

**Earnings Management of Acquiring
Companies and Non-Acquiring Companies in
Gulf Cooperation Council (GCC)**

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Earnings Management of Acquiring Companies
and Non-Acquiring Companies in Gulf
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ABSTRACT

This research aims to investigate the factors influencing accruals and real earnings management in the GCC listed companies. These factors are acquisition, external audit quality, institutional ownership, state ownership, and foreign ownership as part of firm level governance mechanisms, and country level mechanism. In addition, this research investigates the effect of the acquisition deals characteristics on the engagement in accruals and real earnings management. For examining the effect of acquisition, corporate governance mechanisms (firm-level) and national governance quality (country-level) on accruals and real earnings management, the sample consists of 308 companies (3210 firm-year observations) for the financial year 2007-2017. To estimate accruals earnings management, this study uses Modified Jones model (1995). This study uses cross-sectional models developed by Roychowdhury (2006) to detect REM proxies in signed values. Specifically, abnormal cash flow from operations (CFO) proxies for sales manipulations, abnormal production costs proxies for overproduction and abnormal discretionary expenses proxies for manipulations of discretionary expenses. The results reveal that the GCC listed companies engage in both accruals and real earnings management. The highest engagement in accruals earning management across the GCC is in Saudi Arabia, whereas the lowest engagement in accruals earning management is in UAE, and Bahrain. This is due to the that the lowest national governance quality across the GCC is in Saudi Arabia, whereas the highest national governance quality is in UAE and Qatar. External audit quality is observed to be an inefficient mechanism in mitigating engagement in accruals and real earnings management. In terms of ownership structure, institutional ownership is obtained to be an efficient tool in restraining engagement in accruals and real earnings management. Likewise, state ownership is found to be an efficient tool in restraining engagement in accruals and real earnings management. However, foreign ownership is observed to be an inefficient mechanism in mitigating engagement in both accruals and real earnings management. In respect of country level governance, national governance quality is found to be an efficient tool in restraining engagement in accrual earnings management. However, it is an inefficient tool in restraining engagement in real earnings management.

In terms of acquisition deals characteristics influencing accruals and real earnings management in the GCC, this study found that acquiring companies with cross border deals are likely to engage in accruals earnings management before the acquisition but not in real earnings management. Acquiring companies with unrelated industries deals engage in real earnings management but not in accruals earnings management. The large percentage of ownership acquired was found to be an efficient tool in restraining engagement in accruals and real earnings management. Finally, the cash payment acquisition was found to be an efficient tool in restraining engagement in real earnings management, but not in accruals earnings management. This study has several implications for policymakers, as well as existing and potential investors in the GCC region. The first implication is that investors should take their decision to deal with the acquiring company with consideration that the reported earnings may not be genuine. Subsequently, this issue will appear in the future when they invest in a company and it is found that the performance does not match with their expectations (Dechow et al., 2010b). The second implication is that the GCC companies should be conscious that Big4 auditing firms cannot mitigate the engagement in earnings management. The GCC companies could employ auditing firms who seek provide a high audit quality with low audit fees. The third implication is that the GCC listed companies could benefit from attracting institutional owners and state owners. These types of owners can mitigate the engagement in accruals and real earnings management and therefore, enhance the firm performance. In terms of national governance quality, it is strongly recommended that policy makers concentrate on developing the national governance system as it mitigates the firm's engagement in earnings management.

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List of Abbreviations

AEM	Accruals Earnings Management
REM	Real Earnings Management
DACC	Discretionary Accruals
ACQ	Acquisition
EAUDQ	External Audit Quality
INSTOWN	Institutional Ownership
STOWN	State Ownership
FOWN	Foreign Ownership
NGQ	National Governance Quality
FSIZE	Firm Size
LEV	Leverage
GROW	Growth
MTB	Market to Book Value
ROA	Return on Assets
CBACQ	Cross Border Acquisition
INDR	Industry relatedness
OWNCQ	Ownership Acquired
PAYMETH	Payment methods
GCC	Gulf Cooperation Council
R&D	Research and development
SG&A	Selling, General & Administrative Expense

CHAPTER 1

INTRODUCTION

1.1 Research background

The merger and acquisition (M&A) have been of a major research interest around the world over the last two decades, the volume and the numbers of mergers and acquisitions is reaching a record-breaking level. Main factors underlying this procedure are related to occurrence of globalization, low-cost funding, and current financial turmoil, hence the need to create large entities to be able to compete for seeking outgrowth and profits. Moreover, the raise in capital flows across the nationwide due to economic reform programs and market liberalization in developing countries. Another key factor causing growing M&A is the increased globalization of investment seeking higher rates of return and the opportunity to diversify risk, and many businesses recognize the uncompromising demand to venture overseas, or within their region (Ravichandran, 2009). Mergers and acquisitions are nowadays frequent events in organizational lives.

Mergers and acquisition (M&A) are great mechanisms for a business to accomplish fast growth during a short time (Deng, 2009). However, the financial performance of a company plays an important role in achieving the acquisition with the lowest costs (Lehmann, 2016b). Earnings management is considered one of the most important tools in reporting a healthy financial situation of companies willing to attract investment and achieve the interest of shareholders and managers (Louis, 2004). This is due to earnings management being a process of beautification of financial statements and masking the genuine information of the company through accruals earnings management (AEM), real earnings management (REM), and classification shifting (CS) (Parfet, 2000b). While accruals and real earnings management have the impact of past or future earnings, classification shifting inflates the current earnings that do not affect the future earnings. Consequently, this study concentrates on

accruals and real earnings management as they have the impact of past or future earnings. It is difficult for real earnings management to be detected by auditors as it occurs during the financial year, whereas accruals earnings management occurs at the end of the financial year and, therefore, becomes more easily detected by auditors (Graham et al., 2005a).

Earnings management is a type of agency costs where shareholders grants managers (as agents) the running of the business on their behalf as shareholders may be unable to do it (Jensen and Meckling, 1976a). Some managers exploit the power granted by shareholders to achieve their interests. For example, financial performance of a certain company relies on published financial statements of evaluation of that company by analysts. Therefore, this issue generates a motivation for the management to engage in earnings management to meet or beat the expectations of analysts since meeting analyst expectations could lead to increase share returns. On the other hand, missing an earnings benchmark could lead to negative impacts on share returns and compensations for managers (Calegari, 2000) (For more details about earnings management see section 2.3.4). Consequently, Earnings management has led to the financial scandals, such as WorldCom (Cornett et al., 2008a) due to the lack of efficient corporate governance and weak investor protection (Enomoto et al., 2015). The GCC are described as weak investor protection environment. It is founded in 1981, the Gulf Cooperation Council (GCC) includes six countries bordering the Gulf. These countries are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (UAE). The goal of the GCC creation is to ensure prosperity and economic development for its members. There is a strong belief among the region's decision makers and authorities that facilitating the cross-border economic activities within the region has a crucial impact on the ongoing economic development efforts (Hamdan, 2012, Legrenzi, 2015). The council's main headquarter is in the city of Riyadh in Saudi Arabia (Al-Hamadi, 2021). The Charter of the GCC was signed on 25 May 1981, formally establishing the institution (Legrenzi, 2015). All current member states are monarchies, including three constitutional monarchies (Qatar, Kuwait, and Bahrain), two absolute monarchies (Saudi Arabia and Oman), and one federal monarchy (the

United Arab Emirates, which is composed of seven member states, each of which is an absolute monarchy with its own emir). There have been discussions regarding the future membership of Jordan, Morocco, and Yemen (Alsharif, 2011). The earning management in the GCC countries is very imperative to avoid some political and social cost. The stakeholders such as investor, shareholders. Creditor and debtors are recommended to increase their knowledge about the term of earning management practices and its important in the business to make better investment choices (Alareeni, 2018). Corporate governance plays a key mechanism in monitoring management' behaviour, therefore mitigating agency costs (earnings management) and investors' concern. Previous literature such as (González and García-Meca, 2014) indicate that External audit quality is a key corporate governance mechanism, which is responsible for ensuring the accounting transactions in companies have been applied in accordance with well-known accounting rules, and reducing the engagement in earnings management through performance of a statutory audit ((Jensen and Meckling, 1976a). In addition, ownership structure as firm governance mechanism plays an essential role in mitigating the engagement in earnings management. Controlling ownership could drive managers to concentrate more on the firm performance; therefore, it may mitigate opportunistic managers ((Pound, 1988). Furthermore, countries with strong investor protection provide an information environment and minority shareholder protection that are better than countries with weak shareholder protection (Porta et al., 2002). Therefore, countries with strong investor protection are probably more engaged in ethical corporate practices as they respond to local institutional pressures in an effort to achieve greater market share or to reduce transaction (Lourenço et al., 2018a). Consistent with this argument, the level of investor protection (rule of law) reduces reporting manipulation of companies as strong investor protection mitigates the ability of management to acquire private benefits of control at the expense of investors (Leuz et al., 2003a).

In developing markets such as the GCC countries, the investor protection environment is described as weak compared to developed countries (Enomoto et al., 2015). It is expected that the lack of efficient corporate governance and weak investor

protection lead to higher engagement in accrual and real earnings management. Empirical studies by (Al-Haddad and Whittington, 2019a, Elkalla, 2017, Chen et al., 2012), and the study of (Kuo et al., 2014) on developing countries, all report that companies use real earnings management and accruals earnings management simultaneously, whereas in developed markets (see also (Ge and Kim, 2014, Zang, 2012)), and (Zang, 2012), companies only engaged in one type of earnings management technique, the real earnings management technique, as it is difficult for it to be detected by auditors (Graham et al., 2005a). Based on this, this study intends to examine the factors influencing accruals and real earnings management in the GCC.

Earnings management is a tool that is used by managers to affect investors decisions and achieve manager's interest. These factors are acquisition, external audit quality, institutional ownership, state ownership, and foreign ownership as part of firm level governance mechanisms, and country level mechanism. Furthermore, the study also aims to examine the role of acquisition deals characteristics for the engagement in accruals and real earnings management.

1.2 Research Motivation

Acquisition is a key strategy for companies to constrain the competition and grow the market share (Higgins, 2013). Earnings management is a tool that is used by managers to affect shareholder decisions and achieve manager's interest. In contrast, shareholders, and management of acquiring companies employ earnings management before the acquisition to affect target companies' decisions and achieve the acquisition with the lowest cost (Higgins, 2013). It is very important for shareholders in non-acquiring companies to be aware of the consequences of earnings management used by managers. It is also important for target companies to be aware of the consequences of earnings management employed before the acquisition by acquiring companies. One of the main consequences is that acquiring companies experience underperformance after acquisition (Louis, 2004). This is attributable to earnings management masking the genuine information of the company (Parfet,

2000a). For example, interested shareholders in a certain company depend on the reported earnings as an indicator of the efficiency and profitability of the firm. In addition, they take their decision to deal with a company without considering that these reported earnings could not be genuine. Subsequently, this issue will appear in the future when they invest in a company and the performance does not match with their expectations (Dechow et al., 2010a). As it is mentioned early, earning management in developing countries is very imperative to avoid some political and social cost. The stakeholders such as investors, shareholders. Creditor and debtors are recommended to increase their knowledge about the term of earning management practices and its important in the business to make better investment choices (Alareeni, 2018). Corporate governance plays a key mechanism in monitoring management' behaviour, therefore mitigating agency costs (earnings management) and investors' concern.

Based on the discussion above, it is important to investigate the role of firm level governance and country level governance in constraining the engagement in earnings management in acquiring and non-acquiring companies in the GCC as developing countries. A plethora of governance and macroeconomic indicators also accounted for this feat. Several studies have investigated the link between firm-specific corporate governance characteristics and stock market performance. First, although several studies have been conducted in the past, their primary focus had been on the association between firm-specific corporate governance and stock market performance. The present study sheds light on the country-level national governance quality across the GCC countries under which firm-size, firm-value, national governance is implementation. Second, previous studies have focused primarily on developed economies only, but our study provides an emerging market perspective with a special focus on accruals earnings management, acquisition, external audit quality, institutional ownership, state ownership, foreign ownership, national governance quality, firm size, leverage, growth, market to book value, return on assets. Third, the sample employed in this study comprises annual data of six countries with complete relevant data for the period from 2007 to 2017. Moreover, it is worth

investigating the effect of the acquisition deals characteristics on the engagement in earnings management. Furthermore, it is important to investigate this in the Gulf Cooperation Council (GCC). This region has six countries (Saudi Arabia, UAE, Kuwait, Qatar, Oman, and Bahrain) which influence the global economy through their vast oil reserves (specifically 40% of the world oil reserves) and it is an important player in the international political system (Wilson, 2009a). In relation to mergers and acquisition, the last three decades have experienced a rapid growth in GCC. For example, Saudi Arabia and United Arab Emirates are emerging as attractive destinations for mergers and acquisitions by foreign direct investment because of their increasing gross domestic product (GDP) over the years. Mergers and acquisition deals in Saudi Arabia have grown from USD 1,550 million in year 2000 to USD 4,943 million in 2013 due to accelerating gross domestic product (Dubey and Kummer, 2016)

Although large number of mergers and acquisitions are occurring, the countries in the GCC are still developing as the corporate governance is weaker than in developed countries (Abdallah and Ismail, 2017a). However, The World Bank, (2017) argue that the UAE has a relatively better developed governance system compared to other countries in the same region. (Shubita, 2015) argue earnings quality differ among the GCC due to income-smooth (earnings management) and corporate governance practices. Consequently, this study aims to identify the factors influencing accruals and real earnings management of the GCC companies. This research enhances the understanding of earnings management in emerging markets during acquisitions as a research area that (Bao and Lewellyn, 2017) identified as not being explored. In addition, the consequences of earnings management are very important for shareholders and target companies to know, as earnings management impacts upon their financial decisions (Bansal et al., 2021

The growing in trends of M&As in developing and frontier countries are putting pressure on the profit margins for the firm on both sides. The firms from developing and frontier markets are entering the developed countries by acquiring firms with the latest technology and taking the benefit of their innovation. Similarly, companies from

developed markets are entering the emerging markets to gain benefits of cost efficiency, cheap labour, and to avail economies of scale.

Recently members of the GCC countries have entered the process of modernizing their economy; by which several ways and strategies are being considered to generate income from other sources rather than relying on oil exploration industries only. The evolution process of economics entails pursuing a new source of revenue if they consider the post carbon era. Many member states of GCC including Kuwait, United Arab Emirates, Saudi Arabia, Oman, and Bahrain have pursued a global approach to expand and revolutionize their economies by adopting cross border mergers and acquisitions to earn revenues away from the extraction of fuel. Countries from GCC are entering into the global strategy of M&A at an overwhelming rate because of two main reasons, firstly the member states have accumulated high liquidity due to rise in the prices of petroleum products including oil and gas, and they have limited opportunities to invest (Gattoufi et al., 2014). And the second factor of increased activities of M&A is to earn a higher rate of return by investing and seeking an opportunity to diversify the risk in other countries (Ravichandran, 2009). The reasons and motivations for M&A can be categorized into three broad types (Gattoufi et al., 2009). Shareholder's wealth maximization goals are the first one. This can be achieved when the consolidation leads to a better scale economies or scope economies and (or) there is improved cost reductions (efficiency). All of this should lead to a more efficient GCC sector which in turn results in value creation and therefore benefiting the shareholders. However, we should realize the claim that consolidation consistently increases market concentration which may increase market power. The latter could lead to higher prices benefiting the owners (shareholders) at the expense of the consumers. Managerial self-interest is the second motivation for M&As. This is where managers could use M&A consolidation to serve their goals; either as a way of boosting or defending their authoritative positions. The last motivation consists of various factors such as cheap labour, and to avail economies of scale which make the environment more attractive to M&As.

1.3 Contribution to knowledge

There is a lack of studies in the GCC is that the GCC markets would behave the same as the findings in other developing countries. There is a need to understand the role of EM during an acquisition process. This study is the first to examine the effect of national corporate governance (country-level), firm-level corporate governance mechanisms and the characteristics of acquisition deals on earnings management in acquiring and non-acquiring companies in the GCC. This study has significant practical and theoretical importance in several ways. Firstly, this study is considered as one of first studies investigating the combined effect of national corporate governance (country-level), firm-level corporate governance mechanisms and the characteristics of acquisition deals on earnings management in acquiring and non-acquiring companies in the GCC. Whilst previous literature in corporate governance has paid significant attention to the impact of internal governance mechanisms on earnings management, the effect of national corporate governance has been under-researched. Specifically, recent researchers such as (Aslan and Kumar, 2014), and (Van Essen et al., 2013) suggest that every corporate governance study must take into consideration the national corporate governance which companies are embedded in. This study responds to the lack of literature and research (Bao and Lewellyn, 2017); it will illustrate the need to understand how national corporate governance mechanisms affect the engagement in accruals and real earnings management in emerging markets. Consequently, this study provides new evidence on the association between national corporate governance and earnings management. From an academic point of view, this study adds to existing literature on the performance of acquiring companies in merger and acquisition in the GCC using a complementary, multi-theoretical perspective containing agency theory, and institutional theory to understand the impact of study variables. This will add to the academic and practical understanding of the critical impacts on the engagement in accruals and real earnings management.

The second significant contribution is to the interest of shareholders and the target companies involved in merger and acquisition in the GCC. It provides a significant caution, if acquiring companies engage in accruals and real earnings

management before the acquisition. Consequently, the share price pre-acquisition is likely to be overestimated, and the share price will be decreased after the acquisition.

The third contribution is to the benefit of auditors via provision of evidence on the parts of accounting information they ought to focus attention on when they need to detect accruals and real earnings management and, particularly, in the acquisition deals.

Finally, this study contributes to policymakers through providing a view of understanding of how the differences in institutional and legal systems affect accruals and real earnings management in the Gulf countries.

1.4 Aims and objectives of the research

The aim of this research is primarily involving extensive investigation in the effect of firm acquisition, corporate governance mechanisms, national corporate governance, and acquisition characteristics on the engagement in accruals and real earning managements in GCC countries. Therefore, specific objectives have been outlined to meet the target:

- ❖ To examine if acquiring and non-acquiring firms engage in accruals and real earnings management in GCC countries.
- ❖ To examine if corporate governance mechanisms have an impact on accruals earnings management (AEM) in acquiring and non-acquiring firms in GCC countries
- ❖ To examine if corporate governance mechanisms have an impact on real earnings management (REM) in acquiring and non-acquiring firms in GCC countries.
- ❖ To identify the acquisition deal characteristics influencing engagement in accruals earnings management of acquiring firms in the GCC.
- ❖ To identify the acquisition deal characteristics influencing engagement in real earnings management of acquiring firms in the GCC.

Based on the above aims, the study has the following sub-aim:

- ❖ To examine the relationship between real earnings management (REM) and accruals earnings management (AEM) in the GCC Listed companies.

1.5 Research methodology

This study examines the effect of acquisition, corporate governance mechanisms (firm-level) and national governance quality (country-level) on accruals and real earnings management in the GCC for the period between 2007-2017. To estimate accruals earnings management, this study uses Modified Jones model (1995). This study uses cross-sectional models developed by Roychowdhury (2006) to detect REM proxies in signed values. Specifically, abnormal cash flow from operations (CFO) proxies for sales manipulations, abnormal production costs proxies for overproduction and abnormal discretionary expenses proxies for manipulations of discretionary expenses. Furthermore, the Kothari et al. (2005) model is adopted as an alternative measure to increase robustness of this study. The adoption of alternative measure of AEM aims to provide consistent results and confirm that my findings are not sensitive to the measures used for AEM. Moreover, multivariate tests adopt fixed effect to investigate the effects of corporate governance mechanisms on earnings management behaviours (both AEM and REM).

