Impact of Religiosity on Cash Holdings: Case Study of Islam

Saira Musarat M.B.A in finance at Foundation University Islamabad saira.thegenious@gmail.com

Naeem Ullah Assistant Professor at Foundation University Islamabad naeemk1@gmail.com

Abstract

The rationale behind the study is to scrutinize the impact and gauge the extent to which liquidity; cash flows, leverage, size, dividend payments, Islam, cash flow, variability and Market to Book ratio affect the cash holdings of corporate organizations. This study is important in the Islamic perspective which is going to check the impact of these variables on cash holdings when credit based financing is restricted to a specific extent and the main focus is on the cash based financing modes. 313 companies listed at Karachi Stock Exchange have been selected to inspect the association. The financial data of 5 years have been taken into account i.e. 2006-2011.Panel data estimation models like common effect model, random effect model and Haussmann test is applied to conduct the analysis. The results showed the significant positive relationship of all variables with cash holdings in Islamic roles follower firms of Pakistan. Islamic roles which is taken in our paper for study is basically based on a two criteria issued for a firms to be Islamic, was that they must have the interest bearing ratio should be less than 37% and the Non compliance investment to assets ratio should be less than 33%.. The study will help the investors and financial analysts to understand the factors of liquidity contributing towards cash holdings in Pakistani firms.

I - Introduction

Cash holding is always seen as an important variable in the eyes of investors and important component of balance sheet despite the fact that it is the least productive of all assets. Many firms in the past had increasing cash holdings with advancing years (Shah, 2011). That is the reason cash holdings have increased from 9% to 18% till 2008. This all has led to concerns for investors due to the increased potential of currency value deterioration and decreasing results of operational activities of firms. Due to the crisis of 2007 the perceptions of investors has also been changed with regards to liquidity and cash holdings and firms with higher levels of cash holdings and shareholders returns with higher revenues of cash have outperformed the opposite.

Now the question is why firms hold too much cash when it does not produce sufficient returns? According to Keynes (1936) there are three motives or benefits of cash holding. First is Transaction motive. According to this motive, there is a cost associated with borrowing funds from outside sources or when assets are converted to cash in urgency. Second is Precautionary motive. According to this motive, all the firms should have enough cash reserves to fulfill its shortfalls because cost would be incurred in other case when financial obligations are liquidated before the maturity time. Last is speculative motive. According to this motive, the firm has to face the cost of opportunities foregone due to low or no cash balance.

Number of prior researchers have studied the determinants of cash holdings and shed light upon it. Olpers (1999) concluded that higher levels of cash holdings lead to higher prospects of growth and higher cash holdings are the results of high risk at operational levels. Ozkan (2004) also emphasized the importance of cash holdings in terms of good growth opportunities. According to Ferreira and Vilela in 2004 firms having sufficient access to debt have high leverage and low cash holdings. Javed et, al (2011) In Pakistani firms Cash holdings are increased by Cash flows, net assets, Market to book ratio and volatility decreased with increase in Leverage. Firm size, tangibility and growth opportunities are the determinants of Cash holdings in listed firms of financial system of Saudi Arabia (Al-Najjar, 2013).

Pakistan is a developing country and was significantly affected by financial crisis of 2007. The increasing trend of inflation, energy crisis, financial slow down and high international debt has weakened the financial situation of Pakistan. Also the emergence of Islamic financial system has led to the motivation behind this research of determinants of Cash holdings in Pakistan.

The research would be unique and add to the existing body of knowledge because little evidence has been found with reference to determinants of cash holdings in the Islamic firms of Pakistan. For this purpose, Islamic firms as a dichotomist variable have been introduced to check the impact on cash holdings. And it takes the value of 1 if company is following criteria set out by Islamic criteria and literature. Although much research has been conducted in developed countries with sample from conventional firms but no such study has been worked upon in the developing countries and Islamic sector. Differentiation in this aspect has not been spotlighted. So this study would definitely add to the existing body of knowledge and addition with innovation in the area of Cash holding and its understanding.

