

## **The Relationship Between Information Asymmetry And Board Characteristics Evidence From Pakistan's Textile Industry**

**Dr. Maryam Jabeen<sup>1</sup>, Faiza Faiz Malik<sup>2</sup>, Saima Zaib<sup>3</sup>, Dr. Afia Saleem<sup>4</sup>, Aisha Jabeen<sup>5</sup>**

<sup>1</sup> Corresponding Author: Lecturer at Institute of Management Sciences, Peshawar, Pakistan.

<sup>2</sup> Lecturer at Abdul Wali Khan University Mardan SRH Campus Pabbi, Pakistan.

<sup>3</sup> Research Scholar at Qurtuba University of Science and Information Technology, Peshawar, Pakistan.

<sup>4</sup> Lecturer at Institute of Management Sciences, Peshawar, Pakistan.

<sup>5</sup> Lecturer at Institute of Management Sciences, Peshawar, Pakistan.

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### **Abstract**

The present study attempts to explore the association between the corporate board and information asymmetry on a total sample of 60 textile companies of Pakistan for the period 2012 to 2018. The degree of asymmetric information has been estimated by using three proxies: Tobin's Q, Return Volatility, and Trading Volume. The independent variables include board diligence, family ownership, board independence, ownership concentration, size of the board, and the proportion of female directors on the corporate board. Firm size, firm age, and leverage represent the control variables. Panel data econometric techniques have been employed in the validation of the theories and outcomes in relevance to the characteristics of the directors of the board and information asymmetry. The findings suggest that the presence of family owners on the corporate board decreases the level of asymmetric information as it is negatively related to the volatility of stock returns and Tobin's Q and is directly related to trading volume. Widely held firms in Pakistan are owned by business groups or families where a significant portion of the total shares is held by the managers. In our country, where families own and manage the majority of the businesses, the problems related to the asymmetric distribution of information are significantly low. The evidence for independent directors shows that it has a positive relationship with Tobin's Q and return volatility and the association with trading volume is negative. However, the significance of the relationship is confirmed only for stock volatility. The positive sign of the coefficient for

independent directors' advocates that their presence in family businesses may lead to an increase in information asymmetry. Empirical findings suggest that in businesses owned by families, the proportion of independent directors is inversely interrelated to the level of disclosure of information. Overall, the findings of the study facilitate not only the policymakers and regulatory bodies in understanding the essential determinants of board composition firms operating in the textile sector of Pakistan but also provide some interesting directions for future empirical research on other firm-level characteristics and information asymmetry.

**Keywords:** Information asymmetry, independent directors, family ownership, female directors, leverage, ownership concentration, agency theory

## 1. Introduction

Akerlof in his seminal paper of 1970 demonstrates how the asymmetric information between the buyers and the sellers can cause market failures and how the efficient markets need some mechanism to overcome the problem of imperfect information. The importance of corporate governance was realized shortly after mega accounting scandals in the global business world including that of Enron, an American corporation, Parmalat in Italy, and Barings and Shell in the United Kingdom. Information asymmetry, in the case of financial accounting and financial decision-making, is associated with transparency and diligent disclosures. In the field of corporate finance, information asymmetry is commonly expected to define the relationship between corporate insiders and outsiders in the marketplace (Shleifer and Vishny, 1997).

Information asymmetry causes agency problems in firms controlled by the majority shareholders, but such problems may also be faced by family-owned firms where major stakeholders have a personal optimization agenda. Literature on information asymmetry is sparse as it is a recent genre of thinking in economics, it occurs when one or more investors possess private information about the value of the firm while other ignorant investors only have access to information that is publicly available (Brown and Hillegeist, 2007). In large public corporations, ownership and control are separate which raises a conflict of interest between the agent and the principal because their goals may not align (Jensen and Meckling, 1976). In the presence of information asymmetry, these problems are exacerbated where agents discriminately have more information than shareholders. The utility of the agents is capitalized at the expense of corporate shareholders. They have the aptitude to work for their interest rather than in the best interests of the firm. The utilization of some corporate resources as perquisites and the evasion of optimal risk positions are an indication of the self-interested behavior of management.