1.6 Summary of the fundamental findings

First, this study found that the GCC listed companies engage in accruals and real earnings management. It is also noted that the GCC companies engage more in real earnings management when they engage in accruals earnings management, suggesting a complementary effect between techniques. This is attributed to in countries with weak investor protection, accruals earnings management will more largely used, therefore real earnings management will only be used as a complement as soon as it is needed by given the high cost associated with its use ((Al-Haddad and Whittington, 2019b). Acquisition is found to be a tool in increasing the engagement in

accruals earnings management but not in real earnings management. the cost of engaging in real earnings management is higher than the cost of engaging in accruals earnings management (Zhang, 2015). In addition, the engagement in real earnings management not only negatively impacts on the current cash flow, but it negatively impacts on future cash flow (Zhang, 2015). External audit quality is observed to be an inefficient mechanism in mitigating engagement in accruals and real earnings management. This is attributed to the big 4 auditing firms do not have a right to stop opportunistic behavior by managers (Kouaib and Jarboui, 2014c) and, therefore, they are less effective in influencing companies that engage in accruals earnings management. moreover, real earnings management techniques are difficult to be detected by external monitoring and scrutiny as it occurs during the financial year and these techniques are considered legal business activities (Graham et al., 2005b). In terms of ownership structure, institutional ownership is obtained to be an efficient tool in restraining engagement in accruals and real earnings management. Institutional ownership companies have more expertise and reasonable access to resources, which qualify them to obtain suitable information at a lower level of cost and therefore to monitor the opportunistic behaviour of managers and mitigate engagement in earnings management (Arouri et al., 2014c). Moreover, being long-term shareholders (Dalwai et al., 2015b), institutional owners are more committed to the monitoring of the behaviour of managers. likewise, state ownership is found to be an efficient tool in restraining engagement in accruals and real earnings management. state owners often give advantages to the companies such as credit liquidity, thus there is less needed to engage in earnings management. Moreover, state owners seek to build credibility in international markets, therefore they mitigate engagement in earnings management (Eljelly, 2009). However, foreign ownership is observed to be an inefficient mechanism in mitigating engagement in both accruals and real earnings management. as foreign ownership has different characteristics (i.e., culture, and religion), it results in them being unable to monitor accurately (Dvořák, 2005). In respect of country level governance, national governance quality is found to be an efficient tool in restraining engagement in accrual earnings management. However, it

is an inefficient tool in restraining engagement in real earnings management. Real earnings management techniques are less likely to be penalized by regulators, as these techniques are considered legal business activities (Graham et al., 2005b). In terms of four acquiring acquisition deals characteristics influencing accruals and real earnings management in the GCC, this study found that acquiring companies with cross border deals are likely to engage in accruals earnings management before the acquisition but not in real earnings management. The explanation behind this is that there are higher costs in engaging in real earnings management as compared to engaging in accrual earnings management (Zang, 2012). Acquiring companies with unrelated industries deals engage in real earnings management but not in accruals earnings management. with higher asymmetric information on unrelated industries deals, they are more like to engage in earnings management the large percentage of ownership acquired was found to be an efficient tool in restraining engagement in accruals and real earnings management. Acquiring companies often acquire target companies that experience poor earnings to accept acquirers' offers during acquisition negotiation without overestimation of acquirers' prices (Raman et al., 2013). Another potential explanation is the large percentage of ownership acquired occurs by controlling shareholders who have improved monitoring and control set and a good reputation that enhances mitigating engaging in earnings management (xie et al., 2003); (klein, 2002). furthermore, controlling shareholders mostly affect strategy decisions rather than concentration on short-term performance (Piosik and Genge, 2019). Moreover, acquiring companies perhaps have already some proportions of shares of the target companies before the acquisition which already have been inverted in the acquiring companies' share price (Mei and Sun, 2008). Finally, the cash payment acquisition was found to be an efficient tool in restraining engagement in real earnings management, but not in accruals earnings management. This is attributed to the high cost of engaging in earnings management if it is detected by target companies. for example, target companies could request a higher exchange ratio or threaten to cancel the acquisition transaction (Louis, 2004). In addition, the engagement in real earnings

management not only negatively impacts on the current cash flow, but it negatively impacts on future cash flow (Zhang, 2015).

1.7 The research limitations

Although the procedures have been taken into account to confirm the robustness of the results of this study, several prospective limitations remain. One of these limitations is, this study employed the Big4 auditing firms to measure external audit quality whilst previous literature such as the work of Lin and Hwang (2010), and Chen et al. (2005) uses auditor size, audit fees, auditor tenure, and industry specialist auditor as proxy of audit quality. The researcher used Big4 auditing firms as proxy for external audit quality as suggested by (Habbash and Alghamdi, 2017). However, this study did not use other proxies for external audit quality in the GCC. Second, his study examined the effect of the acquisition, firm level governance, and country level governance on accruals and real earnings management which added value to this research. Analysing the interaction effect of the acquisition with firm level governance and country level governance could be an effective mechanism in mitigating the engagement in accrual and real earnings management which has been not examined in this research. This strategy will compare acquiring firms with firm level governance and country level governance without firm level governance and country level governance to measure the effect of firm level governance and country level governance on the acquiring firms themselves. Fourth, this study examined the acquiring companies and the acquisition deals companies on the engagement in accruals and real earnings management whilst previous literatures, such as (Erickson and Wang, 1999), and (Fakhfakh and Nasfi, 2012), used deal size and relative size as deal characteristics. The researcher did not use these deal characteristics due to data unavailability. Finally, this study provides evidence based on external audit quality, institutional ownership, state ownership and foreign ownership data. Previous studies such as (Piosik and Genge, 2019, Al-Haddad and Whittington, 2019b) argued that other types of firm level governance (board of directors' characteristics and audit

committee characteristics) affect earnings management. The researcher did not use these types of firm level governance due to it has been researched.

1.8 Research structure

This study analyses the contributions and comprises eight chapters as follows:

Chapter 1: Introduction

This chapter presents the background of the research topic, the focus of the study, the research aims and objectives, the research questions and how this research proposes to answer them. This chapter also identifies the fundamental contributions of this study and displays the fundamental findings of this study.

Chapter 2: Theoretical framework and literature review

The chapter presents the setting of the Gulf Cooperation Council (GCC) countries, the definition of earnings management and the motivations behind earnings management and accrual and real earnings management models. It also presents and discusses the earnings management theoretical framework, empirical evidence, and hypotheses development in terms of earnings management and acquisition, earnings management, and firm level and country level governance, earnings management and acquiring company characteristics and acquisition characteristics.

Chapter 3: Research methodology

This chapter identifies the data collection and sample selection. It also presents the main empirical research models and the research method and presents how this study is to be accomplished. It identifies the measurements of all the variables employed in this study.

Chapter 4: Acquisition, Firm level and country level governance influencing accruals earnings management in GCC.

This chapter presents the findings of the factors influencing accruals earnings management in the GCC by using the absolute value of the modified Jones model. These factors are acquisition, firm level governance mechanisms (external audit quality, institutional ownership, state ownership and foreign ownership) and country level mechanism (national governance quality).

Chapter 5: Acquisition, Firm level and National level governance influencing real earnings management

This chapter presents the findings of the factors influencing real earnings management in the GCC by using the total real earnings management. These factors are acquisition, firm level governance mechanisms (external audit quality, institutional ownership, state ownership and foreign ownership), and a country level mechanism (national governance quality). It also reveals whether the GCC companies use accruals and real earnings managements simultaneously as complements or as substitutes. The accruals earnings management is used as an independent variable in the real earnings management regression.

Chapter 6: The effect of acquisition deal characteristics on accrual earnings management.

This chapter presents the analysis results for the four acquiring firm characteristics and acquisition deal characteristics that influence accruals earnings management in the GCC by using the absolute value of the modified Jones model; these four acquisition deal characteristics are geographic diversification, industrial diversification, ownership acquired and payment methods.

Chapter 7: The effect of acquisition deal characteristics on real earnings management.

This chapter presents the analysis results for the four acquiring firm characteristics and acquisition deals characteristics that influence accruals earnings management in the GCC by using the total real earnings management. These four acquisition deal characteristics are geographic diversification, industrial diversification, ownership

acquired and payment methods. It also compares the findings of accrual earnings management and real earnings management.

Chapter 8: Conclusion and recommendations.

This chapter condenses the research results. It explains the factors influencing accruals and real earnings management in the GCC regions in order to enhance the financial statements transparency. This chapter also identifies the limitations that existed during this study and concludes with future research recommendations.

CHAPTER 2

EARNINGS MANAGEMENT, CORPORATE GOVERNANCE MECHANISMS AND ACQUISITION DEAL CHARACTERISTICS –A REVIEW OF EXTANT LITERATURE

2.1 Introduction

In this chapter a concise overview of theories and previous relevant studies is given to support the works. To start with, the Gulf Cooperation Council (GCC) countries overview, followed by the detailed overview of earning management and the motivational behind earning management. The accrual earning management, real, cost, and the market motivation earning management are fully elucidated. The earning management models, Merger and Acquisition earning management, earning management theoretical debate, the empirical evidence and hypothesis development in terms of earnings management and acquisition, earnings management, and firm level governance (external audit quality, institutional ownership, state ownership and foreign ownership), earnings management and country level governance (national governance quality), earnings management and acquisition characteristics (cross border acquisition, industry relatedness acquisition, ownership acquired and the method of payment).

2.1.1 The setting of Gulf Cooperation Council (GCC) countries

The Gulf Cooperation Council (GCC) purpose is to is to attain unity among its members based on their common objectives and their related political and cultural characteristics, which are established in Arab and Islamic cultures. Presidency of the council rotates annually. The establishment of the Gulf Cooperation Council (GCC) countries together was in November 1981, and it contains six Arab countries, namely Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. The GCC has a culture that differs from developed countries. For example, (Dadfar, 1984) argues, Arab culture differs from western culture due to Islamic religion having a

significant impact on most of Arab culture (Kalliny and Gentry, 2007). The major aim of establishing the GCC were to foster development through their cooperation in various fields such as business affairs, cultural activities, and education. Adding to this, they release comparable policies and regulation amongst themselves to achieve a union (Amico, 2012a). The GCC countries are in the Middle East, and they are classified as developing countries. Nevertheless, this region is one of the most prosperous in the world because of its natural resources (Wilson, 2009b).

The GCC plays a significant role in global energy markets due to 40% of world oil reserves and around 23% of world gas reserves being in the area (Wilson, 2009). In addition, three of the Gulf countries (Saudi Arabia, Kuwait and the UAE) are among the top ten countries in regard to oil reserves (Held and Ulrichsen, 2013b). Consequently, it is significant to note this fact for the GCC as it becomes one of the key supporters for the global economy; and the region plays a significant role in the international political system (Wilson, 2009). The GCC countries have achieved progress in business with the World Bank classifying the GCC countries as the top of the Middle East (Hertog, 2013). In addition, the GCC countries are known as the financial and commercial centre in the MENA region (Baydoun et al., 2012). The rapid growth of the markets in the GCC countries, and pressure from international companies, have led the governments to adopt IFRSs, in the anticipation that their adoption will meet shareholders requirements, and local and international investors (Hussain et al., 2012). Furthermore, the regulatory organisations play notable roles in developing the legal environment and the application of corporate governance (Eulaiwi et al., 2016a), especially after the global financial crisis in 2007-2008. In terms of the effects of the global financial crisis on the GCC markets, it has barely been perceived compared to other similar developing and developed markets (Amico, 2012). For example, decreased the GCC budgets and investment programs as result of oil prices reduction. In addition, decreased the GCC exports due to economic downturn (Abdelbaki, 2010).

There are likenesses and variations between the GCC and other developing countries. The likenesses between the GCC and other developing countries are as

follows. As with developing countries in general, the GCC is faced with inefficient investor rights protection; inefficient legitimate systems; weakness of stock markets; lack of quality information; economic uncertainty; and state involvement (Reed, 2002). In terms of the variations between the GCC and other developing countries, the GCC financial markets do not have many listed companies, high association with international markets, and high diversification (Yu and Hassan, 2008). Independent directors on the board are few in the GCC companies compared to other developing countries (Ferrarini and Filippelli, 2015). There is also a lack of involvement of institutional shareholders in the market compared with other developing countries such as Malaysia (Kiel and Nicholson, 2003). This heightens the inconsistency of the market as retail shareholders have more of a tendency to withdraw their investments sharply, thus resulting in the quality of the price falling (Amico, 2012a).

The GCC suffers from the concentration of ownership being kept in state hands and upper class families (Soural, 2004). Favouritism in hiring and promotions is clearly apparent in the GCC due to influential parties such as upper-class families (Mazaheri, 2013). Public companies depend on debt funding from banks due to the concentrated ownership (Alresheedi, 2015). This is supported by (Held and Ulrichsen, 2013b) who concluded that the markets of the GCC region are inefficient, due to board of directors are members in many companies in the GCC, which could weakness efficiency of corporate governance performance (Ali et al., 2007) and the efficiency of monitoring of managers (Fich and Shivdasani, 2006). Consequently, the comprehensive perception of corporate governance practice and effect on earnings management is fundamental to the promotion of investors prospects, particularly foreign and minority investors, to share in the financial and commercial centre in the MENA region. The strength of corporate governance gives investors with information which enhances confidence in the market and their performance since this region influences the global economy through its vast oil reserves (specifically, 40% of the world oil reserves) and it is an important player in the international political system.

2.2 The Practice of Corporate Governance in the GCC

The essential mechanisms to generate, foster public and investors is known as corporate governance codes which are promoting good corporate governance practice. Different corporate governance quality is being practiced by different countries based on their internal settings and country characteristics such as financial infrastructure, cultural value, the economic, legal and regulatory system (Hope and Fraser, 2003). There is a difference in the level of economy development, accessibility of information and implementation of mechanisms within the regulatory framework (Mueller and Peev, 2007, Gugler et al., 2007, Wallace and Gernon, 1991). Which basically affect the management disclosure practice (Al Nasser, 2018). There is a support provided by the organization for economic cooperation and development (OECD) to MENA countries to grow and promote corporate governance in the region (Hope, 2003). The GCC countries are also a member of the World Trade Organization (WTO) that stimulate the advancement of cultural values to promote and encourage good corporate governance practice and investors because there are attractions of good investors when there is an appropriate operation of corporate governance which will increase the value of firms and the stability of the stock markets (Held and Ulrichsen, 2013a).

There is introduction and enforcement of high corporate governance by the GCC policymakers which are in line with the Organization for Economic Cooperation and Development (OECD) ethics, to attain the best corporate governance structure in the region (Held and Ulrichsen, 2013a). Among all the six members of the GCC countries for the establishment of the corporate governance code to guide listed companies towards the adoption of the best principles and practices of corporate governance. Oman was the first country to adopt its corporate governance in 2002, followed by Saudi Arabia in 2006, UAE in 2007, Qatar in 2009, Bahrain in 2010 and Kuwait in 2010. The corporate governance code was developed in all GCC, while the last update of corporate governance in Oman, UAE, and Kuwait was in 2016, the last update of corporate governance in Qatar in 2017. The last update of corporate governance in Saudi

Arabia was in 2018, followed by Bahrain in 2019. The change in the market model as a reflection of corporate governance model in GCC countries, which highlights the imperative of maximising shareholder wealth and value (Eulaiwi et al., 2016b).

The characteristics of market model corporate governance are as follows: the system is one tier where the shareholders select the most significant governance body, which is a board of directors. Thus, the power of individual shareholders is weakened and controlling shareholders have substantial power over the firm's affairs. The structure of ownership and the role of independent directors on the board of directors, among other factors, are the most significant aspects of corporate governance to monitor management behaviour. The table below displays information on corporate governance in GCC countries.

Table 2.1: Requirements of corporate governance mechanisms in the GCC.						
Items	Oman	Saudi Arabia	UAE	Qatar	Kuwait	Bahrain
The principal source of code	CG code	CG regulations	CG code	CG code	CG code	CG code
Date of Issuance	2002	2006	2007	2009	2010	2010
Recently revised/ replaced	2016	2018	2016	2017	2016	2019
Issuing Entity	Omani Capital Market Authority (OCMA)	Saudi Arabian Capital Market Authority (SACMA)	Emirates Securities and Commodities Authority (ESCA)	Qatar Financial Markets Authority (QFMA)	Kuwait Capital Markets Authority (KCMA)	Bahrain Capital Markets Authority (BCMA)
Legal status	Mandatory compliance	Mandatory compliance	Mandatory compliance	Comply-or-explain	Comply-or-explain	Comply-or-explain
Board of size	5-12	3-11	3-11	5-11	Not less than 5	5-15
Non-executive directors	All	Majority	Majority	Majority	Majority	Majority

Table 2.1: Requirements of corporate governance mechanisms in the GCC.						
Items	Oman	Saudi Arabia	UAE	Qatar	Kuwait	Bahrain
independent director	33% or minimum 2 members	33% or minimum 2 members	33%	3%	1 member and no more than 50%	33% or minimum 3 members
CEO/chairman Separation	Yes	Yes	Yes	Yes	Yes	Yes
Audit committee	At least one member with financial expertise.	At least one member with financial expertise.	At least one member with financial expertise.	At least one member with financial expertise.	At least one member with financial expertise.	Most members should be financial experts
The average of CG score from World bank (2007-2017)	0.43	0.065	0.77	0.73	0.155	0.53

Although the code of corporate governance in Oman, Saudi Arabia, and UAE is mandatory (comply-or-penalty), the code of corporate governance in Qatar, Kuwait, and Bahrain is (comply-or-explain). The codes in Qatar, Kuwait, and Bahrain are like some corporate governance codes in some Western economies such as the UK who use a 'comply or explain' approach; meaning that companies must comply with provisions of the code or explain the reasons as to why they have not (Amico, 2012b). The first aspect of corporate governance code is the presence of executive directors. While Oman requires all board of directors to be non-executive, other GCC countries, namely Oman, Saudi Arabia, UAE, Qatar, and Kuwait require that most of the board of directors should be non-executive. The second important aspect of corporate governance is an independent director. UAE, and Qatar require at least one-third of their board of directors to be independent as well as more specifications under the CG code in.

2.3 Earnings Management

Earnings management is considered one of the most important tools in reporting a healthy financial situation of companies willing to attract investment and achieve the interest of shareholders and managers (Louis, 2004). This is due to earnings management being a process of beautification of financial statements and masking the genuine information of the company. Earnings management is a type of agency costs where shareholders grants managers (as agents) the running of the business on their behalf as shareholders may be unable to do it (Jensen and Meckling, 1976a). Some managers exploit the power granted by shareholders to achieve their interests. For example, financial performance of a certain company relies on published financial statements of evaluation of that company by analysts. Therefore, this issue generates a motivation for the management to engage in earnings management to meet or beat the expectations of analysts since meeting analyst expectations could lead to increase share returns. In terms of earnings management in the GCC, Prior literature state that the GCC companies engage in earnings management. For instance, (Habbash and Alghamdi, 2017) argue that Saudi companies engage in earnings management. (Hessayri and Saihi, 2015b), found that the

UAE engage in earnings management. However, they suggest that corporate governance mechanisms can mitigate the engagement in earnings management.

2.3.1 Definition of earnings management

Davidson et al., (2005) argue that earnings management is a type of agency cost when the managers provide financial information that differs from the genuine information of the company. Earnings management is reported as an accounting choice or actions which affect the income of a financial institution so that it can achieve a specific profit goal reported in financial statements (Scott, 2015; 445). Earnings management conducted out using accounting policies is known as accrual earnings management, while earnings management conducted out through the firm's real operational activities is called real earnings management. These practices are used by managers to achieve certain profits so that it will have an impact on market valuation and ultimately the value of the firm. The basic definition of the earnings management can be simply illustrated in figure 2.1. Based on (Healy and Wahlen, 1999), definition "Earnings management known as the use of judgment in financial reporting and in structuring the transactions to alter financial statements. This is to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers".

