The Impact of Long-Term Debt and Debt-Maturity on the Corporate Investment Decision of the MNCs - Evidence from Pakistan Stock Exchange

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Objectives: The purpose of this study is to examine the determinants of institutional investment decision of MNCs listed on Pakistan Stock Exchange. **Methods/Statistical analysis:** Multinational companies of non-financial firms were selected based on market capitalisation. Data was collected from annual reports and some companies have fallen out due to an outlier's problem and missing financial information. Finally, in this study financial MNC's samples listed on Pakistan Stock Exchange were examined from the 2013-2017 period. Panel data used for estimation and fixed effect model was selected based on Hausman and Likelihood test. **Findings:** The result of the conceptual framework shows that in the common effect model only cash flow and firm size significantly influence the investment decision of the firm, but whenever we extended the model to incorporate the time and individual effect by applying fixed effect model, board size, cash flow, fixed capital intensity, firm size and growth opportunity are the significant determinants of a corporate investment decision. Finely debt maturity, leverage, cash flow, firm size, return on assets and corporate ownership are key determinants affecting the enterprise investment decision in Pakistan.

Key words: *Corporate investment, Debt maturity, Institutional Ownership, MNCs.*

1. Introduction

In finance there is a serious issue related to influence of the leverage on an investment decision. In the context of increasing global competition, investment is vital for a firms' growth and long-term survival, as well as for a country's productivity and economic growth. Therefore, this research topic is of interest to scholars, managers and policy-makers. The corporate financial leverage is the use of debt in its capital structure. This proposition goes for adding to the current writing on the relationship among influence and investment by concentrating especially on the effect of financial influence on investment. These days specialists are in perspectives to discover all aspects that influence investment choice in a firm's dimension.

According to Kumar (2010) debt choice is not just the choices, which make benefit and income, yet in addition incorporate every one of those choices which limit firm costs and spare more cash. Past writing investigated the significance of financing limitations amid settling on business investment (Brainard and Tobin, 1968). Modigliani (1958) adds to corporate money by creating the important theory of monetary structure. The paper adds to the current writing on communications between corporate financing and interest in the accompanying ways. In the first place, this is one of the principal concentrations to research the relationship between investment openings and the decision of influence and debt development, just as the impacts of these monies related approaches to investment choices. Billet et al. (2007) further look at the impact of development openings on the utilisation of leverage contracts. Regardless to the bearing of this relationship' it is contingent on leverage development.

A company's development alternatives influence its leverage decision due to the underinvestment issue (Myers, 1977). Concerning the relationship to other financing choices, Stohs and Mauer (1996) find solid proof that the debt development and capital structure choices are intelligent (Stohs and Mauer (1996), utilise a proportion of capital structure as a control variable and find that it is an essential determinant of debt development in firms with more prominent financial influence which likewise utilise long-term debt.

Dass and Massa (2014) contend that issuing bonds with various developments is a method for considering institutional financial specialists. Utilising syndicated advance information, Man and Santos (2018) locate that most financially sound firms stretch out credit developments to reduce the liquidity hazard. Liu et al. (2015) stated that a company's investment choices and their results decide the company's future money streams and gains and profoundly affect the company's long-term survival and development.

In past examinations, the effect of leverage (debt) on the investment of firms has been investigated. A few investigations call attention to the negative effect of leverage on firm investment (Lang, (1996)). Numerous researchers have for the most part centred on creating

nations, to be specific Canada, UK, US, India, China and so forth. There is extremely uncommon work in Pakistan, which is identified with the effect of long long-term debt and debt maturity on the investment choice of the organisations, while settling on a great investment choice is turned into a major issue in the ongoing years. The past investigations together look at the cooperation of corporate financing and firm investment in the distinctive sectors of debt maturity firms and low-development firms (Mian and Santos, 2018). However, in the present investigation, different factors are likewise included like firm size, leverage, Tobin's q, money streams and institutional ownership, which may impact investment choices at the firm's dimension and have not been broken down in Pakistan. Besides, in the present investigation the effect of long-term debt and debt maturity on the investment choices of the organisations from various segments are broken down to catch an expansive image of the effect of long-term debt and debt maturity on the investment choice of the organisations of Pakistani MNCs. This moderating effect of size and institutional ownership has not been explored previously.

