International Journal of Management Research and Emerging Sciences

Homepage: http://ijmres.pk/
E-ISSN: 2313-7738, ISSN: 2223-5604
Vol 10, No 3, 2020 September, PP. 88-98

EXPLORING FINANCIAL CONSTRAINTS AS MODERATOR ON NEXUS BETWEEN EXCESS CASH HOLDING AND FIRM'S PERFORMANCE

[1]Dr. Muhammad Wasim Jan Khan, [2]Mr. Gohar Sulaiman, [3]Mr. Zujaj Ahmed, [4]Mr. Israr Ali

[1]Assistant Professor: Department of Management Sciences,
University College of Zhob, BUITEMS (BUITEMS Sub-Campus Zhob) Balochistan. Email: wasimjanpk@yahoo.com
[2]PhD Scholar: Department of Management Sciences, Iqra National University Peshawar. Email: Goharsulaiman4@gmail.com
[3]Department of Business Administration & Commerce, Institute of Southern Punjab, Multan, Pakistan. Email: zujaj.ahmed@gmail.com
[4]PhD Scholar: Department of Management Sciences, Iqra National University Peshawar. Email: Israrali618@gmail.com

ARTICLE INFO

Article History:
Received: 19 Dec 2019
Revised: 21 Mar 2020
Accepted: 10 Jun 2020
Available Online: 15 Sep 2020

Keywords:
Financial Constraints, Excess Cash Holding, Return on Assets, Firm's Performance, Return on Equity, Leverage

JEL Classification:
O15, D53

ABSTRACT

Proficient working capital administration is getting significant for café firms adapting to frail money related conditions and expanded monetary vulnerability. The study is coordinated on the basis of information of 56 firms in Pakistan gathered over the period of 10 years 2009-2018 to discover the relationship of holding excess cash and firm's performance in the presence of financial constraints. Two speculations were created for examination, how abundance money holding impact venture and furthermore to inspect the association under the moderation role of financial constraints. Holding of excess cash, income, market to book proportion were taken as self-ruling elements while adventure of complete assets, return on value, return on resources and influence were taken as dependent components and money related necessities, for instance, liquidity was taken as coordinating variable while firm age, firm size and benefit were taken as control factors. The first outcome was that we recognized the speculation that there was a remarkable influence of excess cash holding for financial impediment firms. As the second outcome was, that there was balanced impact of financial need in the affiliation between holding of excess cash in regard with firm's performance.

1. INTRODUCTION

In corporate finance, it becomes difficult to perceive how complement process is done among the determinants to impact a company's venture choices. Different powers keep a firm from seeking after its impeccable hypothesis stage when the supposition of an ideal market is manhandled. Data asymmetries and affiliation issues are the most noteworthy factors influencing adventure capability (Stein, 2003), while money property is emphatically identified with a company's speculation when confronting these erosions. From one perspective, the antagonistic choice issue emerges, on the grounds that administrators are hesitant to issue underestimated protections on account of data asymmetries which prompt underinvestment. Such a marvel along these lines makes a speculation touchy to money possessions. Then again, inclinations in realm building contribute to over investment (Jensen, 1986). This additionally prompts higher venture in view of money possessions. McLean et al. (2012) demonstrate that financial specialist insurance influences firm-level asset assignment. They give proof by investigating an enormous example of firms from 44 nations "during the period 1990–2007" and demonstrating that speculation affectability to outer account comparative with more grounded in nations with more noteworthy speculator securities, since high firms can undoubtedly get outside money to subsidize ventures, while speculation affectability to income is higher in nations with less financial specialist assurances. Their discoveries feature that solid speculator security laws anticipate precise offer costs decrease budgetary imperatives and energize productive venture.

Forgoing investigation opens new discoveries and ideas that how overabundance money holding is related with venture, influence, return on value and profit for resources in budgetary requirements. Abundance money allows monetarily important businesses to profit worth-while included speculation openings (Denis & Sibilkov, 2010). Cash holding are progressively huge for money related restriction firm (Faulkender & Wang, 2006; Pinkowitz et al., 2004). Financial requirement is likewise an issue for producing positive net benefit esteem (NPV) ventures. Money related imperative is hypothetical factor for an organization choice. Firms may put their overabundance money in gainful undertaking. Financial imperative firms put their abundance money in worth expanding ventures, which produce positive net benefit esteem (NPV) (Denis & Sibilkov, 2010). A firm with lacking money prompts liquidation, yet

