# ANALYSIS OF EARNINGS MANAGEMENT: A CASE OF FAMILY-OWNED AND NON-FAMILY-OWNED FIRMS

**By**

**ASIF SAEED**

**NATIONAL UNIVERSITY OF MODERN LANGUAGES ISLAMABAD**

**SEPTEMBER, 2020**

# ANALYSIS OF EARNINGS MANAGEMENT: A CASE OF FAMILY-OWNED AND NON-FAMILY-OWNED FIRMS

By

**Asif Saeed**

MS (Management Sciences), SZABSIT, Islamabad, 2009

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENT FOR THE DEGREE OF

**DOCTOR OF PHILOSOPHY**

**In Management Sciences**

**To**

**FACULTY OF MANAGEMENT SCIENCES**


**NATIONAL UNIVERSITY OF MODERN LANGUAGES**

**ISLAMABAD**

**September, 2020**

d

NATIONAL UNIVERSITY OF MODERN LANGUAGES

FACULTY OF MANAGEMENT SCIENCES

# DISSERTATION AND DEFENSE APPROVAL FORM

**The undersigned certify that they have read the following thesis, examined the defense, are satisfied with the overall exam performance, and recommend the thesis to the Faculty of Management Sciences for acceptance:**

**Thesis/ Dissertation Title:** ANALYSIS OF EARNINGS MANAGEMENT: A CASE OF FAMILY-OWNED AND NON-FAMILY-OWNED FIRMS

**Submitted By: Asif Saeed** **Registration #: 461-PhD/MS/F13**
Name of Candidate

**Doctor of Philosophy**
Degree name in Full

**Management Sciences**
Name of Discipline

**Prof. Dr. Attiya Y. Javid** _____
Name of Research Supervisor Signature of Research Supervisor

**Dr. Aijaz M. Hashmi** _____
Name of Research Co-Supervisor Signature of Research Co-Supervisor

**Dr. Faid Gul** _____
Name of HOD (FMS) Signature of HOD (FMS)

**Prof Dr. Naveed Akhtar** _____
Name of Dean (FMS) Signature of Dean (FMS)

**Major. Gen ®. Muhammad Jaffar HI(M)** _____
Name of Rector Signature of Rector

_____
Date

# CANDIDATE DECLARATION FORM

I, Asif Saeed

Son of Saeed Ahmed

Registration # 461-PhD/MS/F13

Discipline Ph.D. Management Sciences

Candidate of Ph.D. Management Sciences at the National University of Modern Languages do hereby declare that the thesis entitled Analysis of Earnings Management: A Case of Family-Owned and Non-Family-Owned Firms submitted by me in partial fulfillment of Ph.D. degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it shall not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

I also understand that if evidence of plagiarism is found in my thesis/dissertation at any stage, even after the award of a degree, the work may be cancelled and the degree revoked.

_____ _____

Date Signature of Candidate

**Asif Saeed**

Name of Candidate

**Analysis of Earnings Management: A Case of Family-Owned and Non-Family-Owned Firms**

# ABSTRACT

This study provides empirical support in demonstrating the role of family ownership on the association of capital structure, corporate social responsibility, governance structure, firm characteristics, and managerial ownership with earnings management. This research considers two proxies of earnings management i.e. accrual based earnings management and real earnings management, in two different institutional settings i.e. developed and developing countries. To investigate the role of family ownership in these institutional settings, data of listed non-financial Pakistani and US firms is used for the period 2009 to 2017.

Performance based Jones model (Kothari, Leone & Wasley, 2005) is used to measure accrual based earnings management, while real earnings management is measured by using the models presented by Roychowdhury (2006). Pooled ordinary least square regression method clustered at firm and year level is used to estimate the coefficients. Results of the study suggest that for both US and Pakistani firms, all proxies of independent variables are significantly associated with real earnings management, except audit committee independence and board independence, though in the case of Pakistani firms profitability and firm age also have no significant association with real earnings management. The study further explains that all the proxies of independent variables are significantly associated with accrual based earnings management for US firms, whereas in the Pakistani scenario, board independence, audit committee independence, and gender diversity are not significantly associated with accrual based earnings management.

Moreover, in both institutional settings, family ownership is found to influence the impact of each of the independent variables i.e. capital structure, corporate social responsibility, corporate governance, firm characteristics, and managerial ownership, on earnings management. Results also suggest that those US family firms, which are highly levered, have larger board size, more managerial ownership, more assets, and mature firms, are more inclined towards real earnings management than US non-family firms. Whereas, socially responsible non-family firms are more inclined to real earnings management than socially responsible family firms. In addition, gender diversity and profitability work better to deter real earnings management in non-family firms than family firms. On the other side, the role of audit committee independence, gender diversity, firm size, profitability, and maturity is more pronounced to control the managerial opportunism regarding earnings management in US family firms than non-family firms. The study additionally reveals that more corporate social responsible activities, large board, and firm size are more helpful to deter real earnings management in Pakistani family firms than non-family firms. Whereas, corporate social responsibility and managerial ownership of family firms are more helpful to control accrual manipulation in family firms than non-family firms in Pakistan. Moreover, highly levered, more social, having large board size and big Pakistani firms are less involved in real earnings management as compared to US firms, whereas, corporate social responsibility, audit committee independence, gender diversity, corporate board size, firm size, profitability, age, and managerial ownership control accrual earnings management in USA more than in Pakistan. The influence of family ownership in both institutional settings can be justified by the socio-emotional wealth theory.

This study is useful for the users of financial reports like equity investors, creditors, analysts, suppliers, and society at large for informed financial decisions, especially for regulators to amend the corporate governance rules in Pakistan so that earnings management can be controlled.

**Keywords**: Real earnings management, Accrual earnings management, Family ownership, Socio-Emotional Wealth (SEW) theory, CSR, Corporate Governance, Capital Structure, Firms characteristics, Managerial Ownership

# TABLE OF CONTENTS

# LIST OF TABLES

# LIST OF FIGURES

# DEDICATION

I dedicate this work to the most important pillars of my life, first and foremost, my parents who sacrificed their comfort for my education; to my beloved wife, children, brother, and sisters for bearing with my lack of attention during the time I was writing the thesis.

# ACKNOWLEDGMENT

I am extremely grateful to Almighty ALLAH (the most merciful and the most beneficent), who guided and enabled me throughout the times in carrying out this enormous job. I am also thankful to my parents, wife, children, sisters, and brother for their love and support throughout my life. Thank you for believing in me and giving me the strength and support to achieve my dreams.

I would like to extend my sincerest gratitude to my supervisor, Prof. Dr. Attiya Y. Javid, and co-supervisor, Dr. Aijaz M. Hashmi, for their guidance and support. I would also like to thank Dr. Faisal Shahzad, Dr. Fawad Latif, Mr. Adeel Saqib, Mr. Usman Shah Lutfi, and Mr. Muhammad Riaz, for their time to time valuable suggestions during my research work. I am thankful to all my teachers and mentors who have contributed to any aspect of my learning process.

I also acknowledge the support, good wishes, and encouragement of my elders, friends, and students. I will always cherish their role in the successful completion of my dissertation.

**Asif Saeed**

# LIST OF ABBREVIATIONS

| | |
|---|---|
| AB_EM | Accrual Based Earnings Management |
| B_Size | Corporate Board Size |
| BGDV | Board Gender Diversity |
| BI | Board Independence |
| CCG | Code of Corporate Governance |
| CEO | Chief Executive Officer |
| CFO | Chief Financial Officer |
| CG | Corporate Governance |
| CSR | Corporate Social Responsibility |
| EM | Earnings Management |
| F_Size | Firm Size |
| Famown | Family Ownership |
| GAAP | Generally Accepted Accounting Principles |
| IPO | Initial Public Offering |
| LEV | Leverage |
| M_Own | Managerial Ownership |
| OLS | Ordinary Least Square |
| R&D | Research and Development |
| R_EM | Real Earnings Management |
| SEO | Seasoned Equity Offering |
| SEW | Socio-emotional Wealth |

CHAPTER 1

# INTRODUCTION

## 1.1 Background of the Study

Accounting is known as the language of business, which plays a significant role in processing and keeping financial data for corporations in the form of financial reports. The basic motive of financial reporting is to provide information about the financial position and financial performance of corporations to different stakeholders for informed decisions (Haslam et al. 2015). Accounting earnings, which is the result of the income statement, and components of the income statement, are both very central for different stakeholders to assess firms' performance and to forecast operating cash flows in advance (Cohen & Zarowin, 2010; Kothari et al., 2012). Though flexibility in accounting authorizes management to make available the pertinent and reliable information of firm's accounts that assist stakeholders in measuring firms' performance and to enables the business to be innovative, but it also provides room for managers to perform earnings management (EM) opportunistically (Healy & Wahlen, 1999; Dechow & Skinner, 2000). For instance, in accrual based earnings management (AB_EM), corporations' management has the option to manipulate the expected life and salvage value of fixed assets, discretionary accruals, deferred taxes, and have to change accounting methods, for instance, method of inventory costing and method of depreciation.

Considerable research documents that listed firms, in order to manage their earnings, may adopt discretionary accruals. Aharony et al. (2000) document that prior to initial public offering (IPO), Chinese corporations inflate their earnings by using discretionary accruals. Further, Haw et al. (2004), and Chen and Yuan (2004) argued that listed firms of China

utilized accrual based earnings management to satisfy minimum requirement criterion, to remain listed, and to be eligible for IPOs and right issues, or evade trading restrictions or delisting. Besides, several studies (Liu & Lu, 2007; Jian & Wong 2010) propose that controlling equity holders may pool funds or increase earning by making allied party transactions, corporate loans, and get subsidy from the government to meet regulatory thresholds. Real business transactions are also used to manipulate earning. The real earnings management (R_EM) departs firms from normal operational practices and are considered as real manipulation activities that take place when management changes the structure or timing of business transactions to increase generally accepted accounting principles (GAAP) earnings (Roychowdhury, 2006). These activities directly influence the cash flows of the firm.

The scholars argue that to boost short term earnings, CEO of firms prefer to cut research and development (R&D) costs to fulfill earning benchmarks (Baber, Fairfield & Haggard, 1991; Bushee, 1998). Furthermore, Bens, Nagar, Skinner & Wong (2003) additionally suggest that managers significantly finance repurchase stocks by decreasing R&D.

Graham, et al. (2005) provide evidence that management likes R_EM, even though it may decrease the value of firm and increase related costs. They investigated 401 finance executives regarding the main causes that verify their choices on voluntary disclosure and reported earnings. Near about 80% of the participants point out that they prefer to reduce discretionary spending in order to boost earnings. Moreover, 55.3% of the participants answer that to boost earnings they delay the new investment.

## 1.2 Earnings Management (EM)

In this thesis, earnings management (EM) is defined by adopting the ontological understanding of Healy and Wahlen (1999). The definition of earnings management is as follows;

"Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers."

Accrual and real earnings management are two different types of earnings management activities, as per the above definition given by Healy and Wahlen (1999). In next section, detailed discussion on accrual bases earnings management and real earnings management is provided.

### 1.2.1 Accrual based earnings management (AB_EM)

Accrual based earnings management is a managerial decision in financial reporting (Healy & Wahlen 1999). The difference between operating cash flow and reported earning is known as accruals. There are two components of accruals, namely discretionary accruals and non-discretionary accruals (Cohen & Zarowin, 2010). Discretionary accruals include non-obligatory expenses such as annual bonus and non-discretionary accruals are obligatory expenses such as salary and bills of upcoming month. In academic research on accrual based earnings management, the main emphasis of researchers is on discretionary accruals (Jones 1991; Dechow et al., 1995; Healy & Wahlen 1999; Kothari, Leone & Wasley, 2005). Total accruals of a firm are observable in firm's financial statements but the estimation of discretionary accruals and non-discretionary accrual is very difficult

because these types of accruals both discretionary or non-dictionary are not recognizable in financial statements of a firm. In academic literature, different models are used to estimate discretionary accruals such as, “Jones model (1991)”, “modified Jones model” (Dechow, Sloan & Sweeney, 1995), and “performance base model” (Kothari et al. 2005).

Accruals can also be classified into two groups on the basis of time, namely current accruals and long-term accruals. In current accruals, adjustments are made in current assets and current liabilities of firm like underestimation of the provision for bad debts; whereas, in long-term accruals, adjustments are made in fixed assets and long-term liabilities like changes in deferred taxes (Teoh, Welch & Wong, 1998).

According to Luong (2015) the most significant long-term accruals are judgment of depreciation and amortization cost. Moreover, long term accruals are important to be considered when examining the association between stock returns and net income (Loftus & Sin, 1997). Same views are also shared by Richardson, Sloan, Soliman, and Tuna (2001) toward the important role of long-term accruals while measuring the quality of earning. However, Spohr (2005) and Dechow and Dichev (2002) found evidence that current accruals are used for earnings management instead of long term accruals.

Generally, managers are encouraged to manage earnings based on accounting numbers in order to achieve good stock market performance and financial position, not only to maximize the value of firms but also to extract private benefit (Healy & Wahlen, 1999). It seems relevant to investigate that whether management of family firms in developing or developed countries uses accrual based earnings management technique to achieve their objectives or not, in the presence of other variables i.e. leverage, corporate

social responsibility (CSR), governance mechanism, firm characteristics and managerial ownership.

### 1.2.2 Real earnings management (R_EM)

Real earnings management happens when management structures transactions to adjust the financial results (Healy & Wahlen, 1999). Real earnings management activities directly influence the cash flows of the period in which earnings are managed. A number of studies have discussed management intervention through operational decisions (Healy & Wahlen, 1999; Dechow & skinner, 2000; Fudenberg & Tirole, 1995). These scholars have discussed operational decision to manipulate earnings, like to accelerate the sales through sales discounts, change in shipment time, delay in maintenance and R&D expenditures. According to Roychoudhry (2006), Real earnings management happens once management deviates from routine operational practices for the sake of misleading stakeholders to believe that financial reporting objectives are achieved in usual course of action.

A number of real earnings management activities are recognized by different researchers, like repurchase of stock by management to evade dilution of earnings per share due to stock option exercised by employees (Bens, Nagar, Skinner & Wong, 2003), decrease in R&D expenditure when CEO's approach retirement (Dechow and Sloan 1991). Reduction in R&D expenditure is also documented by Baber et al. (1991), and Bushee (1998). Now the question arises that whether there is any difference in family firms of US and Pakistan in the use of real earnings management techniques, in the presence of other factors like leverage, CSR, governance mechanism, firm characteristics, and managerial ownership or not.

Upcoming sections give a concise introduction of different variables, which may affect the decisions of EM.

## 1.3 Capital Structure

The capital structure consists of borrowed capital and owners' investment in business. Firms may finance their assets and operations by issuing new bonds, by bank financing, by retained earnings, or by issuing new equity. The decision of financing depends upon different factors, like existing debt burden, market interest rate, stock market situation, firm performance, and others. On one side, the debt capital is cheaper than the equity capital (Subramanyam, 2017) because interest expense is tax deductible while dividend is paid after the tax payment so dividend payment has no impact on tax liability or net income of firm. On the other side, bankruptcy risk increases with the increase in debt burden, while decreases with equity financing. Management of corporations tries to set capital structure which is mix of both debt and equity and maximizes firms' value. In corporate governance literature, on one hand, the debt portion of capital structure is also considered as a mechanism which disciplines the management and hence curbs the opportunistic behavior of the management which may encompass availing excessive perks, discrimination, and nepotism (Jensen, 1986). While the other hand, critics have explained the negative outcomes of debt burden (Beatty & Webber, 2003), which include the management deploying earnings management strategy to avoid blockage from the creditors and also rigging data to acquire loans at favorable rates. Beatty and Webber (2003) hold that the highly indebted firms refrain from breaking their contractual obligations, hence manage their earnings.

Extant literature discusses the role of debt on earnings management. At one pole, researchers conclude that due to high debt level, management increases earnings management (Idris, 2018; Shahzad, Rauf, Saeed, & Al Barghouthi, 2017; Li, Holmes & Lee, 2016), while others assert that EM practices decrease as debt increases (Lennox, Wang & Wu, 2018; Wardhani & Anggraeni, 2017; Zamri, Rahman & Isa, 2013). Different arguments are given for contradictory results of the relationship between leverage and earnings management. Detailed discussion on these arguments is provided in the literature review section.

This study investigates how leverage controls the opportunistic behavior of management of family and non-family firms listed in two different institutional settings.

## 1.4 Corporate Social Responsibility (CSR)

Corporate social responsibility (CSR) is the measurement of firms' activities for society, which provide benefits to all stakeholders, like the rise in customer's reliability and reduction in pollution (Kim & Sohn, 2013). Literature shows different results on the association between CSR and earnings management.

It is reported in the literature that CSR is negatively correlated with earnings management. Marinnez-Ferrero, Gallego and Farcia-Sanchez (2015) conducted a research on a data of twenty-six countries for the period 2002–2016. They observe negative association among CSR and earnings management. Similar relationship is also find out by Timbate and Park (2018), Litt, Sharma and Sharma, (2013) and Hong and Andersen (2011) in the context of US firms by using different periods and data. Using the data of 10 Asian countries, Scholton and Kang (2013) also discover that earnings management decrease with increase in CSR. Kim, Udawatte and Yin (2018) analyzed the data of Chinese listed

firms from 2009 to 2014, and observed a negative relationship between CSR and earnings management. Firms decrease their earnings management activities to provide high-quality financial information to their stakeholders. They explain this negative relation by the ethical perspective of firms.

On the contrary, Jensen and Meckling (1976) contended that management of firms involves an increased level of social responsibility activities to improve firm reputation or to pursuit self-interest. In such firms, thus the quality of earnings tends to decrease, resulting in manipulation of financial reporting. In Korean context, Choi,et al. (2013) document that EM increases with the increase in CSR. They conclude that to distract stakeholders from their opportunistic behavior related to earnings management, firms perform CSR activities. Similarly Jordaanet al. (2018), Prior et al. (2008), Salewski and Zulch (2014), Shafai et al. (2018), Barton et al. (2010) and Choi and Pae (2011) also observe positive linkage between CSR and EM.

Till date results are inconclusive regarding this association among CSR and earnings management. This study explores the role played by corporate social responsibility in controling the opportunistic behavior of management of listed family and non-family firms of US and Pakistan.

## 1.5 Corporate Governance (CG)

According to the Organization for Economic Co-operation and Development (OECD), corporate governance (CG) is “a set of relationships between a company’s management, its board, its shareholders and other stakeholders”. Mostly CG models focus on agency theory and have a common focus that is to mitigate agency problem (Brown, Beekes, & Verhoeven, 2011). Management’s opportunistic behavior denotes a dangerous

type of agency problem, where corporate governance processes are established to control these type of problems. A number of studies are available that have empirically investigated the linkage between management's opportunistic behavior and ineffective corporate governance mechanisms in firms (Chintrakan, Jiraporn & Kim, 2013; Bebchuck, Cremers & Peyer, 2011; Crutchley, Jensen & Marshall, 2007). These studies document that board independence, audit committee financial expertise, separation of CEO and Board Chair are the key elements of corporate governance processes that limit the managements' opportunistic behavior. The empirical findings found in literature that support the importance of such corporate governance mechanisms are conducted mainly in Western developed economies. The corporate environments in developing countries significantly differ from those of developed countries in many ways. For example, mostly Asian firms are owned and managed by majority shareholders that are usually founding families (Chtourou, Bedard & Courteau, 2001). Besides, these firms appoint employees from institutional shareholders and founding family members (Vafeas, 1999). Moreover, the firms in Asian emerging economies operate in legally weak environments as compared to firms in western developed economies (WJP Rule of Law Index 2017–2018).

Consequently, Cheung and Chan, (2004) argued the above mentioned factors in developing countries affect the promotion of good corporate governance mechanism, which results in to the expropriation of the wealth of minority shareholders by majority shareholders and hence cause damage to the stakes of other stakeholders. Now the question arises, whether the CG mechanism prescribed for Western economies applicable to emerging Asian economies or not (Sauerwald & Peng, 2013). Furthermore, compared to the firms of developed countries, Asian firms are abundant with group affiliations which

significantly affect firms' operations. Thus, the firms in Asian counties may require different type of corporate governance mechanisms as compared to western firms (Claessens & Yurtoglu, 2013).

The Code of corporate governance was first time issued in Pakistan by the Securities and Exchange Commission of Pakistan (SECP) in 2002. Second time, in 2012, a new code was issued, and later, in 2014, it was amended partially. In 2017, when Companies Ordinance 1984 was replaced with Companies Act 2017, a new code was issued by SECP, to enhance the monitoring mechanism.

Pakistan provides a potential ground for such an investigation due to many reasons. Firstly, Pakistan has adopted corporate governance reforms following the corporate governance principles of the developed countries (Javid & Iqbal, 2010). Secondly, the Pakistani corporate environment is similar to that of several Asian economies, where majority of listed firms are controlled by major equity holders. Pakistani corporate environment is characterized by concentrated ownership, where corporate boards tend to remain less independent as directors are mostly chosen from major shareholders, which causes less independence, separation of ownership and high level of close control. Pakistan is also a developing country where a large number of listed firms are controlled and owned by families (Tahir & Sabir, 2014). Furthermore, according to World Bank's Report on legal rights (2019), Pakistan's score on legal rights is 2 out of 12, which makes it very difficult for minority shareholders and other stakeholders to get high quality financial information about corporations. According to World Justice Project (WJP) report on rule of law index, Pakistan is positioned at 105 among 113 countries. This week justice system of Pakistan makes it easy for family-firms to confiscate the wealth of minority shareholders even in

pursuance of the corporate governance structure and mechanisms. Now the question arises, in above mentioned settings, is family ownership playing a role to control the opportunistic behavior of management regarding earrings management or not. A detailed discussion on the linkage between CG and EM is provided in the literature review section.

## 1.6 Ownership Structure

Ownership structure of the firm is considered as the distribution of equity interests between different shareholders consisting of managerial shareholders, institutional shareholders, foreign shareholders, minority shareholders, and many others. Ownership structure is also a very significant feature of a firm which may affect the firm performance, investment decisions, reporting decision, and other strategic decisions which may hurt the stakes of different stakeholders. Managerial ownership is the most important ownership structure from above mentioned ownership structures, because these owners have the right to directly interfere in the firms operating, investing, and financing decisions. Agency theory (Jensen & Meckling, 1976) has two views regarding managerial ownership and corporate performance, alignment view and entrenchment view. Increase in managerial ownership results in increase in firm's performance as it is a source of alignment of the financial rewards between the management and other equity holders (Jensen & Meckling, 1976). On the contrary, management's high level of equity ownership may result in to depleted financial performance (Fabisik et al. 2018), because managers with high ownership in firm would exercise more power and would neglect the stakes of other stakeholders (Chu, Ali & Yeo, 2019). Shleifer and Vishny (1997) also added that managers with high level of owners' equity are possibly well off enough that they may not require to

maximize profits, they instead get more utility by increasing market share or by becoming technological leader.

Managerial ownership may also influence EM which is a reporting decision. Extant literature investigated the influence of different ownership structures on EM. According to Hosseini and Abdoli (2012), institutional and family ownership are significantly associated to EM. Furthermore, Alves (2012) conducted a study on Portuguese firms to investigate the influence of ownership structures namely ownership concentration, managerial ownership, and institutional ownership on the EM levels. Alves (2012) findings revealed non-conclusive and mixed type of results. For instance, the researcher observed negative significant association between two proxies of ownership namely ownership concentration, managerial ownership and EM, while did not conclude any significant association between institutional ownership and EM. Furthermore, researcher also found negative relationship between ownership concentration and financial performance of UK firms (Veprauskaite & Adams, 2013). On the other side, researchers also conclude significant positive impact of ownership structures on EM after examining the data of 180 firms (Yang & Krishan, 2005). A detailed account of discussion on the managerial ownership and EM is provided in literature review section.

## 1.7 Family Owned Firms

A business is known as family owned, if majority of equity stakes are held by family and business is operated directly or indirectly by family with the intention of dynastic succession (De Massis et al., 2015).

In academia, dissimilar views exist about family firms. On one side, researchers like Jensen and Meckling (1976) assert that due to alignment effect family firms control the

unethical conduct of managers, and hence the result is decline in the classical agency issue between owners and managers. Consequently, the chances of type I agency problem are fewer in family-firms than non-family firms. The management of family owned firms includes members of their families and/or their friends (Anderson & Reeb, 2003), which results in the decrease in the agency cost that is related to monitoring. Family owners also have more experience and knowledge of their business, so it is very difficult for management to deceive family owners (Anderson & Reeb, 2003).

Moreover, Stein (1989) explained that family firms have long term prospects, as the goal of family is to transfer their business to their upcoming generation, and also have to maintain their reputation (Ding et al., 2011). Due to these exclusive features and motives, family firms permit family owned businesses to act and perform differently from nonfamily-owned business about several strategic choices. Consequently, the information related to family firms is asymmetric.

The other viewpoint regarding family owned firms contended that family control and ownership provide space to family firm owners to tunnel the wealth of minority equity holders (Fan & Wong, 2002) through different decisions, like related party transaction, excessive perks for management, and less or no dividend declaration. These decisions may result in conflict among majority and minority equity holders, somewhat recognized as type II agency problem (Villalnga & Amit, 2006). This Type II agency problem prevails more dominantly in countries where the policies and regulatory processes are in poor condition for the sake of investor's protection (Liu et al., 2012). Garcia-Castro and Aguilera (2014) claimed that the entrenchment effect leads to favoritism and unprincipled administration in family firms, where several strategic decisions are made to provide

benefits to family owners rather than to minority shareholders. Moreover, this entrenchment is high in countries with poor corporate governance mechanism (Fan & Wong, 2002).

More recently, the literature on the subject area illustrated that family control is essential in most of the countries i.e. 76% in Taiwan (Yeh et al., 2001), 80% in America (Prencipe et al., 2014). Family business is the most dominant corporate ownership type in the world and therefore, family business plays a dominant role in the economic growth. For instance, studies show that family ownership accounts varying levels of economic growth of the different economies i.e. 90% economic growth in USA, 66% in East Asia (Claessens et al., 2000), 44% in Western Europe (Faccio & Lang, 2002), 79% in Germany, 83% in France, 70% in Italy (Prencipe et al., 2014), and 71% in Taiwan (Yang, 2010). Literature also highlights famous family-owned firms like Marriott Corporation, Walmart, Dell, Dupont, Ford, and Microsoft (Gomez-Mejia et al., 2011). Similar trend of family owned firms is observed in Pakistan. The studies like Tahir and Sabir (2014) have noted that a large number of companies listed publicly on the Karachi Stock Exchange are family owned or controlled. Pakistan as a developing country has inefficient justice system as compare to USA, which provide space to firms' management to expropriate the wealth of outside investor. But on the other side, according to Socio-emotional wealth (SEW) theory family firm's decision are not based on economic goals. Therefore, this study examines the impact of family ownership on earnings management in Pakistan (a developing country) and USA (a developed country) and finds out the differences in earnings management behavior.

## 1.8 Institutional Context

### 1.8.1 Institutional Context of Pakistan

In the context of Pakistan, firms still face poor internal as well as external governance systems as compared to firms in more developed economies. The government of Pakistan has been taking different measures to enhance the mechanism of corporate governance, specifically after the initiation of secondary market for foreign investors equally with local investors in 1991. The most significant step was the formation of the Securities and Exchange Commission of Pakistan (SECP) with the views to form an enhanced and effective corporate sector. It also had a view of capital market which is based upon stable regulatory measures in order to foster economic growth. SECP began working in January 1999. It put forward the code of corporate governance (CCG) on March 28, 2002, with a view to form a system where a firm is managed and guided by its board of directors in accordance with better and advanced practices for the purpose of safeguarding the diversified interests of various stakeholders. The codes of corporate governance put forward by the security and exchange commission of Pakistan (SECP) earlier in 2002 are a significant step toward improvement in governance. These rules and regulations include many suggestions in accordance with the best practices of international codes. The main subject of focus includes improvement of board of directors with an aim to make it more responsible towards all stakeholders and advanced disclosure which includes enhanced internal as well as external auditing system for the listed firms.

As mentioned earlier, code of corporate governance was first time issued in Pakistan by Securities and Exchange Commission of Pakistan (SECP) in 2002. Second time, in 2012, new code was issued, and later, in 2014, it was amended partially. In 2017, when

Companies Ordinance 1984 was replaced with Companies Act 2017, new code was issued by SECP, so as to enhance the monitoring mechanism in order to maximize the interests of all the stakeholders instead of just focusing on a few prominent shareholders.

### 1.8.2 Institutional Context of US

In succession of the events of financial scams of Enron, WorldCom and Tyco corporations in the beginning of 2000, the concerns regarding corporate governance upheaved, and a lot of queries were brought forth regarding the competence of prevailing rules and regulations. This inspection intensified the momentum for the passing of Sarbanes-Oxley Act in 2002. The said act is an alteration of Securities Acts of 1933 and 1934 and promulgated precise modifications in the structure of corporate governance in the US.

In particular, SOX pinned down that description of independent directors demanded, that a major part of board of directors must be independent, the permission of independent directors for appointment of director and compensations of executive director, broadened the range for auditing committee control and narrowed down the necessary required qualifications and skills for audit committee members (Sarbanes-Oxley, 2002).

Furthermore, various amendments took place as a consequence of approval of SOX, which stated that prerequisites for corporate governance are valid for all SEC registrants and they are compulsory regarding compliance with respect to particular members and corporations. In this regard, the SEC has set up a transparent liability of public company's CEO and CFO with a view of authenticity of information disclosed by that enterprise. In addition to that, it has been applied to enhance and boost the involvement of board of directors and main board committees in surveillance of corporate governance (Butler,

Goldberg and FitzGerald, 2004). Due to this act, the framework of corporate sector of US remained unchanged, but the liability of a public enterprise has changed. SOX required that financial reports to be approved under section 302, the CEO and CFO are held accountable in personal capacities. Furthermore, it lies mainly with board to maintain a majority of independent directors in board.

## 1.9 Research Gap

This study after extensive literature review, identified the following research gaps that provide foundation for this study.

Till date many studies have documented the linkage between capital structure and earnings management (Gombola et al., 2016; Habib et al., 2013; Ghazali et al., 2015; An et al., 2016; Lazzem & Jilani, 2017), CSR and EM (Prior et al., 2008; Salewski & Zulch, 2014; Shafai et al., 2018; Barton et al., 2010; and Choi & Pae 2011) and governance structure and EM (Inya, Psaros & Seamer, 2018; Elghuweel et al., 2017; Khalil & Ozkan, 2016; Luthan, Satria and Ilmainir, 2016; Katmon and Farooque, 2017; Jouber and Fakhfakh, 2012; Abdul Rahman & Ali, 2006). However most of the previous work provides non-conclusive results on association among capital structure proxied as leverage and earnings management. For example, Gombola et al. (2016), Habib et al. (2013), and Zamri et al., (2013) in their studies find negative impact of leverage on earnings management while Lezzem and Jilani (2017), Ghazali et al., (2015) and An, Li and Yu (2016) find positive impact of leverage on earning management. In above mentioned studies between leverage and EM, agency theory is employed to explain the linkage between leverage and EM. Agency theory considers leverage as controlling mechanism which disciplins the opportunistic behavior of managers (Jensen, 1986), hence less earning

management by levered firms (Gombola et al., 2016; Zamri et al., 2013; Habib et al., 2013). On the other side, debt covenant hypothesis of Positive Accounting Theory (Watts & Zimmerman, 1978) states that closer a firm is to violating accounting-based debt covenants, the more likely the firm's management is to choose accounting treatments that shift reported earnings from future periods to the current period (Lezzem & Jilani, 2017; An et al., 2016; Ghazali et al., 2015). By increasing current earnings, the company is less likely to violate debt covenants, hence less constraints for management in running the company.

Varied findings on the relationship between leverage and EM suggest that there exist some other factors that influence the association between leverage and earning management. Under the socio-emotional wealth (SEW) theory, family ownership is the likely variable which may influence the said relationship. According to SEW theory given by Gomez-Mejia et al. (2007) family owned businesses prioritize non-financial outcomes (dynastic succession) over financial outcomes (to meet earning targets), hence no need to manage earnings. Because shifting future period earnings to current period will destruct the goal of family owned business. As mentioned above, number of studies have examined the association between leverage and earnings management, but little attention is given to explore the relationship between leverage and EM for family and non-family firms separately, which may be the possible factor for these contradictory results. Therefore, the current study attempts to bridge this literature gap by studying the relationship between leverage and EM for family and non-family firms separately in two different institutional settings i.e. developed and developing countries.

Similarly the relationship between CSR and EM is also non-conclusive. On one side, researchers conclude that CSR deters EM (Shafai et al., 2018; Bozzolan, Fabrizi, Mallin & Michelon, 2015; Marinnez-Ferrero et al., 2015; Salewski & Zulch, 2014; Choi & Pae, 2011; Barton et al., 2010), while others argue that firms perform CSR activities to build soft image in society so as to hide their opportunistic behavior (Jordaan et al., 2018; Choi et al., 2013). According to Choi et al. (2013) and Yip, Van Staden and Cahan (2011) there may be some potential firm's internal governance factors that could be the cause of these varied results. On the contrary Hung, Shi and Wang, (2015) demonstrate that the linkage between CSR and EM is influenced by some external governance factors. Based on the above mentioned studies, family ownership seems an important factor which might be playing a role in these dissimilar results, as family ownership can be an external as well as an internal factor. Furthermore, according to SEW theory, the goals of family firms are different from that of non-family firms. Therefore, in order to understand the relationship between CSR and EM, this study investigates the relationship between CSR and earrings management for family and non-family firms separately in two different institutional settings.

Moreover, there are mixed type of results related to the impact of governance mechanism on earnings management. For instance, some researchers conclude that governance mechanism controls the opportunistic behavior of management (Inya, Psaros & Seamer, 2018; Elghuweel et al., 2017; Luthan, Satria & Ilmainir, 2016; Katmon & Farooque, 2015), while others say that governance mechanism is unable to control the opportunistic behavior of management (Khalil & Ozkan, 2016; Jouber & Fakhfakh, 2012; Abdul Rahman & Ali, 2006). The possible explanation of these contradictory results could

be nature of corporate governance code, the study period, institutional settings in which firms operate i.e. overall law and order situation, judicial system efficiency, strength of legal rights, and overall business environment. Furthermore, family ownership is also a likely factor which may influence the linkage between corporate governance mechanisms and EM. To the best of our knowledge, no study has been conducted to examine the relationship between governance mechanism and earnings management separately for family non-family firms and for two different institutional settings for same period. The need to fill this gap, so this study considers two different nature of countries to evaluate the impact of governance mechanism on EM for same period through the role of family ownership.

## 1.10 Contribution

Overall, this study is an attempt to contribute in the understanding of the relationships by addressing the role played by two groups of differently informed investors i.e. family and non-family shareholders. More concretely, present study aims to analyze whether family ownership influences the impact of capital structure, CSR, firm characteristics, governance mechanism, and managerial ownership on earnings management of both types i.e. real earnings management and accrual based earnings management at a same time into two different institutional settings i.e. Pakistan and USA. Furthermore, the motive to carry out this research rests in the special agency problem that can appear in family-owned business where family members are majority shareholders and are involved in earnings management (Chen et al., 2008). In this situation, the classical agency problem between managers and shareholders is moderated since family members majority shareholders have more information and can control managers more closely than shareholders in non-family

business (Chau & Gray 2002; Chen et al. 2008; Chrisman et al. 2004). In this context the use of control mechanism such as information disclosure is not strictly necessary (Ho & Wong 2001).

Majority of previous studies investigated the influence of family firm on EM by using discretionary accrual as a measure of earnings management (Cascino et al., 2010; Ding et al., 2011). These studies identify the relationship between family owned and earnings management by using agency theory. However, very little attention is given by scholars on the investigation of the relationship between earnings management and family owned firms by using real earnings management as a measure of earnings management. Consequently, the current study is an attempt to fill the gap in literature by using both real and accrual based earnings management as a measure of earnings management, as well as in providing evidence on whether family ownership influences the impact of above mentioned factors on earning management.

A number of studies are conducted to find the relationship of family firms with earning management have employed agency theory. The classic agency theory views that family firms are less prone to agency problems between managers and owners (Asaba, 2013; Czarnitzki & Kraft, 2009). Management of family firms use earning management strategically by avoiding activities (real earnings management) that inhibit the long run value of firm and use accounting treatments (accrual based earnings management) that help family firms to retain trans-generational control (Achleitner et al. 2014). Furthermore, the behavioral agency model of Wiseman and Gomez-Mejia (1998) views that family firms' strategic decisions are made, based on socio-emotional wealth, such as the continuation of family values through the business as compared to non-family firms, which make strategic

decisions based on economic goals. Moreover, current study explains the influence of family ownership by using Socio-emotional wealth (SEW) theory. SEW opines that family members sense economic issues in term of how actions will affect their socio-emotional benefaction.

## 1.11 Problem Statement

Earnings management, either real and/or accrual, is a point of concern for the corporate world in developing and developed economies. Window dressing and/or misrepresentation of financial results is an accounting as well as shareholder's wealth concern not only in non-family firms but in family firms as well. To address the issue of earnings management, researchers have explored and explicated the impact of capital structure, CSR, governance mechanism, firms' characteristics and ownership structure on earning management, but their results are not conclusive and consensual rather inconclusive and contradictory. Secondly, negligible attention is employed to explicate the mentioned relationships in presence of family ownership. And lastly, these are not investigated from a Socio-emotional Wealth Theory (SEWT) perspective in different institutional settings. This study aims to answer the research question that either family ownership influence the relationships, of capital structure, CSR, governance mechanism, forms' characteristics, and ownership structure with earning management, or not in developing and developed countries from a SEW theory perspective.

## 1.12 Research Questions

Based on the problem statement, following are the main questions of the study:

1. What is the impact of capital structure, CSR, Governance mechanism, firm specific characteristic and managerial ownership on earnings management (real and accrual)?
2. Whether the impact of CG, leverage, CSR, firm characteristics and ownership structure is different on real and accrual earnings management in family and non-family firms for two different institutional settings?

## 1.13 Objectives of the Study

Based upon the research questions following are the study objectives:

1. To examine the impact of capital structure, CSR, Governance mechanism, firm specific characteristic and managerial ownership on earnings management (real & accrual).
2. To evaluate the influence of family ownership of CG mechanism, leverage, CSR, firm characteristics and ownership structure on real and accrual earnings management in two different institutional settings.

## 1.14 Significance of the Study

The study is noteworthy as it contributes in the literature by evaluating the role of family ownership on the linkages of the capital structure, corporate social responsibility, governance mechanism, ownership structure, and firm characteristics on earnings management in Pakistani and US firms.

The outcomes of this study would be helpful in confirming the scholars view about the role of debt as a monitoring mechanism on earning management, which will further help investors in respect of reliance on accounting information in investment decisions.

Furthermore, the investigation will highlight the relationship of leverage and both types of earnings management (real and accrual) for family owned and non-family owned businesses. The study will also help the investors in making choices in investment decisions like whether they should invest in livered family firms or livered non family firms.

The study is beneficial as it examines the linkage between CSR and earning management for family and non-family owned business, which would enhance the understanding level of stake holders in evaluating firm's performance and its CSR activities. The research views that the stake holders should consider both the socially responsible activities and initiatives related to companies earnings.

Last but not least, the current study evaluates the usefulness of code of corporate governance in mitigating earnings management practices. The research would be beneficial for the policy makers. Furthermore, the outcomes of this research can be used by different regulators like SECP and FBR to strengthen corporate governance mechanisms like, board size, number of simultaneous directorship, composition of board (mix of executive and non-executive directors, gender diversity, independent director), composition of audit committee, and to control tax evasion.

## 1.15 Research Methodology

To answer the research questions and to achieve the research objectives, panel data is investigated by applying two ways clustered pooled ordinary least squares (OLS) method, suggested by Petersen (2009). Before applying two ways clustered pooled OLS, different diagnostic tests are also used to check the properties of the data. Detailed discussion on research methodology is given in Chapter 4.

## 1.16 Structure of the Study

The structure of the thesis is as follows:

Chapter 2 provides the theoretical framework; chapter 3 presents literature review and hypotheses development. Research methodology is given in chapter 4, whereas chapter 5 sheds light on empirical results. At the end, chapter 6 presents discussion, conclusion, implications, limitations and future recommendations.

CHAPTER 2

# THEORETICAL FRAMEWORK

Earnings management is very attractive topic for academician and for policy makers. Academician are trying to investigate the factors which influence the firms' management to perform/deter earnings management activities and the theories which explain the management's behavior. Policymakers are also busy to make rules and regulation which can prevent management to perform such activities which shake the trust of stakeholders. Before moving to the literature review and hypotheses development, this chapter will shed light on different types of earnings management, motives of earnings management, and the theories which can explain the behavior of management regarding earnings management.

## 2.1 Definition of Earnings Management

Accounting provides discretions to management to adopt the method for reporting and estimation of financial results of a firm. Management can use these discretions either in opportunistic way or to maximize the firm's value. Earnings management is informative if it is used to maximize the value of shareholders and it will be opportunistic if employed to meet the objective of managers' i.e. annual bonus and salary increment. EM or earnings manipulation is selection of accounting method by management which is either increasing the value of firm and/or opportunistic to provide benefit themselves by increasing their utility (Scott, 2003; Fields et al. 2001).

Suh (1990), Demski (1998), and Sankar and Subramanyam (2001) provide another definition which is commonly used to describe EM, these scholars consider that EM is taking advantage of flexible accounting choices to report financial results in such a way to signal inside information about forthcoming cash flows of firm. Additionally, according to

the information viewpoint of EM, "managerial discretion is a means for managers to reveal to investors their private expectations about the firm's future cash flows" (Beneish, 2001, p. 3).

Management apply accounting discretions provided by generally accepted accounting principles (GAAP) to manage accruals, mostly by accounting estimates and choices (Beneish, 2001; Fields et al., 2001; Healy & Wahlen, 1999). On the other side, cash flow from operations and accruals can also be used for EM purpose. Previous studies about EM has focused on the management of accruals (Schipper, 1989; Jones, 1991; Healy & Wahlen, 1999; Dechow, Sloan, & Sweeney, 1995; Kothari, Leone, & Wasley, 2005) and management of real activities of business (Roychowdhury, 2006; Gunny, 2005; Cohen, Dey, & Lys, 2008; Zang, 2012). Following are the definitions of EM by different researchers:

According to Schipper (1989) EM is "a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gains (as opposed to say, merely facilitating the neutral operation of the process)." He further asserts, "a minor extension of this definition would encompass real EM, accomplished by timing of investment or financing decisions to alter reported earnings or some subset of it."

Davidson and Weil (1987) define EM as, "a process of taking deliberate steps within the constraints of generally accepted accounting principles to bring about a desired level of reported earnings."

Healy and Wahlen, (1999) also provide a similar definition of EM. According to them "EM occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports either to mislead some stakeholders about the

underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers".

AB_EM materialize when management control financial results by misuse of accounting discretions of generally accepted accounting principles, while R_EM takes place when managements' attempt to change the financial results by adopting sub optimal choices about the scale and timing of fundamental business activities. According to Ewert and Wangenhofer (2005, p.1102) AB_EM "includes the way accounting standards are applied to record given transactions and events" whereas R_EM "changes the timing or structuring of real transactions". R_EM infers that the management of firm departs from alternative optimal plan just to affect financial results; thus, imposing a genuine cost to firm and it is more damaging to the firm's future cash flow and value. They additionally say that bodies of accounting standards can reduce the flexibility exist in accounting standards to reduce management in accounting earnings, but they can do very little to limit R_EM. A similar definition of R_EM is used by Roychowdhury (2006, p. 337), he sums ups R_EM as:

"Departures from normal operational practices, motivated by managers' desire to mislead at least some stakeholders into believing certain financial reporting goals have been met in the normal course of operations. These departures do not necessarily contribute to firm value even though they enable managers to meet reporting goals."

According to Beniesh (1999) EM is occur when management violates GAAP to show better than actual financial performance of the firm. Beneish (1999) also addressed the question that either EM is accomplished through violating the restrictions of GAAP or not. He compared the firms that didn't manage their earnings with firms those overstate their

earnings, were more involved in inside trading. His findings validate the definition of earning manipulation proposed by Schipper (1989) and Healy (1985). Further, Shipper (1989) says that earning manipulation is a thoughtful action of management that include any type of manipulation which can affect financial results through accounting numbers either violating GAAP which is illegitimate or within the limits of GAAP which are legitimate.

Management use different tactics in order to show increased profit or to avoid from accounting losses. For example, firms offer price discount to increase in sales at the end of year, reduction in R&D expenditure to reduce costs, and sale of assets (Roychowdhury, 2006). Zang (2012), and Gunny (2010) also highlighted the same activities of management to achieve different targets as by Roychowdhry (2006).

A question is aroused from the above discussion that whether these EM activities/practices are legal or not. Dechow and Skinner (2000) provides the answer of this question. According to them if EM activities are within the bound of GAAP then these are legitimate otherwise reflected as accounting scams. Furthermore they also categorize such type of activities into two groups: activities directly affect cash flow of firms and accounting choices. Later AB_EM materialize at the end of financial year period and are within the limits of GAAP and earlier (R_EM) affect current as well as future period cash flows and are done throughout the financial period (Roychowdhury, 2006).

## 2.2 Earning Management Techniques

GAAP earnings are the outcome of accounting choices and business operations, companies can utilize different methods to manipulate their earning. As observed by Lin et al. (2006), US companies utilize EM techniques to attain analysts' forecasted earnings

target. They conclude that such companies would inflate their profits through AB_EM, manipulate their business activities, manipulate the operating cash flows, and purposively transfer core costs like COGS, SG&A to non-reoccurring cost to increase reported earnings.

Based on the definitions of EM, earnings however can be manipulated in a number of ways. Literature has observed three different types of EM. Accounting choices include a technique that biases financial reporting through (1) AB_EM (Dechow et al., 1995; Fields et al., 2001), (2) classification shifting (McVay, 2006; Shirato & Nagata, 2012) and (3) R_EM that deviates from normal business activities to enhance earnings (Graham et al., 2005; Bushee, 1998; Gunny, 2005; Cohen & Zarowin, 2010; Alhadab, 2016; Kothari et al., 2016).

Next section elaborates each EM technique so that every concept can be defined more accurately.

### 2.2.1 Real Earning Management

R_EM happens when management structure transactions to adjust the financial results (Healy & Wahlen, 1999). R_EM practices directly influence the cash flows of the corporations for the period in which earning are managed. There are many studies that discuss management intervention from the operational decisions perspective (Healy & Wahlen, 1999; Dechow & skinner, 2000; Roychoudhry, 2006). These scholars have discussed operational decisions which include acceleration in sales through modification in shipment time, delaying in research and development expenditures, sales discounts, and expenses on maintenance. Similarly, R_EM happen when management departs from usual operational practices in order to deceive stakeholders in making them to understand true

that certain financial targets have been achieved through routine actions (Roychoudhry, 2006).

A number R_EM activities are identified by different researchers, like repurchase of stock by management to evade dilution of earnings per share due to stock option exercised by employees (Bens, Nagar, Skinner & Wong, 2003), decrease in R&D expenditure close to the ending of tenure of CEO (Dechow & Sloan 1991). Reduction in R&D expenditure is also documented by (Baber, Fairfield & Haggard, 1991) and (Bushee, 1998).

Zang (2012) explains R_EM actions are targeted actions adopted by management to bring change in reported earnings in a specific way through change in the structure or time of investing, financing transaction or operation. This explanation of R_EM by Zang (2012) satisfies the definition of EM of Healy and Wahlen (1999). Cohen and Zarowin (2010) also explain that R_EM is management's actions to manipulate the current income and cash flow. The similarity of these different explanations of R_EM provides enough support that R_EM activities are deliberated in nature and have real impact on cash flow.

### 2.2.2 Accrual Based Earnings Management

Accruals are the differences between cash flows and net income that are part of a firm's regularly transactions. For example, if a business sells goods or services on credit, the sale is considered as income without considering that either cash is received or not (Kothari et al., 2012). This results in a receivable being created, which will be adjusted at the time of receiving the cash (McVay, 2006). This type of accounting practices allow room for the managers to manipulate financial reports as they become able to record unearned revenue which is still not earned. Similarly, management can also delay to record expenses that have been incurred.

