Artículo de investigación

Investment-Cash Flow Sensitivity in Family Owned Pakistani Firms

Sensibilidad al flujo de efectivo de inversiones en empresas pakistaníes de propiedad familiar
Sensibilidade do Fluxo de Caixa de Investimento em Empresas Paquistanesas Familiares

Recibido: 19 de febrero de 2019. Aceptado: 22 de abril de 2019

Written by:
Muzammal Khan (Corresponding Author)[115]
Muhammad Salman Shabbir[116]
Muhammad Sohail Tahir[117]
Rafaqet Ali[118]
Mubeen Hussain[119]

Abstract

Different governance structure of family owned firms may impact their investment decisions and hence performance in the long run. This study investigates the impact of family ownership and control on investment-cash flow sensitivity of family owned firms listed in Pakistan Stock Exchange. Using the ownership threshold of >50% share holdings, panel data of 135 firms is analyzed from 2004-2017. Generalized Method of Moments (GMM) was used to estimate the coefficients of model. Results reveal the financing decisions are significantly sensitive to the cash flows generated by the firms in a credit constraint environment. The study recommends policy makers to facilitate capital funding to family owned firms and encourage the placement of professional CEOs instead of family members.

Keywords: family firms, investment-cash flow sensitivity, control and CEO
JEL classification: G31, G32

Resumen

La mayoría de la estructura de gobierno de la familia de propiedad propia puede afectar sus inversiones tomadas y rendimiento en el largo plazo. Este estudio investiga el impacto de la propiedad de la propiedad y el control en la inversión de flujo de flujo de la población de la sociedad de propiedad de la sociedad en cuestión. El uso de la propiedad de propiedad del 50% de los contenedores, se establece el certificado de seguridad de 135 de 135 a partir de 2004-2017. Se utilizó el método utilizado para medir los coeficientes del modelo (GMM). Los resultados que muestran las medidas de aprobación son sensibles a los flujos de flujo generados por la entidad en un entorno de restricción de contenido. El estudio considera que los responsables de la política de toma de posesión de capital para una sociedad de propiedad privada y la colocación de profesionales profesionales en lugar de miembros de familia.

Palabras claves: familia, inversión de flujo de caja, control y CEO

Resumo

Diferentes estruturas de governança de empresas familiares podem afetar suas decisões de investimento e, portanto, o desempenho a longo prazo. Este estudo investiga o impacto da propriedade familiar e controle sobre a sensibilidade do fluxo de caixa de investimento das empresas familiares listadas na Bolsa de Valores do Paquistão. Utilizando o limite de propriedade de mais de 50% das participações acionárias, os dados de painel de 135 empresas são analisados de 2004 a 2017. O Método Generalizado de Momentos (GMM) foi utilizado para estimar os coeficientes do modelo. Os resultados revelam que as decisões de financiamento são significativamente sensíveis aos fluxos de caixa gerados pelas empresas em um ambiente de restrição

[115] PhD Scholar Superior University Lahore, Department of Management Sciences, COMSATS University, Islamabad, Vehari campus Email: muzamilkhan@ciitvehari.edu.pk
[116] Post Doctoral Fellow School of Management University Sains Malaysia
[117] Department of Management Sciences, COMSATS University, Islamabad, Vehari campus
[118] Department of Management Sciences, COMSATS University, Islamabad, Vehari campus
[119] PhD Scholar Superior University Lahore, Department of Management Sciences, COMSATS University, Islamabad, Vehari campus

de crédito. O estudo recomenda formuladores de políticas para facilitar o financiamento de capital para empresas familiares e incentiva a colocação de CEOs profissionais em vez de membros da família.

Palavras-chave: empresas familiares, sensibilidade do fluxo de caixa de investimento, controle e CEO

Introduction

Modigliani and Miller (1958), argued that financial structure of firms does not impact the investment decisions under the perfect capital markets and rational stakeholders. However, imperfections of capital markets, con-integrations of stock markets and irrational behaviors of investors have demonstrated that, many factors influence the investment decisions of firms. Schiantarelli and Sembenelli (2000) have demonstrated that investment opportunities and governance systems impact the investment decisions of family owned firms. Especially, it applies on firms where financial funding constraints may affect the dictions of expansion and internationalization of business.

