

## THE IMPACT OF TRANSPARENCY AND DISCLOSURE ON STOCK MARKET CAPITALIZATION THROUGH THE DIVIDEND YIELD EIDOLON

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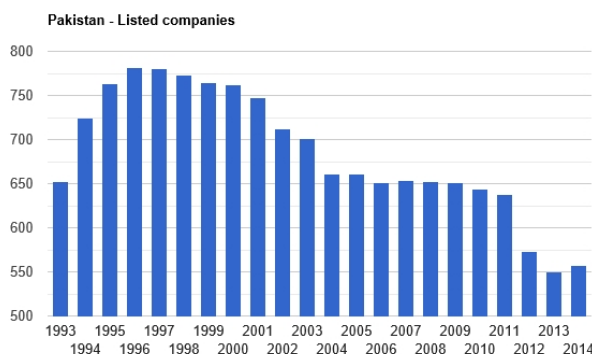
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ARTICLE INFO	ABSTRACT
<p><i>Article History:</i> Received: 30 Jul 2019 Revised: 15 Aug 2019 Accepted: 20 Nov 2019 Available Online: 02 Mar 2020</p> <hr/> <p><i>Keywords:</i> Information Disclosure, Stock Market Capitalization, Stock Market Return, Investor Protection, Ownership</p> <hr/> <p><i>JEL Classification:</i> G32, O16</p>	<p><i>Purpose:</i> The paper aims to access the impact of financial transparency and disclosure on stock market capitalization. The financial transparency and disclosure measure the extent to which the firms have open firm-specific information for the investors. More transparency leads to strong investor protection.</p> <p><i>Design/methodology:</i> The study has been conducted on the Pakistan Stock Exchange from period 2008 to 2017. Descriptive Statistics, Correlation, and Regression Analysis have been used to find out the impact of the above-mentioned variables on the Stock market Capitalization.</p> <p><i>Findings:</i> The results support our hypothesis that information disclosure and strength of investor protection has positive significant impact on market capitalization.</p> <p><i>Research Limitation:</i> While our study focuses on the significance of information disclosure and transparency, it does not measure the quality and accuracy of the information disclosed.</p> <p><i>Practical Implication:</i> The results might be of interest to potential investors who will be able to diversify their investment in a way that minimizes risks based on the disclosure practices of the firms.</p> <p><i>Originality/value:</i> The research contributes to the finance literature by finding out the impact of information disclosure on stock market capitalization in the Pakistan Stock Exchange on recent data.</p>

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### 1. INTRODUCTION

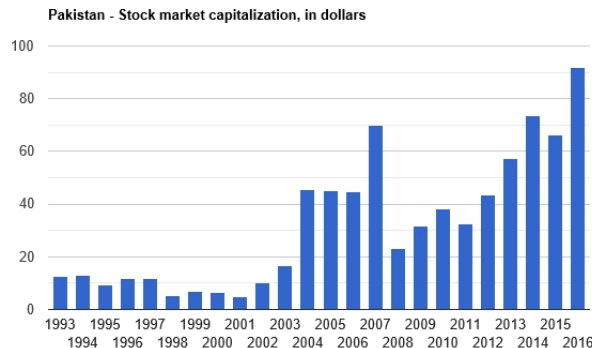
For over 15 years, corporate governance has been a major policy concern in Pakistan, especially for SECP (Securities and Exchange Commission of Pakistan). The policymakers and standard setters are highly aware of the significance of corporate governance (International Monetary Fund 2007). The Code of Corporate Governance (CCG) was established by SECP for monitoring the corporate governance practices of the firms listed on the Exchange. The Corporate governance practices includes strengthening the role of directors and shareholders, increasing the financial and non-financial transparency and disclosure of firm-specific information, gender-equality and independence in decision-making (McGee, 2009). The code which was first incorporated in the year 2002 led to many firms delisting due to the heavy implementation costs. In 2012, SECP renewed the code (CCG, 2012) which led to a whooping drop to 573 listed firms in total. by 2017, the CCG 2012 was replaced by 'Listed Companies Regulations' which came into effect from 1<sup>st</sup> January 2018 and was ensured best in alignment with international standards (Iqbal 2012). Moreover, following the establishment of Listed Companies Regulations 2017, the SECP requested the World Bank Group to carry out an independent assessment of corporate governance under practice in Pakistani context, as a part of ROSC (Reports on Observance of Standards and Codes Program). The assessment reflects detailed technical discussions with the SECP, the Ministry of Finance, the Pakistan Stock Exchange, the Pakistan Institute of Corporate Governance, the Institute of Chartered Accountants of Pakistan, and representatives of companies, banks, and market participants (International Monetary Fund 2007). The report highlights that corporate governance framework for listed companies has improved in recent years as the government has enhanced the legal and policy framework, and key institutions have grown in sophistication and maturity (OECD 1999). Much more can be done to address corporate governance in Public Sector Companies. The findings of the ROSC are based on the Detailed Country Assessment (DCA) of the OECD Principles of Corporate Governance.



