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The Determinants of Cash Holdings: Evidence from SMEs in Pakistan

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Abstract

This study has investigated determinants of cash holdings for SMEs (Small and Medium Enterprises) in Pakistan by using random effects panel data techniques. The sample is sorted from the population of non-financial sector in Pakistan. The findings are quite similar to some previous studies. Whereas, some results are unique in case of Pakistan. Size1, Size2, Z-score, Cash Flow and GrowthP2 have negative relationship with the cash holdings but Size1, Size2 and Z-score has significant impact. Bank debt, Liquidity and tangibility has positive significant relationship with the cash holdings. Further, GrowthP1 has positive and negative insignificant relationship with the cash holdings.

Key Words: Cash Holdings, SMEs (Small and Medium Enterprises),

INTRODUCTION

It is well-known fact that holding of cash is very important among the financial assets of a non- financial firms. Firms hold cash to pay for operating expenses and capital investments. Like other assets, holding of cash has both benefits and cost. In spite of its larger opportunity cost, firms hold larger balance of cash and cash equivalent in their balance sheet to pursue certain motives. Existing theoretical literature on Cash Holdings categorized these motives into transactional, precautionary and speculative. Transaction motive establishes that firms hold cash to make payment for day to day operating transactions particularly purchase of goods and services. Precautionary motive emphasizes that firms retain some reserve cash to avoid risk of failure in making payment for contingency expenses. Firms which are exposed to higher uncertainty in timing and amount of future cash payments, need to hold some extra cash and cash equivalent as a liquidity cushion. Speculation motive suggests that firms keep some spare stockpiling of cash to benefit from speculative transactions. Firms dealing in commodities with volatile prices are likely to hold extra cash to benefit from favorable prices (Besley and Brigham 2005).

Underline benefits of holding cash include: a) reduction in the chances of financial distress, b) lessening the impact financial constraints on investment policy of firms and c) reduction in cost of external financing (Ferreira and Vilela 2004). The Pecking Order Theory recommends the preference order of financing arrangements that should be followed by firms to optimize their value. Firms should consider first retained earnings to finance to finance investment plans. If retained earnings are found inadequate to finance investment opportunities, then first short term debt, then long term debt and finally equity fund should be considered to finance investment opportunities (Myers 1984). This theory describes that firms usually do not cogitate target cash levels and keep cash reserves as a cushion between retained earnings and investment expenditure. Furthermore, the free cash flow theory emphasizes that managers build up cash reserves to increase their discretionary power on the investment decisions of firms. Availability of excess cash with managers allows them to invest in those projects that help them in pursuing their own personal interest rather than keeping in view the interest of stockholders (Jensen 1986) and (Ferreira and Vilela 2004).

Small and medium enterprises (SMEs) suffered more from market imperfections. These firms are credit rationed by banks due to their larger informational opacity and greater information asymmetry problems (N Berger and F Udell 1998). Generally, ownership and control of SMEs lie in the same hands. Due to togetherness of ownership and management, these firms demonstrate larger flexibility in their cash disbursement behavior which raises the agency cost of debt. Resultantly, financial difficulties as well as financial constraints of these firms increase (Fazzari and Petersen 1993) (Pettit and Singer 1985) and (Titman and Wessels 1988). Finally, these firms have relatively higher transaction cost due to their small-scale operations and cannot enjoy economies of scale associated with these costs (Mulligan, 1997).

The importance of SMEs in Pakistanis is well established on account of their contributions to the economy. For instance, SMEs make almost 90% of all enterprises, engage nearly 80% of the non-agricultural labor force and contribute about 40 % to GDP in Pakistan (Small Medium Enterprises Development Authority). However, in contrast to larger firms, SMEs face more financial constraints regarding investment opportunities. Moreover, most of these firms face credit rationing by banks and resultantly hold more cash as comparison to larger listed firms. Therefore, contribution of SMEs to the economy at large and credit rationing by banks

of these firms persuade us to investigate the factors that may bring variation in cash holdings. Much more research has been conducted regarding determinants of cash holding of firms around the world. In Pakistan, few studies have investigated the determinants of cash holdings. But, to the best of authors knowledge, literature is nonexistence regarding determinants of cash holdings by SMEs in Pakistan. It is important to unearth cash holdings determinants in Pakistan to answer the unaddressed question. Therefore, this study is aimed to empirically test the effect of growth opportunities, size of the firm, relationship with financial institutions, probability of financial distress, cash flows generated by the firm, tangibility and liquidity on cash holdings of SMEs listed on Karachi stock exchange. Findings of this study will be useful for managers in estimating the cash holdings particularly in the context of SMEs and can be used by other stakeholders in understanding variations in cash holdings reported by SMEs in balance sheet.