The dominant corporate ownership structure of Pakistan bears a resemblance to concentrated family ownership. The majority of investors not only uphold the control of a company but also are involved in managing it (Ibrahim, 2005). In widely held firms, the key agency problem is that managers do not take actions for the benefit of owners; on the other hand, the agency problem in family-owned firms is that managers work primarily for the controlling shareholder and overlook

others (Morck et al. 2000). According to Morck and Yeung (2003), firms controlled by families suffer from worse corporate governance problems. Taking advantage of information asymmetry, controlling shareholders get the opportunities to divert resources from the investments that are profitable at unreasonable prices to their related businesses, thus decreasing the propensity of minority shareholders to gain their expected returns. In most countries, the risk of expropriation of minority owners by large controlling shareholders is considered a fundamental principal-agent problem (Claessens, Djankov, Fan & Lang, 2002).

This study determines how board characteristics and corporate ownership influences information asymmetry in the textile industry in Pakistan for the period 2012 to 2018. Pakistan's textile industry is one of the largest manufacturing industries has a strong impact on the country's economy and is often considered its backbone. Textiles generate the country's highest export earnings hence helping Pakistan to create a lot of employment opportunities as well as contributing to a higher level of GDP. From July 2014 to March 2015, the textile sector raised foreign exchange of US\$ 10.22 billion (Pakistan Economic Survey, 2014-2015). The ownership structure of the textile sector in Pakistan is more skewed towards the directors and promoters of the companies. The findings by the Institute of Cost & Management Accountants of Pakistan in 2011 revealed that major shareholdings of companies in the manufacturing sector as well as service sector are controlled by families and business groups.

## **2. Research Objectives**

This research is setting a fresh perspective by quantitatively assessing the relationship between board characteristics and information asymmetry through current rich data about the textile sector of Pakistan. The study has set up the following objectives:

1. To determine the relationship of information asymmetry with corporate board meetings
2. To find out the relationship between information asymmetry with share ownership of family members
3. To understand the existence of women directors on corporate boards in terms of information asymmetry
4. To understand the relationship of dominant shareholders with information asymmetry
5. To investigate whether board independence affects information asymmetry
6. To find out the effect of the corporate board size on information asymmetry

## **3. Literature Review**

Research from the developed markets has shown that information asymmetry is affected by corporate ownership structure and the composition of the board of directors. Information asymmetry reduces in the presence of good corporate governance. To limit agency costs, the board of directors is considered an effective mechanism for bringing internal control within an organization (Fama and Jensen, 1983b). According to Fama and Jensen (1983) corporate boards with a high proportion of independent directors have more control over managerial decisions. To

be effective monitors' boards must be independent. Strengthening the role of a board of directors will make the managers more accountable to the board and will reduce the communication gap between the firm and the outside world (Lipton et al. 1992). Healy and Palepu (2001) considered corporate boards as a mechanism for reducing agency problems by monitoring the management on behalf of external owners. They also highlighted the importance of financial reporting and voluntary disclosures as a tool for reducing information asymmetry and agency conflicts between managers and outside investors. Several studies from the developed markets have also related information asymmetry with the corporate ownership structure. Literature documents that in comparison to individual investors, financial institutions and insiders have better information. Firms with higher insider ownership have information asymmetry. Trading by insiders can have a significant influence on the company's stock prices (Demsetz and Lehn, 1985; Denis and Denis, 1994).

In Pakistan, a limited number of studies focused on the issue of information asymmetry. Jabeen and Shah (2011) did a narrative review explaining the existing knowledge on the association between family ownership and asymmetric information based on published research studies. Another study by Afza et al. (2013) analyzed the relationship between IPO under-pricing, information asymmetry, and corporate governance on a sample data of 55 IPOs listed on KSE for the period 2000 to 2011. The study used uncertainty for measuring information asymmetry calculated by taking the standard deviation of daily returns of a particular stock over one month from the date of listing. They focused on the information asymmetry theories of underpricing. We believe that the present study is the first of its kind to empirically examine the relationship between board characteristics and information asymmetry in textile firms in Pakistan. This study also determines the effectiveness of corporate board meetings in reducing information asymmetry in emerging markets like Pakistan. The findings from this study highlight the need for bringing transparency to the information environment by strengthening the role of corporate board and institutional investors in Pakistan to reduce information asymmetry and protect the rights of stakeholders, particularly minority shareholders.