This definition focuses on the judgment of managers on the financial reports; therefore, it focuses on the first type of earnings management (accruals earnings management). In 1989 Schipper gave another explanation of earnings management stated that earnings management was "resolute involvement in the external financial reporting process, with the intent of obtaining some private gain". The second definition sees earnings management itself as being aggressive, as it confirms purposes that drive to private gain. Based on that, the second definition is wider than the first definition, as it includes all types of earnings managements (see the next section). Therefore, this study adopts the second definition, as it concentrates on all types of earnings managements that they are adopted in this study.

2.3.2 Is Earnings Management 'good' or 'bad'?

In most cases, there is a good side of earning management if it is accurately practice for the benefits of the companies prior to achieving the key performance objective of the companies. Good earnings management means reasonable and proper practices. Accounting Subjectivity and Earnings Management: A Preparer Perspective referred by Parfet (2000 p. 487) contends: calls attention to the context in which decisions are made, where subtle effects from human perceptions and peer pressures, the complexity of combined factors, and a high-stakes business environment all impact good people who are trying to do their jobs with integrity. It briefly describes, from contracting perspective earnings management was anticipated by the principal when the bonus contract was being negotiated, so that it is allowed for in setting the bonus rate. Firstly, lowering contracting costs in the face of rigid and incomplete contracts. Secondly, earnings management can reveal inside information to investors.

In the case of the bad earning management that implies intervention to hide real operating performance in a company. Some of the methods used that will influence bad earnings management is as follow below based on the previous research investigation. (1) contracting perspective, (2) Financial Reporting Perspective, and (3) Implication to Accounting.

Researchers divide earnings management into positive earnings management and negative earnings management. Supporters of earnings management argue that positive and sustainable company performance are driven by earnings management. This is due to reported earnings affecting transaction conditions between a certain firm and other parties. For example, obtaining loans from banks depends on the strength of the financial reports of the company. Consequently, companies with higher earnings obtain superior transaction conditions (Burgstahler and Dichev, 1997). However, opponents of earnings management, suggest that earnings management has a negative impact on the performance of companies; this is attributable to earnings management masking the genuine information of the company (Parfet, 2000b). For example, interested individuals in a certain company depend on the reported earnings as an indicator of the efficiency of a firm. In addition, they take their decision to deal with this company without considering that these reported earnings could not be genuine. Consequently, this issue will appear in

the future when the performance of a firm does not match with their expectations (Dechow et al., 2010a). Earnings management is driven by given incentives to achieve certain aims, for example, contractual motivations, the market motivations, the securing of a manager's position, tax avoidance and political motivations.

2.4 Types of earnings managements

Earnings management occurs through two ways, i.e., accruals earnings management (AEM) and real earnings management (REM).

2.4.1 Accrual earnings management

Accruals earnings management (AEM) occurs when management is responsible for presenting earnings by using the accounting discretion which is allowed under IFRS (Enomoto et al., 2015). The aim of this activity is to change the income of a firm in order to achieve certain goals. Accruals earnings management affects the statement of financial position directly (Dechow et al., 1995a). The principle that guides the criterion of the accrual earnings management was suggested by Palepu *et al* 2003 (Figure 2.1). Accruals in earnings management (AEM) occurs through three ways. The first way is through revenues recording. In this activity, companies engage in earnings management by timing recording revenues; for instance, through recording revenues at the end of the fiscal year when the gathering of cash is stopped. Thereby, this increase in revenues will definitely affect total accruals (Dechow et al., 1995a). The second activity of accruals earnings management is accounts receivable. Companies manipulate in accounts receivable to change the income. They change accounts receivable through allowance for doubtful accounts. For example, the lower allowance for doubtful accounts leads to higher revenues and, thereby, to higher earnings (Teoh et al., 1998). The last activity of accruals earnings management is property, plant, and equipment. Companies use optimistic estimates of the useful life of fixed assets to reduce depreciation, which is an expense, thereby increasing income. In addition, they record some operational expenses such as maintenance expenses for fixed assets as capital expenses, thereby increasing the income of the company (Shivakumar, 2000).

2.4.2 Real earnings management

According to (Roychowdhury, 2006), real earnings management affects cash flows directly, and it occurs when management takes multiple activities that alter the timing or structure of actual business activities during the financial year in order to meet given financial reporting standards to avoid reporting annual losses. According to (Alhadab and Clacher, 2018), managers in countries with strong investors protection prefer engaging in real earnings management over accrual earnings management for several reasons. Firstly, accrual earnings management occurs under the scrutiny of regulators and auditors; therefore, accrual earnings management is more likely to attract auditor or regulatory scrutiny than real earnings management. Secondly, managers could shift from accrual earnings management to real earnings management in this year when accrual earnings management applied vastly in previous years. “Change on the timing or structuring of management decision (real business decisions related to the operating, investing, or financing activities), that have a direct impact on cash flows and thus in earnings, motivated by managers’ desire to mislead stakeholders about the real performance of the company” figure 2.2 give detail of the REM. Real earnings management occurs through three ways to increase the income to meet analyst, and market expectations. The first way is sales discount; in this way, companies give a big sales discount, or they are more tolerant of credit conditions to increase their sales.

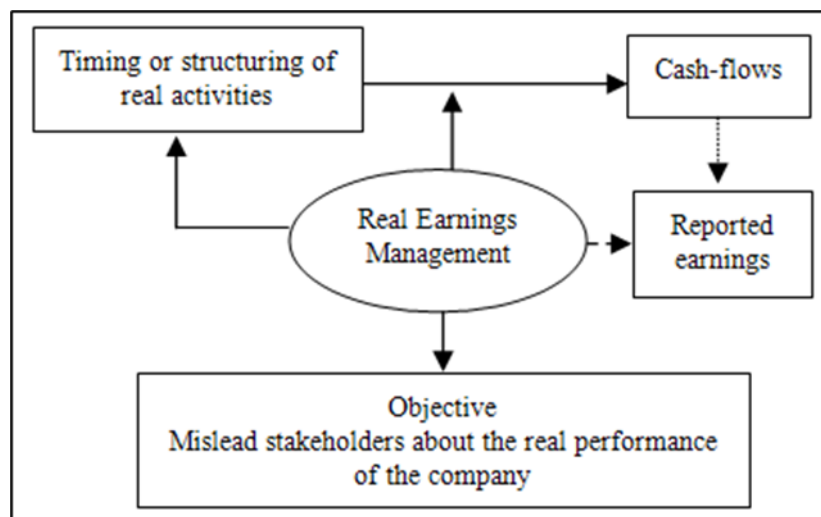


Figure 2.1: The schematic diagram of real Earning Management Summary

The second real earnings management way used is overproduction. In this activity, companies produce more than they need in a certain year to reduce the cost of goods sold, thereby increasing profit margins. The last way used of real earnings management is the reduction of discretionary expenses. In this activity, companies reduce expenses such as R&D, advertising, and SG&A expenses because they think of the return of these expenses over the long term, thereby the reduction of these expenses in a certain year might lead to increased income margins in subsequent years (Roychowdhury, 2006).

2.4.2.1 *The cost of earnings management*

Engaging in earnings management for long periods is unlikely to continue without being revealed. Consequently, the cost of engaging in accruals earnings management and real earnings management are not free. This is supported by (Graham et al., 2005b) who argue that accruals earnings management could attract the attention of shareholders and external auditors, especially in a year of alternation. Similarly, (Nam et al., 2014) suggest that engaging in accruals earnings management mitigates the flexibility of accounting due to earnings being overvalued in one period, and then management having fewer degrees of freedom in the next periods. In addition, shareholders could claim in court against managers when they reveal that information provided is not genuine. Another cost of accruals earnings management is that enhancing earnings for a short period through accruals earnings management could drive underperformance as managers are unable to stay with overstated earnings forever (Roosenboom and van der Goot, 2005). In terms of the cost of real earnings management, (Lo, 2008) states that the cost of engaging in real earnings management is higher than the cost of engaging in accruals earnings management as it negatively impacts on future cash flow.

2.4.3 Motivations behind earnings management

Regarding the motivations of earnings management, various scholars have conducted relevant studies. Healy and Wahlen (1999) summarized the motivations for earnings management arise from: (i) capital market expectations and valuation; (ii) contracts that

are written in terms of accounting numbers; and (iii) anti-trust or other government regulation. Most of the studies can be classified as one of the three points, so this paper reviews some literatures based on these points about earnings management reasons. Earnings management is absolutely driven by given incentives to achieve certain aims. In this regard, researchers pointed to the following incentives.

2.4.3.1 Contractual motivations

The financial relationship between a company and others such as lenders based on the confidence gained by published financial statements. This issue grants managers a motivation to engage in earnings management in order to reduce transaction terms (Sweeney, 1994). In addition, the association between compensations or superior positions for managers with the achievement of earnings drives managers to engage in earnings management (Healy and Wahlen, 1999).

2.4.3.2 The market motivations

Financial efficiency of a certain company relies on published financial statements of evaluation of that company by analysts. Investment decisions made by investors are driven by analyst expectations. Therefore, this issue generates a motivation for the management to engage in earnings management to meet or beat the expectations of analysts since meeting analyst expectations could lead to increase share returns. On the other hand, missing an earnings benchmark could lead to negative impacts on share returns and compensations for managers (Calegari, 2000).

2.4.3.3 Securing of the manager's position

The replacement of management is an important stage for engaging in earnings management; for example, if the board of directors has changed a manager due to underperformance of a company. The new manager could then engage in earnings management in the same year that he has been appointed. Engaging in earnings management could occur through the reducing of the income of the last year that was run

by the old manager. The reduction of income occurs through increased expenses and decreased revenues such as doubtful account receivable to improve performance in the following years and, thereby, impacting positively on the performance of a new manager. This behaviour is known as 'big bath accounting' (Kirschenheiter and Melumad, 2002).

2.4.3.4 Avoidance of tax

Managers engage in earnings management within IFRS to obtain lowered taxes. This is due to investors tending to invest in companies with lowered taxes expenses; as such, investors could be attracted (Calegari, 2000).

2.4.3.5 Political motivations

Large companies and strategic industries are subject to the governmental security due to huge profits achieved and many of employee engage in their activities. Consequently, these companies manage earnings to (a) divert the attention of government, (b) and to obtain the facilities of government such as protection from international competitors (Jones, 1991).

2.5 Earnings management models

As discussed in the previous section, earnings management occurs through two ways: accruals earnings management (AEM) and real earnings management (REM). In this section, the most generally employed models to estimate accruals and real earnings management will be discussed and then justifications provided for the employment of them.

2.5.1 Accruals earnings management models

The rapid growth of the markets in the GCC countries, and pressure from international companies, have led the governments to adopt IFRSs, in the anticipation that their adoption will meet shareholders requirements, and local and international investors

(Hussain et al., 2012). Under IFRS, the accruals element, such as account receivable, can be adjusted when financial statements are being prepared by managers. However, some managers exploit the flexibility provided by IFRS selecting the accounting methods and procedures that achieve certain aims; for example, by increasing compensations regardless of the negative impact on the interest of other parties. For this reason, previous studies have tested accruals earnings management. The earnings of companies consist of two elements: the accruals element (in the income statement, and the statement of financial position, and the cash flow element (in the cash flow statement). According to (Dechow et al., 1995b, Dechow and Dichev, 2002, Kothari et al., 2005), accruals element can be prepared by the adjustments of managers; thus, some managers could opportunistically employ accruals to engage in earnings management which will affect the earnings stability in the future. Although the accruals are an essential earnings element, it is divided into normal accruals and abnormal accruals. According to (Dechow et al., 2010a), “the normal accruals are meant to capture adjustments that reflect fundamental performance, while the abnormal accruals are meant to capture distortions induced by application of the accounting rules or earnings management”. This implies that inappropriate accounting standards and practices lead to abnormal accruals (earnings management). Previous studies showed that there are several models that have been developed to identify normal accruals and abnormal accruals of the earnings of companies. The following paragraphs will explore the most widely employed accruals earnings management estimation models.

The Jones model (1991), developed by Jones (1991), deems that the growth of sales and fixed assets investment, such as property, plant, and equipment (PPE), are the major elements of the total accruals of a company. The Jones (1991) model aims to distinguish between normal accruals (nondiscretionary accruals) and abnormal accruals (discretionary accruals) as suggested by (McNichols, 2002). Nonetheless, the misclassification of accruals is the key criticism of the Jones (1991) model; for example, it classifies some abnormal accruals as normal accruals (Dechow et al., 2010a). The modified Jones model (1995) is developed by (Dechow et al., 1995b). To minimize the misclassification of accruals of the Jones (1991) model, (Dechow et al., 1995b) adjust the Jones model via modification of the credit sales growth by determining alteration in account receivables from alteration in

sales. They suggest that the modification of credit sales will boost the strength of the Jones (1991) model as credit sales are an important element to engage in earnings management.

(Kothari et al., 2005) developed the Jones (1991) model further, as well as the modified Jones model (1995), by assuming that there is the potential of error in the discretionary accruals measurement without considering company performance. As such, they suggested a specific model for controlling company performance by employing ROA in the current year to boost the modified Jones model (1995). Nonetheless, (Dechow et al., 2010a) argued that “in their model they identify a firm from the same industry with closest level of ROA to that of the sample firm and deduct the control firm’s discretionary accruals (residuals) from those of the sample firm to generate performance matched residuals” (Dechow et al., 2010a). All the above models attempt to estimate the discretionary accruals which are a proxy for accruals earnings management. The high value of discretionary accruals implies managers engage extremely in accruals earnings management.

(Dechow and Dichev, 2002) suggested that accruals estimation relies on accruals matching cash flows. Consequently, they suggest that the previous working capital accruals affect the current working capital accruals. The operational cash flow of the next year is affected by the current working capital accruals, which is a key factor for estimation of earnings management. (Dechow et al., 2010a, Francis et al., 2005) comment on the (Dechow and Dichev, 2002) model stating that it focuses on the current accruals, and it ignores long-term accruals such as property, plant, and equipment (PPE), which are the major elements of the total accruals of the company and reflect engagement in earnings management. (Francis et al., 2005) modified the (Dechow and Dichev, 2002) model. They added the revenue growth and the depreciation accruals to the model which reflect the firm performance. Furthermore, they divided the abnormal accruals (residual accrual) into discretion estimation errors of management and discretion estimation errors of the accounting system (DeFond, 2010).

The Jones (1991) model, and the modified Jones (1995) model are the most employed in the measurement of accruals earnings management in the studies as suggested by (Dechow et al., 2010a). This is supported by (Peasnell et al., 2000, Dechow et al., 1995b), who reviewed the effectiveness of the modified Jones (1995) model amongst various samples; they suggested that this model is the most convenient model for measuring

accruals earnings management. In addition, (DeFond, 2010) argued that the new accruals earnings management models that contest with the modified Jones (1995) model are not successful. Consequently, the modified Jones (1995) model will be employed to estimate accruals earnings management in this research. As a check for robustness, Kothari et al. (2005) will be employed as alternative estimator for accruals earnings management due to this model controlling company performance by employing ROA in the current year to boost the modified Jones model (1995).

2.5.2 Real earnings management models

Real earnings management affects the cash flows of companies and can be achieved by engaging in three legal activities: (1) Sales discounts to increase sales (abnormal cash flows from operations (ACFO)); (2) expenses reduction to increase income (abnormal discretionary expenses (ADE)); and (3) overproduction to reduce cost of goods sold (abnormal production costs (APC)) as suggested by the (Roychowdhury, 2006).

2.5.2.1 Abnormal cash flows from operations (ACFO) model

Previous literature, such as (Kim et al., 2012, Cohen et al., 2008b) found evidence that companies give a big sales discount, or they are more tolerant of credit conditions to increase their sales. Consequently, this mechanism of real earnings management increases the income of a company in the current year, while it decreases the operational cash flows in the current year (Roychowdhury, 2006). In addition, this mechanism increases production costs of the coming year, whereas it decreases the income of the coming year. (Roychowdhury, 2006) estimated the abnormal cash flow from operation through a linear regression of the current year sales and the change of sales (the current year sales minus the previous year sales). To estimate abnormal cash flow from operation, this study follows the (Roychowdhury, 2006) model as suggested by (Al-Haddad and Whittington, 2019a, Elkalla, 2017, Chen et al., 2012).

2.5.2.2 Abnormal discretionary expenses (ADE) model

Discretionary expenses donate to the aggregate of administrative expenses, selling expenses, advertising expenses and research and development expenses. Companies can reduce discretionary expenses to report a high income. Prior studies such as (Gunny, 2010, Bushee and Noe, 2000) suggested that abnormal discretionary expenses can be estimated through each type of the above expenses separately. Alternatively, abnormal discretionary expenses can be estimated through the aggregate of all the above expenses (Cohen et al., 2008b, Zang, 2012) . (Roychowdhury, 2006) estimated the abnormal discretionary expenses as the aggregate of administrative expenses, selling expenses, advertising expenses and research and development expenses. (Roychowdhury, 2006) estimated the abnormal discretionary expenses through a linear regression of the previous year sales. To end up, this study follows the (Roychowdhury, 2006) model in measuring abnormal discretionary expenses as suggested by (Al-Haddad and Whittington, 2019a, Elkalla, 2017, Chen et al., 2012).

2.5.2.3 Abnormal production costs (APC)model

To increase the income of a company, managers could overproduce stock to reduce the cost of goods sold, therefore increasing the operational income of the current year. This is supported by (Dechow et al., 1998) who argued that increasing the produced units' numbers leads to reduction of the fixed cost per unit which in turn increase the unit profit. (Roychowdhury, 2006) defined abnormal production costs as the cost of goods sold and inventory change during the current year. (Roychowdhury, 2006) estimates abnormal production costs through a linear regression of current sales. To estimate real earnings management through overproduction activities, this study follows (Roychowdhury, 2006) as suggested by (Al-Haddad and Whittington, 2019a, Elkalla, 2017, Chen et al., 2012).To end up, this study estimates real earnings management (REM) through estimating abnormal discretionary expenses (ADE), abnormal cash flows from operations (ACFO); and abnormal production costs (APC) by using (Roychowdhury, 2006), followed by combining these three estimators to capture the total effect of real earnings management as suggested by (Cohen et al., 2008b, Cohen and Zarowin, 2010, Zang, 2012).

2.6 Merger and Acquisition

Mergers and acquisitions (M&A) refer to transactions between two companies combining in some form. Although mergers and acquisitions (M&A) are used interchangeably, they come with different legal meanings. In a merger, two companies of similar size combine to form a new single entity. On the other hand, an acquisition is when a company can control more than 50% of target companies (Singh, 1971). M&A deals can be friendly or hostile, depending on the approval of the target company's board.

2.6.1 Motivations behind Merger and Acquisition

Mergers and acquisitions are strategic decisions leading to the maximization of a company's growth by enhancing its production and marketing operations. They have become popular in the recent times because of the enhanced competition, breaking of trade barriers, free flow of capital across countries and globalization of business as several economies are being deregulated and integrated with other economies. A few motives are attributed for the occurrence of mergers and acquisitions.

2.6.1.1 Growth Motivations

The main aim of merger and acquisition is the growth shareholders profits (Gaughan, 2013). To achieve this, companies expand their distribution network via the acquisition of new product or the acquisition of the same product in a new market (Tamosiuniene and Duksaite, 2009). Growth is vital for maintaining the sustainability, enthusiasm, and quantity-improving potential of company. A growth- positioned a company is not only able to entice the most brilliant executives but it would also be able to retain them. The operations of the growth give a challenge and anticipation to the executives as well as chances for their job development and swift career advancement. This helps to improve administrative productivity. Furthermore, growth leads to increase in profit of the company and promote the shareholders' value (Mouna Sellami 2015). A company can achieve its growth objective by Increasing its existing markets and entering in new markets. A company may increase and/or expand its markets internally or externally. If the company

cannot grow internally due to lack of physical and managerial resources, it can grow externally by combining its operations with other companies through mergers and acquisitions. Mergers and acquisitions may help to accelerate the pace of a company's growth in a convenient and inexpensive manner.