In AB_EM, firms utilize accounting choices in such a way that brings earnings in advance, through the speeding up of revenues or deceleration of expenses, thus accelerate the current earnings. In accounting literature this is recognized as discretionary accruals. In future time period, these discretionary accruals will be reserved, which result in lowering the future period earnings.

In case of increase of accruals in one period, there must be a decrease of these accruals in the next coming period. Hence, firms with poor performance may not be able to carry on show their increased level of earnings and hence result in to detection of their EM. In contrary, well performing firms that have increase in their earnings and cash flows can easily compensate reversals from prior EM actions. In addition, scholars view that well performing firms are more inclined to accounting choices as compared to low performing firms, and are in better position to make choices during periods of growth (Roosenboom et al., 2003).

As per the conservative assumptions of the GAAP, management of the firm has the option to increase different expenses like depreciation expense by decreasing the useful life of assets and allowances for bad debts. Management can also increase the depreciation cost in order to reducing the earnings by decreasing the residual worth of PPE. On contrary, the company can also increase net income in the low growth period by reducing bad debt expenses, increasing useful life and residual values of property plants and equipment (Comskey & Mulford, 2002).

Management of the firms can also use the flexibility of GAAP through inventory costing methods. In slow growth period, management uses first-in-first-out inventory costing technique to increase current period earnings, in contrary, to decrease earnings in

high growth period the management may use the last-in, first-out inventory method. The firms by making use of flexibility provide by accounting principles can select their EM choices related to the use of inventory costing methods as and when required for their earning value.

By studying the Egyptian firms, Kamel and Elbanna (2012) conclude that management of Egyptian firms manipulate their income through the overvaluation of inventory and by shifting core expenses to nonrecurring expenses. Therefore, AB_EM may be utilized to manipulate earnings, by influencing the cost of operations, value of PPE and liabilities.

Moreover, according to Comskey and Mulford (2002) management may also increase earnings by understating the accrual environmental claims and expenses payable. Other liabilities can also be used by reducing the warranty obligations to increase current period earnings.

### 2.2.3 Classification Shifting

Literature also documents another type of EM technique, which is known as classification shifting. Classification shift happen within the restrictions of GAAP, but is different from AB_EM and R_EM (Athanasakou et al., 2009; Fan et al., 2010). The Securities and Exchange Commission (SEC) of USA has clearly pointed out that the issue of classification shifting is essential by stating, “The appropriate classification of amounts within the income statement is as important as the appropriate measurement or recognition of such amount” (SEC, 2000). However, boost in current earnings by using the former two methods has the quality to decrease future earnings.

Moreover, McVay (2006) examined the managements' use of classification of items of the income statement for EM objective, who deduced that managers opportunistically change operating cost like COGS and S&GA to non-reoccurring cost. As such, the "street earnings", which are the earnings number specified by analysts' forecasts, are overvalued by the expenses outlined in the statement. Management utilize classification shift as a method of EM to meet earnings benchmarks (McVay, 2006). McVay (2006) sets out some of the reasons for managers' greater willingness to use classification shifting than accrual and real activity as an EM tools. First, while real and accrual EM change the bottom-line of income statement that is reported earnings, but in classification shift managers manage gross profit, instead of GAAP earnings (Fan et al., 2010). For instance, a shift can take place from a non-operating item to an operating item with the purpose of showing better performance. Second, the classification shifting is less likely to result in auditors or regulatory scrutiny. Examining whether internal corporate governance constrains classification shifting, the study find that high-quality internal governance mitigates classification shifting (Zalata & Roberts, 2016). Therefore, this suggests, that robust internal governance leads to act as a substitute of accounting standards. Finally, manipulation of earnings through real or accrual practice affects future earnings, with no 'settling up' cost of sacrificing economic benefit in future periods, which makes it less costly as compared with the other two types.

Fan et al. (2010) argued that management tends to report reoccurring costs as special items to inflate profits, and this is more pronounced for firms those are interested to meet/beat earning benchmarks. Specifically, they further report that manager increase reported earnings by utilizing classification shifting in the 4th quarter of the period to

meet/beat targeted income. Furthermore, Abernathy et al. (2014) observe that when other EM tools i.e. real and accrual EM are restricted, management is more likely to utilize classification shifts.

Moreover, classification shifting has also drawn international attention because IFRS provide more room to management to classify revenues and expenses (Shirato & Nagata, 2012). Furthermore, there has been a lot of discussion about UK firms' use of classification shifting. Focusing on three EM tools namely R_EM, AB_EM, and classification shifting, Athanasakou et al. (2011) provide evidence suggesting that UK firms use classification shifting to meet the expectations of analysts. In addition, Athanasakou et al. (2011) conclude that large UK firms utilize classification shifting method to shift core expense to non-recurring items to manipulate earnings upward to achieve targeted earnings to avoid negative earnings surprise.

## 2.3 Motivations of Earnings Management

Generally, managers are encouraged to manage earnings based on accounting numbers in order to achieve good stock market performance and financial position, not only to maximize the value of firms, but also to extract private benefit (Healy & Wahlen, 1999). Accounting literature provides evidences that management use EM methods in accordance with their motives of EM like, earnings target, zero earnings, manager's bonus. Healy and Wahlen (1999) provide three motives of EM that are given as follows.

(1) Capital market opportunities such as meeting or beating substantial earnings benchmarks, such as reporting positive profit, avoiding decrease in earnings and preventing adverse earnings surprises (Dechow & Dichev, 2002; Graham et al., 2005), and

manipulating earnings around unique capital market conditions for example initial public offering (IPO) and seasoned equity offering (SEO) (Rangan, 1998).

(2) Contractual incentives such as meeting performance-based compensation targets, or to avoid debt covenant violations (Bergstresser & Philippon, 2006; Cheng & Warfield, 2005).

(3) Political cost and regulatory incentives (Jones, 1991; Hang & Wang, 1998; Efendi et al., 2014).

Following sub-sections describe these incentives.

### 2.3.1 Stock Market Motivation.

#### *2.3.1.1 Earnings benchmarks.*

Prior literature documents three important EM benchmarks that manager's use in their choice to meet or beat benchmarks:

(1) Reporting positive profit (Osma, 2008; Roychowdhury, 2006)

(2) Avoiding earnings decrease (Burgstahler & Dichev, 1997)

(3) Avoid reporting negative surprises (Dechow et al., 2002; Brown & Caylor, 2006).

In terms of stock market motivation, management manage earnings to report positive profits or to beat previous period profits. Burgstahlar and Dichev (1997) conclude that management utilizes discretionary accruals and change in operational activities to report positive income and avoid decrease in earnings. More specifically, they find that more than half of firms manage earnings to report positive net income or to raise small earnings. Degeorge et al. (1999) present similar evidences on earnings manipulations to achieve earnings targets and find that managers may report positive profit but, after achieving the

earnings target, they try to achieve analysts' forecasted income. Roychowdhury (2006) also supports the findings from Burgstahler and Dichev's (1997) study. Based on a sample of 4,252 firms from 36 industries, he finds that management of US firms increase earnings by offering price discount and more relaxed credit terms to achieve a number of outcomes. These include temporarily boost current sales, reduce/cut discretionary expenses and increase in production to show lower costs of goods sold to meet/beat two earnings benchmarks: analysts' consensus earnings forecasts, and report positive profit.

Furthermore, firms can manipulate their R_EM activities depending on whether the need is to meet/beat analysts' consensus earnings forecasts. For instance, R&D expenditures are not capitalized but usually classed as expenses. However, firms capitalizing R&D investment do not reduce R&D expenditures. If managers are forced to meet/beat consensus forecasted earnings of analysts, they may lower R&D expenditures to boost current earnings. Moreover, the relationship between two earning benchmarks is analyzed by Osma and Young (2009): positive earnings and earnings growth; and change in R&D expenses. By using the sample of 700 listed firms in UK, they find evidence that the possibility of successive cuts in current R&D spending increases when firms fail to report positive growth in earnings. They also reveal that UK firms' managers shrink strategic investment, such as R&D investments to achieve targeted profits. Recently, Mindak et al. (2016) also investigate whether firms are controlling earnings upward or downward to beat three major earnings targets; namely, zero earnings, previous period earnings, and forecasted earnings.

#### *2.3.1.2 Initial public offering.*

Most empirical research supports the view that firms on average opportunistically manage up earnings before or during a special capital market situation, i.e. IPO. This evidences that firms offer IPO, increase their earnings by using both R_EM and A_EM, so that to inflate the price of IPO (Morsfield & Tan, 2006). Teoh et al. (1998) conclude evidence that US IPO firms on average opportunistically manage up earnings by utilizing income-increasing AB_EM during the year of IPOs. However, firms offer IPO with high levels of AB_EM significantly underperform in the market after the IPO for three years and therefore misguide investors during IPOs by EM.

DuCharme et al. (2001) examine EM and subsequent performance of IPO firms. They show that abnormal AB_EM during the period of IPO is negatively linked with post-IPO stock returns and positively associated with initial value of firm. Roosenboom (2003) also finds that management of IPO firms manipulate earnings through AB_EM aggressively, so that to increase the share price of IPO. A different perspective exists against opportunistic EM around IPOs, and there is empirical evidence to support this view (Ball & Shivakumar, 2008; Fan, Wong & Zhang, 2007; Armstrong et al., 2010). By examining the interaction between EM and owners' retention of shares, Fan et al. (2007), concludes that discretionary accruals are at highest in the year of IPO. He further finds a positive association among discretionary accruals in the IPO year and future earnings. His finding also provides further support that earnings and investor's retention of stocks are positively priced in valuing the IPO firm.

Ball and Shivakumar (2008) study earnings quality around the time of IPO in the UK and they find that UK IPO firms begin reporting more conservatively prior to IPO. In

addition, they find no evidence that managers in UK IPOs firms opportunistically inflate earnings prior to IPO. Moreover, Armstrong et al. (2010), study the extent of EM around IPOs, but unable to find an evidence of relationship among manipulations in accruals and the four different types of incentive for management to manage earnings (stock's issue price, post-IPO stock return, inside trading, and CEO benefits). Specifically, they attribute negative correlation between AB_EM and the year of IPO issue price and post-IPO firm performance to cash flow mispricing. Further, Alhadab et al. (2016) examine R_EM and AB_EM during the year of IPOs in both UK markets (Alternative Investment Market and Main Market) and find that IPO firms engage in R_EM during the year of IPOs. Specifically, IPO firms on the AIM manage earnings upward by manipulating their sales and discretionary expenses.

#### *2.3.1.3 Seasoned equity offerings.*

So many researcher have documented the evidences that firms involve in EM to increase reported earnings before issuing stocks (seasoned equity offering) (Teoh et al., 1998; Lee & Masulis, 2009). After examining linkages between discretionary accruals and the performance of seasoned equity offering, in a study by Teoh et al. (1998), it is concluded that US firms make SEOs, increased their earnings in the quarter in which they offered SEO and in very next quarter to meet the threshold of stocks offering. Specifically, they provide evidence that discretionary accruals increase before the offering, highest in the year of offer, and decrease subsequently, resulting in earnings increasing before the offering and being highest in the SEO year and decrease afterwards. Moreover, they also find negative association between EM which is done during the SEO and post SEO stock market performance.

Further, Lee and Masulis (2009) examine the effect of quality of financial reporting on SEO underwriting fees in US market. After the study, they conclude that US firms increase their earnings through AB_EM techniques before the SEO year. Lee and Masulis (2009), further provide evidences that flotation costs of firms with lower financial reporting quality are higher than the flotation costs of firms with higher financial reporting quality.

Earlier literature has focused on discretionary accruals, total accrual and specific items of AB_EM during the year of SEOs (Teoh et al., 1998; Rangan, 1998; Marquardt & Wiedman, 2004). However, managers also have the option to increase reported earnings through R_EM activities before issuing stocks (Kothari et al., 2016; Cohen & Zarowin, 2010). These scholars found that the management of SEO firms involve in both income-increasing R_EM and AB_EM during the period of issuing stocks (SEO). They further, conclude that the firms offer SEO, use both methods to manipulate earnings i.e. R_EM and AB_EM face poor performance in operations and in stock market in the period after SEO.

### 2.3.2 Contracting Motivation.

The empirical studies related to contractual motives of EM have focused two important contracts affecting firms' discretion. These are compensation contracts of the firm's executive and lending contracts of the firm, and they are created to reduce potential agency problems. Compensation contracts of a firm's executive typically consist of base salary and earnings based-compensation deal with the conflicts between managers and shareholders of a firm. Further, compensation contracts of a firm's executive include incentives that encourage managers to maximize the firm's value (Smith and Watts, 1982). Lending contracts are concerned about the potential conflicts between owners and creditors, and are written to protect creditors' rights.

#### *2.3.2.1 Management compensation motivation.*

Under the opportunistic perspective, managers exercise their accounting discretion not to maximize the value of the firm but to transfer wealth and make themselves better off at the expense of other contracting parties by selecting reporting methods and estimates that do not accurately reflect their firms' underlying value (Watts & Zimmerman, 1990; Christie & Zimmerman, 1994; Healy & Wahlen, 1999). However, under the bonus-maximization hypothesis, Healy (1985) shows that management use EM techniques to increase the value of their bonuses award under the firm's compensation plans. Consistent with this view, other studies also conclude the same, that management of the firms where bonuses are connected with the income of the firm use accrual and real activities to increase the reported earnings (Bergstresser & Philippon, 2006; Efendi et al., 2007). Empirical studies also conclude that shareholder's wealth decline in the firms where management increases reported earnings in order to raise their bonuses (Kothari et al., 2016).

Studies also examine the effects of equity incentives of CEOs on the EM to meet/beat significant benchmarks in earnings and income smoothing. For instance, Cheng and Warfield (2005) examine the relation between CEOs' equity incentives derived from stock-option-based compensation such as option grant and EM to meet/beat earnings forecasts from analysts that not only lower agency costs but also motivate managers. By using the data of listed firms in USA, Cheng and Warfield (2005) also argued that US firms with more equity incentives manage their earnings through AB_EM to meet/beat analyst consensus forecasts. They also concluded that a negative association between equity incentives and strong positive earnings surprise.

Similarly, Bergstresser and Philippon (2006) in their study showed that US firms' equity incentives of CEOs derived from stock-based compensation are significantly positively linked with management utilizing AB_EM activities and sell more shares during the years of higher accrual manipulation. However, Johnson et al. (2005) asserted that only firms with unrestricted stock holdings are positively related with the occurrence of accounting fraud, at the same time they report that fraud firms do not achieve greater incentives from the stock option grants or restricted stock. After examining the relationship between higher levels of equity based incentives and EM, Erickson et al. (2006) and Armstrong et al. (2010) found that equity based incentives of CEOs are not associated with accounting fraud.

The information asymmetry that exists between managers and principles affords managers opportunities to take actions to increase their own benefits at the expenses of principles' wealth. Many studies of EM have documented that R_EM activities are preferred by management over AB_EM, to boost firms' current earnings at the stake of future value. Dechow and Sloan (1991) examines the relationship between R_EM by reducing R&D expenditures and CEOs' compensation on the basis of reported income. These scholars also provide evidences that in the final year of the job CEOs reduce R&D spending to improve short-term earnings.

Chief Financial Officers (CFOs) of firms are in a position to strongly influence the accounting choices. Number of studies try to find out that whether equity incentives of chief financial officer (CFO) influence the EM or not. Jian et al, (2010) conclude that CFO's equity based compensation influence EM more than the equity incentives of CEO

measured through discretionary accruals. On the other hand, powerful CEOs also pressurize CFOs to become involved in EM.

Moreover, in examining to what extent US firms CFOs are involved in EM, Fang et al. (2011) infer that why CFOs becoming engaged in R_EM. Researchers conclude that the CFOs of the firms which manage their earnings have comparable equity incentives as the incentives of the CFOs of firms which are not involved in EM. But the incentives of CEOs of firm which involve in earnings manipulation are greater than the equity incentives of CEOs of non-manipulating firm. So, Fang et al. (2011) advocate that CFOs mainly yield to pressure from CEOs motivated by equity incentives to engage in material accounting manipulation.

#### *2.3.2.2 Borrowing contracts.*

Since debt covenant violation is costly, so firms those are near to technical default may incentivize firms' management to engage in EM and thus decrease the likelihood of technical default (Watts & Zimerman, 1986). A number of studies have shown how avoiding the violation of debt becomes a motivation for firms to utilize AB_EM, and present evidence that firms involve in AB_EM in order to evade violation of debts covenants (Dichev & Skinner, 2002).

Sweeney (1994), investigates accounting policy choice by using the data of 130 US firms those reported covenant violation in annual report during the 1980 to 1989. She provides evidence that in firms with larger debt-to-equity ratio managers are more likely to use EM techniques in the previous year of covenant violations in order to mitigate the unexpectedly high default costs and improve their bargaining position, this is consistent with the debt covenant hypothesis. Specifically, she contends that managers may manage

up earnings through EM techniques while in default based on accounting numbers to resolve the default, this depends upon the flexibility provided by accounting methods. Dichev and Skinner (2002) also find same results that the management of US firms which are close to debt covenants violation use AB_EM to avoid technical default of debt covenant. Additionally, they also provide evidence that violations of debt covenants are not necessarily associated with financial distress. DeFond and Jiambalvo (1994) present similar evidence to that reported by Sweeney (1994) after examining the association between debt covenants' violation and firms' AB_EM. Firms report a debt covenants violation in their annual reports during the period 1985-1988. Additionally, Elnaby et al. (2007) reported that even after the technical default firms continue their EM practices. Moreover, other studies do not find evidence to document EM surrounding technical default (Healy & Palepu, 1990; DeAngelo et al., 1994).

Most of the accounting literature used AB_EM as a measure of EM while examining the relationship between debt contracts and EM. But very few studies address the association between debt contracts and R_EM. By using the data of 218 firms over the time span 1987-1989, Bartov (1993) provides evidence that firms use sales of long-term assets as tools of R_EM activities to increase their reported earning to avert debt covenant violation. Recently, Roychowdury (2006) also provide evidences that managers engage in R_EM in order to avoid debt covenant violation

Moreover, Kim et al. (2013) also study the relationship among closeness to net worth covenant slack and firms R_EM. Researchers conclude that firms engage more in R_EM activities when debt covenants slack is tighter. They also find when a firm's ability to re-

negotiate the debt covenant technical default is restricted; it is more likely to increase earnings by using R_EM activities to avoid violation of debt covenant.

Franz et al. (2014) also examine the association of both real and accrual EM with debt covenant by using a US sample consisting of 2,195 loans over the period 1992- 2007. They conclude that firms close to violation of debt covenant are more involve in both types of EM (real and accrual) activities than other firms. Although firms those are more close to covenant violation are significantly more likely to use both AB_EM and real activities management, they tend to use R_EM as compare to AB_EM.

From above discussion, it is summarized that firms use flexibility in accounting methods and real activities to increase their reported earnings, when there is a chance of technical default so that to mitigate the costs of technical default.

### 2.3.3 Political Costs and Regulatory Motivations.

When earnings of specific firms are likely to be influenced by governmental intervention, managers have an incentive to adjust their earnings to avoid, encourage or influence governmental interference. This influence could be indirect because earnings seem to be "excessive" through potential future regulations, or directly through existing regulations (Watts & Zimmerman, 1978). Based on the "political- cost hypothesis", Watts and Zimmerman (1986) show that, during periods of heightened political cost, motor carrier firms were involved in income-decreasing EM when faced with potential industry deregulation.

Jones (1991) and Cahan (1992) show that firms have negative abnormal accruals during the periods of inquiry by the US International Trade Commission or the US Federal Trade Commission, respectively. After examining the 23 US firms, Jones (1991) notices

income decreasing EM during import relief inquiries to obtain favorable regulation. Cahan (1992) and Gill-de-Albornoz and Illueca (2005) show that managers in firms investigated for anti-trust violations engage in income- decreasing earnings by utilizing accrual manipulation during periods of heightened political costs, implying that such firms seek to avoid non-favorable regulation.

In terms of industry regulations and deregulation, Key (1997) finds similar results within the US cable and US motor carrier industries. Focusing on the period of Congressional scrutiny (1989-1991), Key (1997) examines whether the US cable television (TV) industry engages in income decreasing activities using AB_EM in order to avoid congressional scrutiny and potential regulations, and shows that the US cable TV industry has negative abnormal accruals during the congressional scrutiny period of 1989-1991. Furthermore, Cho and Sachs (2012) find that US motor carriers manage earnings downward during the political-cost deregulation period of 1975- 1979 by using Dechow et al. (1995) accruals model in an effort to avoid deregulation.

Further, Han and Wang (1998) assess the situation during the 1990 Persian Gulf Crisis by investigating the 76 oil and gas firms. They find evidence that during Persian Gulf Crises oil firms were motivated to reduce their reported earnings for the 3$^{rd}$ and 4$^{th}$ quarters of the financial year by engaging in income-decreasing accrual accounting in order to avoid political costs generated by potential adverse political actions such as regulations, anti-trust and government.

At the end of discussion related to motivations of earnings management, based on SEW theory, the preferences of family firms are non-economic goals over economic goals i.e. family control and influence, family members' identification with the firm, binding

social ties, emotional attachment and renewal of family bonds to the firm through dynastic succession (Berrone et al., 2012). It does not matter either they operate in developed countries or developing countries.

## 2.4 Theoretical Model and Framework

Model 2.1 is constructed to study the impact of capital structure, governance mechanism, CSR, firms' characteristics and managerial ownership on earnings management for both institutional settings and can be explained by agency theory, institutional settings theory and stakeholder theory. The same model is used to study the relationship of EM with independent variables of the study for family and non-family firms separately and can be explained through SEW theory.

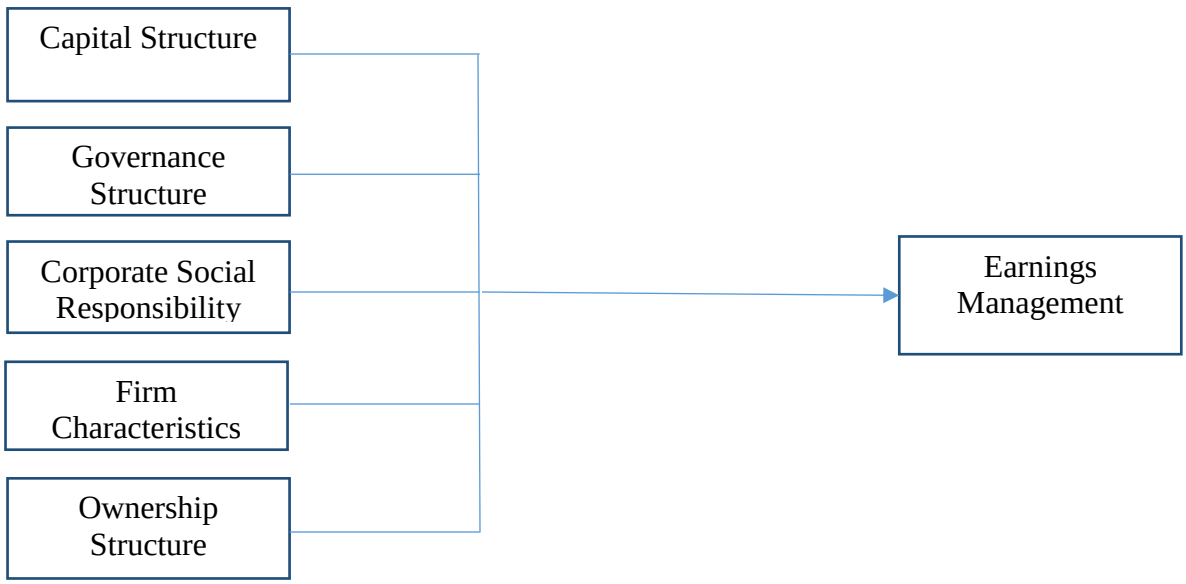


Figure 2.1 Theoretical Model

Present study employs different theories to explore the relationship between the key variables. These theories include agency theory; SEW theory, institutional theory and stakeholder theory. Next sections elaborate each theory in detail.

### 2.4.1 Agency Theory

Corporation is a legal entity created under the law that is distinct and separate from owners. In corporations authorities are delegated by owners to manager to run the business in the best interest of owners. This relationship between owners and managers is known as agency relationship (Jensen & Meckling, 1976). It is assumed that management will run the business in the best interest of owners. But some time the goals of managers are different form the owners while making different business decisions like investment in new projects, financing new assets etc. This conflict of interest between managers and owners is known as agency problem (Jaskiewicz & Klein, 2007).

There are two methods to align the goals of managers with of owners, monitoring and compensation. Different types of compensations are provided to management to align their interests with owners, like annual bonus, increments in salary, share in profit and stock options. In monitoring, different types of mechanism are developed to control the opportunistic behavior of managers, like accounting standards, corporate governance rules, and independent directors in board of directors.

The agency theory considers leverage and family ownership as two devices that can monitor and limit opportunistic conduct of management (Chen et al., 2014). According to agency theory, family controlled have two views regarding agency problem, alignment view and entrenchment view. These views have diverse perspective with respect to EM behavior of family controlled business. According to Jensen and Meckling (1976) in

family-firms, management and owners are same, have same level of information, hence their interests are aligned and there is no need to manage earnings.

According to entrenchment view, in family controlled business, family members appoint a person as CEO from their family (Ding et al., 2011) and family members are also a part of board (Casceno et al., 2010). In doing so family board members can make decisions which can protect their own interest rather than the interest of non-family shareholders like zero dividend or low dividend, excessive perks utilization and appointing non-professional family members in top management (Shleifer & Vishny, 1997; Schulze et al., 2003), because motives of family owned business are different form the motives of non-family owned business (Gomes-Mejia et al., 2007). This will create conflict of interest between family members and non-family shareholders known as type II agency problem (Salvato & Moores, 2010). According to entrenchment view, family-firms manage earnings to reduce the pressure of non-family shareholders regarding dividend payment.

Agency theory does not explain the behavior of family controlled business, because family-firms give more importance to non-economic goals than economic goals (Gomes-Mejia et al., 2007) and agency theory consider only economic goals. SEW preservation is a significant factor of family owned business in decision making process that is not reflected by agency theory (Gomez-Mejia et al., 2007). Thus, agency theory does not present a complete picture of family controlled business decision making process.

### 2.4.2 Institutional Setting Theory

Institutional setting theory is basically describing the institutional settings and these institutional settings can be divided into two different forms. First one is developed and second one is under developed. This differentiation is based on investor protection, judicial

system and the risk of expropriation. If investor protection is high, judicial system is efficient, minority rights are not violated and risk of expropriation is low, then it means that countries is in developed economies, otherwise it is underdeveloped economy (Liu, Yang & Zhang, 2010). According to this theory, in developed economies, these unique institutional settings described earlier would reduce managerial opportunism, which ultimately lower the intensity of agency problem, hence reduce EM practices. On the other side, if the economy is underdeveloped, then there is low investor protection, low judicial efficiency, and high risk of expropriation provides greater space for manager to manipulate the accounting information. Hence, we expect that in these societies the EM practices will be high. As for as governance mechanism is concerned, the basic purpose of CG mechanism is to align the interest of managers to the interest of owners. But as far as the implication of CG mechanism is concerned, till date the results of CG mechanism on management opportunistic behavior are not same across different economies as discussed earlier under the heading of CG mechanism and EM. Different results of CG mechanism in different countries are mainly due to institutional settings.

### 2.4.3 SEW Theory

The Socio-emotional wealth (SEW) theory emerges from the behavioral agency theory (Gomez-Mejia et al., 2007). SEW theory contends that family-firms are more committed to achieve non-economic goals as compare to economic goals (GomezMejia et al., 2007). Under SEW theory, the main objective of family owned business is to preserve socio-emotional wealth. Under this theory, goals of family-firms i.e. mission and objectives are driven by the sole plan of accumulated benefaction (GomezMejia et al., 2007). Firms

owned by families are enthusiastic to accept more risk to achieve their non-economic goals than non-family owned firms (GomezMejia et al., 2007).

It means that strategic decisions of family-firms are based on SEW preservation (Achleitner et al., 2014). For example family-firms involved in EM if they feel, EM will support to meet their non-economic goals. Literature provide evidence that family-firms manage their earning by using AB_EM method as compare to non-family-firms (Achleitner et al., 2014) because one of the main purposes of family-firms is dynasty succession (Zellweger & Astrachen, 2008). Family owned businesses in comparison to non-family business have long run prospects (Berrone et al., 2012). Long run objective prospect influence family owned or controlled business to report lower net income and EPS (Gugler, 2003), so that to reduce the dividend payment pressure of non-family shareholders. Retained earnings permits family owned business to save money for future generation.

On the other side, according to socio-emotional wealth theory, family owned businesses want to continue their control on business and do not want to face any constraint form creditors in case of debt covenants violation (Gomez-Mejia et al., 2014). Debt covenant violation can leads family controlled business towards bankruptcy. Hence threat of bankruptcy may weak the control of family members on business. Bankruptcy threat is due to poor performance of firm. Poor performance of business gives negative signal to the market and decrease the share value (Brown & Caylor, 2006). Thus family controlled business may be involved in income increasing AB_EM to hide financial performance (Prencipe et al., 2008).

Berrone et al. (2012) highlight five dimensions of non-economic goals of family firms in thier article as, family control and influence, family members' identification with the firm, binding social ties, emotional attachment and renewal of family bonds to the firm through dynastic succession.

### 2.4.4 Stakeholder Theory

Stakeholder theory suggests that it is managers' ethical duty to consider the benefits of all stakeholders (Freeman, 1984). The theory considers that managers should be accountable to all stakeholders. Stakeholders include persons or groups that are affected or benefited by the firm's actions (Freeman, 1984). Stakeholder theory consider broader group of society than shareholders. Figar and Figar (2011) categorize stakeholders into eight groups, namely, lenders, worker of the firms, vendors, consumers, state, political groups and business groups.

In line with the stakeholder view, a firm not only perform its traditional role which satisfy the interests of owners, but also fulfils the needs of its numerous stakeholder groups. Guthrie, Petty and Ricceri (2006) further explain that stakeholder theory highlights a company's accountability to be beyond simple economic or financial performance. This respective theory postulates that the management of a company is expected to execute its accountability towards its stakeholders by undertaking decisions that are deemed salient by the stakeholders. Disclosure of information plays pivotal role in the process of performing accountability to those stakeholders. The provision of a company's information should not be limited and extended on nonfinancial or regulated information (Gray, Kouhy & Lavers, 1995). This is because conforming to stakeholder theory, the public has the right to know about certain facets of a company's corporate practices. The concept of CSR is

closely related to stakeholder theory as it is expected that the firm will fulfill its responsibilities towards community. A firm can get benefits like lower cost of financing, high image in society, and enhance the relationship with society at large, by disclosing CSR information (Gray, Kouhy & Lavers, 1995).

The theory of Stakeholders creates a link among all the stakeholders and the wealth maximization of the shareholders. It shows the relationship between a company and all of its stakeholders. According to this theory, companies are bound to meet the needs of its different stakeholders instead of only the important shareholders. All stakeholders of firm required accurate financial information for their financial decision. According to this theory, if a firm is a socially responsible and take care the interest of its stakeholders, then it will not involve in earnings management activities and provide accurate financial information to its stakeholders for decision making. On the other side, if a firm involves in earnings management activities, then it is not considered as socially responsible unit of the society, because firm is providing manipulated information, which can detract the financial decisions of stakeholders of the firm hence damage the interest of stakeholder.

CHAPTER 3

# LITERATURE REVIEW

This chapter explain the exiting literature regarding earnings management and hypotheses development.

## 3.1 Family-firms and Earnings Management

### 3.1.1 Family-firms and Real Earnings Management

Masri (2018) conducted a study to review the moderating role of governance mechanism on the association between family ownership and R_EM. For this purpose, Masri (2018) used the data of Indonesian firms form time 2010-2013. Results of the study depict that family-firms do not prefer to manage their earnings through R_EM, because the cost of R_EM is higher than the cost of AB_EM in log run (Kim et al., 2013). This high cost damage the goal of dynastic succession of family-firms (Berrone et al., 2012). Moreover internal governance mechanism further deter family-firms to manipulate earnings through R_EM. Furthermore, results also depict that high levered and growing firms manipulate their earnings through real activities.

Similarly, Kim, Byun, and shin (2018) also conduct a study to examine the behavior of family-firms regarding R_EM in Korean context. By utilizing the data of Korean firms during the time period 2001 2013, Kim et al., (2018) find that Korean family-firms are less involved in activity based EM, to look after the wealth of existing shareholders. Results of the research also depict that profitable firms do manage their earnings due to the less incentives, but the firm bear loss in the last year are tends to increase their earnings through R_EM by offering sale discount at the end of the period. Highly levered firms also manage their earnings while earnings smoothness through real activities are not affected by audit

quality because auditors are appointed to verify that firms are following the prescribed rules and regulation while recording the transaction and preparing the financial results.

In Chines context Tian, Yang and Yu (2018) also discover that family-firms are less involved in EM through activity based EM than non-family-firms. To study the behavior of family-firms regarding R_EM Tian et al., (2018) applied 2SLS technique on the data of Chines firms from the period 2005-2014. The findings of the study advocate that family-firms in China do not manipulate earnings through sales, discretionary expenses or through increase in production. Deviation from normal business activities either through accelerated sales, cuts in discretionary expenditures and increase in overall production may influence the future performance of firm (Tian et al., 2018), which can affect the family goal of dynastic succession (Berrone et al., 2010). Findings of the study further reveal that more profitable and large firms are less involved in R_EM due to less incentives and high scrutiny by analysts. (Achleitner et al., 2014; Gunny, 2010). On contrary highly levered firms manage their earnings by cutting discretionary expenditures.

Further Razzaque, Ali and Mather (2016) study the behavior of family-firms regarding R_EM in developing country context. For this purpose Razzaque et al., (2016) use the data of listed firms in Bangladesh (a developing country) during the time period 2006-2011. In Bangladesh family-firms manage their earnings more extensively than non-family-firms, and this relationship is not linear. Results further reveals that at the early age family-firms manage earnings more extensively than mature family-firms. Furthermore, findings further depict that control variable firm size and debt burden are also the cause of increase in earnings smoothness, while profitable and mature firms are less involved in EM through real operations.

Moreover, Shaikh, Fei, Shaique and Nazir (2019) conducted a research to examine the influence of family ownership and executive ownership on EM practices in Pakistan. For this research, researcher utilize the data of listed firms in Pakistan for time span 205-2016. EM is proxied by R_EM and AB_EM and are estimated through Roychoudhary model and Jones model. Findings of the study conclude that, firms owned by families or executives are engaged in EM through R_EM and AB_EM. Findings of the study advocate the entrenchment view of agency theory. Findings further disclose that, more profitable and big firms are not involve in R_EM practices, while highly levered and mature firms manage their earning through real activities. Additionally, highly levered and profitable firms are engaged in AB_EM practices, whereas big firm are do not manage their earnings through AB_EM practices. This finding supports the argument that big firm are more closely observed by stakeholders, so to save their image in society, do not manage earnings through AB_EM.

Lisboa (2016) also examined the influence the family ownership and firm characteristic on EM proxied by R_EM and AB_EM in pre and post financial crises. By utilizingq the data of listed firms in Portugal during 2003-2015, researcher concluded that during the crises period low financial performance influence family-firms to manipulate earnings through real operations, so that to safeguard themselves from violation of debt covenant, which in turn leads to decrease the family control on firm. On contrary family-firms are less involved in manipulation of discretionary accruals, because litigation and detection risk of being caught.

### 3.1.2 Family-firms and Accrual Based Earnings Management

Paiva, Lourenco and Curto (2016) examine the influence of analyst coverage on reporting quality of family and non-family-firms. For this analysis they utilize the data of 1043 UK listed firms for the time period 2006-2010. Discretionary accrual are used as a proxy of earning quality. After controlling firm size, debt burden and profitability, study conclude that family-firms those are not covered by more market analyst are more involved in accrual based earnings manipulation. Paiva et al., (2016) explain that family-firms are involved in AB_EM due to the weak external monitoring. Results of the study also depict that profitable firms are less involved in AB_EM due to high firm performance. Moreover leverage, loss and growth opportunity are positively correlated with AB_EM.

Chi, Hung, Cheng and Lieu (2015) study the moderating role of board-independence and the dual role of CEO in the association among family ownership and EM. By applying random effect panel regression on the data of listed firms in Taiwan during the period between 2000-2012, study conclude that family-firms are more involve in EM activities than non-family-firms. Chi et al., (2015) conclude that family-firms expropriate the wealth of minority shareholders due to week investor protection and inefficient governance mechanism. Furthermore, results also show that independent directors deter this opportunistic behavior of family-firms' management, while the probability of EM is high in firms where CEO and Chairman is same individuals. Results of the study also prevail that highly levered and growth firms are not involved in this opportunistic behavior.

Jaggi, Leung and Gul (2009) also conclude that in Hong Kong family-firms are more involved in EM activities than non-family-firms. Study also conclude that firms with higher percentage of independent directors are less involved in EM activities. Results of the study

further prevails that firm size does not have significant impact on discretionary accruals, while profitable firms are less involved in AB_EM in the context of Hong Kong.

Hashmi, Brahmana and Lau (2018) conducted a study on 238 active Pakistani firms for the duration 2009-2015. Researchers study the moderating role of political connection on EM proxied by discretionary accruals of family-firms. Results of the study explain that family-firms are less involved in AB_EM. High ownership and representation of family on board align the goals of owners and managers, due to which family-firms involvement in EM decreases. This same goal depress family-firms to manage earnings through discretionary accrual, because this act damage the family reputation (Cascino et al., 2010). Study also find out that politically connected organizations are more involved in EM than politically connected family businesses. Control variables namely, firm-size and profitability decrease the AB_EM, while leverage, loss, managerial ownership and growth opportunity are the reason to increase in AB_EM.

**Table 3.1 Summary of Research Articles**

| Sr. No. | Year | Authors | Country | Developing /Developed | Sample Year | Key Findings |
|---|---|---|---|---|---|---|
| 1 | 2019 | Shaikh, Fei, Shaique & Nazir | Pakistan | Developing | 2005-2016 | Family firms are engaged in R_EM and AB_EM |
| 2 | 2018 | Hashmi, Brahmana & Lu | Pakistan | Developing | 2009-2015 | Family firms are less involved in AB_EM |
| 3 | 2018 | Piam, Yang & Yu | China | Developing | 2005-2014 | Family firms do not manipulate earning through R_EM |
| 4 | 2018 | Kim Byun & Shin | Korea | Developed | 2001-2013 | Korean firms are less invovled in R_EM |
| 5 | 2018 | Masri | Indonesia | Developing | 2010-2013 | Family firms do not prefer R_EM |

| | | | | | | |
|---|---|---|---|---|---|---|
| 6 | 2016 | Paiva, Lourenco & Curto | UK | Developed | 2006-2010 | Family firms are more involved in AB_EM |
| 7 | 2016 | Lisboa | Portugal | Developed | 2003-2015 | Family firms manipulate earnings through R_EM |
| 8 | 2016 | Razzaque, Ali & Mather | Bangladesh | Developing | 2006-2011 | Family firms manage their earning through R_EM more extensively than non-family firms |
| 9 | 2015 | Chi, Hung, Ching & Lieu | Taiwan | Developing | 2002-2012 | Family firms involve in EM |

## 3.2 Capital Structure and Earnings Management

Agency theory consider leverage as a mechanism which disciplines the management and hence curbs the opportunistic behavior of the management which sometimes in forms of enjoying excessive perks, empire building and facilitating their relatives by posting them on key position (Jensen, 1986). As this mechanism limit the opportunistic behavior and hence management has no need to hide or manipulate their actions through EM. For example, Jelinek (2007) finds that increase in leverage limits the opportunistic behavior and hence results in lower EM. Ming Chia et al. (2007) discussed that leveraged firm is controlled by creditor and hence less room for the company management to engage in EM.

However, another perspective regarding leverage is also explained the negative outcomes of leverage. This view argues that management used EM strategy to avoid strict restriction from creditor and also manipulate information to get loans at favorable rates. Beaty and Webber (2003) discuss that leveraged firm do not want to breach the contractual agreement and hence to present the strong financial position through AB_EM.

This contradictory view is explained by differentiation EM in to two groups. Recent literature on EM has divided it in two forms (Roychowdhury, 2006; Gunny, 2010). First, AB_EM and second is R_EM. Several scholar reported that higher scrutiny either in form of auditor, regulator or by financer put pressure on management to used R_EM instead of AB_EM (Anagnostopoulou & Tsekrekos, 2016).

Further, lower litigation and detection risk of R_EM over AB_EM also motivate management to use R_EM especially when they are highly leveraged. Zang (2012) said that higher cost associated with AB_EM (in form of litigation risk) motivates manger to use R_EM.

Furthermore, Chi et al. (2011) found that firm use R_EM instead of AB_EM when they are audited by BIG 4. Anagnostopoulou and Tsekrekos (2016) argued that lower detection risk of R_EM motivated manger to use R_EM instead of AB_EM when they are highly scrutinized by outside financers. As real manipulations are properly recoded so it is very tough for regulator, auditors and creditors to differentiate R_EM from the daily ongoing business activities. Further, real actions like sale of assets generate extra cash for business and hence it is easier for the management to pay its loan. On the other side, AB_EM just increases the earning and it would not help out the management especially when they have to pay heavy installment to creditors (Sellami, 2015). Overall lower detection and litigation risk in the present of higher scrutiny by debt financer motivate management to be more involved in R_EM instead of AB_EM.

It has been indicated that managers may prefer to manage earnings through manipulation of real activities to meet earnings benchmarks (Graham et al., 2005). There are some reasons why real activities manipulation might be preferred over accounting

choice. Firstly, R_EM activities are less likely to be detected by outsiders including creditors. Particularly, while business decisions are under the control of management, accounting choice is monitored by auditors (Gunny, 2010) and can be assessed according to a detailed set of accounting standards. Since R_EM contains no violation of accounting standard and concerns with firms actual activities that are management discretion, even if a blatant commitment of real activities manipulation is detected, financial statement auditors may not be able to restrict it. Sun and Liu (2017) examine the effect of analyst coverage on real activities manipulation, including manipulation of sales, production and discretionary expenses. They indicate that, while analyst following has been shown by prior studies to restrict accruals management (Yu, 2008), R_EM is actually higher for firms followed by more analysts. Moreover, distinguishing normal business activities from manipulated activities is a daunting task, especially for outsiders because it is difficult for them to separate normal business activities from R_EM activities (Roychowdhury, 2006).

Asim and Ismail (2019) conducted a research to examine the impact of leverage on EM practices of Pakistani listed firms. For this analysis researchers utilized the data of manufacturing firms listed in Pakistan for the time span 2009-2015. EM practices are proxied by discretionary accruals and estimated by applying the Modified Jones Model. Results of the study reveal that highly levered firms are more involved in EM practices than low levered firms. This result support the argument that to get more debt financing at lower rate firm manage their earnings through AB_EM. Results further show that profitable and large size firms are also engaged in EM practices.

Based on the above discussion following hypotheses are formulated:

*H1: Leverage is positively associated with real earnings management.*

*H2: Leverage is negatively associated with accrual based earnings management.*

## 3.3 Leverage, Family-Firm and Earnings Management

Prior literature investigates the differences of EM in terms of AB_EM between family and non-family-firm (Cascino et al., 2010; Ding et al., 2011). However, findings on the association between AB_EM and family ownership are non-conclusive. Several scholars tested the relationship of family ownership with AB_EM and report negative association of family ownership with AB_EM (Jiraporn & Dadalt, 2009; Chen et al., 2014). They assert that family owned businesses limit the managerial opportunism and agency conflict, due to the alignment effect (Jensen & Meckling, 1976; Demsetz & Lehn, 1985) and hence result in lesser AB_EM.

On contrary, literature also documents that family ownership and AB_EM are positively linked. (Yang, 2010; Ding et al., 2011). These scholars asserted that firms' owned and controlled by family provide an opportunity of expropriation of wealth of minority shareholder. Furthermore, researchers explain that this act of family-firms lead to a problem known as agency problem type II (Shahzad et al., 2017).

Overall above evidence and argument clearly identified that differences are prevailed in family and non-family-firms in EM perspective. Therefore, family ownership may influence the relationship between leverage and both types of EM (real & accrual). As it is easier for the leveraged family firm to manage earnings through real and AB_EM as compare to leverage non family firm under unique institutional settings of Pakistan. In Pakistan, the efficiency of the judicial system and corruption are in worse conditions and organizations usually practice expropriation and content refutation to manage earnings. Hu et al. (2014) reported that Pakistan lacks in well-established property protection rights,

policies and inefficient corporate information systems. In sum, in a weak regulatory environment, leveraged family owned businesses are in the best position to take advantage of the institutional environment because of the strong alignment of incentives between managers and owners within the firm. Hence, leveraged family owned businesses are likely to perform R_EM to preserve the family identity dimension of SEW theory than leveraged non family owned business. On the other side to transfer the business to next generation (dynastic succession dimension of SEW theory), family owned firms are more engaged in AB_EM than R_EM, because the cost of R_EM is higher than the cost of AB_EM (Zang, 2012).

Based on the above discussion and according to the institutional setting theory and SEW theory, it is hypothesized that;

*H1f: Leveraged family-firms engagement in real earning management is different than the leveraged non-family-firms.*

*H2f: Leveraged family-firms involvement in accrual based earnings management is different than the leveraged non-family-firms.*

## 3.4 CSR and Earnings Management

Engagement of firms in CSR activities leads to establishing and strengthening relationships with firms' stakeholders, helping them achieve competitive advantage (Carroll & Shabana, 2010). The proponent of stakeholder theory, Freeman (1984) posits that CSR practices results into increased profit than costs for a firm by maintaining better linkages with its broad range of stakeholders. With regard to customers, for instance, a firm's involvement in CSR activities ameliorates brand loyalty (Pivato, Misani, & Tencati 2008). Additionally, Luo and Bhattacharya (2006) are of the view that CSR activities

enhance customer satisfaction. Godfrey (2005) opines that CSR activities can enhance employees' morale whereas Davis (1973) states that as a consequence of engagement in CSR activities; firms can attract talented workforce. With regard to another important stakeholder group namely community, Porter and Kramer (2002) found in their study that a firm's charitable initiatives support it in maintaining its competitive edge and fulfill the stakeholders' needs. In nutshell, ensuring alignment of its CSR activities with stakeholder interests enables a firm to create value (Kurucz, Colbert, & Wheeler, 2008). Following is the discussion on CSR and EM of firms.

Liu, Shi, Wilson and Wu (2017) conducted a research on US listed firm for the time period 2003 to 2010 to examine the influence of CSR on EM. After examine the data, concluded that CSR has non-significant impact on EM for both AB_EM and R_EM. For robustness, they use different models of AB_EM (Leuz et al. 2003; Stubben 2010); and R_EM (Roychoudhary, 2006) and conclude the same that CSR has no significant impact on either type of EM. They further conclude that firm-size, audit quality and age decrease R_EM and AB_EM, while leverage has positive relationship with AB_EM and negative with R_EM. They further added that both EM techniques are also negatively linked with each other.

Similar results are also documented by Moratis and Egmond (2018) in US context. Methodologically their study was different from the above mentioned study of Liu et al. (2017). Liu et al. (2017) investigated bi-directional association among EM and CSR after separating the firms into two sub samples based upon companies' impact on environment i.e. companies with high environmental impact and companies with low environmental impact. Results show that CSR has no significant impact on EM nor EM has significant

impact on CSR. They further conclude that higher environmental impact firms are less involved in EM than the firms with low environmental impact. Firms with higher environmental impact invest more in CSR activities to compensate their negative externalities for society not to safeguard themselves against EM behavior. Results further indicate that larger firms are less engaged in EM than small firms, because larger firms are more scrutinized by investor as compare to smaller firms. But on the other side leverage has significant and positive impact on discretionary accrual. This result can be explained through debt covenant hypothesis.