different issues like reckless money spending can look by firm in the event that they are having overabundance measure of money. Corporate money holding straightforwardly influence firms to keep up liquidity and venture openings in this way it's appropriate administration is basic (Campello et al., 2011). Past literature reveals that excess of cash holding is the most preferred factor for all companies. Excess of cash holding lead to firm performance however the underlying mechanism due to which excess of cash holding have positive or negative effect on firm performance are still not yet clear and nobody explain it (Das & Goel, 2019). Now a days, most of the firms facing different types of problems due to which their performance is going down day by day. Primary reasons of the lower execution are absence of abundance of money holding, income and Market to book proportion which prompts lower execution of the organizations (Hadi et al., 2018). To discover how money holding impact corporate speculation choice is significant issue for analysts. That is on the grounds that there are numerous variables that influence a firm from ideal degree of speculation. In these elements, fever data and office strife have restricted companies to access to outside financing and breaking point the inner supports is the reason firms leave best chances of ventures. In Pakistan numerous organizations confronting similar issues, i.e., abundance of money holding, income and market to book proportion which thought about the principle reasons of lower execution of the organizations.

Cash holding is a significant segment of company's benefits. Overabundance money enables firms to benefit the best venture open doors that expansion the stock estimation of the firm. A firm with deficient money prompts liquidation; however different issues like flighty money spending can look by firm on the off chance that they are having abundance measure of money (Opler et al., 1999). Corporate money holding straightforwardly influence firms to keep up liquidity and venture openings along these lines, its legitimate administration is basic (Campello et al., 2011). Hadi et al. (2018) suggested that there are some financial constraints in the market due to which firm performance can be increased or decreased. So, it is important for firm to find those constraints and it can lead to some beneficial results for the firm. Das and Goel (2019) conducted study in India and their study concluded that those firms who have ample of cash have leverage and high return on equity. This study highlighted the significance that how firm with maximum cash holding have greater impact on firm performance. Moreover, these scholars highlighted that firm with excess of cash holding might have greater effect on firm performance and also suggested that what will be the possible financial constraints that increase or decrease the firm performance. Jebran et al. (2019) conducted study on Pakistani non-financial firms with cash holding as dependent variable and capital expenditure growth, cash flow, tangibility, leverage, size, liquidity and cash flow volatility as independent variable and suggested that in future scholars can conduct study on holding excess cash with other factors. In this research, holding of excess (cash flow, market value relative to its book value) is independent variable, firm's performance, i.e. (investment of total assets, return of equity, return on assets, and leverage) is dependent variable and financial constraint, i.e., (liquidity) is moderator variable.

1.1 Research Questions

- Is there any relationship between holding of excess cash and company performance?
- Do financial constraints moderate the link b/w excess cash and company performance?

1.2 Research Objectives

- To ascertain relationship between holding of excess cash and company performance.
- To identify financial constraints as moderation factor on the link b/w excess cash and company performance.

2. LITERATURE REVIEW

2.1 Pecking Order Theory

The theory by Pecking is further developed by Myers and Majluf (1984) at that they discussed that worth is a lesser amount of sustained plans to increase capital later when administrators (who are trusted upon to ponder clear condition of the firm than examiners) issue new worth, budgetary authorities acknowledge that executives feel that the firm is overstated and boss are misusing this over-valuation. Pecking demand speculation was first suggested by Donaldson in 1961 and it was re-suggested by Myers and Majluf (1984) and Whited (2006). Thusly, inside resources are used first, and when that is depleted, commitment is given, and when it isn't sensible to give any more commitment, esteem is given.

2.2 Financial Constraints

Increases of a venture Euler condition that record for money related imperatives improve its fit. The inquiry remains whether these impacts are evaluated in resource markets (Love, 2003; Bond & Meghir, 1994; Whited, 1992). At the end of the day, do budgetary imperatives influence resource returns; and provided that this is true, is this hazard

diversifiable? Cash related requirements dependent on relapse coefficient gauges (Kaplan & Zingales, 1997; Lamont et al., 2001).

2.3 Excess Cash Holding

Money the executives is a basic activity that numerous entrepreneurs embrace from an enthusiastic point of view. Poor money the executives can hurt the organization's exhibition in both unpretentious manners and evident ones. Issues don't simply emerge from a lack of money; having an excessive amount of money can likewise contrarily influence a business. Holding abundance money can resemble expanding the expense of products without an expansion in costs (Drobetz & Grüninger, 2007).

2.4 Cash Flow

At the point when chiefs' goals vary from those of investors, the nearness of inside produced income in abundance of that required to keep up existing resources set up and money new positive NPV activities makes the prospective for those assets to be dissipated. Second, the positive connection displays capital market flaws, where expensive outer financing makes the potential for inside created incomes to extend the attainable venture opportunity (Fazzari et al., 1988; Hubbard, 1998).

