other hand, businesses that take a more conservative stance might store less capital and instead rely on steady cash flows and outside funding.

Our findings revealed a positive association between the business strategy index and the firm's cash level. Specifically, companies adopting the Defender approach were more inclined to accumulate cash reserves than those following the Prospector approach. This result suggests that firms focused on stability and efficiency tend to hold higher cash reserves to maintain financial stability and avoid risks. Furthermore, we examined the Speed of Adjustment of cash holdings, which reflects how quickly firms adjust their cash levels to reach their target holdings. We observed that Prospector firms deviated more from their target cash holdings than Defender firms. This deviation is likely due to the higher transaction costs of pursuing riskier research and development initiatives for Prospector firms.

Additionally, our study demonstrated a positive correlation between corporate cash holdings and company market valuation. Therefore, this indicates that investors and the market value firms with higher cash reserves more favourably. However, the significance of this relationship was particularly evident for Defender firms, suggesting that their strategic focus on financial stability may enhance the value of their cash holdings.

Moreover, we explored the impact of business strategy on excessive corporate liquidity, which refers to uncertain and aggressive cash management. We found that companies with higher strategy index values had their cash reserves valued less, particularly among Defender firms. This outcome suggests that firms with substantial cash holdings might engage in high-risk activities, such as unnecessary mergers and acquisitions, which could negatively impact the overall enterprise value.

6.2 Policy Implications

The study's implications are valuable for business managers and financial managers alike. For managers, understanding the relationship between business strategy and cash holding can aid in making strategic decisions, including investment strategies, to maximise the firm's value. The study highlights the importance of controlling cash effectively, as it significantly influences the firm's market value. One of the notable aspects of this research is its uniqueness in exploring the association between business strategy, cash holding, and firm value, specifically in the context of Pakistani firms. This study provides valuable insights for researchers and practitioners in the Pakistani business landscape, where such research was previously lacking.

The study suggests several other implications besides investment strategies and strategic decision-making. Cash management can enhance a firm's financial flexibility, making it more responsive to market opportunities. Proactive cash control can decrease a company's cost of capital and strengthen its creditworthiness. The information can also be used to create customized financial plans that support the company's strategic objectives. Understanding these factors can help regulatory agencies and legislators develop frameworks that promote responsible cash management practices and build a more robust and competitive corporate climate in Pakistan.

6.3 Limitations and Future Research Directions

The results of this study have valuable implications for researchers; still, it uncovers the relationship between corporate strategy and firms' cash holdings. While our research adds to the existing body of literature concerning firm-level characteristics and cash holdings, it also has certain limitations. One limitation is the focus on non-financial enterprises in Pakistan, which may limit the generalisability of the findings to other industries or regions. The possible influence of unobserved variables, such as firm-specific governance processes or managerial risk preferences, which may affect cash holdings, is another limitation of this study. Moreover, the study's dependence on historical data can leave out essential details about changing business strategies or dynamic market conditions.

Future research should explore how a company's strategy influences its liquidity in more depth, as this area still needs to be studied despite its significance. Additionally, investigating the impact of managerial skills on business liquidity and the interplay between corporate strategy and capital structure dynamics could provide further valuable insights. Overall, this study contributes to our understanding of the complex relationship between business strategy, cash holding policies, and firm value in the context of Pakistani firms. The findings have practical implications for business decision-making and can help managers formulate effective strategies to maximise the value of their organisations.

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Conflict of interest statement

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