Source: TheGlobalEconomy.com, The World Bank

**Fig. 1.** Pakistan- No. of Listed Companies

According to the World bank, the average of stock market capitalization for Pakistan has been 32.2 billion USD during the period 1993 to 2016. The stock market capitalization for Pakistan dropped from 69.72 billion USD in 2007 to a considerable low value of 23.35 billion USD in 2008 particularly because of the Global Financial Crisis 2007-2008, which affected the global economy with a very serious financial loss (The World Bank 2013). The Pakistan Stock Exchange however gradually recovered over the past ten years and reached an all-time high of 100.83 billion USD. The World average for market cap particularly remained at a high number compared to Pakistan average. While in the year 2007, the world average was 816.2 billion USD, the global financial crises led to a serious decline as low as 430.96 billion USD. as for Pakistan, the average market cap was 100.83 billion USD in 2017, the world average was recorded 1165 billion USD.



Source: TheGlobalEconomy.com, The World Bank

**Fig. 2.** Pakistan-Stock Market Capitalization (USD)

In this paper, we build on the idea that information and transparency and disclosure play an important role in stock market capitalization, with moderating impact of dividend yield on the latter. The impact of factors such as strength of Investor protection and ownership concentration of the firms on stock market in Pakistani context are similarly researched. The empirical analysis is based on all the companies listed on Pakistan Stock Exchange. as the research primarily focuses on the impact of transparency and disclosure on firm performance, and not the other way around. SO, the future research can focus on the impact of stock market capitalization on transparency and disclosure. Similarly, the research is limited to the level of transparency and disclosure and not the quality and accuracy of the disclosure. So, the future researchers can base their interest on the quality and accuracy of financial transparency and disclosure in the context of Pakistan.

## **1.1 Research objectives**

The research is based on the following objectives:

- TO find out the impact of Business Extent of Disclosure on stock market capitalization.
- TO find out the impact of investor protection strength on stock market capitalization.
- TO find out the impact of ownership rate on stock market capitalization.
- TO find out the impact of Stock market Return as a moderator on the relationship between business extent of disclosure and stock market capitalization.

## **1.2 Statement of the problem**

Stock Market in Pakistan has recently started scratching the surface. Due to many distortions in economy, market forces do not reward good governances or punish unethical practices (Shahzad et al. 2019). The rising poverty and the unequal distribution of the benefits of economic growth bear indication to the ineffectiveness in social and economic development exhibited by various governments in Pakistan since its inception (Iqbal 2012). The large part of the undocumented economy discourages promotion of transparency and accountability in the organization. Overall management structure is also not conducive to establishing the norms of good governance. Many companies in listed Stock Exchange are not fully practicing the code of good governance (Wan Yusoff 2012). Tightly held ownership, lack of professional skills, missing change agents, audit dependability and overall structural weaknesses are bottlenecks in developing the corporate governance in the organizations (Shleifer & Wolfenzon 2002).