2. Theoretical Background and hypothesis development.

Investment is the proportion of monetary compensation in the present, to get a more favourable position in future. Cash related specialists correspondingly as institutional inspectors and government, are constantly stressed over whether to contribute or not, and how to pick best undertaking elective among the accessible choices. As shown by Nwibo and Alimba (2013) an individual cash related ace will pick whether to buy a stock, handle a course of arranging and so on. Large scale and Paolo (2010) contend that assignment of assets relies on the experience picked up from past investment. Before picking the investment choice, investors examine distinctive kinds of financial information, and endeavour to change that information into valuable data. In this way, it is to consider the relationship between money related choices and investment practices in isolated firm sectors. Kadapa Kham et al. (1998) for instance, look at the effect of income on firm interest in six years, and separate firms into three sectors as per firm size. This article demonstrates that the income - investment relationship is the touchiest in the biggest sector and the littlest sector of organisations and has the least level of affectability. Essentially, Zheng and Zhu (2013) verify that political relationships assume a vital job paying off debtors financing by applying to the political relationship levels these organisations. As far as the state possession structure, to make an examination among Okuda and Nhung (2012) is to discover private firms and state-controlled firms progressively solid under financing longer term debt than state controlled firms.

2.1 Leverage and a firm's investment.

Over the most recent two decades observational research has been done to break down the relationship between influence and investment choices. The investigation of the impact of financial influence on corporate investment choice is an essential issue in corporate money.

Money-related influence assumes an essential job in the capital structure of an organisation. Among various techniques for corporate financing, financial influence is one of the debt instruments utilised by the association to raise assets for the present moment just as for the long term. Cantor (1990) examined the relationship between corporate investment and monetary influence. He presumed that a firm having an extensive measure of income can without much of a stretch aggregate a colossal measure of stores and these stores can be utilised by the firm to make a new investment amid less beneficial year. Be that as it may, then again, exceptionally turned organisations having a little measure of income, can't keep up hold and at some point, need to curtail, when the organisation is stuck in the issue of money-related trouble. Thus, it implies that if there should be an occurrence of an exceedingly turned firm, investment is profoundly touchy to the income of the firm; what's more, this indicates a greater inconstancy in investment over time. Earlier hypothetical work proposes that monetary influence has a negative effect on the firm's investment choice. Myers, (1977) and Zwiebel, (1996) considered the relationship between financial influence and the firm's investment rate. They saw that financial influence is contrarily identified with a firm's investment rate, and reasoned that lenders feel challenges for the accessibility of credit if there should be an occurrence of more noteworthy topsy-turvy data about gainfulness and business risk. According to Ooi (1999), vast and increasingly beneficial organisations offer an inclination to reinvest their benefit for extension of business because of a low liquidation hazard just as a high assessment section. However, Titman and Wessels (1988) similarly found a negative relationship between the financial effect and firm productivity. They are fighting for productive associations to move away from external financing and give more tendency to domestic stores. Titman and Wessels (1988) contribute by saying that improvement in assets increases motivation for an association, because these points of interest do not create centralised assessable payments and cannot be guaranteed. Thus, they strengthen the basic relationship between commitment and industrial development openings. Obviously, Hite (1977) and Franklin and Mouthusamy (2011) found a great positive relationship between the monetisation effect and the experience for companies with high progress. Different aces have seen the relationship between the budget effect and the choice of firm theory (Jensen, 1986). Based on the above literature we developed the following hypothesis:

H1: Leverage and debt maturity have a negative relationship with a firm's investment decision.

