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Financial Sustainability and Financial Performance: The Moderating Role of Type of Ownership in Pakistan

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ARTICLE DETAILS	ABSTRACT
History <i>Revised format: November 2020</i> <i>Available Online: December 2020</i>	The study is conducted with the objective to investigate the impact of firm performance (FP) on financial sustainability (FS) in a developing nation, Pakistan and additionally to see the moderating role of type of ownership i.e. Institutional Ownership (IO) or Managerial Ownership (MO) in the FP-FS relationship. Sample of the study included all the non-financial firms listed on Pakistan Stock Exchange PSX and time covered is from 2009-2018. In total there are 2734 observations. Empirical results of the study suggests that FP has a positive relationship with FS but the relation is not significant. Moreover, findings indicate this relationship is significantly negatively moderated by Intuitional Ownership (IO) whereas the relationship is not significant under the moderation impact of Managerial Ownership (MO).
Keywords <i>Financial Sustainability, Firm Performance, Managerial Ownership, Institutional Ownership, moderation.</i>	
JEL Classification: <i>M40, M41</i>

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1. Introduction

At the present time, companies are demanded to operate in a sustainable manner in order to return more to the society in the form of better society, environment or financial input. Corporate sustainability¹ studies are increasing in the literature. Moreover, it is difficult to go through a company's reports or websites without the reference to sustainable development or sustainability (Montiel & Delgado-Ceballos, 2014). Corporate sustainability has three dimensions i.e. social, environmental and economic aspect (Accenture, 2011). Financial sustainability of a company is related to the economic aspect of corporate sustainability. Financial sustainability is derived from the principle of value maximization for stakeholders by investing in best possible investments with an acceptable level of risk (Zabolotnyy & Wasilewski, 2019). By applying the concept of sustainability, organizations are trying to cope up with the ups and down of economic development and organization of resources in the long term. Concept of financial sustainability is relatively recent in the literature (Lagoarde-Segot & Paraque, 2018).

Financial sustainability of a firm is defined as the potential to provide continuity of activities and to create value for owners in the long term, using optimal combination of investment and sources of financing (Zabolotnyy & Wasilewski, 2019). The concept of financial sustainability caters the going concern principle of accounting and value maximization for stakeholders.

Despite many studies have been conducted to analyze the correlation between firm performance and corporate sustainability there is lack of research focused on evaluation of financial sustainability on firm level. (Diantimala, 2018). Moreover, importance of corporate governance factors for this relationship remains under investigative as well (Peng & Yang, 2014). Studies related to moderating role of corporate governance are still unclear (Harjoto & Jo, 2011). In this study, we focus on one aspect of corporate governance i.e. type of ownership: Institutional Ownership (IO) or Managerial Ownership (MO) and attempt to investigate how ownership as a moderator would affect the FP-FS relationship and in which direction.

This study is conducted in a developing country of Pakistan, as it is evident from the literature that studies about financial sustainability and sustainability in general, related to developing nations are very limited and there is a need to conduct such studies in developing countries (Grewatsch & Kleindienst, 2017) the direction of the relationship could be different from developed nations. Moreover, ownership type demands further investigation because of the agency problem which arise due to conflict of interest between the management and the shareholders in emerging markets (Claessens, Djankov, Fan, & Lang, 2002).

This study focuses on Pakistan, which is a developing country where there is weak protection for shareholders, problems related to corporate governance due to lack of transparency and ownership issues (Ararat & Ugur, 2003). This can result in difference in direction of the developing country from a developed country. In country like Pakistan, government is more focused on developing policies to improve the current situation of the economy rather than long term impact. Research has shown that in a developing country low future orientation can have negative impact on firms in the longer run (Ararat, 2008). This study is expected to contribute towards the literature by: providing empirical data of FS-FP relationship, impact of corporate governance as a moderator in the FS-FP relationship. Thus the empirical analysis would be beneficial for policy implications, managers, and academicians. The rest of the paper is arranged as follows: the second section gives a review of the literature, third section explains the methodology used in this paper whereas results are provided in the fourth section. Lastly, paper concludes with the findings, limitation and future implications.