The present research builds the distinctive foundations in the literature in different ways. First, this study is an innovative attempt to investigate the impact of information transparency and disclosure on stock market capitalization (Shahbaz, Rehman, & Afza 2016). Karachi Stock Exchange is not a sustainable market and investors find fluctuations in prices of stocks, and for this reason, Karachi Stock Exchange have very different risk–return relationship. The investors discover that the market goes up or down dramatically in a few sessions (Iqbal 2012). This surges the need to explore in depth, the causes of such volatile market capitalization, highlighting its association transparency and disclosure, investor protection and ownership concentration (Agyei-Mensah 2017). Ensuring effective investor protection as a key driver of economic performance has become one of the major subjects of interest for academics from various economic areas. In the vision of (Matoussi & Jardak 2012), corporate governance along with mechanisms implemented for investor protection represent ‘key drivers of market development’. On the contrary, there are some uncertainties about the mechanisms through which country-level governance has a real influence when it comes to ensuring legal investor protection (Hail & Leuz 2006). As a result of information asymmetry, the investors are unable to make informed decisions. TO better protect the interest of investors, the stock market authorities of the emerging markets should introduce laws and regulations to improve information transparency and disclosure, in order to protect the interests of the investors (Edogbanya & Kamardin 2016).

Finally, majority of the businesses in emerging markets are family orientated which are acting for profit making (Ali & Summa 2007). This type of ownership is called Pyramidal Ownership. This argues a greater challenge for policy makers to protect the dual objective, the minority shareholder and maintain the profit maximizing incentive of family oriented business (Shaikh et al. 2019). Such contexts which are characterized by high ownership concentration, the issue of high quality financial T&D becomes even more important in order to increase the level of protection of minority shareholders who are often exposed to high risk of expropriation by majority shareholders (Calabrò 2016). The disclosure of any modification in ownership structure gives the investor the possibility to appreciate the control and the future perspectives of the firm. We find out the resulting impact of the information transparency and disclosure on stock market capitalization and check whether in the presence of dividend payment, this regulated disclosure might be overseen by the investors while making investment decisions.

## **2. REVIEW OF LITERATURE AND HYPOTHESES DEVELOPMENT**

### **2.1 Stock market capitalization**

As defined by (The World Bank 2013), the Stock Market Capitalization is one of the financial indicators of the economy which is used to evaluate a country’s development. Investors around the world are concerned about diversifying between different classes of assets as well as investing in the different portfolios of the securities on the basis of size or market capitalization of a company (Matoussi & Jardak 2012). The Market Cap or the Market Capitalization of a firm means the ‘total value of all shares of a firm’s stocks. The method for calculating the Market Cap is to multiply the price of a stock with the total number of outstanding shares (Bhat et al. 2018). Market capitalization measures the worth of a company on an open market as well as the market’s view of the future outlook as it shows what the potential investors will pay for the stock. Companies are classified on the basis of their market capitalization. These categories include small, mid or large cap (Panagiotidis 2005). While investing, the potential

investors bear in mind these categories as each company has a different market cap and a different risk-return features, as well as the fact that these companies will perform differently based on the different market conditions. Although there are no stern rules for these categories and the maximum of each has raised in the past. Based on market capitalization, countries in emerging markets are still lagging behind the developed markets such as USA and Europe. Past researches by (Jaffar & Musa 2014; Arayssi, Dah, & Jizi 2016; Aik Leng & Abu Mansor 2005) have depicted that the firm's transparency and disclosure level can cause an increase in the performance and profitability, hence increasing the market value as well.

