

## IMPACT OF OWNERSHIP STRUCTURE ON CASH CONCENTRATION: AN EVIDENCE FROM PAKISTAN'S TEXTILE SECTOR

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### Abstract

*Poor cash management may result in failure of maintaining liquidity which leads to financial distress. The focus of this study is to examine the relationships between ownership structure and cash concentration. Change in ownership structure changes the philosophy of decision making. Current study aims to investigate whether change in ownership pattern brings any change in cash holding or cash concentration pattern. For this purpose, data is collected for 103 textile related firms for 5 years (2017-2021). The OLS regression model has been used for analysis. Results reveal that ownership concentration has no significant effect on cash concentration. Institutional ownership has a positive but insignificant effect. It is also found that insider ownership has negative coefficient but still statistically insignificant relationship with cash management. It is concluded from results that ownership structure has no significant direct relation with cash concentration but this relation is subject to intervention of some other control variables. The scope of this study is restricted to only three types of ownership structures and the textile sector in emerging markets. This study embarks on agency theory which exhibits agency problems and agency cost. This research contributes to literature by exploring the less discussed relationship of ownership and cash management.*

**Keywords:** Ownership structure, cash concentration, cash holding, Financial distress.

### 1. Introduction

An agency problem is a conflict of interest which always arises when one person is supposed to act in the best interest of the other person. Corporate finance considers this matter a conflict of interest between shareholders and managers. According to agency theory, Agency cost emerges from the separation between ownership and control when ownership is dispersed among multiple classes of shareholders. The separation of shareholders among different classes, according to the pattern of shareholdings, acts as a catalyst in matters of conflict of interest. Managers in firms with dispersed ownership utilize the cash reserves for their own benefit instead of that of the owners. Jensen (1986) indicates that managers use company cash to create small investment chances before making dividend payments to shareholders. (Nikolov and Whited, 2014) documented that the governance of cash holdings is equally important as that of other corporate matters.

Managing liquidity is arguably the most puzzling financial strategy a company must navigate, as corporations cannot afford the consequences of depleting their cash reserves. Mishandling the cash reserves results in operational repercussions, including the dissolution of the company if it persistently fails to settle its debts as they become due. On the other hand, maintaining excessive cash is inefficient, as this asset ought to be allocated to investments that generate profit and enhance the firm's cash flow. Cash concentration refers to the amount of cash and cash equivalents a company retains on its balance sheet. A company requires cash based on three main objectives: First, for payment transactions, and second, to ensure precautionary measures against unexpected events, followed by speculation

for future gains. Companies maintain safe funds to protect themselves from vague events which may arise. Pecking order theory focuses on making sequential orders for using sources of funds and leverage. Organizations build up cash reserves to face off unexpected expenses while experiencing low cash flow because this unpredictability continues to be a challenge. Organizations use speculative funds that they allocate in their accounts to gain from possible profit-making opportunities produced by market price fluctuations. The essential principle is to maintain equilibrium among these three objectives. Trade-off theory addresses the criteria for setting their optimal level of cash holdings by weighting the essential principle, which is to maintain equilibrium among these three objectives. Trade-off theory addresses the criteria for setting their ideal level of cash holdings by piloting the marginal costs benefits analysis.

Ownership structure explains the distribution of shareholding patterns among different groups. It is mainly divided into two groups: concentrated ownership means few shareholders hold substantial share amounts, while dispersed ownership divides company shares among multiple groups of shareholders. Corporate ownership sets the direction of important financial decisions, including cash management, since it influences a firm's operational and financial strategies. Corporate finance research establishes an understanding of the influence of ownership structure on cash holding. A properly structured ownership framework helps businesses create specific accountability systems. For this study, we used three main ownership structures: concentrated ownership, which means few shareholders hold substantial share amounts; institutional ownership; and insider ownership. (Com et al., 2016) argue that ownership concentration, insider ownership, and institutional ownership have a significant effect on cash concentration. (Lozano and Durán, 2017) documented that firms with highly concentrated ownership target a high level of cash concentration. Cash concentration is significantly influenced by institutional investors. Institutional ownership showed a positive impact on cash concentration because of a more professional way of cash management (Harford et al., 2008). Ozkan and Ozkan (2004) explained that low managerial ownership is likely to reduce the conflict of interest between managers and shareholders. Although expanded literature is available on the topic under discussion, the exact correlation between the ownership structure and cash concentration is still probable under different contexts. We used COVID-19 as a control variable. The COVID-19 pandemic has brought complex changes in adopting cash management strategies under concentrated and dispersed ownership. These changes are influenced by multiple factors, such as firm size growth and the scope of the industry. This study aims to explore the relationship between ownership structure and cash management strategies. The findings of this research will help both theories and practitioners to understand how different ownership structures influenced the selection of cash management strategies.