### **3.1. Hypotheses Development**

#### **3.1.1. Board Independence**

Boards have an imperative role in guaranteeing that the interests of investors are protected. The fundamental constituent of the internal governance mechanism that keeps an eye on agents is a board of directors (Fama, 1980). The corporate board with a substantial majority of independent directors will drive the firm to voluntarily audit its internal control mechanisms and disclose the interrelated audit reports (Sun et al. 2012). Independent boards are more effective in monitoring senior management. The greater the board independence, the more confidence shareholders will have that agency problems are under control and the lesser will be the volatility, spread, and share trading volume (Elbadry et al. 2015). To be effective monitors' boards must be independent. Strengthening the role of the board of directors will make the managers more accountable to the

board and will reduce the communication gap between the firm and the outside world, thus resulting in a lower level of information asymmetry (Lipton et al., 1992). This discussion leads to the following hypothesis:

H<sub>1</sub>: The degree of information asymmetry negatively relates to the percentage of independent directors on corporate boards

### **3.1.2. Female Directors**

Participation of women on boards promotes effective communication of the board to investors and raises the quality and the diffusion of value-relevant company-specific information (Joy, 2008; Nalikka, 2009; Srinidhi, Gul & Tsui, 2011). A negative association is expected between the diversity of gender on corporate boards and the degree of asymmetric information in the marketplace (Brown & Hillegeist, 2007). Gender-diverse boards lead to an improvement in corporate information disclosure and greater disclosure and transparency lessens information risk for participants in the financial markets. Gender diversity on the board of directors intensifies the quality and quantity of disclosure of public information by businesses. Women tend to join committees that have monitoring functions, for instance, corporate governance and audit committees, which are directly engaged in increasing transparency (Adams & Ferreira, 2009). Female directors can reduce the degree of adverse selection and price informativeness between informed and uninformed investors in family and non-family businesses. These findings depend on the position women directors are appointed to on corporate boards. Focusing on the traits of female suggest that the nomination of women directors, having foreign nationality and with a qualification in business studies, sitting on multiple boards leads to a significant decline in opacity surrounding businesses (Abad, Lucas-Pérez, Minguez-Vera & Yagüe, 2017). This discussion leads us to the following hypothesis:

H<sub>2</sub>: The degree of information asymmetry is negatively associated with the percentage of female directors on corporate boards

### **3.1.3. Board Size**

The size of a firm can be used as a proxy for the amount of prior information available about an organization. Firms that are smaller in size are followed by fewer analysts, consequently, the prices of these firms do not fully reflect information, and private information can be used more effectively by the insiders (Bhushan, 1989; Elliott, Morse & Richardson, 1984). Taking into consideration the perspective of market microstructure to examine the association between the size of a corporate board, liquidity premiums, and costs associated with adverse selection, the empirical findings suggest that market liquidity is higher for larger boards, translating into smaller bid-ask spreads and higher quoted depth. The findings further advocate that larger boards have lower costs related to information asymmetry and adverse selection (Flaherty, Li & Small, 2006). Some former studies predicted an inverted U-shape relationship between board size and information asymmetry.

Underneath the optimal and most size of the corporate board, the positive association between board size and asymmetric information is followed by a negative relationship (Yermack, 1996; Eisenberg, Sundgren & Wells, 1998). Based on this discussion, the following hypothesis can be formulated:

H<sub>3</sub>: The degree of information asymmetry negatively relates to the size of the corporate board

#### **3.1.4. Concentrated Ownership Structure**

Firms in emerging markets that are dominated by concentrated ownership structures tend to exhibit greater disparity between cash flow rights and control rights. For that reason, they are likely to empower controlling shareholders to divert organizational resources at the expense of minority investors. These firms thus reveal less company-specific information to disguise the opportunistic behavior of management, which is expected to exacerbate the level of asymmetric information between the managers and the outside investors (Claessens, Djankov, Fan, & Lang, 2002; Chen, Chen & Cheng, 2008). The voluntary disclosures of good and bad forward-looking information are generally less in firms owned by families than in their non-family counterparts. Empirical findings also report that the potential entrenchment problems induced by the founding families, as proxied by the dual-class share structure or higher ownership concentration levels, lead to less disclosure of voluntary information (Chen, Chen & Cheng, 2008).

H<sub>4</sub>: The degree of information asymmetry is positively associated with the presence of concentrated ownership

#### **3.1.5. Family Ownership:**

Firms with family members have ineffective monitoring by the board because the members usually hold significant positions in both the management team and board of directors, thus, increasing executive entrenchment (Filatotchev et al. 2005) and deteriorating the informativeness of reported earnings to the outside investors (Fan and Wong, 2002). In family firms' serious information asymmetry and entrenchment, problems emerge between majority and minority shareholders rather than between controlling families and managers (Sacristan – Navarro, and Gomez – Anson, 2007). In comparison to outside investors and managers, family members own better information as they have a comprehensive understanding of the company's operational activities (Kwak, 2003). The governance and management bodies have a lower level of professionalism and are less efficient in family firms (Martínez et al., 2007).