## 2.2 Business extent of disclosure

The corporate disclosure is of critical importance for the efficient functioning of stock markets (Alfraih & Almutawa 2017). Accounting research provides evidence that investors rely on corporate disclosure revealed by managers (Sletten 2012). Disclosure of reliable, timely information contributes to liquid and efficient markets by enabling investors to make investment decisions based on all of the available information that would be material to their decisions. as a result, investors are demanding better reporting and greater transparency (Fung 2014). They are demanding more information, and they are shouting louder than ever before. Empirical experience in countries with large and active equity markets shows that disclosure can be a powerful tool for influencing the behavior of companies and protecting investors (Fung 2014). A strong disclosure regime can help attract capital and maintain confidence in the capital markets. Conversely, weak disclosure and non-transparent practices can contribute to unethical behavior and a loss of market integrity at great cost, not just to the company and its shareholders, but also to the economy as a whole (Kobbi-Fakhfakh, Shabou, & Pigé 2019). In her review of theories and determinants of corporate disclosure, (Shehata 2014) shows that voluntary disclosure is an effective way to disseminate corporate information to stakeholders about the business to reduce information asymmetry and agency conflicts between managers and investors.

*H<sub>1</sub>: There is a significant impact of Business Extent of Disclosure on Stock Market Capitalization*

## 2.3 Strength of investor protection

According to (The World Bank 2013), strength of Investor Protection is the degree to which investors are protected through disclosure of ownership and financial information. Investors are more likely to be in an unfavorable position when investing with limited information acquisition and professional knowledge (Rafael La Porta, Lopez-de-Silanes, & Shleifer 1999). Therefore, improving the level of investor protection and exploring the relationship between information disclosure and degree of corporate value is necessary to enable investors to more accurately judge investment value. Recent research finds that countries with better-developed capital markets have stronger investor protection (Zhou, Tam, & Lan 2015). This research argues that the association is due to investor protection fostering good corporate governance that in turn instills investor confidence. In countries with weak investor protection, companies have both agency problems and weak corporate governance. (Rafael La Porta and Shleifer 2008) suggest that investor protection rules are central for understanding corporate finance. When investors finance firms, they look for the firm in which their rights are protected by law. Disclosure rules must give the investor the ability to appreciate how their rights are protected.

*H<sub>2</sub>: There is a significant impact of Investor Protection Strength on Stock Market Capitalization*

## 2.4 Ownership rate

At the core of the study of corporate ownership is the question what it takes for an owner to exercise an effective control over business activities. (Mavruk, Overland, & Sjögren 2019) define a controlling owner as an owner that holds at least 20 percent of the company. Below this threshold, firms were regarded to be under management control. In a similar vein, many modern corporate governance studies use an arbitrarily chosen threshold, based on the largest shareholder, to determine whether there is a controlling owner or not. Most of these cut-offs are at the levels from 5 to 20 percent. However, (Doss, Kieran, & Kilic 2019) document in their survey how such a threshold has varied between only four percent (Zhou, Tam, & Lan 2015) and up to 80 percent (Edwards & Weichenrieder 2009). Although family firms are a rare phenomenon in Western countries, they are very common in Asian economies (Mittal & Goel 2012; Jaggi, Leung, & Gul 2009; R La Porta 1999). A majority of Asian businesses, both small and large, are family firms whose management structure is dominated by family members (Jaggi, Leung, & Gul 2009; Kumar 2008). This type of ownership is called Pyramidal Ownership. This argues a greater challenge for policy makers to protect the dual objective, the minority shareholder and maintain the profit maximizing incentive of family oriented business (Claessens, Djankov, & Lang 2000). When ownership is highly concentrated, the nature of the agency problem shifts away from manager-shareholder conflicts to conflicts between the controlling owner and minority shareholders (Mavruk, Overland, & Sjögren 2019).