## **2. Hypotheses Development.**

Control mechanisms for implementation of corporate governance can reduce the manipulation opportunities for managers (Saleh et al., 2023). Sundarasan et al., (2024) explained the direct relationship between corporate governance and financial reports. (Tran and Dang, 2021) documented that major shareholders along with managers can use resources of the firm for their personal benefit and exploit other shareholders. Guluma (2021) argued that Ownership structure is an integral part of corporate governance and has a strong impact on financial decision making. Jensen and Meckling (1976) proposed agency theory, and elaborated the conflict of interest between shareholder and managers.

### **2.1 Ownership concentration**

Ownership concentration is explained by the ratio of a firm's share ownership held by a small group of shareholders to the total number of shares issued. Ownership concentration strongly impacts a firm's financial decisions (Naughton et al., 2010). Harford, Mansi and

Maxwell (2008) stated that higher ownership concentration reduces the excess cash reserves. Burkart and Panunzi (2006) ownership concentration leads to the alignment of interest between shareholder and management so it could lower the cash concentration. Moolchandani and Kar (2022) showed that concentrated ownership could reduce the agency problems so cash reserves can be used in best interest of owners therefore, no need for excessive cash holdings.

Contrary, Morck and Shleifer (1988) documented that higher ownership concentration effects positively on excessive cash holdings. (Moolchandani and Kar (2022) argued that for maintaining the control over resources, concentrated share ownership demands higher cash reserves.

Alhmoode, et al., (2024) found that the relationship between concentrated ownership and cash concentration is subject to context. It varies across countries. Turgut (2022) also supported this argument by explaining that the impact of concentrated ownership on cash management may be affected by multiple control variables. Size of the firm also affects the impact of concentrated ownership on cash concentration. For the relationship under discussion firms in emerging markets show different results as compared to firms listed in mature markets (Haron et al., 2021)

*H1: Ownership concentration demands more cash concentration.*

## **2.2 Institutional ownership**

Percentage of shares held by the institutions in a firm's outstanding shares explains the institutional shareholding in firms. Institutional investors are more interested in holding institutional ownership. Pension funds, mutual funds, hedge funds normally invest in firms. Numerous Past studies explained the relationship between institutional ownership and cash concentration. Cheng, Wang and Wang (2022) explained the negative relation between institutional ownership and cash concentration. Institutional ownership can work as a disciplinary tool and can exert pressure by doing external monitoring (Liu et al., 2020). Institutional ownership showed a positive impact on a firm's value and reduced the chances of information Asymmetry. Brown, Chen and Shekhar (2011) argued that presence of institutional ownership leads to lower cash holdings. Which advocates that institutional investors have more expertise to invest cash in profitable projects. Furthermore, past studies have suggested that institutional ownership discourage cash concentration and advocate for efficient allocation of cash reserves.

On the other hand, some studies found the positive relation between institutional ownership and cash concentration. Bushee, (2001) indicated that Institutional investors may rank short term needs higher than the long term benefits. Which associate institutional ownership positively with cash concentration. Cremers, Pareek and Sautner (2017) also supported the argument by documenting that short term investment perspective encourages more cash holding to meet short term needs. Furthermore, some studies have explained the relationship subject to the change of industry, size and characteristics of the firm. It is documented that firm size significantly impacts the relationship between institutional ownership and cash concentration. Financial independence and growth opportunities has significantly intervene the relationship (Stulz, 2000). Gayatri and Wirasedana, 2021) documented that Smaller firms shows more negative tendency in relationship between institutional ownership and cash concentration rather that bigger firms.