II- Literature Review

Ozkan & Ozkan (2004) explained that Cash holding is beneficial in terms of low cost and financial flexibility internally and for this transactional and precautionary motives are the main reasons of holding cash. Ozkan also studied the determinants of cash holdings and the main focus was on the association of managerial ownership and cash holdings. Managerial ownership was discussed in terms of delegation of powers and board composition of firms in UK. They also found that cash holding is significantly shaped by liquid assets, cash flows, bank debt, leverage and fruitful opportunities. Financial flexibility (Kusnadi, 2003) is helpful to unexpected expenses incurred and investment of capital needed when cost of external financing is high. Keynes (1936) also viewed extra or external funds as costly means of acquiring debt when firms cannot access internal funding for investing in opportunities, they liquidate assets, pay less dividends and issue debt.

According to Dittmer et al, (2003) There is a way to find the equal balance of costs and benefits of cash retaining and firms can find the ideal balance which is also known as trade-off theory. Cash flow, market to book ratio, net working capital, leverage, firm size (Shah, 2012) significantly impact the cash holding of firms in Canada. The study was conducted on 166 firms listed in stock exchange of Toronto in the two yrs of 2008-2010. Falk Fender (2002) studied the impact of firm characteristics on cash holdings of small size firms. The results were that the higher the cash reserves of the firm higher would be the asymmetric information, agency problems and higher debt ratio. Low cash balances leads to low level of above characteristics. Taxes are also not that much influencing like marginal ownership. Also the level of cash balances increase with the size of the firm. Javed et, al (2011) In Pakistani firms Cash holdings are increased by Cash flows, net assets, Market to book ratio and volatility and decreased with increase in Leverage. Firm size, tangibility and growth opportunities are the determinants of Cash holdings in listed firms of financial system of Saudi Arabia (Al-Najjar, 2013).

Lawrencia et al (2012) studied the impact of variables in Nigerian Firms on the cash holdings. After the correlation technique was applied in the test, the results were that profitability, leverage and working capital has a significant impact on cash holdings. In (1999) Olpers studied the listed firms of US to check the impact of different factors on the corporate cash holdings. Different analytical techniques were applied which led to the results that higher the growth opportunities, riskier cash flows create higher cash holding ratios.

Myers and Majluf (1984) firms prefer the funds that are internally generated over external funds due to asymmetric information they face. Myers (1977) firms that are growing cannot go for projects that have positive net present value due to debt which is riskier on its financial statements. For this reason they should build excess cash. Kim et al (1998) firms that face financial distress must have higher cash holding as they are facing bankruptcy costs, decreased sales revenue, less quality, expenditures of R & D etc.

Baskin (1987) said that firms that have higher debt or leverage have lower cash holdings because cost of funds increase with the leverage. Al-Najjar (2013) Cash holding in excess is also bad that firm only concentrate on retaining cash, it would lose the favorable investment opportunities. Dittmar et al. (2003) say that cash reserves are also good because information asymmetry and agency costs associated with external financing are costly.

Jensen (1986) Agency problems leads to problem of cash shortfall because managers when have excess cash utilize it in matters of their interest and does not care for shareholders' interests. Bates et al found the fact that higher the riskiness of cash flows, higher would be the cash ratios. Benjamin & Samuel, (2012) determined profitability is significantly and positively associated with cash holdings. Ozkan, (2004) found that bank debt, liquid assets, leverage and growth opportunities significantly impact the cash holding of firm.

Hoffman (2006) concluded that cash flow variability, leverage and liquid assets are strong determinants of cash holdings. Daher (2010) found the significant negative relationship between cash and different variables like working capital, size, leverage, cash flows etc.

III- Methodology

So far the results and findings of the prior researches have been taken into account. This study like the earlier researches is going to add knowledge to the body of research specifically by determining the factors influencing cash holdings in Islamic firms from all the sectors working in Pakistan and listed at Karachi Stock exchange.

Factors influencing Cash holdings and Hypothesis Development:

Following factors are taken into consideration in this study to check variation in cash holdings.