In the context of ten European countries, Alsaadi, Ebrahim and Jaffar (2017) evaluated the relationship between CSR, Shariah compliance and earning quality. They utilized panel data for time span 2003 to 2013 of non-financial listed companies. By controlling corporate governance score and firms specific variable namely size of firm (natural log of shareholders equity), return on asset (ROA), debt burden (debt to asset ratio), audit quality (big four auditors) and ownership concentration (percentage of closely held shares), their findings show that firms involved in higher CSR activities are less involved in EM. While other variables such as corporate governance score return on asset and ownership concentration are positively linked with EM.

Villaron-Peramato, Garcia-Sanchez and Marinz-Ferrero (2018) study that either leverage moderates the relationship between CSR and managerial discretion in financial reporting proxied by AB_EM or not in 1916 international companies of 22 countries. By applying Generalized Method of Movements to control the problem of endogeneity on panel data, they find that managers of the firms perform CSR activities are less involved in EM. After evaluating the role of debt burden on the relationship between CSR and

managerial discretion. Moreover, they concluded that debt burden further mitigate managerial discretion in financial reporting.

Martinez-Ferrero, Gallego-Álvarez and Farcia-Sanchez (2015) also conduct a research to study the moderating role of stakeholder and investor protection on bi-directional relationship between EM and CSR. They used the data of 1960 multinational non-financial companies of 26 countries. By using generalized method of moments due to endogeneity problem in data, they conclude that CSR has strongly significant negative impact on managerial entrenchment. They also documented that investor protection and stakeholder protection further strengthen this negative impact of CSR on EM. Results hold the hypothesis that socially responsible firms are committed to provide transparent financial information to their shareholders and other stakeholders to protect their stakes in firm. On the other side results also show that firms engaged in EM are less involved in social activities. Results also show significant positive impact debt burden on EM. This result supports debt covenant hypothesis.

In international context, the relationship among CSR and earning quality is also studied by Bozzolan, Fabrizi, MAllin and Michelon (2015). By examining 1141 firms of 24 countries during 2003 to 2009, they concluded that highly rated CSR firms provide high quality information to their stakeholders. Results further depicts that highly rated CSR firms prefer accrual EM instead of real earing management, because R_EM effect the long term performance of the company than accrual EM which is merely the window dressing of the results and have no real impact on firms long term performance. Stakeholder theory explain these results, as firms protect the stake of their stakeholders, hence manage earning through accruals which is not harmful for the future performance of the firm. Additionally,

from results it is also clear that firms in strong legal enforcement countries use operational activities to manage their earning instead of AB_EM, because detection risk is high of being involved in AB_EM instead of R_EM.

Cho and Chun (2016) also investigated that either governance mechanism moderate the linkage between CSR and EM practices of Korean listed firms for the period 2005-2010 or not. Results of the study explain that CSR measured as Korea Economic Justice Institute (KEJI) index has negative impact on EM proxied by R_EM, suggesting that management of more socially responsible firms are less involved in R_EM due to the long run cost of R_EM is higher than the cost of AB_EM (Cohen & Zarowin, 2010). They further added that corporate governance mechanism measured as KCGS (Korea Corporate Governance Service) Index strengthen the negative relationship. Results also indicate a significant positive association of size of firm, leverage, and firm age with EM, while negative association between corporate governance score, firm performance, growth opportunity and audit quality (firm audited by big four auditors) with EM.

Timbat and Park (2018) also examined the association between CSR and financial reporting quality. By applying multiple regression analysis technique on the data of non-financial S&P 500 firms for the period 2005 to 2014, they conclude that CSR performance is negatively associated with discretionary accruals calculated through Dichow and Dichev (2002) model. Their results are robust for other discretionary accrual metric calculated through performance based Jones model. Findings of the study also indicate that the tendency of involvement in real EM is low in socially responsible firms. Moreover the study results demonstrate that firm size and audit quality have negative impact on discretionary accrual. While debt burden, growth opportunity, asset profitability and

previous financial year loss has negatively associated with accrual quality. To get loan on favorable rate leveraged firms manage their accruals, similarly previous year loss motivate management to show positive net income in current year.

Similar research also conduct by Gras-Gil, Manzano and Fernández (2016) in Spain to investigate the impact of CSR on EM. They used the data of Spanish listed firms for the period 2005-2012. By applying generalized least square method, they conclude that CSR has negative impact on discretionary accruals. Stakeholder theory explain the results of the study and conclude that socially responsible firms give more importance to establish long run relation with their stakeholders rather than maximizing short run profits. Leverage, firm size and profitability are also used in analysis as control variables, and results indicate that leverage and profitability are significantly positively associated with discretionary accruals.

Following is the detail of other studies conducted to examine the link between CSR and EM, and provide negative association.

**Table 3.2 Summary of Research Articles**

| Author | Year | Relationship sign | No of firms/firm year observations | Time period | Country or region |
|---|---|---|---|---|---|
| Calegari et al. | 2010 | -ve | 3467 firms | 1991-2008 | USA |
| Hong & Andersen | 2011 | -ve | 10193 firm year observations | 1995-2005 | USA |
| Kim et al. | 2013 | -ve | 23391 firm year observations | 1991-2009 | USA |
| Litt et al. | 2013 | -ve | 2095 firms | 2004-2006 | USA |
| Scholtons & Kang | 2013 | -ve | 139 firm | 2004-2008 | 10 Asia countries |

But the other side of the picture indicates that socially responsible firms are more involved in EM. Management perform CSR activities to hide their opportunistic earing

management activities. Prior, Suroca and Tribo (2008) concluded that socially responsible firms are more involved in EM through discretionary accruals after analyzing 539 firms of 26 countries during 2002 to 2004. According to them to managers perform social activities to defuse stakeholder activism which may hurt their position in company due to EM.

Chih, Shen and Kang (2008) also document a positive impact of CSR on EM. For this analysis researchers divided 1653 firms of 46 countries into two samples, labeled as CSR and non-CSR firms. Results clearly depict that firms with high level of CSR performance are more intended to conduct EM activities, supporting multiple objective hypothesis. Results also uncover that firms belongs to rich countries perform CSR activities are more involved in EM activities than firms of poor countries, which again strongly support the multiple objective hypothesis. But the same is not true for countries where legal enforcement is high. From results it is also clear that larger firms and highly leveraged firms measured as natural log of total assets and debt to equity ratio respectively have low propensity to engage in EM activities as contrast to smaller and low levered firms because larger and highly levered firms are tightly monitored by creditors, analyst and other stakeholders as well.

In the context of European countries, Salewski and Zulch (2014) tries to investigate the influence of CSR on EM, accounting conservatism and accrual quality. After analyzing the 90 blue chips European firms during 2005-2009, they conclude that firms perform more CSR activities present low quality financial information. According to them there are country specific factors due to which positive link exist between CSR and EM. To cover opportunistic behavior firms invest more in CSR activities may be the other reason of this

positive association. Leverage and firm size are also significantly and positively associated with discretionary accruals.

Shafai, Amran and Ganesan (2018), in Malaysian context proposed a relationship in which they theoretically prove that CSR is positively linked with managerial opportunistic behavior proxied as EM. They further theoretically added that managerial ownership strengthen this positive relationship among CSR and EM. According to them manager perform CSR activities to divert the attention of different stakeholders from their opportunistic behavior. Other studies also conclude positive association among CSR and EM (Barton, Hansen & Pownal, 2010; Laksmana & Yang, 2009).

Previous studies explain two perspective of CSR and EM relationship. The first states that a CSR committed firms are less inclined to manage earnings, since they refrain from hiding unfavorable earnings realization, hence these firms do not need to conduct EM (Chih et al. 2008). EM seems as a malicious activity, so firms with high dedication to CSR, act in a more accountable way while reporting financial information (Choi et al., 2013).

The other viewpoint advocates that EM is most likely to be executed by managerial opportunism approach. Managers deploy EM to disguise their opportunistic behavior (Prior et al., 2008). Managers perform negligible CSR activities only to save themselves from the fear of stakeholder's activism and vigilance (Choi et al., 2013). A number of prior studies have identified these contradictory viewpoints. Researcher of one perspective find that EM decreases with the increase in CSR, concluding that firms with strong obligation to CSR are less involve in EM (Alsaadi et al., 2017; Christensen et al., 2015; Hong & Andersen, 2011; Gras-Gil et al., 2016). In contrary, some scholars believe that EM increases with the increase in CSR activities, which suggests that companies with a greater

level of EM practices use CSR activities to hide their opportunistic behavior (Prior et al., 2008; Scholtens & Kang, 2013; Muttakin et al., 2015). These non-conclusive results motivates researcher to investigate this issue further and evaluate the relationship between EM and CSR in more detail.

One possible reason for this apparent contradiction is that certain factors may influence the impact of CSR on EM, such as the extent to which the managers restrict the manipulation of reported earnings. Controlling shareholders play a significant part in EM activities (Ying & Wang, 2013) like family, state and institutional shareholders, in which family shareholders are considered as is one of the important controlling shareholders that may influence the impact of CSR on EM, which have different objectives of EM.

However, till date the impact of CSR on EM is not explored from the perspective of family ownership. Therefore on the bases of the above discussion, the study hypothesized that:

*H3: There exists association between CSR and earnings management*

*H3f: The relationship between CSR and EM is different for family and non-family-firms*

## 3.5 Corporate governance and earnings management

A number of studies have investigated that whether governance mechanisms influence EM or not. The prior studies have identified that poor governance mechanisms could lead managers to engage in EM practices to get personal benefits like, increasing in their salaries, compensation and bonuses (Healy, 1985; Rohaida, 2011).

The impact of internal governance mechanism on EM is studied by Dechow et al. (1995). They found that companies are engaged in EM under different circumstances like

(a) when the CEO is also serving as Board Chairman, (b) when the CEO is also a founder of the firm, (c) when the firm is characterized by a less efficient audit-committee; and (d) when the firm has very few outside block-holders. Furthermore, these scholars concluded that the main motivation to adopt EM practices is to attract increased number of external investors at lower costs.

Following is the discussion on some studies related to governance mechanism and EM.

The EM practices have investigated by Sun and Farooque (2016) in develop countries such as Australia and New Zealand after the changes in governance regulations and reforms. They covered the study time frame from 2001 to 2006 on sample of 661 listed firms in Australia and New Zeeland Stock Exchanges. The Chow test with structural break is applied to draw the conclusion. However, the results explain that a positive trend in time is found on the whole and sub-samples of said economics. Additionally, findings of the study also explain that the size, growth and profit are negatively associated with EM in both countries.

Inya, Psaros and Seamer (2018) try to explore the applicability of Western Corporate Governance mechanism in East Asian setting. By using the data of 122 listed firms in Thailand, researchers conclude that Western CG mechanism include board independence, independent audit-committee and separation of chairman and CEO is not efficient to mitigate the opportunistic behavior of management in East Asian country, because maximum number of listed Asian Firms are own and managed by a closed group of investors belongs to a specific family (Chtourou, Bédard, & Courteau 2001). The other reason for this weak impact is that corporate and legal environment of Asian countries is not efficient as in Western Countries. While experience and tenure of directors and

managerial ownership play an important role to mitigate the managerial opportunism, hence resource dependency theory explain the relationship instead the agency theory.

Fuzi, Halim and Julizaerma (2016) also documented the importance of board independence in context of protecting the wealth of shareholders. Katmon and Farooque (2015) investigated the role of internal governance mechanism on firms EM behavior. By utilizing the data of 145 listed firms in UK during 2005 to 2008, researchers conclude that corporate internal governance mechanism include board-size, board independence, audit-committee size, audit-committee independence and board meetings have no impact on discretionary accrual a proxy of EM. Only audit-committee meetings and firm size which is control variable have significant and positive impact on EM. For robustness, they apply 7 different models to test the hypotheses of the study, and to handle the problem of endogeneity, they also apply 2SLS method, but the results remained unchanged.

In Pakistani corporate environment, Afzal and Habib (2018) also examine the impact of governance mechanism on EM of KSE-100 indexed firm. For this analysis researchers utilized the data of time span 2005-2013. EM practices are proxied by discretionary accruals and are computed through Modified Jones Model. Whereas, governance mechanism is proxied by board meetings, board size, independent board, CEO chair duality and different ownership structures. After applying fixed effect panal regression, study concludes that increase in executives' ownership and institutional ownership results in decrease in EM. Similarly more board meetings, large size board and independent board curb the EM behavior of management.

To check the effectiveness of two corporate governance mechanism namely Sarbanes-Oxley Act of USA and the 8th Company Law directives of the European Union,

Bajra and Cadez (2018) conduct a research on the data of 127 cross listed European firms for time span 2002 to 2013. After applying ordinary least square, they conclude that quality of board of directors and quality of internal audit is negatively associated with discretionary accrual, measured by modified Jones model (Dechow et al., 1995). For robustness purpose, researchers also measure discretionary accruals by using performance based modified jones model (Kothari et al., 2005), but the main results were unchanged. Results also depict that control variable such as, profitability, size of firm and debt burden are also negatively correlated with discretionary accruals.

Similar to developed countries, Securities and Exchange Commission of Pakistan (SECP) established code of corporate governance in 2002 and 2012 to control the opportunistic behavior of managers. In above mentioned code of corporate governance, rules are made about the composition of board, composition of board committees, frequency of financial reporting, audit-committee, internal and external auditors and related party transactions.

An appropriate number of independent directors on board is one of the core element of Western corporate governance mechanism. By including additional independent directors on board increases the effectiveness of management oversight (Fama 1980; Fama & Jensen 1983). Studies in developed countries like USA (Farber 2005; Persons 2006), Canada (Smaili & Labelle 2009), the UK (Peasnell, Pope, & Young 2001) and Australia (Sharma 2004) document significant negative impact of independent directors on the board on opportunistic behavior of management. On the other side, the results of studies conducted in in Taiwan (Wang, Chuang, & Lee 2010) and Tunisia (Matoussi & Gharbi 2011), find no relationship among board independence and reduction in fraud.

Following is the summary of related research which discussed the association between board independence and EM.

Alareeni (2018) examined the impact of different corporate governance mechanism tools i.e. board-size, board independence, institutional ownership and CEO board chair duality on EM in Bahrain. By applying fixed effect regression technique on the data of 20 listed firms in Bahrain over time period 2011 to 2015, researcher conclude that in the context of Bahrain, only board-size is significant negative impact on discretionary accruals while board independence and institutional ownership is positively linked with EM due to greater managerial discretionary. On the other side CEO duality has no significant impact on EM because in most of the firms CEO and board chair are not same person.

Chen, Cheng and Wang (2015) investigated 1587 non-financial US firms in order to empirically examine the impact of board independence on EM before and after SOX act. For this purpose they use 2000 to 2001 as pre regulatory period and from 2005 to 2006 as post regulatory period. By using 2SLS method, results indicate that board independence has no influence on discretionary accruals before and after regulatory reforms for non-compliance firms defined as firms those have not majority of independent directors before regulatory reforms in US. But after taking interaction of information access score with board independence, the results show significant negative influence of board independence on EM for non-compliance firms due to easy availability of information. Results show same relationship between board independence and other proxy of earing management i.e. R_EM. Results of the study also corroborate that institutional ownership and profitability have significant negative impact on discretionary accruals because institutional owners are considered as external corporate governance tool and high profitable firms have no need to

manage earnings. Results also show that there is no significant impact of audit-committee independence on discretionary accruals for non-compliance firms. While interaction of audit-committee independence and information access score show similar results as for board independence and discretionary accruals.

Luthan, Satria and Ilmainir (2016), investigated that either governance mechanism deter EM or not in Indonesia. For this purpose, they analyzed the data of 65 listed Indonesian manufacturing firms during the time period 2010 to 2013. Results of the study depict that board independence, and managerial ownership are significantly negatively associated with EM proxied by discretionary accruals. Results also confirm that CG mechanism plays a role to control the managerial opportunism.

In developing country context, to examine the influence of internal governance mechanism on EM Khalil and Ozkan (2016) organized a research in Egypt. By using the data of 125 listed firms for the time span 2005-2012, they conclude that board independence has no significant impact on EM due to weak legal protection in Egypt. Other governance variables like audit quality, executive ownership, large outside holding, board-size and audit-committee are negatively connected with EM due to large size of outside directorship which can monitor executive more efficiently. Results of the study also depicts that in firms with concentrated shareholding provide higher quality financial information in the presence of board independence, audit quality and audit tenure. At higher level of executive ownership, firms are not engage in EM activities due to alignment of goals between shareholding and managers (Jensen & Mecklin, 1976).

Alzoubi (2016) also inspect the association between audit-committee and EM in one of MENA region country Jordan. To check the above mentioned relationship, data of 82

manufacturing listed companies on Amman Stock Exchange over the period of 2007 to 2010 is used. By applying GLS method, he concludes that the existence of audit-committee and internal audit department decrease the EM. Results also depict that independent board, board-size, board financial skills and firm size are also helpful tools to control the opportunistic behavior of management proxied by discretionary accruals.

Swai (2016) organized a study to investigate the influence of CG mechanism on EM practices of in African context. For this analysis researcher utilized the data of 40 listed firms during the time span 2004-2013. In this study EM practices are proxed by real and accrual EM, while governance mechanism is proxied by board size, board composition and audit quality. Findings of the study reveal that audit quality significantly decrease the AB_EM while it has no impact on R_EM. Moreover, board size and board compositon has no significant influence on EM.

Al-Sraheen and Al-Daoud (2018) further explore the influence of independent board on managerial opportunism regarding EM. Results depict that board independence mitigate the EM. For this analysis they use the data of 72 listed firms of Amman for the period 2013-2016. Findings advocate that outside independent directors are effective monitors, hence helpful in aligning the interest of management and shareholders.

Separation of audit-committee from firm's executives, strengthens the monitoring role of audit-committee (Abbott, Parker & Peters, 2004). Audit-committee comprises only on independent directors is considered as optimal, because they are worried about their reputation, which encourage them to perform their role more carefully (Fama & Jensen, 1983). Literature documented that the firms provide high quality financial reports, have

more independent audit-committee (Carcello & Neal 2003) and the less likely it is to participate in EM (Lin & Hwang 2010).

Zalata, Tauringana and Tingbani (2018) examined US firms to find out the influence of internal governance mechanism on EM. By using 5660 firms year observations for the period of 2007-2013, they conclude that female financial expert reduce discretionary accrual more than male financial experts. Results of the study also corroborate that in firms where ratio of female directors is higher, inclined to less discretionary accruals. Results further verify that board-size in US firms also deter opportunistic behavior of management regarding their discretion over financial reporting. It is also clear from the findings that the role of female financial expert on board is significant regarding discretionary accruals in high litigation companies as compare to low litigation industries. While on the other side, leverage is significantly negatively corelated with earing management, arguing that highly levered firms are closely monitored by creditors so there is less space for management to manipulate accruals.

Further, Lin, Hutchinson, and Percy (2015) also studied the role of audit-committee regarding discretionary accruals in context of Chinese companies those are also listed on Hon Kong Stock Exchange. By using 204 firm years observations of cross listed Chinese firms and 204 firm year observations of local listed firms over the period 2004 to 2008, they conclude that audit-committee independence is accommodating characteristic of audit-committee to deter EM behavior of management. But the same fact is not true for local listed firms. Mean of local listed firms discretionary accruals are greater than significantly different that the mean of cross listed firms. Results of the study also corroborated that government officials on audit-committee moderate this relationship

positively between audit-committee and EM even for cross listed firms, hence disappearing the positive role of audit-committee in mitigating discretionary accruals. Results further depict that audit quality and debt burden are helpful in decreasing discretionary accruals while growth and previous year loss are the cause to manipulate earnings.

In the context of Eastern Africa, Waweru and Port (2018) studied the corporate governance compliance and AB_EM. They used the panel data from time span 2005 to 2014 of 48 listed companies in Nairobi and Dar-es-Salam Stock Exchanges. By applying the Pooled OLS method, the finding of the study indicated that the audit quality and audit-committee exert a negative impact on EM of the firms. While, other corporate governance variables namely, size of the board, board independence, board gender diversity, board meetings and inside ownership provide the positive connectedness with EM. Finally, the findings of the study contradict with previous studies in literature.

Similarly, Zgarni, Hilioui, and Zehri (2016) conducted a study to find the effectiveness of audit- committee and external auditors on EM of firm. Audit-committee effectiveness is measured by a score calculating by considering audit-committee size, audit-committee independence, audit-committee financial expertise and number of audit-committee meetings. By controlling different factors, namely, firm's growth, firm size, debt burden and profitability measured as market to book value of equity, natural log of assets, ratio of total debt to total assets and return on assets respectively, they conclude that in isolation audit-committee is not helpful to decrease the discretionary accrual. While the interaction of effective audit-committee and external auditor reputation proxied by big 4 auditors, is helpful in controlling discretionary accruals. Firm size is also has negative impact on discretionary accruals. No other control variable has significant impact on EM.

Alves and Vicente (2015), also explore the impact of different governance model on discretionary accruals in Brazilian and Portages listed non-financial firms. After studying 46 Brazilian and 16 Portages firms they conclude that Latin model is helpful to reduce the discretionary accrual as compare to other models i.e. continental and Anglo-Saxon models. Latin model is different from other model indicated above in terms that Latin model include audit board rather than audit-committee. Hence audit-committee is not successful to control the discretionary power of management as audit board.

Moreover, Alquhaif, Latif and Chandren (2017), explore the association between corporate governance mechanism and EM behavior of management in Malaysian listed firms through share buyback. By using 608 firm years' observations, they conclude that gender diversity and board independence in Malaysian firms has significant negative impact on EM through share buyback. This result indicate that independent directors and female directors are effective monitors to control managerial opportunism, hence aligning the goals of shareholders and management (Jensen & Mecklin, 1986). Result of the study also corroborate that highly leveraged firms are also less inclined to manage earning because creditors are also considered as outside monitor of management. Audit quality is not significantly associated EM, because auditors are appoint to monitor managerial discretions in maintain accounting records by using accrual based method not to detect real activities manipulation.

Discretionary accruals problem contains financial and moral dilemmas, for which existing literature usually ponder gender as predicting feature (Krishnan & Parsons, 2008). Due to dissimilar aptitudes both genders possess diverse competences due to different socialization practices (Srinidhi et al., 2011). In discussing the variation among the

economic and monetary conduct of both genders, Betz, O'Connell, and Shepard (1989) states that females prefer to assist others, while male focus on creation of wealth and career improvement. Significant difference exists between males and females with respect to their ethical conduct in their professional life. According to Betz et al. (1989) males are more immoral to get monetary benefits and on the other side females are expected to report existence of dishonest financial reporting.

Dissimilarities in the behavior of male and female are also noticed while in the process of decisions and risk taking. According to Krishnan and Parsons, (2008) during the corporate decision making process females are less cooperative to accepting the unethical conduct, and give more weightage to the organizations interest that their own as compare to males. Moreover females are risk averse as compare to the males (Barber & Odean, 2001). Females are more careful and less hostile than males in different decision-making settings (Byrnes et al., 1999). According to Powell & Ansic, (1997) females are less prone to risk taking than males, particularly in monetary decision-making settings. They also tend to act more decisively than men to enhance earnings quality because they are highly sensitive to reputational loss and the risk of lawsuits (Srinidhi et al., 2011). Hence females are usually considered to assume an unemotional attitude regarding earning smoothness (Gul, et al., 2009). Krishnan and Parsons (2008) conclude that companies in which more female executives are at higher positions report less discretionary accruals. Study of Srinidhi et al. (2011) also reveal that female directors has negative impact on EM and this result is also supported by Gavious et al. (2012). Pucheta-Martinez, Bel-Oms, and Olcina-Sempere (2016) also conclude that higher female directors on corporate board controlled EM. According to Barua, Davidson Rama, and Thiruvadi (2010) negative association

among female executives and discretionary accruals is due to their moral beliefs and conventions.

While on the other side some studies do not support the above conclusion regarding the connection among females on corporate boards and earning quality. Buniamin, Johari, Rehman and Rauf (2012) conclude that in Malaysian context gender diverse boards were unable to deter EM. Similarly, Sun, Liu, and Lan (2011), and Peni and Vahamma (2010) also contend that gender diversity has no impact on EM. Following are some detailed review of literature on board gender diversity and EM.

To study the influence of board gender diversity on EM in European Countries, Kyaw, Olugbode and Petracci (2015) conducted a research during the time span 2002 to 2013. For this purpose they examine the data of 970 firms of all European countries. By applying the fixed effect models and including governance variables such as board independence, CEO board chair duality and board-size and financial variable like firm size, firm debt burden and profitability, they conclude that female representation on board decrease EM proxied by discretionary accruals. Results further show that this relationship is strong in countries where women are more powerful i.e. in Scandinavian countries. Results further show that board-size, and profitability are also negatively associated with EM.

Similar research also conducted by Lakhal, Aguir, Lakhal, and Malek (2015) in France. They try to find out that the impact of gender diversity of board on EM. For this purpose they utilized the data of 170 non-financial listed firms of France over 2008 to 2011. By controlling different governance and financial variables, they conclude less EM in firms where more women are present on board. Results further depict less EM in firms where

there are 3 or more women are present on board. For robustness, three methods are used to measures discretionary accruals i.e. Modified Jones Model (Dechow et al., 1995), Kothari model (Kothari et al., 2005), and Raman and Shahrur model (2008). Impact of gender diversity remain same for above mentioned models. Results of the study also show that decrease in EM in firms due to the female chairman of board. Board independence and board-size are also negatively significantly associated with discretionary accruals. While financial variables, leverage and profitability measured as ratio of total debt to total assets and return on assets respectively, are also helpful to reduce discretionary accruals.

Further, Al-Shaer and Zaman (2016) also conducted a study to explore the connection among gender diversity on board and accrual quality sustainability in UK context. By using different proxies of board gender diversity such as percentage of female director on board, number of female board members, and number of independent female board members, and controlling different governance variables like board independence, board-size and board meeting, they conclude that gender diversity is helpful to improve the accrual quality. Only percentage of female director on board is not significantly related to accrual quality, but after excluding board-size from model, which is highly positively correlated with percentage of female directors, this proxy of gender diversity is also helpful to improve the accrual quality. Results also indicate that gender diversity have same impact on large and small UK firms. Findings explain the opinion that female are more supportive to take care the community and are more responsible than male (Hilman et al., 2002).

Gull, Nekhili, Nagati, and Chtioui (2017) conduct a research to investigate that either gender diversity curb the opportunistic behavior of executives or not in listed companies of France. Finding of the study corroborated that female representation on board deter EM

and firm produce higher quality financial reports. They concluded that just female representation of board is not the only thing which deter EM, there are other female directors attributes those help female directors to control management, like female financial education, experience and their presence in audit-committee. Results of the study also depict that governance variables board-size, board independence, CEO tenure, family ownership, and institutional ownership also helpful to decrease discretionary accruals. Financial variables leverage, firm performance and firm size are also accommodating in controlling the opportunistic behavior of management, because large and highly leveraged firms are tightly monitored by outside stakeholders than low leveraged and small firms.

Further, Damak (2018) also conducted a research in French scenario to find out the influence of female on EM. This study is dissimilar from the studies of Gull et al. (2017) and Lakhal et al. (2015) in the context that in mentioned study was conduct in scenario where female on corporate board was volunteer decision of firms while in present the data used from the time period when female on corporate board is legal requirement instead of volunteer. Results of the study show that restriction of presence of female on corporate boards on French listed firms have significant negative impact on EM. Moreover other variables like, independent board and board-size are also have significant negative impact on EM. Results of the study further depict that gender diverse board has stronger negative impact on EM in firms where institutional ownership is lower than the firms where institutional ownership is high, concluding that women are more effective in firms where institutional ownership limited. Results also conclude that audit-committee perform more significant role to control management regarding discretionary accruals in firms where institutional ownership is high, proving that audit-committees are more power full in firms

where institutional ownership is higher. Moreover, firm size is also negatively correlated with discretionary accruals, shows that firms with higher sales are no need to boost earnings through accruals.

Based upon the above discussion and theories under discussion, following hypotheses are proposed:

*H4: Board independence is associated with earnings management.*

*H4f: The impact of board independence is different on earnings management for family-firms and non-family-firms.*

*H5: Earnings management practices are affected by audit committee independence.*

*H5f: The impact of audit committee independence is different on earnings management for family-firms and non-family-firms.*

*H6: Earnings management practices are associated with board gender diversity.*

*H6f: The impact of gender diversity is different on earning management for family-firms and non-family-firms.*

*H7: Earnings management practices are affected by corporate board-size.*

*H7f: The impact of board size is different on earnings management for family-firms and non-family-firms.*

## 3.6 Firm Characteristics and Earnings Management

Firms' characteristics namely firms' size, firms' age, and firm's profitability also influence the EM. Literature documented both positive and negative influence of the firm's characteristics on EM. Richardsen et al. (2002) conclude that EM increases with the increase in firm size and argue that large firms are more influenced by capital market pressures as compare to small firms to meet the earning targets. This motivate the

management of the larger firms to use EM techniques more aggressively as compared to smaller firms. In contrast, larger firms are more closely scrutinized by analysts, hence it is difficult for larger firms to manage their earnings as compare to small firms (Lee & Choi, 2002).

Larger firms possess well established internal control that restrain the possibility of managements EM practices or unethical behaviors (Sun & Rath, 2009). Furthermore, large firms are normally audited by big 4 audit firms, which prevent managers to perform EM activities (Georgescu et al., 2015). Additionally, Lemma et al. (2013) asserted that large firms for the sake of credibility and reputation concerns avoid EM practices.

Conversely, Lemma et al. (2013) argue that stock market more pressurize larger firms to earn positive income as compared to small firms. Additionally, Nelson et al. (2002) asserted that larger firms are in better position to bargain with auditors as compare to smaller firms, hence, auditors give up managements earnings manipulations.

Profitability is another important firm characteristic which can influence the decision of any stakeholder. To show firm more profitable, management involve in EM. Extent literature discuss the relationship between profitability and EM. Kim (2015) asserts that more profitable firms are financially stable, hence there is no need to manage earnings to show firm more profitable. In EM literature so many researchers find negative impact of profitability on EM (Tian et al., 2018; Shahzad et al., 2017).

Khuong, Ha and Thu (2019) conducted a research to inspect the influence of firm characteristics on EM in Vietnam. For this analysis, researcher utilized the data of twenty nine energy firms listed in Vietnam over the duration 2010-2016. Results of the study show that highly levered and large firms do not manage their earnings through R_EM. Moreover,

results also advocate that growth and operating cash flows are positively linked with R_EM.

On the other hand, Hessayri and Saihi (2015) argued that performance based compensation influence the management of the firm to manipulate earnings so that to increase their incentives. Moreover, to maintain previous year high performance firms may involve in EM activities. Positive impact of profitability on EM is also documented in research (Kim et al., 2018; Enomoto & Yamaguchi, 2017; Mafrolla & D'Amico, 2017).

Similarly, Asim and Ismail (2019) also examine the impact of firm's characteristics on EM practices of Pakistani listed firms. For this analysis researchers utilized the data of manufacturing firms listed in Pakistan for the time span 2009-2015. EM practices are proxied by discretionary accruals and estimated by applying the Modified Jones Model. Results of the study reveal that highly levered firms are more engaged in EM than low levered firms. This result support the argument that to get more debt financing at lower rate firm manage their earnings through AB_EM. Results further show that profitable and large size firms are also engaged in EM practices. Large firms manage their earnings through AB_EM in order to meet the expectations of analysts.

Swai (2016) conducted a study to investigate the influence of firms' characteristics on EM in African context. For this analysis researcher utilized the data of 40 listed firms during the time span 2004-2013. Firm specific variables of the study includes, profitability, leverage, operating cash flow and growth. Findings of the study reveal that firms EM decrease with the increase in profitability and growth. Results further depict that other firms' characteristics are not significantly linked with both types of EM practices namely real and accrual EM.

Nalarreason, Sutrisno and Mardiati (2019) examined the influence of firm's characteristics on EM. For analysis, researchers utilized the data of Indonesian listed firm over the time span 2013-2017. Findings of the study reveal that, highly levered and large firms are more engaged in EM than low levered and small firms. Highly levered firms manage their earnings to avoid the debt contract hypothesis. Additionally, result also support the argument that large firms are more engage in EM so that overcome the market pressure to meet earning targets.

Regarding the impact of firm age on EM there may be two possibilities. On one side more mature firms are less involves in EM practices, because their growth is stable, hence income is also stable so there is no need to manage earnings. On the other side investor and analyst think that mature firms will earn positive income, to meet the expectation of investor and analyst management of mature firms will manage earnings upward. EM literature documents both positive impact and negative impact of firm age on EM (Lennox et al., 2018; Li et al., 2016).

Other firm characteristics may also affect EM. This EM behavior of firms may be different for family-firms and non-family-firms, because according to SEW theory family-firm favor non-economic goals over economic goals. Similarly EM behavior of family-firms may be different in developing countries as compare to developed countries, because in developing countries corporate governance is not as efficient as in developed countries.

Based upon above discussion and theories under consideration, following hypotheses are formulated:

*H8: Firms earnings management practices are linked with firm size*

*H8f: The impact of firm's size on earning management is different for family-firms and non-family-firms*

*H9: Firms earnings management is associated with firm's profitability*

*H9f: The impact of firm's profitability on earnings management is different for family-firms and non-family-firms*

*H10: Earnings management is depend upon firm's age*

*H10f: The impact of firm's age on earning management is different for family-firms and non-family-firms*

## 3.7 Managerial Ownership and Earnings Management

If executives own the shares of the firm in which they are employed, this type of ownership is known as managerial ownership. Executives perform various duties for firms, like, controlling, auditing, and decisions regarding investments, financing and operations. A manager who has equity interest in firm will probably make decision in the best interests of its equity holders because of their position as a shareholder. They will also motivate management to achieve high quality and performance (Mahariana & Ramantha, 2014). To reduce agency problem, managerial ownership is used as governance mechanisms. By reducing agency conflict, the quality of reported earnings may increase (Soebyakto et al., 2017). This means that managerial ownership decreases EM practices within a firm. On the other side, managers who have enough ownership in firms so that they can control the board decisions, may use their authorities to influence the board decisions in their own favor. This act of managers create conflict of interest between managerial owners and other owners, which is known as type-II agency problem. Literature documents both positive and negative influence of managerial ownership on EM.

Salehi, Mahmoudabadi and Adibian (2018) conducted a research to study the role of managerial ownership on EM in Iranian listed firms. By using the data of 103 listed firms for the period 2011-2016, study conclude that, concentrated managerial ownership leads to increase in EM, this result can be explained through the entrenchment view of agency theory (Jensen & Meckling, 1976). In this study in exploring the relationship between managerial ownership and EM, researchers control various firm characteristics, like profitability, leverage, and firm size, which may affect the association of managerial ownership and EM. Results of the study portray that increase in leverage, firm size and profitability lead to increase the EM.

Ilmas, Tahir and Asrar-ul-haq (2018) also conducted a research in order to inspect the association between ownership structure and EM. For this examination, researchers utilized the data of top 100 Pakistani firms, for the duration 2008-2014. In the study, EM is measured through discretionary accrual and calculated by using Jones Model (1991), and ownership structure is proxied by managerial and institutional ownership. Results of the study portray that EM increases with the increase in managerial. The positive impact of managerial ownership on EM, support the entrenchment view of agency theory (Jensen & Meckling, 1976). To examine above mentioned relationship, researchers control various variables, which may influence the results, like, firm's size, profitability and leverage. All of these variables has positively associated with EM in Pakistan.

Moreover, Shaikh, Fei, Shaique and Nazir (2019) conducted a research to examine the influence of control mechanism on EM practices in Pakistan. For this research, researcher utilize the data of listed firms in Pakistan for time span 2005-2016. EM is proxied by R_EM and AB_EM and are estimated through Roychoudhary model and Jones

model. Findings of the study conclude that, firms owned by executives are engaged in EM through R_EM and AB_EM. Findings of the study advocate the entrenchment view of agency theory. Findings further disclose that, more profitable and big firms are not involve in R_EM practices, while highly levered and mature firms manage their earning through real activities. Additionally, highly levered and profitable firms are engaged in AB_EM practices, whereas big firm are do not manage their earnings through AB_EM practices. This finding supports the argument that big firm are more closely observed by stakeholders, so to save their image in society, do not manage earnings through AB_EM.

Similarly, to observe the influence of ownership structure on EM, Alzoubi (2016) also conduct a research in the context of Jordanian firms. For analysis, researcher utilized the data of 62 listed firms. EM is proxied by discretionary accruals and modified Jones Model (Dechow et al., 1995) is used for estimation of discretionary accruals. Moreover, various proxies of ownership structure are used. Alzoubi (2016) conclude that increase in managerial ownership lead to increase in EM, hence supporting the entrenchment view of agency theory (Jensen & Meckling, 1976), while family ownership and institutional ownership control the opportunistic behavior of management regarding EM. For this research, researcher control various other variables, like, leverage, profitability and firm size, and conclude that profitability and leverage are negatively related to EM, while firm size increase EM.

One the other side researchers also find that managerial ownership align the interest of managers and owners. Jehu and Ibrahim (2019) conduct research to inspect the influence of managerial ownership on EM. For this analysis, researcher use the data of Nigerian listed firms for the duration 2009-2017, and EM is proxed by discretionary accruals. Results of

the study portray that EM decreases with the increase in managerial ownership, and provide support to the alignment view of agency theory (Jensen & Meckling, 1976). In this analysis, researcher control various variables which may influence the relationship between, like firm size, leverage, age of firm and profitability.

Afzal and Habib (2018) also examine the influence of governance mechanism on EM practices of KSE-100 indexed firms. For this analysis researchers utilized the data of time span 2005-2013. EM practices are proxied by discretionary accruals and are computed through Modified Jones Model. Whereas, governance mechanism is proxied by board meetings, board size, independent board, CEO chair duality and different ownership structures. After applying fixed effect panel regression, study concludes that increase in executives' ownership and institutional ownership results in decrease in EM. Similarly board meetings and board size are significantly negatively linked with EM.

Based on above discussed studies, arguments, and in the light of SEW theory, it is hypothesized that:

*H11: Managerial ownership influence earnings management.*

*H11f: Managerial ownership has different impact on earnings management for family and non-family-firms.*

## 3.8 List of Hypothesis

The list of hypotheses is given as follows:

*H1: Leverage is positively associated with real earnings management.*

*H2: Leverage is negatively associated with accrual based earnings management.*

*H1f: Leveraged family-firms engagement in real earning management is different than the leveraged non-family-firms.*

*H2f: Leveraged family-firms involvement in accrual based earnings management is different than the leveraged non-family-firms.*

*H3: There exists association between CSR and earnings management*

*H3f: The relationship between CSR and EM is different for family and non-family-firms*

*H4: Board independence is associated with earnings management.*

*H4f: The impact of board independence is different on earnings management for family-firms and non-family-firms.*

*H5: Earnings management practices are affected by audit committee independence.*

*H5f: The impact of audit committee independence is different on earnings management for family-firms and non-family-firms.*

*H6: Earnings management practices are associated with board gender diversity.*

*H6f: The impact of gender diversity is different on earning management for family-firms and non-family-firms.*

*H7: Earnings management practices are affected by corporate board-size.*

*H7f: The impact of board size is different on earnings management for family-firms and non-family-firms.*

*H8: Firms earnings management practices are linked with firm size*

*H8f: The impact of firm's size on earning management is different for family-firms and non-family-firms*

*H9: Firms earnings management is associated with firm's profitability*

*H9f: The impact of firm's profitability on earnings management is different for family-firms and non-family-firms*

*H10: Earnings management is depend upon firm's age*

*H10f: The impact of firm's age on earning management is different for family-firms and non-family-firms*

*H11: Managerial ownership influence earnings management.*

*H11f: Managerial ownership has different impact on earnings management for family and non-family-firms.*

CHAPTER 4

# RESEARCH METHODOLOGY

## 4.1 Introduction

The current chapter consist of debate on data, sample selection criteria, variable measurement, and research procedure utilized to discuss the research questions of the study.

Following is the sequence of this chapter:

4.2 Data collection

4.3 Sample selection

4.4 Description of dependent variable

4.5 Family firms

4.6 Definition of independent variables

4.7 Model specification

4.8 Estimation technique

## 4.2 Data Collection

This study utilizes secondary data to address the research questions. Secondary data of developed country (USA) is collected from Thomson Reuters DataStream. Whereas, the data of developing country's (Pakistan) financial variables is collected from COMPOSTAT and governance variable data is collected manually from annual reports of firms, because this data is not available on data stream. Annual observations are utilized for analysis in this study for the period 2009-2017 (both inclusive) following the approach adopted by earlier studies (Eng, Fang, Tian, Yu & Zhang, 2018; Lisboa & Kacharava,

2018; Kumar & Vij, 2017) to control the impact of financial crises on financial reporting. Independent and dependent variables of the study are computed by using the above mentioned sources.

## 4.3 Sample Selection

This study utilizes the data of two countries i.e. USA and Pakistan. Pakistan is home country market of the researcher and is an important developing market, whereas USA is a developed market and is globally most influential market. At first stage data is distributed into two sub-groups. Subgroup one consists developed country (USA) data and subgroup two is about developing country (Pakistan) data. The reason for this division of data lies in the objectives of the study i.e. to check the impact of leverage, CSR, governance mechanism, firm characteristics and managerial ownership on both types (real and accrual) of EM in both institutional settings. After this step, by following Muttakin et al. (2015) and Shahzad et al. (2019) each sub sample again is distributed into two sub groups, i.e. family and non-family firms, to check the influence of family ownership on the association between independent variables of the study and EM. Measurement of family firm is discussed in section 4.5.

At second stage, financial firms are excluded from initial sample. The reason for this exclusion is based upon different basic fundamentals, like the difference of investment between financial and non-financial companies (Biddle et al., 2009), different reporting criteria (Bassiouny et al., 2016) and different regulatory bodies (Anderson et al., 2012). In literature several authors have excluded financial firms from the final sample (Cascino et al., 2010; Lisboa, 2016; Shahzad et al., 2017).

By following Shahzad et al. (2019) and Sajid (2017) this study uses convenience sampling. Table 4.1 and Table 4.2 display the process of sample selection for developed and developing economies respectively.

**Table 4.1 Process of Sampling (US Economy)**

| | Number of Firms | Firm-year Observations |
|---|---|---|
| Number of Listed Firms | 2541 | 22869 |
| Less: Finance Firms | 409 | 3681 |
| Final Sample | 2132 | 19188 |
| Family Firms | 1543 | 13,887 |
| Non-family firms | 589 | 5,301 |

**Table 4.2 Process of Sampling (Pakistan's Economy)**

| | Number of Firms | Firm-year Observations |
|---|---|---|
| Number of Listed firms | 559 | 5031 |
| Less: Financial firms | 174 | 1566 |
| Less: Firms having missing data | 203 | 1827 |
| Final Sample | 182 | 1638 |
| Family Firms | 97 | 873 |
| Non-family firms | 85 | 765 |

## 4.4 Description of Dependent Variable

EM is the dependent variable of this study. In literature three types of EM techniques are discussed, R_EM, AB_EM and classification shifting. R_EM activities have direct impact on firm's current and future cash flows and performance. On the other side AB_EM is just window dressing and has no impact on firms' current and future cash flows. R_EM is based on real actions of the firm, and it is very difficult for stakeholders to differentiate between actual transactions and structured transactions (DuCharme et al., 2001). EM literature mostly focused AB_EM (Schipper, 1989; Jones 1991; Cohen et al., 2010; Zang 2012; Ahmed, 2013; Waweru & Prot, 2018; Alareeni, 2018), and relatively few studies focused R_EM (Roychoudhary, 2006; Zang, 2012; Shahzad et al., 2017). This study uses both types of EM i.e. R_EM and AB_EM.

Current study adds to existing research work on EM by studying real and accrual EM simultaneously for developing and developed countries. Moreover, recent literature advocates that firms use R_EM and AB_EM techniques alternatively (Zhu et al., 2015, Doukakis, 2014). Hence analyzing EM through one technique may not provide true results. In addition to AB_EM, understanding of R_EM is also appreciated by recent literature (Cohen & Zarowin, 2010). According to Cohen and Zarowin (2010) R_EM has not been extensively analyzed as AB_EM.

As discussed earlier in section 2.2.3, the third kind of earning manipulation method is classification shifting. In this method management purposefully misclassified the items of profit and loss account (McVay, 2006). This method has no impact on net income of the firm, however management may involve in this method to deceive stakeholders those have concerned about core income of corporation.

McVay (2006) conducted a research on US listed companies for 1988 to 2003 and concludes that management opportunistically shift recurring expenses like cost of goods sold (CGS) and services and general admin (S&GAD) expenses to non-recurring cost. Due to this shifting, core income of the firm increases but it has no impact on net income of the firm. Abernathy et al. (2014) also conclude that firms are involved in classification based shifting EM when other techniques are not possible by analyzing US firms' data for 1988 to 2011.

However the emphasis of this study is real and accrual EM, classification based shifting method is beyond the scope of this study, because it has no impact on the net income of firm. According to McVay (2006) this method doesn't change the net income, so there is little chance that auditors use their energy and time to detect this type of irregularities. She further added that if stakeholder's emphasis on GAAP earnings for decisions this type of EM will be meaningless, so the focus of this study is only on real and accrual EM. In next two sections real and accrual EM measurements are discussed.

### 4.4.1 Real Earnings Management

To meet different targets, management may involve in EM activities through the decisions which have direct impact on firm's current and future cash flows like advertisement expenses, R&D expenses. These types of activities are known as R_EM. Management involves more in R_EM than AB_EM, because AB_EM activities have more chances to be caught by regulators as compare to R_EM (Cohen & Zarowin, 2010).

Firms may manipulate earnings by using different decisions like reduction in cost of goods sold by abnormal production of finished goods (Roychowdhury, 2006). According to Kuo et al., (2014), per unit fixed cost decline due to abnormal production. To measure

the normal production cost we estimate the following equation proposed by Roychowdhury (2006), by applying ordinary least square (OLS) technique. Equation 4.1 is estimated for each firm in order to estimate error term which is ultimately employed as a one proxy of R_EM (abnormal cash flow from production)

**PCt = α +β1SRt + β2ΔSRt + β3ΔSRt-1 + Ɛt -------- (4.1)**

Where, PCt represents production cost at time t, which is the sum of cost of goods sold in year t and change in inventory over the period t-1 to t. SRt is the sales revenue at time t. ΔSRt is the variation in sale revenue from time t to t-1. ΔSRt-1 is variation in sale revenue from time t-1 to t-2. Ɛt represents the error term. Following Roychowdhury (2006) all the variables in equation (4.1) are divided by the total assets of previous period ($TA_{t-1}$), so that the impact of change in total assets on production cost and on sales can be neutralized. The residuals calculated from this cross-section OLS represent abnormal production cost. Higher level of residuals show larger no of units produced, hence reduction in per unit cost of goods sold and increases in earnings.

Management of the firm can increase the earnings of the period by reducing the non-operating costs. Non-operating costs which a firm can reduce include advertisement cost, research and development cost and selling and admin cost. Above mentioned costs are normally paid in cash. By reducing these costs firm can increase current period's cash flow but at the stake of future cash flows. Hence, negative discretionary expenses in the current period are interpreted as R_EM activity. To measures normal level of discretionary expenses we estimate the following model proposed by Roychowdhury (2006), by applying OLS technique on each firm observation:

$$DEt = \alpha + \beta 1 SRt\text{-}1 + Ɛt \text{--------(4.2)}$$

Where DEt represents discretionary expenses at time t. SRt-1 represent sale revenue at time t-1. Ɛt represents the error term. All variables of equation (4.2) are divided by the total assets of previous year to neutralize the impact of change in total assets on discretionary expenditures and on sales. The residual obtained from this ordinary least squares regression represents abnormal level of discretionary expenses. More negative value of residuals of model (3.2) indicate more R_EM through discretionary expenses.

Firms can also manage their earnings by giving sale discounts and by offering lenient credit policy. By doing this, firms cash flow from operations decrease abnormally (Roychowdhury, 2006). To measure this type of EM activity Roychowdhury (2006) proposed a model to measure normal cash flow from operations. Following is the description of model:

$$CFOt = \alpha + \beta 1\ SRt + \beta 2 \Delta SRt + \text{Ɛ}t \text{--------} (4.3)$$

Where CFOt represents cash flow from operations at time t. SRt is the sale revenue at time t. Further, ΔSRt is the variation in sale revenue from time t to t-1 and Ɛ is residuals which represent the abnormal cash flow from operations. Following Roychowdhury (2006) all the variables of equation (4.3) are divided by lag of total assets. Model (4.3) is estimated by applying OLS technique for each firm.