2.6.1.2 Synergy Motivations

The synergy term refers to the combination of two or more companies to make a better influence together than making that influence alone (Gaughan, 2010). According to (DePamphilis, 2010), the synergy is divided into operating synergy, and financial synergy. The first one refers to scale economies such as assets depreciation. Whereas the financial synergy means the cost of capital will be reduced through mergers and acquisitions. For example, the cost of establishing new company is higher than the cost of acquiring founded companies. Other than the operating economies, synergy can also develop from enhanced managerial abilities, innovation, innovativeness, R&D, and market attention capability based on complementarity of resources and skills and a broadened prospect of opportunities.

2.6.1.3 Intangible Assets Motivations

The opportunity to acquire assets may be explained by Mergers particularly land, mined rights, plant, and equipment at lower cost than would be incurred if they were purchased or constructed at current market prices. In some case when the market price of some stocks has been significantly below the alternative cost of the assets they represent, increasing firm contemplating creating plants expanding mines or buying equipment. Frequently it has found that the preferred asset could be acquired lower by obtaining a firm that already owned and operated the asset. Therefore, it was reported by (Tamosiuniene and Duksaite, 2009) that organizations development is based on Knowledge that is described as intangible assets Intangible assets consist of human capital, customer capital, and structural capital (Saint-Onge and Chatzkel, 2008). Consequently, companies may involve

in acquisition to access intangible assets which could be an important tool in organizations development (Coffey et al., 2002).

2.7 Earnings management theoretical debate

Earnings management is a strategic tool that is used by managers to affect shareholder decisions and achieve manager's interest. Several theories have been developed to interpret the purpose of this strategy such as agency theory, the signalling theory, institutional theory, positive accounting theory and others. This study relies on agency theory, and the institutional theory, that explain the association between earnings management, corporate governance mechanisms and acquisition deal characteristics if it occurs.

Though there are several theories related to corporate governance, the evolution of agency theory, stakeholder theory, stewardship theory and institutional theory explain the role of management. These four theories are considered as the fundamental theories of corporate governance. Considering the stakeholder theory and institutional theory it can be deduced that corporate governance is more towards social relationships rather than structure. All the four theories discussed above mostly on the perception that principals get return on their investment in the firm (Mamun et al., 2013).

The various models of corporate governance that exist globally have evolved as economies and the corporate structure were shaped, simply following convention, or based on environmental influences such as worldview, culture, and the legislative and political framework. Due to abrupt changes in external and internal business environment, corporate governance also changes constantly. External environmental factors include business collaborations, financial funding, new business venture, technological advancements, mergers, and acquisitions, while internal environmental factors include shareholders, stakeholders, and profit maximization of the firm. All these environmental factors result in changes directly or indirectly to corporate governance. Corporate governance mechanisms may differ from country to country based on economic positions, political and cultural situations (Hofstede et al., 2005) argued that the relevance and applicability of theories vary between developed and developing market. As the

institutional and organisational framework is weak in the developing market, it can be posited that agency theory more likely to be applied in depicting the organisational behaviour and business management principles in developed market.

It is contended, from agency theory perspective, that the delegation of executive and managerial responsibilities by principles to agents demands the presence of mechanisms that tends to align the interest of corporate population or ensures that agents (executives and managers) exercise their authority to generate the upper-most return for the owners. Purpose of this study was to explore theories of corporate governance in a broad range which would cover all the aspects of corporate governance rather than a partial context (which is principles and agents' relationship covered by agency theory). Freeman, (2016) argued that stakeholder theory better equips managers to articulate and foster the shared purpose of their firm. This theory acknowledges a wide range of answers rather than only principles and agents. Stakeholder theory posits that firm is not only to generate profit for the shareholders but to defend an image and values respecting all shareholders. As mentioned earlier that agency theory does not cover corporate governance fully, combining the agency, stakeholder, stewardship, and institutional theories disclose the differing authorities of different types of shareholders within the developing market firms. These theories largely, point out that there is a positive reinforcing effect on firm performance. Contributions of different theories at corporate governance level establish a foundation which redefines the various stakes of the firm and the model of corporate governance. The next subsections that follow discuss the selected theory in detail in terms of its perspective on the association.

2.7.1 Agency theory

The agency theory is built on the relationship between the principals (shareholders), and the management (agent) these two parties are separated and both parties want maximum benefit but that is not possible. The existing conflict interest and reason for that are that the two parties are separated. In 2010 Macintosh and Quattrone also explained the foundation of agency theory as the separation between owners and managers in a company. The Shareholders play important roles of the principal of delegating the research and decision-making to the managers or so-called agents that carry out the jobs. The theory

explained the two parties' different preferences and behaviours where their objectives and goals distinguish from each other as well as their attitude toward risk. Both the principal and the agent are presumed to be acting rationally in their research and are primarily. The agency theory can be employed to the agency relationship deriving from the separation between ownership and control (see Figure 2.2). (1) the Shareholders delegate control to professional managers (the board of directors) to run the company on their behalf. (2) The Directors (agents) have a fiduciary responsibility to the shareholders (principal) of their organisation (usually described through company law as 'operating in the best interests of the shareholders'). Shareholders normally play a passive role in the day-to-day management of the company. (3) Separation of ownership and control leads to a potential conflict of interests between directors and shareholders. (4) The agents' objectives (such as a desire for high salary, large bonus, and status for a director) will differ from the principal's objectives (wealth maximisation for shareholders).

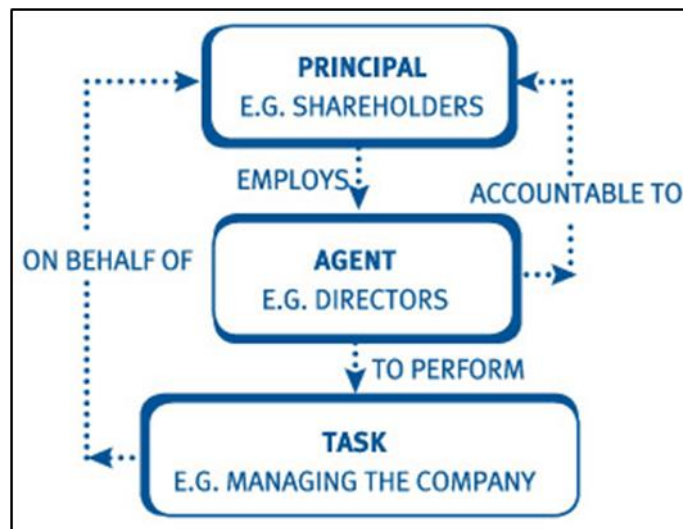


Figure 2.2: Agency theory between the principal and the agents

In modern companies, shareholders (principal) hire managers as agents to run the business on their behalf. This is supported by (Jensen and Meckling, 1976a) who define agency theory as "one in which one or more persons (the principles) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent". The relationship between shareholders and agents is described in a contract between them to align both interests and avoid agency problems. For example, the manager (agent) works on behalf of shareholders to achieve

their objectives and maximise their profits, and shareholders pay compensations to managers in lieu of their efforts (Jensen and Meckling, 1976a);(Eisenhardt, 1989a). On this note there maybe conflict of interest between the principal and the managers due to personal interest such as seeking to increase their compensations, prestige and/or reputation, while shareholders concentrate on maximising their wealth (Jensen and Meckling, 1976a). Managers are responsible for preparing financial statements, and they could potentially prepare financial reports that support their interests rather than the interest of their shareholders. This leads to asymmetric information which drives agency problems such as moral hazard (Alam Choudhury and Ziaul Hoque, 2006). However, shareholders can protect their interests through monitoring opportunistic behaviour by managers. According to (Jensen and Meckling, 1976a), monitoring manager's behaviour to force them to have less potential for engaging in ways that are not aligned with the interest of shareholders will not be at zero cost; this is what repeatedly is called the 'agency cost'. (Davidson et al., 2005) argue that earnings management is a type of agency cost when the managers provide financial information that differs from the genuine information of the company. Agency theory suggests ways of reducing agency costs namely monitoring cost, bonding cost and residual loss (Eisenhardt, 1989b). Monitoring cost is borne by the principals and is the set of monitoring mechanisms such as internal corporate governance mechanisms to monitor management behaviour whereas bonding cost is taken by the agents involving financial or non-financial mechanism, ensuring that the agent makes an effort to maximise the principals' wealth. Residual loss happens despite the involvement of monitoring cost and bonding cost since these can fail or not be effective enough to align the interest of the principals (owners) and agents (management). Thus, the owner can reduce the self-interest incentive through some tools such as monitoring managers' behaviour and by introducing a contract incentive to align their interest with management interest (Eisenhardt, 1989b). An example of aligning interest, the ownership of shares and stock options are one of the long-term incentive concepts given to managers to reduce agency problems. These proposed solutions are considered as motivation to the manager to align their interest with other shareholders' interest. In other words, the agency problem can be reduced through direct and indirect monitoring. An example of direct monitoring is the appointment of independent directors, and an example of indirect monitoring is offering incentives to managers (Jensen and Meckling, 1976b).

According to (Porta et al., 1999), agency problems (principal-agent) can be heightened in developed countries where the widespread ownership structure and separation between shareholders and agent is an outstanding feature. The case in developing countries is different, however. This is because most shares of a company and the activities of monitoring companies are still owned by a small number of owners (Jaggi et al., 2009). Consequently, the Principal-Principal (PP) problem could be clear in developing countries (Su et al., 2008). The principal-Principal (PP) problem refers to conflict of interest between majority shareholders and minority shareholders due to majority shareholders expropriating the right of minority shareholders such as through sales and purchase of key assets. Consequently, agency theorists establish corporate governance mechanisms to monitor the activities of managers and protect shareholder's wealth of expropriation (Jensen and Meckling, 1976a, Fama and Jensen, 1983). Corporate governance mechanisms differ across the world. For instance, in the UK and USA, companies depend on legal protections to mitigate the agency problem, whereas in Japan, companies depend on block-holders (Shleifer and Vishny, 1997).

2.7.2 Institutional theory

The main aim of the institutional theory is addressing an economic issue within its surrounding environment which includes political, social, religious, cultural and technological factors (Powell and DiMaggio, 1991). This supported by (Judge et al., 2008) who confirm that "Institutional theory emphasizes that organizations, organizational fields, and nations are more than a means to produce goods and services-they are also social and cultural systems". Institutional theory is complementary to agency theoretical views through suggesting that the efficiency of the internal corporate governance mechanisms is modelled through several institutional determinants which tend to vary across the world (Filatotchev et al., 2013). According to (Judge et al., 2010), institutional theory goes beyond concentration on how the legislation for agency conflicts, and it reaches further to seek insight into how political, social, and cultural elements form the cross-national variety of settings in corporate governance. (Filatotchev et al., 2013)p. 970) suggest that "This new approach is aimed at a better understanding of the interdependence between governance mechanisms and the organizational and institutional environments in which these practices

are conducted. This view implies that corporate governance practices do not have a direct and linear effect on performance. Rather, performance effects are contingent on a number of firm-level and macro institutional factors that are not accounted for in most studies”.

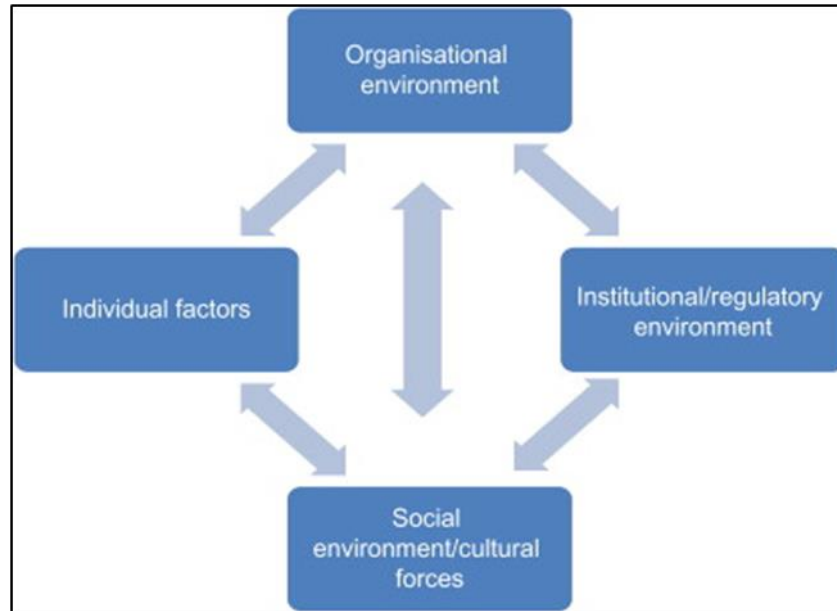


Figure 2.3: The schematic diagram of Institutional Theory

This framework provides insight on the governance mechanisms, organisation, and institutional environment with a way of identifying the exceptional areas of risk for a particular company (figure 2.3). Nevertheless, the present state of theory does not allow us to estimate the magnitude of the risks and their impact on the earning management. Therefore, in the following section we identify some gaps in the application of institutional theory that prevent us from directly predicting and mitigating these challenges on earning management behaviour. It is concluded that by identifying a set of specific research question, the answers to which will provide us with a better under-standing of how to predict, and mitigate conflicts on earning management, as well as a research methodology to help answer this question. Companies follow several rules and regulations to ensure legitimacy and, therefore, have access to resources and make sure of their survival (Powell and DiMaggio, 1991). Nevertheless, these rules and regulations do not necessarily ensure that companies will survive to practice efficiently (Meyer and Rowan, 1977a). According to institutional theory, earnings management motivations could be impacted through formal (legal rules) or informal (sociological tradition) change and, thus, alteration could be

generated through a company in order to formulate itself on other companies (Kury, 2007a).

In the GCC, most of the public companies are concentrated (families) as a substitute for the lack of protection of shareholders. Families, as a majority shareholder, could use company resources for their private interests which reveals that expropriation of minority shareholder resources could exist in the GCC through engagement in earnings management.

The link between the legitimacy theory and the stakeholder theory was conveyed by the institutional theory (Clark 2004). The mechanisms that government could employ to align their views with cultural and social norms to attain legitimacy (DiMaggio and Powell, 1983). According to Institutional theory developed by (Meyer and Rowan, 1977b), companies adopt rules due to “coercive”, “mimetic” or “normative” isomorphism. Coercive isomorphism happens when companies alter their institutional practices because of stakeholders' pressure (Meyer and Rowan, 1977b).

Mimetic isomorphism exists when companies attempt to mime other companies' practices, to obtain a legitimacy competitive advantage (DiMaggio and Powell, 1983). In terms of normative isomorphism, it adopts worthy institutional practices e.g., introducing recognised standards (DiMaggio and Powell, 1983).

According to institutional theory, corporate governance' role is to alter organisational procedures over time “fulfil ritualistic roles that help legitimize the interactions between the various actors within the corporate governance mosaic” (Cohen et al., 2008b). This theory also states a picture of companies that clarify and determine their aims to meet their environment expectations (Fishell et al., 1985). Corporate governance ought to require companies to define management' goals in a case of an existing value system in companies (Meyer and Rowan, 1977). The institutional theory argues that social and political phenomena are associated with adoption or rejection new regulation systems (Cohen et al., 2008b). Consequently, corporate governance as a new system will pass in the venue where there is a wide similarity between the new rules and current practices in the company (Yazdifar, 2003).

Based on this, there are two key theories (agency theory, and institutional theory) support corporate governance practices in mitigating the engagement in earnings

management. Agency theory shapes the foundation theoretical perspective for this research aims where the focus is on examining the association between corporate governance, acquisition, and earnings management. The relationship between shareholders and agents is still ambiguous in the GCC due to the lack of studies into the management motivations who engage in earnings management in this region. Agency theory is the most relevant theory to achieve this study aims.

Agency theory anticipates ownership concentration could reduce agency problems, thus a reduction in agency cost by aligning the controlling owners and management. The GCC listed companies are characterised as having institutional ownership, and state ownership this concentration could mitigate agency problems. Although the GCC adopted corporate governance practices, this region is described as developing countries, institutional theory will be employed as an alternative theory in interpreting the results when need. Institutional theory suggests that firms could adopt performances or rules as a result of coercion from legislators to improve organizational effectiveness. Institutional theory and agency theory are complementary approaches to corporate governance (Stedham and Beekun, 2000). Consequently, hypotheses will be formulated and tested based on agency theory, and institutional theory will be employed in the findings' interpretations.

Agency theory and institutional theory are the most employed theories in detecting the engagement in earnings management in acquiring and non-acquiring companies. Agency theory would suggest (as noted by Erickson and Wang, 1999, and documented by Gong et al., 2008) that acquirers manage earnings when the cost of managing earnings is lower than the target's cost of detecting the earnings management (Watts and Zimmerman, 1986). Nonetheless, agency theory and institutional theory alone could not be adequately accomplished to justify the earnings management motivations; Therefore, convergence between these two theories could be useful, due to institutional theory also provides an accurate interpretation of earnings management practices.

2.8 Empirical evidence and hypotheses development

2.8.1 The relationship between earnings management and acquisitions

Acquisition and mergers (M&A) are one of key issues that has drawn significant attention from practitioners and academics. Acquisition is considered a key strategic decision for the acquiring firm. Managers argue that acquisition drives the efficiency of a company in the market and the wealth of shareholders. According to (Erickson et al., 1999) it was reported that agency theory suggests that acquirers engage in earnings management before the acquisition motivations to boost their company's stock price before acquisition so that they can influence the exchange ratio. Thereby, an impression of confidence and a low level of risk could be generated among investors towards financing the company (Spence, 1973). Preparation and planning are required of the management of the acquiring company to achieve acquisition transaction. The high cost of acquisition could result in a failure to achieve the desired aim. Therefore, managers of the acquisition seek the best way to reduce the cost of it as much as possible to benefit shareholders (Erickson and Wang, 1999). Earnings management can serve as a key tool in achieving acquisition with the lowest costs. Acquiring companies engage in earnings management before acquisition when the costs of engaging in earnings management are not high; this is due to their motivations to boost their company's stock price before acquisition so that they can influence the exchange ratio (Erickson and Wang, 1999). On the other hand, the cost of engaging in earnings management could be significantly high if it is deducted by target companies. For example, target companies could request a higher exchange ratio, or threaten to cancel the acquisition transaction (Erickson and Wang, 1999). Consequently, companies that have growing opportunities engage in earnings management and publish their financial statements to boost confidence among the financiers. However, earnings management occurs when the costs of undoing earnings management exceed the cost of engagement in managing earnings (Watts and Zimmerman, 1986). In addition, acquiring companies have a strategic plan for acquisition, and they have enough time to engage in earnings management (Erickson and Wang, 1999). Furthermore, acquiring companies engage in earnings management when the cost of detecting the earning management is low (Louis, 2004).

While investigation of engagement in earnings management before acquisition is challenging, previous researchers have observed this phenomenon. Based on a sample of 50 UK companies over the period from 1998-2011, (Nico, 2016, Lehmann, 2016b) found that acquiring companies with strong governance are more engaged in accruals earnings management than weak-governed acquirers. This is because of the role of corporate governance that motivates manager's actions in the interests of company shareholders. In addition, (Kassamany et al., 2017a) aimed to examine the association between acquisition and earnings management, based on a sample of 197 UK acquirers between 1990-2009. They found that acquiring companies engage in both accruals and real earnings management pre-acquisition, this is attributed to attracting the target's shareholders and receiving their approval. In the same region, (Tutuncu, 2019) investigated the impact of accruals earnings management before the acquisition on the performance of firms acquired by their managers. His study uses a sample of 291 UK private firms over the period from 2004 and 2012. It stated that these firms engage in earnings management before the acquisition to attract shareholders, since managers cannot finance all transactions from their own wealth.