*H<sub>3</sub>: There is a significant impact of Ownership Rate on Stock Market Capitalization*

## 2.5 Moderator

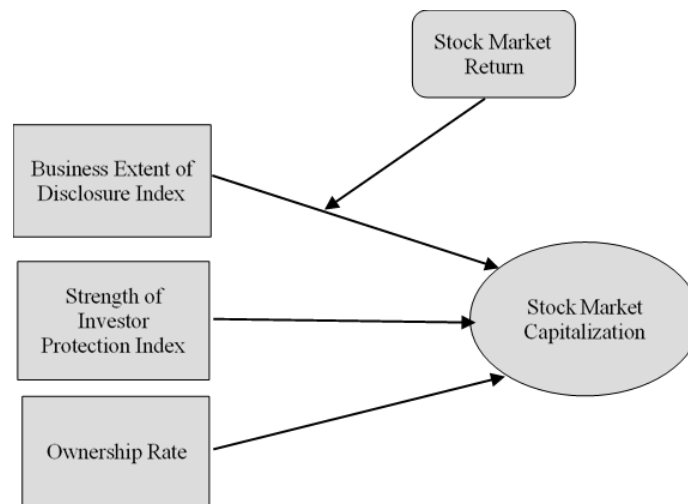
Previous studies on dividend yields provided strong evidence for the presence of relationship between dividend yields and stock market capitalization, but this relation is still controversial and open for scholars' discussion so as to explore its new dimensions. The impact of dividend yield on stock market capitalization was traced by (Mahmood & Waheed 2014)<sup>1</sup>. They indicated that DY was positively related to stock prices and Retention Ratio was negatively related to Stock Prices. They further explained that investors wanted dividends as it provided the clue about the future prospect of the company.

## 2.6 Stock market return (As a proxy for dividend yield)

Stock market return is a gain on an investment. Stock market Returns are the profits that the Investors produce out of from the trading of shares (Mahmood & Waheed 2014). This arrival could be as benefit through replacing or as income given with the aid of the organization to its buyers on Occasion. It consists of any adjustment in esteem and top rate or income or different such cash streams which the financial professional receives from the hypothesis. It might be expected both in splendid phrases or as a stage of the sum contributed. Stock market return may be made thru earnings mentioned with the aid of the corporations (Melas 2019). For the maximum component toward the finish of each area, an enterprise making benefit gives a portion of the stake to the investors. that is one of the wellsprings of securities trade go back one monetary specialist should count on (Marseguerra 1998).

**H<sub>4</sub>:** *There is a significant impact of Stock Market Return as a moderator on Stock Market Capitalization*

## 2.7 Theoretical framework



**Fig. 3.** Theoretical Framework

## 3. RESEARCH METHODOLOGY

The source of data utilized for this research is secondary. Secondary source means data collected by someone else earlier. The proposed research used the World Bank indicators for the variables used. In this research, the entire population is selected as a sample. This type of sampling technique is called Total Population Sampling. The reason for selecting the entire population is that all the companies listed on PSX are exposed to the same economic, political and legal environment. The Quantitative method of Data collection is being employed to gather data from our target population. The data for the proposed research is gathered through the direct observation of the annual reports and the data present on the internet for the all the public and private companies listed on Pakistan Stock Exchange and the time frame of the data gathered is for last 10 years.

## 4. DATA ANALYSIS

Descriptive statistics is used to describe the basic features of the data in study, where frequency distribution, mean, median and mode of the indices in the annual reports have been analysed (Rendón-Macías, Villasís-Keever, & Miranda-Novales 2016).

#### 4.1 Descriptive analysis

**Table 1.** Descriptive statistics

	ED_PAK	IP_PAK	OR_PAK	SMC_PAK	SMR_PAK
Mean	5.980	6.420	3.830	55.903	16.270
Median	6.000	6.300	3.910	50.490	18.700
Maximum	6.000	6.700	4.720	100.830	49.400
Minimum	5.900	6.300	2.820	23.350	(35.500)
Std. Dev.	0.042	0.193	0.525	26.616	24.196
Skewness	(1.500)	0.873	(0.375)	0.466	(0.748)
Kurtosis	3.250	1.762	2.949	1.901	3.272
Jarque-Bera	3.776	1.909	0.236	0.865	0.963
Probability	0.151	0.385	0.889	0.649	0.618

Table 4. shows the Descriptive Statistics of the variables under proposed research. For the current study, the result of kurtosis for SMC fall below 3 which meant data had formed a flat curve.