The rest of the paper has been organized as following. Next section is about theoretical frame work to support expected relationship. Third section is about results and discussions. Fourth section is about conclusion of results.

Theory and Empirical Findings

In a world of perfect market, holding of cash is not required. Cash holdings decision is more important in SMEs because of scarcity of financial resources. The decision about the extent to which management of firm may hold cash depends on three well known theories that are free cash flow theory, trade-off theory and pecking order theory.

Free Cash Flow Theory

There exist two theoretical approaches which compete with each other regarding association between holding of cash and cash flow generated by firms. Kim, Mauer et al. (1998) and Kim, Kim et al. (2011) pointed out negative relationship between cash flow generated by firms and holding of cash. Generating more cash flow decreases the need to maintain high level of cash holdings. Opler, Pinkowitz et al. (1999) pointed out positive association between holding of cash and cash flow generated by firms. They argued that generating higher level of cash flow by firms increases the likelihood of maintaining higher level of cash to capitalize the investment opportunities.

Trade-off Theory

The focus of trade-off theory is on marginal cost and benefits of holding cash. So, firms keep optimal level of cash holdings by keeping in view marginal cost and benefits of holding cash (Al- Najjar and Belghitar 2011) (Martínez-Sola, García-Teruel et al. 2013). Ferreira and Vilela (2004) defined three benefits of holding cash. It reduces the probability of financial distress, attract investment policy and reduce the cost of external financing. Based on (Keynes 1936), (Opler, Pinkowitz et al. 1999) identified the two motives of cash holdings which includes precautionary motive and transaction cost. According to precautionary motive, firms prefer stockpiling of cash to capitalize unexpected investment opportunities. As per transaction motive, firm may obtain external financing by paying both variable and fixed costs.

Pecking Order Theory

Pecking order theory was initially proposed by (Myers 1984) and (Myers and Majluf 1984). Pecking order theory focus on hierarchical preference regarding financing decision. To obtain funds, first preference should be given to internal financing. Second preference should be given to external financing such as issuing debt. Third preference should be given to issuing new equity to obtain finance. As per pecking order theory, firms do not to maintain target level of cash (Ferreira and Vilela 2004). Such firms that have high investment opportunities and they may have to face difficulty in obtaining external finance, should maintain as much cash as possible (Chen 2008).

Previous studies, based on free cash flow theory, trade-off theory and pecking order theory have proposed various firm characteristics such as size, cash flow bank debt and etc. as determinants of cash holdings.

Cash Holdings

We have used Cash holding (CASH) as dependent variable which is measured as cash plus cash equivalents and divide it by total assets following (Ozkan and Ozkan 2004). Higher level of cash holdings implies that management of firms follow proactive approach regarding financing decision.

Firm Size

Smaller firms have to face high cost of financing and borrowing constraint in obtaining loan (Kim, Mauer et al. 1998). As fixed cost associated with loan amount is not proportional to the size of loan, which increases the cost of financing (Bigelli and Sánchez-Vidal 2012). Smaller firms are not well diversified and have higher likelihood of facing financial distress (Rajan and Zingales 1995). Many earlier studies proposed negative relationship between size of firms and holding of cash (Opler, Pinkowitz et al. 1999, Ferreira and Vilela 2004, Drobetz and Grüninger 2007, Chen 2008, Al- Najjar and Belghitar 2011, Bigelli and Sánchez-Vidal 2012). Following trade off theory, inverse relationship is expected between firm size and cash holdings in Pakistan. Two proxies have been used to measure the size of firms. Using first proxy size of firms can be calculated by taking natural logarithm of total assets. Using second proxy size of firms can be calculated by taking natural logarithm of total sales.

Cash Flow

Holding more cash decreases the likelihood of firms to enter in financial distress. Firms with higher cash flow can avail more growth opportunities (Kim, Mauer et al. 1998). Smaller size firms facing more risky activities and investment opportunities hold lager proportion of liquid assets (Opler, Pinkowitz et al. 1999). As cash flow is additional source of liquidity and can be consider as substitute of cash. Therefore, the expected relationship is negative between cash flow generated by firms and cash holdings (Kim, Mauer et al.