2.2 Cash flow and investment.

Income is a significant determinant of a firm's investment choice. The existence of money streams give more development chances to the firm. The main contention proposed by Jensen (1986) was in view of management cost hypothesis of free income. Jenson contend that the chief gave more inclination to his very own advantage while settling on an investment choice because of which he spent free income on less productive tasks. The primary contention

proposed by Jensen (1986) considered the organisation cost hypothesis of free income. The second contention was proposed by Myers and Majluf (1984) in view of asymmetry of data. They demonstrated that the cost of outer financing is high as contrast with inside wellspring of financing because of the issue of deviated data. Thus, at some point the firm left undertakings of positive net present esteem. They demonstrated that the cost of outer financing is high as contrast with interior wellspring of financing because of the issue of data. Fazzari et al, (1988) contemplated the relationship of financing limitation and firm investment by utilising the US fabricating firm information over the period 1969 to 1984. They stated that monetarily limitation firms are progressively reliant to their money inflow amid settling on their capital investment choice. Numerous different investigations like Hoshi et a1(1991) additionally gave observational help to the investigations (Fazzari et al, 1988). In this investigation, firms have been characterised based on different qualities like profit circulation design, firm size, age and so on for the reason to recognise their dimension of monetary limitations. Donaldson (1961) contended that income assumes a most crucial job in firm investment choice. As per Donaldson (1961), supervisors lean toward interior funds in contrast to an outside source because of asymmetry of data in the market. Whited H (1980) contended that investment of a business is touchy toward income, and this impact is discovered more grounded in high turned firms in contrast to low turned firms. Devereux (1992) inspected the relationship between corporate investment choice and income in the UK over the period 1972 to 1986 by utilising board information examination. They infered that there is a huge positive relationship of income with corporate investment. Joseph (2002) examined the relationship between corporate investment choice and income in the UK from the period 1991 to 2000. He likewise discovered that income has a positive and noteworthy effect on firm investment choice in the UK. Based on the above literature we developed the following hypothesis:

H2: Cash flow has a positive relationship with a firm's investment decision.

2.3 Size of firms, debt maturity and corporate investment.

Previously, firm size has been considered broadly in various nations. In view of Source Based Opinion, expansive firms have more assets since they can without much of a stretch get subsidising from the money related market (Myers and Turnbull, 1977). As per Fazzari et al, (1988), firm size has been contemplated widely in various nations. According to Saquido (2003), firm size and influence are both unimportant in investment choices. They contend that the investment choice and firm financing choices are very autonomous. Lawrence's past research (2004) contended that the firm size of the undertaking size expanded because of the higher rate of return. The organisation found a positive relationship among size and productivity. Chirinko (1993) designed the relationship between the experiences and actions of the huge companies in the US state of Kansas. They cause the bargain to be the most logical variable of corporate theory in a measurable way. In addition, some amazing reviews such as Hung and Kuo, (2011) and Aivazian et al. (2005) found that energy offerings for

large firms had a profitable result. As Saquido (2003) showed, firm size and impact level are not significant in both hypothesis decisions. They argue that the theory decision and the firm's financing decisions are unacceptably allowed. Recent research by Lawrence (2004) reported that the limit of firm creation, along with the size of the business, increased in the context that it provided higher yields with substantially more effort. He found a positive link between the size and profitability of the alliance. A large-scale firm can reasonably pull out to embrace auditors. As Titman and Wessels (1988) showed, companies that are gradually attracting attention can be further developed, reducing the likelihood of disappointment from small firms. Amidu (2007) examined the determinants of the capital structure of banks in Ghana. His analysis explored the advantage, asset structure, institutional cost and size as the most fundamental parts of the bank's capital structure in Ghana. These factors affect the theory decision of the capital structure in banking structure very much.

Karadeniz et al (2009) contemplated the effect of firm size, development opportunity, resource substantial quality and profit for resources on firm debt proportion. They show that arrival on resources and resource substantial quality is contrarily corresponded to the organisation's debt proportion while the size of the organisation and development openings did not have any long-term association with organisation debt proportion. Based on the previous literature we developed the following hypotheses:

H3: Firms are more sensitive about debt and investment decisions.
H4: A firm's investment decision is improving by institutional ownership.
H5: How a moderator can affect a corporate investment decision.