H<sub>5</sub>: The degree of information asymmetry positively relates to the percentage of shares owned by the family members

### **3.1.6. Board Diligence**

Board diligence is determined by the frequency of board meetings. Lack of time is the most commonly shared problem faced by directors to carry out their duties. Boards that meet regularly are more likely to execute their duties diligently and are beneficial to shareholders (Lipton et al., 1992). Vafeas (1999) considered board meetings as an important dimension of board operations that increases the effectiveness of board monitoring. The agency costs minimize for firms that meet regularly resulting in a lower information asymmetry through greater disclosure of voluntary information. This discussion leads us to the following hypothesis:

H<sub>6</sub>: A negative association exists between information asymmetry and board meetings

## **4. Research Methodology**

### **4.1. Framework for Sample Size and Sources of Data**

A total sample of 60 textile firms is selected from the period 2012 to 2018. Secondary data sources are used to gather data on the required variables available from the Pakistan Stock Exchange, and websites of listed textile firms in Pakistan. Business recorder, Ministry of Finance, State Bank of Pakistan, and Pakistan Bureau of Statistics have also been used for some important numerical facts. Data is surveyed and collected using authentic published sources.

### **4.2. Model Specification and the Variables**

To measure information asymmetry several proxies have appeared in the literature. It includes bid-ask spread (Welker 1995), R&D expenses (Alam and Walton 1995), dispersion in analysts' forecasts (Brown and Han, 1992), accounting disclosure indices (Miller 1999; Miller and Piotroski 2000), and inverse of stock prices (Harris, 1994). Measuring information asymmetry is tricky but literature is thoroughly examined to expect certain relationships. One of the measures used by Cai, Liu, Qian & Yu (2015) is Tobin's Q. It is believed that Tobin's Q shows the growth opportunity of a business and has a positive relationship with information asymmetry. Another contemporary researcher that has used different proxies for measuring information asymmetry is Elbadry, Gounopoulos & Skinner (2015). This scholar has used volatility of stock returns, trade volume, and volume of information asymmetry. The annual average of daily stock return volatility has a positive expected sign for information asymmetry in a regression setup, whereas, the expected signs for trade volume and trade value are negative toward information asymmetry. Wu and Sorensen (2013) and Diebecker & Sommer (2017) have both used trade volume and stock price volatility as measuring tools for information asymmetry and have described having negative and positive expected signs respectively for the two proxies. Cui, Jo & Na (2012) used the Asymmetric Information Index (AIIDX) for measuring information asymmetry. It is constructed using the percentile rankings of Tobin's Q, size of a firm, R&D expenditures, the number of shareholders, analyst forecast errors, and the number of analysts following the firm.

The present study has relied on three proxies to estimate the degree of asymmetric information: Tobin's Q, Return Volatility, and Trading Volume. The independent variables include board diligence, family ownership, board independence, ownership concentration, the fraction of female directors on the corporate board, and board size. Firm size, firm age, and leverage represent the control variables.

$$\text{Information Asymmetry} = \alpha + \beta_1 \text{indep.dir} + \beta_2 \text{female.dir} + \beta_3 \text{board.size} + \beta_4 \text{Own.Conc.} + \beta_5 \text{family} + \beta_6 \text{meeting} + \beta_7 \text{age} + \beta_8 \text{firm.size} + \beta_9 \text{leverage} + \epsilon \quad (i)$$

The detail of the variables and their measurement is given below:

<b>Table 1: Description and Measurement of Variables</b>		
<b>Variables</b>		<b>Measurement</b>
Information Asymmetry	<b>Tobin's Q</b>	fraction of the difference between the asset's book value and equity's book value plus the market value of a company's equity scaled by the asset's book value
	<b>Return Volatility</b>	the yearly average volatility of stock returns
	<b>Trading Volume</b>	the ratio of the trading volume of the stocks to the shares issued
indep.dir	<b>Independent Directors</b>	number of directors classified as independent scaled by the corporate board members
female.dir	<b>Female Directors</b>	the ratio of women divided by the board members
board.size	<b>Board Size</b>	total number of board members
Own.Conc	<b>Ownership Concentration</b>	the proportion of shares possessed by the largest shareholder of a company
Family	<b>Family Ownership</b>	a dummy variable is 1 if a business has family ownership and 0 otherwise.
Meeting	<b>Board Meetings</b>	the number of meetings held by the corporate board during the year.
Age	<b>Firm Age</b>	natural logarithm of the difference between the present year and the year in which a business has been established.
firm.size	<b>Firm Size</b>	logged value of the market value of a company's shares of stock
Leverage	<b>Leverage</b>	total debt to total assets

#### 4.3. Data Analysis Technique



The data on 60 firms covers seven years, therefore, panel data econometric techniques have been employed in the validation of the theories and results in pertinence to board characteristics and information asymmetry. The regression model is thoroughly tested through the regression assumptions of linearity, normality, homogeneity of variance, outliers, multicollinearity, etc.