2. Review of Literature

Corporate governance, as the previous literature reveals has been studied numerous times, as a channel through which sustainability is influenced by firm performance. Number of proxies are used to measure corporate governance like CEO power (Li, Li, & Minor, 2016), governance structure's (Giroud & Mueller, 2011), mutual monitoring (Li Z. , 2014), CEO tournament (Coles, Li, & Wang, 2017), compensation incentives (Core & Guay, 1999), corporate governance policies (Aras & Crowther, 2008) in the studies related to CSR, sustainability, corporate sustainability. A study conducted in Kenya on Micro Finance Institutions reveals that board size, CEO duality, composition of board and CEO gender have significant impact on financial sustainability of the institutions (Chenuos, Mohamed, & Bitok, 2014). Corporate governance is associated with the procedures, processes, and practices through which organizations operate. These rules and procedures are to be followed and the manner in which they are followed determine the corporate governance of an organization. Goals of good governance are to use the resources in such an efficient manner that the interest of corporates are aligned with the interest of the society and the other stakeholders. Therefore, corporate governance is the connection between internal governance mechanisms of corporates and the society's way to make the corporate accountable (Deakin & Hughes, 1997). Moreover, it helps the corporate to operate successfully in a society (Keasey, Thompson, & Wright, 1997) and for longer period of time (Kontes, 2004).

Long term endurance has become a challenge for every firm whether small, medium or a corporate, how businesses may respond to this challenge is very important for them to answer (Krechovska & Prochazkova, 2014). Sustainability is the strategy for long term sustenance of the organizations comprising of three dimension i.e. economic, social and environmental. It has also been emphasized by some authors that economic dimension is the most desirable of the three as it makes the organizations financially strong and would avoid situations leading towards bankruptcy or shut down (Szekely & Knirsch, 2005), (Gupta & V. Kumar, 2013). Financial sustainability is covering the economic dimension of sustainability which is when a firm creates value for its stakeholder by maximizing the profits and minimizing the impact on the society. Researches have agreed on the multifaceted nature of financial sustainability, as it is linked to solvency, profitability and efficiency of an organization whether private or public (Diakoulaki, Mavrotas, & Papayannakis, 1992), (Gryglewicz, 2011). Another study suggest that financial sustainability is about the financial viability or strength of the firm and it has a board spectrum when compared to firm performance (Matson, Thayer, & Shaw, 2016). Numerous research studies have been conducted in this regard but there is still lack of research directed towards the methodology or measure of financial sustainability on a firm level (Zabolotnyy & Wasilewski, 2019), (Jordão & Almeida, 2017).

There is no confirmed direction of firm performance and sustainability relationship, it differs in different cultures and economic conditions, therefore there is no universally accepted direction of this relationship (Goyal, Rahman, & Kazmi, 2013). Moreover, empirical evidence from developing and emerging countries is limited in literature (Grewatsch & Kleindienst, 2017). Corporates are now improving their performance by striving for long term benefits (Chabowski, Mena, & Gonzalez-Padron, 2011). Commitment of an organization for long term survival has now a strategic level importance and society expects an organization to live as a better citizen (Orsato, 2006).

In the context of a developing country, studies related to financial sustainability and corporate are limited and mainly conducted on financial sector (Rauf & Mahmood, 2009), NGOs (Hussain, Shaheen, & Shahid, 2018).

3. Methodology

3.1 Sample and Data

The population of this research is the non-financial sector of Pakistan, which consist of around 400 firms. Data was collected from 2010 till 2019. Data was extracted from financial statements of these firms which are listed with Pakistan Stock Exchange PSX. Firms with missing data were removed from the sample which reduced the data to 281 firms and 2734 observations for the sample period.

3.2 Variables

The dependent variable was financial sustainability calculated by Sustainable Growth Ratio (SGR) as calculated by (Amouzesh, Moeinfar, & Mousavi, 2011). Independent variable in the study is firm performance which is measured by Tobin Q ratio. Type of ownership is taken as a moderator in the study. There are two types of ownership: Managerial ownership (MO) and Institutional Ownership (IO). Data regarding these variables were collected from financial statements. For Control variables of the study log of firm age was taken.

Table 1: Calculation Measures for the Variables

Variables	
SGR	The rate of growth that a company can expect to see in the long term calculated by multiplying a company's earnings retention rate by its <u>return on equity</u> .
Tobin Q	The Q ratio, also known as Tobin's Q , equals the market value of a company divided by its assets' replacement cost. Thus, equilibrium is when market value equals replacement cost.