3. Data, Sample and Methods

3.1 Sample description.

This study consists of the annual financial reports of the multinational companies' (MNC's), analysis of the balance sheet from annual reports, the business register and the secondary data collected from the stock exchange portal (PSX). The data of non-financial firms for the period of five years from 2013 to 2017 are collected from the annual financial reports of the companies sector-wise. To think about these components, non-financial firms recorded at the stock exchange are picked for examination. Toward the beginning , examples measure incorporates non-money related organisations recorded at the Stock Exchange. These organisations were chosen on the basis of market capitalisation, because normally these organisations speak to the KSE 100 list. After screening the information, firms having deficient information were dropped out from the example and alongside this, each one of those non-money related firms having negative value or inadequate data are likewise rejected from the example estimate. In the present considered for pooled information estimation, just non-financial MNCs are chosen, capital structure, guideline complexities and investment choice of money related firms (like banks, renting organisations, insurance agencies and

modarabas organisations) are not the same as non-monetary firms; along these lines it is normal that their determinants will likewise vary from each other. That is the fundamental reason of barring money related MNCs from the examination.

3.2 Definition of Variables

Table 3.1 shows the brief detail of dependent and independent variables related to my study.

Table 3.1 Measurement of variables

Variables	Definition	References
Investment	Percentage of current assets in the total assets of the company	(Azzoni et al., 2006)
Debt Maturity	Amount of long-term debt to total debt	, Alcock et al., 2012
Leverage	Percentage of total debt in the total assets of the company	Ahn et al., (2005); and Saquido (2003)
Firm Size	Total assets at the end of the year	(Jangili and Kumar 2010).
Institutional Ownership	Percentage of shares owned by different institutions out of total shares of the company	Brickley et al. (1988).
Cash Flows	Firm annual cash inflow from operation	Carbo et al., (2008)
ROA	Net profit of the company to the average of the assets	(Weston and Brigham, 2013).

3.3 Methodology.

To mpirically xamine the determinants of corporate investment decision of Pakistani MNCs a simple linear regression was used, which is extensively used in the previous literature. Below is generalised form of simple linear regression.

$$INV_{it} = \beta_0 + \beta_1 DMAT_{it} + \beta_2 LEV_{it} + \beta_3 ROA_{it} + \beta_4 CFL_{it} + \beta_5 FS_{it} + \varepsilon_{it}$$

Where Y_{it} represents the firm investment, while X_{it} indicates the determinants of firm's investment decision like institutional ownership, cash flow, firm size, financial leverage, return on assets, debt maturity and μ_{it} represents the error term. Further i, t and k represent number of firms, number of years (time) and the number of explanatory variables respectively. Based on above generalised equation below specific equation was developed.

$$INV_{it}=\beta_0+\beta_1 DMAT_{it}*INSTO_{it}+\beta_2 LEV_{it}*INSTO_{it}+\beta_3 CFL_{it}*INSTO_{it}+\beta_4 ROA_{it}+\beta_5 FS_{it}+\mathcal{E}_{it}$$

Where INV represents the firm's investment, while INSTO represents institutional ownership, CF represents cash flow from operation, DMAT represents debt maturity, FS represents firm size, Lev represents financial leverage, ROA represents return on assets and µit represents the error term. Further it and k represent   number of firms, number of years (time) and the number of explanatory variables respectively. The past literature prefers to use Generalized Method of Movement (GMM) estimation to handle the problem of endogeneity and serial correlation. But in case of   current study, the empirical results showed that dependent variable "Investment" is not affected by its lagged term,   means there is no pattern in the data. Therefore, panel data estimation will be better as compared to using   Generalized Method of Movement (GMM) estimation. That's why   fixed effect model was selected based on   Hausman and Likelihood test.