A large body of empirical literature, (Goergen, 2001; Pawlina; 2005 and Hadlock, 1998) has focused their attention on effects of family ownership and governance system, on level of investment-cash flow sensitivity and dependence. Though, results of those studies are still mixed, however, they are sufficient to prove that the investment decisions vary from firm to firm and certain governance and industrial level variables play significant role in shaping investment strategy of firms. The relationship of investment decisions of firms and varying cash flows has been largely studied with moderating effects of funding constraints. Firms with more investment-cash flows sensitivities have more external funding problems and vice versa. For example, Andres (2011) found that large publically traded firms with family ownership > 50% are more prone to external funding constraints, in comparison with other firms, due to less sensitive investment to cash flows. Asymmetric information is also one of the causes of increased investment-cash flow sensitivity among the family controlled firms (Hung & Kuo, 2011).

In Pakistan, most of businesses have roots in family startups and almost 67% businesses are still controlled by families. Though literature has consistently provided the evidence of varying pattern of investments and cash flows among the family owned businesses, yet most of researches have been conducted in developed countries like UK and USA. Family business startups in developing countries like Pakistan face a different cultural and financial funding system which has been little investigated by researchers. Family firms due to their distinct features, manifest different investment and financial behaviors. In Pakistan, despite having large share of family firms listed in PSE, little research has been made to study the effects of family firms on their financial behavior. This study fills the gap and provides further evidence in literature regarding the effects of family ownership of business on investment-cash flow sensitivity and financial constraints (Gugler, 2003).

This study has twofold objectives; first, it will investigate whether there is a difference of investment-cash flow dependence between the family and non family owned firms by using the sample from listed companies in Pakistan Stock Exchange. Second, it will also examine effect of CEO as family member on investment decisions and dependence on internally generated funds. This research contributes in following ways; first, this study uses large panel data set to investigate the effects of family owned firms and their investment-cash flow sensitivity. Second, in Pakistan, where most of big businesses are family owned and controlled, this study examines the impact of CEO as family member versus non family member professional CEO on investment decisions in the light of financial funding constraints (De La Torre, 2011 and Pan X., 2016). Finally, this study contributes of literature on funding and investments issues of Pakistani firms.

The remaining article is organized as; next 2nd section reviews the recent developments in literature on investment-cash flow dependence. 3rd Section presents research methodology to test the theoretical hypothesis using the data of Pakistani firms. 4th section discusses the results and draw meaningful information from analysis. Last, 5th section concludes the findings of study and provides guidelines for investors and policy makers.

Literature Reviews and Hypothesis development

The initial findings regarding investment and cash flows dependency were documented by

Fazzari, Hubbard, and Petersen (1988), when they found that firms suffering from severe financial constraints had positive relationship with investment-cash flow sensitivity. Further theoretical studies linked the corporate governance dynamics with investment decisions. Kaplan, S., and Zingales, L. (1997) found the negative role of large institutional investors with investment-cash flow sensitivity. Morgado et al. (2003) reported the direct positive association between investments and internally generated cash flows of firms.

Due to increased percentage of family businesses in the world, Researchers (Bopaiah, 1998; James, H.S., 1999) have shifted their focused to different perspectives in financial and strategic matters of family owned businesses. Andres (2011) reported that UK firms operated by family members were facing external funding problems in comparison with other non-family owned firms, while their financial strategies were more dependent on internal cash flows availability. De La Torre (2011), described the determinants of family owned business in the long run, including, higher level of risk aversion, efficient use of internal funds due to less asymmetric information among family members controlling the firm, more concerns for reputation and difficulty of survivals due to breakup of family relations.

Morgado (2003) examined the German family owned firms and found increased efficiency in funds allocation and above median returns due to low agency costs as well as low internal cost of capital issuance making them less sensitive to investment-cash flows dependence. However, Gugler (2003) examined the data of Australian family owned firms from 1990-2002 and found opposite results. He described that family ownership negatively impacted the investment-cash flows dependence due to uneven distribution of firm wealth.

Contrary findings were reported by D'Aurizio, Oliviero, and Romano (2015) that family business firms are less prone to external financing than their counterparts after the collapse of Lehman brothers' collapse. Stacchini and Degasperi (2015) studied the family firms during the crisis period 2007-2009 in USA and documented the advantage of family ownership & control; as those firms were less affected by the financial crisis. Opposite evidence is provided by Wang (2015) that family firms had control and governance issues like abnormal dividends payments, special bonuses and nepotism which could lead to firms towards less investment-cash flows sensitivity.