1998). Cash flow ratio generated by firms is calculated as pre-tax profit plus depreciation and divide it by total assets.

Bank Debt

Bank debt can be served as substitute of maintaining high level of cash holdings. Firms having less difficulty to obtain debt from bank are expected to hold less cash. Cash holding is negatively affected by bank debts (Ferreira and Vilela 2004) (Kim, Mauer et al. 1998) (Kalcheva and Lins 2007). Prime customers of banks have to face less difficulty in obtaining finance. Therefore, Firms having closer relationship with banks hold less cash (Luo and Hachiya 2005). So, bank debt reduces the need of cash reserve. Negative relationship is expected between cash holdings and bank debt as proposed by (Ferreira and Vilela 2004, Ozkan and Ozkan 2004, García- Teruel and Martínez- Solano 2008, Bigelli and Sánchez-Vidal 2012). Bank debt ratio is calculated as short-term bank debt and divide it by total assets.

Liquidity

Presence of liquid assets can also be used to meet cash need in times of cash shortage (Al- Najjar and Belghitar 2011). Liquid assets can be converted into cash with little price change. Liquid assets decrease the probability of issuing new shares in capital market (Ozkan and Ozkan 2004). Therefore, negative relationship is expected between cash holdings and liquid assets (Ferreira and Vilela 2004). Liquidity ratio is calculated by subtracting cash and marketable securities from working capital and divide it by total assets.

Tangibility

Firms having substantial collateral face fewer difficulty to obtain external finance (Titman and Wessels 1988). Tangible assets can be used as collateral while issuing debt or while obtaining debt from financial institution (Drobetz and Grüninger 2007). Therefore, negative relationship is expected between cash holdings and tangibility. Tangibility ratio has been calculated as total fixed assets divide it by total assets.

Z-Score

Z-Score is a measure of financial distress. To decrease the default risk, firms have to raise the level of cash holdings. Z-score model was proposed by (Altman 1968). Effect of Z-score on holding of cash is not clear. Therefore, positive or negative relationship can be expected between cash holdings and Z-score. Methodology proposed by (Begley, Ming et al. 1996) to calculate (Altman 1968) Z-score model has been used using following formula.

$$ZScore = 0.104X1 + 1.010X2 + 0.106X3 + 0.003X4 + 0.169X5$$

Where,

X1 = Ratio of Working capital to Total assets

X2 = Ratio of Reserves to Total assets

X3 = Ratio of Net operating profits to Total assets

X4 = Ratio of Book value of capital to Book value of debt

X5 = Ratio of Sales to Total assets

Growth

Firms that have more growth opportunities are expected to have more cash to capitalize investment opportunities (Ferreira and Vilela 2004, Al- Najjar and Belghitar 2011, Kim, Kim et al. 2011). Growing firms hold higher level of cash to avoid financial distress (Ferreira and Vilela 2004, Ozkan and Ozkan 2004). Two proxies have been used to calculate growth opportunities as proposed by (Scherr and Hulburt 2001). As per first proxy growth, opportunities (GrowthP1) which is calculated by dividing depreciation over total assets. As per second proxy, growth opportunity two (GrowthP2) which calculated by taking the natural logarithm after dividing current year sales over sales of previous year. Negative relationship is expected between first proxy and cash holdings. Whereas, positive relationship is expected between second proxy and cash holdings.

Sample

The data has been taken from the balance sheet analysis consisting of all listed companies in Karachi stock exchange issued by state bank of Pakistan for the period 2006-2011. Such companies whose data was missing considerably have been dropped. Therefore, this research focuses on the sample of 44 small and medium enterprises with two hundred and sixty-four total observations. The segregation between large enterprises and small and medium enterprises has been made using the standard developed by state bank of Pakistan. The criteria given by state bank of Pakistan is following.

According to the criteria SE-R1 the firm is known as small enterprise if it has up to twenty employees including contractual employees and the sales turnover of the firm is up to seventy-five million. In accordance with this criteria ME-R1medium enterprises have 21-250 employees including contractual employees and their sales turnover is between 75-400 million in case of manufacturing concern.