*H2: Institutional ownership shows a positive impact on cash concentration.*

## **2.3 Insider ownership**

Insider ownership represents the share held by management (Managers and directors) within the firm. Jensen and Meckling (1976) introduce agency theory, which explains the conflict between shareholders and managers. This theory emphasizes alignment of interest between

shareholders and managers. Insider ownership has gained attention of researchers in the context of corporate governance. (Moolchandani and Kar (2022) argued that insider ownership may reduce the conflict of interest which leads to active utilization of cash resources. Ref also supported the argument and documented negative association between insider ownership and cash concentration. (Harford, Mansi and Maxwell (2008) explained that insider ownership leads towards good corporate governance and lower the excessive cash holdings. Rashid (2016) advocates higher insider ownership reduces the agency conflict and lower the cash concentration which results in efficient use of cash funds and argues that insider ownership reduces the large cash holdings because of active monitoring and reduced agency problems.

Furthermore, numerous studies have proven that the negative relationship between insider ownership and cash concentration is because of some other factors including; country, industry, firm size, corporate governance mechanism. Boubaker, Derouiche and Nguyen (2015) explained that countries, where strong legal practices have developed, firms showed strong negative relationship between managerial ownership and cash concentration. Sarfraz et al. (2022) also supported the argument by exploring that smaller firms exhibit more negative relationships between variables as compared to larger firms. Good corporate governance practices have a positive impact on better cash management. Insider ownership advocate for active monitoring of operations which discourages massive cash holdings. It is also noteworthy that literature suggested that industry features and norms showed greater influence on the negative relationship between insider ownership and cash concentration. Industry characteristics showed impact on dimension and intensity of relationship between insider ownership and cash concentration

*H3: Insider ownership has a positive impact on cash concentration.*

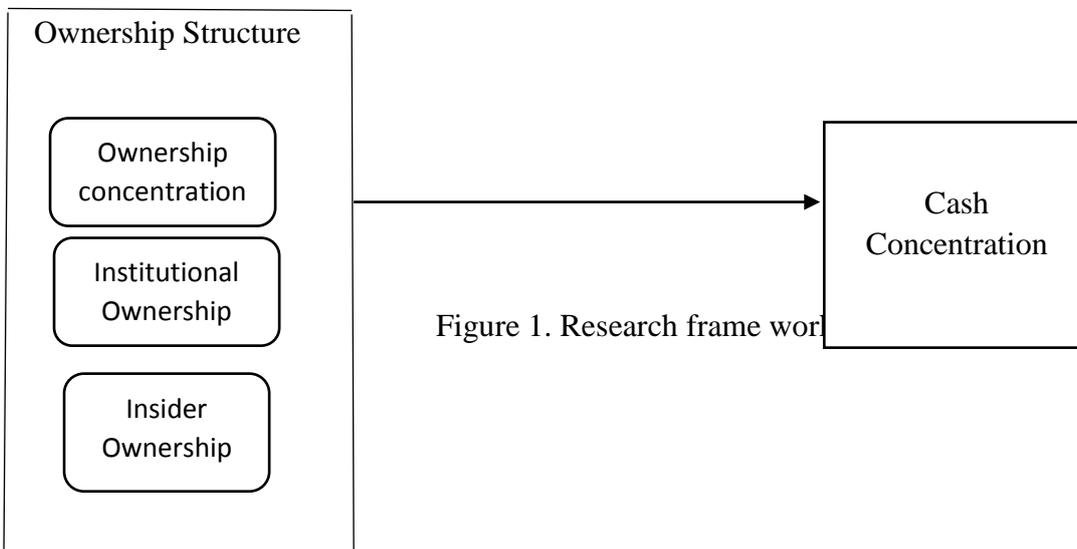


Figure 1. Research frame work

### Research Methodology

The aim of this study is to examine the impact of ownership structure on cash concentration practices in the corporate sector. For investigation, data samples are collected from the textile sector, only for the companies listed on Pakistan stock exchange. Data is collected from annual financial reports along with FSA published by state bank of Pakistan for the 5 years (2017-2021). Only those firms are selected which satisfy the below mentioned criteria.

- a. Firms which are allied with the textile sector are selected, to uphold the relevance principle.

b. Firms with missing data are not selected, so that integrity of data should not compromise.

c. Continuity of operations is considered for ensuring consistency of data sample.

After ensuring the specific criteria, the data set consists of 103 firms from the textile sector. This selection process also ensures the participation of firms from every possible market segment.