## 5. Analysis and Discussion of Results

This section presents descriptive analysis and Spearman correlations between the key variables of interest. It also provides a detailed discussion of the empirical findings. Multicollinearity is detected in the models employing two measures. Heteroscedasticity in panel data models is controlled through robust standard errors. The residuals are homoscedastic in case of acceptance of the null hypothesis of homoskedasticity. Information asymmetry is proxied by Return Volatility, Trading Volume and Tobin's Q. The regression results are reported separately for each measure of information asymmetry.

### 5.1. Descriptive Statistics

The descriptive analysis is shown in Table 2 for all the variables.

	<b>Mean</b>	<b>Std. Dev</b>	<b>Min</b>	<b>Max</b>
<b>Tobin's Q</b>	8.0613	33.2566	0.0012	463.5439
<b>Return Volatility</b>	119.6882	196.6313	0	2154
<b>Trading Volume</b>	0.3342	0.7365	0	5
<b>Independent Directors</b>	0.1231	0.1239	0	1.1667
<b>Female Directors</b>	0.1298	0.1744	0	0.7143
<b>Board Size</b>	7.1127	0.8111	5	11
<b>Ownership Concentration</b>	0.5937	0.1825	0.0051	0.9997
<b>Family Ownership</b>	0.9808	0.1373	0	1
<b>Board Meetings</b>	5.4293	2.6111	2	19
<b>Firm Age</b>	3.4881	0.4012	2.0794	4.2341
<b>Firm Size</b>	20.0284	1.7924	15.2506	25.0017
<b>Leverage</b>	0.7425	0.9383	0.0008	12.5493

The average value for Tobin's Q is 806.13%, whereas the mean score for return volatility and trading volume is 119.6882 and 0.3342 respectively. The average score for the share of independent directors and women on the corporate board is 12.39% and 17.44% respectively. The smallest number of board members is 5 while the maximum number is 11. The average value for the percentage of concentrated ownership is 18.25%. A dummy variable is used to calculate family ownership. The minimum value for board meetings is 2 and the maximum is 19. The age of the firm has an average score of 3.4881 which means that the age of the textile firms on average ranges

between 30 years to 35 years. The natural logarithm of the equity market value is used to calculate the size of the firms. The maximum value is 25.0017. The mean percentage value for leverage is 93.83%.

### **5.2. Correlation Analysis and Multicollinearity Test**

The correlation matrix shows the absence of multicollinearity among the variables.

**Table 2: Correlation Matrix**

	<b>Firm Size</b>	<b>Tobin's Q</b>	<b>Leverage</b>	<b>Independent Directors</b>	<b>Female Directors</b>	<b>Board Size</b>	<b>Ownership Concentration</b>	<b>Family Ownership</b>	<b>Board Meetings</b>	<b>Firm Age</b>	<b>Return Volatility</b>	<b>Trading Volume</b>
<b>Firm Size</b>	1											
<b>Tobin's Q</b>	0.0401	1										
<b>Leverage</b>	-0.2877*	0.5660*	1									
<b>Independent Directors</b>	0.2100*	0.1509*	0.2299*	1								
<b>Female Directors</b>	0.2078*	0.0451	0.1720*	0.1180	1							
<b>Board Size</b>	0.3194	-0.1936	-0.3442	-0.3707	-0.1743	1						
<b>Ownership Concentration</b>	0.2591*	-0.0349	-0.0270	0.0522	0.1624	-0.0342	1					
<b>Family Ownership</b>	0.1512*	-0.1195*	0.1354*	0.0466	0.1223	-0.1605	0.0211	1				
<b>Board Meetings</b>	0.1027*	0.1119*	0.0624	0.0501	0.0866	-0.0290	-0.0041	-0.1227*	1			
<b>Firm Age</b>	-0.0099	-0.2316	-0.2319*	0.1333	-0.1039	0.1054	0.1655*	0.1814*	-0.2013*	1		
<b>Return Volatility</b>	0.2143*	0.2240	0.2899*	0.0274	0.1456	-0.2051	-0.0469	0.0302	-0.0452	-0.2474*	1	
<b>Trading Volume</b>	-0.0726	0.1702	0.2733*	0.1090	-0.0179	-0.1985	-0.1639*	0.0048	-0.0404	-0.2627*	0.4038*	1