(Alsharairi Malek, 2015) examined the relationship between earnings management and acquisition by using a sample of 1,320 European mergers and acquisitions completed over the period from 2003-2012. They found that managers engage in earnings management before the acquisition; this was due to compensation for the higher information asymmetry. (Karim et al., 2016a) investigated accruals earnings management by acquiring companies around merger and acquisition transactions. Their study uses a sample of 30 countries across the world for the period 2004–2015. They found that the acquiring companies engage in earnings management before the acquisition transaction. It is explained that managers of acquiring companies expect the market will reduce their stock prices and, thus, they engage in earnings management through income-increasing. In developing countries, (Lennox et al., 2018) found that the acquiring companies in China engage in accruals earnings management before the acquisition transaction, since managers of acquiring companies expect the market will reduce their stock prices. Likewise, (Zhang, 2015) found that the acquiring companies in China engage in real earnings

management before the acquisition transaction due to relative restriction to accruals earnings management.

In relation to the GCC, there is no research that has been done regarding acquisition and earnings management. In addition, the GCC is faced with inefficient investor rights protection, inefficient legitimate systems, weakness of stock markets, the lack of quality information, economic uncertainty, state involvement and a higher cost for engaging in real earnings management than the cost of engaging in accruals earnings management (Reed, 2002); (Tsamenyi et al., 2007, Lo, 2008). Consequently, this study will assess the following:

H1a: There is an association between acquiring companies and level of accruals earnings management.

H1b: There is an association between acquiring companies and level of real earnings management.

2.8.2 The relationship between earnings management and corporate governance mechanisms

Practitioners and academics have been becoming aware of the truth that the practice of good corporate governance enhances the quality of financial statements. The lack of corporate governance is linked with opportunistic behaviour by managers (Shleifer and Vishny, 1997). Numerous studies have been investigated into the relationship between corporate governance and earnings management. Thus, there is a general agreement that good corporate governance mitigates earnings management and protects shareholders (Bekiris and Doukakis, 2011). Nevertheless, there is a disagreement about the factors of good corporate governance. This argument drives to a discussion regarding the association between external audit quality, ownership structure (institutional ownership, state ownership and foreign ownership) as firm-level governance mechanisms, national corporate governance as country-level and earnings management from within previous studies.

This study focuses on audit quality as it is a key factor in reducing agency problems through performance of a statutory audit. The main aim of auditing is to ensure that

accounting transactions in companies have been applied in accordance with well-known accounting rules ((Jensen and Meckling, 1976a). In terms of ownership structure, the GCC suffers from the concentration of ownership being kept in state hands and upper-class families. In addition, in the GCC, the state typically owns a high number of shares in publicly listed companies (Soural, 2004). Each type of ownership has different interest and benefits at different levels (Alresheedi, 2015), thus influencing earnings management (Guo and Ma, 2015). This study focuses on some of the most common variables, such as institutional ownership, state ownership, and foreign ownership due to data availability. Whilst previous literature in corporate governance has paid significant attention to the impact of firm governance mechanisms on earnings management, the effect of national corporate governance has been under-researched. Specifically, recent researchers such as Aslan and Kumar (2014), and Essen et al. (2013) suggest that every corporate governance study must take into consideration the national corporate governance which companies are embedded in.

2.9 The relationship between earnings management and firm-level governance

2.9.1 Earnings management and quality of external audit

According to agency theory formulated by (Jensen and Meckling, 1976a) independent auditing firms as corporate governance mechanisms are a key factor in reducing agency problems through performance of a statutory audit. The main aim of auditing is to ensure that accounting transactions in companies have been applied in accordance to well-known accounting rules. Consequently, the requirement of audited accounting reports is a key part of corporate governance as it minimises asymmetric information between shareholders and management by allowing shareholders to assess the credibility of financial reports. The independence of auditors is considered as one of the significant factors contributing towards the effectiveness of quality of audit (Chen et al., 2005). Large audit organisations, such as the big four companies¹, are more independent, provide higher quality of auditing and, therefore, they reduce earnings management (Klein, 2002). This view is supported by (Jensen and Meckling, 1976a) who stated that auditors could minimise

¹The big four companies are Deloitte, PricewaterhouseCoopers (PwC), Ernst & Young (EY) and KPMG.

agency costs between shareholders and management through minimising errors in financial statements if they belong to one of the 'Big 4'. The 'Big 4', has a great reputation of providing a high quality of audit (Guna and Herawaty, 2010). In addition, the 'Big 4' are more conservative in expressing their opinions and they are able to detect better firms engaging in earnings management (Fakhfakh and Nasfi, 2012). However, the effect of the Big 4 auditing firms on earnings management lies in the variation of strength of rule of law (Bradbury et al., 2006, Maijoor and Vanstraelen, 2006, McMeeking et al., 2007), as the effectiveness of the law is the main determinant for efficiency of auditing companies (Krishansing Boolaky, 2011). Chi et al. (2011) added that companies shift from accruals earnings management to real activities management when their ability in using accruals earnings management is constrained by higher quality auditors.

Empirical evidence on the association between external audit quality and earnings management argues that the Big 4 auditing firms are an efficient mechanism in mitigating engagement in earnings management. For example, (Habbash and Alghamdi, 2017) examined the relationship between the audit quality and accruals earnings management in the GCC by using a sample of 30 oil and gas firms from 2008 to 2019. They found that Big4 constrain accruals earnings management. It is explained that the Big 4 auditing firms have more experience derived from their human resources which allows them to create higher quality audits. Likewise, Oyebamiji, (2020) investigates the relationship between the audit quality and accruals earnings management in Nigeria by using a sample of 15 industrial companies over the period from 2006 to 2017. The results of his study show that Big 4 auditing firms mitigate the engagement in accruals earnings management because Big 4 auditing firms have higher strength in terms of: resources at their disposal; ability to hire high profile personnel; ability to train their staff both locally and internationally; wherewithal to invest immensely in technology; capacity to engage in extensive research; capacity to specialize and decentralize operations; ability to conduct more extensive tests; among other considerations relative to the non-Big 4 firms.

(Alzoubi, 2018) investigates the relationship between the audit quality and accruals earnings management in Jordan by using a sample of 72 industrial companies over the period from 2006 to 2012. The results of his study show that Big 4 auditing firms mitigate the engagement in accruals earnings management because Big 4 auditing firms have more

experience derived from their human resources which allows them to create higher quality audits. Similarly, (Chen et al., 2011) found that the Big 4 auditing firms and the four largest Chinese companies are an efficient factor in reducing the engagement in accruals earnings management by managers. (Orazalin and Akhmetzhanov, 2019) showed that there is no difference between the companies audited by the Big 4 and the companies audited by other audit companies regarding the effects of audit quality on accruals earnings management in Kazakhstan. It is explained by the lack of investment protection and low regulatory regimes.

In contrast, other previous studies have argued that the Big 4 auditing firms are an inefficient mechanism in mitigating engagement in accruals and real earnings management. For instance, (Habbash and Alghamdi, 2017) examined the relationship between the audit quality and accruals earnings management in Saudi Arabia, which is a part of our sample, by using a sample of 337 industrial companies over the period from 2006 to 2009. They used the Big4 to measure the audit quality and demonstrated that audit quality in Saudi Arabia is unable to constrain accruals earnings management. It is explained that the Big 4 auditing firms do not have a right to stop opportunistic behaviour by managers (Kouaib and Jarboui, 2014) and, therefore, they are less effective in influencing companies engaging in accruals earnings management. Likewise, Kouaib and Jarboui (2014) found that Big 4 auditing firms in Tunisia are an inefficient mechanism in mitigating engagement in accruals earnings management, due to weak investor protection.

(Habbash and Alghamdi, 2017) examined the relationship between the audit quality and real earnings management in the GCC by using a sample of 30 oil and gas firms from 2008 to 2019. They found that Big4 cannot constrain real earnings management. It is explained that real earnings management is normal activity. Likewise, (Al-Haddad and Whittington, 2019b) found that Big4 auditing firms in Jordan are unable to mitigate the engagement in real earnings management as they are considered normal business practices (Graham et al., 2005b). Similar to results for developing countries, Alhadab and Clacher (2017) claimed that the Big 4 auditing firms in the UK cannot constrain real earnings management as it is normal activity. (Doukakis, 2014) found that the engagement in real earnings management is not affected by Big4 auditing firms in 22 European countries. Attributing to real earnings management techniques is less likely to be penalised by Big4

auditing firms as these techniques are considered legal business activities (Graham et al., 2005b). (Alhadab and Clacher, 2018) claimed that Big 4 auditing firms in the UK cannot constrain real earnings management as companies audited by Big 4 firms still engage in a high level of real earnings management. The GCC region is described as having weak rules compared to developed countries. However, Big 4 auditing firms could constrain engagement in both accruals and real earnings management. Consequently, this study assesses the following:

H2a: There is an association between companies audited by Big4 auditing firms and companies engaging in accruals earnings management before acquisition.

H2b: There is an association between companies audited by Big4 auditing firms and companies engaging in real earnings management before acquisition.

2.9.2 Earnings management and institutional ownership

From the agency theory perspective, Agency problems in companies are closely associated with the quality of corporate governance mechanisms. Institutional owners as one of the main corporate governance mechanisms tend to monitor managers' behaviour to mitigate agency problems (Jensen and Meckling, 1976a). Agency theory proposes that monitoring by institutional ownership can be an imperative governance mechanism (the efficient monitoring hypothesis). In fact, institutional investors can provide active monitoring that is difficult for smaller, more passive or less-informed investors (Almazan et al., 2005). Additionally, institutional investors have the opportunity, resources, and ability to monitor managers. Therefore, the efficient monitoring hypothesis suggests that institutional ownership is associated with a better monitoring of management activities, reducing the ability of managers to opportunistically manipulate earnings. The efficient monitoring hypothesis suggests an inverse relationship between a firm's earnings management activity and its institutional share ownership. However, (Duggal and Millar, 1999) argued that institutional shareholders are negative shareholders since they sell their shares rather than spending their resources in monitoring the behaviours of managers when companies experience underperformance. In addition, short-term institutional shareholders concentrate on short-term outcome and, thus, support management to obtain short-term

interest at the expense of long-term benefits, which plays a role in determining stock prices when taking investment decisions (Chen et al., 2007).

(Pound, 1988) examined the association between institutional ownership and earnings management and proposes the efficient monitoring hypothesis. Based on this, institutional ownership reduces earnings management since it has more expertise in monitoring managers at a lower level of cost than other shareholders. In addition, the controlling process taken by institutional ownership could drive managers to concentrate more on the firm performance; therefore, it may mitigate opportunistic managers. On the other hand, the strategic alignment hypothesis proposes that institutional ownership increases engagement in earnings management. Depending on this hypothesis, institutional ownership will agree with top managers for private gain at the expense of minority stakeholders. As major shareholders, institutional investors have power over corporate policies, especially when they have focused holdings and long-term investment horizons (Gaspar et al., 2005, Hartzell and Starks, 2003). Higher dividends can serve as an effective monitoring tool to mitigate the manager-shareholder agency conflict, especially at firms where such agency costs are high (John et al., 2011). Long-term institutions with large ownership stakes use dividend pay outs as a monitoring device, especially at firms with high agency costs. Whereas (Crane et al., 2016) suggest that higher overall institutional ownership causes firms to pay more dividends and repurchase more shares. Following an agency-theory-based interpretation of dividends, *ceteris paribus*, monitoring institutions are more likely to intervene in firms with high agency costs as their benefits from doing so will be higher. Agency costs are likely to be high in firms with both free cash flow and poor investment opportunities, as the managers are more likely to have negative net present value projects at these firms (Chung et al., 2005). As earnings management can also reflect agency costs, the extent of earnings management can serve as a proxy for the presence of an agency cost (Cornett et al., 2008b). Conglomeration in institutional ownership may have determined this diverse evidence, significantly, institutions have various incentives and vary in their choices between trading and monitoring. Otherwise, monitoring institutional investors may condition their use of dividend pay outs to improve agency problems on firms' financial performance and we show that the firms' income is an important conditioning variable. The joint hypothesis has been tested those intense institutional

investors with both large stakes and long investment horizons monitor, and that they monitor through the dividend pay-out channel. It was revealed from the supporting evidence that is consistent with this hypothesis. It shows that the positive relationship is only salient for firms with high agency costs and weak external monitoring systems, suggesting that institutions will only monitor when they foresee improved benefits from doing so.

In this vein, several studies document that institutional ownership inhibits managers to opportunistically engage in earnings management (Bange and De Bondt, 1998, Chang et al., 2016, Cornett et al., 2008b). Prior literature examines the association between institutional ownership and accruals earnings management and provides mixed evidence. (Sakaki et al., 2017) examined the association between institutional ownership stability and earnings management. They used a sample of 9,961 French companies from a period from 1990-2012. They found that institutional ownership stability plays a positive role in mitigating earnings management; this is attributed to the effective monitoring role performed by the stable institutional ownership. Based on a sample of 140 Indonesian companies for period from 2012-2016, (Kusumaningtyas Metta et al., 2019) found that institutional ownership mitigates earnings management, since the effective monitoring process taken by institutional ownership could drive managers to concentrating their attention more on enhancing the firm's performance. (Hessayri and Saihi, 2015b) examine the relationship between institutional ownership and earnings management in the United Arab Emirates, which is a part of our sample. They used a sample of 54 companies for the period from 2008-2012 and found that institutional shareholders are effective in mitigating earnings management when a large share is held by them. This is attributed to them having resources (i.e., expertise and professionalism) to drive them to enhance their monitoring.

Based on an examination of 63 Jordanian companies operating in the MENA region from 2012-2016, (Maswadeh, 2018) argues that there is no significant impact of institutional ownership on accruals earnings management. The study attributes this result to the lack of adequate expertise of the institutional ownership of Jordanian companies operating in developing markets. In terms of institutional ownership and real earnings management, Kałdoński et al. (2019) and Melladoa and Saonab (2019) for companies in Poland and Latin America, respectively, have shown that institutional ownership is an

efficient governance mechanism in mitigating the engagement in real earnings management; this is attributed to institutional investors being more skilled and there being, therefore, reduced information asymmetry between management and shareholders. From developing countries, Kim et al. (2018; Korea) and Hsu and Wen (2015; China) found that institutional investors constrain real earnings management activities because they have more resources that enable them in the monitoring of managerial behaviours. Al-Haddad and Whittington (2019) found that institutional ownership, as a governance device, mitigates the engagement in both accruals and real earnings management. Institutional owners qualify companies to obtain suitable information at a lower level of cost and therefore to monitor the opportunistic behaviour of managers and the mitigation of engagement in earnings management (Arouri et al., 2014). Moreover, being long-term shareholders, institutional owners are more committed to monitoring the behaviour of managers (Dalwai et al., 2015). Given this, this study assesses the following:

H3a: There is an association between companies with institutional ownership and level of accruals earnings management before acquisition.

H3b: There is an association between companies with institutional ownership and level of real earnings management before acquisition.

2.9.3 Earnings management and state ownership

According to agency theory state owners pay attention to political benefits and employment more than maximising profits which, in turn, mitigate agency costs through alignment of the interests of principals (owners) and agents (managers) (Shleifer and Vishny 1994). (Pan et al., 2014) argue that state ownership may impact upon a firms' performance as follows. State-ownership companies are thought to have better access to resources compared to other types of company ownership. In addition, state-ownership companies are more likely to obtain greater government support. Furthermore, governments seek to build credibility in international markets. Moreover, the state ownership extends appropriate control to the managers and tries to find solutions to company issues in difficult times. Therefore, state ownership protects interested individuals such as investors (Eljelly, 2009).(Hoang et al., 2019), (Ding et al., 2007), (Aljifri

and Moustafa, 2007),(Al-Harkan, 2006),(Shleifer and Vishny, 1997) and (BÖS, 1991) argue that state-owned companies do not have pressures to engage in earnings management because they do not have the incentives of earnings management. Debt finance is seldom employed among state-owned companies (Liu and Lu, 2002). In addition, compensation systems in state-owned companies are different when compared to other types of company (Afify, 2013). Moreover, state-owned companies can strongly perform in monitoring the opportunistic behaviours of managers as they have good access to resources compared to other type of ownership in companies (Afify,2013).

Although state-ownership has a significant role as a governance mechanism in mitigating agency costs, the economies of several countries have faced a greater challenge by state-ownership (Sara Ding et al., 2017). Firstly, there is the association between the responsibilities of state-ownership and the functions of state-ownership, such as selection of a board of directors and, the simultaneous restriction of their responsibilities. In addition, a real competition is confirmed between state-owned companies and private-owned companies without state involvement through the creation of new policies and regulation which impact on the private-owned companies. Furthermore, state-owned companies are basically governed by politicians, who might achieve their own interests through transferring resources to their supporters (Shleifer and Vishny, 1986a); (Iannotta et al., 2013). Moreover, state-ownership may decrease the interest in monitoring the opportunistic behaviour of managers due to the protection of state-owned companies by the government (Wang and Yung, 2011).

In relation to state ownership and accruals earnings management, empirical evidence is mixed. (Nguyen et al., 2020) showed that state ownership increases the engagement in accruals earnings management in the Vietnamese real estate sector; this is attributed to a low level of governance and audit quality in state owned companies. Boghdady (2019) examined the difference between the level of accrual earnings management between state owned and private companies in Egypt, based on a sample of 1030 firm–year observations over the period from 2010 to 2017. The result showed that there is no difference between the level of accrual earnings management between state owned and private companies. This is attributed to the government having tried to combine between state-owned and private owned companies. (Ben-Nasr et al., 2015) investigated the role of state ownership

and earnings quality using a sample of 350 companies from 45 countries. They suggested that state ownership engages in accruals earnings management to hide the expropriation of company resources for political aims.

In contrast, Afify (2013) tested the effect of state ownership on accruals earnings management in Egypt. The result showed that state-owned companies are less likely to engage in accruals earnings management than private companies; this was attributed to the variation between rewarding systems between state-owned companies and private companies. In addition, the government has an efficient role in monitoring managerial behaviours. Wang et al. (2011) and (Ding et al., 2007) argued that Chinese state-owned companies engaged in accruals earnings management at lower levels than family-owned companies; this was considered due to them having easy ways to access resources, therefore they do not have the incentives of earnings management. Similarly, (Charumilind et al., 2006) suggested that the higher the level of state ownership in Thai companies, the lower the engagement in accruals earning management due to the easy ways of accessing resources. For the state ownership and real earnings management, Boghdady (2019) showed that there is no difference between the level of real earnings management between state-owned and private companies; this is attributed to the government having tried to combine between state-owned and private owned companies. However, (Dong et al., 2020) found that state ownership mitigates the engagement in real earnings management in China due to the engagement in real earnings management is costly. In addition, state owned having easy ways to access resources, therefore they do not have the incentives of earnings management. Furthermore, state owned companies having the aim of maintaining social stability and providing employment, rather than generating profit (Li and Zhang, 2010). As such, this study assesses the following:

H4a: There is an association between companies with state ownership and level of accruals earnings management before acquisition.

H4b: There is an association between companies with state ownership and level of real earnings management before acquisition.

2.9.4 Earnings management and foreign ownership

According to the agency theory, large foreign shareholders actively monitor managers and likely alleviate a free-ride problem, thus reducing agency costs (Shleifer and Vishny, 1986b). This is attributed to foreign investors being able to bring new technologies into the local firms which assist in the monitoring and control of the firms 'daily activities (De Clercq et al., 2010). In addition, the attraction of foreign ownership requires a higher disclosure rule and protection of investors (Porta et al., 1999) which avoid the obtaining of information and monitoring costs (Cooper and Kaplanis, 2000). Foreign investors are frequently block holders such as institutional investors rather than individual investors. Therefore, foreign investors have strong motivations to maximize the value of the companies which are subject to their investments by actively participating in operations (Park et al., 2017).