Recent literature (Andres, 2015: Pan and Tian, 2016; Fateminasab, 2014) have provided convincing evidences that large financial bodies take addition cautious measures when dealing with family controlled firms due to higher level of inherent business uncertainty. Considering all the findings of empirical studies, it can be argued that family firms face higher level of financial constraints which is measured through investment-cash flows sensitivity. So, first testable hypothesis is;

H1: *Family owned firms has positive effect on investment-cash flow sensitivity.*

Another very important characteristic that manifests the distinctive behavior of family owned firms is, the existence of active family members as CEO, controlling all the operational and financial matters of firms. Several studies in both developed and developing countries have documented the evidence that active and passive control mechanisms of family owned firms results in varied governance style and hence different performance. For example, Villalonga & Amit (2006), and Eklund (2013) compared the family firms grouped as having family member as CEO and having a professional independent CEO. Findings portrayed that performance of family firms having professional CEO was remarkably better than later group.

As literature highlights, family owned firms with active CEO as family member, face problems due to family pressures. It adversely impacts the financial policies and decisions and hence the performance in the long term (James, H.S., 1999). Therefore, it can be argued that active family member CEO may be the main cause of higher investment-cash flows sensitivity in family owned firms. Considering all above arguments, second hypothesis is;

H2: *Family owned firms having active family member as CEO experience higher investment-cash flows sensitivity.*

In the next section, methodology and population for hypothesis testing will be discussed in details.

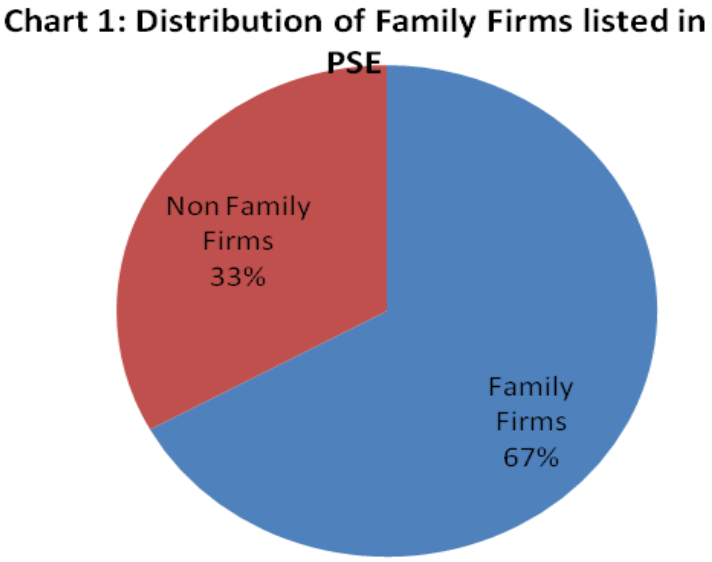
Methodology

As the main objective of study to describe the casual relation of family ownership of firms and investment-cash flow sensitivity, using large set of secondary data, positivism paradigm approach is most suitable for this study. Looking through the lenses of positivism approach, it can be

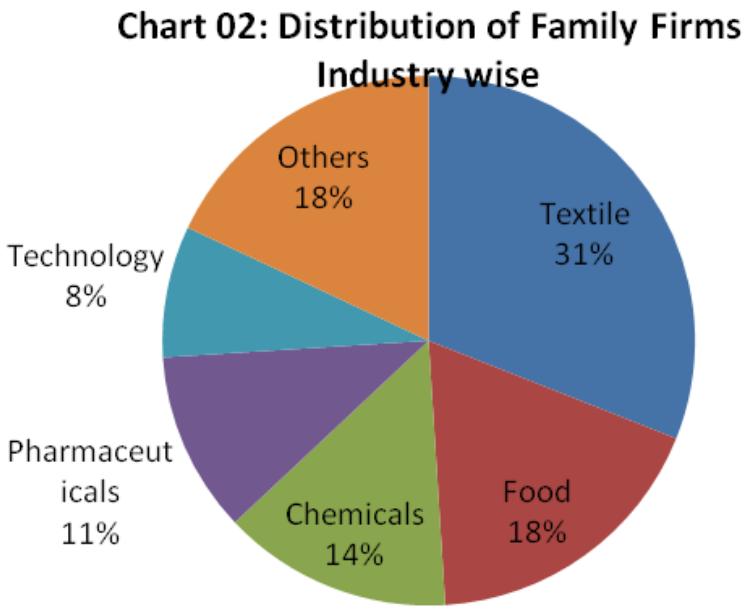
affirmed that this is a quantitative study which will use deductive approach to design its testable hypothesis and results of study will be generalized over all the population. Agency theory (Eisenhardt, K. M. 1989) is used as guidance for studying the relationship of variables.