#### 4.2 Correlation analysis

Correlation is used to see the relationship among the dependent and independent variables and explains the strength of association among dependent and independent variables. According to (Sekaran and Bougie 2013), it has both magnitude and direction which may be positive or negative. Table 4.2 shows the correlation analysis between the independent variables, dependent variables and moderator from the proposed research.

**Table 2.** Correlation analysis

Variables	ED-PAK	IP-PAK	OR_PAK	SMC_PAK	SMR_PAK
ED_PAK	1.000	0.327	(0.251)	0.560	0.788
IP_PAK	0.327	1.000	0.004	0.787	(0.056)
OR_PAK	(0.251)	0.004	1.000	(0.383)	(0.408)
SMC_PAK	0.560	0.787	(0.383)	1.000	0.366
SMR_PAK	0.788	(0.056)	0.408	0.366	1.000

The correlation between the extent of disclosure and stock market capitalization is ( $r = 0.560$ ), moderately positive which means that an increase in extent of disclosure causes a moderate increase in stock market capitalization. Both averages were significantly correlated. The correlation between the strength of investor protection and stock market capitalization is ( $r = 0.787$ ), is strongly positive which means that an increase in the strength of investor protection causes a high increase in stock market capitalization. Both averages were significantly correlated.

#### 4.3 OLS regression analysis

The Ordinary Least Squares (OLS) Regression Analysis is used to test the causal relationship between one or more independent variables and a dependent variable. In the proposed study, we estimate the relationship between the independent and dependent variables in two ways:

**Table 3.** OLS regression with out moderator

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	(1,439.521)	691.740	(2.081)	0.083
ED_PAK	155.983	120.349	1.296	0.243
IP_PAK	97.448	25.421	3.833	0.009
OR_PAK	(16.442)	9.139	(1.799)	0.122
R-squared	0.819		Mean Dependent var	55.903
Adjusted R-Squared	0.729		S.D. Dependent var	26.616
S.E. of regression	13.861		Akaike info criterion	8.385
Sum squared resid	1,152.773		Schwarz criterion	8.506
Log likelihood	(37.926)		Hannan-Quinn criter	8.252
F-statistic	9.062		Durbin_Watson Stat	2.050
Prob (F-statistic)	0.012			

Table 3. shows Regression Analysis which is done with out moderator SMR. Value of R-Square shows how much variation is caused in dependent variable by independent variable (Cronk, 2012). Its value ranges from 0 and 1.

From above data, the value of R Square is 0.819 which shows that all the independent variables account for 81.9% change in Stock Market Capitalization. The adjusted R-square is used to predict the goodness of the model. The value of adjusted R-Square in the data is 0.728 which shows that the model used has a high predictive capacity. Here, the value of F-Statistic is 9.06 and its probability value is 0.04 which means that all the independent variables (ED, IP, OR) significantly affect the Stock Market Capitalization at 5% significance level.

#### 4.3.1 Test of moderation effect

Moderation involves a third variable that acts as controlling condition for the effect of one variable on another (Jose 2019). The moderation effect is examined by the interaction variable, Extent of Disclosure\*Stock Market Return (ED\*SMR), it is computed as a product of the two variables of Extent of Disclosure and Stock Market Return. This interaction variable is called 'Modeffect'.