Roychowdhary (2006) describes three main causes for using above three equations namely 4.1, 4.2 and 4.3 to detect R_EM. First, management can increase the sale revenue by offering extra discount and relaxed credit terms than normal routine. By doing this, management in a position to increase sale revenue for current time period. Due to additional sales revenue firms will boost current period profit. However this action of management reduces future period sales and earnings.

Secondly, management in a position to report decreased cost of goods sold by producing more than required inventory in normal routine. By producing more than requirement in current period fixed cost is spread over a large number of units, which reduces the per unit fixed cost. Per unit total cost will also decrease by decreasing per unit fix cost, because per unit total cost is sum of fixed unit per cost plus per unit variable cost. Consequently, firm will be in a position to report lower level of cost of goods sold and higher earnings. However, due to over production other costs will increase like holding cost and other operational costs, which will reduce operating cash flows.

Third reason explained by Roychowdhary (2006) is, as management in a position to reduce discretionary expenditures of the current period to reduce reported period expenses hence higher earnings. Discretionary expenditures include research and development expenditure, selling and admin expenses. Cash flow from operation can also be increased by doing so, because normally these expenditures are paid in cash. However by doing so firm future cash flow could be decreased.

In literature, three other aggregate measures are used to detect total R_EM (Achleitner et al, 2014). Consistent with Achleitner et al. (2014) those aggregate measures are as follows:

$$R\_EM1 = (-1)\, Ab.OCF + Ab.PC \text{--------} (4.4)$$

Where Ab.OCF presents abnormal operating cash flows and Ab.PC presents abnormal production cost.

The model 4.4 is the sum of abnormal production cost and abnormal operating cash flows after multiplying by -1. Higher the value of R_EM1 indicates higher EM by firm by

overproduction and offering cash discount and lenient credit terms (Zang, 2012). This is also explained by Anagnostopoulou and Tsekrekos (2016).

Second aggregate measure of R_EM is as follows:

$$R\_EM2 = (-1)* Ab.OCF + (-1)*Ab.DE\text{--------}(4.5)$$

Where Ab.OCF presents abnormal operating cash flows and Ab.DE presents abnormal discretionary expenditures.

In this model abnormal operating cash flows are multiplied by -1 and then added it in residuals of discretionary expenditures after multiplying with -1. Higher the value obtained from above model indicates higher EM by management by offering sale discount, lenient credit policy and by reducing discretionary expenditures (Anagnostopoulou & Tsekrekos, 2016).

Third aggregate model of R_EM is as follow:

$$R\_EM3 = (-1)* Ab.OCF + Ab.PC + (-1)* Ab.DE\text{--------}(4.6)$$

Where Ab.OCF presents abnormal operating cash flows, Ab.PC presents abnormal production cost and Ab.DE presents abnormal discretionary expenditures.

This research employs model (4.6), which combines all the three individual components of real earnings management i.e. abnormal operating cash flows, abnormal production cost, and abnormal discretionary expenditures. Abnormal operating cash flows accrue from sale discounts and/or lenient credit policy for customer, which manipulate earnings by increasing sale revenues. If firms manage earnings by intentionally giving favorable terms to clients to boost sales, abnormal cash flow from operations will be negative. Abnormal production cost is the costs that come from a firm's overproduction to reduce fixed indirect manufacturing costs per unit and to increase net income. Thus, if firm

produce more products than they actually need in order to manage earnings, abnormal production cost will be positive. Abnormal discretionary expenses include R&D expenses, advertisement and admin expenses, and education expenses. If firms manage earnings by reducing SG&A expenses, abnormal discretionary expenditures will be negative.

### 4.4.2 Accrual Based Earnings Management

Managers also manage earnings through discretionary accruals. In past, several models are developed and used to measure discretionary accruals like Healy Model (1985), DeAngelo Model (1986), Jones Model (1991), Modified Jones Model (1995), Performance based Jones Model (2005) and others. According to Bartov et al., (2000), AB_EM models can be classified into two groups, simple models and more complex models. In simple models, total accruals are used as a proxy to measure discretionary accruals (Healy model, 1985) and in complex models, regression method is used to decompose total accruals into discretionary and non-discretionary accruals, like Jones Model (1991), Modified Jones Model (Dechow et al., 1995), performance based jones model (Kothari et al, 2005) and some others.

This study employs performance based Jones model (Kothari et al., 2005) to capture discretionary part of total accruals, which is one of the most widely used AB_EM model (Saeed et al. 2019; Lazzem & Jilani, 2017; Anagnostopoulou & Tsekrekos, 2017; Lisboa, 2016, Ismail et al., 2015; Baig & Khan 2016;Yang, 2010).

#### *4.4.2.1 Performance-Matched Discretionary Accruals Model*

Following is the equation of performance based Jones model modified by Kothari et al. (2005):

$$TAC_t = \alpha + \beta_1 \Delta Sales_t + \beta_2 PPE_t + \beta_3 ROA_t + \varepsilon_t \text{ -------- } (4.7)$$

Where

$TAC_t$ = Total accrual measured as the difference between income before extraordinary items and cash flow from operations of firm in year t,

$\Delta Sales_t$ = Change in sales of firm from year t to t-1,

$PPE_t$ = Net amount of property plant and equipment of firm in year t,

$ROA_t$ = Return on assets of firm in year t

$\varepsilon$ = error term

All variables of above equation are divided by lagged total assets of firm to standardize all variables except ROA. Model 4.9 is estimated through OLS method for each firm.

The difference between actual and estimated accruals represents discretionary accruals.

## 4.5 Family-firms

In literature different measures are used for family-firms. Anderson and Reeb (2003) distinguish family-firms from non-family-firms on the basis that if founding family own the shares of firm and also a family member is part of board of directors, then it is a family firm otherwise firm is considered as non-family. A firm is known as family firm if single owner owns 5% or more than 5% share of a company's outstanding shares (La Porta et al., 1999). According to García-Sánchez, Martinez-Ferrero and García-Meca (2018), a firm is considered as family firm if family block holders hold at least 20% shares. ''family-firms are those firms, where a family owner exercises much influence over the firm's affairs'' (Gomez-Mejia, Cruz, Berrone, & De Castro, 2011). Miller et al. (2007) define a family firm as one in which multiple members of the same family are involved as major owners

or managers. This study considers the definition of Barontini and Caprio (2006). Barontini and Caprio (2006) define that a firm is a family firm if largest shareholder own minimum 10% shares of the company (Jara et al. 2019; Lozano et al. 2016; Pindado et al., 2008)

## 4.6 Independent Variables

The study has five independent variables: capital structure (CS), corporate governance mechanism (CGM), corporate social responsibility (CSR), firm characteristics (FC), and ownership structure (OS).

### 4.6.1 Capital Structure

Capital structure is the mix of debt and equity. Consistent with the previous studies capital structure is proxied by leverage, it is a continuous variable which is equal to the ratio of total debt to total assets (Saeed et al. 2019; Shahzad et al. 2019; D'Acunto, Liu, Pflueger, & Weber, 2018; Ibhagui & Olokoyo, 2018; Anagnostopoulou & Tsekrekos, 2016).

### 4.6.2 Corporate Governance Mechanism

In literature, different proxies of corporate governance are used to measure corporate governance like, board-size (Vaidya, 2019; Tulung & Ramdani, 2018; Zion & Markarian, 2018), board independence (Neville et al., 2019; Uribe-Bohorquez et al., 2018; Tulung & Ramdani, 2018; Matoussi & Gharbi 2011), board gender diversity (Brieger et al., 2019; Galbreath, 2018; Kyaw et al., 2015; Lakhal et al., 2015), financial literacy of board members (Sarwar et al., 2018; Ebirien et al., 2018), audit-committee independence (Majiyebo et al., 2018; Alqatamin, 2018), board meetings (Ebirien et al., 2018), audit-committee meetings and number of board committees (Singh et al., 2018).

This study utilizes four proxies for corporate governance mechanism, namely independent board, board gender diversity, audit-committee independence, and size of board. Independent board is the ratio of independent board members to total board members (Neville et al., 2019; Tulung & Ramdani, 2018; Matoussi & Gharbi, 2011). Aaudit-committee independence is measured as percentage of independent directors in audit-committee (Majiyebo et al., 2018; Alqatamin, 2018; Crutchley, Jensen & Marshall, 2007). Furthermore, board gender diversity is measured as a percentage of female directors on board (Brieger et al., 2019; Cherian et al., 2019; Kyaw et al., 2015; Lakhal et al., 2015), while board-size is measured as a natural log of number of board members (Vaidya, 2019; Tulung & Ramdani, 2018; Zion & Markarian, 2018).

### 4.6.3 Firm Characteristics

EM literature has highlighted various firm characteristics like firm size (Vakilifard & Mortazavi, 2016; Razzaque et al., 2016), firm age (Khanh & Nguyen, 2018; Capalbo et al., 2018) and profitability (Anagnostopoulou & Tsekrekos, 2016; Vakilifard & Mortazavi, 2016; Razzaque et al., 2016), which can influence earnings management. This study utilized firm size, age and profitability as proxies of firm characteristics. Firm size is measured as a natural log of total assets (Vakilifard & Mortazavi, 2016; Razzaque et al., 2016), firm age is measured as a natural log of number of years a firm is listed on stock exchange (Khanh & Nguyen, 2018; Capalbo et al., 2018) and profitability is measured as return on assets (Shahzad et al. 2019; Anagnostopoulou & Tsekrekos, 2016; Vakilifard & Mortazavi, 2016; Razzaque et al., 2016).

### 4.6.4 Ownership Structure.

In EM literature, the role of ownership structure has been discussed very frequently (Sadjiarto et al. 2019; Moslemany & Nathan, 2019; Lassoued et al. 2018; Kazemian & Sanusi, 2015). In previous studies different proxies of ownership structures are used, like foreign ownership, managerial ownership, and institutional ownership. This study utilized managerial ownership as a proxy of ownership structure. Managerial ownership is measured as the ratio of sum of equity securities owned by all directors and officers of a corporation to the total share outstanding (Sadjiarto et al., 2019; Kazemian & Sanusi, 2015; Fahlenbrach & Stulz, 2009).

### 4.6.5 Corporate Social Responsibility (CSR).

This study measures CSR performance of a firm by using firm's annual environmental, social and governance (ESG) scores calculated by Thomson data stream, which is one of the extensively used method in CSR literature (Han, Kim & Yu, 2016). Attig et al. (2015) and Cheng et al. (2014) also measured CSR performance by taking the average of firms' annual ESG scores.

Due to unavailability of Pakistani firm's annual ESG scores, this study measured CSR performance of Pakistani listed non-financial firms by utilizing the method of Haniffa and Cooke (2005). This method used the information of CSR activities that are mentioned in firm's annual reports. The detailed measure of CSR performance is provided in appendix 1. In literature several researchers has used this method (Saeed et al. 2019; Qa'dan & Suwaidan, 2019; Platonova, Asutay, Dixon & Mohammad, 2018; Ali, Frynas & Mahmood, 2017).

## 4.7 Model Specification

To test the study hypotheses H1, H2… and H11, the data is divided into two samples i.e. developing country and developed country. After that, by following Muttakin et al.(2016), Shahzad et al (2018), we further divided each sample into two sub samples i.e. family-firms and non-family-firms to test the hypotheses H1f, H2f, …… and H11f. Following statistical model is developed to study the relationship between independent and dependent variables.

$$EM_{i,t} = \alpha + \beta_1 CS_{i,t} + \beta_2 CSR_{i,t} + \beta_3 GM_{i,t} + \beta_4 FC_{i,t} + \beta_5 MO_{i,t} + \varepsilon_{i,t} \text{-------- } (4.8)$$

Where, EM presents earning management, which is proxied by R_EM and AB_EM. Further, CS is capital structure that is measured as total debt to total assets, CSR is corporate social responsibility proxied as CSR index, GM is corporate governance mechanism, proxied as board independence, board-size, audit-committee independence and board gender diversity. FC is firm characteristics, proxied by firms' size, profitability and firm age. MO represent ownership structure, proxied by managerial ownership. ε represents the error term. Subscript i represents firm i and t represents time. Following Li and Chen (2018) and Shahzad et al. (2017), Herwartz (2010) the study used specific to general approach to test the hypotheses mentioned in Chapter 3. At first stage, study estimates the impact of specific independent variable separately on the dependent variable for full sample, family-firms and non-family-firms, and in second stage, the study estimates the impact of all independent variables simultaneously on the dependent variable for full sample, family-firms and non-family-firms.

### 4.7.1 Earnings Management Family Ownership and Capital Structure

The study used two proxies of EM i.e. R_EM and AB_EM. Following are the models to test hypotheses H1, H1f, H2, and H2f:

$$R\_EM_{i,t} = \alpha + \beta_1 LEV_{i,t} + \varepsilon_{i,t} \text{----------} (4.9)$$

Where

R_EM = Real earnings management

LEV = Leverage is proxy of capital structure and measured as the ratio of debt to total assets

α is constant term and β1 is coefficient of regression

Ɛ = error term of regression

i = Firm i

t = Time

$$AB\_EM_{i,t} = \alpha + \beta_1 LEV_{i,t} + \varepsilon_{i,t} \text{----------} (4.10)$$

Where

AB_EM = Accrual earnings management

LEV = Leverage is proxy of capital structure and measured as the ratio of debt to total assets

α is constant term and β1 is coefficient of regression

Ɛ = error term of regression

i = Firm i

t = Time

### 4.7.2 Earnings Management Family Ownership and Corporate Social Responsibility

To check the impact of CSR on EM (real & accrual) for full sample and subsample of family and non-family-firms, hypotheses H3 and H3f are constructed in chapter 3. To test H3 and H3f, models 4.13 and 4.14 are used. Following are the models and their description:

$$R\_EM_{i,t} = \alpha + \beta_1 CSR_{i,t} + \varepsilon_{i,t} \text{----------} (4.11)$$

Where

R_EM = Real earning management

CSR = Corporate Social Responsibility and is proxied by CSR index

α is constant term and β1 is coefficient of regression

Ɛ = error term of regression &

i = Firm i

t = Time

$$AB\_EM_{i,t} = \alpha + \beta_1 CSR_{i,t} + \varepsilon_{i,t} \text{----------} (4.12)$$

Where

AB_EM = Accrual earning management

CSR = Corporate Social Responsibility and is proxied by CSR index

α is constant term and β1 is coefficient of regression

Ɛ = error term of regression

i = Firm i

t = Time

### 4.7.3 Earnings Management Family Ownership and Corporate Governance Mechanism

Corporate governance mechanisms are made to align the interest of executives with the interest of owners. Family ownership is one of the potential factor which may influence the effectiveness of corporate governance mechanism. To check the association of corporate governance mechanism proxies with EM and the influence of family ownership on the relationship between EM (real and accrual) and governance mechanism proxies, the study formulated hypotheses H4, H4f, H5, H5f, H6, H6f, H7 and H7f. To test these hypotheses the following models are used for full sample and subsamples, consisting of family and non-family-firms:

$$R\_EM_{i,t} = \alpha + \beta_1 BI_{i,t} + \beta_2 BRDSZ_{i,t} + \beta_3 ACI_{i,t} + \beta_4 BGDV_{i,t} + \varepsilon_{i,t} \text{----------} (4.13)$$

Where

R_EM = Real earnings management

BI = Board independence

BRDSZ = Board size, and measures as natural log of number of board members

ACI = Audit committee independence

BGDV = Board gender diversity

α is constant term and β1, β2 , β3 & β4 are coefficients of regression

Ɛ = error term of regression

i = Firm i

t = Time

$$AB\_EM_{i,t} = \alpha + \beta_1 BI_{i,t} + \beta_2 BRDSZ_{i,t} + \beta_3 ACI_{i,t} + \beta_4 BGDV_{i,t} + \varepsilon_{i,t} \text{----------} (4.14)$$

Where

AB_EM = Accrual earnings management

BI = Board independence

BRDSZ = Board size, and measures as natural log of number of board members

ACI = Audit committee independence

BGDV = Board gender diversity

α is constant term and β1, β2 , β3 & β4 are coefficients of regression

Ɛ = error term of regression

i = Firm i

t = Time

### 4.7.4 Earnings Management Family Ownership and Firm Characteristics.

As discussed in literature review chapter, firm characteristics affect EM. Family-firms have different objective of EM than non-family-firms (Gomez Mejia, 2007). To check the impact of firms' characteristic on EM and the role of family ownership on the association between firms' characteristics and EM (real & accrual), study formulated hypotheses H8, H8f, H9, H9f, H10 and H10f. To test these hypotheses following models are utilized for all three samples i.e. full sample, family-firms and non-family-firms:

$$R\_EM_{i,t} = \alpha + \beta_1 SIZE_{i,t} + \beta_2 ROA_{i,t} + \beta_3 Age_{i,t} + Ɛ_{i,t} \text{----------} (4.15)$$

Where

R_EM = Real earnings management

SIZE = Firm size and measured as natural log of total assets

ROA = Return on assets

Age = Firm's age and measured by taking natural log of listing years

α is constant term and β1, β2 and β3 are coefficients of regression

Ɛ = error term of regression

i = Firm i

t = Time

$$AB\_EM_{i,t} = \alpha + \beta_1 SIZE_{i,t} + \beta_2 ROA_{i,t} + \beta_3 Age_{i,t} + Ɛ_{i,t} \text{ ----------} (4.16)$$

Where

AB_EM = Accrual earnings management

SIZE = Firm size and measured as natural log of total assets

ROA = Return on assets

Age = Firm's age and measured by taking natural log of listing years

α is constant term and β1, β2 and β3 are coefficients of regression

Ɛ = error term of regression &

i = Firm i

t = Time

### 4.7.5 Earnings Management Family Ownership and Managerial Ownership

In literature there exist two views regarding managerial ownership and EM i.e. alignment and entrenchment views respectively (Jensen, 1986). However, family-firms have their own objectives regarding EM. To understand the influence of managerial ownership on EM (real & accrual) in the presence of family ownership the study hypothesized H11 and H11f

To test hypotheses H11 and H11f, the study used the following models:

$$R\_EM_{i,t} = \alpha + \beta_1 INSDOWN_{i,t} + Ɛ_{i,t} \text{ --------} (4.17)$$

Where

R_EM = Real earnings management

INSDOWN = Managerial owner ship

α is constant term and β1 is coefficient of regression

Ɛ = error term of regression &

i = Firm i

t = Time

$$AB\_EM_{i,t} = \alpha + \beta_1 INSDOWN_{i,t} + Ɛ_{i,t} \text{ ----------} (4.18)$$

Where

AB_EM = Accrual earnings management

INSDOWN = Managerial owner ship

α is constant term and β1 is coefficient of regression

Ɛ = error term of regression

i = Firm i

t = Time

### 4.7.6 Relationship between Earnings Management and all Independent Variables.

The current section explains the general models that are utilized to test all hypotheses of the study. Following the earlier work of Achleitner et al. (2014) and Wang (2006), following model is constructed:

$$R\_EM_{i,t} = \alpha + \beta_1 LEV_{i,t} + \beta_2 CSR_{i,t} + \beta_3 BI_{i,t} + \beta_4 BRDSZ_{i,t} + \beta_5 ACI_{i,t} + \beta_6 BGDV_{i,t} + \beta_7 SIZE_{i,t} + \beta_8 ROA_{i,t} + \beta_9 Age_{i,t} + \beta_{10} INSDOWN_{i,t} + Ɛ_{i,t} \text{ ----------} (4.19)$$

Where

R_EM = Real earnings management

LEV = Leverage and measured as ratio of total debt to total assets

CSR = Corporate Social Responsibility Index

BI = Board independence

BRDSZ = Board size, and measures as natural log of number of board members

ACI = Audit committee independence

BGDV = Board gender diversity

SIZE = Firm size and measured as natural log of total assets

ROA = Return on assets

Age = Firm's age and measured by taking natural log of listing years

INSDOWN = Managerial owner ship

α is constant term and β1, β2 , …, β10 are coefficients of regression

Ɛ = error term of regression

i = Firm i

t = Time

$$AB\_EM_{i,t} = \alpha + \beta_1 LEV_{i,t} + \beta_2 CSR_{i,t} + \beta_3 BI_{i,t} + \beta_4 BRDSZ_{i,t} + \beta_5 ACI_{i,t} + \beta_6 GDV_{i,t} + \beta_7 SIZE_{i,t} + \beta_8 ROA_{i,t} + \beta_9 Age_{i,t} + \beta_{10} INSDOWN_{i,t} + \varepsilon_{i,t} \text{ ----------} (4.20)$$

Where

AB_EM = Accrual Earnings Management

LEV = Leverage and measured as ratio of total debt to total assets

CSR = Corporate Social Responsibility Index

BI = Board independence

BRDSZ = Board size, and measures as natural log of number of board members

ACI = Audit committee independence

BGDV = Board gender diversity

SIZE = Firm size and measured as natural log of total assets

ROA = Return on assets

Age = Firm's age and measured by taking natural log of listing years

INSDOWN = Managerial owner ship

$\alpha$ is constant term and $\beta 1, \beta 2, \ldots, \beta 10$ are coefficients of regression

$\varepsilon$ = error term of regression

i = Firm i

t = Time

Note: the study has employed above models for all three samples i.e. full sample, family-firms and non-family-firms.

## 4.8 Estimation Techniques

Current study utilizes two ways clustered pooled-OLS estimation technique to test the hypotheses H1 through H11 and H1f through H11f. The choice of two way clustered pooled-OLS is based on some diagnostic tests. First of all, LM test is employed which lead to the choice of pooled OLS instead of random effect. The results of LM test are reported in Table 5.15. At second step, auto-correlation and heteroscedasticity are tested for all models i.e. 4.9 to 4.20. Result for heteroscedasticity and auto-correlation tests are reported in Table 5.17, Table 5.18, Table 5.19 and Table 5.20. Results indicate that there exist autocorrelation and heteroscedasticity problem. To handle this issue of auto- correlation and heteroscedasticity, this study employed two way clustered pooled-OLS recommended by Petersen (2009). This approach has broader acceptability and utilization in the corporate finance and is ranked higher for the estimation of standard errors. In addition, industry and year dummies are taken in to account in the models to estimate the sector and year specific influence. For robustness of the results, this study also employed GMM technique.

For comparison of regression coefficients of independent variables for family firms and non-family firms, and for developing and developed countries, t-test is used.

### 4.8.1 Pooled OLS Clustered in Two Ways

This study utilize two way clustered pooled -OLS regression technique for the estimation of equations 4.9 to 4.20. Panel data set is utilized for both countries to estimate regression coefficients. Usually panel data reveals auto-correlation and heteroscedasticity for variables of interest (Petersen 2009). The existence of auto-correlation and heteroscedasticity in panel data leads to violation of the OLS assumption of independence, which may leads to misspecification of test statistics. Using the data without correction of auto- correlation and heteroscedasticity yields to miss specified test-statistics in research based on accounting data (Gow et al., 2010). Since the results of diagnostic tests presented in Chapter CHAPTER 55, indicate that there exist the problem of auto-correlation and heteroscedasticity in both sets of data, so by following the suggestion of Petersen (2009), this study used pooled OLS clustered at firm and year level. Gow et al. (2010) also prove that pooled OLS clustered at firm and year level is robust to both serial and cross-sectional correlations.

### 4.8.2 GMM Method

For the robustness of results, this study employed System Generalized method of moment (GMM) to estimate the coefficients of the regression of equations 4.21 and 4.22. System GMM is superior to Difference GMM in the way that it permits the indication of more instruments than Difference GMM. This advantage of system GMM increased the efficiency of results (Blundell & Bond, 1998). The assumption of System GMM includes that the first difference of instrument variable is not correlated with the fixed effect, and it

includes large number of individuals and small time periods. Moreover, GMM also take care the issue heteroscedasticity and autocorrelation in the model.

## 4.9 Diagnostic Tests

### 4.9.1 Test for Pooled OLS

To investigate that either pooled OLS technique can be employed on the data or not, the Breusch-Pagen Lagrange Multiplier (LM) test is used. LM test checks that whether the intercept is common for all the companies, against the alternative that intercept is not common. If the null hypothesis is accepted, then OLS is used instead of random effect. Table 5.15 and

Table 5.16 present the results of LM test.

### 4.9.2 Test for Normality of Data

Gujarati and Porter (2009) suggest that the error terms must be normally distributed before applying endogenity test, auto-correlation test and heteroscedasticity test. To check the normality of error terms Jarque Bera test is employed. The null hypothesis which is tested under this test is that 'error terms are normally distributed' against the alternative hypothesis that error terms are not normally distributed.

### 4.9.3 Test for Stationarity of the Data

Fisher test is utilized to check the stationarity of panel data. The null hypothesis to check under this test is "data is non stationary" against the alternative that "data is stationary" at level. If null hypothesis accepted, it is the indication that in non-stationary at level. To make the data stationary 1st difference is used. If the data still is non-stationary then 2nd difference is utilized.

### 4.9.4 Test for Auto-Correlation in Data

To check the auto-correlation of panel data, Wooldridge test is used. If covariance exists between residuals or error terms, it means that there exist auto-correlation in panel data. The null hypothesis of this test is 'No auto-correlation is present in panel data, against the alternative hypothesis that auto-correlation is present in panel data.

### 4.9.5 Test for Heteroscedasticity in Data

To observe the presence of heteroscedasticity in panel data, Modified Wald test is used. Heteroscedasticity means that error term varied over time. The null hypothesis to check under this test is, over time error terms remain constant against the null hypothesis that error terms are not remain constant.

CHAPTER 5

# EMPIRICAL RESULTS

## 5.1 Introduction

This chapter elaborates the results of the study. Sequence of this chapter is as follow:

5.2 Descriptive Statistics of US listed firms

5.3 Differences between Means

5.4 Investigation of models and data

5.5 Regression results

## 5.2 Descriptive statistics

### 5.2.1 US Data

Descriptive statistics related to full sample of US firms and sub-sample of US non-family-firms and US family-firms appear in Table 5.1, Table 5.2 and Table 5.3 respectively. Descriptive statistics tables explain the characteristics (minimum, maximum, mean, median, standard deviation, 25th percentile and 75th percentile) of full sample and sub-samples. Table 5.1 presents that the mean of combined R_EM is 0.336, while mean of combined R_EM for non-family-firms and family-firms are 0.372 and 0.320 respectively. This result indicates that listed family-firms in USA are less involved in R_EM activities than listed non-family-firms. According to Achleitner et al., (2014) manipulation in real activities damage long run objective of family-firms i.e. dynastic succession, so family-firms are less involved in real earing management activities.

Performance based Jones model (Kothari et al., 2005) is used to measure AB_EM. Residuals obtained from performance based Jones model (Kothari et al., 2005) are used as

a proxy of AB_EM. Mean value of residuals obtained from above mentioned model is (-0.831), (-2.981) and (0.111) for full sample, non-family-firms and family-firms respectively. Family-firms are more involved in AB_EM as compare to non-family-firms.

Capital structure, which is one of the independent variable of the study, is measured as the ratio of total debt to total assets. Table 5.1 also shows that debt to asset ratio for full sample of US listed non-financial firms is 56.51%. While debt to asset ratio for non-family and family-firms is 59.70% and 55.13% respectively. Debt financing in non-family-firms is higher than family-firms. This indicates that to stay away from scrutiny of creditors and to control the matters of organization, family-firms avoid from debt financing.

Firm characteristic is another independent variable which is proxied by firm profitability, firm age and firm size and measured as return on assets, natural log of listing age and natural log of total assets respectively. Return on assets for full sample is 5.60%, while ROA for non-family-firms and family-firms is 6.2% and 5.3% respectively. To avoid the pressure from shareholders and to avoid political cost, family-firms declare less profit as compare to non-family-firms. Results also depict that non-family-firms (AGE=3.296) are more mature than family-firms (AGE=2.368), while size of family-firms (ln ta = 13.569) is less than the size of non-family-firms (ln ta = 15.868).

Governance structure is proxied by four different variables, such as, audit-committee independence, board independence, board-size and board gender diversity. Audit-committee independence is the ratio of number of independent directors in audit-committee to size of audit-committee. On average audit-committee of non-family-firms (99.5%) are more independent than audit-committees of family-firms (96%), whereas on average board of directors of family-firms are less independent (72.7%) than the board of non-family-

firms (81.9%). On the other side non-family-firms (10.114) have larger board-size than family-firms on average (8.75).

CSR is another independent variable of the study and it is proxied by CSR index. Detail of CSR Index calculation is available in appendix 1 of thesis. Results show that on average non-family-firms (CSR Index = 0.62) in US are more socially responsible as compare to US family-firms (CSR Index = 0.34). Results of Table 5.2 and Table 5.3 depict that on average managerial ownership in family-firms is less than the managerial ownership in non-family-firms. Family-firms wants to keep their control over the matters of organization, so they are reluctant to make executives as owner.

**Table 5.1 Descriptive Statistics of US firms (Full Sample)**

| Variables | Min | Max | Mean | Median | St.dv | P25 | P75 | N |
|---|---|---|---|---|---|---|---|---|
| R_EM | -1.446 | 1.764 | 0.336 | .438 | .517 | .066 | .725 | 12479 |
| AB_EM | -9.379 | 21.796 | -0.831 | -2.184 | 6.369 | -4.04 | -.449 | 14762 |
| ROA (%) | -44.6 | 20.2 | 5.60 | 4.9 | 13.1 | 1.3 | 8.8 | 16614 |
| LEV (%) | 0.0 | 10 | 56.51 | 56.57 | 22.92 | 38.27 | 73.65 | 17174 |
| F_Size | 0 | 20.477 | 14.262 | 14.329 | 1.921 | 13.04 | 15.513 | 17494 |
| AGE | 0 | 3.807 | 2.626 | 2.944 | 1.029 | 1.792 | 3.434 | 19026 |
| M_Own (%) | 0 | 96.6 | 05.1 | 0 | 13.2 | 0 | 0.8 | 19188 |
| Famown (%) | 0.1 | 99.8 | 15.9 | 10.3 | 16.7 | 7.5 | 14.3 | 6284 |
| BI (%) | 0 | 100 | 77.9 | 81.8 | 14.5 | 71.4 | 88.9 | 9384 |
| BGDV (%) | 0 | 75 | 14.9 | 14.3 | 10.6 | 9.18 | 22.2 | 9387 |
| B_SIZE | 1 | 19 | 9.52 | 9 | 2.242 | 8 | 11 | 9385 |
| CSR | 0.056 | 0.96 | 0.50 | 0.43 | 0.24 | 0.29 | 0.73 | 9421 |

**Table 5.2 Descriptive Statistics of US firms (Non-Family-firms)**

| Variables | Min | Max | Mean | Median | St.Dev | P25 | P75 | N |
|---|---|---|---|---|---|---|---|---|
| R_EM | -1.435 | 1.585 | 0.372 | 0.475 | 0.467 | 0.143 | 0.716 | 3865 |
| AB_EM | -9.379 | 21.796 | -2.918 | -2.85 | 3.464 | -4.702 | -1.573 | 4589 |
| ROA (%) | -44.6 | 20.2 | 6.2 | 6.1 | 7.4 | 3.5 | 10 | 5153 |
| Lev (%) | 0.00 | 100 | 59.70 | 60.24 | 18.84 | 47.32 | 72.75 | 5175 |
| F_Size | 10.444 | 20.477 | 15.868 | 15.77 | 1.248 | 14.996 | 16.675 | 5277 |
| AGE | 0 | 3.807 | 3.296 | 3.401 | 0.592 | 3.045 | 3.807 | 5298 |
| M_Own (%) | 0 | 96.6 | 10.7 | 5.8 | 13.3 | 0.6 | 15.7 | 5298 |
| Famown (%) | 0.1 | 9.90 | 4.59 | 5.01 | 2.3 | 2.30 | 8.94 | 5298 |
| BI (%) | 0 | 100 | 81.9 | 84.6 | 10.8 | 76.9 | 90 | 5290 |
| BGDV (%) | 0 | 66.7 | 16 | 16.7 | 10 | 10 | 22.2 | 5291 |
| B_SIZE | 1 | 18 | 10.114 | 10 | 2.12 | 9 | 11 | 5291 |
| CSR | 0.16 | 0.96 | 0.62 | 0.64 | 0.21 | 0.42 | 0.84 | 5291 |

**Table 5.3 Descriptive Statistics of US firms (Family-firms)**

| Variables | Min | Max | Mean | Median | St.dev | P25 | P75 | N |
|---|---|---|---|---|---|---|---|---|
| R_EM | -1.446 | 1.764 | 0.32 | 0.418 | 0.537 | 0.03 | 0.731 | 8614 |
| AB_EM | -9.379 | 21.796 | 0.111 | -1.853 | 7.113 | -3.673 | 0.478 | 10173 |
| ROA (%) | -42.6 | 18.2 | 5.33 | 5.02 | 14.6 | -5.00 | 8.1 | 11461 |
| LEV (%) | 0.0 | 100 | 55.13 | 53.95 | 24.34 | 34.09 | 74.23 | 11999 |
| F_Size | 0 | 20.144 | 13.569 | 13.647 | 1.737 | 12.58 | 14.62 | 12217 |
| AGE | 0 | 3.807 | 2.368 | 2.565 | 1.045 | 1.609 | 3.219 | 13728 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| M_Own (%) | 0 | 94.1 | 27.9 | 30.0 | 12.5 | 10.0 | 80.0 | 13890 |
| Famown (%) | 10.1 | 99.8 | 48.3 | 45.0 | 21.4 | 29.2 | 66.6 | 986 |
| BI (%) | 0 | 1 | 72.7 | 77.3 | 16.9 | 63.6 | 85.7 | 4094 |
| BGDV (%) | 0 | 75 | 13.5 | 12.5 | 11.2 | 0 | 20 | 4096 |
| B_SIZE | 1 | 19 | 8.75 | 9 | 2.16 | 7 | 10 | 4094 |
| CSR | 0.05 | 0.95 | 0.34 | 0.29 | 0.17 | 0.23 | 0.39 | 4130 |

### 5.2.2 Pakistani Data

Descriptive statistics related to full sample of listed firms in Pakistan, and sub-sample of listed non-family and family-firms appear in Table 5.4, Table 5.5 and Table 5.6 respectively. Descriptive statistics tables explain the characteristics (minimum, maximum, mean, median, standard deviation, 25th percentile and 75th percentile) of full sample and sub-samples. Table 5.4 shows that the mean of combined R_EM is 0.354, 0.183 and 0.564 for full sample, non-family-firms and for family firms respectively. These results argued that Pakistani family-firms manage their earnings through R_EM activities more than non-family-firms.

Performance based Jones Model is used to measure AB_EM. Residuals obtained from performance based Jones model are utilized as proxy of AB_EM. Mean value of residuals obtained from above mentioned model is 0.019, 0.033 and 0.002 for full sample, non-family-firms and family-firms respectively. Non-family firms are more involved in AB_EM than family-firms. This indicate that family-firms prefer non-economic goal (family identity) over the financial goals (positive earnings) which is one dimension of SEW theory, that can be damaged in the case of detection of AB_EM by auditors.

Table 5.4 further shows that debt to asset ratio of full sample of PSX listed firms is 65.2%, while debt to asset ratio for non-family-firms is 68.4% and for family-firms is 61.3%. Pakistani Non-family-firms are highly levered than Pakistani family-firms. This indicates that, to stay away from the scrutiny of creditors and to control the matters of organization, family-firms avoid from debt financing.

Firm characteristics is another independent variable of the study, which is proxied by firm profitability, firm age and firm size. Profitability of firm is measured as return on assets, while age is measured as the natural log of listing age, and firm size is measured through the natural log of total assets. Return on assets for full sample is 4.5%, while ROA for non-family-firms and family-firms is 4.9% and 4.01%. To avoid the pressure from shareholders and to avoid political cost, family-firms declare less profit as compare to non-family-firms. Results also show that, Pakistani family-firms (AGE=3.296) are more mature than Pakistani non-family-firms (AGE=3.267), while on average family-firms (ln ta = 8.088) are smaller than non-family-firms (ln ta = 8.64).

This study utilizes four proxies to measure governance structure, which are, audit-committee independence, board independence, board-size and board gender diversity. Audit-committee independence is the ratio of independent directors in audit-committee to size of audit-committee. On average audit-committee of non-family-firms (86.1%) are more independent than audit-committees of family-firms (80.2%), while on average board of directors of family-firms is less independent (61.3%) than the board of non-family-firms (73.2%). Results also show that on average, non-family-firms (8.42) have larger board-size than family-firms (7.795).

CSR is another independent variable of the study, and it is proxied by CSR index. Detail of CSR Index calculation is available in appendix 1 of thesis. Results show that, on average non-family-firms (CSR Index = 0.46) in Pakistan are more socially responsible as compare to Pakistani family-firms (CSR Index = 0.39). Managerial ownership is calculated as the percentage of share hold by executives to the total shares. Table 5.5 and Table 5.6, depict that on average managerial ownership in family-firms (51.29%) is more than the managerial ownership in non-family-firms (38.35%). Family-firms wants to keep their control over the matters of organization, so family firms appoint family owners as executives.

**Table 5.4 Descriptive Statistics of Pakistani Listed firms (Full Sample)**

| Variables | Min | Max | Mean | Median | St.dev | P25 | P75 | N |
|---|---|---|---|---|---|---|---|---|
| R_EM | -5.80 | 5.078 | .354 | .126 | 1.532 | -.156 | .794 | 1252 |
| AB_EM | -.606 | .342 | .019 | .051 | .194 | -.024 | .128 | 1436 |
| ROA (%) | -82.8 | 65.5 | 4.5 | 4.5 | 12.2 | -0.5 | 10.2 | 1638 |
| LEV (%) | 3.1 | 90.0 | 65.2 | 59.4 | 65.8 | 41.2 | 74.0 | 1638 |
| F_Size | 3.6 | 13.187 | 8.391 | 8.306 | 1.564 | 7.34 | 9.419 | 1638 |
| AGE | 1.792 | 4.025 | 3.28 | 3.296 | 0.479 | 3.045 | 3.714 | 1638 |
| M_Own (%) | 0 | 98.782 | 25.202 | 13.131 | 27.766 | 14.8 | 45.53 | 1638 |
| Famown (%) | 0 | 99.0 | 25.5 | 14.0 | 27.8 | 10.5 | 0.468 | 1638 |
| BI (%) | 0 | 100 | 67.9 | 71.4 | 20.2 | 57.1 | 85.7 | 1638 |
| BGDV (%) | 0 | 71.4 | 8.6 | 5.9 | 13.8 | 0 | 14.3 | 1638 |
| B_SIZE | 5 | 15 | 8.139 | 8 | 1.635 | 7 | 9 | 1638 |
| CSR | 0.01 | 0.98 | 0.43 | 0.40 | 0.20 | 0.25 | 0.60 | 1638 |

**Table 5.5 Descriptive Statistics of Pakistani Listed firms (Non-Family-firms)**

| Variables | Min | Max | Mean | P50 | Sd | P25 | P75 | N |
|---|---|---|---|---|---|---|---|---|
| R_EM | -5.804 | 5.078 | .183 | .039 | 1.419 | -.17 | .599 | 690 |
| AB_EM | -.606 | .342 | .033 | .053 | .183 | -.011 | .132 | 794 |
| ROA (%) | -82.8 | 65.5 | 4.9 | 4.6 | 13.5 | -1.0 | 11.3 | 900 |
| LEV (%) | 3.1 | 100 | 68.4 | 59.0 | 84.2 | 39.1 | 73.5 | 900 |
| F_Size | 3.6 | 13.187 | 8.64 | 8.59 | 1.606 | 7.562 | 9.825 | 900 |
| AGE | 1.792 | 4.025 | 3.267 | 3.401 | .524 | 2.996 | 3.738 | 900 |
| M_Own (%) | 0 | 79.91 | 38.35 | 40.5 | 5.256 | 10.3 | 60.69 | 900 |
| Famown (%) | 0 | 9.9 | 3.8 | 2.1 | 2.3 | 1.3 | 6.3 | 900 |
| BI (%) | 0 | 100 | 73.2 | 75.0 | 18.4 | 62.5 | 87.5 | 900 |
| BGDV (%) | 0 | 71.4 | 5.8 | 1.3 | 11.6 | 0 | 10.0 | 900 |
| B_SIZE | 6 | 15 | 8.421 | 8 | 1.799 | 7 | 9 | 900 |
| CSR | 0.05 | 0.95 | 0.46 | 0.45 | 0.205 | 0.30 | 0.61 | 900 |

**Table 5.6 Descriptive Statistics of Pakistani Listed firms (Family-firms)**

| Variables | Min | Max | Mean | P50 | Sd | P25 | P75 | N |
|---|---|---|---|---|---|---|---|---|
| R_EM | -5.804 | 5.078 | .564 | .283 | 1.637 | -.085 | 1.128 | 562 |
| AB_EM | -.606 | .342 | .002 | .044 | .206 | -.037 | .125 | 642 |
| ROA (%) | -52.9 | 43.9 | 4.01 | 4.13 | 10.3 | 0.1 | 9.07 | 738 |
| LEV (%) | 10.4 | 100 | 61.3 | 60.1 | 30.8 | 42.5 | 74.2 | 738 |
| F_Size | 3.885 | 12.989 | 8.088 | 8.044 | 1.457 | 7.073 | 9.049 | 738 |
| AGE | 1.946 | 4.025 | 3.296 | 3.258 | .417 | 3.091 | 3.664 | 738 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| M_Own (%) | 1.8 | 98.782 | 51.259 | 49.95 | 21.00 | 32.85 | 69.26 | 738 |
| Fam_Own (%) | 10.1 | 99.0 | 51.8 | 50.3 | 20.4 | 34.5 | 69.39 | 738 |
| BI (%) | 0 | 100 | 61.3 | 62.5 | 20.5 | 50.4 | 75.0 | 738 |
| BGDV (%) | 0 | 62.5 | 12.1 | 4.3 | 15.3 | 0 | 25.0 | 738 |
| B_SIZE | 5 | 14 | 7.795 | 7 | 1.333 | 7 | 8 | 738 |
| CSR | 0.01 | 0.98 | 0.39 | 0.35 | 0.20 | 0.25 | 0.55 | 738 |

## 5.3 Differences between Means

This section shed light on the differences between means of variables of family-firms and non-family-firms.

### 5.3.1 US Sample.

Table 5.7 displays the differences between means of variables of US family and non family-firms. T-test is used to test the significance differences between means. Results depict that there exist significance difference between means of all variables at 1% level of significance. There exist significance difference between mean of real and AB_EM for family and non-family-firms. This result is consistent with the results of Cascino et al., (2010) and Achleitner et al. (2014).

**Table 5.7 Two-sample t-test with equal variances and independent populations For US firms' samples**

| Variable | obs1(Non-family firms) | obs2 (family firms) | Mean (Non-family-firms) | Mean (Family-firms) | Diff | SD of Non family firms | SD of family firms | t-value | p_value |
|---|---|---|---|---|---|---|---|---|---|
| R_EM | 3865 | 8614 | 0.372 | 0.32 | 0.052 | 0.467 | 0.537 | 5.20 | 0 |
| AB_EM | 4589 | 10173 | -2.918 | 0.111 | -3.03 | 3.464 | 7.113 | -27.42 | 0 |
| ROA (%) | 5153 | 11461 | 6.2 | 5.33 | 0.87 | 7.4 | 14.6 | 4.05 | 0 |
| Lev (%) | 5175 | 11999 | 59.70 | 55.13 | 4.57 | 18.84 | 24.34 | 12.04 | 0 |
| F_Size | 5277 | 12217 | 15.868 | 13.56 | 2.299 | 1.248 | 1.737 | 86.94 | 0 |
| AGE | 5298 | 13728 | 3.296 | 2.368 | 0.928 | 0.592 | 1.045 | 60.97 | 0 |
| M_Own (%) | 5298 | 13890 | 10.7 | 27.9 | 0.078 | .133 | .125 | 37.96 | 0 |
| Famown (%) | 5298 | 986 | 4.59 | 48.3 | -43.7 | .033 | .214 | -123.3 | 0 |
| BI (%) | 5290 | 4094 | 81.9 | 72.7 | 9.2 | 10.8 | 16.9 | 32.03 | 0 |
| BGDV (%) | 5291 | 4096 | 16 | 13.5 | 2.5 | 10 | 11.2 | 11.40 | 0 |
| B_SIZE | 5291 | 4094 | 10.114 | 8.75 | 1.364 | 2.12 | 2.16 | 30.66 | 0 |
| CSR | 5291 | 4130 | 0.62 | 0.34 | 0.28 | 0.21 | 0.17 | 69.70 | 0 |

Note: No of observations vary due to missing data values

### 5.3.2 Pakistani Sample.

Table 5.8 presents the mean differences of all variables of family and non-family-firms of Pakistan. T-test is used to test the significance differences between means. Results depict that there exist significance difference between means of all variables at 1% level of

significance except profitability and firm age. There exist significance difference between mean of real and AB_EM for family and non-family-firms. This result is consistent with the results of Achleitner et al. (2014).

**Table 5.8 Two-sample t-test with equal variances and independent populations for Pakistani firms' samples**

| Variable | obs1(Non-family firms) | obs2 (family firms) | Mean (Non-family-firms) | Mean (Family-firms) | Diff | SD of Non family firms | SD of family firms | t-value | p_value |
|---|---|---|---|---|---|---|---|---|---|
| R_EM | 690 | 562 | .183 | .564 | -0.381 | 1.419 | 1.637 | -4.41 | 0 |
| AB_EM | 794 | 642 | .033 | .002 | 0.031 | .183 | .206 | 3.02 | 0 |
| ROA (%) | 900 | 738 | 4.9 | 4.0 | 0.9 | 13.5 | 10.3 | 1.49 | 0.13 |
| Lev (%) | 900 | 738 | 68.4 | 61.3 | 7.1 | 84.2 | 30.8 | 2.17 | 0.02 |
| F_Size | 900 | 738 | 8.64 | 8.088 | 0.552 | 1.606 | 1.457 | 7.21 | 0 |
| AGE | 900 | 738 | 3.267 | 3.296 | -0.029 | .524 | .417 | -1.22 | 0.22 |
| M_Own (%) | 900 | 738 | 38.35 | 51.259 | -12.909 | 5.256 | 21.009 | -17.77 | 0 |
| Famown (%) | 900 | 738 | 3.8 | 51.8 | -48.0 | .053 | .204 | -67.85 | 0 |
| BI (%) | 900 | 738 | 73.2 | 61.3 | 11.9 | 18.4 | 20.5 | 12.37 | 0 |
| BGDV (%) | 900 | 738 | 5.8 | 12.1 | -6.3 | 11.6 | 15.3 | -9.47 | 0 |
| B_SIZE | 900 | 738 | 8.421 | 7.795 | 0.626 | 1.799 | 1.333 | 7.85 | 0 |
| CSR | 900 | 738 | 0.46 | 0.39 | 0.07 | 0.205 | 0.20 | 6.95 | 0 |

## 5.4 Investigation of Model and Data

This section discusses about the different tests which are applied to determine the characteristics of data and to determine suitable estimation method. Correlation analysis is applied to detect the multicollinearity issue between independent variables of the data. J Jarque–Bera test is applied to check the normality of data, and to examine heteroscedasticity and autocorrelation issues, Wald test and Wooldridge test are used simultaneously. Moreover to investigate the stationarity issues, fisher test is applied.

### 5.4.1 Multicollinearity

#### *5.4.1.1 Correlation Test*

Pairwise correlation coefficient is calculated between dependent variable and independent variables of the study. Table 5.9 presents the results of pairwise correlation between R_EM and all independent variable for US sample. Table 5.9 depicts that leverage is positively associated with R_EM. This result indicate that leveraged firms manage their earnings through R_EM. CSR is also positively associated with R_EM indicating that firms which perform social activities manage their earnings through real activities. Moreover board-size, firm size and managerial ownership are positively associated with R_EM. Results of the Table 5.9 further show that independent audit committee and board, gender diversity, profitability and firm age are negatively correlated with R_EM. Multicollinearity is not the issue, because the results of the Table 5.9 predict that linear association between independent variables is less than 0.50.