2.5 Market to Book Ratio

The expense to book extent, similarly called the P/B or market to book extent, is a money related valuation gadget used to survey whether the stock an association is done or disparaged by taking a gander at the expense of each and every excellent idea with the net assets of the association. This is the worth that the market thinks the association is worth (Myers & Majluf, 1984). Without endeavoring to outline the broad writing on bookkeeping conservatism, we observed that parts of the hypothetical writing on unqualified ideology takes a market-to-book proportion more noteworthy than one as an appearance of preservationist bookkeeping (Ohlson & Gao, 2006; Feltham & Ohlson, 1995, 1996).

2.6 Firm Performance

Financial examiners have focused on the costs of diffused offer belonging; that is, the impact of ownership structure on execution. For example, preferred firm execution leads over a development in the estimation of venture openings asserted by the board which, at whatever point worked out, would manufacture their offer belonging (Berle & Means, 1932). Ownership structure of the firm may be endogenously directed by the affiliation's contracting condition which differentiates across over firms in perceivable and subtle habits (Himmelberg et al., 1999).

2.7 Investment of Total Assets

Absolute resources incorporate a wide range of advantages, for example, money and transient ventures, all out records receivable, inventories, net property, plant and gear (PP&E), speculations and advances, impalpable resources like generosity, and unmistakable resources (Jun &Yang, 2015). Money lenders utilize physical resources as an assurance that at any rate a segment of cash loaned can be recovered through the clearance of the sponsored resource for the situation that the credit itself can't be reimbursed (Myers & Majluf, 1984).

2.8 Return on Equity

Return on Equity (ROE) is an extent of cash related implementation managed by isolating vigorously pay by explorers' worth. As financial consultants' worth is proportional to an affiliation's focal points short its responsibility, ROE could be thought of as the appearance on net resources (Stein, 2003). Return on Equity (ROE) regarded favored or tragic will rely on what's common for a stock's companions. An improvement or retail firm with littler asset report accounts close with net increment may have regular ROE levels of 18% or more (Jensen, 1986).

2.9 Return on Assets

ROA gives researchers and examiners an idea with respect to how significant a connection's affiliation is at using its focal concentrations for make advantage. Bit of leeway for assets is appeared as a rate (Harford, 1999). Organizations (at any rate the ones that endure) are at last about productivity: crushing the most out of constrained assets. Benefit for assets (ROA) is the clearest of such corporate incentive for-the-cash measures (Huang & Ritter, 2009).

2.10 Leverage

Impact can moreover suggest the proportion of commitment a firm uses to back assets. Right when one insinuates an association, property or theory as "significantly used," it infers that thing has more commitment than esteem (Franzoni, 2009). Goedhuys and Mohnen (2017) marked that productivity proportions are a proportion to survey a firm's capacity to acquire benefits and measure the degree of the executive's adequacy of an organization". The point

is to see the advancement of the organization in a specific time, both reduction and increment, and discover the reason for change. Our outcomes additionally bear on the ongoing proof that haphazardly created influence alteration sweep yield experimental outcomes that take after influence focusing on and incomplete modification conduct (Chang & Dasgupta, 2009; Iliev & Welch, 2010). The coming about proof affirms the presentation of an incomplete change model in a more refined condition than concentrates that gauge a similar change speed across all example firms. Besides, the enormous evaluated alteration paces contrast extraordinarily in financial centrality from the modification velocities created by the Chang and Dasgupta (2009) reproductions. Keynes (1936) depicted three principle explanations behind holding money. First exchange thought processes incorporate day by day working exchange for instance buying crude material, paying interest and profit and so forth. Second, one is preparatory thought processes in unforeseen occasions. Third one is Speculative intentions incorporate benefiting beneficial venture openings that all of a sudden emerge in the market. Organization keeps low degree of money in those circumstances when approaching transient account.

2.11 Theoretical Framework

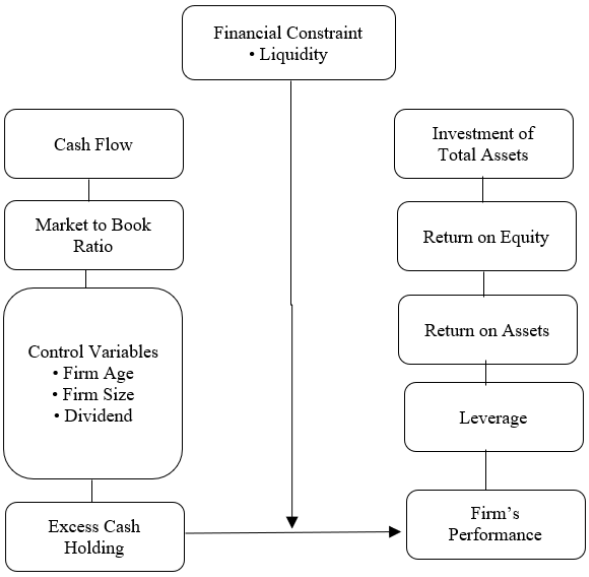

Fig. 1. Theoretical Framework

3. RESEARCH METHODOLOGY

This examination is done to discover the directing impact of monetary requirements on the relationship among abundance money property of Non-Financial Firms. Discoveries produced using concentrating the gathering that can be sum up to the bigger populace. Test size of our investigation is 56 non-financial related organizations enlisted in Pakistan Stock trade out of 397 for the time of 2009-2018.