Leverage:

High debt leads to more cash spending at the time of payment which decreases the cash holdings. Ferreira and Vilela (2003) and Bates et al. (2009) had similar results of inverse relationship between leverage and cash holdings or the association was inverse in nature. Olpers (1999) concluded that leverage is inversely proportional to cash holdings because firms with high debt ratios have to pay their outstanding debts with cash balances.

Trade off theory and pecking order theory also leads to inverse relationship between both the variables. So we are going to develop the following hypothesis:

H₁: Leverage is a negatively and significantly associated with cash holdings.

Size of the Firm:

According to (Harris and Raviv, 1990) size of the firm play an important role in the cash holding of the firm. Larger the size of the firm, more they would invest in growth opportunities. Size indicates the asset level of the firms. Large numbers of assets are when invested in opportunities yield low cash holding. So the relation is inverse in nature.

H₂: Firm Size is a positively and significantly associated with Cash holding.

Cash Flows:

Schrand (1999) claimed in his paper that firms have to bear the cost of forgone growth opportunities if its cash flows are volatile. Cash holdings act as buffer when the firm runs short of cash from operations. So higher the cash flows, higher would be the cash holdings.

H₃: Cash flows is a positively and significantly associated with Cash holdings.

Dividend Payments:

Firms can use dividend payments as a substitute to hold extra cash by not paying them or missing them. They can be used as a substitute to cash. This shows the negative relationship between dividend payments and cash holdings (Olpers, 1999).

H₄: Dividend payment is a negatively and significantly associated with Cash holdings. Liquidity:

Ozkan (2004) concluded that Liquidity has a negative impact on firm's cash holdings. This shows that firms have to use their marketable securities and net working capital for cash holdings to avoid shortfalls.

H₅: Liquidity is a negatively and significantly associated with Cash holdings.

Market to Book Ratio:

Market to book ratio is defined as the book value of equity subtracted from the book value of total assets to market value of equity to book value of total assets. Ozkan (2004) said that Market to book ratio is directly proportional to cash holdings because firms who have higher market to book ratio would go for more cash and marketable securities to avoid financial downfall and distress and higher cost of financing.

H₆: Market to Book Ratio is a positively and significantly associated with Cash holdings.

Variability:

Hoffman (2006) studied the strong determinants of cash holdings and found that higher growth opportunities and higher cash flow variability leads to higher cash holdings.

H₇: Cash flow variability is a positively and significantly associated with Cash holdings.

Islamic Firms:

Javed et, al (2011) In Pakistani firms Cash holdings are increased by Cash flows, net assets, Market to book ratio and variability and decreased with increase in Leverage.

H8: Islamic dicotomic is a positively and significantly associated with cash holdings.

The data for different variables used in the study would be obtained from balance sheet analysis of state Bank of Pakistan for the period 2006-2011. We selected this source because these are the official figures published by Pakistan and reduce biasness and inherited from other sources. The period 2006-2011 is robust because during these years economy of Pakistan went through different economic cycle. Thus this duration provides us the opportunity to get meaningful and robust results of the cash holding behavior of the firms.

Panel Data Regression Models:

We will estimate the following base line regression models:

 $Cash_{i,t} = \alpha + \beta_1 Cash flows_{i,t} + \beta_2 Liq_{i,t} + \beta_3 Lev_{i,t} + \beta_4 Mbr_{i,t} + \beta_5 Size_{i,t} + \beta_6 Var_{i,t} + \beta_7 Div_{i,t} + \beta_8 Islamic dichotomic variable_{i,t}$

Where:

α = Constant Value

β = beta coefficient

The dependent variable is CASH which is the ratio of total cash and cash equivalents to total assets. The independent variables are LEV which is the ratio of total debt to total assets, SIZE is the natural logathrim of assets, CFW is the ratio of pre-tax profit plus depreciation to total assets. LIQ is the ratio of current assets and current liabilities to total cash to total assets. DIVIDEND is the ratio of dividend payments to total assets. MBR is the ratio of book value of total assets minus the book value of equity plus the market value of equity to book value of total assets. VAR is the ratio of standard deviation of cash flows to average total assets. ISLAMIC DICHOTOMIC VARIABLE consists of all the Islamic firms in which impact of all liquidity variables on cash holdings is analyzed. Islamic firms are differentiated from Non-Islamic firms on the basis of interest bearing ratio and Non-Compliance ratio. All the firms with the interest bearing ratio less than 37% and Non-Compliance

investment ratio less than 33% are categorized as 1 and Islamic and remaining others are categorized as 0 and Non-Islamic.