4. Results and Discussion

4.1 Descriptive statistics

Before going to run any test to panel data, the behaviour of   data is examined to assure its accuracy. Descriptive statistics show the general behaviour of data including   dependent variable as well as all independent variables. Here the descriptive statistic table contains the value of   mean, minimum values, maximum values and values of standard deviations of all variables of the sample, which shows how much data is deviated from its centre. Results of descriptive statistic are given below in Table 4.1

Table 4.1: Descriptive Statistics

Variables	Max	Min	Mean	Std.
INVESTMENT	0.98	0.13	0.62	0.22
FIRM SIZE	8.15	4.91	6.64	0.77
RETURN ON ASSETS	37.68	(27.99)	3.52	11.55
LEVERAGE	3.52	0.03	0.64	0.58
INSTITUTIONAL OWNERSHIP	0.97	0.00	0.31	0.27
DEBT MATURITY	0.94	0.003	0.36	0.21
CASH FLOW	7.96	(1.59)	0.21	0.79

Table 4.1 shows that average investment mean value in Pakistani non-financial firms is 0.62 while maximum and minimum investment is 0.98 and 0.13 respectively with a standard deviation of 0.22. Similarly, the mean value of the firm size in non-financial firms of Pakistan is 6.64 and the minimum and maximum value is 8.15 and 4.91 respectively, with a standard deviation of 0.77. Similarly, in Pakistan the mean value of   cash flow of non-financial firms is 0.21 and the minimum and maximum value is -1.59 and 7.96 respectively, with a standard deviation of 0.79. The average value of ROA is 3.52, which means that approximately half of the total assets are fixed assets in Pakistani non-financial firms, while the minimum and maximum percentage is -27.99 and 37.68 respectively, with a standard deviation of 11.55. The average value of financial leverage is 0.63, which shows that, capital structure of non-financial firms in Pakistan contain 63% debt and 37% equity while   minimum and maximum portion of debt used in Pakistan is 0.03 and 3.52 respectively with a standard deviation value of 0.57. In Pakistan, the mean value of institutional ownership of non-financial firms is 0.31 having the minimum and maximum value of 0.00and 0.97 respectively with a standard deviation value of 0.27. Finally, the mean value of debt maturity is 0.36 and   minimum and maximum value in Pakistan is 0.003 and 0.94 respectively with a standard deviation value of 0.21.

4.2 Multivariate analysis.

Table 4.2: Correlation Matrix

	INV	FS	ROA	LEV	INST O	DMAT	CF
INV	1						
FS	0.12	1					
ROA	-0.13	0.43	1				
LEV	-0.36	-0.39	-0.44	1			
INST O	-0.09	0.41	0.27	-0.13	1		
DMAT	0.54*	0.39	0.30	-0.37	0.16	1	
CF	-0.07	0.21	0.45	-0.30	0.10	0.24	1

Table 4.2 shows the correlation analysis among all independent variables and * indicate the highest figure in the table. This table shows that there is no problem of multicollinearity among independent variables because the highest value is 0.54. Table 4.2 represents, that there is high correlation between cash flow and firm size, which is 0.45, preceded by return on assets and firm size, which is 0.43. Institutional ownership, symbolised by (INSTO), shows a positive relationship with all variables. Cash flow, symbolised by (CF), shows a positive correlation with firm size as well

as return on assets ratio while correlation with financial leverage. Institutional ownership, represented by (INSTO), has negative correlation with return on assets while showing positive correlation with financial leverage as well as firm size. Similarly, financial leverage is symbolised by (LEV) which shows a positive relationship with firm size and return on assets.

A redundant fixed effects likelihood test was used for the selection purpose that either common effect model or fixed effect model will be better. Here the selection criteria are the P-value of this test. If P-value of the likelihood test is significant, then common effect model will be rejected. In the current situation, P-value is significant; therefore, common effect model is rejected.

Table 4.3 Likelihood Test

Test summary	Statistic	d.f	P-value
Cross-section F	36.19	(30,106)	0.0000

The null and alternative hypotheses of the test are:

H_o = The common effect model is an appropriate model.
H1 = The fixed effect model is an appropriate model.