Managerial Ownership	<i>Managerial ownership</i> is measured as the percentage of equity shares owned by directors' and their immediate families at the accounting year end.
Institutional Ownership	Institutional ownership is the amount of a company's available stock owned by mutual or pension funds, insurance companies, investment firms, private foundations, endowments or other large entities that manage funds on behalf of others.
Firm Age	Log of firm age

3.3 Model

To test the hypotheses of the study following model was developed:

$$SGR_{it} = \beta_0 + \beta_1 FP_{it} + \beta_2 FP_{it} \times MO_{it} + \beta_3 X_{it} + \varepsilon_{it} \quad \text{equation 1}$$

$$SGR_{it} = \beta_0 + \beta_1 FP_{it} + \beta_2 FP_{it} \times IO_{it} + \beta_3 X_{it} + \varepsilon_{it} \quad \text{equation 2}$$

Where SGR (Sustainable Growth Rate Ratio) is the measure used to calculate the financial sustainability of the firm following (Amouzesh, Moeinfar, & Mousavi, 2011). It is calculated by the following formula:

$SGR = \text{Retention Ratio} \times \text{Return on Earnings}$

Whereas:

$\text{Retention ratio} = \text{Retained earnings} / \text{Net income} \times 100$

$ROE = \text{Net Income} / \text{Shareholders Equity}$

FP is the firm performance calculated through Tobin's Q. Formula for Tobin's Q is as follows:

$\text{Tobin's Q} = \text{Equity Market value} + \text{Liability Market Value} / \text{Total Asset Replacement Value}$.

MO is the managerial ownership which is derived from the annual financial data of each company. IO is the institutional ownership which is derived from the annual financial data of each company. FP X MO and FP X IO are the interaction terms used to calculate the moderating impact of ownership type on FP and FS relationship. X denotes the control variable which the log of firm age of the firm i in year t . β_1 , β_2 , β_3 are the vectors of the measures to be calculated and ε is the error term.

4. Results

The following table shows the descriptive statistics of the variables of interest. Table shows the mean, normality of the data and the standard deviation along with the number of observations.

Table 2: Descriptive Statistics

Variables	Mean	Skewness	Kurtosis	Std. Dev	Obs
IO	19843473	1.047823	6.306894	8.38	1844
Log Firm Age	2.804224	-1.24746	3.088403	0.497	2870
FP	231000000	1.977534	4.421431	15.125	2734
MO	10207107	1.035595	1.447254	1.28	2870
SGR	872944.2	1.077137	1.796717	15.366	2631

Table 3 shows the Panel Least Squares, regression results for FP-FS relationship:

Table 3: Panel Least Squares

Variable	Coefficient	Std. Error	t-Statistic	p-Value
C	-2.17	1.97	-1.11	0.27
FP	0.00	0.00	-0.77	0.44
FP X IO	0.00	0.00	-4.79	0.00
FP X MO	0.00	0.00	-0.03	0.98
FIRM_AGE_LOG_AGE	0.79	0.68	1.16	0.24

The relationship between FP-FS is insignificant and negatively related. Therefore, FP has an insignificant impact on FS, showing if the firms performing better financially does not imply that it

would get financial sustainability. Institutional ownership has a significant impact on the FP-FS relationship but the negative direction which shows that if the IO increases the FS would reduce. Moreover, it shows if shares of a firm are owned by other institutions it would have negative impact on its financial sustainability. MO does not have a significant on FP-FS relationship.

5. Conclusion

Limited number of studies have investigated the moderators for FP-FS relationship, this area need more research. In the context of a developing country the role of corporate governance factors affecting FP-FS is again limited (Zabolotnyy & Wasilewski, 2019), (Akben-Selcuk, 2019). This research was conducted with a purpose to fill the gap and to investigate the FP-FS relationship in the presence of a type of ownership as a moderator.

Findings from the study shows that there is no significant relationship between FP-FS in the non-financial firms in Pakistan. The sample had all the firms listed on PSX for the time period of 10 years from 2010-2019. This result supports the Neoclassical theory of the firm, which states that the main objective of the firm is to maximize profit. Backing the conventional theory of economics, the result supports that the main objective of a corporate is to earn profit and increase the worth of its shareholders. A study conducted in Turkey also showed that ownership has a negative impact on FP-CSR relationship (Akben-Selcuk, 2019).

Another result from the study shows that ownership type has a negative but significant impact on FP-FS relationship in the form of IO as a moderator whereas it is insignificant in case of MO as the moderator between FP-FS relationship. The result is consistent with the empirical findings from (Peng & Yang, 2014), (Ting & Yin, 2018). The findings of the study would certainly add to the limited existing literature. Moreover, the negative affect of IO as a moderator would help the corporates to reduce IO in order to strengthen the value for shareholders. Findings can also help the policy makers, who are making policies for the corporates in the emerging countries. However, the study has also some limitations, firstly, data is collected from non-financial sectors only financial sectors could be included in the future studies for an overall view of the firms working in a country. Secondly, this study is conducted on data from a single country, Pakistan, more comprehensive study could be conducted in future by using data from more than one country.

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