Common Effect Model:

In order to test the hypothesis we will proceed by estimating the following common effect model:

 $Cash_{i, t} = \alpha_0 + \beta_1 cash flow_{i,t} + \beta_2 Liq_{i,t} + \beta_3 Lev_{i,t} + \beta_4 Mbr_{i,t} + \beta_5 Size_{i,t} + \beta_6 Var_{i,t} + \beta_7 Div_{i,t} + \beta_8 Islamic dichotomic variable_{i,t}$

However we got robust results by using this model. Because although all firms are manufacturing firms but they belong to different sectors of the economy, in phase their own set of specific industrial norms and cross sectional variables share these vital differences.

Fixed Effect Model:

We will estimate the following fixed effect models:

 $Cash_{i, t} = \alpha_i + \beta_1 cash flow_{i,t} + \beta_2 Liq_{i,t} + \beta_3 Lev_{i,t} + \beta_4 Mbr_{i,t} + \beta_5 Size_{i,t} + \beta_6 Var_{i,t} + \beta_7 Div_{i,t} + \beta_8 Islamic dichotomic variable_{i,t}$

Fixed effect estimation is a powerful panel data estimation technique and it allows for heterogeneity of cross sectional variable by incorporated unique intercept for every cross sectional firms. This allows for reduction of biasness caused by omitted variable.

Random Effect Models:

We will estimate the following random effect models:

 $Cash_{i, t} = \alpha_0 + \beta_1 cash flow_{i,t} + \beta_2 Liq_{i,t} + \beta_3 Lev_{i,t} + \beta_4 MBR_{i,t} + \beta_5 Size_{i,t} + \beta_6 Var_{i,t} + \beta_7 Div_{i,t} + \beta_8 Islamic dichotomic variable_{i,t}$

A random effect model is a powerful panel data estimation technique it allows for controlling the biasness caused by error terms. This model works the same as fixed effect model with a difference that it considers the influence of individual characteristics of entities across the sample to check the impact. Also there is no T-value like fixed effect model. Instead of that P-value is given importance. If P-value for nay variable is less than 0.05, than it has a significant impact on the dependent variable. Other it is insignificant or neutral.

Housman Test:

We have applied this test to choose between the results of Fixed and Random Effect model because some time fixed effect models and random effect models give us conflicting result in order to select the more robust result, we will conduct housement test under the following hypothesis.

H₁: Fixed effect model results are accepted.

H₀: Random effect model results are accepted.

If P value of 0.05 or less will make us to except the result of fixed effect model or vise virsa. Fixed effect model says that unique errors (ui) are correlated with regressors in the sample. Whereas random effect models say that they are uncorrelated. It is also the null hypothesis of the random effect model.

Population and Sampling:

Sample of the study consisted of 313 firms selected from all the firms listed at Karachi stock exchange. The Islamic firms are introduced as a dichotomic variable in the study and exception to prior studies of cash holdings. All the firms in the sample were categorized as Islamic and Non-Islamic on the basis of their following of Islamic procedures in all the years taken in study. Firms that have followed the Islamic procedures in all years were categorized as Islamic and assigned as 1. And all the firms that have sometimes followed Islamic principles are categorized as 0 and Non-Islamic firms. Also when the average total assets were calculated data for the year 2006 to 2011, it eliminated the year 2006 and 2011 from the study. So period of study decided were 2007 to 2011. The criteria for firms to be Islamic was that they must have the interest bearing ratio should be less than 37% and the Non compliance investment to assets ratio should be less than 33%.