3.1 Excess Cash

Abundance of money possessions may be increasingly relevant for compulsory firms as they allow the business to contribute when different asset sources are exorbitant, restricted or inaccessible. At the end of the day more prominent money possessions permit firms that experience outer budgetary imperatives to maintain a strategic distance from underinvestment and diminished development. Abundance money determined as the leftover of determinants of money holding.

3.2 Financial constraints

3.2.1 Liquidity

Liquidity refers to the availability of cash or currency equivalents in order to satisfy current working needs. As such, "liquidity is the indicator of available flexible capital to pay costs" and commitments as they become due. Apparently, money is the fluids tool of everything. The reasons for liquidity's gainful impact are researched: Liquidity builds the data substance of market costs and of execution delicate administrative remuneration (Fang et al., 2009).

3.2.2 Panel Data

Board information is said to be multi-dimensional information. Board information rehashed proportion of elements conduct. Elements might be organizations, people or nations. Board information additionally called cross-sectional or longitudinal information. Time arrangement and Cross-sectional information are extraordinary instance of board information. Board information contains perception on factor in various time of same firms or people. While speculating the connection between abundance money and venture, the normal conduct analyzed under Panel information strategies.

3.2.3 Fixed Effect Model

Using fixed-impacts (FE) at whatever point you may be simply enthused about exploring the impact of components that move after some time. FE examines the association among pointer and result factors inside a component (country, individual, association, etc.). Each component has its own one of a kind individual characteristic that could affect the marker factors.

3.2.4 Random Effect Model

The justification behind irregular impacts model is that, not run of the mill for the fixed impacts model, the changeability transverse over segments is acknowledged discretionary and uncorrelated with the marker or free calculates fused the model. Self-assertive effects expect that the substance's misstep term isn't related with the pointers that award time-invariant factors to accept a vocation as illustrative elements.

4. DATA ANALYSIS AND RESULTS

This part incorporates the determined outcomes.

Table 1. Regression

	SIZE			DIVIDEND			AGE		
Variables	Fin. Constraints			Fin. Constraints			Fin. Constraints		
	Investment			Return on Equity			Return on Assets		
	Coeft-valuep-value			Coef t-valuep-value			Coeft-valuep-value		
Excess cash	0.348	4.90	0.001	0.389	4.81	0.001	0.501	4.391	0.001
Cash Flows	0.007	0.99	0.34	-0.003	-0.51	0.589	0.007	0.60	0.561
MTB	3E-06	0.60	0.608	-3.45	-0.05	0.891	3E-06	0.45	0.601
R^2		0.188			0.200			0.0798	
F		8.04			3.01			3.89	
p-value		0.001			0.001			0.001	

Table1 indicates the common effect model. Results displays that excess cash holding have positive and substantial association with investment of total assets, excess cash holding and return on equity have affirmative and substantial association with each other and with return on assets a significant and positive relationship is also observed. Cash flow has no significant association with investment of return on equity and total assets have no substantial association cash flow and also return on assets has no significant relationship with cash flow. Market to book proportion has no significant relationship with investment of return on equity, total assets and return on assets. Furthermore, overall results show good model because the f value reveals that over all model is fit and p value is less than 0.05. Overall outcome reveals the significance of cash holding for all financial constraints.

Table 2. Breusch-Pagan /Hat Test

Variables	SIZE	DIVIDEND	AGE
	Fin. Constraints	Fin. Constraints	Fin. Constraints
Chi^2	377.21	108.19	180.70
Prob >Chi^2	0.000	0.000	0.000

Table 2 shows that hat test of all constraint firms. The results indicate that $chi^2<0.05$ which shows that there is no problem of heteroscedasticity. Moreover, the aforementioned results indicate that dividend, size and age of the constraints firm have less chi^2 value from 0.05 and p value is also equal to 0.000.