- Data Sources and Sample. The key sources of information are the published financial data of firms in Pakistan. It includes, Balance Sheet Analysis (BSA) published by State Bank of Pakistan every year, financial analysis reports, available online on web portal of Pakistan Stock Exchange (hereinafter, PSE), and official websites of listed companies. To fulfill the requirements of industry data, standard industry classifications of PSE are used. Sample includes only firms having complete available data.

All the family owned firms, listed in Pakistan Stock Exchange are the population of study. There is no specific criterion available in literature for considering a family owned firm. Early theoretical studies have fit the criteria of; family control, ownership concentration and profit distribution pattern, into their respective definitions (La Porta, 1999: Pindado, 2011: and Faccio 2005). However, some researchers have used quantitative criteria of family ownership of >50% (Doidge et al., 2005). This study adopts this criterion (>50% shareholdings), as most of family owned businesses in Pakistan, have more than 50% of shares and family control (Attiya, 2010).



Following criteria is established to select the firm for sample; first, all the financial firms are excluded from the sample due to their different reporting style and definitions of investment and cash flows. This criteria is in line with many empirical studies (Faccio, 2002: Chang, 2015 and Villalonga, 2006). Second, firms must be in business and remained listed in PSE during the time period. Third, no merger and acquisition should be taken place. The data is collected for the time period 2004-2017. Effort has been made to collect maximum available data to get more accurate results, however, due to less data availability of firms, time period is limited to 2004.Dats of thirteen years is sufficient to run the proposed model. After applying all the criteria, total 135 firms are short listed making 7,560 firm year observations. Chart no. 01 shows the distribution of family firms listed in Pakistan stock Exchange. Using the threshold of more than 50% shareholding, 67% firms are considered as family firms and remaining 33% firms are classified as non family firms. Chart no. 02 shows distribution of sample firms industry wise. As textile sector in Pakistan has the largest share of 31% in family firms followed by food industry of 18% and so on.



- Estimation of Variables and Research Model. Investment-cash flow sensitivity which is the dependant variable of model is measured by using the model presented by Fazzari, Hubbard, and Petersen (1988):

$(CI/NFA)it = \alpha 0 + \beta 1(CFL/NFA)it + \beta 2CIOit + \varepsilon it$ **(Equation No. 01)**

Where (CI/NFA) it is dependant variable. It represents the total investment divided by net fixed assets. (CFL/NFA it) measures cash flow and is calculated as net profit plus depreciation divided by net fixed assets. (CIO)it is the proxy of investment opportunities and εit is error term. Some studies like Kaplan and Zingales, (1997) have used Tobin's marginal Q as proxy of growth. However, owing to limited data availability, net change of sales (ΔSales) it, is used as proxy (Wang, 2006).

To test the positive effect of family ownership on investment-cash flow sensitivity, two more dummy variables are added as extension in Fazzari, Hubbard, and Petersen (1988) model. First dummy variable is family owned firms (FO-FIRMi). It will have 1 value for firms with family ownership and zero otherwise. It will measure the direct effect of family owned business on investments. Second variable is ((CFL/NFA) it*FO-FIRMi) which is an interaction variable to assess the indirect effect of family control business on cash flow of firms (Anderson, 2003).

To avoid the biasness of model, firm level characteristics are added as control variables. Studies have shown that liquidity and debt levels of firms have significant impact on level of investments of firms (Andres, 2011; Almeida, 2004). Both are represented with (Yit-1). To assess the impact of last year investment on future years, dependant variable with a lag is added ((CI/NFA)it-1).