Panel Data Model Specifications

Panel data technique has been applied. Panel data inherits many characteristics over other types of data. The panel data is combination of both time series and cross section. Therefore, provides more information and reduce multi-collinearity. The panel data technique can detect and measure more effects which is not possible in case of pure time series and cross section data. Before the application of panel data techniques correlation amongst independent variables has been calculated to know the multi-collinearity amongst independent variables.

The standard equation of panel data is given below

$$Y_{it} = \beta_1 + \sum_{j=2}^{k} \beta_j X_{jit} + \delta_t + \varepsilon_{it} \quad \ldots\ldots 1$$

Whereas, equation 1.1 contains the proposed panel model for current research.

$$Cashholdingsit = \beta_1 + \beta 2Size12it + \beta 3Size23it + \beta 4Cashflow4it + \beta 5Bankdebt5it + \beta 6Liquidity6it + \beta 7Tangibility7it + \beta 9ZScore8it + \beta 9GrowthP19it + \beta 10GrowthP210it + \delta_t + \varepsilon_{it} \quad \ldots\ldots 1.1$$

Where:

i = is representing i_{th} variable

t = is representing to the t_{th} year

$\boldsymbol{\beta_1}$ = is a common intercept of panel regression

$\boldsymbol{\beta_2}$,$\boldsymbol{\beta_3}$,$\boldsymbol{\beta_4}$,$\boldsymbol{\beta_5}$,$\boldsymbol{\beta_6}$,$\boldsymbol{\beta_7}$,$\boldsymbol{\beta_8}$,$\boldsymbol{\beta_9}$, and$\boldsymbol{\beta_{10}}$ = is the coefficient of each explanatory variables

Variable Name	Calculation Formula
Cashholdingit	(Cash+ Marketable Securities) / Total Assets
Size12it	Ln(Assets)
Size23it	Ln(Sales)
Cashflow4it	(Pre-Tax Profit + Depreciation) / Total Assets
Bankdebt5it	Short-term bank debt / Total Assets
Liquidity6it	Working Capital – (Cash + Marketable Securities) /Total Assets
Tangibility7it	Fixed Assets / Total Assets
ZScore8it	0.104X1+0.010X2+0.106X3+0.003X4+0. 169X5
Growth P19it	Depreciation / Total Assets
Growth P210it	LN(Sales / $Sales_{t-1}$)

Cashholdingit is dependent variable, Size12it, Size23it, Cashflow4it, Bankdebt5t, Liquidity6it, Tangibility7it , $Z-Score8it$, Growth P19it, and Growth P210it are independent variables, δ_t is denoting the shift in the intercept term, ε_{it} = is denoting the error term of panel regression.

It is the simplest form of regression that is applied over panel data that has common intercept value. The coefficients obtained from such standard regression are not free from error. Therefore, in order to mitigate this problem fixed and random effects estimates of panel regression are obtained (Baltagi and Kao 2001), (Wooldridge 2002) and (Baltagi, Song et al. 2003). Breusch and Pagan lag range multiplier test is applied to solve the problem that whether random or fixed estimates are best fitted. This test follows a chi square distribution. This test produces results with one degree of freedom because single hypothesis is being tested. The null hypothesis of this test states that there are no random effects (Breusch and Pagan 1980).

In this paper random effects model is applied keeping in view the results of (Breusch and Pagan 1980). The random effects model is also known as error component model. In this model, the error which is ε_{it} is replaced with the w_{it}. $w_{it}= \varepsilon_i+ u_{it}$ this is known as composite error term because it is composite of two errors, ε_i individual specific error component and u_{it} which is combined error term of cross section and time series.

RESULTS AND DISCUSSION

Table 1 reports descriptive statistics to outline the general characteristics of all variables used in the study. Sample firms held low cash reserves despite of the fact that these firms are smaller in size and face financial constraints as compare to large firms. Bank debt is high, on average 75% of debt is used by SMEs for financing their activities. Liquidity, used as substitute of cash is also very low indicating that these firms might face liquidity problems for daily life transactions such as payment for goods and services. The mean value -12.37 for Z-Score also reveals that firms have likelihood to face financial distress. Growth opportunitiesP2, measured using this year sales divided it by last year sales showed that these firms have good growth opportunities in terms of demand for their goods.