### 3.2 Variable Proxies

All variables are measured and explained with established proxies and definitions mentioned in literature.

#### 3.2.1 Cash Concentration

In this study cash concentration is considered as dependent variables. It is the amount of cash and cash equivalent available in the balance sheet to meet short term financial needs.

#### 3.2.2 Ownership Structure

For this research ownership structure is an independent variable. For this study ownership structure is composed of three types of ownership structure i.e. (Ownership concentration, Institutional ownership, insider ownership).

##### *Ownership concentration*

It is explained as the percentage of block holder owners. Normally it is considered as owners having more than 5 percent shares of the firm.

##### *Institutional ownership*

It is the percentage of common shares of firms held by institutions rather than individuals.

##### *Insider ownership*

It is explained as the percentage of shares held by management (executives and directors) within the firms.

#### 3.2.3 Control Variables

This study also focused on some other related variables, which can influence the cash concentration, as control variables. We include liquidity, firm size, Firm Growth, leverage, ROA, tax and Covid 19 as control variables. Each of these variables is measured with an established proxy as discussed in past literature.

### 3.3 Model Specification

In order to examine the impact of ownership structure on cash concentration, an ordinary Least Square (OLS) regression method has been used while some other relevant variables are employed in the model as control variables.

$$CC = \alpha + \beta_1(CO) + \beta_2(INO) + \beta_3(IO) + \beta_4(LIQ) + \beta_5(FSIZE) + \beta_6(FG) + \beta_7(LEV) + \beta_8(ROA) + \beta_9(\ln TAX) + \beta_{10}(COVID) + \varepsilon_{i,t} \quad (1)$$

In this study, the above -mentioned statistical model is established to analyze the impact of ownership concentration (Independent variable) on cash concentration (dependent variable). Here CC stands for cash concentration which is our dependent variable, Alpha ( $\alpha$ ): The constant ( $\alpha$ ) element shows CC base value when all other variables remain zero. CO indicates ownership concentration, INO explains institutional ownership, IO stands for insider ownership, these three indicate our independent variable (ownership structure). While, for control variables LIQ stands for liquidity, FSIZE represents for firm size, FG indicates Firm growth, LEV shows leverage, ROA stands for return on Assets, LnTAX indicates natural log of tax and COVID represents COVID-19  $\varepsilon(i,t)$  represents error term.

### 3.4 Operational Definition

Table 1 explains all variables and proxies used in this study.

<b>Table 1. Variable definitions and sources</b>			
<b>Variable/Proxy name</b>	<b>Variable Measurement</b>	<b>Data Source</b>	<b>Authors</b>
CC1 CC2	CC1 measured using cash and cash equivalents to total asset ratios. CC2 measured using cash and cash equivalents to net asset ratios, where net asset was computed as book value of assets less cash and cash equivalents	Annual Reports	(Ferreira and Vilela, 2004; Borhanuddin, & Pok, 2011)
Concentrated ownership (CO)	It is measured by ratio shares held by large shareholders to total issued shares	Annual Reports	(Hussain et al., 2023)
Institutional Ownership (INO)	Percentage of shares held by institutions	Annual Reports	(Hussain et al., 2022).
Insider ownership (IO)	It is the percentage of shares held by executive management.	Annual Reports	(Habib et al., 2022)
Liquidity (LIQ)	current Assets / Current Liabilities	Annual Reports	(Adil, Hussain, Irshad, & Awais, 2024)
Firm Size (FSIZE)	Calculated by natural logarithm of total assets. Ln (total assets)	Annual Reports	(Xuezhou, et al.,2021)
Firm Growth (FG)	Measured through Tobin's Q. Market value of equity divided by book value of equity	Annual Reports	(Xuezhou, et al 2022).

Leverage (LEV)	it is a ratio of total liabilities (debt) to total assets	Annual Reports	Adil et al. (2024)
Return on Assets (ROA)	It is calculated by dividing net income to total Assets	Annual Reports	(Hussain et al., 2022; Zhang, 2022)
Tax (LNTAX)	Natural log of Tax amount	Annual Reports	(Mawejje and Sebudde, 2019; Hussain, 2020)

### 5. Statistical Findings

In this research, various statistical models have been used to examine the relationship among the variables. Comprehensive statistical analysis has been done through descriptive stats and pairwise correlation mode. Furthermore, to analyze thoroughly the data sample has gone through other Pertinent statistical models i.e. variance inflation factor and OLS regression along with fixed and random effect, OLS regression with alternative proxy along with fixed and random effect.