After adding new variables final research model to test the first hypothesis is as follows;

$(CI/NFA)it = \alpha 0 + \beta 0(CI/NFA)it\text{-}1 + \beta 1(CFL/NFA)it + \beta 2\Delta Salesit + \beta 3FO\_FIRMi + \gamma((CFL/NFA)it*FO\text{-}FIRMi) + \varphi Yit\text{-}1 + \varepsilon it$ **(Equation No. 02)**

Where (CI/NFA)it is dependant variable. It is calculated as total investment divided by net fixed assets. (CFL/NFA)it measures cash flow and is calculated as net profit plus depreciation divided by net fixed assets. ΔSalesit is a proxy of investment opportunities; (FO_FIRMi) is dummy variable for family owned firms with 1 for family firms and zero for otherwise. Yit-1 is set of control variables and εit is error term.

Using the equation no. 02, the impact of cash flows on investment sensitivity is measured by β1 with value zero ((CFL/NFA)it =0) and for family business it will be calculated as (β1 + γ) and for the rejection of null hypothesis (β1+ γ) > β1.

For testing the hypothesis no. 2 which states that active family member as CEO has effect on investment-cash flow sensitivity, dummy variable of family owned firm has been replaced

with another dummy variable (F_CEOi). New model is given below as equation no. 03;

$(CI/NFA)it = \alpha 0 + \beta 0(CI/NFA)it\text{-}1 + \beta 1(CFL/NFA)it + \beta 2\Delta Salesit + \beta 3F\_CEOi + \gamma((CFL/NFA)it*FO\text{-}FIRMi) + \varphi Yit\text{-}1 + \varepsilon it$ **(Equation No. 03)**

Where (CI/NFA)it is dependant variable. it represents total investment divided by net fixed assets. (CFL/NFA)it measures cash flow and calculated as net profit plus depreciation divided by net fixed assets. (ΔSalesit) shows investment opportunities; (F_CEOi) is dummy variable for family member as CEO with 1 for family member as active CEO and zero for professional non family CEO. Yit-1 is set of control variables and εit is error term.

Andres, 2011 suggests that heterogeneity and potential endogeneity problems may occur in secondary data of firms. Therefore, panel data approach is employed to estimate the co-efficients of model given equation no. 02 & 03. GMM approach has been used in this study for analysis, following the similar empirical studies. To confirm the estimation power of GMM method and for robustness OLS, with-in group, first difference and system GMM estimations are estimated. Dependent variable with a lag is used as instrument in GMM methods. Further, Arellano–Bond autocorrelation test and Hansen Test is used as statistic of overidentifying restrictions with purpose to identify the correlation between the instruments and the reported error terms as a validity measure. Among the GMM estimation techniques, system GMM provides most accurate results in case of endogeneity problem persist in data of instruments.

Empirical Results of Models

- Descriptive Analysis. This section consists of descriptive statistics of variables. Table No. 01 provides the descriptive statistics of aggregate measure of variables of family owned firms and investment-cash flows sensitivity indicators. Mean value of CI/NFA is 2.89. It may be explained as family firms have high level of investments in comparison with fixed assets. It shows low sensitivity to cash flows. But their positive skewness shows the existence of financial constraints and standard deviation of 0.12 shows that companies are performing better than other firms.

Table 1. Descriptive Statistics of data

Variables	Mean	Std. Dev.	Skewness	Minimum	Maximum
CI/NFA	2.89	0.12	0.30	-0.49	0.58
CFL/NFA	2.05	1.22	-1.05	-4.61	4.50
ΔSales	3.01	1.23	-0.18	-2.81	8.81
Debt	1.86	1.56	-0.64	-4.61	5.62
Cash	0.93	0.08	0.04	0.47	1.09

All the variables are tested for correlation to find out the co-movement with each other. Results shown in table no. 02 indicate that CI/NFA is negatively correlated with CFL/NFA with magnitude -.267 and is statistically significant. Similarly, CFL/NFA which is negatively correlated with ΔSales with relatively low magnitude -.168 yet, statistically it is significant. Debt also exhibit similar relation and negative correlation with ΔSales with value of -.168.