Data Collection:

The secondary data for the study or research has been from the financial statement analysis of Joint stock companies of State Bank of Pakistan. These firms were listed at Karachi Stock Exchange and data has been collected from 2007 to 2011. Also Journal articles are researched to get the idea of the prior researches and authenticity and accuracy of references have been taken care off.

Data Analysis:

Panel data regression model is used in the study to get the accurate results. It is also known as longitudinal or cross sectional time data series is a data set which is used to analyze the behavior of entities or groups like countries, individuals, states or firms across time series. It further consists of common effect model, fixed effect model, Random Effect Model and Housman Test.

IV- Results and Discussion

Common Effect Model:

This would contain the Descriptive Statistics, Pearson Correlation and Multiple Regression techniques applied to check the impact of variables.

Descriptive Statistics:

In order to know the descriptive properties of the collected data, this technique has been applied. Results are shown in the Table 4.1:

|--|

| 1 abic 4.1. | | | | | |
|-------------|-------------|--------|---------|--------|-------|
| Variables | No. of Obs. | Mean | Std Dev | Min | Max |
| WCASH | 1005 | 0.042 | 0.079 | 0.0002 | 0.453 |
| WCFT | 1005 | 0.14 | 0.14 | 0.019 | 0.970 |
| WLIQ | 1005 | -0.008 | 0.33 | -1.42 | 0.697 |
| WLEV | 1005 | 0.289 | 0.245 | 0 | 1.08 |
| WMBR | 1005 | 1.07 | 0.750 | 0.154 | 5.53 |
| WSIZE | 1005 | 14.66 | 1.67 | 10.41 | 18.66 |
| WVAR | 1005 | 0.234 | 0.34 | 0.0001 | 0.227 |
| WDIV | 1005 | 0.153 | 0.32 | 0 | 0.177 |
| WIslam | 1005 | 0.364 | 0.481 | 0 | 0 |

All the variables are lying close to the mean value except Size which is far away from the mean value and this shows its insignificance with reference to impact upon cash holdings. Same is the case with standard deviation. Size has a much higher value which shows that it is lying far from mean value.

Table 4.2:

Pearson correlation:

To examine the relationship between the studied variables with multicollinearity among them, Pearson Correlation technique has been applied. The correlation results are shown below in the Table 4.2:

| Variables | | | | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|-------|------|---|
| WCASH | 1 | | | | | | | | |
| WCFT | 0.26 | 1 | | | | | | | |
| WLIQ | 0.22 | -0.05 | 1 | | | | | | |
| WLEV | -0.28 | -0.04 | -0.39 | 1 | | | | | |
| WMBR | 0.29 | 0.35 | -0.07 | -0.02 | 1 | | | | |
| WSIZE | 0.09 | -0.13 | 0.21 | -0.09 | -0.01 | 1 | | | |
| WVAR | 0.12 | 0.56 | -0.19 | 0.09 | 0.15 | -0.03 | 1 | | |
| WDIV | 0.34 | 0.34 | 0.34 | -0.31 | 0.35 | 0.23 | 0.01 | 1 | |
| WIslam | 0.30 | 0.11 | 0.22 | -0.52 | 0.09 | 0.07 | -0.00 | 0.24 | 1 |

According to the Correlation results, negative and significant relationship exists between Leverage and Cash holdings. Whereas positive and significant relationship exists between Cash flows, Liquidity, Market to book ratio, Dividend, Variability, Islam and Cash holdings, Weakest correlation exist between Size and Cash holdings and strongest correlation exists between Dividend and Cash holdings.