Previous empirical studies have relied on the knowledge spillover hypothesis, which argues that a highly skilled foreign ownership can boost the earnings quality. For example, (Vo and Chu, 2019) examined the effect of foreign investors on earnings quality in Vietnam. They used the modified Jones model as a proxy for earnings quality for a sample of 322 firms over the period from 2000 to 2015. They found that foreign investors enhance the earnings quality. The explanation behind this is that foreign investors are more skilled in monitoring managerial behaviors. (Ben-Nasr et al., 2015) investigated the role of foreign ownership and earnings quality using a sample of 350 companies from 45 countries. They suggested that foreign investors are related to high quality financial information, high earnings quality and low earnings management. Guo and Ma (2015) found that foreign investors are an efficient mechanism in mitigating real earnings management in Japan. Foreign investors can bring new technologies into the local firms, which assists in monitoring and controlling the daily activities of firms (De Clercq et al., 2010). Similarly, (Firth et al., 2007) found that foreign investors enhance the earnings quality in China due to foreign investors forcing local management to boost the quality of financial statements.

In contrast, previous empirical studies relied on the information asymmetry hypothesis, which argues that geographic distance constrains foreign investors in the monitoring of the opportunistic behaviors of managers. For instance, (Al-Haddad and Whittington, 2019b) found that foreign ownership in Jordan is unable to mitigate the engagement in accruals and real earnings management as distance mitigates efficiency.

Similarly, (Maswadeh, 2018) examined the effect of foreign ownership on accruals earnings management for a sample of 63 Jordanian industrial companies from 2012 to 2016. The result showed foreign ownership has a statistically insignificant association with accruals earnings management due to the minority of foreign ownership in Jordan. As argued above, the knowledge spillover hypothesis argues that a highly skilled foreign ownership can mitigate the behaviors of managers. As such, this study assesses the following:

H5a: There is an association between companies with foreign ownership and level of accruals earnings management before acquisition.

H5b: There is an association between companies with foreign ownership and level of real earnings management before acquisition.

2.10 The relationship between earnings management and country-level governance

Many studies on earnings management consider institutions as a factor influencing earnings management. However, various institutions such as political and economic, system and form of governance are quite different between countries. (Ball et al., 2000) suggested that earnings quality in accounting is systematically different in common-law countries versus code-law countries. Thus country-level institutional differences effect on earnings management. It raises a series of alternative measures institutions to find a suitable proxy for each research. As the result, in majority of paper examining relationship between institutional factors and earnings management, institutional factors are measured in an indirect way by using different variable such as the strength of legal environment or investor protection, control of corruption or bribery, government effectiveness, political connection, political costs (NGUYEN and DUONG, 2020).National governance quality (country-level), such as rule of law, shapes corporate governance mechanisms (firm-level) by affecting the cost of implementation of corporate governance practices (Doidge et al., 2007);thus, companies could assume more benefits such as higher valuation from adopting a higher level of governance mechanisms. According to the World Bank (2017), national governance quality (country-level) is measured through six dimensions: Voice and accountability, political stability and absence of violence/terrorism, government effectiveness, control of corruption, regulatory quality, and rule of law. Estimate of

governance ranges from approximately -2.5 to 2.5; this means that weak governance performance is equal to -2.5, whilst strong governance performance is equal to 2.5. According to (Globerman and Shapiro, 2002, Leuz et al., 2003b, Lensink et al., 2008), the level of government effectiveness and rule of law reduce corruption and reporting manipulation of companies as strong government effectiveness and rule of law mitigate the ability of management to acquire private benefits of control at the expense of investors. The government effectiveness and rule of law are closely correlated with the control of corruption, therefore can give rise to the aforementioned multicollinearity (Globerman and Shapiro, 2002). Furthermore, Effective governments produce higher levels of political stability and more efficient Voice and accountability (Mauro, 1995). Consequently, it is hard to use these six indicators in a single regression as their collinearity is highly likely to make empirical estimations problematic. It should be noted that, world bank indicators have been employed in a narrowed format by different researchers recently. Previous researchers, i.e.(Nguyen et al., 2015),(Essen et al., 2013) and (Knudsen, 2011), found that government effectiveness (GE), regulatory quality (RQ), rule of law (RL)served as proxies of national governance quality.

Countries with strong investor protection provide an information environment and minority shareholder protection that are better than countries with weak shareholder protection (Porta et al., 2002).Therefore, countries with strong investor protection are probably more engaged in ethical corporate practices as they respond to local institutional pressures in an effort to achieve greater market share or to reduce transaction (Lourenço et al., 2018b). The level of investor protection (rule of law) reduces reporting manipulation of companies as strong investor protection mitigates the ability of management to acquire private benefits of control at the expense of investors (Leuz et al., 2003a). In addition, the investment decisions are affected by the existence of the advantages of host countries (Dunning, 1980). Moreover, national governance quality captures the properties of these countries that make them attractive to prospective investors (Dunning, 2009).

Previous studies provide evidence that countries with a high governance quality attract more investors and mitigate the engagement in earnings management. (Basuil and Datta, 2019) investigate the impact of national corporate governance on relative acquisition size across borders. They used a sample of 348 cross-border acquisition transactions by USA

companies in 44 countries for the period from 1990–2006. The result shows that national corporate governance is linked with the increase of cross-border acquisitions, attributing to higher market potential and lower political risk. Similarly, (Shedden, 2016) examines the relationship between country-level characteristics and merger and acquisition, based on a sample of 1952 merger and acquisition transactions from 74 countries for the period from 1990-2015; the result of his study indicates that stronger country-level characteristics (legal and regulatory standards, investor protection and corporate transparency) drive to higher merger and acquisition transactions across the world. In addition, managers of the acquiring companies are willing to pay a higher ratio to acquire another company when they estimate that the risks of achieving the acquisition are lower.

(Saona and Muro, 2018) examined the effect of the legal and regulatory system at the country level on accruals earnings management. They used a sample of 715 non-financial firms in Latin America over the period from 1997 to 2015. They found that the legal and regulatory systems are efficient mechanisms in mitigating the engagement in earnings management. (Lang et al., 2006) investigated earnings management across the world comparable with earnings management in the US, based on a sample of 181 non-US companies for the period from 1991-2002. They found that cross-listed non-US companies, especially companies that were in weak investor protection countries, have earnings management higher than US companies; they attributed that to the weakness of the legal environment in such countries. Likewise, (Dyreg et al., 2012) stated that companies running their business in countries with a strong legal environment have a lower level of engagement in accruals earnings management. In countries with weak investor protection, it would be costly to adopt a high level of corporate governance mechanisms because they are less financially developed (Doidge et al., 2007). Consequently, this study hypothesizes that:

H6a: There is an association between companies with high national governance and level of accruals earnings management before acquisition.

H6b: There is an association between companies with high national governance and level of real earnings management before acquisition.

2.11 The relationship between real earnings management (REM) and accruals earnings management (AEM)

Accruals earnings management and real earnings management are correlated (Matsuura, 2008). This is supported by (Roychowdhury, 2006) who argued that companies cannot engage in accruals earnings management alone regardless of the cost related to engaging in real earnings management due to accruals earnings management occurring at the end of the financial year and companies have limited time to prepare the financial statements. The legal environment is a key factor in using accruals and real earnings management (Piosik and Genge, 2020). After Sarbanes–Oxley Act (SOX), managers shifted from engaging in accrual earnings management to engaging in real earnings management due to accrual earnings management being more likely to attract auditor and regulatory scrutiny than real earnings management (Cohen et al., 2008b, Ho et al., 2015). In addition, the cost of engaging in earnings management plays an important role in using accruals and real earnings management, attributing this to the higher cost of engaging in real earnings management than the cost of engaging in accruals earnings management (Zang, 2012). While investigation of the relationship between accruals earnings management and real earnings management is challenging, previous researchers observe this phenomenon.

(Cohen and Zarowin, 2010) examined the relationship between accruals earnings management and real earnings management by using a sample of 1511 completed US offers over the period from 1987-2006. They found that managers employ real earnings management as a substitute for accruals earnings management due to accrual earnings management being more likely to attract auditor or regulatory scrutiny than real earnings management. Likewise, based on a sample of 820 USA companies over the period from 1987-2008, Zang (2012) found that real earnings management is used as substitute for accruals earnings management due to the strength investor protection in the USA.

Concerning the developing countries, (Habbash and Alghamdi, 2017) found that the GGC oil and gas listed employ real earnings management as a substitute for accruals earnings management due to accrual earnings management being more likely to attract auditor or regulatory scrutiny than real earnings management. However, Chen et al. (2012) found that real earnings management is employed as a complement for accruals earnings management in Taiwanese companies due to costs being relatively low. Al-Haddad and

Whittington (2019) examine the relationship between accruals earnings management and real earnings management by using a sample of 108 Jordanian public companies over the period from 2010-2014. They found that managers use real earnings management as a complement for accruals earnings management. This is attributed to in countries with weak investor protection, accruals earnings management will more largely used, therefore real earnings management will only be used as a complement when it is needed given the high cost associated with its use. Likewise, (Elkalla, 2017) found that real earnings management is employed as a complement for accruals earnings management in MENA companies due to the high costs of engaging in real earnings management. The GCC region is described as developing countries where investor protection is weak (Abdallah and Ismail, 2017). Consequently, this study will assess the following:

H7: The GCC listed companies employ real earnings management techniques as complements for accruals earnings management.

2.12 The relationship between earnings management and acquisition deal characteristics

Previous studies, such as those of (Erickson and Wang, 1999) and (Vasilescu and Millo, 2016), have investigated the relationship between acquisition deal characteristics and earnings management. Nevertheless, there is disagreement in terms of the factors of acquisition deals characteristics. This argument drives discussion regarding the association between cross-border acquisition deals, industry relatedness acquisition deals, acquired shares, payments methods and earnings management in previous studies.

2.12.1 Earnings management and cross border acquisition deals

Cross-border acquisition deals can be defined as “an acquirer firm and a target firm whose headquarters are located in different home countries” (Shimizu et al., 2004). Cross border acquisition deals can be inflow or outflow transactions (Reddy, 2015). For example,

when domestic companies acquire companies based in foreign countries, acquisition deals are outflow (Kang and Johansson, 2000). Supporters of cross border acquisition deals such as Hitt and Pisano, (2003), suggest that cross border acquisition deals assist companies take feature of growth opportunities in international markets, especially when companies face slowly growth in the local market. In addition, (Lee et al., 2018) suggested when cash flows generated from different business or geographic segments are imperfectly correlated, diversification lowers cash flow volatility and default risks, which in turn increases firm value by lowering borrowing costs and increasing tax saving from higher debt capacity. Furthermore, acquiring a company that still exists overcomes the entry barriers (i.e regulations, and competitive) in cross border market (Hitt and Pisano, 2003). Yang et al., (2013); and Boateng et al., (2008) suggested that shareholders' wealth of the acquiring companies is significantly increase by cross-border acquisition deals. In contrast, opponents to cross border acquisition deals, such as (Barkema and Schijven, 2008), (Yeoh, 2004), (Denis et al., 2002) and (Hitt et al., 1997), argue that cross border acquisition deals are more cost than domestic acquisition deals. This is attributed to international laws associated with investors protection, and legal fees. Moreover, (Deng and Elyasiani, 2008) argued that cross border acquisition deals are associated with significant systemic market risks.

From the perspective of agency theory, while shareholders aim to reduce investment risks and increase the company growth, managers aim to achieve their interests such as compensations ((Jensen and Meckling, 1976a). Cross border acquisitions can achieve shareholders aim (Murphy, 1985). Managers have private information that encourage them to engage in earnings management before the cross-border acquisition, thus achieving their aims and shareholders aim if the acquisition deal succeeded ((Richardson, 2000). companies face significant challenges in successfully accomplishing cross border acquisition deals due to asymmetric information faced by acquiring and target companies (Kang and Kim, 2008). Asymmetric information occurs in the financial negotiation's procedure (Reuer at el., 2012). Zaheer, (1995) suggests that asymmetric information is more in cross border acquisition deals than domestic acquisition deals. This is attributed to acquiring companies face "liability of foreignness". (Richardson, 2000) states that the degree of asymmetric information is associated positively with engagement in earnings

management. (Baik et al., 2015) confirmed that acquiring companies engage in earnings management before the acquisition deals when they face high asymmetric information in the host country. This is attributed to mitigate the cost related to a cross border acquisition.

Prior literature examines the association between cross border acquisition deals and earnings management and provides mixed evidence. (Baik et al., 2015) examined the association between cross border acquisition deals and earnings management in the USA. It uses a sample of 853 deals over the period from 1984 to 2012. They found that acquiring companies engage more in earnings management before the acquisition when they involve in cross border acquisition deals. This is attributed to target companies have different characteristics (i.e., culture, and religion). Botsari and Goh, (2014) examined the association between cross border acquisition deals and earnings management in the UK. They used a sample of 90 acquisition deals over the period of 1997 to 2004. They found that acquiring companies engage more in earnings management when they involve in cross border acquisition deals. This is attributed to asymmetric information between two parties involving in acquisition. In contrast, Ho, (2010) examined the effect of cross border and domestic acquisition deals on earnings management in the USA, over the period from 1980 to 2002. The result shows no difference between cross border and domestic acquisition deals in the engagement in earnings management. (Vo and Chu, 2019) found that acquiring companies with domestic acquisition deals in the USA engage in real earnings management before the acquisition. The explanation behind this is that the effects of the engagement in real earnings management are not recognizable in the short run.

In terms of the cross-border acquisition in the GCC, the UAE and Saudi Arabia concentrate on economic diversification away from oil with a concentration on technology and innovation, the region is set to grow in stature as a well-established hub that can connect the growing economies of Africa and South East Asia with more stabilised regions such as North America and Europe.

Although prior literature provides evidence regarding the influence of cross border acquisition deals on earnings management in developed countries, there is a lack of this issue in developing countries. Consequently, this study will assess the following:

H8a: There is an association between companies with cross border acquisition deals and level of accruals earnings management before acquisition.

H8b: There is an association between companies with cross border acquisition deals and level of real earnings management before acquisition.

2.12.2 Earnings management and acquisition deals in industry unrelatedness.

Industrial relatedness between the acquiring and the target companies is an essential factor for developing business after the acquisition (Ahuja and Katila, 2001; Boschma and Ellwanger, 2012). Penrose (1959) suggest that acquiring and target companies must remain close to their present industries when extending into new product market, especially, when acquiring and target companies are successful in their activities. Consequently, both companies can easily exchange information and combine operations that reduce dual functions (Chatterjee et al., 1992). Capron and Shen, (2007) state that acquisition in relatedness industries is more attractive since it maximises companies' value. On the contrary, acquisition deals in unrelated industries need more efforts to achieve the benefits (information exchange) obtained from relatedness industries (Fan and Lang, 2000). From the agency theory, Managers as agents have private information about the company that encourage them to engage in earnings management before the acquisition, thus achieving their aims and shareholders aim if the acquisition deal succeeded ((Richardson, 2000). The level asymmetric information theory, the level of asymmetric information in unrelated industries companies is greater than industry relatedness companies ((Lim et al., 2008). Information asymmetry can rise acquiring companies increased risk, as they may overpay for the target companies, and they could face unreliable statements employed in due diligence (Alsharairi et al, 2015). Consequently, the level of engagement in earnings management in unrelated industries companies is high compared with these industry relatedness companies (Baik et al, 2015).

While investigation of engagement in earnings management with industry relatedness acquisition deals is challenging, previous researchers have observed this phenomenon. (Baik et al, 2007), for example, examined the association between industry relatedness and accruals earnings management in the USA. It used a sample of 1507 acquisition deals over the period from 1990–1998. The results of their study showed the greater the unrelated industries in the acquisition, the greater the engagement in accruals earnings management. This is attributed to transfer a part of evaluation risk to the target companies

and avoid overpaying. In addition, (Vo and Chu, 2019) found that acquiring companies with industry relatedness acquisition deals in the USA engage in real earnings management less than unrelated industries acquisition deals. The explanation behind this is information asymmetry between acquiring and target companies. Based on a sample of 50 UK companies over the period from 1998-2011, (Nico, 2016, Lehmann, 2016b) found that acquiring companies with unrelated industries acquisition deals are more engaged in accruals earnings management than industry relatedness acquirers. This is because of the acquisition pricing uncertainty.

In contrast, (Kassamany et al., 2017a) aimed to examine the association between unrelated industries acquisition deals, earnings management, based on a sample of 197 UK acquirers between 1990-2009. They found that acquiring companies with unrelated industries acquisition deals engage less in both accruals and real earnings management than industry relatedness acquisition deals; this is due to the unrelated industries acquisition deals generating a higher increased cash flow, when compared to the cash flows produced by engaging in earnings management (Vasilescu and Millo, 2016), (Khanchel El Mehdi and Seboui, 2011) and (Jiraporn et al., 2008).

In relation to the GCC, there is no research that has been done regarding industry relatedness, accruals, and real earnings management. Consequently, this study will assess the following:

H9a: There is an association between companies with industry unrelatedness and level of accruals earnings management before acquisition.

H9b: There is an association between companies with industry unrelatedness and level of real earnings management before acquisition.

2.12.3 Earnings management and ownership acquired.

In relation with the controlling ownership and its influence on the engagement in earnings management, there are two theoretical hypotheses indicating that the ability of large shareholders to constrain the engagement in earnings management is mixed. The first hypothesis is 'The Efficient Monitoring Hypothesis' which argues that controlling ownership is an efficient mechanism in monitoring management and mitigating opportunistic

behaviour (Jensen and Meckling, 1976; Fama and Jensen, 1983). This is attributed to the controlling process taken by the controlling ownership which can drive managers to concentrate more on the firm performance, therefore it may mitigate against opportunistic managers (Shleifer and Vishny, 1997). This is supported by the argument that the majority shareholders have a role in controlling, which constrains the managerial opportunistic behaviour. When majority shareholders have stricter control, management has less incentive to engage in earnings management, indicating the alignment of interests between shareholders and management (Lassoued et al., 2017).

Empirical evidence on the association between controlling ownership and earnings management argues that controlling ownership is an efficient mechanism in mitigating the engagement in earnings management. For example, in Latin American markets, (Mellado and Saona, 2020) examined the relationship between the large owners and the engagement in real earnings management over the period from 2004 to 2016. They found that the large owners mitigate the engagement in real earnings management due to the monitoring role undertaken by large owners. In the same region, (Sáenz González and García-Meca, 2013) examine the relationship between the controlling ownership and accruals earnings management over the period from 2006 to 2009. They found that the controlling shareholders mitigate the engagement in accruals earnings management due to efficient internal monitoring. (Alves, 2012) found large shareholders mitigate the engagement in accruals earnings management in Portuguese companies.

In the developing market context of Jordan, (Maswadeh, 2018) and Ramadan (2016) found that the large shareholders mitigate the engagement in accruals earnings management. This is attributed to large controlling shareholders being able to activate corporate governance mechanisms and control managerial opportunistic behaviours. Also, large shareholders employ a high percentage of independent managers on the board of directors and, therefore, they use company resources efficiently and protect minority shareholders. (Kouaib and Jarboui, 2014a) examined the joint effect of the controlling shareholders and audit quality on accruals earnings management in Tunisian companies over the period from 2007 to 2011. They found that Tunisian companies that have high controlling shareholders and high audit quality together can mitigate the engagement in

accruals earnings management because of the combined monitoring power of the auditors and controlling shareholders.

The competing hypothesis is "The Expropriation-of-the Minority Shareholders Hypothesis" that argues that in a case of concentrated ownership structure, controlling ownership could act opportunistic behaviour versus minority shareholders aims to achieve their own aims such as profit maximisation (Lemmon and Lins, 2003; Callao et al., 2016). This is supported by (Shleifer et al., 1988) who argued that controlling shareholders have a high percentage of the outstanding shares, they expropriate minority investor's wealth. This is attributing to the weakness of the minority shareholders (Porta et al., 1999). Empirical evidence on the association between controlling ownership and earnings management argues that controlling ownership is an inefficient mechanism in mitigating the engagement in earnings management. For example, in the Jordanian context, (Al-Haddad and Whittington, 2019b) examine the relationship between large shareholders and the engagement in both accruals and real earnings management over the period from 2010 to 2014. They found that the large shareholders encouraged the engagement in accruals and real earnings management due to large shareholders often being families.