Table 2. Pearson Correlation matrix of variables

Variables	CI/NFA	CFL/NFA	ΔSales	Debt	Cash
CI/NFA	1				
CFL/NFA	-.267**	1			
ΔSales	-.168**	.820**	1		
Debt	-.194**	.688**	.555**	1	
Cash	.009	-.016	.022	.169**	1

Stars (*) shows level of significance at 0.01, 0.05 and 0.10 significance criteria.

- Family Firms impact on Investments. The results of estimation of equation no. 02 to test the first hypothesis are reported in table no. 03. Overall results reject the null hypothesis and all the estimates of four methods including OLSs to system GMM, shows family firms are significantly sensitive to investment-cash flow dependence. However, they enjoy relatively low sensitivity in comparison with nonfamily firms.

Results show that family firms face a greater level of financial constraints due to lack of diversity (Kaplan, 1997). Cash flows generated by firms impact positively to investments and magnitude of impact is larger in family businesses ($\beta 1+ \gamma = 0.071 + 0.302 = 0.373$) than its counterparts which is $\beta 1= 0.063$.

Table 3. Family business and investment-cash-flow sensitivity

CI/NFA	OLS Estimator (1)	Within Group estimator (2)	First difference GMM estimator (3)	System GMM estimator (4)
CI/NFA t-1	-0.012	-0.114***	-0.049***	-0.006
	[0.008]	[0.006]	[0.006]	[0.006]
CFL/NFA	0.071**	0.131***	0.057	0.071*
	[0.031]	[0.052]	[0.06]	[0.032]
CFL/NFA *F_FIRM	0.276	0.356**	0.323**	0.302*
	[0.186]	[0.179]	[0.162]	[0.119]
ΔSALES	0.112**	0.096**	0.186**	0.100**
	[0.045]	[0.046]	[0.078]	[0.048]
DEBT	0.002**	0.004**	-0.005	0.003**
	[0.000]	[0.002]	[0.008]	[0.001]
CASH	0.595**	1.148***	0.3846	0.648**
	[0.225]	[0.296]	[0.702]	[0.281]

F_FIRM	-0.009			0.103
	[0.033]			[0.201]
Observations	7398	7406	6480	7398
H_o: (a) + (b) =0	3.4	6.59	4.14	4.87
AR(1)			-1.43	-1.43
AR(2)			-0.99	0.02
Henson Test			256.14	305.3

Stars (*) shows level of significance at 0.01, 0.05 and 0.10 significance criteria.

It can be observed that the effect of investment on cash flows is significant in both family and non family owned business. However, impact is much lower in family owned firms. These results are consistent with recent empirical works by researchers who have studied other regions.

The results support to hypothesis no. 01 that family owned firms have impact on investment and internally generated funds. It also supports that investment-cash flow dependence is low in comparison to its counterparts. The findings are in line with study by Hung and Kuo (2011). The results may be explained as the key defined characteristics of family owned businesses like complicated agency conflicts, poor governance and taking the advantage of asymmetric information by active family members. Other results show that (FO_FIRMi) is also positively associated that CASHit and debt showing that family firms if provide more credit facilities, may expand their businesses.

- Family Member as CEO and Impact on Investments. In most of the family owned firms, owner of business remains the CEO or Chairman during the life span of business and all the active strategic decisions are made by him. As the family members added to the Board of Governors, they also hold the key positions in the firms. Therefore, family members play significant role in investment decisions and long terms effects are different from the non family firms, where professional CEOs on the basis of their past performance and experience are hired for specific time period. Hypothesis no. 02 tests the effect of active family member as CEO on investment and cash flow dependency.

The results of equation no. 03 for testing the hypothesis no. 02 are presented in table no. 04. As discussed previously, all the estimators like OLS estimators to system GMM estimators are employed to confirm the results. Studies (Goergen and Renneboog, 2001), have shown that OLS estimators may be biased due to heterogeneity issues of data. The system GMM approach is considered to account for all such data related problem and it provided balanced results. Therefore, this study discusses only system GMM results and estimates.