Table 3. Robust Standard Error

	SIZE			DIVIDEND			AGE					
Variables	Fin. Constraints			Fin. Constraints			Fin. Constraints			Fin. Constraints		
	Investment			Return on equity			Return on Assets			Leverage		
	Coeft	-value	p-value	Coeft	-value	p-value	Coeft	-value	p-value	Coeft	-value	p-value
Excess cash	0.410	3.60	0.001	0.25	3.30	0.004	0.370	3.41	0.003	0.207	1.05	0.132
Cash Flows	0.39	3.70	0.003	0.30	4.85	0.001	0.410	3.80	0.001	0.003	0.70	0.523
MTB	6E-04	1.02	0.402	3E-05	1.76	0.077	8E-04	1.01	0.132	-0.10	-3.17	0.06
R^2	0.199			0.1117			0.0894			0.190		
F	3.99			1.90			2.49			2.49		
P	0.000			0.046			0.007			0.007		

Above tab. 3 shows the linear regression model which explains that excess of cash lead to high return on equity, return on assets and also return on leverage. It reveals that there is significant and positive association among independent and dependent variables. When firms have extra cash, its investment, return on equity as well as return on assets will increase. The revealed outcomes elaborate that intended variables have adverse guild for leverage. So, leverage will be low if firm has high cash flow. This shows an adverse or negative relationship. While, the remaining all variables such as excess of cash, cash flow and market-to-book have substantial association with return on equity, return on assets and investment.

Table 4. Fixed Effect Model

	Size			Dividend			Age					
Variables	Fin. Constraints			Fin. Constraints			Fin. Constraints			Fin. Constraints		
	Investment			Return on Equity			Return on Assets			Leverage		
	Coeft		p	Coeft		p	Coeft		p	Coeft		p
Excess cash	0.401	4.70	0.000	0.25	3.30	0.004	0.370	3.41	0.003	0.207	1.05	0.132
Cash Flows	0.35	3.70	0.003	0.30	4.85	0.001	0.410	3.80	0.001	0.003	0.70	0.523
MTB	6E-04	1.02	0.402	3E-05	1.76	0.077	8E-04	1.01	0.132	-0.10	-3.17	0.06
R^2	0.253			0.081			0.0376			0.120		
F	9.33			3.04			2.98			5.46		
p	0.001			0.023			0.003			0.04		

Above table 4 shows that holding of excess of cash have significant and positive association with investment of total assets, have significant association with return on equity, and also significant and positive association with return on assets while one the other hand there is no significant association between leverage and excess cash. The results also show that cash flow have significant and positive association with investment of ROE, total assets and return on assets, while there is no significant association of cash flow with leverage. R^2 results revealed that when one percent change in excess of cash holding it bring 25% change in investment of total assets, 8% change in ROA, 3% in ROE and 12% in leverage. F value reveals that overall significance of the model and p value also indicates significant effect for all independent variables and dependent variables.

Table 5. Random Effect Model

Variables	SIZE Financial Constraints			DIVIDEND Financial Constraints			AGE Financial Constraints			Financial Constraints		
	Investment Coeft-value		p-value	Return on Equity Coeft-value		p-value	Return on Assets Coeft-value		p-value	Leverage Coeft-value		p-value
Excess cash	0.327	3.36	0.002	0.217	3.56	0.004	0.436	4.83	0.002	0.325	3.71	0.007
Cash Flows	0.201	2.95	0.001	5E-04	0.17	0.78	0.37	2.37	0.004	0.019	0.68	0.299
MTB	4E-04	0.40	0.716	5E-04	0.85	0.65	6E-06	1.50	0.492	-0	-3.21	0.043
R^2	0.190			0.0581			0.0870			0.201		
Wald chi2	78.03			25.12			39.39			69.96		
P	0.001			0.003			0.00			0.00		

Above table 5 shows that excess cash have significant and positive association with investment of total assets. Excess cash have significant and positive association with ROE and positive link with ROA and it also positive and significant association with leverage. Moreover, cash flow has significant and positive relation with investment and ROA, while it has no significant association with ROE and leverage because p values greater than 0.05. The random effect model also shows that market to book ration have no significant relationship with investment, ROE, ROA and leverage. R^2 for financial constraints firm results shows that for size of the firm the R^2 value is 19 % change is dependent variables, for dividend the R2 is 5% which shows that it brings 5% change in dependent variables, and for age of the firm it brings 39% change in dependent variables value.

Table 6. Hausman Result

Variables	SIZE Fin. Constraints	DIVIDEND Fin. Constraints	AGE Fin. Constraints
Chi^2	39.96	18.61	5.95
Prob >Chi^2	0.000	0.031	0.897

Above tab. 6 reveals the outcomes of Hausman results. Depending on this test, we can decide that weather we can use fixed effect model or random effect model. Based on the all the results revealed above, we concluded that random effect model is better or even the best choice to be used.