Furthermore, Table 5.10 displays the linear association between AB_EM and all independent variables for US sample. Result depicts positive association between leverage and AB_EM. Leveraged family firms manage their earnings through discretionary

accruals. Furthermore all independent variables of the study are negatively correlated with AB_EM. Results of pair wise correlation further show that the linear association among all independent variables is less than 0.50, this indicate that multicollinearity is not the issue.

**Table 5.9 Pairwise correlations between R_EM and independent variables of the study (US data)**

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) R_EM | 1 | | | | | | | | | | |
| (2) LEV | 0.076*** | 1 | | | | | | | | | |
| (3) CSR | 0.033** | 0.14*** | 1 | | | | | | | | |
| (4) ACI | -0.013 | -0.009* | 0.15* | 1 | | | | | | | |
| (5) BI | 0.021 | 0.024* | 0.332* | 0.382* | 1 | | | | | | |
| (6) BGDV | -0.169*** | 0.113*** | 0.294* | 0.055 | 0.224 | 1 | | | | | |
| (7) B_SIZE | 0.013* | 0.176*** | 0.457*** | 0.104*** | 0.266*** | 0.255*** | 1 | | | | |
| (8) F_Size | 0.246*** | 0.083*** | 0.399*** | 0.122*** | 0.149*** | 0.19*** | 0.479*** | 1 | | | |
| (9) ROA | -0.171*** | -0.103*** | 0.238*** | 0.082*** | 0.05*** | 0.092 | 0.154*** | 0.388*** | 1 | | |
| (10) AGE | -0.008 | -0.163*** | 0.451*** | 0.227*** | 0.293*** | 0.193*** | 0.322*** | 0.318*** | 0.294*** | 1 | |
| (11) M_Own | 0.013* | 0.036*** | 0.117*** | 0.065*** | -0.155*** | -0.043 | 0.111*** | 0.265*** | 0.123*** | 0.157*** | 1 |

Note. *** p<0.01, ** p<0.05, * p<0.1

**Table 5.10 Pairwise correlations between AB_EM and independent variables of the study (US data)**

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) AB_EM | 1 | | | | | | | | | | |
| (2) LEV | 0.097*** | 1 | | | | | | | | | |
| (3) CSR | -0.254*** | 0.14*** | 1 | | | | | | | | |
| (4) ACI | -0.08*** | -0.009* | 0.15* | 1 | | | | | | | |
| (5) BI | 0.052*** | 0.024* | 0.332* | 0.382* | 1 | | | | | | |
| (6) BGDV | -0.101*** | 0.113*** | 0.294* | 0.055 | 0.224 | 1 | | | | | |
| (7) B_SIZE | -0.161*** | 0.176*** | 0.457*** | 0.104*** | 0.266*** | 0.255*** | 1 | | | | |
| (8) F_Size | -0.340*** | 0.083*** | 0.399*** | 0.122*** | 0.149*** | 0.19*** | 0.479*** | 1 | | | |
| (9) ROA | -0.393*** | -0.103*** | 0.238*** | 0.082*** | 0.05*** | 0.092*** | 0.154*** | 0.388*** | 1 | | |
| (10) AGE | -0.319*** | -0.163*** | 0.451*** | 0.227*** | 0.293*** | 0.193*** | 0.322*** | 0.318*** | 0.294*** | 1 | |
| (11) M_Own | -0.129*** | 0.036*** | 0.117*** | 0.065*** | -0.155*** | -0.043*** | 0.111*** | 0.265*** | 0.123*** | 0.157*** | 1 |

Note. *** p<0.01, ** p<0.05, * p<0.1

**Table 5.11 Pairwise correlations between R_EM and independent variables of the study (Pakistani data)**

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) R_EM | 1 | | | | | | | | | | |
| (2) LEV | -0.095*** | 1 | | | | | | | | | |
| (3) CSR | -0.089*** | -0.158*** | 1 | | | | | | | | |
| (4) ACI | -0.031 | 0.389*** | 0.165*** | 1 | | | | | | | |
| (5) BI | 0.026 | 0.046* | 0.215*** | 0.297*** | 1 | | | | | | |
| (6) BGDV | 0.107*** | 0.012 | -0.209*** | 0.01 | -0.116*** | 1 | | | | | |
| (7) B_SIZE | -0.093*** | -0.039 | 0.232*** | 0.201*** | 0.32*** | -0.153*** | 1 | | | | |
| (8) F_Size | -0.32*** | -0.072*** | 0.275*** | 0.112*** | 0.06** | -0.079*** | 0.207*** | 1 | | | |
| (9) ROA | -0.001 | -0.123*** | 0.226*** | -0.022 | 0.019 | -0.102*** | 0.114*** | 0.021 | 1 | | |
| (10) AGE | -0.042 | -0.024 | 0.1*** | 0.008 | 0.025 | -0.253*** | -0.001 | -0.041* | 0.017 | 1 | |
| (11) M_Own | 0.147*** | 0.017 | -0.191*** | -0.101*** | -0.291*** | 0.242*** | -0.183*** | -0.174*** | -0.01 | -0.013 | 1 |

Note. *** p<0.01, ** p<0.05, * p<0.1

**Table 5.12 Pairwise correlations between AB_EM and independent variables of the study (Pakistani data)**

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) AB_EM | 1 | | | | | | | | | | |
| (2) LEV | -0.279*** | 1 | | | | | | | | | |
| (3) CSR | 0.048* | -0.158*** | 1 | | | | | | | | |
| (4) ACI | 0.007 | 0.389*** | 0.165*** | 1 | | | | | | | |
| (5) BI | 0.051 | 0.046* | 0.215*** | 0.297*** | 1 | | | | | | |
| (6) BGDV | -0.047 | 0.012 | -0.209*** | 0.01 | -0.116*** | 1 | | | | | |
| (7) B_SIZE | 0.126*** | -0.039 | 0.232*** | 0.201*** | 0.32*** | -0.153*** | 1 | | | | |
| (8) F_Size | 0.195*** | -0.072*** | 0.275*** | 0.112*** | 0.06** | -0.079*** | 0.207*** | 1 | | | |
| (9) ROA | 0.09** | -0.123*** | 0.226*** | -0.022 | 0.019 | -0.102*** | 0.114*** | 0.021 | 1 | | |
| (10) AGE | -0.054** | -0.024 | 0.1*** | 0.008 | 0.025 | -0.253*** | -0.001 | -0.041* | 0.017 | 1 | |
| (11) M_Own | -0.099*** | 0.017 | -0.191*** | -0.101*** | -0.291*** | 0.242*** | -0.183*** | -0.174*** | -0.01 | -0.013 | 1 |

Note. *** p<0.01, ** p<0.05, * p<0.1

Table 5.11 presents the results of linear association between R_EM and all independent variable for Pakistani sample. Results depict that leverage is negatively correlated with R_EM. This result indicates that leveraged firms are not involved in EM. Results further depict that all other independent variables of the study are negatively associated with R_EM in Pakistan except gender diversity, board independence and managerial ownership. Moreover, multicollinearity is not the issue, because correlation among independent variables is less than 0.50.

Table 5.12 show the pairwise correlation between AB_EM and all independent variables of the study for Pakistani sample. Result shows that leverage is negatively associated with AB_EM. This result indicates that due to the monitoring of creditors, firms do not manage earnings through discretionary accruals in Pakistan. Furthermore, gender diversity, firm age and managerial ownership are negatively associated with AB_EM in Pakistan. CSR, ACI, BI, board-size, firm size and profitability are positively correlated with AB_EM. Moreover multicollinearity is not the problem, because pairwise correlation between all independent variables is less than 0.50.

#### *5.4.1.2 Variance Inflation Factor*

VIF test is also applied to check the multicollinearity problem in US and Pakistani data. Table 5.13 and Table 5.14 present the results of VIF for US and Pakistani data respectively. Results of the VIF test show that multicollinearity is not the problem in the data, because VIF of all variables is less than 10 for all variables of both countries.

**Table 5.13 Variance Inflation Factor for US**

| VIF of REM for US data | | VIF of ABEM for US data | |
|---|---|---|---|
| Variables | VIF | Variables | VIF |
| LEV | 1.13 | LEV | 1.13 |
| CSR | 2.04 | CSR | 2.00 |
| ACI | 1.24 | ACI | 1.23 |
| BI | 1.47 | BI | 1.45 |
| BGDV | 1.15 | BGDV | 1.15 |
| B_SIZE | 1.48 | B_SIZE | 1.47 |
| F_Size | 2 | F_Size | 1.97 |
| ROA | 1.18 | ROA | 1.18 |
| AGE | 1.43 | AGE | 1.41 |
| M_Own | 1.11 | M_Own | 1.10 |

**Table 5.14 Variance Inflation Factor for Pakistan**

| VIF of REM for Pakistani data | | VIF of ABEM for Pakistani data | |
|---|---|---|---|
| Variables | VIF | Variables | VIF |
| LEV | 1.05 | LEV | 1.05 |
| CSR | 1.29 | CSR | 1.29 |
| ACI | 1.13 | ACI | 1.14 |
| BI | 1.28 | BI | 1.29 |
| BGDV | 1.19 | BGDV | 1.2 |
| B_SIZE | 1.23 | B_SIZE | 1.22 |

| | | | |
|---|---|---|---|
| F_Size | 1.19 | F_Size | 1.17 |
| ROA | 1.09 | ROA | 1.08 |
| AGE | 1.08 | AGE | 1.08 |
| M_Own | 1.2 | M_Own | 1.2 |

### 5.4.2 Test for Pool OLS

The Breusch-Pagen Lagrange Multiplier (LM) test investigates whether the intercept is common for all the companies or not. Table 5.15 and Table 5.16 report that cross section chi-square is insignificant for all models, it means there is common intercept across the companies. Hence, present study employs Pooled OLS for all models.

**Table 5.15 LM test Result for US data**

| Models | Value of LM test | Decision |
|---|---|---|
| 4.9 | 20.25 | Pooled OLS |
| 4.10 | 36.13 | Pooled OLS |
| 4.11 | 31.17 | Pooled OLS |
| 4.12 | 11.64 | Pooled OLS |
| 4.13 | 15.12 | Pooled OLS |
| 4.14 | 11.15 | Pooled OLS |
| 4.15 | 955.49 | Pooled OLS |
| 4.16 | 617.97 | Pooled OLS |
| 4.17 | 30.15 | Pooled OLS |
| 4.18 | 38.45 | Pooled OLS |
| 4.19 | 718.51 | Pooled OLS |

| | | |
|---|---|---|
| 4.20 | 856.77 | Pooled OLS |

Table 5.16 *LM test Result for Pakistani data*

| Models | Value of LM test | Decision |
|---|---|---|
| 4.9 | 14.74 | Pooled OLS |
| 4.10 | 33.49 | Pooled OLS |
| 4.11 | 5.81 | Pooled OLS |
| 4.12 | 11.71 | Pooled OLS |
| 4.13 | 31.54 | Pooled OLS |
| 4.14 | 56.61 | Pooled OLS |
| 4.15 | 96.49 | Pooled OLS |
| 4.16 | 92.77 | Pooled OLS |
| 4.17 | 14.08 | Pooled OLS |
| 4.18 | 13.64 | Pooled OLS |
| 4.19 | 133.98 | Pooled OLS |
| 4.20 | 107.64 | Pooled OLS |

### 5.4.3 Test for the Heteroscedasticity

Wald test is applied to examine the heteroscedasticity issue in each model of the study. Table 5.17 displays the results of Wald test for US data. The p-value for all the models is less than 0.05, indicating that there exist heteroscedasticity. Hence two dimensional cluster pooled-OLS technique is applied to tackle the problem.

Table 5.18 displays the results of Wald test for Pakistani data. The results of test are significant for all models, because p-value is less than 0.10, hence there exist heteroscedasticity. Two dimensional cluster pooled-OLS technique is applied to tackle the problem of heteroscedasticity.

**Table 5.17 Result of Wald test for US data**

| Model No. | Value of Wald Test | p-value | Decision |
|---|---|---|---|
| 4.9 | 3237 | 0.000 | Heteroscedasticity Exist |
| 4.10 | 6435 | 0.000 | Heteroscedasticity Exist |
| 4.11 | 7136 | 0.000 | Heteroscedasticity Exist |
| 4.12 | 2937 | 0.000 | Heteroscedasticity Exist |
| 4.13 | 5235 | 0.000 | Heteroscedasticity Exist |
| 4.14 | 2739 | 0.000 | Heteroscedasticity Exist |
| 4.15 | 3433 | 0.000 | Heteroscedasticity Exist |
| 4.16 | 9832 | 0.000 | Heteroscedasticity Exist |
| 4.17 | 1332 | 0.000 | Heteroscedasticity Exist |
| 4.18 | 8333 | 0.000 | Heteroscedasticity Exist |
| 4.19 | 3931 | 0.000 | Heteroscedasticity Exist |
| 4.20 | 2436 | 0.000 | Heteroscedasticity Exist |

**Table 5.18 Results of Wald test for Pakistani data**

| Model No. | Value of Wald Test | p-value | Decision |
|---|---|---|---|
| 4.9 | 8100 | 0.000 | Heteroscedasticity Exist |
| 4.10 | 4600 | 0.000 | Heteroscedasticity Exist |

| | | | |
|---|---|---|---|
| 4.11 | 2600 | 0.000 | Heteroscedasticity Exist |
| 4.12 | 3800 | 0.000 | Heteroscedasticity Exist |
| 4.13 | 3800 | 0.000 | Heteroscedasticity Exist |
| 4.14 | 3000 | 0.000 | Heteroscedasticity Exist |
| 4.15 | 2300 | 0.000 | Heteroscedasticity Exist |
| 4.16 | 1800 | 0.000 | Heteroscedasticity Exist |
| 4.17 | 4100 | 0.000 | Heteroscedasticity Exist |
| 4.18 | 3000 | 0.000 | Heteroscedasticity Exist |
| 4.19 | 9700 | 0.000 | Heteroscedasticity Exist |
| 4.20 | 3000 | 0.000 | Heteroscedasticity Exist |

### 5.4.4 Test for the Auto correlation

Table 5.19 presents the result of Wooldridge test for models 4.9 to 4.20 for US data. The value of F statistics is significant for all models, because the p-value for all models is less than 0.01 (level of significance). Hence we reject the null hypothesis of Wooldridge test that there is no autocorrelation and conclude that auto correlation exist in the data. Hence two dimensional cluster pooled-OLS technique is applied to tackle the problem.

**Table 5.19 Results of Wooldridge test for US data**

| Model No. | F Statistics | p-value | Decision |
|---|---|---|---|
| 4.9 | 323.276 | 0.000 | Auto correlation exist |
| 4.10 | 86.973 | 0.000 | Auto correlation exist |
| 4.11 | 113.860 | 0.000 | Auto correlation exist |
| 4.12 | 35.454 | 0.000 | Auto correlation exist |
| 4.13 | 114.129 | 0.000 | Auto correlation exist |

| | | | |
|---|---|---|---|
| 4.14 | 33.679 | 0.000 | Auto correlation exist |
| 4.15 | 308.586 | 0.000 | Auto correlation exist |
| 4.16 | 5.940 | 0.000 | Auto correlation exist |
| 4.17 | 319.286 | 0.000 | Auto correlation exist |
| 4.18 | 93.288 | 0.000 | Auto correlation exist |
| 4.19 | 96.785 | 0.000 | Auto correlation exist |
| 4.20 | 18.240 | 0.000 | Auto correlation exist |

Table 5.20 presents the result Wooldridge test for models 4.9 to 4.20 for Pakistani data. The value of F statistics is significant for all models, because the p-value for all models is less than 0.10 (level of significance). Hence we reject the null hypothesis of Wooldridge test, that there is no autocorrelation and conclude that, auto correlation exist in the data.

**Table 5.20 Results of Wooldridge test for Pakistani data**

| Model No. | F Statistics | p-value | Decision |
|---|---|---|---|
| 4.9 | 2.027 | 0.056 | Auto correlation exist |
| 4.10 | 44.236 | 0.000 | Auto correlation exist |
| 4.11 | 1.507 | 0.021 | Auto correlation exist |
| 4.12 | 44.383 | 0.000 | Auto correlation exist |
| 4.13 | 1.825 | 0.078 | Auto correlation exist |
| 4.14 | 44.927 | 0.000 | Auto correlation exist |
| 4.15 | 0.215 | 0.043 | Auto correlation exist |
| 4.16 | 44.058 | 0.000 | Auto correlation exist |
| 4.17 | 1.557 | 0.013 | Auto correlation exist |

| | | | |
|---|---|---|---|
| 4.18 | 44.438 | 0.000 | Auto correlation exist |
| 4.19 | 0.645 | 0.042 | Auto correlation exist |
| 4.20 | 43.892 | 0.000 | Auto correlation exist |

### 5.4.5 Stationarity Test

To examine the stationarity, fisher test is applied. Table 5.21 and Table 5.22 present the result of fisher for US data and Pakistani data respectively. Results show that the value of fisher test are significant for all the variable at conventional level for US and Pakistani data. Which indicate that all the variables are stationary at level.

**Table 5.21 Result of Fisher-test for US data**

| Variable | Fisher Test | p-value | Decision |
|---|---|---|---|
| R_EM | 1290 | 0.0000 | Stationary |
| AB_EM | 1064 | 0.000 | Stationary |
| CSR | 1896 | 0.000 | Stationary |
| BI | 624.78 | 0.000 | Stationary |
| ACI | 403.665 | 0.000 | Stationary |
| BGDV | 186.678 | 0.000 | Stationary |
| B_SIZE | 345.982 | 0.000 | Stationary |
| ROA | 14100.00 | 0.000 | Stationary |
| F_Size | 8795.3089 | 0.000 | Stationary |
| LEV | 8127.8630 | 0.000 | Stationary |
| AGE | 830.975 | 0.000 | Stationary |
| M_Own | 4760.2108 | 0.000 | Stationary |

**Table 5.22 Result of Fisher-test for Pakistani data**

| Variables | Fisher-test value | p-value | Decision |
|---|---|---|---|
| CR_EM | 1885.7246 | 0.000 | Stationary |
| AB_EM | 1074.4119 | 0.000 | Stationary |
| CSR | 530.8018 | 0.000 | Stationary |
| BI | 513.8897 | 0.000 | Stationary |
| ACI | 355.2032 | 0.000 | Stationary |
| BGDV | 170.001 | 0.000 | Stationary |
| B_SIZE | 214.1039 | 0.000 | Stationary |
| ROA | 1203.6829 | 0.000 | Stationary |
| F_Size | 874.8561 | 0.000 | Stationary |
| LEV | 977.8715 | 0.000 | Stationary |
| AGE | 745.8561 | 0.000 | Stationary |
| M_Own | 603.2017 | 0.000 | Stationary |

## 5.5 Regression Results

Following regression model is constructed in Chapter 4 CHAPTER 4to test the hypothesis those are developed in literature review section of this study. At first stage, we run regression for each independent variable and dependent variable for full sample and subsamples of US and Pakistani data separately. In second step we run full model for full sample and subsamples of US data and Pakistani data separately. Detailed methodology is discussed in methodology section of this study.

$$EM_{i,t} = \alpha + \beta_1 CS_{i,t} + \beta_2 CSR_{i,t} + \beta_3 GM_{i,t} + \beta_4 FC_{i,t} + \beta_5 MO_{i,t} + \varepsilon_{i,t} \text{ ---------- } (4.8)$$

### 5.5.1 Capital Structure and Earnings Management

#### *5.5.1.1 Capital Structure and Real Earnings Management*

Following are the hypotheses that are tested in this section for US data and Pakistani data:

*H1: Leverage is positively associated with real earnings management*

*H1f: Leveraged family-firms involvement in real earnings management is different as compare to leveraged nonfamily-firms*

Table 5.23 shows the result of two way clustered pooled-OLS for full sample, and sub samples i.e. sub sample of family-firms and sub sample of non-family-firms for US data. Column 1 of the above table depicts that leverage measured as total debt to total asset ratio, has positive and significant impact on R_EM for full sample ($\beta = 0.149$, $p < 0.01$). Furthermore column 2 and column 3 of Table 5.23 show that leverage has also positive and significant impact on R_EM for family-firms ($\beta = 0.133$, $p < 0.01$) and non-family-firms ($\beta = 0.172$, $p < 0.01$). The results explain that US firms either belongs to family or non-family-firms increase R_EM with the increase in leverage, hence H1 is accepted. Moreover results also depict that the coefficient of leverage for non-family firm is greater than the coefficient of leverage for family-firms. This result indicates that leveraged non-family-firms manage their earnings more extensively through real activities as compare to leveraged family-firms, and this difference is significant. Hence, we accept the hypothesis H1f.

**Table 5.23 Leverage and R_EM in USA**

| Variables | Full Sample R_EM | Family-firms R_EM | Non-Family-firms R_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| LEV | 0.149*** | 0.133*** | 0.172*** | 3.81*** | Significant |
| Constant | 0.252*** | 0.248*** | 0.267*** | | |
| Observations | 12,478 | 8,613 | 3,865 | | |
| R-squared | 0.026 | 0.025 | 0.028 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

Table 5.24 displays the results of two way clustered Pooled-OLS of leverage on R_EM in Pakistan. Leverage is significantly negatively associated ($\beta$ = -0.621, $p < 0.01$) with R_EM in developing country. This result indicates that R_EM decreases with the increase in leverage. Hence, this result does not support the hypothesis H1 for Pakistani data. The coefficient of leverage ($\beta$ = -0.0248) for family firm is not significant while it is significant for non-family-firms ($\beta$ = -1.002, $p < 0.05$), and both coefficients are also significantly different from each other on the basis of t-test. Leveraged family-firms do not manage their earnings through real activities, because the long run cost of R_EM is high (Cohen & Zarowin, 2010), so it will damage the goal of dynastic succession of family firm (Berrone et al. 2012). This result support the hypothesis H1f for Pakistani data.

**Table 5.24 Leverage and R_EM in Pakistan**

| Variables | Full Sample R_EM | Family-firms R_EM | Non-Family-firms R_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| LEV | -0.621*** | -0.0248 | -1.002** | 2.33** | Significant |
| Constant | 0.722*** | 0.579* | 0.775*** | | |
| Observations | 1,252 | 562 | 690 | | |
| R-squared | 0.029 | 0.001 | 0.031 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

#### *5.5.1.2 Capital Structure and Accrual Based Earnings Management*

Following are the hypotheses which are developed in literature review section, and are tested in this section:

*H2: Leverage is negatively associated with AB_EM*

*H2f: Leveraged family-firms business involvement in AB_EM is different as compare to leveraged non-family-firms*

Table 5.25 show the results of two ways clustered pooled-OLS of leverage on AB_EM for full sample, and sub samples i.e. sub sample of family-firms and sub sample of non-family-firms of US data. Column 1 depicts that leverage has positive and significant ($\beta = 2.270$, $p < 0.10$) impact on AB_EM for full sample in USA. High levered US firms manage their earnings through discretionary accruals, hence we reject the hypothesis H2. Column 2 and 3 of above table show the results of leverage on AB_EM for family and non-family-firms. Leverage also has a positive and significant impact on AB_EM for family firms ($\beta = 2.604$, $p < 0.10$) and for non-family firms ($\beta = 3.286$, $p < 0.01$). Furthermore,

coefficient of leverage for family and non-family-firms are significantly different from each other. Non-family levered firms are more engaged in AB_EM than levered family-firms. This result backing the hypothesis H2f. This difference may be explained in the light of family identity dimension of SEW theory (Berrone et al. 2012).

**Table 5.25 Leverage and AB_EM in USA**

| Variables | Full Sample AB_EM | Family-firms AB_EM | Non-Family-firms AB_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| LEV | 2.270* | 2.604* | 3.286*** | 2.60*** | Significant |
| Constant | -2.125** | -1.332 | -4.906*** | | |
| Observations | 14,752 | 10,163 | 4,589 | | |
| R-squared | 0.019 | 0.012 | 0.039 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

Table 5.26 presents the results of two way clustered pooled-OLS regression of leverage on AB_EM for listed non-financial firms of Pakistan for three different samples, i.e. full sample, family-firms and non-family-firms. The co-efficient of leverage for full sample ($\beta$=-0.232, $p < 0.01$), family-firms ($\beta$=-0.189, $p < 0.01$) and non-family-firms ($\beta$ =-0.259, $p < 0.01$) are negative and significant. These results indicate that AB_EM decreases as increase in leverage. Hence accepting the hypothesis H2 for Pakistan. Results further show that the impact of leverage on AB_EM is high for non-family-firms as compare to family-firms, and this difference is significant at 1% level of significant. This evidence support the hypothesis H2f for Pakistani listed firms.

**Table 5.26 Leverage and AB_EM in Pakistan**

| Variables | Full Sample AB_EM | Family-firms AB_EM | Non-Family-firms AB_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| LEV | -0.232*** | -0.189*** | -0.259*** | 1.90* | Significant |
| Constant | 0.157*** | 0.115*** | 0.186*** | | |
| Observations | 1,436 | 642 | 794 | | |
| R-square | 0.078 | 0.040 | 0.120 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

### 5.5.2 Corporate Social Responsibility and Earning Management

Following are the hypotheses tested under this section

*H3: There exist association between CSR and earnings management*

*H3f: The relationship between CSR and EM is different for family and non-family-firms*

**Table 5.27 CSR and EM (Real Earnings) in USA**

| Variables | Full Sample R_EM | Family-firms R_EM | Non-Family-firms R_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| CSR | 0.184*** | 0.285*** | 0.147*** | 2.50** | Significant |
| Constant | 0.263*** | 0.239*** | 0.276*** | | |
| Observations | 7,533 | 3,673 | 3,860 | | |
| R-square | 0.017 | 0.012 | 0.016 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

To examine the influence of CSR on R_EM in developed country, we estimate model 4.13, by applying two way clustered pooled-OLS. Table 5.27 presents the result for full sample, family-firms and non-family-firms. The co-efficient of CSR for full sample, family-firms and non-family-firms are 0.184, 0.285 and 0.147 respectively, are positive and significant. These results indicate that firms which perform CSR activities are involved in real earing management activities in USA. On the basis of these results, we accept the hypothesis H3, that there exist association between CSR and EM, in developed country. Moreover, results also show that the coefficient of CSR for family-firms is significantly high as compare to non-family-firms, which indicates that family-firms increase EM as increase in CSR activities more extensively than non-family-firms. This result supports the hypothesis that the relationship between CSR and EM is different for family and non-family-firms in developed country.

**Table 5.28 CSR and EM (Real Earnings) in Pakistan**

| Variables | Full Sample | Family-firms | Non-Family-firms | Comparison Based on | Result |
|---|---|---|---|---|---|
| | R_EM | R_EM | R_EM | t-value | |
| CSR | -0.644*** | -0.0590 | -0.902*** | 2.830*** | Significant |
| Constant | 0.647*** | 0.589*** | 0.623*** | | |
| Observations | 1,252 | 562 | 690 | | |
| R-square | 0.018 | 0.000 | 0.017 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

Table 5.28 shows the results of two way clustered pooled-OLS regression for developing country context between R_EM and CSR. The coefficient of CSR is negative

and significant (β = -0.644, p < 0.01) for full sample, which is the indication that CSR activities deter R_EM. This result support the hypothesis H3 in Pakistani context. Firms which perform CSR activities are considered more responsible so they are not involved in EM activities which may shake the stakeholder's trust. The coefficient of CSR for family-firms is negative (β = -0.0590, p >0.10) but insignificant, while it is negative (β = -0.902, p < 0.01) and significant for non-family-firms. These results support the hypothesis H3f in Pakistani context, that the association between CSR and R_EM is different for family and non-family-firms.

**Table 5.29 CSR and EM (Accrual Based) in USA**

| Variables | Full Sample | Family-firms | Non-Family-firms | Comparison Based on | Result |
|---|---|---|---|---|---|
| | AB_EM | AB_EM | AB_EM | t-value | |
| CSR | -0.054*** | -0.084*** | -0.011*** | 5.417*** | Significant |
| Constant | 0.971 | 2.509** | -2.229*** | | |
| Observations | 8,437 | 3,851 | 4,586 | | |
| R-square | 0.064 | 0.050 | 0.025 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

To examine that either AB_EM is influenced by CSR activities in developed country, we estimate model 4.14 by employing two way clustered pooled-OLS regression. Table 5.29 displays the result of above mentioned regression between CSR and AB_EM for full sample, family-firms and non-family-firms. The coefficient of CSR for full sample (β = -0.0542, p < 0.01) is negative and significant. This result indicates that CSR controls the opportunistic behavior of management regarding AB_EM in developed country. Column 2 and 3 show the results for family and non-family sample. The coefficient of CSR for

family-firms (β = -0.0841, p < 0.01) is different for the coefficient of CSR for non-family-firms (β = -0.011, p< 0.01). The impact of CSR on AB_EM for family-firms is more pronounced as compare to non-family-firms. So in the light of above results we accept the hypotheses H3 and H3f in US context.

**Table 5.30 CSR and EM (Accrual Based) in Pakistan**

| Variables | Full Sample AB_EM | Family-firms AB_EM | Non-Family-firms AB_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| CSR | 0.045*** | -0.146*** | 0.192*** | 12.050*** | Significant |
| Constant | -0.003 | 0.062*** | -0.058*** | | |
| Observations | 1,436 | 642 | 794 | | |
| R-square | 0.042 | 0.032 | 0.045 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

Table 5.30 portrays the results of two way clustered Pooled-OLS regression of CSR on AB_EM for developing country. Column 1, 2 and 3 present the results for full sample, family-firms and non-family-firms respectively. Column 1 depicts that CSR has positive and significant impact (β = 0.045, p < 0.01) on AB_EM in developing country. Firms perform CSR activities to hide their opportunistic behavior. This result support the hypothesis H3 in Pakistani context. Column 2 and 3 portray the results for family and non-family-firms. The coefficient of CSR for family firm is negative and significant (β = -0.146, p < 0.01) while CSR has significant positive (β = 0.192, p < 0.01) impact on AB_EM for non-family firms. AB_EM in family-firms decreases as family-firms more involve in CSR activities, while non-family-firms perform CSR activities to build their soft image in

society, so that their opportunistic behavior can be camouflaged. This result is in favor of H3f.

### 5.5.3 Governance Structure and Earnings Management

Corporate governance mechanism are made to align the interest of management with the shareholder's interest. In literature review section, different hypotheses are constructed to examine the association between governance mechanisms and managerial opportunistic behavior regarding EM. In this section of the study we test the following hypotheses:

*H4: Board independence is associated with earnings management*

*H4f: The impact of board independence is different on earning management for family-firms and non-family-firms*

*H5: Earnings management are affected by audit committee independence*

*H5f: The influence of audit committee independence is different on earning management for family-firms and non-family-firms*

*H6: Earnings management practices are associated with board gender diversity*

*H6f: The impact of gender diversity is different on earnings management for family-firms and non-family-firms*

*H7: Earnings management practices are affected by corporate board-size.*

*H7f: The impact of board size is different on earnings management for family-firms and non-family-firms.*

Table 5.31 presents the results of two-way clustered Pooled-OLS regression of different proxies of governance structure on real earing management for full sample, family-firms and non-family-firms in developed country. Results depict that coefficient of audit-committee independence is not significant for full sample ($\beta = -0.063$), family-firms

(β = -0.0320) and for non-family-firms (β = -0.262), hence rejecting the hypothesis H5 in US context that EM are affected by audit-committee independence. While board independence merely positive and significant (β = 0.0447. p < 0.10) impact on R_EM for full sample only. Based upon this result we accept the hypothesis H4. EM through real activities are based on operational decisions and these decision are made by the executives of firms instead of board of directors. So board independence has no significant impact on R_EM. On the other side, board-size measured as ln of board-size, has positive and significant impact on R_EM for full sample (β = 0.0113, p < 0.01), family-firms (β = 0.0536, p < 0.01) and for non-family-firms (β = 0.0116, p < 0.01), indicating that R_EM increase as increase in board-size. This result support the hypothesis H7. Moreover the impact of board-size on R_EM for non-family-firms is high as compare to family-firms, hence accepting the hypothesis H7f in US context.

**Table 5.31 Governance Structure and Real Earnings Management in USA**

| Variables | Full Sample | Family-firms | Non-Family-firms | Comparison Based on | Result |
|---|---|---|---|---|---|
| | R_EM | R_EM | R_EM | t-value | |
| ACI | -0.063 | -0.032 | -0.262 | 1.676* | Significant |
| BI | 0.045* | -0.055 | 0.084 | 1.77* | Significant |
| BGDV | -0.856*** | -0.726*** | -1.042*** | 2.970*** | Significant |
| B_SIZE | 0.113*** | 0.054*** | 0.116** | 2.081** | Significant |
| Constant | 0.259*** | 0.390*** | 0.471** | | |
| Observations | 7,483 | 3,625 | 3,858 | | |
| R-square | 0.124 | 0.101 | 0.095 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

Further board gender diversity, measured as ratio of female directors to total number of directors on board, has significant negative influence on R_EM for full sample (β = -0.856, p < 0.01). This result indicate that R_EM decreases with the increase in female representation on corporate boards, hence accepting the hypothesis H6. Furthermore, the coefficient of gender diversity for family-firms (β = -0.726, p < 0.01) is less than the coefficient of gender diversity for non-family-firms (β = -1.042, p < 0.01). Female board members of non-family-firms play more significant role as compare to family-firms. This result support the hypothesis H6f in USA context.

**Table 5.32 Governance Structure and Real Earnings Management in Pakistan**

| Variables | Full Sample R_EM | Family-firms R_EM | Non-Family-firms R_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| ACI | -0.137 | -0.325 | 0.292 | 1.336 | Insignificant |
| BI | 0.125 | 0.150 | 0.452 | 1.450 | Insignificant |
| BGDV | 1.072** | 0.321 | 1.601** | 1.685* | Significant |
| B_SIZE | -0.679*** | -0.335 | -0.830*** | 2.50** | Significant |
| Constant | 1.702*** | 1.376** | 1.253*** | | |
| Observations | 1,252 | 562 | 690 | | |
| R-square | 0.118 | 0.124 | 0.132 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

Table 5.32 displays the results of two way clustered Pooled-OLS regression of corporate governance proxies on R_EM for developing country. Column 1, 2 and 3 depict the results for full sample, family-firms and non-family-firms respectively. Independent

audit-committee and independent board have no significant impact on R_EM in developing country neither for full sample, family-firms nor for non-family-firms. Results of t-value further depict that, coefficients of ACI and BI are not significantly different for family and non-family firm. Based on these result, hypothesis H4, H4f, H5 and H5f are rejected in Pakistani context. The coefficient of gender diversity is positive and significant ($\beta = 1.072$, $p < 0.05$) for full sample, indicating that R_EM increase as increase in female representation on board. This result support the hypothesis H6. Furthermore, the coefficient of BGDV for family-firms is positive but insignificant ($\beta = 0.321$, $p > 0.1$), while positive and significant ($\beta = 1.601$, $p < 0.05$) for non-family-firms, and this difference is also significant based on t-test. These results support the hypothesis that gender diverse board has different impact on R_EM for family and non-family-firms in Pakistan. Column 1 also displays that R_EM decreases with the increase in board-size for Pakistani listed firms. Larger board possess the required skills and knowledge which is necessary to overlook the management decisions efficiently. This result support the hypothesis H7. The impact of board-size is not significant on R_EM for family-firms, while for non-family-firms board-size is the reason to decrease in R_EM, and this difference is also significant. This results support the hypothesis H7f that the impact of board-size is different for family and non-family-firms.

To examine the impact of different proxies of governance structure on AB_EM in developed country context, we utilized two-way clustered Pooled-OLS regression. Column 1, 2 and 3 of Table 5.33 present the results for full sample, family-firms and non-family-firms of USA. The coefficient of audit-committee independence ($\beta = -4.090$, $p < 0.01$) depicts that audit-committee independence has negative and significant impact on AB_EM

for full sample. On the base of this result hypothesis H5 is accepted for US firms. Furthermore audit-committee independence also has significant negative impact on AB_EM for family-firms ($\beta$ = -2.984, $p < 0.01$) and non-family-firms ($\beta$ = -3.110, $p < 0.10$). Independent audit-committee is a good tool to control the managerial opportunism regarding AB_EM. Moreover, the coefficient of independent audit-committee for family-firms is less than for non-family-firms. This result suggests that family ownership decreases the role of independent audit-committee. On the basis of these result, hypotheses H5 and H5f are accepted in the context of USA. Gender diversity on board also has significant and negative impact on AB_EM for full sample ($\beta$ = -3.263, $p < 0.01$), family-firms ($\beta$ = -4.071, $p < 0.01$) and for non-family-firms ($\beta$ = -1.892, $p < 0.05$), suggesting that female board members deter the accrual manipulation in US context. This result support the hypothesis H6. Furthermore, female directors in family-firms are more vigilant to monitor management actions as compare to non-family-firms regarding accruals manipulations. On the basis of this result hypothesis H6f is accepted. Results of the Table 4.31 also depict that coefficient of board independence ($\beta$ = -1.146**, $p < 0.05$) is negative and significant for full sample in USA, demonstrating that AB_EM decreases with the increase in board independence. Furthermore, coefficient of board independence for family-firms ($\beta$ = -3.059, $p < 0.01$) suggests that family-firms are not engaged in AB_EM as board of director goes to more independent, while board independence is not significantly related to AB_EM for non-family-firms ($\beta$ = -1.095, $p > 0.1$). These result backing the hypotheses H4 and H4f. Whereas, AB_EM decreases due to increase in board-size for full sample ($\beta$ = -2.905***), and for family-firms ($\beta$ = -3.467***), suggesting that larger board control management more effectively. In non-family-firms the role of larger

board is insignificant. Based upon these results, we accept the hypotheses H7 and H7f in US context.

**Table 5.33 Governance Structure and Accrual Based Earnings Management in USA**

| Variables | Full Sample AB_EM | Family-firms AB_EM | Non-Family-firms AB_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| ACI | -4.090*** | -2.984*** | -3.110* | 2.390** | Significant |
| BI | -1.146** | -3.059*** | -1.095 | -3.907*** | Significant |
| BGDV | -3.263*** | -4.071*** | -1.892** | -3.580*** | Significant |
| B_SIZE | -2.905*** | -3.467*** | -0.306 | -2.897*** | Significant |
| Constant | 8.291*** | 8.218*** | 0.283 | | |
| Observations | 8,381 | 3,797 | 4,584 | | |
| R-square | 0.134 | 0.131 | 0.115 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

Table 5.34 displays the results of two way clustered Pooled-OLS regression of CG proxies on AB_EM in developed country. Column 1, 2 and 3 show the results for three

**Table 5.34 Governance Structure and Accrual Based Earnings Management in Pakistan**

| Variables | Full Sample AB_EM | Family-firms AB_EM | Non-Family-firms AB_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| ACI | -0.0195 | -0.0362 | -0.00406 | 0.701 | Insignificant |
| BI | 0.0146 | 0.0490 | -0.0501 | 1.139 | Insignificant |
| BGDV | -0.0376 | 0.0140 | -0.0745 | 1.407 | Insignificant |

| | | | | | |
|---|---|---|---|---|---|
| B_SIZE | 0.133*** | 0.113** | 0.138*** | 2.010** | Significant |
| Constant | -0.248*** | -0.232** | -0.214*** | | |
| Observations | 1,436 | 642 | 794 | | |
| R-square | 0.117 | 0.111 | 0.122 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

different samples like full sample, family-firms and non-family-firms. The coefficients of audit-committee independence board independence and board gender diversity are insignificant for all three samples in Pakistan. Results further depict that, the coefficients of audit-committee independence board independence and board gender diversity for family and non-family firms are not significantly different from each other. These results suggest that hypotheses H4, H4f, H5, H5f, H6 and H6f are not accepted. ACI, BI and BGDV are unable to control the opportunistic behavior of management regarding accruals manipulation in Pakistan. Whereas the coefficient of board-size ($\beta = 0.133$, $p < 0.01$) is suggested that large board-size is helpful in deterring accrual manipulation, hence hypothesis H7 is accepted. Moreover, the coefficient of board-size is also positive and significant for family-firms ($\beta = 0.113$, $p < 0.01$) and for non-family-firms ($\beta = 0.138$, $p < 0.01$), but different from each other significantly. This result also indicates that the influence of board-size is not same for family and non-family-firms, hence supporting the hypothesis that board-size has different impact on AB_EM for family and non-family-firms in developing country.

### 5.5.4 Firm Characteristics and Earnings Management

Literature suggests that firms' characteristics influence the management decision about EM. On the basis of existing literature following hypotheses are developed in literature review section and are tested under this section:

*H8: Firms earnings management practices are linked with firm size*

*H8f: The impact of firm's size on earning management is different for family-firms and non-family-firms*

*H9: Firms earnings management is associated with firm's profitability*

*H9f: The impact of firm's profitability on earnings management is different for family-firms and non-family-firms*

*H10: Earnings management is depend upon firm's age*

*H10f: The impact of firm's age on earning management is different for family-firms and non-family-firms*

Table 5.35 presents the results of two way clustered Pooled-OLS regression of firm characteristics on R_EM for listed firms in USA. Column 1, 2 and 3 present the results for full sample, family-firms and non-family-firms respectively. The coefficient of firm size is positive and significant for full sample ($\beta = 0.106$, $p < 0.01$), family-firms ($\beta = 0.128$, $p < 0.01$) and for non-family-firms ($\beta = 0.113$, $p < 0.01$). These results indicate that R_EM increases with the increase in firm size. Moreover, results also depict that large family-firms are more involved in EM through real actions than large non-family-firms. Result of t-test further depicts that coefficients of firm size for family and non-family firms are significantly different from each other. On the basis of these results, hypotheses H8 and H8f are accepted. Profitability on the other side has negative impact on R_EM for all three

samples of US firms, but the impact of profitability on R_EM is more pronounced for non-family-firms as compare to family-firms, and this difference is significant. These results support the hypotheses H9 and H9f.

**Table 5.35 Firm Characteristics and Real Earnings Management in USA**

| Variables | Full Sample R_EM | Family-firms R_EM | Non-Family-firms R_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| F_Size | 0.106*** | 0.128*** | 0.113*** | 1.690* | Significant |
| ROA | -1.181*** | -1.120*** | -2.179*** | 5.120*** | Significant |
| AGE | -0.0107 | 0.0170* | -0.0425*** | 5.080*** | Significant |
| Constant | -1.141*** | -1.484*** | -1.142*** | | |
| Observations | 12,378 | 8,531 | 3,847 | | |
| R-square | 0.143 | 0.142 | 0.224 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

Additionally, the co-efficient of firm age for full sample (β = -0.0170) is insignificant, hence, H10 is rejected. The coefficient of firm age is positive and significant for family-firms (β = 0.0170*), and significant negative for non-family-firms (β = -0.0425***). This result support H10f in US context.

To examine the impact of firm characteristics on R_EM in developing country context, we run two way clustered Pooled-OLS regression on Pakistani data. Column 1, 2 and 3 of Table 5.36 present the results for full sample, family-firms and non-family-firms respectively. The coefficient of firm size for full sample (β = -0.322, p < 0.01) suggests that firm size has significant negative impact on R_EM. Firm size is also negatively and significantly associated with R_EM for family-firms (β = -0.520. p < 0.01) and non-family-

firms (β = -0.187, p < 0.05), but the impact of firm size on R_EM for family-firms is near about three fold of non-family-firms. Hence hypothesis H8 and H8f are accepted in Pakistani context. Profitability, the other firm characteristic has no significant impact on R_EM either for family-firms or non-family-firms, hence rejecting the hypotheses H9 and H9f. Moreover results also suggest that firm age has negative and significant impact on R_EM for non-family-firms (β = -0.209*), while it has no significant impact on R_EM for full sample and for family-firms, henceforth supporting the hypothesis that maturity of firm has different influence on R_EM for family and non-family-firms, and rejecting the hypothesis H10.

**Table 5.36 Firm Characteristics and Real Earnings Management in Pakistan**

| Variables | Full Sample R_EM | Family-firms R_EM | Non-Family-firms R_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| F_Size | -0.322*** | -0.520*** | -0.187** | 3.367*** | Significant |
| ROA | 0.023 | 0.609 | -0.348 | 1.011 | Insignificant |
| AGE | -0.170 | -0.090 | -0.209* | 1.791* | Significant |
| Constant | 3.611*** | 4.996*** | 2.509*** | | |
| Observations | 1,252 | 562 | 690 | | |
| R-square | 0.105 | 0.186 | 0.051 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

To study the impact of firm characteristics on AB_EM for three different samples of US listed firms, we utilized two way clustered Pooled-OLS regression. Column 1, 2 and 3 of Table 5.37 present the result for full sample, family-firms and non-family-firms respectively. Firm size is significant negatively associated with accrual earrings

management for full sample (β = -0.040***) of US firms. Moreover the coefficient of firm size is also negative and significant for family-firms (β = -0.051, p < 0.05), but positive and insignificant for non-family-firms (β = 0.031, p > 0.10). These results support the hypotheses that firm size is associated with AB_EM and has different impact on AB_EM for family and non-family-firms. Hence, on the basis of above results hypothesis H8, and H8f are accepted. Moreover, the coefficient of profitability, measured as return on assets, is negative and significant (β = -0.473, p < 0.01) for full sample, indicating that AB_EM decrease with the increase in accounting profit. Results also depict that the impact of profitability is more pronounced for family-firms (β = -0.393, p < 0.01) as compare to non-family-firms (β = -0.325, p < 0.01), and this difference is significant. These results are in line with the hypotheses that the impact of firm's profitability on AB_EM is different for family and non-family-firms. At the end, maturity of firm, measured as natural log of firm's listing age, also has significant negative impact on AB_EM for full sample (β = -0.0487***, p < 0.01), family-firms (β = -0.0550**, p < 0.05) and for non-family-firms (β = -0.021***, p < 0.01). But the impact of maturity is more pronounced for family-firms as compare to non-family-firms, and this difference is significant too. On the basis of above results hypotheses H10 and H10f are accepted.

**Table 5.37 Firm Characteristics and Accrual Based Earnings Management in USA**

| Variables | Full Sample AB_EM | Family-firms AB_EM | Non-Family-firms AB_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| F_Size | -0.040*** | -0.051** | 0.031 | 2.985** | Significant |
| ROA | -0.473*** | -0.393*** | -0.325*** | 1.793* | Significant |
| AGE | -0.049*** | -0.055** | -0.021*** | 2.093** | Significant |
| Constant | 0.944*** | 1.106*** | 0.197 | | |
| Observations | 14,734 | 10,145 | 4,589 | | |
| R-square | 0.187 | 0.186 | 0.166 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

Table 5.38 exhibits the results of two way clustered pooled-OLS regression of firm characteristics on AB_EM for listed non-financial firms of Pakistan. AB_EM in family and non-family-firms of Pakistan increases as increase in firm size, but large non-family-firms manage earnings through discretionary accruals more extensively than large family-firms. This result in line with the hypothesis H8 and H8f. Furthermore, results also depict that profitability deter EM in family-firms while it is the reason to increase in AB_EM in non-family-firms, hence these results also in line with the hypothesis that EM behavior of profitable family-firms is different than the behavior of profitable non-family-firms. At the end, firm age is not significantly related to AB_EM for family-firms, while it has significant negative impact on AB_EM in non-family-firms. This result also support the hypothesis that firm age has different impact on AB_EM for family and non-family-firms in developing country.