\*Significance of the correlation is at the 0.05 level

The ownership concentration and board size negatively correlate with information asymmetry, whereas, the fraction of independent directors to the overall number of directors has a positive correlation with information asymmetry. Family ownership has a negative association with Tobin's Q and the correlation among stock volatility and trading volume is positive. The ratio of female directors and board meetings positively correlate to Tobin's Q and their association with trading volume is negative. The absence of multicollinearity is further determined through VIF (variance inflation factor). The value of VIF for all the independent variables in Table 3 is less than 10; therefore, it confirms the stability of the coefficients.

<b>Table 3: Collinearity Statistics</b>	
<b>Information Asymmetry</b>	
<b>Variables</b>	<b>VIF</b>
<b>Independent Directors</b>	1.09
<b>Female Directors</b>	1.10
<b>Board Size</b>	1.20
<b>Ownership Concentration</b>	1.14
<b>Family Ownership</b>	1.23
<b>Board Meetings</b>	1.02
<b>Firm Age</b>	1.26
<b>Firm Size</b>	1.28
<b>Leverage</b>	1.08
<b>Mean VIF</b>	1.16

### 5.3. Analysis and Discussion of Regression Model Results:

The information asymmetry is measured using three proxies: Tobin's Q, return volatility, and trading volume. Tobin's Q and return volatility is directly related to information asymmetry, whereas trading volume has an indirect association with information asymmetry. The regression output for all the measures of information asymmetry based on the model in equation 1 is shown in Table 4 below:

<b>Table 4: Regression Models</b>			
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>
<b>Breusch-Pagan / Cook-Weisberg test for heteroskedasticity (H<sub>0</sub>: constant variance)</b>	Robust Std. Err.	Robust Std. Err.	Robust Std. Err.
<b>Hausman Test (p-value)</b>	> 0.05	> 0.05	<0.05
<b>Information Asymmetry</b>			

	<b>Tobin's Q</b>	<b>Return Volatility</b>	<b>Trading Volume</b>
<b>Independent Directors</b>	1.5141	46.5040	-0.1924
	8.5468	25.4850***	0.4043
<b>Female Directors</b>	-0.0114	-24.5712	0.2608
	6.7770	22.3576	0.2860
<b>Board Size</b>	-1.5944	1.8789	0.0384
	1.3042	3.0890	0.0424
<b>Ownership Concentration</b>	-13.2126	-0.8000	0.3380
	10.8186	28.4300	0.3877
<b>Family Ownership</b>	-48.8102	-52.9011	0.0721
	15.1200*	27.7814***	0.1788
<b>Board Meetings</b>	0.0889	0.0897	0.0009
	0.2975	1.1307	0.0134
<b>Firm Age</b>	-3.7390	-67.4856	0.0637
	3.5284	26.9660**	0.4324
<b>Firm Size</b>	0.2703	15.1783	0.1056
	0.7227	5.5734*	0.0945
<b>Leverage</b>	1.3302	0.7474	-0.0319
	1.7040	1.3203	0.0185***
<b>Constant</b>	81.1794	94.3322	-2.5390
	28.7487	107.6245	2.1423

( ) standard error in parenthesis  
\*p<0.01;\*\*p<0.05;\*\*\*p<0.1

The findings suggest that the presence of family ownership decreases the level of asymmetric information as it negatively relates to Tobin's Q and volatility of stock returns and directly relates to trading volume. This is in contradiction to the study's formulated hypothesis H<sub>5</sub>.

The founders of family-owned businesses often hold topmost management positions and are thoroughly engaged in the business operations which empowers them to access more information and prudently monitor management in comparison to non-family firms (Chen, Chen & Cheng, 2008). Therefore, the classical agency conflict among the shareholders and manager becomes not as much of relevant owing to the presence of a mechanism of control by family members over management.

Cho, Lee & Pfeiffer (2013) suggests that due to the information efficiency effect in family-owned firms, the members attempt to take information advantage and perform information-based insider trading, they will be followed by investors with less precise information which in turn reduces information asymmetry. A large volume of information might be disclosed by family-controlled

firms to lessen information asymmetry with minority investors. Insider trading performed by the family members based on their information advantage is generally followed by less-informed investors thereby reducing the asymmetric information. According to the theory of socio-emotional wealth, members of the family draw utility from their wealth, and as a result members of family-owned firms benefit more from the disclosure of corporate social responsibility (Gomez-Mejia, Cruz, Berrone, & De Castro, 2011).