Table 7. Regression for Financial Constraints (Excess Cash)

Variables	SIZE Fin. Constraints			DIVIDEND Fin. Constraints			AGE Fin. Constraints			Fin. Constraints		
	Investment Coeft		p	Return on Equity Coeft		p	Return on Assets Coeft		p	Leverage Coeft		p
Financial Constraints (Excess cash)	0.401	4.70	0.000	0.25	3.30	0.004	0.370	3.41	0.003	0.207	1.05	0.132
Financial Constraints (Cash Flows)	0.35	3.70	0.003	0.30	4.85	0.001	0.410	3.80	0.001	0.003	0.70	0.523
Financial Constraints (MTB)	6E-04	1.02	0.402	3E-05	1.76	0.077	8E-04	1.01	0.132	-0.10	-3.17	0.06
R^2	0.159			0.130			0.10			0.120		
F	1.74			1.01			1.10			1.01		
p- value	0.120			0.231			0.201			0.230		

Table7 reveal the common effect model. This table shows the moderating impact of financial constraints on the association between independent variables and dependent variables. The results show that those businesses whose have facing financial constraints such as financial constraints (excess cash) with investment have significant association with return on asset as well as with return on equity also has significant and positive association. Financial constraints (cash flow) have positive and remarkable association with Investment, positive and remarkable relationship

with return on equity, positive and remarkable relationship with return on assets and there is no remarkable association with leverage. Financial constraints and market-to-book proportion have no significant relationship investment, have no significant remarkable with return on equity, have no significant relationship with return on assets and there is insignificant and negative association as per leverage is concerned.

Table 8. Breusch-Pagan /Hat Test

Variables	Liquidity
Chi^2	310.10
Prob > Chi^2	0.000

Table 8 indicates that hat test of moderating constraint variable of the firms. The results show that $chi^2<0.05$ which indicate that there is no existence of heteroscedasticity. The value of p is less than 0.05.

Table 9. Robust Standard Error Financial Constraints * Excess Cash

	SIZE			DIVIDEND			AGE					
Variables	Fin. Constraints			Fin. Constraints			Fin. Constraints			Fin. Constraints		
	Investment			Return on Equity			Return on Assets			Leverage		
	Coeft		p	Coeft		p	Coeft		p	Coeft		p
Financial Constraints *EC	0.501	5.01	0.001	0.290	4.20	0.002	0.390	7.32	0.002	0.215	.03	0.301
Financial Constraints *Cash Flows	0.45	4.20	0.001	0.401	5.58	0.000	0.319	4.70	0.001	0.003	0.60	0.432
Financial Constraints *MTB	7E-04	1.01	0.202	4E-03	1.76	0.007	7E-03	1.10	0.202	-0.11	-2.17	0.07
R^2	0.2701			0.101			0.0376			0.130		
F	10.22			5.13			2.98			4.10		
P	0.001			0.003			0.003			0.05		

Table 9 shows regression of linear model. The results indicate that overall model if significant. Excess of cash with moderating variables liquidity financial constraints* Excess cash have positive and significant association with Investment, positive and remarkable association with return on equity, remarkable and positive relationship with return on assets and there is no association with leverage. Financial constraints* cash flow have remarkable and positive association with return on equity, return on assets and investment and there is negative and remarkable association as per leverage is concerned. Financial constraints* MTB have no remarkable association investment, ROE, ROA and leverage.

Table 10. Fixed Effect Model Financial Constraints*Excess Cash

	SIZE			DIVIDEND			AGE					
Variables	Fin. Constraints			Fin. Constraints			Fin. Constraints			Fin. Constraints		
	Investment			Return on Equity			Return on Assets			Leverage		
	Coeft		p	Coeft		p	Coeft		p	Coeft		p
Financial Constraints *Excess cash	0.301	6.70	0.000	0.36	4.01	0.003	0.275	5.02	0.001	0.308	2.07	0.201
Financial Constraints *Cash Flows	0.53	4.50	0.002	0.40	3.64	0.001	0.301	4.70	0.001	0.001	0.50	0.470
Financial Constraints *MTB	5E-03	1.01	0.303	4E-04	1.56	0.066	8E-04	1.01	0.201	-0.10	-4.17	0.05
R^2	0.260			0.061			0.0250			0.220		
F	8.22			4.05			5.99			4.58		
p- value	0.000			0.021			0.003			0.04		

Table10 indicates fixed effect model. The results of fixed effect model revealed that outcomes of this fixed effect model are changed from previous linear regression. It is clear from the fixed effect model excess of cash has significant role i.e. the range is from 1% to 10% level of significant level. R^2 shows that when one percent changes in excess cash flow*FC it will bring 26% change in INV, 6% change in ROE, 3% change in ROA and 22% change in leverage.