**Table 5.38 Firm Characteristics and Accrual Based Earnings Management in Pakistan**

| Variables | Full Sample AB_EM | Family-firms AB_EM | Non-Family-firms AB_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| F_Size | 0.024*** | 0.019*** | 0.026*** | 1.937* | Significant |
| ROA | 0.189*** | -0.260*** | 0.439*** | 5.810*** | Significant |
| AGE | -0.020** | -0.017 | -0.022** | 1.892* | Significant |
| Constant | -0.128*** | -0.082 | -0.137*** | | |
| Observations | 1,436 | 642 | 794 | | |
| R-square | 0.149 | 0.129 | 0.114 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

### 5.5.5 Ownership Structure and Earning Management

Extant literature argues that managerial ownership is associated with EM. On the basis of extant literature, following hypotheses are constructed in literature review section and are tested in this section:

*H11: Managerial ownership has impact on earnings management*

*H11f: Managerial ownership has different impact on earnings management for family and non-family-firms*

To examine the impact of managerial ownership on R_EM in developed country context, we utilized two way clustered Pooled-OLS regression by keeping managerial ownership as independent variable and R_EM as dependent variable. Column 1, 2 and 3 of Table 5.39 presents the result of above mentioned regression for full sample, family-firms and non-family-firms respectively. Positive and significant coefficient of managerial

ownership for full sample (β = 0.0473, p <0.01) suggests that managerial ownership is the reason to increase in R_EM in USA for non-financial firms. Results also suggest that managerial ownership in family firm is positively associated (β = 0.099, p <0.01) with R_EM while it has significant negative impact (β = -0.213, p < 0.01) on R_EM for non-family-firms. Overall results of Table 5.39 support the hypotheses H11 and H11f in US context.

Table 5.40 displays the results of two way clustered pooled-OLS regression of managerial ownership on R_EM for Pakistani firms, full sample, family-firms and non-family-firms. The coefficient of managerial ownership for full sample demonstrate that R_EM increase as increase in managerial ownership. Results also indicate that managerial ownership has positive and significant impact of R_EM for family (β = 0.665, p < 0.01) and non-family-firms (β = 3.172, p < 0.01). Non-family-firms with high managerial ownership are more engaged in R_EM than family-firms. Above results backing the hypothesis that managerial ownership has not the same impact on R_EM for family and non-family-firms.

**Table 5.39 Managerial Ownership and Real Earnings Management in USA**

| Variables | Full Sample R_EM | Family-firms R_EM | Non-Family-firms R_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| M_Own | 0.047*** | 0.099*** | -0.213*** | 9.250*** | Significant |
| Constant | 0.333*** | 0.317*** | 0.395*** | | |
| Observations | 12,479 | 8,614 | 3,865 | | |
| R-square | 0.019 | 0.018 | 0.014 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

**Table 5.40 Managerial Ownership and Real Earnings Management in Pakistan**

| Variables | Full Sample R_EM | Family-firms R_EM | Non-Family-firms R_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| M_Own | 0.809*** | 0.665*** | 3.172** | 2.422** | Significant |
| Constant | 0.152* | 0.224 | 0.067 | | |
| Observations | 1,252 | 562 | 690 | | |
| R-square | 0.122 | 0.117 | 0.133 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

Table 5.41 show the results for the two way clustered pooled-OLS regression of managerial ownership on AB_EM for US firms. The coefficient of managerial ownership for full sample is -5.956 and it is significant at 1% level of significance, indicating that managerial ownership deter AB_EM in US firms. Column 2 and 3 display the results for family and non-family-firms. The coefficient of managerial ownership for family-firms is ($\beta$ = -5.450, p <0.01) negative and significant, while it is positive and insignificant for non-family-firms ($\beta$ = 0.329, p >0.10), indicating that managerial ownership has not the same influence on AB_EM for family and non-family-firms in developed country. Above mentioned results support the hypotheses H11 and H11f in US context.

**Table 5.41 Managerial Ownership and Accrual Based Earnings Management in USA**

| Variables | Full Sample AB_EM | Family-firms AB_EM | Non-Family-firms AB_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| M_Own | -5.957*** | -5.450*** | 0.329 | 14.379*** | Significant |
| Constant | -0.495 | 0.295 | -2.953*** | | |
| Observations | 14,762 | 10,173 | 4,589 | | |
| R-square | 0.137 | 0.111 | 0.000 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

Table 5.42 displays the outcomes for two way clustered pooled-OLS regression of managerial ownership on AB_EM for listed firms in Pakistan for three different samples i.e. full sample, family-firms and non-family-firms. In column 1 the coefficient of managerial ownership is -0.0694 indicating that managerial ownership prevent AB_EM in listed Pakistani firms. Column 2 and 3 show the results of managerial ownership on AB_EM for family and non-family-firms. Managerial ownership has significant, negative and different impact on AB_EM for family ($\beta$ = -0.0752, $p < 0.05$) and non-family-firms ($\beta$ = -0.170, $p < 0.05$). Overall these results support the hypothesis that managerial ownership has different impact on AB_EM for family and non-family-firms in Pakistan.

**Table 5.42 Managerial Ownership and Accrual Based Earnings Management in Pakistan**

| Variables | Full Sample AB_EM | Family-firms AB_EM | Non-Family-firms AB_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| M_Own | -0.069*** | -0.075** | -0.170** | 1.957* | Significant |
| Constant | 0.037*** | 0.041** | 0.039*** | | |
| Observations | 1,436 | 642 | 794 | | |
| R-square | 0.103 | 0.096 | 0.112 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

### 5.5.6 Earnings Management (Full Model)

Table 5.43 presents the results of two way clustered Pooled-OLS for model 4.21 of US listed firms. Column 1, 2 and 3 display the results for full sample, family-firms and non-family-firms. Coefficients of leverage for full sample ($\beta = 0.084$, $p < 0.01$) is positive and significant at 1% level of significance. This result suggests that leverage is positively linked with R_EM in US firms, and accepting the hypothesis H1, that leverage is positively associated with R_EM in US firms. Co-efficient of leverage for family-firms ($\beta = 0.103$, $p < 0.01$) and non-family-firms ($\beta = 0.056$, $p < 0.10$) are also positive and significant, and different from each other, suggesting that R_EM behavior of leveraged family and non-family-firms is different, hence supporting the hypothesis H1f, that leveraged family owned business involvement in R_EM is different from leveraged non-family owned firms.

Furthermore, the co-efficient of CSR for family firms ($\beta = 0.295$*** , $p <0.01$) and non-family-firms ($\beta = 0.334$***, $p < 0.01$) are depicting that firms which perform CSR activities either belongs to family or non-family, are more involved in EM activities. The

beta coefficients of CSR for family and non-family-firms are also different from each other, hence backing the hypothesis H3f that the relationship between CSR and EM is different for family and non-family-firms. Results also indicate that audit-committee independence has no significant impact on EM for full sample, family firms and for non-family firms, hence rejecting the hypothesis H5, that ACI has an impact on EM. Result of t-test suggests that coefficients of ACI are significantly different for family and non-family firms, hence we accept the hypothesis H5f. Additionally, the coefficient of board independence for family-firms ($\beta = 0.0672$, $p < 0.10$) has positive and significant impact on EM for family-firms, whereas BI has no significant impact on EM for non-family-firms, and this difference is significant too. This result backing the hypothesis H4f. The coefficient of board-size for full sample ($\beta = 0.065$, $p < 0.01$), is positive and significant, indicating that real earnings management increase with the increase in board size. On the basis of this result, H7 is accepted. Moreover, the coefficients of board size for family-firms ($\beta = 0.073$, $p < 0.01$) and for non-family-firms ($\beta = 0.031$, $p > 0.10$) are positive and significant, indicating that real earnings management also increases with the increase in board size for both type of firms. Result of the t-test indicates that the coefficients of board size for family and non-family firms are significantly different from each other. On the basis of this result, H7f is accepted. Results of the Table 4.41 further depict that gender diversity on board is helpful in deterring real earnings management in US firm. This result support H6. Results also indicate that non-family-firms having more female on board are less engaged in R_EM than family-firms having female directors, and this difference is also significant on the basis of t-test value. This result backing the hypothesis H6f, that gender diverse board has different impact on R_EM in family and non-family-firms.

Moreover, Table 5.43 also displays the result for the influence of firm characteristics on R_EM in US firms. Increase in firm size, measured as natural log of total assets, is also the reason to increase in R_EM in US firms ($\beta = 0.143$, $p < 0.01$). Results further depict that large family-firms ($\beta = 0.151$, $p < 0.01$) are more involved in R_EM as compare to large non- family-firms (0.139, $p < 0.01$). On the basis of these results, H8 and H8f are accepted. Results also depict that more profitable US firms are less involved in R_EM ($\beta = -1.116$, $p < 0.01$). The coefficients of profitability for family-firms ($\beta = -0.835$, $p < 0.01$) and non-family-firms ($\beta = -1.464$, $p < 0.01$) are also negative and significant, indicate that both types of profitable firms are not involved in real earnings management. The value of t-test is also significant, which indicates that both coefficients are different too. These results support H9 and H9f.

Results also portray that maturity of firm does not have significant impact on R_EM in US ($\beta = -0.708$, $p >0.10$). This result does not support H10. The coefficients of age for family firms ($\beta = 0.512$, $p < 0.10$) is positive and significant, while for non-family-firms ($\beta = -0.807$, $p < 0.05$), is negative and significant. This result advocates that more mature family firms are more involved in real earnings management, while, on contrary, more mature non-family are not involve in real earrings management. The value of t-test Indicates that this difference is significant too. This result proposes the accepting of hypothesis, that the behavior of mature family-firms is different from the behavior of mature non-family-firms. Managerial ownership in US firms is the reason to increase in R_EM for full sample ($\beta = 0.139$, $p < 0.01$) and for family-firms ($\beta = 0.116$, $p < 0.01$), while in non-family-firms ($\beta = -0.114$, $p < 0.01$) managerial ownership deter real earnings management. These results also suggest that family-firms having managerial ownership

are more engaged in R_EM than non-family firm, hence we accept the hypotheses H11 and H11f.

**Table 5.43 Real Earnings Management in USA**

| Variables | Full Sample R_EM | Family-firms R_EM | Non-Family-firms R_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| LEV | 0.084*** | 0.103*** | 0.056* | 1.87* | Significant |
| CSR | 0.342*** | 0.295*** | 0.334*** | -1.701* | Significant |
| ACI | -0.119 | -0.146 | -0.056 | -1.301 | Insignificant |
| BI | 0.0311 | -0.067* | 0.055 | -1.951* | Significant |
| BGDV | -0.495*** | -0.422*** | -0.577*** | 1.773* | Significant |
| B_SIZE | 0.065*** | 0.073*** | 0.031 | 1.829* | Significant |
| F_Size | 0.143*** | 0.151*** | 0.139*** | 1.801* | Significant |
| ROA | -1.116*** | -0.835*** | -1.464*** | 3.168*** | Significant |
| AGE | -0.708 | 0.512* | -0.807** | 2.192** | Significant |
| M_Own | 0.139*** | 0.116** | -0.114*** | 4.927*** | Significant |
| Constant | -1.172*** | -0.640*** | -1.367*** | | |
| Observations | 7,431 | 3,591 | 3,840 | | |
| R-square | 0.468 | 0.420 | 0.556 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

Table 5.44 presents the results of model 4.22 for US data. Column 1, 2 and 3 display the results for full sample, family-firms and non-family-firms. The coefficient of leverage for full sample ($\beta = 0.705^{***}$, $p < 0.01$) is positive and significant, hence opposing the H2. This show that AB_EM in US is increased with the increase in leverage. On the basis of

this result, H2 is rejected for US firms. Furthermore, results also depict that the coefficients of leverage for family-firms (β = 0.381**, p < 0.05) and for non-family-firms (β = 0.167*, p < 0.01) are also positive and significant, but significantly different. This result supports the hypothesis H2f. Moreover, the coefficient of CSR is negative for all three samples, indicating that increase in CSR activities leads to decrease in AB_EM. Furthermore, t-test suggests that the coefficient of CSR for family (β = -0.138, p < 0.10) is different from the coefficient of CSR for non-family-firms (β = -0.163, p < 0.01). These results support the hypotheses H3 and H3f in USA context.

Table 5.44 also portrays the result for proxies of governance structure. Audit-committee independence is significantly negatively associated with AB_EM for full sample (β = -0.383*, p < 0.10), family-firms (β = -0.411**, p < 0.05) and for non-family-firms (β = -0.209***, p < 0.01). This result suggest that audit committee independence plays effective role to control AB_EM. Moreover the coefficients of ACI are not same for family and non-family-firms. Hence, these result support the hypotheses H5 and H5f. The coefficient of board independence for full sample in US (β = -0.067**, p < 0.05) is suggesting that earnings management decrease as increase in board independence. Furthermore, coefficients of BI for family firms (β = -0.052**, p < 0.05) and for non-family-firms (β = -0.012*, p < 0.10) are negative and significant. This result indicates that board independence also plays effective role to control AB_EM in US family and non-family firms. Value of t-test indicates that the coefficients of board independence for family and non-family firms are significantly different. These results support the hypotheses H4 and H4f. Results further depict that gender diverse board in US deter AB_EM for all firms. On the basis of this result H6 is accepted. Value of t-test indicates

that gender diversity plays same role to deter AB_EM for family and non-family firms, hence H6f is rejected.

**Table 5.44 Accrual Based Earnings Management in USA**

| Variables | Full Sample AB_EM | Family-firms AB_EM | Non-Family-firms AB_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| LEV | 0.705*** | 0.381** | 0.167* | 4.108*** | Significant |
| CSR | -0.150*** | -0.138* | -0.163*** | 1.825* | Significant |
| ACI | -0.383* | -0.411** | -0.209*** | -4.099*** | Significant |
| BI | -0.067** | -0.052** | -0.012* | -1.970** | Significant |
| BGDV | -0.146** | -0.176* | -0.122** | -1.592 | Insignificant |
| B_SIZE | -0.035** | -0.013* | -0.045* | 2.105** | Significant |
| F_Size | -0.782** | -0.114* | 0.175** | -4.619*** | Significant |
| ROA | -0.045*** | -0.049*** | -0.047*** | -1.402 | Insignificant |
| AGE | -0.043*** | -0.053*** | -0.019*** | -2.176** | Significant |
| M_Own | -0.571* | -0.364* | -0.797 | 5.302*** | Significant |
| Constant | 1.087** | 0.118 | -0.295*** | | |
| Observations | 8,369 | 3,785 | 4,584 | | |
| R-square | 0.492 | 0.440 | 0.476 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

Results of the Table 5.44, depict that AB_EM decreases with the increase in board size for full sample (β = -0.035**, p < 0.05), family firms (β = -0.013*, p < 0.10) and for non-family firms (-0.045*, p < 0.05) in USA. These results further added that, the role of board independence is more pronounced in non-family firms as compare to family firms,

and this difference is significant too. These evidences support the hypotheses H7 and H7f in US context.

Furthermore, Table 5.44 also displays that increase in firm-size decreases AB_EM in US for full sample ($\beta = -0.782^{**}$, $p < 0.05$). This result support the hypothesis H8. The coefficient of firm size for family-firms ($\beta = -0.114$, $p < 0.10$) is negative and significant, whereas it has significant and positive impact on AB_EM for non-family-firms ($\beta = 0.175^{**}$, $p < 0.05$). This difference of coefficients is significant too, so H8f is accepted. Moreover, results indicate that AB_EM decreases as firm earns more profit in USA, and this result prevail for all US firms, i.e. for full sample ($\beta = -0.045^{***}$, $p < 0.01$), family firms ($\beta = -0.049^{***}$, $p < 0.01$) and for non-family firms ($\beta = -0.047^{***}$, $p < 0.01$). This result support the hypothesis H9 but reject H9f. Similarly, firm age deter AB_EM in all US firms, either belong to full sample ($\beta = -0.043^{***}$, $p < 0.05$), family firms ($\beta = -0.053^{***}$, $p < 0.01$) and non-family-firms ($\beta = -0.019^{***}$, $p < 0.01$). On the basis of this result, H10 is accepted. Moreover, the impact of age is more pronounced for family firms than non-family firms, and this difference is significant based on t-test value. Hence, we accept H10f. Additionally, results also depict that managerial ownership has significant negative impact on AB_EM for full sample ($\beta = -0.571^{*}$, $p < 0.10$) and for family firm ($\beta = -0.364^{*}$, $p < 0.10$), but has no significant impact on AB_EM for non-family-firms ($\beta = -0.797$, $p > 0.10$). This result indicates that increase in managerial ownership decreases accrual manipulation in US firms belong to full sample and for family firms only. Managerial ownership has no significant impact on AB_EM for non-family firms. Based on these results, H11 and H11f are accepted.

Table 5.45 displays the results of model 4.21 for Pakistani data. Column 1 shows the results for full sample while column 2 and 3 show the results for family and non-family firm respectively. Column 1 depicts that coefficient of leverage ($\beta$ = -0.828***, $p < 0.01$) has significant negative impact on R_EM in Pakistan. This result contradict hypothesis H1 that leverage is positively associated with R_EM. Results further depict that leverage ($\beta$ = -0.239, $p < 0.10$) has no significant impact on real earrings management for family-firms, while ($\beta$ = -1.466***, $p < 0.01$) significant negative impact on real earrings management for non-family-firms. This result support the hypothesis that leveraged family firms' involvement in R_EM is different as compare to leverage non-family firms. Results further depict that R_EM activities are reduced as increase in the value of CSR index for full sample ($\beta$ = -0.178**, $p < 0.05$), family firms ($\beta$ = -0.857*, $p < 0.10$) and for non-family firms ($\beta$ = -0.597***, $p < 0.01$). This result supports the hypothesis H3. Result also show that the impact of CSR on R_EM for family-firms is more negative than the non-family-firms, and this difference is significant based on the t-value. On the basis of this result, hypothesis H3f is also accepted.

Corporate governance mechanisms i.e. audit-committee independence ($\beta = 0.162$, $p > 0.10$) and board independence ($\beta = 0.275$, $p > 0.10$) are unable to deter R_EM in Pakistani firms. These results do not support the hypotheses H4 and H5. Furthermore, gender diversity has significant positive impact on R_EM for full sample ($\beta$ = 0.672*, $p < 0.10$), hence H6 is accepted. Gender diverse boards has no significant impact on R_EM for family-firms ($\beta = 0.568$, $p > 0.10$), while in non-family-firms ($\beta = 1.336$**, $p < 0.05$) R_EM increases with the increase in female directors on board. This result backs the hypothesis H6f. Additionally, results also depict that larger boards are more helpful in deterring R_EM

for all three samples i.e. full sample (β = -0.180*, p <0.10), family firms (β = -0.197*, p <0.10) and for non-family firms (β = -0.111*, p <0.10), but the impact of board size is more pronounced for family firms as compare to non-family firms. Value of t-test confirms that this difference is significant. On the basis of these results H7 & H7f are accepted.

Results of the Table 5.45 further depict that firm's profitability (β = -0.345, p >0.10) and firm's age (β = -0.099, p > 0.10) have no significant impact on R_EM for full sample in Pakistani context, hence hypothesis H9 and H10 are rejected. Results further depict that R_EM decreases with the increase in firm size for full sample (β = -0.342***, p < 0.10), family firms (β = -0.524***, p < 0.01) and for non-family firms (β = -0.170**, p < 0.05). This result supports the H8. Results also depict that the impact of firm size is more obvious for family-firms as compare to non-family-firms, hence accepting the hypothesis H8f. Additionally, results also show that R_EM increases as increase in managerial ownership (β = 0.427**, p < 0.05) . The impact of managerial ownership on R_EM for non-family firms (β = 1.891*, p < 0.10) is more positive as compare to family firms (β = 0.823***, p < 0.01), and this difference is significant too. These results support the hypothesis H11 and H11f.

Table 5.46 displays the results of two way clustered pooled-OLS for model 4.22 in Pakistani context. Column 1, 2 and 3 display the results for full sample, family-firms and non-family-firms respectively. The coefficient of leverage for full sample (β = -0.238***, p < 0.01) is negative and significant, hence backs the hypothesis H2 i.e. increase in leverage control AB_EM. Furthermore, the coefficients of leverage for family-firms (β = -0.194***, p < 0.01) and for non-family-firms (β = -0.231***, p <0.01) are also negative and significant, but different from each other, indicating that Leveraged family owned

**Table 5.45 Real Earnings Management in Pakistan**

| Variables | Full Sample R_EM | Family-firms R_EM | Non-Family-firms R_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| LEV | -0.828*** | -0.239 | -1.466*** | 2.420** | Significant |
| CSR | -0.178** | -0.857* | -0.597*** | -2.955*** | Significant |
| ACI | 0.162 | 0.080 | 0.460 | -3.375*** | Significant |
| BI | 0.275 | -0.036 | 0.547 | -2.450** | Significant |
| BGDV | 0.672* | 0.568 | 1.336** | -2.901*** | Significant |
| B_SIZE | -0.180* | -0.197* | -0.111* | -1.977** | Significant |
| F_Size | -0.342*** | -0.524*** | -0.179** | -2.439** | Significant |
| ROA | -0.345 | -0.099 | -0.761 | 4.102*** | Significant |
| AGE | -0.0362 | 0.0547 | -0.114 | 1.924* | Significant |
| M_Own | 0.427** | 0.823*** | 1.891* | -2.859*** | Significant |
| Constant | 3.643*** | 4.070*** | 2.764*** | | |
| Observations | 1,252 | 562 | 690 | | |
| R-square | 0.364 | 0.227 | 0.275 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

business involvement in AB_EM is different as compare to leverage nonfamily owned business. On the basis of this result hypothesis H2f is accepted. Moreover, the coefficient of CSR is positive and significant for full sample (β = 0.0660***, p < 0.01) and for non-family-firms (β = 0.121***, p < 0.01), but negative and significant for family-firms (β = -0.181***). These results support the hypothesis H3 and H3f.

Table 5.46 also portrays the result for proxies of governance structure. Audit-committee independence, board independence and board gender diversity have no impact on AB_EM for all three samples i.e. full sample, family-firms and non-family-firms. In the light of these results we reject the hypothesis H4, H4f, H5, H5f, H6 and H6f. Results further depict that AB_EM increases with the increase in board-size ($\beta = 0.105^{***}$, $p < 0.01$), hence accepting the hypothesis H7. Moreover the coefficients of board-size for family-firms is ($\beta = 0.041$, $p > 0.10$) is insignificant while positive and significant for non-family firm ($\beta = 0.126^{***}$, $p < 0.01$) and this difference is significant too, hence H7f cannot be rejected.

Furthermore, Table 5.46 also displays the impact of firm's characteristics on AB_EM in Pakistani context. Firm size has significant positive impact on AB_EM for full sample ($\beta = 0.0181^{***}$, $p < 0.01$), indicating that AB_EM increases as increase in firm size. This result support the hypothesis H8. Results also portray that larger family-firms ($\beta = 0.020^{***}$, $p < 0.01$) manage earnings through accruals more extensively than non- family-firms ($\beta = 0.011^{**}$, $p < 0.01$). The value of t-test indicates that this difference is significant, hence H8f is accepted. Results also portray that increase in profitability is the reason to increase in AB_EM for full sample ($\beta = 0.0911^{*}$, $p < 0.10$), and for non-family-firms ($\beta = 0.275^{*}$, $p < 0.10$), but this is merely significant. This results indicate that hypothesis H9 is accepted. Results further depict that AB_EM decrease with the increase in firm's age, and this is true for family and non-family Pakistani listed firms. Based on this result, we accept H10. Value of t-test indicates that the impact of age on AB_EM is significantly different for family and non-family firms, hence we accept H10f. Managerial ownership also has significant negative impact on EM for full sample ($\beta = -0.079^{***}$, $p < 0.01$) and for family-

firms sample (β = -0.074**, p <0.05), but has no impact on AB_EM for non-family-firms (β = -0.139, p > 0.10). On the basis of these results, H11 and H11f are accepted.

**Table 5.46 Accrual Based Earnings Management in Pakistan**

| Variables | Full Sample AB_EM | Family-firms AB_EM | Non-Family-firms AB_EM | Comparison Based on t-value | Result |
|---|---|---|---|---|---|
| LEV | -0.238*** | -0.194*** | -0.231*** | 1.820* | Significant |
| CSR | 0.0660*** | -0.181*** | 0.121*** | -4.057*** | Significant |
| ACI | 0.0143 | 0.033 | 0.007 | 1.037 | Insignificant |
| BI | 0.454 | 0.527 | -0.112 | 1.190 | Insignificant |
| BGDV | -0.042 | 0.088 | -0.015 | 1.38 | Insignificant |
| B_SIZE | 0.105*** | 0.041 | 0.126*** | -2.672*** | Significant |
| F_Size | 0.018*** | 0.020*** | 0.010** | 1.832* | Significant |
| ROA | 0.091* | -0.091 | 0.275* | -3.452*** | Significant |
| AGE | -0.029*** | -0.086 | -0.052*** | -5.102*** | Significant |
| M_Own | -0.079*** | -0.074** | -0.139 | 2.077** | Significant |
| Constant | -0.060 | 0.013 | 0.055 | | |
| Observations | 1,436 | 642 | 794 | | |
| R-square | 0.366 | 0.326 | 0.295 | | |

*** = p<0.01, ** = p<0.05, * = p<0.1

### 5.5.7 Comparison of Earnings Management between US and Pakistani Listed Firms

Table 5.47 presents the comparison of R_EM between USA and Pakistani listed non-financial firms. Results depict that there is significant difference of leverage on R_EM in USA and Pakistan. Increase in leverage is the reason to increase in R_EM in USA while in

contrast there is inverse relationship between leverage and R_EM in Pakistani context. Similarly, the impact of CSR on R_EM in USA is positive while in Pakistani listed firms, R_EM decreases with the increase in CSR activities, and this difference is also significant. US firms perform CSR activities to hide their opportunistic behavior, while Pakistani firms which perform CSR activities behave in ethical manner. Additionally, audit committee independence and board independence have no significant impact on R_EM in both institutional settings. The reason for this result lies in the fact that R_EM is based on actual operations of the business, so it is very difficult to identify that specific operations are done for earnings management or they were necessary for firm's performance. Furthermore, gender diverse board in US listed firms has significant negative impact on R_EM, while in Pakistani listed firm the relationship is significant and positive, and the coefficients of gender diversity are significantly different for both data sets. In Pakistani context female directors are elected just for compliance purpose. Furthermore, in developing economies, females are not power full as compare to developed economies.

Furthermore, R_EM increases in US listed non-financial firms as increase in firm's size, while this association in Pakistani scenario is negative and significant and both regression slopes are statistically different from each other. On the other side, profitability has negative impact on R_EM in both countries, but in US context this relationship is significant, while insignificant in Pakistani setup. If firms are already earnings profit, so there is no need to manage earnings. In both institutional settings, R_EM increases as increase in managerial ownerships, but managers of Pakistani listed firms are more involved in R_EM as compare to US firms. Type two agency problem is more severe in

developing economies as compare to developed economies. This difference can be explained through institutional setting theory.

**Table 5.47 Comparison of Real Earnings Management between USA and Pakistan**

| Variables | Full Sample USA R_EM | Full Sample Pakistan R_EM | Comparison based on t-value | Result |
|---|---|---|---|---|
| LEV | 0.084*** | -0.828*** | 6.434*** | Significant |
| CSR | 0.342*** | -0.178** | 3.173*** | Significant |
| ACI | -0.119 | 0.162 | 0.877 | Insignificant |
| BI | 0.0311 | 0.275 | 0.999 | Insignificant |
| BGDV | -0.495*** | 0.672* | 3.976*** | Significant |
| B_SIZE | 0.065*** | -0.180* | 0.965 | Insignificant |
| F_Size | 0.143*** | -0.342*** | 6.721*** | Significant |
| ROA | -1.116*** | -0.345 | 1.324 | Insignificant |
| AGE | -0.708 | -0.036 | 8.471*** | Significant |
| M_Own | 0.139*** | 0.427** | 1.648* | Significant |

*** = p<0.01, ** = p<0.05, * = p<0.1

Table 5.48 presents the comparison of AB_EM between two different institutional settings i.e. USA and Pakistan. Increase in leverage caused in significant decrease in AB_EM in Pakistan, while it has the reason to increase in AB_EM in US context and this difference of slopes for both countries is statically significant. CSR on the other side decreases the discretionary accruals significantly in US context, whereas discretionary accruals increase as increase in firm's CSR activities in Pakistani context and this difference between slopes is also significant. US firms are considered more responsible, so provide actual information of business to all stakeholders. Whereas Pakistani firms perform

CSR activities to hide their opportunistic behavior. Furthermore, board independence, audit committee independence and gender diversity control managerial opportunism regarding AB_EM in USA while, these mechanisms are unable to control management in Pakistan. Institutional setting theory explain that, in developing country rules and regulations are not efficient or systems are not developed up to the standard so that to control management's opportunist behavior. Likewise, discretionary accruals increase as increase in board-size in Pakistani listed non-financial firms, but in US context discretionary accruals decrease significantly as increase in board size and this difference in slopes is statistically significant. Institutional setting theory also explain this difference.

Additionally, profitability and firm-size has significant negative impact on AB_EM in US corporate settings, while Pakistani listed non-financial firms manage discretionary accrual more as increase firm size and profitability. In both institutional settings, more mature firms are less involved in AB_EM, as with the passage of time firms developed strong internal mechanisms to control management more effectively. Table 5.48 also display that managerial ownership has significant negative influence on AB_EM in US and Pakistani listed non-financial firms, but in US context it has more negative impact as compare to Pakistan and this difference is also significant. Managers are also owners of firms, so there is no need to manipulate the earnings of firms.

**Table 5.48 Comparison of Accrual Based Earnings Management between USA and Pakistan**

| Variables | Full Sample USA AB_EM | Full Sample Pakistan AB_EM | Comparison based on t-value | Result |
|---|---|---|---|---|
| LEV | 0.705*** | -0.238*** | 2.485** | Significant |
| CSR | -0.150*** | 0.066*** | 6.329*** | Significant |

| | | | | |
|---|---|---|---|---|
| ACI | -0.383* | 0.0143 | 2.827*** | Significant |
| BI | -0.067** | 0.454 | 5.554*** | Significant |
| BGDV | -0.146** | -0.0421 | 2.573** | Significant |
| B_SIZE | -0.035** | 0.105*** | 3.624*** | Significant |
| F_Size | -0.782** | 0.0181*** | -2.269** | Significant |
| ROA | -0.045*** | 0.0911* | -2.501** | Significant |
| AGE | -0.043*** | -0.029*** | -1.404 | Insignificant |
| M_Own | -0.571* | -0.0798*** | 4.636*** | Significant |

*** = p<0.01, ** = p<0.05, * = p<0.1

### 5.5.8 Comparison of Earnings Management between Family-firms of US and Pakistan

Table 5.49 presents the comparison of R_EM between US family-firms and Pakistani family-firms. US family-firms increase EM through real activities as increase in leverage, whereas leverage has no significant impact on R_EM in Pakistani family-firms. The coefficients of leverage for US and Pakistani family-firms are different in direction but this difference is statistically insignificant. It means that, the impact of leverage on R_EM in both countries is same. Additionally, more social responsible US family-firms are involved in EM through real activities, whereas Pakistani family-firms decrease their R_EM as their involvement increase in social responsible activities and this difference is statistically significant.

Moreover, Table 5.49 also depicts that audit-committee independence is unable to deter R_EM in family-firms of both institutional settings. Additionally, more independent and gender diverse boards deter R_EM in US family-firms, whereas both of the

independent variables i.e. independent and gender diverse boards have no significant impact on R_EM in Pakistani family-firms. This difference can be explained by the institutional setting theory. Similarly, large board-size in Pakistani family-firms controls the opportunistic behavior of management regarding R_EM, while in US context this relationship is positive.

Table 5.49 further displays that large US family-firms are engaged in EM through real activities, but increase in size of family-firms listed on Pakistani stock exchange decreases R_EM, and this difference is significant too. Moreover, the impact of profitability on R_EM is same for both institutional settings. Profitable family firms are not involved in R_EM. Results further depict that mature US family firms manage their earnings through real activities, while age has no significant impact on R_EM in Pakistani family firms. This difference is also significant on the basis of t-test. Furthermore, increase in managerial ownership in family-firms of both institutional settings is the reason to increase in R_EM, but it has greater impact in Pakistani context as compare to US context and this difference is also significant. This result can be explained through institutional setting theory.

**Table 5.49 Comparison of Real Earnings Management of family-firms between USA and Pakistan**

| Variables | US Family-firms R_EM | Pakistani Family-firms R_EM | Comparison based on t-value | Result |
|---|---|---|---|---|
| LEV | 0.103*** | -0.239 | 0.937 | Insignificant |
| CSR | 0.295*** | -0.857* | 2.822*** | Significant |
| ACI | -0.146 | 0.0802 | 0.576 | Insignificant |

| | | | | |
|---|---|---|---|---|
| BI | -0.067* | -0.036 | 0.097 | Insignificant |
| BGDV | -0.422*** | 0.568 | 1.919* | Significant |
| B_SIZE | 0.073*** | -0.197* | 2.52** | Significant |
| F_Size | 0.151*** | -0.524*** | 6.542*** | Significant |
| ROA | -0.835*** | -0.099 | 0.724 | Insignificant |
| AGE | 0.512* | 0.0547 | 3.245*** | Significant |
| M_Own | 0.116** | 0.823*** | 4.267*** | Significant |

*** = p<0.01, ** = p<0.05, * = p<0.1

Table 5.50 presents the comparison of AB_EM between US family-firms and Pakistani family-firms. Family-firms listed in Pakistan decrease their involvement in AB_EM as they are more levered, while this relationship is opposite in US context. Moreover, CSR has significant negative impact on R_EM of family-firms in both institutional settings, but in Pakistani settings the impact is more pronounced as compare to US context. In both institutional settings, family firms behave in ethical manners regarding AB_EM.

Additionally, Table 5.50 also displays that, governance mechanism is helpful in deterring AB_EM in US family firms, but unable to control managerial opportunism regarding AB_EM in Pakistani family firms. Institutional setting theory explains this difference.

Furthermore, Table 5.50 also depicts that the impact of profitability and age on AB_EM is same in both institutional settings. In both countries, AB_EM decreases with the increase in profitability and age. Results also depict that the impact of firm size is negative on AB_EM in US family firms, while positive in Pakistani family firms. Results

further depict that increase in managerial ownership in family-firms listed in both institutional settings deters the management of discretionary accruals, but in US settings the impact is more pronounced as compare to Pakistani corporate environment.

**Table 5.50 Comparison between Accrual Based Earnings Management of family-firms of USA and Pakistan**

| Variables | US Family-firms AB_EM | Pakistani Family-firms AB_EM | Comparison based on t-value | Result |
|---|---|---|---|---|
| LEV | 0.381** | -0.194*** | 2.188** | Significant |
| CSR | -0.138* | -0.181*** | 0.553 | Insignificant |
| ACI | -0.411** | 0.033 | 2.490** | Significant |
| BI | -0.052** | 0.527 | 4.067*** | Significant |
| BGDV | -0.176* | 0.088* | 2.391** | Significant |
| B_SIZE | -0.013* | 0.041 | 2.626*** | Significant |
| F_Size | -0.114* | 0.020*** | 2.234** | Significant |
| ROA | -0.049*** | -0.091 | 0.358 | Insignificant |
| AGE | -0.053*** | -0.086 | 1.244 | Insignificant |
| M_Own | -0.364* | -0.074** | 2.707*** | Significant |

***** = p<0.01, ** = p<0.05, * = p<0.1**

### 5.5.9 Generalized Method of Moment (GMM)

Table 5.51, Table 5.52, Table 5.53 and Table 5.54 show the results of R_EM and AB_EM of US and Pakistani data for full sample, family-firms and non-family-firms sub-samples. These tables are constructed by applying GMM technique on equation (4.19) and (4.20). GMM method is used for robustness. The results of the study are robust. Results

depict that endogeneity exit in the data. To tackle the endogeneity issue, GMM technique is applied.

**Table 5.51 GMM Regression Results for Real Earnings Management in USA**

| Variables | Full Sample | Family-firms | Non-Family-firms |
|---|---|---|---|
| | R_EM | R_EM | R_EM |
| L.R_EM | 0.334*** | 0.246*** | 0.456*** |
| LEV | 0.0503*** | 0.0522*** | 0.0501*** |
| CSR | 0.204*** | 0.123*** | 0.157*** |
| ACI | -0.0827 | -0.0692 | -0.220 |
| BI | 0.093 | 0.110 | 0.0650 |
| BGDV | -0.447*** | -0.424*** | -0.428*** |
| B_SIZE | 0.111*** | 0.140*** | 0.0821* |
| F_Size | 0.107*** | 0.118*** | 0.0931*** |
| ROA | -0.750*** | -0.748*** | -0.798*** |
| AGE | -0.000672 | 0.00503 | -0.00220 |
| M_Own | 0.0492*** | 0.0851*** | -0.0289* |
| Constant | -0.893 | -1.020 | -0.664 |
| AR(1) | -14.10*** | -7.63*** | -12.15*** |
| AR(2) | -4.52*** | 3.66*** | -2.47*** |
| Endogeneity test | 321.01*** | 105.67*** | 223.29*** |
| Observations | 6,691 | 3,409 | 3,282 |

*** = p<0.01, ** = p<0.05, * = p<0.1

**Table 5.52 GMM Regression Results for Accrual Based Earnings Management in USA**

| Variables | Full Sample | Family-firms | Non-Family-firms |
|---|---|---|---|
| | AB_EM | AB_EM | AB_EM |
| L.AB_EM | -0.00380** | 0.00236 | -0.00346** |
| LEV | 0.364*** | 0.279* | 0.0845* |
| CSR | -0.139*** | -0.0783** | -0.185*** |
| ACI | -0.290** | -0.0748* | -0.213** |
| BI | 0.260* | 0.395* | 0.553** |
| BGDV | -0.124*** | -0.154*** | -0.106*** |
| B_SIZE | -0.0435*** | -0.0192** | -0.0671** |
| F_Size | -0.0784** | -0.0875** | 0.0215* |
| ROA | -0.0765*** | -0.068*** | -0.0547*** |
| AGE | -0.0400*** | -0.0365*** | -0.0134** |
| M_Own | -0.0662*** | -0.0429* | 0.0200 |
| Constant | 0.314* | 0.521* | -0.361 |
| AR(1) | -15.00*** | -4.89*** | -16.12*** |
| AR(2) | -5.75*** | -3.54*** | -6.9*** |
| Endogeneity test | 192.05 (0.000) | 104.41*** | 138.89*** |
| Observations | 7,623 | 3,612 | 4,011 |

*** = p<0.01, ** = p<0.05, * = p<0.1

**Table 5.53 GMM Regression Results for Real Earnings Management in Pakistan**

| Variables | Full Sample | Family-firms | Non-Family-firms |
|---|---|---|---|
| | R_EM | R_EM | R_EM |
| L.CR_EM | 0.0769** | 0.00414 | 0.107** |
| LEV | -0.847*** | -0.0372 | -1.529*** |
| CSR | -0.124* | -0.834** | -0.790** |
| ACI | 0.00406 | -0.0919 | 0.311 |
| BI | 0.317 | -0.226 | 0.921** |
| BGDV | 0.854** | 0.935 | 1.330*** |
| B_SIZE | -0.464* | -0.426* | -0.588* |
| F_Size | -0.216*** | -0.432*** | -0.0643* |
| ROA | -0.173 | 0.137 | -0.486 |
| AGE | -0.121 | 0.00938 | -0.161 |
| M_Own | 0.377** | 0.388* | 0.972 |
| Constant | 0.532 | 0.421 | 0.701 |
| AR(1) | -8.07*** | -5.70*** | -5.868*** |
| AR(2) | -2.18** | 2.12 ** | -2.16*** |
| Endogeneity test | 79.55*** | 46.33*** | 53.58*** |
| Observations | 1,067 | 476 | 591 |

*** = p<0.01, ** = p<0.05, * = p<0.1

**Table 5.54 GMM Regression Results for Accrual Based Earnings Management in Pakistan**

| Variable | Full Sample | Family-firms | Non-Family-firms |
|---|---|---|---|
| | AB_EM | AB_EM | AB_EM |
| L.AB_EM | 0.628*** | 0.579*** | 0.636*** |
| LEV | -0.105*** | -0.0919*** | -0.103*** |
| CSR | 0.301* | -0.0659** | 0.0129* |
| ACI | 0.0327 | 0.0478 | 0.00157 |
| BI | 0.00783 | 0.0331 | -0.00806 |
| BGDV | -0.0350 | -0.0543 | -0.00406 |
| B_SIZE | 0.0297** | 0.0261 | 0.0279* |
| F_Size | 0.0838*** | 0.0330 | 0.115*** |
| ROA | 0.0439* | -0.0713 | 0.117** |
| AGE | -0.0146* | -0.0190 | -0.0139* |
| M_Own | -0.0111* | -0.0231* | -0.0190 |
| Constant | 0.0239 | 0.104 | -0.0325 |
| AR(1) | -8.07*** | -5.83*** | -5.47*** |
| AR(2) | 2.54** | 2.52** | -2.70*** |
| Endogeneity test | 49.92*** | 40.55*** | 30.69*** |
| Observations | 1,250 | 560 | 690 |

*** = p<0.01, ** = p<0.05, * = p<0.1

CHAPTER 6

# DISCUSSION AND CONCLUSION

The main emphasis of this study is to discover the role played by family ownership on the association between earnings management and capital structure; earnings management and CSR, earnings management and governance mechanism; earnings management and firms' characteristics and ownership structure and earnings management, in the light of SEW theory, in two different institutional settings. To investigate above mentioned relationships, model 4.21 and 4.22 are estimated by applying two way cluster pooled OLS. Chapter 5 presents empirical results of the study. This chapter discusses the results of the study. Following is the sequence of this chapter:

6.1 Real Earnings Management in USA

6.2 Accrual Earnings Management in USA

6.3 Real Earnings Management in Pakistan

6.4 Accrual Earnings Management in Pakistan

6.5 Comparison of Earnings Management in USA and Pakistan

6.6 Conclusion

6.7 Implications

6.8 Limitations and Future Extensions

## 6.1 Real Earnings Management in USA

In US context, leverage is positively associated with R_EM. This result supports the hypothesis H1 that levered firm use R_EM to manipulate their earnings. US high levered firms are inclined to manage earnings through R_EM activities, because real activities are properly recorded and have very low chances to being caught by auditors. Kim et al. (2013)

also conclude same findings in US context by giving the explanation that to get more financing at low cost firms manage their earnings through R_EM. Further, Mamedova (2008), Anagnostopoulou and Tsekrekos (2016), and Vakilifard and Mortazav (2016) also conclude a positive relationship between leverage and R_EM. Furthermore, Anagnostopoulou and Tsekrekos (2016) argued that lower detection risk of R_EM motivates manger to use R_EM when they are highly scrutinized by outside financers. Chi et al. (2011) reasoned that firm use R_EM instead of AB_EM when they are audited by BIG 4.

Results further depict that family-firms manage earnings through R_EM more than non-family-firms. This result supports the hypothesis H1f, i.e. Leveraged family firms involvement in R_EM is different as compare to leverage nonfamily firms. Though the cost of R_EM is greater than the cost of AB_EM in long run (Cohen & Zarowin, 2010), but still family-firms prefer R_EM over AB_EM. This behavior of family firm can be explained by the family identity dimension of SEW theory (Berrone et al., 2012). According to Berrone et al., (2012) family identity is meshed with firm name, and to save the family name the management of family firm try to avoid unlawful activities like AB_EM and manage earnings through R_EM.

Additionally, US firms which perform more CSR activities are more involved in earnings manipulation through R_EM. Muttakin et al. (2015) and Scholtens and Kang (2013) also conclude same results. Firms perform CSR activities to build soft image in society so as to hide their opportunistic actions. Results also depict that non-family-firms which perform CSR activities are more involved in EM than family-firms. This result support the hypothesis H5 i.e. the relationship between CSR and EM is different for family

and non-family-firms. This different behavior of family and non-family-firms can possibly be explained by Binding social ties dimension of SEW theory (Berrone et al., 2012). Firms perform CSR activities to strengthen their social bonds with the community ant not to hide their opportunistic behavior, even though these activities do not provide economic gains (Brickson, 2007). Family-firms are deeply embedded in their communities and often sponsor activities that are valued to community (Berrone et al., 2012), and firms do CSR for receiving recognition from society (Schulze et al., 2003).

Audit-committee independence has no significant impact on R_EM in USA. This result can be described by the logic that one duty of audit-committee, from the list of duties, is to detect anomalies in accounting records, and to identify that either accounting information are recorded by following the prevailed accounting laws or not. R_EM activities on the other side are actual transactions and properly recorded and are not fraudulent activities. Similarly, ACI has no significant impact on R_EM for family firms and non-family-firms, and the coefficients of ACI are not significantly different for family and non-family, hence rejecting hypothesis, that the impact of audit-committee independence is different on earnings management for family firms than non-family firms. Furthermore, board independence also has no significant impact on EM in US context. Results also depict that board independence have different impact on EM for family and non-family firms, hence verifying the hypothesis that the impact of board independence is different on EM for family-firms and non-family-firms. Board independence have significant negative impact on EM for family-firms while it is insignificant for non-family, suggesting that independent directors deter suboptimal decision of R_EM in family-firms which can damage the stakes of outside shareholders.

Furthermore, results also indicate that female members on board have negative impact on EM in US firms. Similar results are also reported by Pucheta-Martínez, Bel-Oms and Olcina-Sempere (2016), Arun et al. (2015), Gavious et al. (2012) and Srinidhi et al. (2011). According to Krishnan & Parsons (2008) during the corporate decision making process females are less cooperative to accepting the unethical conduct, and give more weightage to the organizations interest than their own as compare to males. Results of the study also depict that females on corporate boards are more effective in non-family-firms than family-firms. In family-firms the coefficient of gender diversity is different for family and non-family-firms, hence supporting the hypothesis that the impact of gender diversity is different on EM for family-firms than non-family-firms. Female board members have a more hostile approach regarding risk (Thiruvadi & Huang, 2011; Man & Wong, 2013), hence, they are more conservative and demonstrate more sensible behavior than their counterpart while in the process of corporate decision making (Huang & Kisgen, 2013). Additionally, female board members may quickly notice opportunistic behavior (Khazanchi, 1995), because they are stricter controllers and demand more audit efforts than male board members (Adams & Ferreira, 2009).

Results further added that US firms having larger board, are more involved in R_EM. Similar findings are also documented by Inya et al., (2018). Entrenchment view of agency theory (Jensen & Meckling, 1976) explains the positive relation between board-size and EM. Furthermore, larger boards are not efficient in decision making. Results further depict that family-firms with larger board-size are more involved in EM while board-size has no significant impact on EM for non-family-firms. Family control dimension of SEW theory (Berrone et al., 2012) explains this difference between family and non-family-firms. To

maintain control over the affairs of firms, family-firms appoint more directors on boards from those who belong to the family or are close friends of family.

R_EM increases with the increase in firm size. This result is significant at 1% level of significance. This positive association among firm size and EM is consistent with the argument that large firms have more pressure to earn positive income (Lemma et al., 2013). Similar results are also reported by kang and kim (2012), Tian et al. (2018), and Ilmas et al. (2018). Large family-firms manage earnings more extensively than large non-family-firms to preserve their socioemotional wealth. Furthermore, firm's profitability is negatively associated with EM for all three samples. Profitable firms have no need to manage earnings. Similar results are also find out by Paiva et al. (2016), Tian et al., (2018), and Shahzad et al. (2017). Results further depict that EM decrease with the increase in firm's age. Similar results are also documented by Gavana et al. (2019), Videira (2016), Bassiouny (2016) and Ahmad-Zaluki et al. (2011). According to Zhang (2006) EM decreases with the increase in firm age, because managers may have less influence on a firm's operating and financial activities in older firms, as controlling and monitoring system of older firms are more efficient than new firms. On the contrary older family-firms are more involved in R_EM, indicating that with the passage of time management discovers more sophisticated ways to manage activities. Results further depict that managerial ownership is the reason for increase in EM for US listed firms. Shayan-Nia et al. (2017) and Alfayoumi et al. (2010) also find positive association between managerial ownership and EM. Results also show that increase in managerial ownership in non-family-firms is the reason for decrease in EM. Alignment view of agency theory explains that, when managers become the owner of the firms, then the interest of management and shareholders

are the same, hence there is no need to manage earnings (Jensen & Meckling, 1976). On the contrary, in family-firms managerial ownership is the reason for increase in EM. Shareholder managers belonging to family manage earnings to portray that firm is profitable to attract new investment so that their business can be transferred to next generation (Berrone et al. 2012).