Table 1

Descriptive Statistics

Descriptive	Cash Holdings	Size1	Size2	Cash Flow	Bank Debt	Liquidity	Tangibility	Z-Score	Growth P1	Growth P2
Mean	0.026	12.5	11.9	0.15	0.75	-0.30	0.92	-12.37	0.05	2.35
SE*	0.003	0.05	0.08	0.01	0.02	0.03	0.03	2.87	0.00	0.61
Median	0.007	12.5	12.2	0.08	1.00	-0.17	0.91	0.379	0.03	1.01
Mode	0.002	13.2	12.2	0.07	1.00	-0.70	0.71	-12.02	0.03	1.00
SD**	0.054	0.95	1.31	0.24	0.36	0.53	0.50	46.77	0.11	9.92
SV***	0.003	0.91	1.72	0.05	0.13	0.28	0.25	2188	0.01	98.5
Kurtosis	17.385	0.96	2.29	25.0	-0.32	1.87	0.45	1.833	54.1	107
Skewness	3.960	-0.03	-1.09	4.56	-1.13	-1.19	0.65	-1.19	7.64	10.0
Range	0.379	5.75	7.97	2.01	1.00	2.98	2.72	273.6	1.14	115
Minimum	0.000	9.68	7.34	0.01	0.00	-2.35	0.00	-191.0	0.00	0.00
Maximum	0.379	15.4	15.3	2.02	1.00	0.62	2.72	82.61	1.14	115
Sum	6.808	3313.0	3148.1	41.0	199	-81.2	260.2	-3265	13.6	621
Count	264	264	264	264	264	264	264	264	264	264

The table 1 contains descriptive statistics of the sample. * is the standard error. ** is the standard deviation and *** is sample variance. The sample is comprises of 264 panel observations.

Table 2

Correlation Matrix

	Cash Holdings	Size1	Size2	Cash Flow	Bank Debt	Liquidity	Tangibility	Z-Score	GrowthP1	GrowthP2
Cash Holdings	1									
Size1	-0.551	1								
Size2	-0.407	0.346	1							
Cash Flow	-0.065	-0.179	-0.090	1						
Bank Debt	0.084	-0.035	0.012	-0.083	1					
Liquidity	0.027	0.056	0.153	-0.104	-0.127	1				
Tangibility	0.128	-0.084	-0.125	0.200	-0.444	-0.386	1			
Z-Score	0.120	0.040	0.206	-0.149	-0.009	0.929	-0.468	1		
Growth P1	0.009	-0.022	0.031	0.517	-0.136	-0.001	0.171	-0.021	1	
GrowthP2	-0.551	0.038	-0.376	-0.024	-0.057	-0.010	0.069	-0.031	-0.033	1

Table 2 contains the correlation matrix amongst dependent and independent variables. The Cash Holdings is dependent variable. All other variables are independent variables. The values have been differentiated using above and below 0.50 benchmark.

Table 2 contains correlation matrix, calculated to investigate the relationship among all variables. Results show that there exists multi-collinearity amongst four independent variables which are cash flow & growthP1 and Liquidity and Z-score. Therefore, such variables amongst which multi-collinearity exist have been dropped and later on included successively while estimating random effects panel regression. Cash Holdings which is dependent variable is positively associated with Bank Debt, Liquidity, Tangibility, Z-Score, and GrowthP1. whereas, Cash Holdings is negatively associated with firm Size, Cash Flow and GrowthP2.

Panel Regression model is applied to investigate the effect of firm size, cash flow, bank debt, liquidity, tangibility, Z-Score, and growth opportunities on cash holdings. Size of the firm is significant variable for determining cash holdings and exhibit negative relationship in all models. Smaller firms may have to face high cost of external financing and difficulty to obtain external financing. These SMEs need to build up their own cash reserves for transaction and precautionary motives. Cash flow depicts significant relationship in model 1 and 2, and is negative in both models implying that cash flow is used as substitute of cash in SMEs. Firms are able to build up cash reserves from cash flow generate by operations. SMEs frequently use this cash for

meeting their short-term obligations and for the payment of goods and services.

Bank debt is positive and statistically significant in model one, two and five. This contradiction of positive relationship suggests that SMEs have low cash holdings and low level of debt financing because of difficulty in obtaining bank debt. Liquidity is significant in all models and have positive relationship with cash holdings. This relationship is contrary with results of presence of liquid assets other than cash proposed by (Opler, Pinkowitz et al. 1999) and (Ferreira and Vilela 2004). In present study, the reason for positive relationship is that SMEs are facing liquidity issues and thus have low cash holdings and low other liquid assets that can substitute cash.