Multiple Regression Analysis:

The impact of independent variables on dependent variables is studied through the multiple regression technique. Results are shown in the Table 4.3:

Table 4.3:

| Variables | Coef | Std. Err | T-Value | P-Value |
|-----------|--------|----------|----------------|---------|
| WCFT | 0.593 | 0.0211 | 2.80 | 0.005 |
| WLIQ | 0.031 | 0.0076 | 3.98 | 0.000 |
| WLEV | -0.311 | 0.0111 | -2.79 | 0.005 |
| WMBR | 0.022 | 0.00327 | 6.75 | 0.000 |
| WSIZE | 0.003 | 0.0014 | 2.58 | 0.010 |
| WVAR | 0.186 | 0.0803 | 2.31 | 0.021 |
| WDIV | 0.210 | 0.087 | 2.42 | 0.016 |
| WIslam | 0.294 | 0.0053 | 5.46 | 0.000 |

According to the above results, all the variables with P-value equal to or greater than 0.05 would be insignificant predictors of Cash holdings. On the basis of this Cash flows, Leverage, are insignificant whereas Size, variability and Dividend payments are strong insignificant predictors of Cash holdings. Liquidity, Market to book ratio and Islam are strong and significant predictors of Cash holdings in Pakistani context.

Fixed Effect Model:

Fixed effect model has been used to check the association between the predictors and outcome variables. Results are as follows in the table 4.4:

Table: 4.4

| Variables | T-Value | Coef. | Std. Err | P > t |
|-----------|------------|---------------------------------|-----------|--------|
| WCFT | 0.050 | 0.0437625 | 0.223355 | 0.050 |
| WLIQ | 0.103 | 0.0161717 | 0.0099102 | 0.103 |
| WLEV | 0.015 | -0.0306405 | 0.0125726 | 0.015 |
| WMBR | 0.000 | 0.0237895 | 0.0038241 | 0.000 |
| WSIZE | 0.592 | 0.0011608 | 0.0021664 | 0.592 |
| WVAR | 0.006 | 0.2354055 | 0.0854375 | 0.006 |
| WDIV | 0.002 | 0.3446604 | 0.1127448 | 0.002 |
| WIslam | 0.000 | 0.0376783 | 0.0077199 | 0.000 |
| Cons | -0.70 | -0.0227626 | 0.0327354 | 0.487 |
| Sigma_u | 0.05341316 | | | |
| Sigma_e | 0.05779388 | | | |
| rho | 0.46066856 | Fraction of variance due to u_i | | |

The table provides information related to T-value, P-value, Number of observation and groups. Results indicate that Cash flows have a neutral effect on Cash holdings because the value is 1.96 exactly and T-value has to be higher than 1.96 to show the significant impact on dependent variable. Liquidity is insignificantly impacting the cash holdings with а value 1.63 less than 1.96. Leverage is significant negatively impacting the Cash holdings. Market to book ratio and variability has a very strong significant impact on cash holdings. Size has a very insignificant impact on cash holdings. Dividend payments also have a very strong impact on cash holdings with Islamic firms. The F-value is 0.00 which shows that model is Ok and applied correctly. Number of observations are 1005 and number of entities are 313. The errors Ui are also correlated with the regressors in the fixed effect model.

Random Effect Model:

In random effect model, all the P-values are if less than 0.05, they have a significant impact on the dependent variable. The results of the study show that all the variables have a significant positive impact on cash holdings except size. Size has an insignificant impact. **Table 4 2**.

| 1 able 4.2: | | | | |
|-------------|------------|---------------------------------|-----------|-------|
| Variables | P > z | Coef. | Std. Err | Z |
| WCFT | 0.011 | 0.0511146 | 0.0199783 | 2.56 |
| WLIQ | 0.002 | 0.0242641 | 0.0078808 | 3.08 |
| WLEV | 0.003 | -0.0315518 | 0.0107992 | -2.92 |
| WMBR | 0.000 | 0.0227548 | 0.0032305 | 7.04 |
| SIZE | 0.073 | 0.0027788 | 0.0015505 | 1.79 |
| WVAR | 0.008 | 0.1999844 | 0.0759245 | 2.63 |
| WDIV | 0.003 | 0.2613003 | 0.0892154 | 2.93 |
| WIslam | 0.000 | 0.0320636 | 0.0057372 | 5.59 |
| Cons | 0.081 | -0.0419186 | 0.0240126 | -1.75 |
| Sigma_u | 0.04007658 | | | |
| Sigma_e | 0.05779388 | | | |
| rho | 0.32471623 | Fraction of variance due to u_i | | |

Haussmann Results:

If the value of Haussmann result is less than 0.05, which is significant than use Fixed effect model. Otherwise use Random effect model. The value of this study is 0.5330 which is much higher than 0.05 so we have selected the Random Effect Model. Our null hypothesis is accepted which is that our unique errors (Ui) are not correlated with regressors in the study.