Now there are two possibilities. Either fixed effect model or random effect model will be used. Now Hausman specification test will be used for making decision. Hausman (1978) proposed a test to facilitate the choice of an appropriate technique from among the two competing approaches, namely the fixed effects and the random effects. This test tells us that difference between the fixed effect and the random effect estimators is significant or not. The null and alternative hypotheses of the test are:

H_o = The random effect model is an appropriate model.
H1 = The fixed effect model is an appropriate model.

The Hausman test is applied to identify the suitable technique. Results indicate that Chi-square value of cross section is 31.96 having a p-value of 0.000. Hence the Hausman test recommends the fixed effects model to be employed in order to obtain consistent and efficient estimates.

Table 4.4 Hausman Test

Test summary	Chi-square statistic	Chi-sq. d.f	P-value
Cross-section random	31.96	6	0.0000

The fixed effect model is like pooled regression, but it allows for the constant to vary across individuals. It is also called Least Square Dummy Variable (LSDV) estimator, because it uses dummy variables for taking different cross sections to account (Gujrati 2006). Different intercept concepts are logical because our samples consist of heterogeneous set of non-financial firms relating to diverse sectors.

Table 4.6 Results of Fixed Effect Model (FEM)

Variables	Coefficient	t-statistic	P value
C	0.5673	4.1060	0.0001
SIZE	-0.0005	-0.0256	0.97
ROA	-0.0071	-4.97	0.000
Lev	-0.1409	-5.202	0.000
INSTO	-0.0956	-1.752	0.08
DMAT	0.5891	8.210	0.000
CF	-0.0375	-1.998	0.05
R Square	0.50		
F statistic	23.48		
Prob F	0.000		

Note: This table presents the results for the balanced panel-data models using firm fixed-effects.

Table 4.6 reports the result of fixed effect model. The value of R square is 0.50. It means that 50% of variation in corporate investment (the dependent variable) is occurring due to all independent's variables. The value of R square is highly satisfactory; it is acceptable for panel data analysis (Shaikh, Iqbal and Shah, 2012). There may be certain other variables which are missing in the current study which also influence the corporate investment decision; that's why the value of R square is 50%. The results of fixed effect model reveal that return on assets, institutional ownership financial leverage, debt maturity and cash flows have significant relationship with investment, while, firm size has insignificant and negative impact on corporate investment decisions. Our result shows that return on assets has also a significant negative relationship with investment decision of non-financial firms in

Pakistan. Cash flow is statistically significant and negatively associated with corporate investment decision in Pakistan, which support the cash flow theory of investment.

The results show that increase of 1 unit in cash flow might lead to an increase of 0.59 unit in investment, if other variables are remaining constant. This clearly indicates that Pakistani non-financial firms mostly finance their new investment from that of internal funds. Because, Pakistani firms have no easy access to cheap borrowing. The result is consistant with the previous results of Azzoni and Kalatzis (2006); Aivazian et al., (2005) and Bokpin and Onumah (2009); Nair (2011); Geng and Diaye (2012) and some other research studies. The past literature persists that when cash inflows of a company is increasing, it will lead   company to invest more in fixed assets, due to which its production capacity will be increased. In terms of firm size, which shows the estimated coefficient of 0.14 with a P-value of 0.001,   indicates that firm size has   insignificant association with   corporate investment decision. The results show that   increase of 1 unit in firm size will increase 0.14 units in investment rate. The finding of   current study suggests that as   size of the firm is insignificant, the result is consistant with the previous results of Bokpin and Onumah 2009; Yu 2003; Aivazian et al., 2005; and Hung and Kuo, 2011). They argued that larger firms go toward   more diversification strategy. They enjoy the benefit of higher credit rating and easier access to capital markets and pay minimum interest rates on borrowed funds, which may lead the firm toward more investment. Lawrence et al., (2004) argue that larger   enjoy the benefit of higher credit rating and easier access to capital markets and pay minimum interest rates on borrowed funds, which may lead the firm toward more investment. In addition, the result is consistant with the previous results of Bokpin and Onumah 2009; Yu 2003; Aivazian et al., 2005; and Hung and Kuo, 2011). They argued that larger firms go toward   more diversification strategy. They enjoy the benefit of higher credit rating and easier access to capital markets and pay minimum interest rates on borrowed funds, which may lead the firm toward more investment. Finally, growth opportunity measured by return on assets is positively correlated with investment activities when   fixed effect model is applied to incorporate the time effect. This result is the same expected and is logical with the following past studies of (Jiming et al., 2010; Odit and Chittoo 2008; and Amidu 2007). High-growth firms enjoy the benefit of easy access to capital markets and pay minimum interest rates on borrowed funds due to higher credit rating. The presence of large capital may lead the firms towards more investment. High-growth firms enjoy the benefit of easy access to capital markets due to higher credit rating (McConnell & Servaes, 1990).