**Table 2 Descriptive statistics**

Variable	Obs.	Mean	Std. Dev.	Min	Max
CC1	515	.4911438	4.966518	0	102.99
CC2	515	.0178925	.042185	0	.49
CO	515	66.99321	19.98061	0	98.4758
INO	515	11.87974	15.89745	0	91.5194
IO	515	47.98965	28.7232	.051	98.01
LIQ	515	2.78614	17.99231	.0004931	314.6914
FSIZE	515	13.81421	1.920350	7.9809143	19.0124
FG	515	2.99051	18.408	-71.817271	259.0005
LEV	515	.1995612	.2789527	0	1
RAO	515	-1.71348	18.9143	-95.01	315.81
InTax	515	9.87291	2.35124	0	12.96176
Covid19	515	.35214	.412751	0	1

Descriptive stats are an important tool for understanding complex financial data. It gives the short and brief introduction about the data under consideration. Measures of central tendency such as mean, median and ranges explains the dispersion of data and standard deviation shows how much data is deviation from central values. It gives the clear snapshot of data by which researchers fetch out the exact information. This analysis makes the decision making process easy and very targeted about selection of statistical tests and further data analysis techniques. The sample is a collection for 103 firms from the textile sector for 5 years with 515 observations for each variable. CC1 with mean of .4911438 Std. Dev is 4.966518, Min is 0 and Max is 102.99 while CC2 has mean value 0.0178925, Std. Dev 0.042185 and min is 0

and max is 0.49. Independent variable CO is ranging from 0 to 98.4758 with mean of 66.99321 and Std. Dev 19.98061. INO having mean 11.87974 with range of 0 to 91.5194 with Std. Dev of 15.89745. IO showcasing 28.7232 deviation from mean value 47.9865 and ranging 0.051 to 98.01. LIQ exhibits the range 0.0004931 to 314.6914 and mean 2.78614 and Std. Dev 17.99231. Mean value of FSIZE is 13.81421 and Std. Dev 1.920350 with max 19.0124 and min is 7.9809143. FG is showing Std. Dev 18.408 from its mean value 2.99051 and ranging min -71.817271 and max 259.0005. LEV exhibits mean value 0.1995612 and 0.2789527 with min 0 and max 1. Mean value of ROA is -1.71348 showing negative return over the period of time with min -95.01 and max 315.81. natural Log of tax showing mean value 9.87291 and Std. Dev 2.35124 ranging from 0 to 12.96176. Finally, the COVID variable has an average value of 0.35214 and a range of 0 to 1, which is evident in the pandemic's occurrence and its impact on sample firms.

**Table 3 Correlation Metrix**

Variable	CC1	CC2	CO	INO	IO	LIQ	FSIZE	FG	LEV	ROA	LnTax	Covid19
CC1	1											
CC2	0.5138*	1										
CO	0.0847*	0.1705*	1									
INO	0.1102*	0.0925	-0.0006	1								
IO	-0.1505*	-0.0317	0.1962*	-0.3964*	1							
LIQ	0.8803*	0.4971*	0.2047*	0.1230*	-0.1113*	1						
FSIZE	-0.218*	-0.1927*	-0.02967	0.1378*	0.03985	-0.2197*	1					
FG	-0.2175*	-0.1958*	-0.2853*	-0.0347	0.1168*	0.0486	-0.1993*	1				
LEV	-0.0935	-0.1474	-0.0777	0.0137	0.1784*	-0.0699	0.1181*	0.1728*	1			
ROA	-0.0351	0.0796	0.0321	0.0473	0.0717	-0.0173	0.1347*	0.1347*	0.0217	1		
LnTax	-0.1934*	-0.1951*	-0.0973*	0.0890*	0.0213	-0.1729*	0.7822*	0.2897*	0.2180*	0.0839	1	

<b>Covid 19</b>	- 0.018 9	0.072 9*	- 0.020 8	0.021 3	- 0.013 6	- 0.002 1	0.027 9	0.017 8	- 0.047 1	0.05 17	0.09 16	1
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Table 3 represents the results of the correlation Matrix. It shows the strength and direction of the relationship between the variables. It also depicts that is the relationship is significant or not. Correlation values lies between +ve1 to -ve1. +1 signifies the strong direct relation between the variables while -ve explains the strong inverse relation between the variables. Zero value signifies no relationship between variables. For representing significance, researchers use stars as level of significance. One Star (\*) shows significance level ( $p < 0.05$ ), two stars (\*\*) explains a higher level of significance ( $p < 0.01$ ). whereas, three stars (\*\*\*) shows ( $p < 0.001$ ) which is much stronger than previous values.