Table 4.2.

| Variables | Coef. | | Difference (b-B) | Sqrt (diag (V_b-V_B)) S.E. | |
|-----------|------------|------------|------------------|-------------------------------|--|
| | (b) fe | (B) fe | | | |
| WCFT | 0.0437625 | 0.0511146 | -0.0073521 | 0.009987 | |
| LWIQ | 0.0161717 | 0.0242641 | -0.0080924 | 0.0060087 | |
| WLEV | -0.0306045 | -0.0315518 | 0.0009113 | 0.006438 | |
| WMBR | 0.0237895 | 0.0227548 | 0.0010347 | 0.0020463 | |
| WSIZE | 0.0011608 | 0.0027788 | -0.001618 | 0.001513 | |
| WVAR | 0.2354055 | 0.1999844 | 0.0354211 | 0.0391795 | |
| WDIV | 0.3446604 | 0.2613003 | 0.0833602 | 0.0689347 | |
| WIslam | 0.0376783 | 0.0320636 | 0.0056147 | 0.0051653 | |

Chi2 (8) = (b-B)' [(V_b-V_B) ^ (-1)] (b-B)] = 7.03

Prob > Chi2 = 0.5330 (Random effect model selected as value > 0.05)

As per above analysis Market to book ratio has a very strong significant impact on the cash holdings which is similar to the views that firms with high market to book ratio invest their major portion of cash in marketable securities or cash equivalents because these firms have to face higher costs of external financing in financial distress. Our findings are consistent with Ozkan (2004) and our hypothesis is accepted. Cash flows also have a significant impact on cash holdings due to the fact that higher cash flows leads to increasing capability of firms to hold more cash for internal rather than external financing. Also higher cash flows help companies to take advantages of the growing opportunities. Results are consistent with Schrand (1999). Moreover liquidity also have a positive significant impact on cash holdings because firms invest mostly in their cash and cash equivalent assets like marketable securities in order to have high cash holdings to save their precautionary and speculative motives. Leverage has a high negative significant impact which is consistent with the findings that firms that invest in debt or have higher debt ratios have lower holdings of cash. Ferreira and Vilela (2003) and Bates et al. (2009) also had the same findings. Size has an insignificant relationship with cash holdings due to the fact that the firms with large size have good access to financial and capital markets. So they do not need to have high cash holdings every time. Dividend payments also have a positive significant relationship with cash holdings because firms that payout dividends to shareholders regularly need to have higher cash holdings. Variability has a significant positive relationship with cash holdings that firms with high volatile earnings need to retain high cash holdings for shortfalls or emergency needs. Islamic firms also have a very strong significant impact on cash holdings. Pakistani firms tend to hold more cash because of the precautionary needs to sudden financial slow down and economic crisis.

Out of our seven hypotheses only one are rejected which are related to size. Remaining all are related to cash flows, Dividend, variability, leverage, liquidity, Market to Book ratio and Islam are accepted with significant and robust results.

V- Conclusion

The study concluded that major determinants of cash holdings are leverage, liquidity, variability, cash flows, dividend payments, whereas size has an insignificant impact. The results of the study have supported the findings of many researches in the literature. The overall results of the study is positive which showed that effect of independent variables is significant because the P values are much less than 0.05 in Random effect model only Size has shown a different behavior and the hypothesis is rejected in that regard. The hypothesis that leverage is inversely proportional to cash holdings has been proved. All hypotheses have been accepted except the size one. Whereas in Islamic firms all these variables have a significant impact. This study is important in aspect because Islamic firms are studied and analyzed in the research which has excellent implications for the policy makers and analysts in Muslim countries and Islamic financial systems.