Table 4.7 Results of simple Fixed Effect Model with Moderation (FEMM)

Variables	Model1		Model2		Model3		Model4	
	Coefficient	P value	Coefficient	P value	Coefficient	P value	Coefficient	P value
C	0.5672	0.0001	0.5825	0.0000	0.5713	0.0001	0.5540	0.0002
SIZE	-0.000548	0.9796	-0.0020	0.9259	0.0007	0.9734	0.0005	0.9792
ROA	-0.00714	0.0000	-0.0066	0.0000	-0.0071	0.0000	-0.0072	0.0000
LEV	-0.1410	0.0000	-0.1463	0.0000	-0.1405	0.0000	-0.1288	0.0025
INSTO	-0.0956	0.0820	-0.0577	0.3553	-0.1315	0.2093	-0.0719	0.3875
DMAT	0.5892	0.0000	0.5576	0.0000	0.5500	0.0000	0.5883	0.0000
CF	-0.0375	0.0476	-0.0208	0.3652	-0.0354	0.0717		0.0461
INSTO*CASH			-0.0915	0.2111				
INSTO*DEBT MATURITY					0.0989	0.6862		
INSTO* LEVERAGE							-0.0380	0.7031

Table 4.7 reports the result of the fixed effect model with the moderator. The value of the coefficient after moderation of cash flows is -0.0915 and the p value is 0.211. This means that there is negative relationship between institutional ownership and cash flows but it is insignificant. The values of coefficient of debt maturity also reduce after the moderation effect. This indicates that institutional ownership reduces the coefficient. There is a positive relationship between debt maturity and institutional ownership but it is insignificant. The results of the fixed effect model with the moderation effect reveal that the institutional ownership effect as a moderator is negative with cash flows and positive with debt maturity but both are insignificant. Our result shows that leverage has also an insignificant negative relationship with investment decisions of non-financial firms in Pakistan. Cash flow is statistically insignificant and negatively associated with corporate investment decisions in Pakistan. This clearly indicates that Pakistani non-financial firms mostly finance their new investment from that of internal funds. Because, Pakistani firms have no easy access to cheap borrowing. The result is consistant with the previous results of Azzoni and Kalatzis (2006); Aivazian et al., (2005) and Bokpin and Onumah (2009); Nair (2011); Geng and Diaye (2012) and some other research studies. The past literature persists that when cash inflows of a company is increasing, it will lead company to invest more in fixed assets, due to which its production capacity will be increased. In our results, it shows a negative and insignificant relationship between cash flows and institutional ownership. The finding of current study suggests that as institutional ownership of the firm is insignificant and negative relationship of moderation with cashflows and leverage but positive relationship with debt maturity in non-financial firms in Pakistan.