In pairwise correlation Metrix, CC1 showed significant negative relationship with IO, FISZE, FG and LnTAX. One stars indicates that level of significance is ( $P < 0.05$ ). on the other side CC1 has positive significant relationship between CC2, INO and LIQ. While, other reaming variables showed weak or insignificant relationship with CC1. CC2 has negative significant relation with FSIZE, FG and LnTAX and positive significant relationship with CO and LIQ. CO has positive significant association with IO and LIQ, on the other side significantly negatively associated with FSIZE, FG, LEV and LnTAX. INO has significant negative relation with IO and significant positive relationship with LIQ, FSIZE and LnTAX. IO has significant negative relationship with LIQ and significant positive effect on FG and LEV. LIQ has significantly negative relationship with FSIZE and LnTAX. FSIZE has significantly positively associated with LEV, ROA and LnTAX and convencing negative effect on FG. It is found that FG has positive and significant effect on LEV, ROA and LnTAX. Whereas, leverage has significant positive relationship with LnTAX. ROA, LnTAX and COVID-19 have no relationship.

<b>Variable</b>	<b>VIF</b>	<b>Tolerance 1/VIF</b>
CC1	1.13	0.885
CC2	1.27	0.7874
CO	1.48	0.6757
INO	1.09	0.9174
IO	2.13	0.4695
LIQ	1.38	0.7246
FSIZE	1.17	0.8547
FG	1.39	0.7194
LEV	2.01	0.4975
ROA	1.07	0.9346
Mean	1.412	0.74658

Table 4 shows the results for Multicollinearity test. Comprehensive analysis has conducted to examine the multicollinerity among the variables. Multicollinerity is a problem which arises when there is substantial correlation exists among the variables. This Substantial correlation among the variables increase the variance of regression coefficients. To evaluate this problem Variance inflationary test (VIF) has been conducted. VIF explains the impact of variation in regression coefficients. It is commonly agreed that if VIF value is more than 10 it can cause multicollinerity problem otherwise, if the value is under10 it has nothing to do with Multicollinerity (Adil et al. 2024). After thorough analysis, VIF values are reported in table 4 which showed that all values are under 10 which is criteria for examining Multicollinerity.

These results enhance the validity of dataset. It also strengthens the believe that there is no problem for mutillcollinerity in this data set. Elimination of multicollonerity augments the validity and reliability of regression results (Lindner, T., Puck, J., & Verbeke, A.,2022)

Variable	OLS		RE		FE	
	Coff	P-value	Coff	P-value	Coff	P-value
<b>CO</b>	0.0001871	0.074	0.000122	0.253	0.00007898	0.222
<b>INO</b>	0.0000436	0.669	0.000172	0.401	-3.124E-05	0.801
<b>IO</b>	-1.27E-06	0.056274	-1.43E-06	0.986	0.00007106	0.389
<b>LIQ</b>	0.00100316	0	0.000314	0	0.0001952	0
<b>FSIZE</b>	-0.001927	0.164	-0.005967	0.017	-0.0070015	0.299
<b>FG</b>	-0.002817	0.169	-0.007641	0.019	-0.0060174	0.297
<b>LEV</b>	-0.019521	0.007	-0.005894	0.181	-0.003185	0.514
<b>ROA</b>	0.000182	0.019	0.000173	0	0.00017205	0
<b>LnTax</b>	-0.0016819	0.181	0.000493	0.792	0.0014972	0.462
<b>COVID19</b>	0.0089152	0.034	0.008127	0.017	0.0057124	0.046
<b>_CONS</b>	0.069582	0.011	0.121046	0.021	0.0798243	0.32
<b>F-STAT</b>	11.49	0	1561.27	0	100.9	0
<b>R-SQ</b>	0.3149		0.2958		0.1681	
<b>Hausman</b>	139.97 (0.00)					
<b>NO</b>	515		515		515	