Given this, controlling/large shareholders seem to play an efficient role in monitoring managerial opportunistic behaviours, as they are interested in protection of their large investments. However, when the percentage of large shareholders is extremely high, it has an inverse impact on the company as they can affect managerial decisions to achieve their private aims which expropriates the rights of the minority shareholders. In relation to the GCC, no research has been done regarding ownership acquired, and accruals and real earnings management. Based on the monitoring hypothesis, this study will assess the following:

H10a: There is an association between ownership acquired and level of accruals earnings management before acquisition.

H10b: There is an association between ownership acquired and level of real earnings management before acquisition.

2.12.4 Earnings management and method of payment.

According to (Erickson and Wang, 1999), mergers and acquisitions should be based on the payment method used to complete them; for example, the ability of the acquiring companies to pay and raise new funds and the response of the target companies. The payment methods are categorised into cash, stock-for-stock and mixed (cash and stock exchange) (Erickson and Wang, 1999). Acquiring companies prefer to do acquisition through stock-for-stock rather than cash. This is due to acquiring companies needing to retain cash to finance future growth. In addition, in a case of stock-for-stock, acquiring companies do not need cash so much. Consequently, stock-for-stock is more likely to boost non-cash working capital such as inventory (Collins et al., 2017). Acquiring companies inflate earnings and share price before the acquisition to show the financial efficiency of the company and achieve acquisition with the lowest costs (Erickson and Wang, 1999). Earlier studies such as (Louis, 2004) and (Botsari and Meeks, 2008b) from the USA support this view, and they argue that stock-for-stock acquirers engage in earnings management before the acquisition to increase the market value of their stocks and achieve acquisition with the lowest costs. However, the cost of engaging in earnings management could be significantly high if it is detected by target companies. For example, target companies could request a higher exchange ratio, or threaten to cancel the acquisition transaction, thus stock-for-stock acquirers engage in earnings management, when they believe that the cost of an engaging in earnings management outweighs the cost of engaging in it (Erickson and Wang, 1999). In contrast, other researchers such as Heron and Lie (2002) who investigated the relationship between stock-financed acquisitions, cash-financed acquisitions and earnings management argued that the payment methods are not associated with earnings management, as auditors could detect engagement in earnings management during the audit in stock-for-stock and cash payment. Consequently, this study assumes that acquiring companies could engage real earnings management instead of accruals earnings management in both payment methods, as accrual earnings management is more likely to attract auditor or regulatory scrutiny than real earnings management (Cohen and Zarowin, 2010). Therefore, I hypothesise the following:

H11a: There is an association between companies with stock-financed acquisitions and level of accruals earnings management before acquisition.

H11b: There is an association between companies with stock-financed acquisitions and level of real earnings management before acquisition.

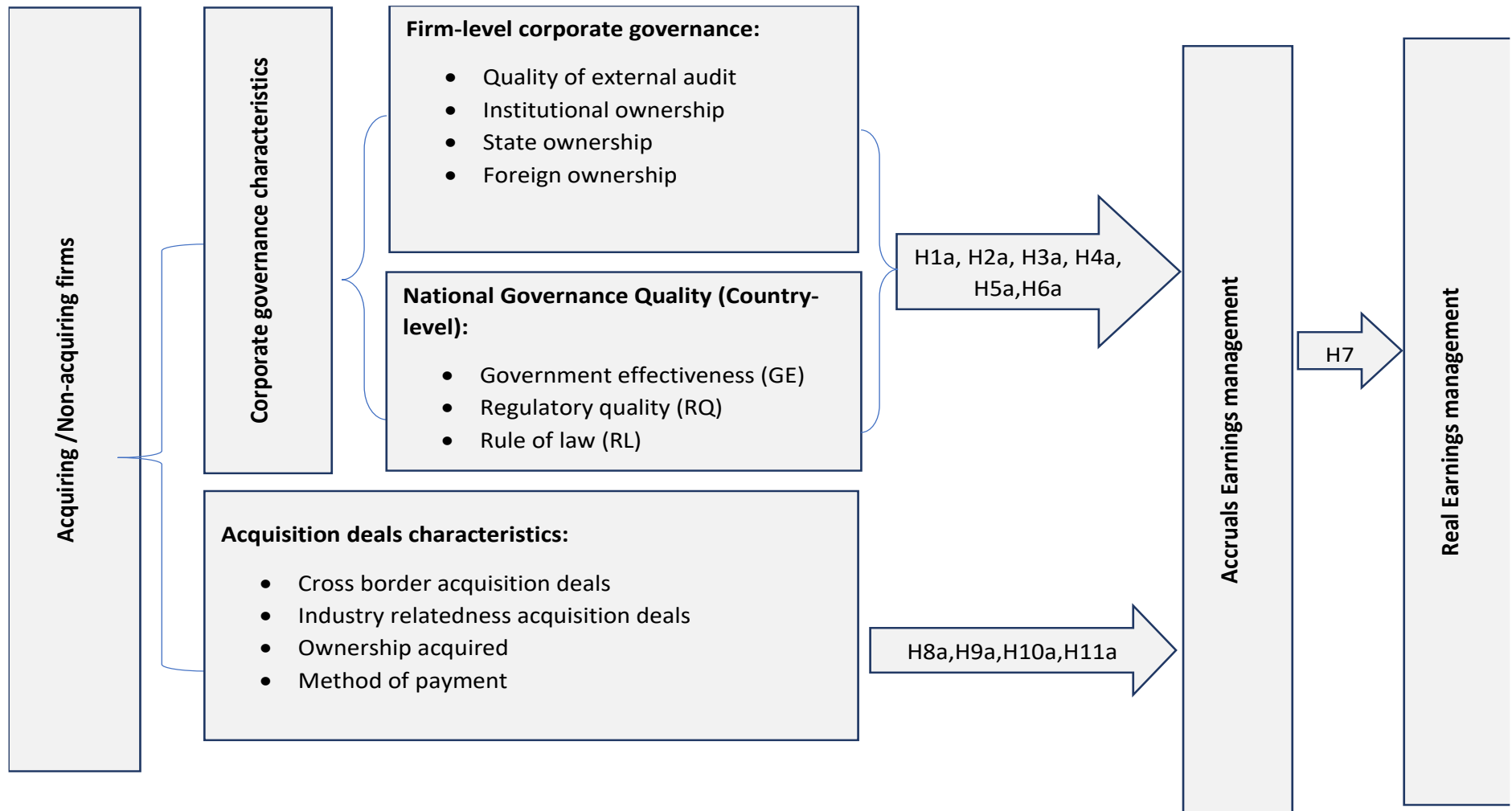


Figure 2.4: Conceptual Framework

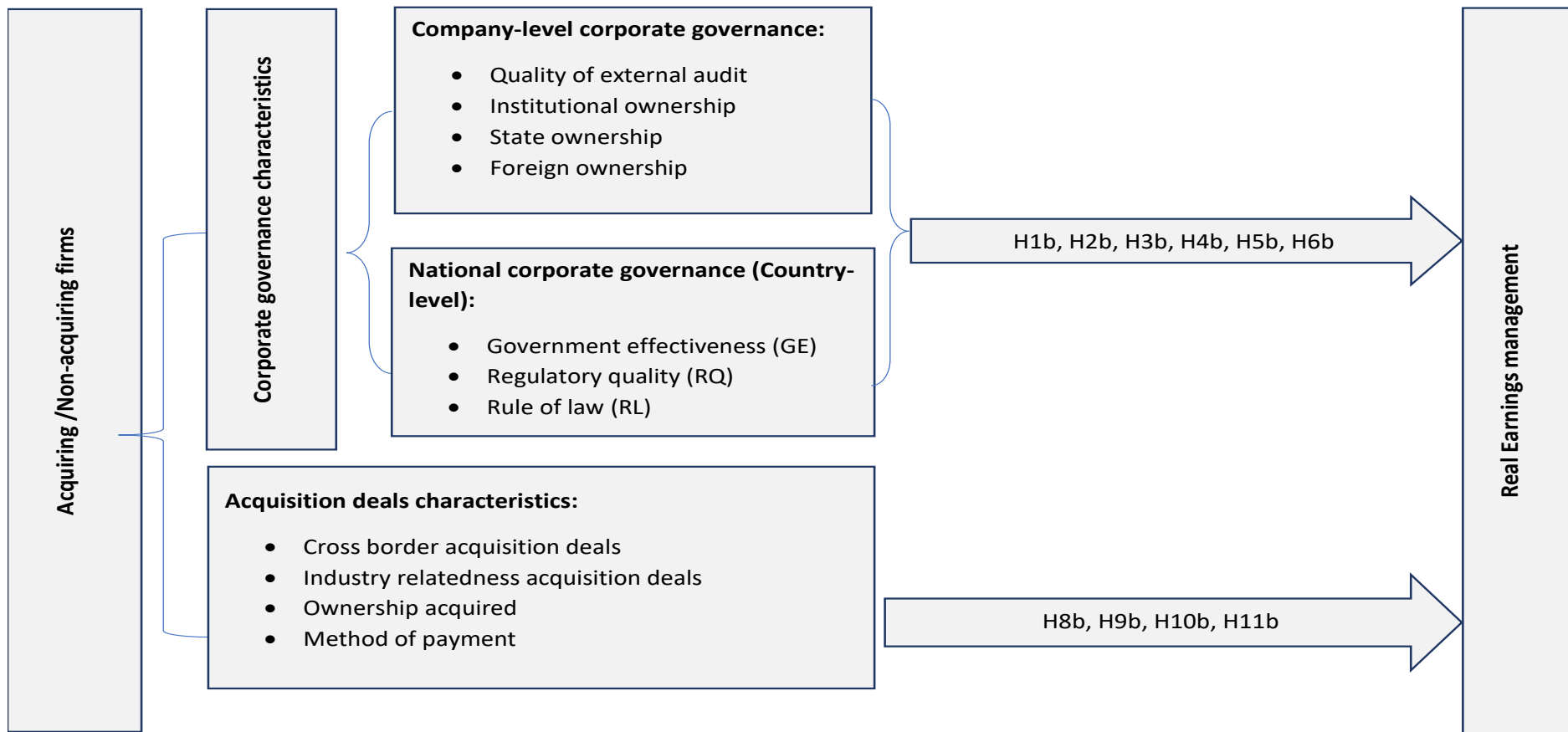


Figure 2.5: Conceptual Framework

2.13 Summary

This chapter discussed and presented the importance of the GCC region. It also discussed earnings management theories, the literature associated with this study, i.e., literature associated with earnings management motivation and firm level governance mechanisms, country level governance mechanisms and acquisition deal characteristics for mitigating the engagement in accruals and real earnings management. It presents the study hypotheses developed from the literature review discussion and shows how these hypotheses achieve the objectives of this study. Tables 2.1. and 2.2 below present the predicted signs of the independent variables that are presented in the research hypotheses. The following chapter presents the data collection and sample selection and the main empirical research models.

Table 2.2: Predicted signs of the independent variables with accruals earnings management

Predicted signs of the independent variables with accruals earnings management		
The independent variables	Hypothesis number	Predicted signs
Acquisition	H1a	+/-
Firm level governance		
External audit quality	H2a	+/-
Institutional ownership	H3a	+/-
State ownership	H4a	+/-
Foreign ownership	H5a	+/-
County level governance		
National governance quality	H6a	+/-
Acquisition deal characteristics		
Cross border acquisition	H8a	+/-
Industry relatedness acquisition	H9a	+/-

Table 2.3: Predicted signs of the independent variables with real earnings management

Predicted signs of the independent variables with real earnings management		
The independent variables	Hypothesis number	Predicted signs
Acquisition	H1b	+/-
Firm level governance		
External audit quality	H2b	+/-
Institutional ownership	H3b	+/-
State ownership	H4b	+/-
Foreign ownership	H5b	+/-
County level governance		
National governance quality	H6b	+/-
Accruals earnings management	H7	+/-
Acquisition deal characteristics		
Cross border acquisition	H8b	+/-
Industry relatedness acquisition	H9b	+/-
Ownership acquired	H10b	+/-
The method of payment	H11b	+/-
Ownership acquired	H10a	+/-
The method of payment	H11a	+/-

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

Consistent with the objective of this thesis, the previous chapter provides an overview of the M&A activity in the GCC region and presents in-depth the earnings management theory in this context. This chapter reviews the earnings management literature, in particular the definitions and motivation of earnings management, and discusses the empirical models used to test accruals and real earnings management Model. Prior research provides evidence that the shareholders used earnings management strategies using accruals and real earning managements (Graham et al., 2005a, Roychowdhury, 2006, Gunny, 2010). However, there is no clear evidence on how managers choose between accruals manipulation and real earnings management. The extant literature shows that shareholders may follow an overall management strategy using a mix of real and accruals earnings management tools, or alternatively, they can choose between the two management techniques, using the technique that is the least costly for them (Cohen et al., 2008). Given the importance and complexity of earnings management behaviour, this chapter reviews the most relevant studies on accruals and real management model. Furthermore, as the purpose of this thesis is to examine the occurrence of accruals and real earnings management in the M&A context, this chapter presents the differences between these main methods of earnings management in terms of costs, motivation, market motivation manager position political motivation and earning management model, and in particular distinguishes between combined strategies of earnings management based on accruals and real and simple techniques based either on accruals or real. Furthermore, the Merger and acquisition of both accruals and real earnings management strategies on operating performance and shareholders are discussed to highlight the importance of this topic not only for academics, but also for investors, auditors, regulators, and accounting standards setters. The remainder of this chapter

is organised as follows: section two provides the main definitions of accruals and real earnings management and discusses the main differences between these two methods of earnings management. Section three presents the research methodology and clarify the procedure for the data collection Section four presents the key empirical research regression and presents the procedure for measuring dependent variable; independent variables; and control variables. Empirical procedures of data analysis are explained in Section five and shows a summary of the whole chapter.

3.1.1 Research Methods

To examine the research hypotheses, this section debates the research paradigm and its effects on the research methodology and methods. The selection of research philosophy has been relied on the research objectives. The philosophy of research indicates the methods that should be applied in collecting and analysing data and then utilizing such data (Collis and Hussey, 2003). Previous studies suggest two key methodologies: interpretivism and positivism. Walliman, (2016) argues that Interpretivism uses qualitative methods, whereas positivism chooses quantitative methods. Also, interpretivism philosophy focuses on the variations among conducting research and the fact, which ought to be understood, while the positivist's philosophy deals with a constant fact observed and clarified employing an objective view (Annells, 1996). This research follows positivism due to it is examining the reality of a phenomenon that already occurs between earnings management, corporate governance, and acquisition in the GCC listed companies. Besides, this research uses the existing theories when developing hypotheses, which could be confirmed or rejected under the research results (Saunders et al., 2019).

Hassanein and Hussainey, (2015) pointed out that such conflicting philosophies could lead to two main research approaches, namely qualitative and quantitative. The qualitative study approach suggests a descriptive and non-numeric approach for gathering data that assists in understanding the phenomenon (Berg, 2009). Also, the qualitative study approach is an effective and flexible approach for exploring small

differences in the behaviour and in investigating the alterations in social processes via the study process (Babbie et al., 2015). In contrast, the quantitative study approach relies on measurements and numbers, which attempts to examine the association between variables. Quantitative studies focus on the quantification of collected data; conducting results that can be transformed into numerical data. Collis and Hussey (2014) argue that the quantitative approach contains different shapes of statistical analyses; giving a more credible and accurate measurement of the variables to generalize the research findings. The quantitative method that is based on the positivism philosophy is used in this study. This method uses existing theories that assist the researcher to find an association between research variables and achieves the research objectives (Crotty, 1998).

Babbie et al., (2015) suggest that there are two key study methods, namely, inductive and deductive approaches. Inductive method is employed during moving from given observations to larger generalizations, thus shaping theories. The deductive method relies on theories to improve a suitable hypothesis, this implies that the hypotheses are developed using theoretical models. Consequently, the study method is intended to test the hypothesis via the gathered data. The deductive approach is employed in this research, due to the research hypotheses were constructed in line with the present studies and theories. Moreover, in consistent with the positivists' method, statistical analysis procedure is employed to examines these hypotheses. This method is related to this study the objective, which is to examine the association between earnings management, acquisition, corporate governance mechanisms (firm-level), and national governance quality (country-level).

3.2 Data Collection and Sample Selection

3.2.1 Data Sources and Collection

The means of data collection for this research were from different ways: for the accruals and real earnings management OSIRIS databased was used for the collection of the data and control variables data. The information regarding the complete financial data of GCC companies was acquired by the OSIRIS database. Thomson One database was used to collect acquisition and ownership structure data as the OSIRIS

database is not accurate in collecting ownership structure and does not have acquisition data. Additionally, external audit quality data was gathered from the companies' websites (the published annual financial reports) by hands due the lack of audit quality data in the OSIRIS database and Thomson One database. Furthermore, the world bank databased was used to obtained national corporate governance (NCG) data as it the main and the accurate source in collecting national corporate governance. All the collected data were incorporated in excel sheet before it was analysed with software. In comparison with developed countries, the access to corporate governance data in the GCC seems challenging due to the lack of publishing in the well-known databases. This leads to collect data manually from the reported financial statements. In addition, the lack of database of corporate governance poses a limitation to this research as other variables of corporate governance could assist in identifying the importance of corporate governance mechanisms in mitigating earnings management in acquiring and non-acquiring companies.

3.2.2 Sample Selection

Sample selection and data gathering are a critical procedure to consider with respect to research accuracy and validity. Determining the research population is fundamental to make sure that the selected sample has indeed represented that population (Ryan et al., 2002). In these viewpoints, the target population in this study is determined as the non-financial companies listed in the GCC. Following prior research such as Klein, (2002) and Arun et al., (2015) banks and insurance companies are excluded due to their different financial statements' characteristics. Also, banks and insurance companies are subject to various regulations and corporate governance codes than other companies. Due to the difference in measuring earnings management, regulations and corporate governance code between non-financial companies and financial companies (banks and insurance companies), this study excluded the banks and insurance companies to ensure a consistent and appropriate observation (Alqatamin et al., 2017).

Concretely, this study uses non-financial companies listed in the six GCC stock markets (i.e., Saudi Stock Exchange; Dubai Financial Market and Abu Dhabi Securities Exchange (UAE); Bourse Kuwait; Muscat Securities Market; Qatar Stock Exchange; and Bahrain Bourse). The current research concentrates on the period from 2007 to 2017. It is worthy of observation that the sample period experienced the exciting growth in oil prices during 2007. In addition, the recovery of the stock market from the global financial crisis (which happened in 2008) started in 2010 (Dalwai et al., 2015a). Panel data does not demand the balance of among the sample; thus, there is a various number of companies every fiscal year, and the estimation approach followed is to utilize all observations to evade sample selection problems. Therefore, the sample data contains all listed companies regardless of the firm size (Wintoki et al., 2012). The initial sample contains only GCC targeted to ensure data consistency, such as common disclosure requirements and accounting standards. No restriction was applied on the type of consideration to secure an as broad as possible sample of mergers and acquisitions within the GCC regions.

The first objective of this study is, the influence of acquisition, corporate governance mechanisms (firm-level), and national governance quality (country-level) on earnings accruals management in listed companies within the GCC context. The final sample contains 308 companies (176 non-acquiring companies and 132 acquiring companies); (2322 firm-year observations) for the financial year 2007-2017.