5. Conclusion

This study analyses the determinants of corporate investment decisions in Pakistan. Sample of 31 MNCs listed at   Pakistan Stock Exchange; they were taken for the period of five years, starting from 2013 up to 2017.   Results of this research are consistant with findings of most of the studies in the existing literature. The results of   common effect model suggest that only cash flow and firm size significantly influence the investment decision of the firm; but whenever we extended the model to incorporate the time and individual effect by applying fixed effect model, board size, cash flow, fixed capital intensity, firm size and growth opportunity,   the significant determinants of corporate investment decision, while board independence, board meeting, CEO duality, institutional ownership and financial leverage does not play any significant role in making investment decisions in non-financial firms of Pakistan. First of all the significant relationship suggests that firm managers give more preference to its internal cash flows as compared to external funds to finance their investment activities. Similarly, the significant relationship suggests that firm managers give more preference to its internal cash flows as compared to external funds to finance their investment activities. Similarly, managers give more preference to its internal cash flows. Moreover, the significant relationship suggests that firm managers give more preference to its internal cash flows as compared to external funds to finance their investment activities. . Similarly, managers give more preference to its internal cash flows. The findings of current study suggest that as   size of the firm increases, the investment rate also increases. Large firms enjoy the benefit of easy access to capital markets and pay minimum interest rates on borrowed funds due to higher credit rating. The presence of large capital may lead the firms towards more investment. Larger firms also make more production and achieve economies of scale; these firms obtain higher returns by making more investments. Finally, growth opportunity measured by return on assets has a significant positive impact on firm investment decisions, which means that high-growth firms tend to reduce information asymmetry and provide better aspects for obtaining funds as compared to low-growth firms. Low-growth firms are considered to have lower cash flows and availability of funds.

It is found that there is exists a negative relationship between firm size and investment but it is insignificant. Lawrence's previous research (2004) argued that the firm size of the enterprise size increased due to the higher return on investment. The relationship between cash flows and investment is also negative but significant. It is considered an important determinant of firm investment decision because if the firm has enough cash inflows.(Carbo et al., 2008), they also use this proxy for measurement of cash flows. There is exists a negative relationship between the return of assets and firm investment but it is significant. Profitability ratios are measuring management success as shown by profits generated by sales

and investments (Weston and Brigham, 2013). The relationship between institutional ownership, leverage and corporate firms' investment is also negative but also significant. Brickley et al. (1988). Lang et al., (1996); Opler & Titman (1994); Aivazian et al., (2005); Ahn et al., (2005); and Saquido (2003) also use the same proxy which has been used by other researchers for measuring leverage. There is exists a positive relationship between debt maturity and corporate investment decisions significantly. Both Lang et al. (1996) and Aivazian et al. (2005a) examined that relationship between a firm's investment and financial leverage affects a firm's investment negatively.

5.2 Implication of the study

Based on the empirical results, a few suggestions on the improvement of investment decisions at the firm level are given as follows: The current study has concluded that managers prefer internal finance due to the asymmetry of information with external investors. That asymmetric information increases the cost of external finance. If sometimes a firm has insufficient internal finance to sustain their investment and growth, then the government should give some special financial benefits for such a company like providing a tax shield, providing loans at a low interest rate so that it recovers itself from bankruptcy.

5.3 Limitation of study

The current study tried to overcome and remove existing flaws in all aspects but still it has some limitations that must be considered and applied in future. The very first limitation of this research is that it is conducted with a small sample size and short time period included only MNCs. It is possible to get different results by increasing the sample size, all non financial firms as well as extending the time. Another limitation is that sample size of current study is only limited to the MNCs of Pakistan. It can't give any information about the determinants of investment decisions of financial firms listed on the Pakistan Stock Exchange.

5.4 Future Research Directions

This study investigates the impact of only few variables such as institutional ownership, cash flow, financial leverage, firm size and return on assets on corporate investment decisions; many other variables like business risk, sales growth, dividend payout ratio etc. would also affect the investment decision at firm level. This study has taken data of MNCs Listed PSX. It would be useful to carry same study by taking a sector wise comparison in non-financial sectors for future research. The R value is 50%, which clearly indicates that some other factors are also present, which are not addressed in the current study. Hence, future research studies are suggested to explore some other factors that influence the investment decision.

Conflicts of Interest: The authors declare no conflicts of interest.

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