Table 11. Random Effect Model Financial Constraints*Excess cash

Variables	SIZE Fin. Constraints			DIVIDEND Fin. Constraints			AGE Fin. Constraints			Fin. Constraints		
	Investment			Return on Equity			Return on Assets			Leverage		
	Coeft		p	Coeft		p	Coeft		p	Coeft		p
Financial Constraints *Excess cash	0.501	6.01	0.000	0.301	7.20	0.003	0.450	5.05	0.001	0.108	1.01	0.101
Financial Constraints *Cash Flows	0.431	4.60	0.001	0.301	5.53	0.000	0.330	5.30	0.000	0.003	0.601	0.343
Financial Constraints *MTB	5E-02	1.02	0.301	4E-04	1.54	0.045	7E-03	1.02	0.101	-0.10	-3.17	0.04
R^2	0.331			0.208			0.3176			0.130		
F	10.13			7.010			2.79			4.64		
p- value	0.001			0.001			0.003			0.05		

Table 11 shows the random effect model of excess of cash holding with moderating role liquidity. Regression of Panel data used to evaluate the impact of independent variables on dependent variables. The results of random effect model show that it has positive and remarkable impact on firm's performance. Positive and significant sign indicates that financial constraints have significant moderating effect on dependent variables. R^2 results shows that moderating variable has 33% change in INV, 21% change in ROE, 32% change in ROA, and 13% change in leverage.

5. DISCUSSIONS

This examination discovered that how overabundance money influences firm interest within the sight of directing job of budgetary requirement. Board information of 56 Pakistani firms gathered for the time of 10 years 2009-2018. Two speculations are created to look at how holding of excess cash impact venture and furthermore to inspect this association under the directing variable budgetary limitation. Utilizing three money related imperatives approaches, it is discovered that overabundance money and speculation are unequivocally reliant in both obliged and unconstrained firms. Directing job of money related requirement additionally used to discover the relationship of speculation and abundance money holding. Results show huge impact of abundance money holding and interest within the sight of budgetary imperative. While Financial Constraints i.e. excess cash likewise show critical impact with interest within the sight of money related imperatives. Overabundance money firms have their specific techniques related to the leading group of cash livelihoods. These cash methodologies depend on the possibilities in capital market. The evaluation of this research is directed to reveal the relationship and effect of excess cash holding for proximity of cash related necessity in Pakistan. Thus, excess cash holding, income, market to book proportion are taken as autonomous factors while venture of complete resources, ROE, ROA and Leverage are taken as reliant factors and monetary requirements, for example, liquidity is taken as directing variable while firm age, firm size and profit are taken as control factors.

5.1 Research Implications

For objective one, we acknowledge our other theory that there is huge effect of abundance money hanging on interest in budgetary limitation firms. While for second goal, Hausman test is considered reliable as likewise acknowledge the irregular impact model. Furthermore, acknowledge our substitute speculation for objective two, there was a balanced financial impact requirement in the association between excess cash holding and venture.Moreover, it is also suggested that firms should diminish leverage to profit venture.

This research paper makes the following contributions:

- We present theoretical framework to examine that evaluate corporate excess cash holdings in emerging economy of Pakistan.
- We implement the fixed effect and random effect model by using SPSS to ascertain the association between holding of excess cash and firm's performance.
- We also identify financial constraints having moderating effect on the association between holding of excess cash and firm's performance.

5.2 Limitations

Some of those which we faced are; not all non-financial organizations' information was accessible, Financial firms were not included in this study and also data collected only of the firms operating in Pakistan Stock Exchange (PSX). In this way, these outcomes might be constrained to Pakistani non-financial organizations recorded in PSX.

5.3 Future Research

There is always room for improvement and new ideas which are ought to change time by time as per requirement. So, for the future prospect, more non-financial organizations' information can be included, financial firms can also be included in future studies, the information can be gathered from non-financial and financial related firms operating outside Pakistan.

REFERENCES

Berle, A. A., & Means, G. C. (1932). The Modern Corporation and Private Property. *New York: Macmillan Publishing Co*., 1932.

Bond, S., & Meghir, C. (1994). Dynamic investment models and the firm's financial policy. *Review of Economic Studies*, 197-222.

Campello, M., Giambona, E., Graham, J. R., & Harvey, C. R. (2011). Liquidity management and corporate investment during a financial crisis. *The Review of Financial Studies, 24*(6), 1944-1979.

Chang, X., & Dasgupta, S. (2009). Target behavior and financing: how conclusive is the evidence? *The Journal of Finance, 64*(4), 1767-1796.

Das, S., & Goel, U. (2019). Determinants of excess and deficit cash holdings of firms: evidence from emerging market. *Global Business Review*, 1-14.

Denis, D. J., & Sibilkov, V. (2010). Financial constraints, investment, and the value of cash holdings. *The Review of Financial Studies, 23*(1), 247-269.

Drobetz, W., & Grüninger, M. C. (2007). Corporate cash holdings: Evidence from Switzerland. *Financial Markets and Portfolio Management, 21*(3), 293-324.