Tangibility has significant and positive relationship with cash holdings, which is contrary to such firms that are with more tangible assets have less needs to hold cash reserves as proposed by (Titman and Wessels 1988). Whereas, positive relationship between tangibility and cash holdings implies that SMEs have less tangible assets and have less cash reserves. Z-Score is significant and negative in both model 3 and model 5, implying that with high financial distress firms have low cash holdings because worst financial distress situation raises default risks and reduces the liquid assets in firms. Growth opportunities, measured by dividing current year sales over last year sales, showed a significant negative relationship with cash holdings suggesting that SMEs do not have good growth opportunities in terms of sales of their goods and services. Therefore, firms hold less cash. Model 5 possess more explanatory power than other model except model 1.

Table 3

Panel Regression Results

Variables	E(S)	Model1 RE		Model2 RE		Model3 RE		Model4 RE		Model5 RE	
		β	t-value	β	t-value	B	t-value	β	t-value	β	t-value
Intercept		126.762	7.370	138.329	7.750	136.867	7.410	135.545	7.320	124.178	7.280
		(0.000)		(0.000)		(0.000)		(0.000)		(0.000)	
Size1	-	-9.652	-7.000	-10.547	-7.370	-10.576	-7.170	-10.599	-7.180	-9.416	-6.900
		(0.030)		(0.000)		(0.000)		(0.102)		(0.000)	
Size2	-	-1.588	-2.170	-1.862	-2.460	-1.592	-2.000	-1.289	-1.630	-1.628	-2.220
		(0.074)		(0.014)		(0.046)		(0.180)		(0.026)	
Cash Flow	-	-4.484	-1.790	-3.086	-1.330			-3.686	-1.340		
		(0.074)		(0.184)				(0.966)			
Bank Debt	-	5.368	3.080	4.514	2.510	1.432	0.800	0.072	0.040	5.223	3.000
		(0.002)		(0.012)		(0.426)		(0.023)		(0.003)	
Liquidity	-	22.494	6.940	9.020	5.280					22.095	6.840
		(0.000)		(0.000)						(0.000)	
Tangibility	-	5.960	2.970	7.654	3.720	5.931	2.730	4.743	2.280	5.678	2.870
		(0.003)		(0.000)		(0.006)		(0.638)		(0.004)	
Z-Score	+/-	-0.178	-4.830			-0.044	2.170			-0.172	-4.700
		(0.000)				(0.030)				(0.000)	
GrowthP1	-	5.074	0.990			-1.621	-0.330	2.623	0.470		
		(0.321)				(0.744)		(0.486)			
GrowthP2	+	-0.049	-0.910	-0.048	-0.86	-0.046	-0.780	-0.044	-0.750	-0.050	-0.920
		(0.362)		(0.390)		(0.437)		(0.000)		(0.358)	
R-Squared		0.459		0.394		0.349		0.339		0.455	
*BPLM Test P-Value		0.000		0.000		0.000		0.000		0.000	

*Breusch and Pagan lag range multiplier Test

CONCLUSION

Determinants of cash holdings are usually derived from trade off theory, free cash flow theory and pecking order theory. Based on these theories, we used various potential determinants of cash holdings such as size, cash flow, bank debt, liquidity, tangibility, Z-score and growth. However, empirically these theories do not fully support sample of 45 SMEs listed on Karachi stock exchange for the period 2006 to 2011.

There exists negative relationship between size1, size2, Z-score, cash flow, growthp2 and cash holdings of SMEs in case of Pakistan. These results are consistent with the findings of (Opler, Pinkowitz et al. 1999) (Begley, Ming et al. 1996) (Kim, Mauer et al. 1998) (Ozkan and Ozkan 2004) (Ferreira and Vilela 2004) (Chen 2008) (Al- Najjar and Belghitar 2011, Bigelli and Sánchez-Vidal 2012). Whereas, positive significant relationship exists between bank debt, liquidity, tangibility and cash holding of firms. Therefore, SMEs need to improve liquidity, tangibility and build up cash reserves to reap the benefits of cash holding. Benefits of cash holdings include, decrease in possibility of financial distress, implementation of investment policy in the presence of financial constraints and reduction in cost of external financing. Growthp1 has positive and negative insignificant relationship with cash holdings. Current study is limited to a sample of 45 SMEs because of unavailability of data. Further, research is possible by identifying corporate governance, market value variables along with firm-specific variables for SMEs in Pakistan.

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