Table 5 shows the results of multiple regression models. We used the ordinary least squares (OLS) method to examine the impact of independent variables on dependent variables. CO shows positive but non-significant results with cash concentration. INO also indicates that there is no significant relationship between insider ownership and cash concentration. Institutional ownership has a negative but insignificant relation with cash concentration. Leverage shows a negative but significant impact on cash concentration. These results are in accordance with results of (Borhanuddin et al., 2011). Similarly, ROA has positive but significant relation with cash concentration similar results with (Palazzo, B. 2012). We used Random and fixed effect models for further investigation. However, Positive significant value of the Hausman test endos that we should pick fixed effect model results. According to the fixed effect regression model, Co, INO and IO have no significant impact on cash concentration whereas LIQ has significant impact on cash concentration. These results are accordingly ALGHADI, M. Y., Al NSOUR, I. R., & AIZYADAT, A. A. K. 2021; Kim, H.,

& Park, S. Y. 2012) ownership structure has no direct impact on cash holding and some other variables intervene the relationship.

**Table 6. Multiple Regression Result with Alternative Proxy CC2**

Variable	OLS		RE		FE	
	Coff	P-value	Coff	P-value	Coff	P-value
CO	-0.0018228	0.492	-0.0012639	0.481	-0.0013174	0.438
INO	-0.0063718	0.126	-0.0072417	0.127	-0.0072312	0.063
IO	-0.0031724	0.310	-0.0025865	0.340	-0.0027143	0.269
LIQ	0.3451421	0.000	0.1951609	0.000	0.2154407	0.000
FSIZE	0.0231481	0.381	0.0812403	0.389	0.0203043	0.497
FG	0.0231481	0.317	0.0812403		0.0203043	0.417
LEV	-0.1208679	0.552	-0.1706743	0.052	-0.0998874	0.118
ROA	-0.0042100	0.821	-0.0028500	0.821	-0.0018300	0.845
LnTax	-0.0135089	0.537	-0.0213121	0.537	-0.0301774	0.340
COVID19	-0.1045861	0.472	-0.1423491	0.472	-0.1016545	0.305
_CONS	-0.3178401	0.616	-0.2126058	0.616	-0.4327101	0.640
F-STAT	15.98	0.000	16.29	0.000	9394.72	0.000
R-SQ	0.9127000		0.9243000		0.9397000	
Hausman	134.97 (0.00)					
NO	515		515		515	

We used alternative proxy for cash concentration to comprehend our study. Table 6 explains results by using alternative proxy for cash concentration. We Use OLS regression model to investigate the connection between ownership structure and cash concentration. Results divulge that CO has no significant impact on cash concentration. INO has negative coefficient but non-significant impact on cash concentration and IO also has negative but insignificant impact on cash concentration. For detailed analysis we used random and fixed effect models. Significant value of the Hausman test suggests that we should consider results from a fixed effect model. The fixed effect model signifies that Ownership concentration, Institutional ownership and Insider ownership has a negative coefficient but insignificant relationship with cash concentration. These results are in accordance with (Guo, H et al., 2021) ownership structure and cash concentration is not directly associated but mediated some other variables

## 6. Conclusion

The aim of this study is to examine the relationship between ownership structure and cash concentration. Ownership structure for this research is composed of ownership concentration, Institutional ownership and insider ownership. Sample has been selected from the textile

sector of Pakistan. Textile sector of Pakistan showcased remarkable contribution to national income and exports. Even in pandemic days, across the globe the textile sector has shut down and demand for textile products was increasing, Pakistan's textile sector took the challenge and showed resilience by adopting new safety rules (Adil et al. 2024). Results reveal that in the textile sector ownership structure has no direct impact on cash concentration. These results are in according to past researchers (Guo, H et al., 2021; Kim, H., & Park, S. Y. 2012; ALGHADI, M. Y et al., 2021). It explains that some other variables have a mediation effect on the relationship between ownership structure and cash concentration. It is suggested that selection of sector and time period is also a constraint. This study only focused on the textile sector, further studies on other sectors may contribute to literature. This study is limited to three ownership structures, some different ownership structures i.e. foreign ownership, government ownership can also be used for further studies to contribute to literature.

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