REFERENCES

- 1. Harris, M. and A. Raviv (1990). "Capital Structure and the Informational Role of Debt". Journal of Finance, Vol. 45, pp. 321 -49.
- 2. Hofmann, C., (2006). "Why New Zealand Companies hold cash: An empirical Analysis" Unpublished Thesis.
- 3. Opler, T., Pinkowitz, L., Stulz, R. and R. Williamson (1999). "The Determinants and Implications of Corporate Cash Holdings". Journal of Financial Economics 52, 3-46.

- 4. Kim, C. S., Mauer, D.C. and A. E. Sherman (1998). "The Determinants of Corporate Liquidity: Theory and Evidence". Journal of Financial and Quantitative Analysis 33, 305-334.
- 5. Dittmer, A., and J. Mahrt-Smith, (2007). Corporate Governance and the Value of Cash Holdings, "Journal of Financial Economics, 83, 599–634.
- 6. Faulkender, M. (2002) "Cash Holdings among Small Business", Working Paper (Kellogg School of Management, Northwestern University)
- 7. Ferreira, M. and A. Vilela (2004). "Why Do Firms Hold Cash? Evidence from EMU Countries". European Financial Management, Volume 10, Issue 2, 295-319, June.
- 8. Myers, S., and N. Majluf (1984). "Corporate Financing and Investment Decisions When Firms Have Information that Investors Do not have". Journal of Financial Economics 13, 187-221.
- 9. Benjamin, Y., Samuel K., (2012). "Working Capital Management and Cash Holdings of Banks in Ghana" European Journal of Business and Management Vol. 4, No.13,
- 10. Bates, T., Kahle, K. and Stulz R., (2009). "Why do U.S. Firms hold so much more Cash than they used to?" The Journal of Finance. Vol. LXIV, No. 5
- 11. Mai Daher (2010). "The Determinants of Cash Holdings in UK Public and Private Firms". Dissertation (Lancaster University Management School, Lancaster University)
- 12. Caglayan-Ozkan, N. and A. Ozkan (2004). "Corporate Cash Holdings: An Investigation of U.K. companies". Journal of Banking & Finance 28, 2103–2134
- 13. Islam SS, Mozumdar A (2007). Financial Market Development and the Importance of Internal Cash: Evidence from International Data. J. Bank. Finance. 31(3): 641-658.
- 14. Keynes JM (1936). The General Theory of Employment, Interest and Money, Harcourt Brace, London.
- 15. Baskin J (1987). Corporate Liquidity in Games of Monopoly Power. Rev. Econ. Stat., 69(2): 312-319.
- 16. Myers SC (1977). Determinants of Corporate Borrowing. J. Finance. Econ., 5(2): 147-175.
- 17. Minton BA, Schrand C (1999). The Impact of Cash Flow Volatility on Discretionary Investment and the Costs of Debt and Equity Financing. J. Finance. Econ., 54(3): 423-460.
- 18. Kusnadi, Y. (2003). Corporate cash holding and corporate governance mechanisms.
- 19. Al-Najjar, B., Belghitar, Y.(2011). Corporate cash holding and dividend payment: Evidence from simultaneous analysis. *Managerial and decision Economics* 32 (4), 231-241.
- 20. Javed, T., & Rizwan, M. F. (2011). Determinants Of Corporate Cash Holdings: Evidence From Pakistani Corporate Sector. *Economics, Management, And Financial Markets*, (1), 344-358.
- 21. Olatunde, L., Ogundipe, S, E., and Kehinde A, S., (2012). "Cash Holding and Firm Characteristics: Evidence from Nigerian Emerging Market". Journal of Business, Economics & Finance, Vol. 1, No 2.
- 22. Shah, A. (2011). The corporate cash holdings: Determinants and implications. *African Journal of Business Management*, 5(34), 12939-12950.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage: <u>http://www.iiste.org</u>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <u>http://www.iiste.org/journals/</u> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Academic conference: http://www.iiste.org/conference/upcoming-conferences-call-for-paper/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