Fang, V. W., Noe, T. H., & Tice, S. (2009). Stock market liquidity and firm value. *Journal of Financial Economics, 94*(1), 150-169.

Faulkender, M., & Wang, R. (2006). Corporate financial policy and the value of cash. *The Journal of Finance, 61*(4), 1957-1990.

Fazzari, S., Hubbard, R. G., & Petersen, B. (1988). Investment, financing decisions, and tax policy. *The American Economic Review, 78*(2), 200-205.

Feltham, G. A. & Ohlson, J. A. (1995). Valuation and clean surplus accounting for operating and financial activities. *Contemporary Accounting Research*, 11(2), 689-731.

Feltham, G. A., & Ohlson, J. A. (1996). Uncertainty Resolution and the Theory of Depreciation Measurement. Journal of Accounting Research, 34(2), 209.

Franzoni, F. (2009). Underinvestment vs. overinvestment: Evidence from price reactions to pension contributions. *Journal of Financial Economics, 92*(3), 491-518.

Goedhuys, M., & Mohnen, P. (2017). Management Standard Certification and Firm Productivity: Micro-evidence from Africa. *Journal of African Development.* 1, (61-83).

Hadi, W. E. Al-Radaideh, Q. A., & Alhawari, S. (2018). Integrating associative rule-based classification with Naïve Bayes for text classification. *Applied Soft Computing*, 69, 344-356.

Harford, J. (1999). Corporate Cash Reserves and Acquisitions. *The Journal of Finance*, 54(6), 1969–1997.

Himmelberg, C. P., Hubbard, R. G. & Palia, D. (1999). Understanding The Determinants of Managerial Ownership and The Link between Ownership and Performance. *National Bureau of Economic Research*, 1050 Massachusetts Avenue Cambridge, MA 02138.

Huang, R., & Ritter, J. R. (2009). Testing theories of capital structure and estimating the speed of adjustment. *Journal of Financial and Quantitative analysis*, 44(2), 237-271.

Hubbard, R. G. (1998). Capital market imperfections and investment, Journal of Economic Literature36, 193-225.

Iliev, P., & Welch, I. (2010). Reconciling Estimates of the Speed of Adjustment of Leverage Ratios. *SSRN Electronic Journal*. doi:10.2139/ssrn.1542691.

Jebran, K., Iqbal, A., Bhat, K. U., Khan, M. A., & Hayat, M. (2019). Determinants of corporate cash holdings in tranquil and turbulent period: evidence from an emerging economy. *Financial Innovation*, *5*(1), 3.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, *76*(2), 323-329.

Kaplan, S. N., & Zingales, L. (1997). Do investment-cash flow sensitivities provide useful measures of financing constraints? *The quarterly journal of economics*, 112(1), 169-*215*.

Keynes, J. M. (1936). The general theory of employment, interest and money. *Journal of Royal Statistical Society, 99*(2), 383.

Lamont, O., Polk, C., & Requejo, J. S. (2001). Financial constraints and stock returns. *Review of Financial Studies, 14*, 529–554.

Love, I. (2003). Financial development and financial constraints: International evidence from the structural investment model. *Review of Financial Studies*. 16, 765-791.

McLean, R.D., Zhang, T. & Zhao, M. (2012). Why Does the Law Matter? Investor Protection and Its Effects on Investment, Finance, and Growth. *The Journal of Finance*. 1, 313-350.

Myers, S. C., & Majluf, N.S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics, 13*(2), 187-221.

Ohlson J., & Gao, Z. (2006). Earnings, earnings growth and value. *Foundations and Trends in Accounting, 1*(1), 1-70.

Opler, T., Pinkowitz, L., Stulz, R., & Williamson, R. (1999). The determinants and implications of corporate cash holdings. *Journal of Financial Economics, 52*(1), 3-46.

Pinkowitz, L., Stulz, R. M., & Williamson, R. (2004). Do firms in countries with poor protection of investor rights hold more cash? *National Bureau of Economic Research.* NBER Working Paper No. 10188.

Riddick, L. A., & Whited, T. M. (2009). The Corporate Propensity to Save. *The Journal of Finance, 64*(4), 1729-1766.

Simutin, M. (2010). Excess cash and stock returns. *Financial Management, 39*(3), 1197-1222.

Stein, J. C. (2003). Agency, Information and Corporate Investment. *Handbook of the Economics of Finance*.

Whited, T. M. (1992). Debt, liquidity constraints and corporate investment: evidence from panel data. *Journal of Financial, (47)*4, 1425-1460.

Whited, T. M., & Wu, G. (2006). Financial constraints risk. *Review of Financial Studies, 19*, 531-559.