**Table 4.** OLS regression with moderator

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	(484.011)	1,251.326	(0.387)	0.715
ED_PAK	23.413	229.674	(0.102)	0.923
IP_PAK	112.816	30.675	3.678	0.014
OR_PAK	(13.147)	9.922	(1.325)	0.243
SMR_PAK	0.369	0.400	0.922	0.399
R-squared	0.845		Mean Dependent var	55.903
Adjusted R-squared	0.722		S.D. Dependent var	26.616
S.E of regression	14.038		Akaike info criterion	8.428
Sum squared resid.	985.392		Schwarz criterion	8.580
Log likelihood	(37.142)		Hannan-Quinn criter	8.262
F-statistic	6.838		Durbin_Watson Stat	2.328
Prob(F-statistic)	0.029			

The value of R-Square increased to 0.893, which shows that 89.3% of change in SMC is accounted for by the independent variables (ED, IP, OR) and the value of Adjusted R-Square increased to 76% which shows the predictability of model has increased because of the presence of this new variable. Here, the value of F-Statistic is 6.730 and its probability value is 0.04 which means that all the independent variables (ED, IP, OR), the moderator SMR and the new variable Modeffect significantly affect the Stock Market Capitalization at 5% significance level.

#### 4.4 Robust least squares

The RObust Least Squares is an alternative test for OLS Regression which is used to check the robustness of data i.e. when the data have outliers and it is used to test influential observations (Bertsimas and Sim 2004).

**Table 5.** Robust LS

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	(634.812)	74.045	(8.573)	-
ED_PAK	(41.179)	13.517	(3.046)	0.002
IP_PAK	151.239	1.982	76.320	-
OR_PAK	(12.797)	0.618	(20.697)	-
SMR_PAK	(68.427)	2.917	(23.457)	-
MOD_EFFECT	11.557	0.489	23.611	-
Robust Statistics				
R-squared	0.675		Adjusted R-squared	0.268
Rw-squared	1.000		Adjusted Rw-squared	1.000
Akaike info criterion	29.829		Schwarz criterion	35.231
Deviance	2.846		Scale	0.365
Rn-squared statistic	11,507.150		Prob(Rn-squared stat.)	-
Non-robust Statistics				
Mean dependent var	55.903		S.D. dependent var	26.616
S.E. of regression	16.290		Sum squared resid.	1,061.517

Table 5 represents the robustness check for the variables under study. The value for R-squared and Rw-squared represents the goodness-of fit and the along with their adjusted R-Squared values represents the goodness-of-fit and indicates that 30-100% variation the stock market capitalization is caused by the independent variables. Similarly, the

Rn-squared statistic is 11,507.150 and the p-value for Rn-squared statistic is 0 which shows the null hypotheses are strongly rejected.

## 5. CONCLUSION & RECOMMENDATIONS

The weak positive impact of Stock market Return showed that there is a little to no impact of dividend yield on Stock Market Capitalization. This implies that the investors who would oversee the disclosure practices of a firm and base their investments on the dividends offered by the firms are very less in number. The relationship of the extent of disclosure and strength of investor protection are found to be significantly positive with the stock market capitalization. This shows that the information transparency and business extent of disclosure is important for stock market capitalization. These findings are in line with Aksu & Kosedag (2006) which suggest that the higher the extent of disclosure, better will be the firm performance and hence, the stock market capitalization. The study has found that the impact of ownership on stock market capitalization was negative due to the presence of large shareholders who has indefinite impact on the legal rights of the minority shareholders. The research was based on information disclosure and transparency which is a narrower aspect of corporate governance and the results showed that the concentration of ownership could be harmful to the minority shareholders as it decreases the information transparency and disclosure (Yasser, Mamun, & Ahmed 2016). In short, the company which is owned and managed at the same time by a single individual can reduce the level of information transparency and hence reduces the market capitalization (Wang et al. 2019). The studies suggest that the Securities and Exchange Commission of Pakistan (SECP) should encourage the firms to disclose more information than just the mandatory requirements in order to make the current investors feel more protected and attract the potential investors. The study also suggests that the future researchers should inquire the lapses in the regulatory system of information disclosure and transparency and consider quality information disclosure as a measure of stock market performance. The findings of this study can also help the corporate governance board to improve the corporate governance practices in the firms with the help of information transparency and disclosure as well as strong investor protection.

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