As shown in results that investments made by firms are positively and significantly linked with cash flows of firms (F_CEOi = 1, $\beta 1 + \gamma = 0.047 + 0.324 = 0.3710$). While the results for the firms having professional CEO (F_CEOi = 0) are different and the effect of investments on internally generated cash flows is not significant ($\beta 1 + \gamma = 0.027 + 0 = 0.027$). The findings strongly support the hypothesis no. 02 that investment to cash flow sensitivity deceases when CEO is from family members. Even though, the CEO from family members helps to reduce the asymmetric information and agency problems in board meetings, however, it may be a matter of concern for shareholders who are not family members. In comparison with other counterpart, professional CEO accounts for all the concerns of minority shareholders and investment policies are more coherent and performance oriented.

Table 4. Family active member as CEO and investment-cash flow sensitivity

CI/NFA	OLS Estimator (1)	Within Group estimator (2)	First difference GMM estimator (3)	System GMM estimator (4)
CI/NFAt-1	-0.023	-0.116***	-0.061***	-0.016
	[0.016]	[0.007]	[0.007]	[0.015]
CF/K	-0.021	0.070	0.060	0.047
	[0.055]	[0.071]	[0.100]	[0.063]
ΔSALES	0.075	0.104*	0.222**	0.085
	[0.05]	[0.057]	[0.097]	[0.056]
DEBT	0.001**	0.004	-0.011	0.004*
	[0.001]	[0.003]	[0.011]	[0.002]
CASH	0.693**	1.328***	1.321	0.884*
	[0.288]	[0.447]	[0.923]	[0.483]
F_CEO	_0.104*			0.199
	[0.057]			[0.146]
Observations	4639	4647	4066	4639
H_o: (a) + (b) =0	2.43	4.53	3.91	3.28
AR(1)			-1.31	-1.35
AR(2)			-1.02	-0.21
Henson Test			277.7	359.57

Stars (*) shows level of significance at 0.01, 0.05 and 0.10 significance criteria.

The results of equation no. 03 are consistent with literature (Bennedsen et al. 2007; Eklund, 2013; Chang, 2015). The potential outcome of results can be interpreted that family COEs may take the advantage of large shareholding and biased or unfavorable decisions can be taken for the firms. Such decisions may be beneficial for CEO but may be harmful for the minority shareholders. Professional CEOs in firms out-perform and are more suitable for even family firms.

Conclusion

The study is aimed to investigate the effects of family owned firms on investment-cash flow sensitivity as proxy for financial constraints as well as the key indicator of investments decisions. Further, the effect of family control is also assessed on investment-cash flow sensitivity by taking family member as CEO as proxy. Family firms due to their distinct features manifest different investment and financial

behavior. In Pakistan, despite having large share of family firms listed in PSE, little research has been made to study the effects of family firms on their financial behavior. This study is an attempt to fill this gap. Using the panel data approach and GMM estimation methods, data of 135 firms for the time period of 13 years is analyzed.

The results of analysis accept the theoretical testable statements made in this study. Consistent with the literature on this area, family firms have significant impact on investment-cash flow sensitivity and dependency. However, the results show that sensitivity is relatively lower in comparison with non-family owned firms in Pakistan. Family firms also face financial constraints which is higher than non family firms. Further, family COEs are found to impact the investment-cash flow dependence. It means that family CEO may reduce the agency problems in firms, yet make firms more dependent on internally generated funds due to financial constraints. Financial constraints may be due to extra risk measures by investor in family firms.

- Implications for policy makers and investors.

- Family owned firms have positive feature that there is relatively less agency conflicts among board members and weak point is that firms face financial constraints in financing making them investment-cash flow dependants. Therefore, policy makers are suggested to first encourage the entrepreneurship and family businesses in Pakistan. Secondly, they are suggested to take steps to reduce the financial constraints of firms so that family businesses may be encouraged and expanded more efficiently.
- It is found that involvement of family in firm control as CEO may help to cope with the issues of asymmetric information, yet may lead to sub-optimal decisions by family CEOs. Therefore, Investors should encourage hiring a professional CEO for important business decisions for improved performance of firms.
- Due to higher investment to cash flows dependence, managers at family firms are suggested to maintain minimum level of debt to cope with issues of default risks of bankruptcy. As there are higher financial constraints on firms, financing may become a challenging task for family firms.

- **Future Research Directions.** As the researchers have less focused on family firms and their distinctive characteristics and operational behavior, this study adds to this literature but due to data limitations and time constraints, many dimensions are still needed to explore. Researchers may design a survey research design to explore specific problems of family firms faced in investments and financing.

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