## 6.2 Accrual Earnings Management in USA

Results of the study highlighted that highly livered firms are more involved in AB_EM in USA. Debt covenant hypothesis of positive accounting theory supports this finding. Similar results are also documented by Idris et al. (2018), Lazzem and Jilani (2018). Highly livered family-firms manage earnings more extensively than non-family-firms. This difference in family and non-family-firms can be explained through family control dimension of SEW theory (Berrone et al., 2012). Violation of debt covenant provides opportunity to creditors to interfere in the matters of firms. To avoid from the interference of creditors, and maintain their control on business operations, family firms manage earnings, so that to avoid from the violation of debt covenant.

Furthermore, results also depict that firms which perform more CSR activities are less involved in EM. Villaron-Peramato et al. (2018), Alsaadi et al. (2017), Martinez-Ferrero et al. (2015) and Bozzolan et al. (2015) also conclude same negative impact of CSR on EM. According to stake holder theory, firms take care of all the stakeholders of the firms, so do not manage earnings and provide accurate financial information to all stakeholders.

Moreover results also indicate negative impact of ACI on AB_EM in USA. Similar negative results are also reported by Waweru and Prot (2018), Alzoubi (2016) and Lin et

al. (2015). The argument of Davidson et al. (2005) explains this negative linkage between EM and audit-committee independence. As they say that the presence of independent audit-committees leads to a strong internal corporate governance structure, which in turn works to constrain the level of EM. Furthermore Klein (2002) says that independent audit-committee reduces earnings manipulation because audit-committee is the best mechanism to serve and oversee the financial accounting process. Furthermore, the impact of audit-committee independence on EM in family and non-family-firms is not the same. Independent audit-committee in family firm is more helpful to deter EM as compare to non-family-firms. Family exerts more pressure on audit-committee to oversee the opportunistic behavior of management regarding accrual manipulation. Because being caught in accrual manipulation can leads, to damage the family name, which is associated with the firm (Berrone et al., 2012). Moreover accrual manipulation increases in USA with the increase in independent directors on board. Board independence in isolation is not a successful tool to control managerial opportunism. To control managerial opportunism board should possess relevant knowledge, skills, experience and information about the business. On the contrary, results depict that board-size is negatively associated with EM concluding that larger board-size possesses required skills and knowledge to control the affairs of firm. Results further reveals that the impact of board independence on AB_EM is more pronounced in family firms as compare to non-family firms. According to de Moura et al. (2017), family shareholders force independent directors to use their influence over the corporate decisions. Furthermore, results also indicate that female members on board have negative impact on EM in US firms. Similar results are also documented by Srinidhi et al. (2011), Gavious et al. (2012), Bel-Oms et al. (2016) and Arun, Almahrog

and Aribi (2015). According to Krishnan & Parsons, (2008) during the corporate decision making process, females are less cooperative to accepting the unethical conduct, and give more weightage to the organizations interest than their own as compared to males. Results of the study further depict that females on corporate board are more effective for family-firms than for non-family-firms. Females are more concerned regarding the ethical issues (Krishnan & Parsons, 2008), in family-firms to save family name associated with the business (Berrone et al., 2012) females member plays more effective role as compare to non-family firms.

Larger firms in USA are less involved in AB_EM as compare to smaller firms. This negative association among firm size and EM is consistent with the argument, larger firms are more closely observed by the analysts and other stakeholders than smaller firms. Similar results are reported by Tian et al. (2018), Wardhani et al., (2017) and Shahzad et al., (2017). Large family-firms are less involved in AB_EM as compare to large non-family-firms. Furthermore, firm's profitability is negatively associated with EM for all three samples. Profitable firms have no need to manage earnings. Similar results are also found by Tian et al., (2018), Paiva et al., (2016), and Shahzad et al., (2017). Moreover, results further depict that AB_EM decrease with the increase in firm's age in USA. Negative impact of age on AB_EM is also documented by Dian et al. (2017), Khuaib and Jarboui (2017), li et al. (2016) and Shi et al. (2015). According to Zhang (2006), AB_EM decreases with the increase in firm age because managers may have less influence on a firm's operating and financial activities in older firms.

Results of the study further depict AB_EM decreases in firms where managerial ownership is high. Alignment view of agency theory (Jensen & Meckling, 1976) explains

this result, as managers are also owners, so the interest of management and shareholders are same, so there is no need to manage earnings. Results further show that in family firms same situation exists, but in non-family firms the impact of managerial ownership is insignificant.

## 6.3 Real Earnings Management in Pakistan

Results of the study depict that leverage has significant negative impact on R_EM in Pakistan. The findings of Zamri et al. (2013) are also similar. Leverage is one of the monitoring mechanisms which confines R_EM. This result contradicts the hypothesis H1. Furthermore, results also depict that leverage has no significant impact on R_EM for family-firms while leverage deter R_EM for non-family-firms. R_EM can decrease the future cash inflow of the firm (Cohen & Zarowin, 2010) which can reduce the firm's interest paying ability. This can increase the interest cost for firm in future and may lead firm towards bankruptcy or can reduce the family control over firm. Hence damaging the goals of family-firms i.e. family control and dynastic succession (Berrone et al., 2012).

Findings of the study further depict that CSR activities deter earnings manipulation through real activities in Pakistan. Villaron-Peramato et al. (2018), Alsaadi et al. (2017), Cho and Chun (2016), and Martinez-Ferrero (2015), also conclude same results. Firms which perform CSR activities are considered socially responsible, so they take care about all stakeholders' stakes and not involved in real earnings manipulation because the long run cost of R_EM is high for shareholders (Cohen & Zarowin, 2010). Results also depict that the impact of CSR on EM is more pronounced for family-firms as compare to non-family-firms. Findings suggesting that family-owned firms which perform CSR activities are considered more responsible as compared to non-family-firms. Family-firms perform

CSR activities to make their social bond, a dimension of SEW theory (Berrone et al. 2012), more strong.

Audit-committee independence has no significant impact on R_EM in Pakistan. This result can be described by the logic that one duty of audit-committee from the list of duties is to detect anomalies in accounting records and to identify that either accounting information are recorded by following the prevailed accounting laws or not. R_EM activities on the other side are actual transactions and properly recorded and are not fraudulent activities. Similarly, ACI has no significant impact on R_EM for family and non-family-firms, but the coefficients of ACI are different for family and non-family, hence supporting our hypothesis that the impact of audit-committee independence is different on earning management for family-firms than non-family-firms. Furthermore, board independence has no significant impact on EM in Pakistan either for family or non-family-firms. But the coefficient of board independence is positive for non-family-firms while negative for family-firms, hence accepting the hypothesis that the impact of board independence is different on earning management for family-firms and non-family-firms.

Furthermore, results also show that the role of female members on board to control EM is very week in Pakistani listed firms. The reason can be that, it is not mandatory to appoint female on board according to prevailing code of corporate governance in Pakistan. Furthermore, Kyaw et al. (2015) conclude that female board members deter EM in countries where women are more powerful and female representation on board is mandatory i.e. in Scandinavian countries. Moreover, results also display that gender diverse boards has no significant impact on EM for family-firms, while it has significant positive impact on EM for non-family-firms. Family-firms appoint female members on

board just to achieve their goal of dynastic succession (Gennaioli, et. al, 2014). Results further depicts that R_EM decrease with the increase in board-size for full sample in Pakistan. Larger board consist of board members from different industries so possess different skills and knowledge which is necessary to control managerial opportunism, so it is difficult for firms management to dodge board members (Idris et al., 2018). Furthermore larger boards are more efficient to control the managerial opportunism in family-firms than non-family-firms. Independent board members may increase as the increase in board-size, so it is not possible for family to influence all directors regarding their decision making (Idris et al., 2018).

Findings of the study depict that R_EM decreases with the increase in firm size. Similar results are also reported by Tian et al. (2018), Wardhani et al. (2017), Shahazad et al. (2017), Prencipe et al. (2012) and Cascino et al. (2010). Due to the high future cost of R_EM (Cohen & Zarowin, 2010) and more flexibility to manipulate earnings through other methods, large firms do not prefer R_EM. Large firms may have incentives to avoid EM as they are subject to greater scrutiny from analyst and investors. Small firms are more vulnerable to business and therefore have a greater likelihood of resorting to EM in order to avoid bankruptcy (Zhu et al., 2015). Moreover, the impact of firm size on R_EM is more negative for family-firms than non-family-firms. High future cost of R_EM (Cohen & Zarowin, 2010) may damage the Socio emotional wealth (dynastic succession) of family-firms, so non-family-firms are more involved in R_EM as compare to family-firms.

Profitability of firm has no significant impact on R_EM in Pakistan. R_EM are based on real actions of the firms that take place during the financial year so it is not possible for firms to manipulate earnings through real actions at the end of financial year (Roycoudhry,

2006), so current year profitability has no significant impact on R_EM. Similarly, profitable family and non-family-firms are not involve in EM. Moreover, firm's age has no significant impact on EM either for family or non-family.

In Pakistani context managerial ownership is the reason for increase in EM. Alfayoumi et al. (2010), and Shayan-Nia et al. (2017) also find positive linkage among managerial ownership and EM. Entrenchment view of the agency theory (Jensen & Meckling, 1976) is the possible reason for this positive relationship between managerial ownership and EM. Managerial ownership of family-firms is less opportunistic than non-family-firms. Family owners are more capable to control the opportunistic behavior of management. Furthermore, alignment view of agency theory may be the possible reason for this less opportunistic behavior of management in family-firms. Managers are also the owners of firms, hence interests are align. Furthermore, low investor protection rights is also the reason of this managerial behavior in non-family-firms (Adel Almasarwah, 2015).

## 6.4 Accrual Earnings Management in Pakistan

This section of the study discusses about accrual earrings management in Pakistan. Leverage is significantly negatively associated with AB_EM in Pakistan. Idris et al. (2018), Shahzad et al. (2017), Vakilifard and Mortazavi (2016), and Das et al. (2017), also find same results. According to Zamri et al. (2013), debt serves as a monitoring device which controls EM. Furthermore, leverage also deters EM in family and non-family businesses, but the impact of leverage is more pronounced on EM for non-family-firms. This result can be explained through the dynastic succession dimension of SEW theory (Berrone et al., 2012). Family-firms as compared to non-family firms, somehow manage their earnings to

show their firm profitable, so as to attract new investors and consequently transfer a successful business to their next generation.

Moreover, firms which perform CSR activities are more involved in AB_EM. Similar results are also concluded by Shafai et al. (2018); Muttakin et al. (2015); Salewski and Zulch (2014); Scholtens and Kang (2013); Jo and Harjoto (2011) and Prior et al. (2008). This argument supports this result that, firms with a higher level of AB_EM resort to CSR initiatives to camouflage managerial opportunism (Muttakin et al., 2015; Prior et al., 2008). The impact of CSR on AB_EM for family-firms is negative while positive for non-family firm. Family-firms which perform CSR activities are not involved in AB_EM, because AB_EM is likely to be detected by auditors, which in turn damages the family image which is one dimension of SEW theory (Berrone et al., 2012). So to save family image, family-firms are not involved in AB_EM.

Results of the study also conclude that, audit committee independence, board independence and board gender diversity have no significant impact on AB_EM in Pakistan. Pakistan is a country where individual rights are week (World Bank Report, 2018) and inefficient rule of law (WJP Rule of Law Index 2017–2018) make governance mechanism inefficient, so audit committee independence, board independence and board gender diversity are unable to control the managerial opportunism in Pakistan. Damak (2018) concludes that gender diverse boards are helpful to deter EM in institutional settings where female participation on board is compulsory and women are powerful in corporate decision making. In Pakistan female participation on board is not compulsory, so gender diversity has no impact on AB_EM. Moreover, AB_EM increase as increase in board-size. The result of the study also highlight that in Pakistani context AB_EM increases as the

increase in board-size. Similar results are also concluded by Abdul Rahman and Ali (2006) and give an argument that the possible reason for this result attributed to the board's relative lack of information about firm. Large board-size is the reason to increase in AB_EM for non-family-firms while it has no significant impact on AB_EM for family-firms. The apparent reason for this difference is that family owned firms are controlled by family, hence to save their family image family-firms do not manage earnings through AB_EM, because in the case of detection by auditors, this action damage the family name.

Results also conclude that larger firms manipulate earnings through AB_EM in Pakistan. This result is similar with the findings of Tian et al., (2018), Idris et al., (2018), Ilmas et al., (2018), Das et al. (2017), and Kang and Kim (2012). This positive association among firm size and EM is consistent with the argument that large firms are under more pressure to earn positive income (Lemma et al., 2013). Moreover large family-firms manage earnings more extensively than large non-family-firms to preserve their socioemotional wealth. Additionally profitability of the firm is positively associated with AB_EM. This result contradicts with the findings by Paiva et al., (2016), Tian et al., (2018), Wang et al., (2018) and Shahzad et al., (2017). Seemingly, there is no reason which can explain this result. Results also conclude that older firms are involved in AB_EM in Pakistan. Similar results also reported by Dian et al. (2017), Khuaib and Jarboui (2017), Li et al. (2016) and Shi et al. (2015). According to Zhang (2006) EM decrease with the increase in firm age because managers may have less influence on a firm's operating and financial activities in older firms. On the contrary, firm age has insignificant role to decrease EM in family firms, while age deter AB_EM in non-family-firms. This contradictory result can be explained by following Zhang (2006), who argued that

managers influence decrease with the increase in firm age, which can also true in our case for non-family-firms. As these organization have established processes to control all the agents and activities of the organization, hence minimizing the individual's influence on AB_EM. But this argument is not true for family-firms, because these firms are mostly controlled directly or indirectly by the family members.

The study posited that managerial equity interest in firm is linked with AB_EM. The study results revealed that managerial ownership is associated with AB_EM in negative direction. This finding is same as the findings of earlier studies like Obigbemi (2017) and Johari et al. (2008). Moreover, results depict that in family-firms increase in managerial owner ship leads to decrease in AB_EM, while it has insignificant impact on AB_EM for non-family-firms. According to the definition of family-firms, family-firms are controlled directly or indirectly by their family members, so in order to save their image and identity, family-firms avoid to involve in AB_EM, because in case of detection by auditors, it will damage the family image (Berrone et al., 2012).

## 6.5 Comparison of Earnings Management in USA and Pakistan

The findings of this research demonstrate that US levered firms utilize both EM methods to increase their earnings, while in Pakistan leverage controls the opportunistic behavior of managers related to both types of earnings management. In developing country, where, governance mechanism is not efficient to control managerial opportunism, leverage plays effective role to control managerial opportunism. Whereas, in developed country, strong justice system makes governance mechanism more efficient, so that to protect the interest of all stakeholders. Similarly, leverage is unable to control R_EM and AB_EM in US family or non-family-firms. While in Pakistan, leverage controls the opportunistic

behavior of management regarding AB_EM. This difference between the behavior US and Pakistani leveraged firms can be explained through institutional settings theory.

The results of the study also show that socially responsible firms in USA manage their earnings through R_EM as compared to AB_EM. In contrast, Pakistani socially responsible firms prefer AB_EM methods to manage their earning over R_EM. Strong monitoring mechanism, in developed countries, makes it difficult for management to perform AB_EM, so firms manage their earnings through R_EM. According to law R_EM activities are not considered illegal, whereas accrual based earnings management techniques are illegal. In developing country, inefficient law and order situation motivates manager to perform AB_EM over R_EM, because in long run, the cost of real earnings management is high (Zang, 2012).

Audit-committee independence and board independence are unable to control R_EM in both institutional settings for family and non-family-firms. In addition, board gender diversity strongly control R_EM and AB_EM in US family and non-family-firms, whereas, gender diverse boards, in Pakistani family or non-family firms, are unable to control management decisions regarding R_EM and AB_EM. This difference can be explained through institutional setting. As, Damak (2017) concludes that gender diverse boards are helpful to deter EM in institutional settings where female participation on board is compulsory and women are powerful in corporate decision making. Furthermore, the results explain that larger boards in US firms and in US family firms are unable to control management to perform R_EM, but do control management to perform AB_EM. This relationship is found exactly opposite for Pakistan, i.e. larger boards in Pakistani firms and in Pakistani family firms are able to control management to perform R_EM, but do not

control management to perform AB_EM. These results are in line with the institutional setting theory (Liu et. al, 2010).

Results of the study also show that overall large US firms and Large US family firms prefer to manage earnings through real earrings management as compare to accrual based earnings management. In Pakistani scenario, the situation is exactly opposite to US scenario, i.e. over all large Pakistani firms and large Pakistani family firms prefer to manage earnings through accrual manipulation as compare to real earrings management. Again institutional settings theory (Liu et. al, 2010) explains this difference.

There is no difference in R_EM practices of profitable family and non-family-firms in both Pakistani and US institutional settings, while, Pakistani profitable firms are mere involved in AB_EM. Results further depict that, the impact of listing age on R_EM is insignificant in both institutional settings, whereas, listing age has significant negative impact on AB_EM in both countries. Mature family firms in both institutional settings prefer to manage earnings through R_EM as compare to AB_EM. This result can be explained by SEW theory's family identity dimension.

Additionally, managerial owned firms in USA and Pakistan prefer to manage earnings through R_EM as compare to AB_EM. Same situation is exist for family firms listed in both institutional settings.

## 6.6 Conclusion

The study provides empirical support in demonstrating the association of capital structure, CSR, corporate governance, firm characteristics and managerial ownership with EM, taking into account two proxies of EM, i.e. AB_EM and R_EM. The study testifies that all proxies of independent variables are significantly associated with R_EM for US

firms, except ACI, board independence and firm age. Whereas in Pakistani scenario the same results were observed except board independence, audit-committee independence, profitability and firm age. The same impact of ACI on R_EM in both countries can be explained by the argument that audit-committees are made under the prevailing code of countries to deter AB_EM, so has no impact on R_EM. Similarly, the impact of BI on R_EM is not significant for both countries.

The study further explains that all the proxies of independent variables are significantly associated with AB_EM for US firms. Whereas in Pakistani scenario, the same results were observed except board independence, audit-committee independence, and gender diversity. The possible explanation for these differences lies in institutional settings as institutions are not well developed as compared to US and the level of maintenance of rule of law in Pakistan is weaker than US (The World Justice Project, 2017).

The study also explains these relationships by evaluating the role of family ownership in Pakistani and US firms. The results of the study confirm that family ownership influence the relationships between capital structure and EM; CSR and EM; CG and EM, FC and EM; and managerial ownership and EM for both Pakistani and US firms. Results of the study confirms that family firms select earnings management technique which protect their non-economic objective.

Overall, the results of the study claim that in developed institutional settings, managements of firms prefer to manage earnings through R_EM techniques over AB_EM, where as in underdeveloped institutional settings, management of firms prefer AB_EM over R_EM. Based on results of the study, it is concluded that, it is not just sufficient to

make proper code of corporate governance, but institutional development is also required to implementation of code of corporate governance.

## 6.7 Implications

### 6.7.1 Implications in Pakistani Context

Findings of the study suggest that leverage is negatively linked with accrual and real EM in the context of Pakistan. Hence from the perspective of investor, these findings give weight to leverage as a monitor in order to discipline the management from the perspective of real and accrual earnings management. Countries like Pakistan, where institutional settings are not strong and are unable to control managerial opportunism regarding earnings management, leverage plays its role to monitor the behavior of firms' management.

Further, socially responsible Pakistani firms (overall firms and subsample of non-family firms) manage their earnings through discretionary accruals, while socially responsible family firms are not involved in either type of earnings management. These findings related to Pakistani firms can help equity investors to invest in Pakistani family firms, and also helpful for creditors to lend money to socially responsible family firms. To control the opportunistic behavior of non-family firms, regulators in Pakistan make clear rules regarding CSR activities. Till date, Pakistani Code of Corporate Governance does not provide mandatory compliance criteria regarding CSR activities.

Results of the study further indicate that in Pakistan corporate governance mechanism (audit committee independence, board independence, board size and board gender diversity) is unable to control management's behavior regarding earnings management (real and accrual). Based on the results of the study, in order to control managerial opportunism, there is a need to amend the governance rules in Pakistan

regarding, audit-committee independence, board independence, board composition, and board gender diversity. Regulatory body in Pakistan should amend the definition of independent director so that directors are independent in true spirit not only by definition. Furthermore, audit committee should be more independent, and all the members of audit committee possess knowledge regarding accounting laws. Additionally, selection of external auditors should be made randomly by the regulatory body, instead of audit committee of firm. It is further recommended that regulatory bodies modify governance rules so that R_EM activities can also be controlled.

The results of the study related to Pakistani firms, suggest to individual investors and portfolio managers to invest in mature firms and firms where managerial ownership is high, because mature and high managerial owned firms are not involve in accrual based earnings management. Based on the results of the study, regulatory body in Pakistan should amend the governance rule regarding managerial ownership.

### 6.7.2 Implications in US Context

Results of the study regarding US firms, suggest that socially responsible firms manage their earnings through real EM activities instead of accrual based EM, due to strong governance mechanism regarding accruals management in USA. Based on this result, it is recommended to regulatory body in US to make such a governance mechanism which can be able to control the real earnings management.

Moreover, the results also indicate that governance mechanism (audit-committee independence, board independence and board size) is unable to control managerial opportunism regarding R_EM in US corporate settings. Results further indicate that, governance mechanism (audit committee independence, board independence, gender

diversity and board size) plays vital role to control accrual manipulation in US settings. Based on this result, it is again recommended to regulatory body in US, to make such a governance mechanism which can be able to control the real earnings management.

Furthermore, results of the study may also be helpful for equity and credit investors in US settings, to invest in profitable and mature firms, as profitable and mature firms are not involved in any type of earnings management.

The findings of this study will also help out portfolio managers regarding investments decision, that either to invest in domestic firms, foreign firms, family firms or non-family firms. This study may also be helpful for researcher and academician to understand the earnings management behavior of family and non-family firms.

## 6.8 Limitations and Future Extensions

The scope of the study is limited to the non-financial firms listed in Pakistan and US. Financial firms are not studied in this research to test the hypotheses as financial firms have completely dissimilar investment pattern as compared to non-financial firms. Additionally, this study examines the phenomena in case of one developing market and one developed market, so the results cannot be generalized. Future research may consider more countries for generalizability of results.

Further, present study examines EM behavior of family and non-family firms. Nevertheless, there are other ownership structures, such as, institutional ownership, foreign ownership, and government ownership which are required to be studied further. Moreover, this research measure family-firms only on the basis of shares owned by family members and neglect other measures of family-firms. Future studies may also consider the other measures of family-firms in order to examine the role of family in EM.

Additionally, this study utilizes audit-committee independence, board independence, board-size, and gender diversity, as proxies of governance mechanism to understand the effectiveness of governance mechanism in two different institutional settings. However other proxies of governance mechanism like audit quality, board financial literacy, number of board meetings and audit-committee meetings, and board busyness may also be used for more in-depth understanding of the role of governance mechanism to deter EM.

Moreover, this research uses only three firms characteristics namely, firm size, profitability, and firm age to examine the EM behavior. Future studies, may also use other firm characteristics like, firm growth, cross listing of firms, and size of current assets.

# References

Abbott, L. J., Parker, S., & Peters, G. F. (2004). Audit committee characteristics and restatements. Auditing: *A Journal of Practice & Theory, 23*(1), 69-87.

Abdul Rahman, R., & Haneem Mohamed Ali, F. (2006). Board, audit committee, culture and earnings management: Malaysian evidence. Managerial Auditing Journal, 21(7), 783-804.

Abernathy, J. L., Beyer, B., & Rapley, E. T. (2014). Earnings management constraints and classification shifting. Journal of Business Finance & Accounting, 41(5-6), 600-626.

Achleitner, A. K., Günther, N., Kaserer, C., & Siciliano, G. (2014). Real earning management (REM) and accrual-based earning management in family firms. European Accounting Review, 23(3), 431-461.

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. Journal of financial economics, 94(2), 291-309.

Afzal, M., & Habib, M. D. (2018). Corporate Governance and Earnings Management: A Model and Empirical Investigation from Karachi Stock Exchange. Journal of Finance and Economics Research, 3(2), 51-67.

Aharony, J., Lee, C. W. J., & Wong, T. J. (2000). Financial packaging of IPO firms in China. Journal of Accounting Research, 38(1), 103-126.

Ahmad-Zaluki, N. A., Campbell, K., & Goodacre, A. (2011). Earnings management in Malaysian IPOs: The East Asian crisis, ownership control, and post-IPO performance. The International Journal of Accounting, 46(2), 111-137.

Ahmed, A. S., Neel, M., & Wang, D. (2013). Does mandatory adoption of IFRS improve accounting quality? Preliminary evidence. Contemporary Accounting Research, 30(4), 1344-1372.

Ahmed, S. (2013). Measuring quality of reported earnings' response to corporate governance reforms in Russia. Journal of Accounting in Emerging Economies.

Alareeni, B. (2018). Does corporate governance influence earnings management in listed companies in Bahrain Bourse? Journal of Asia Business Studies.

Alareeni, B. (2018). The impact of firm-specific characteristics on earnings management: evidence from GCC countries. International Journal of Managerial and Financial Accounting, 10(2), 85-104.

Al-Deen Al-Sraheen, D., & Ahmad Al Daoud, K. (2018). Does the presence of independent directors reduce the practices of earnings management? The moderating role of family ownership concentration. Ekonomski pregled, 69(6), 638-654.

Al-Fayoumi, N., Abuzayed, B., & Alexander, D. (2010). Ownership structure and earnings management in emerging markets: The case of Jordan. International Research Journal of Finance and Economics, 38(1), 28-47.

Al-Fayoumi, N., Abuzayed, B., & Alexander, D. (2010). Ownership structure and earnings management in emerging markets: The case of Jordan. International Research Journal of Finance and Economics, 38(1), 28-47.

Alhadab, M., Clacher, I., & Keasey, K. (2016). A comparative analysis of real and accrual earnings management around initial public offerings under different regulatory environments. Journal of Business Finance & Accounting, 43(7-8), 849-871.

Ali, A., & Zhang, W. (2015). CEO tenure and earning management. Journal of Accounting and Economics, 59(1), 60-79.

Ali, A., Chen, T. Y., & Radhakrishnan, S. (2007). Corporate disclosures by family firms. Journal of Accounting and Economics, 44(1), 238-286.

Ali, W., Frynas, J. G., & Mahmood, Z. (2017). Determinants of corporate social responsibility (CSR) disclosure in developed and developing countries: A literature review. Corporate Social Responsibility and Environmental Management, 24(4), 273-294.

Almasarwah, A. K. (2015). Earnings management and its relationship with corporate governance mechanisms in Jordanian industrial firms (Doctoral dissertation, Loughborough University).

Alqatamin, R. M. (2018). Audit committee effectiveness and company performance: evidence from Jordan. Accounting and Finance Research, 7(2), 48.

Alquhaif, A. S., Latif, R. A., & Chandren, S. (2017). Employee stock options and real earnings management through accretive share buyback in Malaysia. Journal of Advanced Research in Business and Management Studies, 1(1), 76-84.

Alsaadi, A., Ebrahim, M. S., & Jaafar, A. (2017). Corporate social responsibility, Shariah-compliance, and earnings quality. Journal of financial services research, 51(2), 169-194.

Al-Shaer, H., & Zaman, M. (2016). Board gender diversity and sustainability reporting quality. Journal of Contemporary Accounting & Economics, 12(3), 210-222.

Alves, C. F., & Vicente, E. F. R. (2013). Does the Latin model of corporate governance perform worse than other models in preventing earnings management?.Applied Financial Economics, 23(21), 1663-1673.

Alves, C. F., & Vicente, E. F. R. (2013). Does the Latin model of corporate governance perform worse than other models in preventing earnings management? Applied Financial Economics, 23(21), 1663-1673.

Alves, S. (2012). Executive stock options and earnings management in the Portuguese listed companies. Revista de Contabilidad, 15(2), 211-235.

Alzoubi, E. S. S. (2016). Audit quality and earnings management: evidence from Jordan. Journal of Applied Accounting Research, 17(2), 170-189.

An, Z., Li, D., & Yu, J. (2016). Earnings management, capital structure, and the role of institutional environments. Journal of Banking & Finance, 68, 131-152.

Anagnostopoulou, S. C., & Tsekrekos, A. E. (2016). The effect of financial leverage on real and accrual-based earning management. Accounting and Business Research, 1-47.

Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: evidence from the S&P 500. The journal of finance, 58(3), 1301-1328.

Armstrong, C. S., Jagolinzer, A. D., & Larcker, D. F. (2010). Chief executive officer equity incentives and accounting irregularities. Journal of Accounting Research,48(2), 225-271.

Arun, T. G., Almahrog, Y. E., & Aribi, Z. A. (2015). Female directors and earnings management: Evidence from UK companies. International Review of Financial Analysis, 39, 137-146.

Asaba, S. (2013). Patient investment of family firms in the Japanese electric machinery industry.Asia Pacific Journal of Management, 30(3), 697-715.

Asim, A., & Ismail, A. (2019). Impact of Leverage on Earning Management: Empirical Evidence from the Manufacturing Sector of Pakistan. Journal of Finance and Accounting Research, 70-91.

Athanasakou, V. E., Strong, N. C., & Walker, M. (2009). Earnings management or forecast guidance to meet analyst expectations? Accounting and business research, 39(1), 3-35.

Attig, N., Boubakri, N., El Ghoul, S., & Guedhami, O. (2015). The Global Financial Crisis, Family Control, and Dividend Policy. Financial Management, 25(2), 291-313.

Baber, W. R., Fairfield, P. M., & Haggard, J. A. (1991). The effect of concern about reported income on discretionary spending decisions: The case of research and development. Accounting Review, 818-829.

Baig, M., & Khan, S. A. (2016). Impact of IFRS on Earning Management: Comparison of Pre-Post IFRS Era in Pakistan. Procedia-Social and Behavioral Sciences, 230, 343-350.

Bajra, U., & Čadež, S. (2018). Audit committees and financial reporting quality: The 8th EU Company Law Directive perspective. Economic Systems, 42(1), 151-163.

Ball, R., & Shivakumar, L. (2008). Earnings quality at initial public offerings. Journal of Accounting and Economics, 45(2-3), 324-349.

Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. The quarterly journal of economics, 116(1), 261-292.

Barontini, R., & Caprio, L. (2006). The effect of family control on firm value and performance: Evidence from continental Europe. European Financial Management, 12(5), 689-723.

Barton, J. (2001). Does the use of financial derivatives affect earnings management decisions? The Accounting Review, 76(1), 1-26.

Barton, J., Hansen, T. B., & Pownall, G. (2010). Which performance measures do investors around the world value the most—And why? The Accounting Review, 85(3), 753-789.

Bartov, E. (1993). The timing of asset sales and earning manipulation. Accounting Review, 840-855.

Bartov, E., Gul, F. A., & Tsui, J. S. (2000). Discretionary-accruals models and audit qualifications. Journal of accounting and economics, 30(3), 421-452.

Barua, A., Davidson, L. F., Rama, D. V., & Thiruvadi, S. (2010). CFO gender and accruals quality. Accounting Horizons, 24(1), 25-39.

Basiruddin, R. (2011). The relationship between governance practices, audit quality and earnings management: UK evidence (Doctoral dissertation, Durham University).

Bassiouny, S. W. (2016). The impact of firm characteristics on earnings management: an empirical study on the listed firms in Egypt. Journal of Business and Retail Management Research, 10(3).

Baxter, P., & Cotter, J. (2009). Audit committees and earnings quality. Accounting & Finance, 49(2), 267-290.

Beatty, A., & Weber, J. (2003). The effects of debt contracting on voluntary accounting method changes. The Accounting Review, 78(1), 119-142.

Bebchuk, L. A., Cremers, K. M., & Peyer, U. C. (2011). The CEO pay slice. Journal of financial Economics, 102(1), 199-221.

Beneish, M. D. (1999). The detection of earnings manipulation. Financial Analysts Journal, 55(5), 24-36.

Beneish, M. D. (2001). Earnings management: A perspective. Managerial Finance, 27(12), 3-17.

Bens, D. A., Nagar, V., Skinner, D. J., & Wong, M. F. (2003). Employee stock options, EPS dilution, and stock repurchases. Journal of Accounting and Economics, 36(1), 51-90.

Bergstresser, D., & Philippon, T. (2006). CEO incentives and earning management. Journal of financial economics, 80(3), 511-529.

Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional Wealth in Family Firms: Theoretical Dimensions, Assessment Approaches, and Agenda for Future Research. Family Business Review, 25(3), 258–279.

Betz, M., O'Connell, L., & Shepard, J. M. (1989). Gender differences in proclivity for unethical behavior. Journal of Business Ethics, 8(5), 321-324.

Biddle, G. C., Hilary, G., & Verdi, R. S. (2009). How does financial reporting quality relate to investment efficiency?. Journal of accounting and economics, 48(2-3), 112-131.

Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. Journal of econometrics, 87(1), 115-143.

Bonilla, C. A., Sepulveda, J., & Carvajal, M. (2010). Family ownership and firm performance in Chile: A note on Martinez et al.'s evidence. Family Business Review, 23(2), 148-154.

Bozzolan, S., Fabrizi, M., Mallin, C. A., & Michelon, G. (2015). Corporate social responsibility and earnings quality: International evidence. The International Journal of Accounting, 50(4), 361-396.

Brickson, S. L. (2007). Organizational identity orientation: The genesis of the role of the firm and distinct forms of social value. Academy of Management Review, 32(3), 864-888.

Brieger, S. A., Francoeur, C., Welzel, C., & Ben-Amar, W. (2019). Empowering women: The role of emancipative forces in board gender diversity. Journal of Business Ethics, 155(2), 495-511.

Brown, L. D., & Caylor, M. L. (2006). Corporate governance and firm valuation. Journal of Accounting and Public Policy, 25(4), 409–434.

Brown, P., Beekes, W., & Verhoeven, P. (2011). Corporate governance, accounting and finance: A review. Accounting & finance, 51(1), 96-172.

Buniamin, S., Johari, N. H., Rahman, N. R. A., & Rauf, F. H. A. (2012). Board diversity and discretionary accruals of the Top 100 Malaysia corporate governance (MCG) index company. African Journal of Business Management, 6(29), 8496-8503.

Burgstahler, D., & Dichev, I. (1997). Earning management to avoid earning decreases and losses. Journal of accounting and economics, 24(1), 99-126.

Bushee, B. J. (1998). The influence of institutional investors on myopic R&D investment behavior. Accounting review, 305-333.

Byrnes, J. P., Miller, D. C., & Schafer, W. D. (1999). Gender differences in risk taking: a meta-analysis. Psychological bulletin, 125(3), 367.

Cahan, S. F. (1992). The effect of antitrust investigations on discretionary accruals: A refined test of the political-cost hypothesis. Accounting Review, 77-95.

Calegari, M. F., Chotigeat, T., & Harjoto, M. A. (2010). Corporate social responsibility and earnings reporting. Journal of Current Research in Global Business, 13(20), 1.

Callao, S., & Jarne, J. I. (2010). Have IFRS affected earnings management in the European Union? Accounting in Europe, 7(2), 159-189.

Capalbo, F., Frino, A., Lim, M. Y., Mollica, V., & Palumbo, R. (2018). The impact of CEO narcissism on earnings management. Abacus, 54(2), 210-226.

Capkun, V., Collins, D., & Jeanjean, T. (2016). The effect of IAS/IFRS adoption on earning management (smoothing): a closer look at competing explanations. Journal of Accounting and Public Policy, 35(4), 352-394.

Carcello, J. V., & Neal, T. L. (2003). Audit committee characteristics and auditor dismissals following "new" going-concern reports. The Accounting Review, 78(1), 95-117.

Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. International journal of management reviews, 12(1), 85-105.

Cascino, S., Pugliese, A., Mussolino, D., & Sansone, C. (2010). The Influence of Family Ownership on the Quality of Accounting Information. Family Business Review, 23(3), 246-265.

Cennamo, C., Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional Wealth and Proactive Stakeholder Engagement: Why Family-Owned Firms Care More About Their Stakeholders. Entrepreneurship Theory and Practice, 36(6), 1153–1173.

Chau, G. K., & Gray, S. J. (2002). Ownership structure and corporate voluntary disclosure in Hong Kong and Singapore. The International journal of accounting, 37(2), 247-265.

Chen, G., Firth, M., Xin, Y., & Xu, L. (2008). Control transfers, privatization, and corporate performance: Efficiency gains in China's listed companies. Journal of Financial and Quantitative Analysis, 43(01), 161-190.

Chen, K. C. W. & Yuan, H. (2004). 'Earning management and capital resource allocation: Evidence from China's accounting-based regulation of rights issues'. Accounting Review, 79:3, 645–65.

Chen, S., Chen, X., & Cheng, Q. (2014). Conservatism and Equity Ownership of the Founding Family. European Accounting Review, 23(3), 403–430.

Chen, X., Cheng, Q., & Wang, X. (2015). Does increased board independence reduce earnings management? Evidence from recent regulatory reforms. Review of Accounting Studies, 20(2), 899-933.

Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. Strategic management journal, 35(1), 1-23.

Cheng, P., Aerts, W., & Jorissen, A. (2010). Earning management, asset restructuring, and the threat of exchange delisting in an earning-based regulatory regime. Corporate Governance: An International Review, 18(5), 438-456.

Cheng, Q., & Warfield, T. D. (2005). Equity incentives and earnings management. The accounting review, 80(2), 441-476.

Cheng, S. (2004). R&D expenditures and CEO compensation. The Accounting Review, 79(2), 305-328.

Cherian, J., Gulzar, M. A., Hwang, J., Jiang, Y., & Sial, M. S. (2019). The Impact of Board Gender Diversity and Foreign Institutional Investors on the Corporate Social Responsibility (CSR) Engagement of Chinese Listed Companies. Sustainability 2019.

Cheung, S. Y., & Chan, B. Y. (2004). Corporate governance in Asia. Asia Pacific Development Journal, 11(2), 1-32.

Chi, C. W., Hung, K., Cheng, H. W., & Lieu, P. T. (2015). Family firms and earnings management in Taiwan: Influence of corporate governance. International Review of Economics & Finance, 36, 88-98.

Chi, W., Lisic, L. L., & Pevzner, M. (2011). Is enhanced audit quality associated with greater real earning management (REM)?. Accounting Horizons, 25(2), 315-335.

Chih, H. L., Shen, C. H., & Kang, F. C. (2008). Corporate social responsibility, investor protection, and earnings management: Some international evidence. Journal of business ethics, 79(1-2), 179-198.

Chintrakarn, P., Jiraporn, P., & Kim, J. C. (2013). The effect of corporate governance on CEO luck: Evidence from the Institutional Shareholder Services (ISS). Finance Research Letters, 10(4), 169-174.

Cho, E., & Chun, S. (2016). Corporate social responsibility, real activities earnings management, and corporate governance: evidence from Korea. Asia-Pacific Journal of Accounting & Economics, 23(4), 400-431.

Cho, S. Y., & Sachs, K. D. (2012). Earnings management and deregulation: The case of motor carriers. Journal of Accounting and Public Policy, 31(5), 451-470.

Choi, B. B., Lee, D., & Park, Y. (2013). Corporate Social Responsibility, Corporate Governance and Earnings Quality: Evidence from K orea. Corporate Governance: An International Review, 21(5), 447-467.

Choi, T. H., & Pae, J. (2011). Business ethics and financial reporting quality: Evidence from Korea. Journal of Business Ethics, 103(3), 403-427.

Chrisman, J. J., Chua, J. H., & Litz, R. A. (2004). Comparing the agency costs of family and non-family firms: Conceptual issues and exploratory evidence. Entrepreneurship Theory and practice, 28(4), 335-354.

Christensen, B. E., Glover, S. M., Omer, T. C., & Shelley, M. K. (2015). Understanding audit quality: Insights from audit professionals and investors. Contemporary Accounting Research, 33(4), 1648-1684.

Christie, A. A., & Zimmerman, J. L. (1994). Efficient and opportunistic choices of accounting procedures: Corporate control contests. Accounting review, 539-566.

Chtourou, S. M., Bedard, J., & Courteau, L. (2001). Corporate governance and earnings management. University of Laval, Quebec, Canada.

Chu, E. Y., Ali, R., & Yeo, J. F. (2019). Large shareholders and dividend payout in Malaysia. International Journal of Business & Society, 20(1).

Chu, J., Dechow, P., Hui, K. W., & Wang, A. Y. (2016). The valuation premium for a string of positive earnings surprises: The role of earnings manipulation. Available at SSRN.

Claessens, S., & Yurtoglu, B. B. (2013). Corporate governance in emerging markets: A survey. Emerging markets review, 15, 1-33.

Claessens, S., Djankov, S., & Lang, L. H. (2000). The separation of ownership and control in East Asian corporations. Journal of financial Economics, 58(1), 81-112.

Cohen, D. A., & Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. Journal of accounting and Economics, 50(1), 2-19.

Cohen, D. A., Dey, A., & Lys, T. Z. (2008). Real and accrual-based earning management in the pre-and post-Sarbanes-Oxley periods. The accounting review, 83(3), 757-787.

Cohen, J., Cohen, P., West, S.G., and Aiken, L.S. (2003). Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences (3rd edition). Mahwah, NJ: Lawrence Earlbaum Associates.

Collins, D. W., & Hribar, P. (2000). Earnings-based and accrual-based market anomalies: one effect or two? Journal of Accounting and Economics, 29(1), 101-123.

Crutchley, C. E., Jensen, M. R., & Marshall, B. B. (2007). Climate for scandal: corporate environments that contribute to accounting fraud. Financial Review, 42(1), 53-73.

Czarnitzki, D., & Kraft, K. (2009). Capital control, debt financing and innovative activity. Journal of Economic Behavior & Organization, 71(2), 372-383.

D'Acunto, F., Liu, R., Pflueger, C., & Weber, M. (2018). Flexible prices and leverage. Journal of Financial Economics, 129(1), 46-68.

Damak, S. (2018). Gender diverse board and earnings management: evidence from French listed companies. Sustainability Accounting, Management and Policy Journal, 9(3), 289-312.

Darrough, M., & Rangan, S. (2005). Do insiders manipulate earning when they sell their shares in an initial public offering?. Journal of accounting research, 43(1), 1-33.

Das, R. C., Mishra, C. S., & Rajib, P. (2017). Real Versus Accrual-based Earnings Management: Do Indian Firms Prefer One over the Other?. Paradigm, 21(2), 156-174.

Das, R. C., Mishra, C. S., & Rajib, P. (2018). Firm-specific Parameters and Earnings Management: A Study in the Indian Context. Global Business Review, 19(5), 1240-1260.

Davidson, R., Goodwin-Stewart, J., & Kent, P. (2005). Internal governance structures and earnings management. Accounting & Finance, 45(2), 241-267.

Davidson, S. S. C. and Weil, R. 1987. Accounting: The language of Business. Seventh Edition. Thomas Horton and Daughter. Arizona.

Davis, K. (1973). The case for and against business assumption of social responsibilities. Academy of Management journal, 16(2), 312-322.

De Massis, A., Frattini, F., Pizzurno, E., & Cassia, L. (2015). Product innovation in family versus nonfamily firms: An exploratory analysis. Journal of Small Business Management, 53(1), 1-36.

de Moura, G. D., Zanchi, M., Mazzioni, S., Rodrigues, F. F., Macêdo, R., & Kruger, S. D. (2017). Determinants of accounting information quality in large publicly-held companies listed on BM&FBOVESPA. Revista de Educação e Pesquisa em Contabilidade, 11(3).

DeAngelo, H., DeAngelo, L., & Skinner, D. J. (1994). Accounting choice in troubled companies. Journal of accounting and economics, 17(1-2), 113-143.

DeAngelo, L. E. (1986). Accounting numbers as market valuation substitutes: A study of management buyouts of public stockholders. The accounting review, 61(3), 400.

Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. The accounting review, 77(s-1), 35-59.

Dechow, P. M., & Skinner, D. J. (2000). Earning management: Reconciling the views of accounting academics, practitioners, and regulators. Accounting Horizons, 14(2), 235–250

Dechow, P. M., & Sloan, R. G. (1991). Executive incentives and the horizon problem: An empirical investigation. Journal of accounting and Economics, 14(1), 51-89.

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earning management. Accounting review, 193-225.

DeFond, M. L., & Jiambalvo, J. (1994). Debt covenant violation and manipulation of accruals. Journal of accounting and economics, 17(1), 145-176.

Degeorge, F., Patel, J., & Zeckhauser, R. (1999). Earnings management to exceed thresholds. The Journal of Business, 72(1), 1-33.

Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. The Journal of Political Economy, 1155–1177.

Demski, J. S. (1998). Performance measure manipulation. Contemporary Accounting Research, 15(3), 261-285.

Demski, J. S. (2004). Endogenous expectations. The Accounting Review, 79(2), 519-539.

Dichev, I. D., & Skinner, D. J. (2002). Large–sample evidence on the debt covenant hypothesis. Journal of accounting research, 40(4), 1091-1123.

Ding, R., Li, J., & Wu, Z. (2018). Government affiliation, real earnings management, and firm performance: The case of privately held firms. Journal of Business Research, 83, 138-150.

Ding, S., Qu, B., & Zhuang, Z. (2011). Accounting properties of Chinese family firms. Journal of Accounting, Auditing & Finance, 26(4), 623-640.

Doukakis, L. C. (2014). The effect of mandatory IFRS adoption on real and accrual-based earnings management activities. Journal of Accounting and Public Policy, 33(6), 551-572.

DuCharme, L. L., Malatesta, P. H., & Sefcik, S. E. (2001). Earnings management: IPO valuation and subsequent performance. Journal of Accounting, Auditing & Finance, 16(4), 369-396.

Ebirien, G. I., Chukwu, G. J., & Ohaka, J. (2018). Audit Committee Characteristics and Corporate Governance Disclosure of Nigerian Deposit Money Banks. Asian Journal of Economics, Business and Accounting, 1-14.

Efendi, J., Park, J. D., & Smith, L. M. (2014). Do XBRL filings enhance informational efficiency? Early evidence from post-earnings announcement drift. Journal of Business Research, 67(6), 1099-1105.

Efendi, J., Srivastava, A., & Swanson, E. P. (2007). Why do corporate managers misstate financial statements? The role of option compensation and other factors. Journal of financial economics, 85(3), 667-708.

El Moslemany, R., & Nathan, D. (2019). Ownership structure and Earnings Management: evidence from Egypt. International Journal of Business and Economic Development (IJBED), 7(1).

Elghuweel, M. I., Ntim, C. G., Opong, K. K., & Avison, L. (2017). Corporate governance, Islamic governance and earnings management in Oman: A new empirical insights

from a behavioural theoretical framework. Journal of Accounting in Emerging Economies, 7(2), 190-224.

Eng, L. L., Fang, H., Tian, X., Yu, T. R., & Zhang, H. (2019). Financial crisis and real earnings management in family firms: A comparison between China and the United States. Journal of International Financial Markets, Institutions and Money, 59, 184-201.

Enomoto, M., & Yamaguchi, T. (2017). Discontinuities in earnings and earnings change distributions after J-SOX implementation: Empirical evidence from Japan. Journal of Accounting and Public Policy, 36(1), 82-98.

Enomoto, M., Kimura, F., & Yamaguchi, T. (2015). Accrual-based and real earning management (REM): An international comparison for investor protection. Journal of Contemporary Accounting & Economics, 11(3), 183-198.

Erickson, M., Hanlon, M., & Maydew, E. L. (2006). Is there a link between executive equity incentives and accounting fraud?. Journal of Accounting Research, 44(1), 113-143.

Ewert, R., & Wagenhofer, A. (2005). Economic effects of tightening accounting standards to restrict earnings management. The Accounting Review, 80(4), 1101-1124.

Fabisik, K., Fahlenbrach, R., Stulz, R. M., & Taillard, J. P. (2018). Why are Firms with More Managerial Ownership Worth Less? (No. w25352). National Bureau of Economic Research.

Faccio, M., & Lang, L. H. (2002). The ultimate ownership of Western European corporations. Journal of financial economics, 65(3), 365-395.

Fahlenbrach, R., & Stulz, R. M. (2009). Managerial ownership dynamics and firm value. Journal of Financial Economics, 92(3), 342-361.

Fama, E. F. (1980). Agency problems and the theory of the firm. Journal of political economy, 88(2), 288-307.

Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. The journal of law and Economics, 26(2), 327-349.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. The journal of law and Economics, 26(2), 301-325.

Fan, J. P., & Wong, T. J. (2002). Corporate ownership structure and the informativeness of accounting earning in East Asia. Journal of Accounting and Economics, 33(3), 401-425.

Fan, J. P., Wong, T. J., & Zhang, T. (2007). Politically connected CEOs, corporate governance, and Post-IPO performance of China's newly partially privatized firms. Journal of financial economics, 84(2), 330-357.

Fan, Y., Barua, A., Cready, W. M., & Thomas, W. B. (2010). Managing earnings using classification shifting: Evidence from quarterly special items. The Accounting Review, 85(4), 1303-1323.

Farber, D. B. (2005). Restoring trust after fraud: Does corporate governance matter?. The Accounting Review, 80(2), 539-561.

Fields, T. D., Lys, T. Z., & Vincent, L. (2001). Empirical research on accounting choice. Journal of accounting and economics, 31(1-3), 255-307.

Figar, N., & Figar, V. (2011). Corporate social responsibility in the context of the stakeholder theory. Facta universitatis-series: Economics and Organization, 8(1), 1-13.

Francis, B., Hasan, I., & Li, L. (2016). A cross-country study of legal-system strength and real earning management (REM). Journal of Accounting and Public Policy, 35(5), 477-512.

Franz, D. R., HassabElnaby, H. R., & Lobo, G. J. (2014). Impact of proximity to debt covenant violation on earnings management. Review of Accounting Studies, 19(1), 473-505.

Freeman, R. E. (1984). Stakeholder management: framework and philosophy. Pitman, Mansfield, MA.

Fudenberg, D., & Tirole, J. (1995). A theory of income and dividend smoothing based on incumbency rents. Journal of Political economy, 103(1), 75-93.

Fuzi, S. F. S., Halim, S. A. A., & Julizaerma, M. K. (2016). Board independence and firm performance. Procedia Economics and Finance, 37, 460-465.

Galbreath, J. (2018). Is board gender diversity linked to financial performance? The mediating mechanism of CSR. Business & Society, 57(5), 863-889.

García Lara, J. M., Garcia Osma, B., & Penalva, F. (2014). Information consequences of accounting conservatism. European Accounting Review, 23(2), 173-198.

Garcia-Castro, R., & Aguilera, R. V. (2014). Family involvement in business and financial performance: A set-theoretic cross-national inquiry. Journal of Family Business Strategy, 5(1), 85-96.

García-Sánchez, I. M., Martínez-Ferrero, J., & García-Meca, E. (2018). Does family involvement monitor external CEOs' investment decisions? Review of Managerial Science, 1-34.

Gavana, G., Gottardo, P., & Moisello, A. M. (2019). What Form of Visibility Affects Earnings Management? Evidence from Italian Family and Non-Family Firms. Administrative Sciences, 9(1), 20.

Gavious, I., Segev, E., & Yosef, R. (2012). Female directors and earnings management in high-technology firms. Pacific Accounting Review, 24(1), 4-32.

Gennaioli, N., Shleifer, A., & Vishny, R. (2014). Finance and the Preservation of Wealth. The Quarterly Journal of Economics, 129(3), 1221-1254.

Georgescu, I. E., & Afrăsinei, M. B. (2015). Analysis of the Impact of Adopting the IFRS by the Companies Listed on BVB. Procedia Economics and Finance, 20, 259-267.

Ghazali, A. W., Shafie, N. A., & Sanusi, Z. M. (2015). Earnings management: An analysis of opportunistic behaviour, monitoring mechanism and financial distress. Procedia Economics and Finance, 28, 190-201.

Gill-de-Albornoz, B., & Illueca, M. (2005). Earnings management under price regulation: Empirical evidence from the Spanish electricity industry. Energy Economics, 27(2), 279-304.

Godfrey, P. C. (2005). The relationship between corporate philanthropy and shareholder wealth: A risk management perspective. Academy of management review, 30(4), 777-798.

Gombola, M. J., Ho, A. Y. F., & Huang, C. C. (2016). The effect of leverage and liquidity on earning and capital management: Evidence from US commercial banks. International Review of Economics & Finance, 43, 35-58.

Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. Academy of Management Annals, 5(1), 653-707.

Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-Owned firms: Evidence from Spanish olive oil mills. Administrative Science Quarterly, 52(1), 106–137.

Gomez-Mejia, L. R., Welbourne, T. M., & Wiseman, R. M. (2000). The Role of Risk Sharing and Risk Taking Under Gainsharing. Academy of Management Review, 25(3), 492-507.

Gomez-Mejia, L., Cruz, C., & Imperatore, C. (2014). Financial Reporting and the Protection of Socioemotional Wealth in Family-Owned Firms. European Accounting Review, 23(3), 387-402.

Gomraiz, M. F. & Sánchez Ballesta, J. P. (2013). Financial reporting quality, debt maturity and investment efficiency. Journal of Banking & Finance, 40, 494–506. http://doi.org/10.1016/j.jbankfin.2013.07.013.

Gow, I. D., Ormazabal, G., & Taylor, D. J. (2010). Correcting for cross-sectional and time-series dependence in accounting research. The Accounting Review, 85(2), 483-512.

Graham, J. R., Harvey, C. R. & Rajgopal, S. (2005). 'The economic implications of corporate financial reporting'. Journal of Accounting and Economics, 40:1–3, 3–73.

Gramlich, J. D., & Sørensen, O. (2004). Voluntary management earnings forecasts and discretionary accruals: evidence from Danish IPOs. European Accounting Review, 13(2), 235-259.

Gras-Gil, E., Manzano, M. P., & Fernández, J. H. (2016). Investigating the relationship between corporate social responsibility and earnings management: Evidence from Spain. BRQ Business Research Quarterly, 19(4), 289-299.

Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. Accounting, Auditing & Accountability Journal, 8(2), 47-77.

Gray, S. J. (1988). Towards a theory of cultural influence on the development of accounting systems internationally. Abacus, 24(1), 1-15.

Gugler, K. (2003). Corporate governance, dividend payout policy, and the interrelation between dividends, R&D, and capital investment. Journal of Banking &Finance, 27(7), 1297–1321.

Gujarati, D. N., & Porter, D. (2009). Basic Econometrics Mc Graw-Hill International Edition.

Gul, F. A., Fung, S. Y. K., & Jaggi, B. (2009). Earnings quality: Some evidence on the role of auditor tenure and auditors' industry expertise. Journal of accounting and Economics, 47(3), 265-287.

Gull, A. A., Nekhili, M., Nagati, H., & Chtioui, T. (2018). Beyond gender diversity: How specific attributes of female directors affect earnings management. The British Accounting Review, 50(3), 255-274.

Gunny, K. A. (2005). What are the consequences of real earnings management?

Gunny, K. A. (2010). The relation between earning management using real activities manipulation and future performance: Evidence from meeting earning benchmarks. Contemporary Accounting Research, 27(3), 855-888.

Guthrie, J., Petty, R., & Ricceri, F. (2006). The voluntary reporting of intellectual capital: comparing evidence from Hong Kong and Australia. Journal of intellectual capital, 7(2), 254-271.

Habib, A., Uddin Bhuiyan, B., & Islam, A. (2013). Financial distress, earnings management and market pricing of accruals during the global financial crisis. Managerial Finance, 39(2), 155-180.

Halaoua, S., Hamdi, B., & Mejri, T. (2017). Earning management to exceed thresholds in continental and Anglo-Saxon accounting models: The British and French cases. Research in International Business and Finance, 39, 513-529.

Han, J. C., & Wang, S. W. (1998). Political costs and earnings management of oil companies during the 1990 Persian Gulf crisis. Accounting review, 103-117.

Han, J. C., & Wang, S. W. (1998). Political costs and earnings management of oil companies during the 1990 Persian Gulf crisis. Accounting review, 103-117.

Han, J. J., Kim, H. J., & Yu, J. (2016). Empirical study on relationship between corporate social responsibility and financial performance in Korea. Asian Journal of Sustainability and Social Responsibility, 1(1), 61.

Haniffa, R. M., & Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. Journal of accounting and public policy, 24(5), 391-430.

Hashmi, M. A., Brahmana, R. K., & Lau, E. (2018). Political connections, family firms and earnings quality. Management Research Review.

Haw, I. M., Hu, B., Hwang, L. S., & Wu, W. (2004). Ultimate ownership, income management, and legal and extra-legal institutions. Journal of accounting research, 42(2), 423-462

Healy, P. (1985). The impact of bonus schemes on the selection of accounting principles. Journal of Accounting and Economics, 7(1-3), 85-107.

Healy, P. M., & Palepu, K. G. (1990). Effectiveness of accounting-based dividend covenants. Journal of accounting and Economics, 12(1-3), 97-123.

Healy, P. M., & Wahlen, J. M. (1999). A review of the earning management literature and its implications for standard setting. Accounting Horizons, 13(4), 365–383

Herwartz, H. (2010). A note on model selection in (time series) regression models–general-to-specific or specific-to-general?. Applied Economics Letters, 17(12), 1157-1160.

Hessayri, M., & Saihi, M. (2015). Monitoring earnings management in emerging markets: IFRS adoption and ownership structure. Journal of Economic and Administrative Sciences, 31(2), 86-108.

Hillman, A. J., Cannella Jr, A. A., & Harris, I. C. (2002). Women and racial minorities in the boardroom: How do directors differ?. Journal of management, 28(6), 747-763.

Hillman, A. J., Cannella Jr, A. A., & Harris, I. C. (2002). Women and racial minorities in the boardroom: how do directors differ? Journal of management, 28(6), 747-763.

Ho, S. S., & Wong, K. S. (2001). A study of the relationship between corporate governance structures and the extent of voluntary disclosure. Journal of International Accounting, Auditing and Taxation, 10(2), 139-156.

Hong, Y., & Andersen, M. L. (2011). The relationship between corporate social responsibility and earnings management: An exploratory study. Journal of Business Ethics, 104(4), 461-471.

Hosseini, S. H., & Abdoli, M. (2012). Effect of Family Control and Board Structure on Earnings Management. International Research Journal of Finance & Economics, 82, 24-32.

Houqe, M. N., Monem, R. M., Tareq, M., & van Zijl, T. (2016). Secrecy and the impact of mandatory IFRS adoption on earning quality in Europe. Pacific-Basin Finance Journal, 40, 476-490.

Hu, J., Li, A. Y., & Zhang, F. F. (2014). Does accounting conservatism improve the corporate information environment? Journal of international accounting, Auditing and Taxation, 23(1), 32-43.

Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives? Journal of Financial Economics, 108(3), 822-839.

Hung, M., Shi, J., & Wang, Y. (2015). The effect of mandatory corporate social responsibility reporting on information asymmetry: Evidence from a quasi-natural experiment in China. Working paper.

Hunt, A., Moyer, S. E., & Shevlin, T. (1996). Managing interacting accounting measures to meet multiple objectives: A study of LIFO firms. Journal of Accounting and Economics, 21(3), 339-374.

Ibhagui, O. W., & Olokoyo, F. O. (2018). Leverage and firm performance: New evidence on the role of firm size. The North American Journal of Economics and Finance, 45, 57-82.

Idris, M. I., Siam, Y. I. A., & Ahmad, A. L. (2018). The impact of external auditor size on the relationship between audit committee effectiveness and earnings management. Investment Management & Financial Innovations, 15(3), 122.

Idris, M., Siam, Y. A., & Nassar, M. (2018). Board independence, earnings management and the moderating effect of family ownership in Jordan. Management & Marketing. Challenges for the Knowledge Society, 13(2), 985-994.

Ilmas, F., Tahir, S., & Asrar-ul-Haq, M. (2018). Ownership structure and debt structure as determinants of discretionary accruals: An empirical study of Pakistan. Cogent Economics & Finance, 6(1), 1439254.

Inya, P., Psaros, J., & Seamer, M. (2018). The Relevance of Western Corporate Governance in Mitigating Management Misconduct in Thailand. Emerging Markets Finance and Trade, 54(6), 1425-1441.

Ismail, N. I., Zakaria, N. B., & Sata, F. H. A. (2015). Auditors Roles towards the Practice of Earnings Manipulation among the Malaysian Public Firms. Procedia Economics and Finance, 28, 145-150.

Jaggi, B., Leung, S., & Gul, F. (2009). Family control, board independence and earnings management: Evidence based on Hong Kong firms. Journal of Accounting and Public Policy, 28(4), 281-300.

Jain, B. A., & Shao, Y. (2014). Family Involvement and Post-IPO Investment Policy. Family Business Review, 27(4), 287-306.

Jara, M., López-Iturriaga, F., San-Martín, P., & Saona, P. (2019). Corporate governance in Latin American firms: Contestability of control and firm value. BRQ Business Research Quarterly, 22(4), 257-274.

Jaskiewicz, P., & Klein, S. (2007). The impact of goal alignment on board composition and board size in family businesses. Journal of Business research, 60(10), 1080-1089.

Javid, A. Y., & Iqbal, R. (2010). Corporate governance in Pakistan: Corporate valuation, ownership and financing. Working Papers & Research Reports, 2010.

Jehu, P., & Ibrahim, M. A. (2019). Board of Directors' Interest in Share Ownership and Earnings Management. Indian-Pacific Journal of Accounting and Finance, 3(1), 33-40.

Jelinek, K. (2007). The effect of leverage increases on earning management. The Journal of Business and Economic Studies, 13(2), 24.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. The American economic review, 76(2), 323-329.

Jensen, M. C., & Meckling, W. H. (1976). The theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305-360.

Jian, M., & Wong, T. J. (2010). Propping through related party transactions. Review of Accounting Studies, 15(1), 70-105.

Jiang, G., Lee, C. M., & Yue, H. (2010). Tunneling through intercorporate loans: The China experience. Journal of Financial Economics, 98(1), 1-20.

Jiraporn, P., & DaDalt, P. J. (2009). Does founding family control affect earning management? Applied Economics Letters, 16(2), 113–119.

Jo, H., & Harjoto, M. A. (2011). Corporate governance and firm value: The impact of corporate social responsibility. Journal of business ethics, 103(3), 351-383.

Johari, N., Mohd Saleh, N., Jaffar, R., & Hassan, M. S. (2008). The influence of board independence, competency and ownership on discretionary accruals in Malaysia. International J. Econ. Manage, 2(2), 281-306.

Johnson, L. T. (2005). Relevance and reliability. The FASB report, 2.

Jones, J. J. (1991). Earning management during import relief investigations. Journal of accounting research, 193-228.

Jordaan, L. A., De Klerk, M., & de Villiers, C. J. (2018). Corporate social responsibility and earnings management of South African companies. South African Journal of Economic and Management Sciences, 21(1), 1-13.

Jouber, H., & Fakhfakh, H. (2012). Pay for luck: new evidences from the institutional determinants of CEOs' compensation. International Journal of Law and Management, 54(6), 485-507.

Kamel, H., & Elbanna, S. (2012). Investigating the phenomenon of earnings management in the Egyptian stock market. Corporate Governance: The international journal of business in society, 12(3), 337-352.

Kang, S. A., & Kim, Y. S. (2012). Effect of corporate governance on real activity-based earnings management: Evidence from Korea. Journal of Business Economics and Management, 13(1), 29-52.

Kasznik, R. (1999). On the association between voluntary disclosure and earning management. Journal of Accounting Research, 37(1), 57-81.

Katmon, N., & Al Farooque, O. (2017). Exploring the impact of internal corporate governance on the relation between disclosure quality and earnings management in the UK listed companies. Journal of Business Ethics, 142(2), 345-367.

Kazemian, S., & Sanusi, Z. M. (2015). Earnings management and ownership Structure. Procedia Economics and Finance, 31, 618-624.

Keung, E., & Shih, M. S. (2014). Measuring discretionary accruals: are ROA-matched models better than the original Jones-type models?. Review of Accounting Studies, 19(2), 736-768.

Key, K. G. (1997). Political cost incentives for earnings management in the cable television industry. Journal of accounting and economics, 23(3), 309-337.

Khalil, M., & Ozkan, A. (2016). Board independence, audit quality and earnings management: Evidence from Egypt. Journal of Emerging Market Finance, 15(1), 84-118.

Khanh, H. T. M., & Nguyen, V. K. (2018). Audit quality, firm characteristics and real earnings management: The case of listed Vietnamese firms. International Journal of Economics and Financial Issues, 8(4), 243.

Khazanchi, D. (1995). Unethical behavior in information systems: The gender factor. Journal of Business Ethics, 14(9), 741-749.

Khuong, N. V., Ha, N. T. T., & Thu, P. A. (2019). The Relationship between Real Earnings Management and Firm Performance: The Case of Energy Firms in Vietnam. International Journal of Energy Economics and Policy, 9(2), 307-314.

Kim, J. B., & Sohn, B. C. (2013). Real earning management (REM) and cost of capital. Journal of Accounting and Public Policy, 32(6), 518-543.

Kim, S. H., Udawatte, P., & Yin, J. (2019). The Effects of Corporate Social Responsibility on Real and Accrual-based Earnings Management: Evidence from China. Australian Accounting Review, 29(3), 580-594.

Kim, Y. (2015). Discussion of foreign ownership and real earnings management: Evidence from Japan. Journal of International Accounting Research, 14(2), 215-219.

Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. Journal of accounting and economics, 33(3), 375-400.

Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. Journal of accounting and economics, 39(1), 163-197.

Kothari, S. P., Mizik, N., & Roychowdhury, S. (2012). Managing for the moment: The role of real activity versus accruals earning management in SEO valuation. Working paper.

Kothari, S. P., Mizik, N., & Roychowdhury, S. (2016). Managing for the moment: The role of earnings management via real activities versus accruals in SEO valuation. The Accounting Review, 91(2), 559-586.

Krishnan, G. V., & Parsons, L. M. (2008). Getting to the bottom line: An exploration of gender and earnings quality. Journal of Business Ethics, 78(1-2), 65-76.

Kumar, M., & Vij, P. (2017). Earnings Management and Financial Crisis: Evidence from India. Journal of International Business and Economy,(2017), 18(2), 84-101.

Kuo, J. M., Ning, L., & Song, X. (2014). The real and accrual-based earnings management behaviors: Evidence from the split share structure reform in China. The International Journal of Accounting, 49(1), 101-136.

Kurucz, E. C., Colbert, B. A., & Wheeler, D. (2008). The business case for corporate social responsibility. In The Oxford handbook of corporate social responsibility.

Kyaw, K., Olugbode, M., & Petracci, B. (2015). Does gender diverse board mean less earnings management?. Finance Research Letters, 14, 135-141.

La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. The journal of finance, 54(2), 471-517.

Lakhal, F., Aguir, A., Lakhal, N., & Malek, A. (2015). Do women on boards and in top management reduce earnings management? Evidence in France. Journal of Applied Business Research, 31(3), 1107.

Laksmana, I., & Yang, Y. W. (2009). Corporate citizenship and earnings attributes. Advances in Accounting, 25(1), 40-48.

Lassoued, N., Attia, M. B. R., & Sassi, H. (2018). Earnings management in Islamic and conventional banks: Does ownership structure matter? Evidence from the MENA region. Journal of International Accounting, Auditing and Taxation, 30, 85-105.

Lazzem, S., & Jilani, F. (2018). The impact of leverage on accrual-based earnings management: The case of listed French firms. Research in International Business and Finance, 44, 350-358.

Lee, B. B., & Choi, B. (2002). Company size, auditor type, and earnings management. Journal of Forensic Accounting, 3(1), 27-50.

Lee, G., & Masulis, R. W. (2009). Seasoned equity offerings: Quality of accounting information and expected flotation costs. Journal of Financial Economics, 92(3), 443-469.

Lemma, T. T., Negash, M., & Mlilo, M. (2013). Determinants of earnings management: Evidence from around the world. Available at SSRN 2370926.

Lennox, C., Wang, Z. T., & Wu, X. (2018). Earnings management, audit adjustments, and the financing of corporate acquisitions: Evidence from China. Journal of accounting and economics, 65(1), 21-40.

Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: an international comparison. Journal of financial economics, 69(3), 505-527.

Li, L., Holmes, M. J., & Lee, B. S. (2016). The asymmetric relationship between executive earnings management and compensation: a panel threshold regression approach. Applied Economics, 48(57), 5525-5545.

Lin, J. W., & Hwang, M. I. (2010). Audit quality, corporate governance, and earnings management: A meta-analysis. International Journal of Auditing, 14(1), 57-77.

Lin, J. W., Li, J. F., & Yang, J. S. (2006). The effect of audit committee performance on earnings quality. Managerial Auditing Journal, 21(9), 921-933.

Lin, T., Hutchinson, M., & Percy, M. (2015). Earnings management and the role of the audit committee: an investigation of the influence of cross-listing and government officials on the audit committee. Journal of Management & Governance, 19(1), 197-227.

Lisboa, I. (2016). Impact of financial crisis and family control on earning management of Portuguese listed firms. European Journal of Family Business, 6(2), 118-131.

Lisboa, I., & Kacharava, A. (2018). Does financial crisis impact earnings management evidence from Portuguese and UK. European Journal of Applied Business and Management, 4(1).

Litt, B., Sharma, D., & Sharma, V. (2013). Environmental initiatives and earnings management. Managerial Auditing Journal, 29(1), 76-106.

Liu, M., Shi, Y., Wilson, C., & Wu, Z. (2017). Does family involvement explain why corporate social responsibility affects earnings management?. Journal of Business Research, 75, 8-16.

Liu, Q., & Lu, Z. J. (2007). Corporate governance and earning management in the Chinese listed companies: A tunneling perspective. Journal of Corporate Finance, 13(5), 881-906.

Liu, W., Yang, H., & Zhang, G. (2012). Does family business excel in firm performance? An institution-based view. Asia Pacific Journal of Management, 29(4), 965-987.

Lo, K. (2008). Earnings management and earnings quality. Journal of Accounting and Economics, 45(2-3), 350-357.

Loftus, J. A., & Sin, S. (1997). The role of current and non-current accruals in the relation between stock returns and earning. Accounting & Finance, 37(2), 147-161.

Louis, H. (2004). Earning management and the market performance of acquiring firms. Journal of financial economics, 74(1), 121-148.

Lozano, M. B., Martínez, B., & Pindado, J. (2016). Corporate governance, ownership and firm value: Drivers of ownership as a good corporate governance mechanism. International Business Review, 25(6), 1333-1343.

Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. Journal of marketing, 70(4), 1-18.

Luong, L. (2015). Earnings management through accrual-based analysis: Case study: Stockmann Oy Abp 2005-2014.

Luthan, E., & Satria, I. (2016). The Effect of Good Corporate Governance Mechanism to Earnings Management Before and After IFRS Convergence. Procedia-Social and Behavioral Sciences, 219, 465-471.

Ma, L., Ma, S., & Tian, G. (2015). Corporate opacity and cost of debt for family firms. European Accounting Review, 1-33.

Mafrolla, E., & D'Amico, E. (2017). Borrowing capacity and earnings management: An analysis of private loans in private firms. Journal of Accounting and Public Policy, 36(4), 284-301.

Mahariana, I. D. G. P., & Ramantha, I. W. (2014). Pengaruh Kepemilikan Manajerial dan Kepemilikan Institusional terhadap Manajemen Laba Pada Perusahaan Manufaktur di BEI. E-Jurnal Akuntansi, 688-699.

Majiyebo, O. J., Okpanachi, J., Nyor, T., Yahaya, O. A., & Mohammed, A. (2018). Audit committee independence, size and financial reporting quality of listed Deposit Money Banks in Nigeria. IOSR Journal of Business and Management, 20(2), 40-47.

Mamedova, I. Z. (2008). The Effect of Leverage Increases on Real Earnings Management. Erasmus University.

Mamedova, I. Z. (2008). The Effect of Leverage Increases On Real Earnings Management. Erasmus University.

Man, C. K., & Wong, B. (2013). Corporate governance and earnings management: A survey of literature. Journal of Applied Business Research, 29(2), 391-418.

Marquardt, C. A., & Wiedman, C. I. (2004). How are earnings managed? An examination of specific accruals. Contemporary Accounting Research, 21(2), 461-491.

Martínez-Ferrero, J., Gallego-Álvarez, I., & García-Sánchez, I. M. (2015). A bidirectional analysis of earnings management and corporate social responsibility: the moderating effect of stakeholder and investor protection. Australian Accounting Review, 25(4), 359-371.

Martínez-Ferrero, J., Garcia-Sanchez, I. M., & Cuadrado-Ballesteros, B. (2015). Effect of financial reporting quality on sustainability information disclosure. Corporate Social Responsibility and Environmental Management, 22(1), 45-64.

Masri, I. (2018). The role of corporate governance in the relationships of family company with real earnings management. Jurnal Akuntansi, 22(1), 51-67.

Mather, P., & Ramsay, A. (2006). The effects of board characteristics on earnings management around Australian CEO changes. Accounting Research Journal, 19(2), 78-93.

Matoussi, H., & Gharbi, I. (2011). Board independence and corporate fraud: The case of Tunisian firms. Politics and Economic Development.

McNichols, M. F. (2001). Research design issues in earning management studies. Journal of accounting and public policy, 19(4), 313-345.

McVay, S. E. (2006). Earnings management using classification shifting: An examination of core earnings and special items. The Accounting Review, 81(3), 501-531.

Miller, D., Le Breton-Miller, I., Lester, R. H., & Cannella Jr, A. A. (2007). Are family firms really superior performers?. Journal of corporate finance, 13(5), 829-858.

Mindak, M. P., Sen, P. K., & Stephan, J. (2016). Beating threshold targets with earnings management. Review of Accounting and Finance, 15(2), 198-221.

Ming Chia, Y., Lapsley, I., & Lee, H. W. (2007). Choice of auditors and earning management during the Asian financial crisis. Managerial Auditing Journal, 22(2), 177-196

Moratis, L., & van Egmond, M. (2018). Concealing social responsibility? Investigating the relationship between CSR, earnings management and the effect of industry through quantitative analysis. International Journal of Corporate Social Responsibility, 3(1), 8.

Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. Journal of financial economics, 20, 293-315.

Morsfield, S. G., & Tan, C. E. (2006). Do venture capitalists influence the decision to manage earning in initial public offerings?. The Accounting Review, 81(5), 1119-1150.

Mulford, C. W., & Comiskey, E. E. (2005). The financial numbers game: detecting creative accounting practices. John Wiley & Sons.

Muttakin, M. B., Monem, R. M., Khan, A., & Subramaniam, N. (2015). Family firms, firm performance and political connections: Evidence from Bangladesh. Journal of Contemporary Accounting & Economics, 11(3), 215-230.

Nalarreason, K. M., Sutrisno, T., & Mardiati, E. (2019). Impact of leverage and firm size on earnings management in Indonesia. International Journal of Multicultural and Multireligious Understanding, 6(1), 19-24.

Nelson, M. W., Elliott, J. A., & Tarpley, R. L. (2002). How are earnings managed? Examples from auditors. Examples from Auditors (November 2002).

Neville, F., Byron, K., Post, C., & Ward, A. (2019). Board independence and corporate misconduct: A cross-national meta-analysis. Journal of Management, 45(6), 2538-2569.

Obigbemi, I. F. (2017). Ownership Structure and the Earnings Management Practices of Nigerian Companies. Journal of Internet Banking and Commerce.

OECD, O. (2004). The OECD principles of corporate governance. Contaduría y Administración, (216).

Osma, B. G. (2008). Board independence and real earning management (REM): The case of R&D expenditure. Corporate Governance: An International Review, 16(2), 116-131.

Osma, B. G., & Young, S. (2009). R&D expenditure and earnings targets. European Accounting Review, 18(1), 7-32.

Paiva, I. S., Lourenço, I. C., & Branco, M. C. (2016). Earnings management in family firms: current state of knowledge and opportunities for future research. Review of Accounting and Finance, 15(1), 85-100.

Paiva, I. S., Lourenço, I. C., & Dias Curto, J. (2019). Earnings management in family versus non-family firms: the influence of analyst coverage. Spanish Journal of Finance and Accounting/Revista Española de Financiación y Contabilidad, 48(2), 113-133.

Peasnell, K. V., Pope, P. F., & Young, S. (2001). The characteristics of firms subject to adverse rulings by the Financial Reporting Review Panel. Accounting and Business Research, 31(4), 291-311.

Peni, E., & Vähämaa, S. (2010). Female executives and earnings management. Managerial Finance, 36(7), 629-645.

Persons, O. S. (2006). Corporate governance and non-financial reporting fraud. The Journal of Business and Economic Studies, 12(1), 27.

Petersen, M. A. (2009). Estimating standard errors in finance panel data sets: Comparing approaches. The Review of Financial Studies, 22(1), 435-480.

Phillips, J., Pincus, M., & Rego, S. O. (2003). Earning management: New evidence based on deferred tax expense. The Accounting Review, 78(2), 491-521.

Pindado, J., Requejo, I., & de la Torre, C. (2008). Does family ownership impact positively on firm value? Empirical evidence from Western Europe. Documento de Trabajo, 2(08), 1-34.

Pivato, S., Misani, N., & Tencati, A. (2008). The impact of corporate social responsibility on consumer trust: the case of organic food. Business ethics: A European review, 17(1), 3-12.

Platonova, E., Asutay, M., Dixon, R., & Mohammad, S. (2018). The impact of corporate social responsibility disclosure on financial performance: Evidence from the GCC Islamic banking sector. Journal of Business Ethics, 151(2), 451-471.

Porter, M. E., & Kramer, M. R. (2002). The competitive advance of corporate philanthropy. HBR, December.

Powell, M., & Ansic, D. (1997). Gender differences in risk behaviour in financial decision-making: An experimental analysis. Journal of economic psychology, 18(6), 605-628.

Prencipe, A., & Bar-Yosef, S. (2011). Corporate governance and earnings management in family-controlled companies. Journal of Accounting, Auditing & Finance, 26(2), 199-227.

Prencipe, A., Bar-Yosef, S., & Dekker, H. C. (2014). Accounting Research in Family Firms: Theoretical and Empirical Challenges. European Accounting Review, 23(3), 361-385.

Prencipe, A., Markarian, G., & Pozza, L. (2008). Earnings management in family firms: Evidence from R&D cost capitalization in Italy. Family Business Review, 21(1), 71-88.

Prior, D., Surroca, J., & Tribó, J. A. (2008). Are socially responsible managers really ethical? Exploring the relationship between earnings management and corporate social responsibility. Corporate Governance: An International Review, 16(3), 160-177.

Pucheta-Martínez, M. C., Bel-Oms, I., & Olcina-Sempere, G. (2016). Corporate governance, female directors and quality of financial information. Business Ethics: A European Review, 25(4), 363-385.

Pucheta-Martínez, M. C., Bel-Oms, I., & Olcina-Sempere, G. (2016). Corporate governance, female directors and quality of financial information. Business Ethics: A European Review, 25(4), 363-385.

Qa'dan, M. B. A., & Suwaidan, M. S. (2019). Board composition, ownership structure and corporate social responsibility disclosure: the case of Jordan. Social Responsibility Journal.

Raman, K., & Shahrur, H. (2008). Relationship-specific investments and earnings management: Evidence on corporate suppliers and customers. The Accounting Review, 83(4), 1041-1081.

Rangan, S. (1998). Earnings management and the performance of seasoned equity offerings. Journal of Financial economics, 50(1), 101-122.

Razzaque, R. M. R., Ali, M. J., & Mather, P. R. (2016). Real earnings management in family firms: Evidence from an emerging economy. Pacific-Basin Finance Journal, 40, 237-250.

Rehman, I. U., & Shahzad, F. (2014). The Economic Consequences of Mandatory IFRS Reporting: Emerging Market Perspective. Engineering Economics, 25(4), 401-409.

Rehman, S. S. F. U. (2013). Relationship between financial leverage and financial performance: Empirical evidence of listed sugar companies of Pakistan. Global Journal of Management and Business Research.

Richardson, S. A., Sloan, R. G., Soliman, M. T., & Tuna, A. (2001). Information in Accruals about the Quality of Earnings. Available at SSRN 278308.

Roosenboom, P., van der Goot, T., & Mertens, G. (2003). Earnings management and initial public offerings: Evidence from the Netherlands. The International Journal of Accounting, 38(3), 243-266.

Roychowdhury, S. (2006). Earning management through real activities manipulation. Journal of accounting and economics, 42(3), 335-370.

Sadjiarto, A., Setio, C., & Budiarti, W. R. (2019). Ownership Structure and Earnings Management in Indonesian Listed Banks. Journal of Economics and Business, 2(2).

Saeed, A., Hashmi, A. M., & Javid, A. Y. (2019). Corporate Social Responsibility and Earnings Management: The Moderating Role of Family Ownership. Abasyn University Journal of Social Sciences, 12(1).

Sajid, (2017). The impact of corporate governance on firm value, payout policy, cost of capital, and corporate social responsibility. (PhD Thesis), Air University, School of Management, Islamabad.

Salehi, M., Mahmoudabadi, M., & Adibian, M. S. (2018). The relationship between managerial entrenchment, earnings management and firm innovation. International Journal of Productivity and Performance Management, 67(9), 2089-2107.

Salewski, M., & Zülch, H. (2014). The Association between corporate social responsibility (CSR) and earnings quality–evidence from European blue chips.

Salvato, C., & Moores, K. (2010). Research on accounting in family firms: Past accomplishments and future challenges.

Sankar, M. R., & Subramanyam, K. R. (2001). Reporting discretion and private information communication through earnings. Journal of Accounting Research, 39(2), 365-386.

Sarwar, B., Xiao, M., Husnain, M., & Naheed, R. (2018). Board financial expertise and dividend-paying behavior of firms: New insights from the emerging equity markets of China and Pakistan. Management Decision, 56(9), 1839-1868.

Sauerwald, S., & Peng, M. W. (2013). Informal institutions, shareholder coalitions, and principal–principal conflicts. Asia Pacific Journal of Management, 30(3), 853-870.

Schipper, K. (1989). Earnings management. Accounting horizons, 3(4), 91.

Scholtens, B., & Kang, F. C. (2013). Corporate social responsibility and earnings management: Evidence from Asian economies. Corporate Social Responsibility and Environmental Management, 20(2), 95-112.

Schulze, W. S., Lubatkin, M. H., & Dino, R. N. (2003). Exploring the agency consequences of ownership dispersion among the directors of private family firms. Academy of Management Journal, 46(2), 179–194.

Scott, W. R., & O'Brien, P. C. (2003). Financial accounting theory (Vol. 3). Toronto: Prentice hall.

Sellami, M. (2015). Incentives and Constraints of Real earning management (REM): The Literature Review. International Journal of Finance and Accounting, 4(4), 206-213.

Shafai, N. A. B., Amran, A. B., & Ganesan, Y. (2018). Earnings Management, Tax Avoidance and Corporate Social Responsibility: Malaysia Evidence. International Academic Institute for Science and Technology, 5(3), 41-56.

Shahzad, F., Rauf, S. A., Saeed, A., & Al Barghouthi, S. (2017). Earning Management Strategies of Leveraged Family and Non-Family Controlled Firms: An Empirical Evidence. International Journal of Business & Society, 18.

Shahzad, F., Rehman, I. U., Colombage, S., & Nawaz, F. (2019). Financial reporting quality, family ownership, and investment efficiency. Managerial Finance.

Shaikh, R., Fei, G., Shaique, M., & Nazir, M. R. (2019). Control-Enhancing Mechanisms and Earnings Management: Empirical Evidence from Pakistan. Journal of Risk and Financial Management, 12(3), 130.

Sharma, P. (2004). An overview of the field of family business studies: Current status and directions for the future. Family business review, 17(1), 1-36.

Shayan-Nia, M., Sinnadurai, P., Mohd-Sanusi, Z., & Hermawan, A. N. A. (2017). How efficient ownership structure monitors income manipulation? Evidence of real earnings management among Malaysian firms. Research in International Business and Finance, 41, 54-66.

Shirato, K., & Nagata, K. (2012). Earnings management through classification shifting under Japanese GAAP. Japan Society for Business Finance Research 36th National Convention, Japan Society for Business Finance Research Homepage, 1-24

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. The journal of finance, 52(2), 737-783.

Singh, S., Tabassum, N., Darwish, T. K., & Batsakis, G. (2018). Corporate governance and Tobin's Q as a measure of organizational performance. British Journal of Management, 29(1), 171-190.

Smaili, N., & Labelle, R. (2009). Preventing and detecting accounting irregularities: The role of corporate governance. Available at SSRN 1324143.

Smith Jr, C. W., & Watts, R. L. (1982). Incentive and tax effects of executive compensation plans. Australian Journal of Management, 7(2), 139-157.

Soebyakto, B. B., Dewi, K., Mukhtaruddin, & Arsela, S. (2017). Investment opportunity set to earning quality and firm's value: Corporate governance mechanism as moderating variable. Corporate Ownership & Control, 14(4-2),435-448.

Spohr, J. (2005). Essays on Earnings Management (summary section only). Svenska handelshögskolan.

Srinidhi, B., Gul, F. A., & Tsui, J. (2011). Female directors and earnings quality. Contemporary Accounting Research, 28(5), 1610-1644.

Stein, J. C. (1989). Efficient capital markets, inefficient firms: A model of myopic corporate behavior. The Quarterly Journal of Economics, 104(4), 655-669.

Stubben, S. R. (2010). Discretionary revenues as a measure of earnings management. The accounting review, 85(2), 695-717.

Subramanyam, G. P. (2017). Investment Banking: Concepts, Analysis & Cases. Tata McGraw –Hill Publishing.

Suh, Y. S. (1990). Communication and income smoothing through accounting method choice. Management Science, 36(6), 704-723.

Sun, J., & Liu, G. (2016). Does analyst coverage constrain real earnings management?. The Quarterly Review of Economics and Finance, 59, 131-140.

Sun, J., Liu, G., & Lan, G. (2011). Does female directorship on independent audit committees constrain earnings management?. Journal of Business Ethics, 99(3), 369-382.

Sun, L., & Al Farooque, O. (2018). An exploratory analysis of earnings management practices in Australia and New Zealand. International Journal of Accounting & Information Management.

Swai, J. P. (2016). The impact of corporate governance and firm-specific characteristics on earnings management: Evidence from East Africa. Research Journal of Finance and Accounting, 7(8), 139-156.

Sweeney, A. P. (1994). Debt-covenant violations and managers' accounting responses. Journal of accounting and Economics, 17(3), 281-308.

Tahir, S. H., & Sabir, H. M. (2014). Impact of Family Ownership on Investment Decision: Comparative Analysis of Family and non-Family companies listed at Karachi Stock Exchange. Business Excellence, 8(2),33.

Teoh, S. H., Welch, I., & Wong, T. J. (1998). Earning management and the long-run market performance of initial public offerings. The Journal of Finance, 53(6), 1935-1974.

Thiruvadi, S., & Huang, H. W. (2011). Audit committee gender differences and earnings management. Gender in Management: An International Journal, 26(7), 483-498.

Tian, Q., & Peterson, D. K. (2016). The effects of ethical pressure and power distance orientation on unethical pro-organizational behavior: the case of earnings management. Business Ethics: A European Review, 25(2), 159-171.

Tian, X., Yang, T., & Yu, T. R. (2018). Real earnings management in family firms: Evidence from Chinese listed firms. International Journal of Revenue Management, 10(2), 77-106.

Timbate, L., & Park, C. (2018). CSR performance, financial reporting, and investors' perception on financial reporting. Sustainability, 10(2), 522.

Tong, Y. H. (2007). Financial Reporting Practices of Family Firms. Advances in Accounting, 23, 231–261.

Triki Damak, S. (2018). Gender diverse board and earnings management: evidence from French listed companies. Sustainability Accounting, Management and Policy Journal, 9(3), 289-312.

Tulung, J. E., & Ramdani, D. (2018). Independence, size and performance of the board: An emerging market research. Corporate Ownership & Control, 15(2).

Uribe-Bohorquez, M. V., Martínez-Ferrero, J., & García-Sánchez, I. M. (2018). Board independence and firm performance: The moderating effect of institutional context. Journal of Business Research, 88, 28-43.

Vafeas, N. (1999). Board meeting frequency and firm performance. Journal of financial economics, 53(1), 113-142.

Vaidya, P. N. (2019). Board Size and Firm Performance: A Study On Bse 100 Companies. Journal of Management (JOM), 6(3).

Vakilifard, H., & Mortazavi, M. S. (2016). The Impact of Financial Leverage on Accrual-Based and Real earning management (REM). International Journal of Academic Research in Accounting, Finance and Management Sciences, 6(2), 53-60.

Vandemaele, S., &Vancauteren, M. (2015). Nonfinancial Goals, Governance, and Dividend Payout in Private Family Firms. Journal of Small Business Management, 53(1), 166-182.

Veprauskaitė, E., & Adams, M. (2013). Do powerful chief executives influence the financial performance of UK firms?. The British accounting review, 45(3), 229-241.

Videira, A. M. G. (2016). Information quality and firm age (Doctoral dissertation).

Villalonga, B., &Amit, R. (2006). How do family ownership, control and management affect firm value? Journal of Financial Economics, 80(2), 385-417.

Villarón-Peramato, O., García-Sánchez, I. M., & Martínez-Ferrero, J. (2018). Capital structure as a control mechanism of a CSR entrenchment strategy. European Business Review.

Walker, M. (2013). How far can we trust earning numbers? What research tells us about earning management? Accounting and Business Research, 43(4), 445–481.

Wang, Y. H., Chuang, C. C., & Lee, S. Y. (2010). Impact of compositions and characteristics of board of directors and earnings management on fraud. African Journal of Business Management, 4(4), 496-511.

Wardhani, R., & Anggraenni, M. D. (2017). The effect of leverage and IFRS convergence on earnings management through real activities manipulation in Asia. Asian Journal of Business and Accounting, 10(1), 87-125.

Watts, R. L., & Zimmerman, J. L. (1978). Towards a positive theory of the determination of accounting standards. Accounting review, 112-134.

Watts, R. L., & Zimmerman, J. L. (1986). Positive accounting theory.

Watts, R. L., & Zimmerman, J. L. (1990). Positive accounting theory: a ten year perspective. Accounting review, 131-156.

Waweru, N. M., & Prot, N. P. (2018). Corporate governance compliance and accrual earnings management in eastern Africa: Evidence from Kenya and Tanzania. Managerial Auditing Journal, 33(2), 171-191.

Wiseman, R. M., & Gomez-Mejia, L. R. (1998). A behavioral agency model of managerial risk taking. Academy of management Review, 23(1), 133-153.

Wongsunwai, W. (2013). The effect of external monitoring on accrual-based and real earning management (REM): evidence from venture-backed initial public offerings. Contemporary Accounting Research, 30(1), 296-324.

Xu, R. Z., Taylor, G. K., & Dugan, M. T. (2007). Review of real earnings management literature. Journal of Accounting Literature, 26, 195.

Yang, J. S., & Krishnan, J. (2005). Audit committees and quarterly earnings management. International journal of auditing, 9(3), 201-219.

Yang, M.-L. (2010). The Impact of Controlling Families and Family CEOs on Earning Management. Family Business Review, 23(3), 266-279.

Yeh, Y., Lee, T., & Woidtke, T. (2001). Family control and corporate governance: Evidence from Taiwan. International Review of Finance, 2(1/2), 21-48.

Ying, Q., & Wang, L. (2013). Propping by controlling shareholders, wealth transfer and firm performance: Evidence from Chinese listed companies. China Journal of Accounting Research, 6(2), 133-147.

Yip, E., Van Staden, C., & Cahan, S. (2011). Corporate social responsibility reporting and earnings management: The role of political costs. Australasian Accounting, Business and Finance Journal, 5(3), 17-34.

Zalata, A. M., Tauringana, V., & Tingbani, I. (2018). Audit committee financial expertise, gender, and earnings management: Does gender of the financial expert matter? International review of financial analysis, 55, 170-183.

Zalata, A., & Roberts, C. (2016). Internal corporate governance and classification shifting practices: An analysis of UK corporate behavior. Journal of Accounting, Auditing & Finance, 31(1), 51-78.

Zamri, N., Rahman, R. A., & Isa, N. S. M. (2013). The impact of leverage on real earnings management. Procedia Economics and Finance, 7, 86-95.

Zang, A. Y. (2012). Evidence on the trade-off between real activities manipulation and accrual-based earning management. The Accounting Review, 87(2), 675 703.

Zellweger, T. M., & Astrachan, J. H. (2008). On the emotional value of owning a firm. Family Business Review, 21(4), 347–363.

Zgarni, I., Hlioui, K., & Zehri, F. (2016). Effective audit committee, audit quality and earnings management: Evidence from Tunisia. Journal of Accounting in Emerging Economies, 6(2), 138-155.

Zhang, R. (2006). Cash flow management, incentives, and market pricing. Incentives, and Market Pricing (September 11, 2006).

Zhu, T., Lu, M., Shan, Y., & Zhang, Y. (2015). Accrual-based and real activity earnings management at the back door: Evidence from Chinese reverse mergers. Pacific-Basin Finance Journal, 35, 317-339.

Zion, U. B., & Markarian, G. (2018). Board Size, Crisis, and Firm Performance: Evidence from Banks. International Journal of Economics and Finance, 10(4), 33-50.

# APPENDIX - 1

Corporate Social Responsibility Score/Index (CSRS) is utilized as dependent variable to proxy CSR activities which are disclosed in companies' annual reports. The study uses a modified Index which includes items relevant to Pakistani firms; the index is adopted from Haniffa and Cooke (2005), and KLD database. The Index contains scores for the four categories: (1) Community involvement; (2) environmental; (3) employee information; and (4) product and services information.

We have employed an unweighted scoring methodology in this study to score items included in the index. Hence, a dichotomous method is applied. If an item is disclosed in annual report it has a score of 1 otherwise 0.

The Corporate Social Responsibility Score (CSRS) is calculated by computing the ratio of actual scores awarded to the total number of items for each company. The value of index can range from zero to one. The higher score shows the greater extent of disclosure.

*Corporate Social Responsibility Index*

CSR Disclosure Items (20)

*A. Community Involvement*

1. Charitable donations

2. Support for housing (infrastructure)

3. Community program (Health and Education)

*B. Environmental*

1. Environmental policies

2. Recycling

3. Pollution prevention

*C. Employee Information*

1. Number of Employees/Human resource

2. Employee profit sharing

3. Strong retirement benefits

4. Worker's occupational health and safety

5. Employee training and development

6. Employee Welfare

7. Employees Relations

8. Child labour and related actions

*D. Product and Service Information*

1. Product quality and safety

2. Customer Award/Rating Received

3. Product development and Research

4. Types of products disclosed

5. Focus on customer service and satisfaction

6. Value added statement

---

# APPENDIX - 2

Definition of variables

| Variable Name | Label of Variable | Nature of Variable | Definition |
|---|---|---|---|
| Real earnings Management | R_EM | Numerical | It is sum of abnormal cash flows from operations, abnormal discretionary expenses and abnormal production cost |
| Accrual Earnings Management | AB_EM | Numerical | The difference between actual and estimated accruals represent discretionary accruals through performance match Jones model. |
| Capital Structure | LEV | Numerical | Capital structure is proxied by leverage, and it is a ratio of total debt to total assets of a firm |
| Corporate Social Responsibility | CSR | Numerical | It is the sum of annual environmental, social and governance (ESG) scores calculated by Thomson data stream. |
| Corporate Governance | ACI<br>BI<br>BGDV<br>B_Size | Numerical | This variable is proxied by four different variables, i.e. audit committee independence (ACI), board independence (BI), board gender diversity (BGDV) and corporate board sixe (B_Size). |

| | | | |
|---|---|---|---|
| | | | ACI: Ratio of independent director in audit committee to total member of audit committee<br>BI: Ratio of independent director I board to toatal board members.<br>BGDC: Ratio of female director in board to total board members.<br>B_Size: Natural log of total bord members. |
| Firm Characteristics | SIZE<br>ROA<br>Age | Numerical | Firm Size: natural log of total assets<br>Profitability (ROA): Ratio of net income to total assets.<br>Firm age: Natural log of listing year of firm. |
| Ownership Structure | INSDOWN | Numerical | Ownership structure is proxied by managerial ownership (MO).<br>MO: Ratio of shares owned by executives to total shares outstanding |