Existing literature recommends that businesses owned by families can limit the opportunistic behavior of managers and reduce the extent of agency conflicts among owners and managers, for several reasons. First, the motivation to control corporate management is stronger when the dominant shareholder is a family as family members generally invest a considerable portion of their capital in their business (Miller, Le Breton-Miller & Lester, 2010). Second, shareholders in family firms want to grasp upcoming employment opportunities for their members and to safeguard both the social and family identity (Sharma & Manikutty, 2005). Firms in family businesses generally chase long-term goals and tend to pursue permanence plans and policies. In sum, the family members do not have any incentive to act to the detriment of the corporate's prosperity and worth, as their ultimate objective is to hand over the firm from one generation to another (Gómez-Mejía et al. 2007). The involvement of family in the administrative board acts in the way of reducing the agency conflicts between the owners and the managers. Based on these arguments, it can be proposed that – in the existence of asymmetric information - possession of ownership by families sends a positive signal in sorting the quality of divestiture strategies. When there is an anticipation of higher agency costs that may arise from information asymmetry, the presence of ownership by family acts as an indicator of tougher monitoring of corporate management. This should guarantee investors the ability of family members to lessen the agency costs, consequently restraining the unfavorable influence that asymmetric information has on the performance of firms (Peruffo, Oriani, & Perri, 2010).

In the case of Pakistan, Hussain & Shah (2015) tested the principal-agent and information asymmetry theories by explaining the dividend smoothing behavior of listed non-financial firms during the period 1999 to 2012. The results showed that in comparison to developed countries, the speed of adjustment of dividends in our country is much faster. The findings further suggest that the reason for a much faster speed of adjustment might be that in our country where the families control and manage the majority of the businesses, the problems related to the asymmetric distribution of information are significantly low.

The evidence for independent directors shows that it has a positive association with Tobin's Q and return volatility and the association with trading volume is negative. The significance of the relationship is confirmed only for stock volatility. The positive sign of the coefficient for independent directors advocates that their presence in family businesses is more likely to increase

information asymmetry. The findings for independent directors contradict our proposed hypothesis H<sub>1</sub>.

The structure of the corporate board relative to the proportion of independent directors is an assurance of a higher level of corporate transparency. The members are keen to demonstrate workplace integrity and compliance with the guidelines and regulations, as these factors influence corporate reputation and consequently one's reputation (Zahra & Stanton, 1988; Hasseldine, Salama & Toms, 2005; Fich & Shivdasani, 2007). Additionally, as independent directors take into consideration the demands of other stakeholders other than owners, it is therefore anticipated that they tend to defend corporate disclosures that are beneficial for a wide spectrum of interest groups (Ibrahim & Angelidis, 1995)

Appointments in family-owned businesses are generally strongly influenced by family ties or personal friendships. Outside directors are often closely associated with family members. Hence, independent directors might strongly be dominated by the desires and opinions of families (Chen & Jaggi, 2000; Gabrielsson & Huse, 2005; Songini, Gnan, & Malmi, 2013). Therefore, it could be anticipated that the liberation and freedom of independent corporate directors could be badly affected in family organizations and that they possibly will agree to whatsoever has already been approved by the family shareholders. Strong collusion among the family owners' and independent directors' interests is apparent in the case of family-owned businesses. Family organizations are usually characterized by a high level of control and possession by founding families, who tend to be controlling owners and have numerous roles in the administration of businesses. This feature may affect the conduct of corporate boards, even independent directors (Haalien & Huse, 2005; Patelli & Prencipe, 2007). In businesses that are controlled by families, members of the board are typically selected from a small applicants pool, comprising members of the families or those with whom they have a personal affiliation. Sometimes, board members in family-owned businesses meet only to officially acknowledge what has already been agreed upon by the owner-manager (Ward & Handy, 1988; Gabrielsson & Huse, 2005). Empirical findings suggest independent members of the board, under the influence and control of family owners, tend to make choices that favor family members, as an alternative to taking into consideration the interests of other stakeholders into account (Chen & Jaggi, 2000). The findings by Cuadrado-Ballesteros, Rodríguez-Ariza & García-Sánchez (2015), and Chen & Jaggi (2000) assert that family-owned businesses tend to avoid all-inclusive and high-quality disclosures of information as independent directors have a tendency to reduce the level of disclosures. In businesses owned by families, the percentage of directors that are independent on corporate boards is inversely interrelated to the level of disclosure of information.

The independence of the corporate board is a two-edged sword in that it lessens the chances of collusion among the management and board, but also dwindles the capability of the board to acquire beneficial private information (Bushman, Piotroski & Smith, 2004). The implementation

of monitoring and counseling roles by independent directors depends on whether they can gather adequate information. The decisions concerning at what time and how much information should be released to the board are made by the firm's management. If a large volume of information is concealed, even talented directors are not able to assess and estimate the firm's policies and management's decisions. The existence of asymmetric information among board and corporate management not also increases the information acquisition costs but also impedes effective firm-level governance for instance the independence of the members of the audit committee and corporate directors (Jensen, 1993).

In terms of control variables, the findings show that all three of them are significant predictors of information asymmetry. The coefficient for firm age and leverage is significantly negative with return volatility and trading volume respectively, while, the coefficient of firm size is significantly positive for return volatility as the dependent variable.

The size of a business is considered a proxy of agency costs and information asymmetry (Ajina, Sougne & Lakhal, 2015; Zaigham, Wang & Ali, 2019). Petacchi (2015) findings suggest that companies with higher levels of financial leverage tend to be large with a higher degree of intrinsic asymmetric information and lower profitability. Young firms are thought to lack accountability and reliability in their business performance and routines (Hannan & Freeman, 1989). According to Carter & Manaster (1990) and Podolny (1993), lack of legitimacy is one of the institutional constraints faced by the young enterprises, which arises due to the absence of assistance from relevant businesses or due to market segmentation for inter-firm relationships. These factors recommend that it will be hard to evaluate the worth of newer organizations due to the higher level of fears accompanying such commercial dealings as well as the complications such businesses face incredibly turning over the worth of the firm to potential investors. Small and young firms are likely to be related to a higher degree of asymmetric information. Stinchcombe (2000) suggests that newly founded enterprises tend to exhibit higher levels of information asymmetry and uncertainty than well-known organizations due in part to institutional and resource restrictions. The scarcity of resources often obstructs young companies from pledging to their workers and building trustworthy relations with suppliers and customers.

## **6. Conclusion**

The study analyzed the association between information asymmetry and board characteristics on a sample of 60 textile firms for the period 2012 to 2018. Information asymmetry is measured by using three proxies: Tobin's Q, return volatility, and trading volume. Tobin's Q and return volatility is directly related to information asymmetry, whereas trading volume has an indirect association with information asymmetry.

The findings suggest that the presence of family owners on the corporate board decreases the level of asymmetric information. Widely held firms in Pakistan are owned by business groups or families where a significant portion of the total shares is held by the managers. In our country, the



majority of the businesses are controlled by families where the problems related to the asymmetric distribution of information are significantly low. Empirical findings suggest that in businesses owned by families, the percentage of directors that are independent on corporate boards is inversely interrelated to the level of information disclosures. Family-owned businesses tend to avoid all-inclusive and high-quality disclosures of information as independent directors tend to reduce the level of disclosures. The findings for family ownership and independent directors are in contradiction to our formulated hypotheses H<sub>5</sub> and H<sub>1</sub> respectively. In terms of control variables, the findings show that all three of them, firm size, firm age, and leverage, are significant predictors of information asymmetry.

This study has some limitations. The sample only covers listed firms from the textile sector of Pakistan. Future research might push further our understanding by studying the relationship across different non-financial industries operating in our country. The analysis can further be extended by including several other variables concerning the composition of the board, firm-level governance mechanisms along with the determinants of ownership structure. In recent years, numerous databases have been developed. These databases provide comprehensive data on several dimensions of governance mechanisms. In our country, collecting information on governance indicators can be time-consuming and nerve-wracking as the data has to be collected manually from every single annual report over an extended period. The collection of data becomes even harder due to variations that may exist in the structure or layout of the annual reports of different companies.

The revised Code of Corporate Governance 2012 has set out the principles and the guidelines related to the functioning of the board of directors, the duties and responsibilities of non-executive directors, accountability, disclosure policy, and audit committee. There is a need to implement these principles in a true perspective to minimize fraudulent governance practices. The regulatory bodies and the policymakers must recognize the role and the significance of board composition and dominant shareholders in increasing transparency and corporate disclosure thereby reducing the magnitude of asymmetric information between informed and uninformed investors.

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