Table 3.1: Descriptive of Data Deletion of acquisition, external audit quality, ownership structure, and national corporate governance on earnings management

Descriptive	Saudi Arabia	UAE	Kuwait	Oman	Qatar	Bahrain	total
Total number of listed companies in the market	206	121	169	130	44	44	714
Less banks and insurance companies	46	52	51	37	16	21	223

Descriptive	Saudi Arabia	UAE	Kuwait	Oman	Qatar	Bahrain	total
Less non-financial companies with missing data	35	27	69	35	7	10	183
Final sample	125	42	49	58	21	13	308
Acquiring Companies	43	21	25	13	11	3	116
Non-Acquiring Companies	82	21	24	45	10	10	192

As shown in Table 3.1 above, the total numbers of listed companies in the GCC are 714 companies. Among the 714 listed companies, 233 companies are classified under banks, and insurance companies. By extracting these financial services companies from the main sample, there are 491 non-financial companies. 183 companies are excluded from 491 non-financial companies, due to missing data. As a result, the final number of companies in the sample is 308. All the 308 companies are GCC non-financial listed companies. The final sample consists of 116 acquiring companies, and 192 non-acquiring companies.

This study aims to examine the effect of corporate governance on earnings management of acquiring companies and non-acquiring companies in the GCC. Hence, the population of the study is 714 GCC listed companies, while the sample contains of 308 GCC listed companies from 2007-2017. The population is not adequate to be generated as the sample size is less than 50% of the population.

3.3 The Main Empirical Research Models:

The relationship between accruals earnings management and acquisition; external audit quality, institutional ownership, state ownership, and foreign ownership; and national governance quality in the GCC listed companies is examined in Chapter Four to achieve the first objective, i.e the effect of acquisition, firm-level mechanisms, and country-level mechanisms on accruals earnings management. This

analysis is conducted by employing STATA12 software. This study adopts the following model:

$$\begin{aligned}
 AEM_{It-1} = & \beta_0 + \beta_1 ACQ_{It} + \beta_2 EAUDQ_{It-1} + \beta_3 INSTOWN_{It-1} + \beta_4 STOWN_{It-1} \\
 & + \beta_5 FOWN_{It-1} + \beta_6 NGQ_{It-1} + \beta_7 FSIZE_{It-1} + \beta_8 LEV_{It-1} \\
 & + \beta_9 GROW_{It-1} + \beta_{10} MTB_{It-1} + \beta_{11} ROA_{It-1} + \text{Countrydummy}_{it} \\
 & + \text{Industrydummy}_{it} + \varepsilon_{it}(1).
 \end{aligned}$$

Where: *AEM(ABS)* represents absolute value accruals earnings management in year *t-1* measured by using the Modified Jones Model; *ACQ* represents acquisition in year *t*; *EAUDQ* is the external audit quality in year *t-1*; *INSTOWN* is the institutional ownership in year *t-1*; *STOWN* is the state ownership in year *t-1*; *FOWN* is the foreign ownership in year *t-1*; *NGQ* is the national governance quality in year *t-1*; *FSIZE* is the firm's size in year *t-1*; *LEV* is the firm's leverage in year *t-1*; *GROW*= growth ratio measured through the change of sale over total assets in year *t-1*; *MTB*= market to book value in year *t-1*; *ROA* represents the firm's profitability in year *t-1*; β_i captures the regression coefficient, where $i= 0, 1, 2, 3, \dots$; ε_{it} captures the error term.

The relationship between real earnings management; and accruals earnings management; acquisition; external audit quality, institutional ownership, state ownership, and foreign ownership; and national governance quality in the GCC listed companies is examined in Chapter Five to achieve the second objective, i.e., the effect of accruals earnings management, acquisition, firm-level mechanisms, and country-level mechanisms on real earnings management. The final sample in Chapter Five consists of 255 companies (1,892 firm-year observations) for the financial year 2007-2017. This analysis is conducted by employing STATA12 software. This study adopts the following model:

$$\begin{aligned}
 REM_{it-1} = & \beta_0 + \beta_1 AEM_{it-1} + \beta_2 ACQ_{It} + \beta_3 EAUDQ_{it-1} + \beta_4 INSTOWN_{Iit-1} \\
 & + \beta_5 STOWN_{It-1} + \beta_6 FOWN_{It-1} + \beta_7 NGQ_{It-1} + \beta_8 FSIZE_{It-1} \\
 & + \beta_9 LEV_{it-1} + \beta_{10} GROW_{it-1} + \beta_{11} MTB_{It-1} + \beta_{12} ROA_{It-1} \\
 & + \text{Countrydummy}_{it} + \text{Industrydummy}_{it} + \varepsilon_{it-1}(2).
 \end{aligned}$$

Where: REM represents the total real earnings management in year $t-1$; AEM represents sign value accruals earnings management in year $t-1$ measured by using the Modified Jones Model; ACQ represents acquisition in year t ; EAUDQ is the external audit quality in year $t-1$; INSTOWN is the institutional ownership in year $t-1$; STOWN is the state ownership in year $t-1$; FOWN is the foreign ownership in year $t-1$; NGQ is the national governance quality in year $t-1$; FSIZE is the firm's size in year $t-1$; LEV is the firm's leverage in year $t-1$; GROW= growth ratio measured through the change of sale over total assets in year $t-1$; MTB= market to book value in year $t-1$; ROA represents the firm's profitability in year $t-1$; β_i captures the regression coefficient, where $i= 0, 1, 2, 3, \dots$; ε_{it} captures the error term.

The third objective of this research is understanding the acquisition deal characteristics, and therefore the sample for the third and fourth model consist of only acquiring companies. To contain each deal in the final sample, there are standards as follows:

- Acquiring companies must be publicly listed companies and traded on the GCC Stock Market.
- Acquiring companies must belong to non-financial sectors.
- The deal was successfully completed between the GCC acquiring companies and targets companies regardless the location of the targets' companies.
- The deal is funded either by employing cash or by offering stock-for-stock to the target companies.
- Acquiring companies must have the financial data on OSIRIS to estimate the annual proxies for real earnings management.

The third aim of this study is the impact of four acquiring firms' characteristics and deals characteristics (cross border acquisition, Industry relatedness acquisition, ownership acquired, and payment methods) on accruals earnings management within the GCC acquiring companies' contexts. The final sample in Chapter six consists of 116 acquiring companies (259 firm-deal observations) for the financial year 2007-2017.

Table 3.2: Distribution of the final sample of the acquisition deals based on years.

Deal year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	total
Deal numbers	21	36	17	16	30	27	16	30	22	25	19	259

Table 3.3: Distribution of the numbers of the acquisition deals based on each variable of the deals' characteristics.

deals' characteristics	Cross border acquisition		Industry relatedness		Ownership Acquired		payment methods	
	Domestic	Cross border	Related Industries	Unrelated Industries	100%	Less than 100%	Stock-for-stock	cash
Numbers of deals	125	134	151	108	84	175	230	29
Total	259		259		259		259	

Notes: the numbers of the deals' characteristics are 259, Based on the cross-border acquisition, the numbers of the deal's characteristics are divided into 125 domestic deals, and 134 cross border deals. According to industry relatedness, it is divided into 151 relatedness companies, and 108 unrelated companies. In terms of ownership acquired, the deals characteristics numbers are divided into 84 deals that acquiring companies bought them by 100%, and 175 deals that acquiring companies bought them by less than 100%. Finally, based on the payment methods, the numbers of the deals' characteristics are divided into 230 stock-for-stock, and 29 cash deals.

The third model which examines the relationship between accruals earnings management and Acquisition deals characteristics (cross border acquisition, industry relatedness, the ownership acquired, and the payment method) in the GCC listed acquiring companies is as follows:

$$\begin{aligned}
& ACQ_{firms}AEM_{It-1} \\
& = \beta_0 + \beta_1CBACQ_{It} + \beta_2INDR_{It} + \beta_3OWNACQ_{It} + \beta_4PAYMETH_{It} \\
& + \beta_5FSIZE_{It-1} + \beta_6LEV_{It-1} + \beta_7GROW_{It-1} + \beta_8MTB_{It-1} \\
& + \beta_8ROA_{It-1} + Countrydummy_{it} + Industrydummy_{it} + \varepsilon_{it} \quad (3).
\end{aligned}$$

Where: *AEM(ABS)* represents absolute value accruals earnings management measured in year *t-1* by using the Modified Jones Model; *CBACQ* is cross border acquisition in year *t*; *INDR* is the industry relatedness in year *t*; *WONACQ* is the shares acquired in year *t*; *PAYMETH* is the payment method in year *t*; *FSIZE* is the firm's size in year *t-1*; *LEV* is the firm's leverage in year *t-1*; *GROW*= growth ratio measured through the change of sale over total assets in year *t-1*; *MTB*= market to book value in year *t-1*; *ROA* represents the firm's profitability in year *t-1*; β_i captures the regression coefficient, where $i= 0, 1, 2, 3, \dots$; ε_{it} captures the error term.

The fourth aim of this study is the impact of four acquisition deals characteristics (cross border acquisition, industry relatedness acquisition, ownership acquired, and payment methods) on real earnings management within the GCC acquiring companies' contexts.

Table 3.4: Distribution of the final sample of the acquisition deals based on years.

Deal Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	total
Deal numbers	11	23	14	13	17	23	13	22	16	17	16	185

Notes: The final sample in Chapter seven consists of 72 acquiring companies (185 firm-deal observations) for the financial year 2007-2017.

Table 3.5: Distribution of the numbers of the acquisition deals based on each variable of the deals' characteristics.

deals' characteristics.	Cross border acquisition		Industry relatedness		Ownership Acquired		payment methods	
	Domestic	Cross border	Related industries	Unrelated industries	100%	Less than 100%	Stock-for-stock	cash
Numbers of deals	87	98	105	80	63	122	165	20
Total	185		185		185		185	

Notes: the numbers of the deals' characteristics are 185, Based on cross border acquisition, the numbers of the deal's characteristics are divided into 87 domestic deals, and 98 cross border deals. According to industry relatedness, it is divided into 105 relatedness companies, and 80 unrelated companies. In terms of ownership acquired, the deals characteristics numbers are divided into 63 deals that acquiring companies bought them by 100%, and 122 deals that acquiring companies bought them by less than 100%. Finally, based on the payment methods, the numbers of the deals' characteristics are divided into 165 stock-for-stock, and 20 cash deals.

The fourth model which examines the relationship between real earnings management and acquisition deals characteristics (cross border acquisition, industry relatedness, the ownership acquired, and the payment method) in the GCC listed acquiring companies is as follows:

$$\begin{aligned}
 ACQfirmsREM_{It-1} &= \beta_0 + \beta_1CBACQ_{It} + \beta_2INDR_{It} + \beta_3OWNACQ_{It} + \beta_4PAYMETH_{It} \\
 &+ \beta_5FSIZE_{It-1} + \beta_6LEV_{It-1} + \beta_7GROW_{It-1} + \beta_8MTB_{It-1} \\
 &+ \beta_9ROA_{It-1} + Countrydummy_{it} + Industrydummy_{it} + \varepsilon_{it} \quad (4).
 \end{aligned}$$

Where: REM represents the total real earnings management in year t-1; CBACQ is cross border acquisition in year t; INDR is the industry relatedness in year t-1; OWNACQ is the ownership acquired in year t-1; PAYMETH is the payment method in year t-1; FSIZE is the firm's size in year t-1; LEV is the firm's leverage in year t-1; GROW= growth

ratio measured through the change of sale over total assets in year t-1; MTB= market to book value in year t-1; ROA represents the firm's profitability in year t-1; β_i captures the regression coefficient, where $i= 0, 1, 2, 3, \dots$; ε_{it} captures the error term.

3.4 Variables Measurements

This section presents the variables measurements employed in the study models. First, the dependent variable, which is earnings management as proxy of accruals earnings management, and real earnings management. Second, the independent variables of interest which are acquisition; external audit quality, institutional ownership, state ownership, and foreign ownership; national governance quality; cross border acquisition; industry relatedness; the ownership acquired; and the payment method. Finally, five control variables (firm size, leverage, firm growth, market to book value, and profitability) are employed to determine their impact along the independent variables on accruals earnings management.

3.5 Dependent Variable Measuring:

3.5.1 Accruals Earnings Management:

To capture accrual earnings management, this study follows prior studies (e.g., Dechow et al., (2010); Collins et al., (2017); Katmon and Farooque, (2017)) by using the Modified Jones Model. According to Dechow et al., (2010) the Modified Jones Model is the top model in earnings management. Therefore, the modified Jones (1995) model is adopted in this study as the main proxy to measure accruals earnings management, and the Kothari et al. (2005) model is adopted as an alternative measure, a robustness test.

3.5.1.1 The Modified Jones Model (1995):

The Modified Jones Model assumes that accruals consist of discretionary accruals and non-discretionary accruals. In terms of non-discretionary accruals, companies cannot edit or affect the numbers of it because it issues from nature activities such as loans. However, companies can affect discretionary accruals such as accounts receivable, and it is used as an indicator to predict earnings management. According to the modified Jones model, discretionary accruals is predicting the residual of the following model:

$$TA = NIBEI - CFO \quad (5).$$

$$NAD_{t-1} = \beta_0 + \beta_1 \frac{1}{A_{it-2}} + \beta_2 \frac{(\Delta REV_{it-1} - \Delta REC_{it-1})}{A_{it-2}} + \beta_3 \frac{(PPE_{it-1})}{A_{it-2}} \quad (6)$$

TA: the total of accruals.

NIBEI: net income before extraordinary items.

CFO: cash flows from operating activities.

NAD_{t-1} : non-discretionary accruals of year t-1.

A_{it-2} : the total assets of a company I for a period t-2.

ΔREV_{it-1} : revenues of a company I in year t-1 less revenue in year t-2.

ΔREC_{it-1} : net receivables of a company I in year t-1 less net receivable in year t-2.

PPE_{it-1} : the total of plants, properties, and equipment of a company I for a period $it - 1$.

$\beta_1, \beta_2,$ and β_3 : model parameters.

$$AEM(DA)_{t-1} = \beta_0 \frac{TA_{it-1}}{A_{it-2}} - \beta_1 \frac{1}{A_{it-2}} + \beta_2 \frac{(\Delta REV_{it-1} - \Delta REC_{it-1})}{A_{it-2}} + \beta_3 \frac{(PPE_{it-1})}{A_{it-2}} \quad (7)$$

$AEM(DA)_{t-1}$: discretionary accruals of year t-1.

TA_{t-1} : total of accruals of year t-1.

A_{it-2} : the total assets of a company I for a period t-2.

ΔREV_{it-1} : revenues of a company *I* in year *t-1* less revenue in year *t-2*.

ΔREC_{it-1} : net receivables of a company *I* in year *t-1* less net receivable in year *t-2*.

PPE_{it-1} : the total of plants, properties, and equipment of a company *I* for a period *it - 1*.

$\beta_1, \beta_2,$ and β_3 : model parameters.

3.5.1.2 Kothari et al.'s (2005) Model:

Kothari et al., (2005) assume that there is the potential of error in the discretionary accruals measurement without considering company performance. Thereby they suggested a specific model for controlling company performance by employing ROA in the current year to boost the modified Jones model. According to Dechow et al., (2010), the Kothari et al., (2005) model as follows:

$$\frac{TA_{it-1}}{A_{it-2}} = \beta_1 + \beta_1 \frac{1}{A_{it-2}} + \beta_2 \frac{(\Delta REV_{it-1} - \Delta REC_{it-1})}{A_{it-2}} + \beta_3 \frac{(PPE_{it-1})}{A_{it-2}} + \beta_4 ROA_{it-1} + \varepsilon_{it-1} \quad (8)$$

TA_{t-1} : total of accruals of year *t-1*.

A_{it-2} : the total assets of a company *I* for a period *t-2*.

ΔREV_{it-1} : revenues of a company *I* in year *t-1* less revenue in year *t-2*.

ΔREC_{it-1} : net receivables of a company *I* in year *t-1* less net receivable in year *t-2*.

PPE_{it-1} : the total of plants, properties, and equipment of a company *I* for a period *it - 1*.

ROA_{it-1} : return on assets of a company *I* for a period *t-1*.

ε_{it-1} : Residuals in year *t-1*.

$\beta_1, \beta_2, \beta_3,$ and β_4 : model parameters.

The research employs Kothari et al., (2005) model as an alternative measurement to boost its validity strength in terms of the results of this research (Sun et al., 2013).

3.5.2 Real Earnings Management:

According to Roychowdhury (2006), real earnings management occurs through the following three activities: sales; overproduction; and discretionary expenditures.

Sales activities occur via increasing price discounts or offering more lenient credit terms in the current period, this resulting in the increase of production costs, the reduction of income, and a retreat in sales ratios in the coming year. Thus, it is anticipated that the reduction of abnormal operating cash flow in the current year due to sales activities. To estimate real earnings management through sales activities, this study follows Roychowdhury (2006), and adopts the following equation:

$$\frac{CFO_{it-1}}{A_{it-2}} = \beta_0 + \beta_1 \frac{1}{A_{it-2}} + \beta_2 \frac{S_{it-1}}{A_{it-2}} + \beta_3 \frac{\Delta S_{it-1}}{A_{it-2}} + \varepsilon_{it-1} \quad (9)$$

Where:

CFO_{it-1} : cash flow from operation of a company I for a period $t-1$.

A_{it-2} : the total assets of a company I for a period $t-2$.

S_{it-1} : the net sales of a company I for a period $t-1$.

ΔS_{it-1} : the changes in the net sales of a company I for a period $t-1$.

ε_{it-1} : Residuals in year $t-1$.

3.5.2.1 Overproduction Activities:

Overproduction activities: to increase the income of a company, managers could overproduce stock to reduce the cost of goods sold, therefore the increase the operational income. To estimate real earnings management through overproduction activities, this study follows Roychowdhury (2006), and adopts the following equation:

$$\frac{PROD_{it-1}}{A_{it-2}} = \beta_0 + \beta_1 \frac{1}{A_{it-2}} + \beta_2 \frac{S_{it-1}}{A_{it-2}} + \beta_3 \frac{\Delta S_{it-1}}{A_{it-2}} + \beta_4 \frac{\Delta S_{it-2}}{A_{it-2}} + \varepsilon_{it-1} \quad (10)$$

Where:

$PROD_{it-1}$: production cost of a company I for a period $t-1$.

A_{it-2} : the total assets of a company I for a period $t-2$.

S_{it-1} : the net sales of a company I for a period $t-1$.

ΔS_{it-1} : the changes in the net sales of a company I for a period $t-1$.

ΔS_{it-2} : the changes in the net sales of a company I for a period $t-2$.

ε_{it-1} : Residuals in year $t-1$.

Discretionary expenditures: managers can also reduce discretionary expenditures (e.g. advertising, selling and administrating expenses; research and development expenses) to report a high income. To estimate real earnings management through discretionary expenditures activities, this study follows Roychowdhury (2006), and adopts the following equation:

$$\frac{DISXP_{it-1}}{A_{it-2}} = \beta_0 + \beta_1 \frac{1}{A_{it-2}} + \beta_2 \frac{\Delta S_{it-2}}{A_{it-2}} + \varepsilon_{it-1} \quad (11)$$

Where:

$DISXP_{it-1}$: the discretionary expenses of a company I for a period $t-1$.

A_{it-2} : the total assets of a company I for a period $t-2$.

ΔS_{it-2} : the changes in the net sales of a company I for a period $t-2$.

ε_{it-1} : Residuals in year $t-1$.

3.5.2.2 *Discretionary expenditures*:

Managers can also reduce discretionary expenditures (e.g., advertising, selling and administrating expenses; research and development expenses) to report a high income. To estimate real earnings management through discretionary expenditures activities, this study follows Roychowdhury (2006), and adopts the following equation:

$$\frac{DISXP_{it-1}}{A_{it-2}} = \beta_0 + \beta_1 \frac{1}{A_{it-2}} + \beta_2 \frac{S_{it-2}}{A_{it-2}} + \varepsilon_{it-1} \quad (9)$$

Where:

$DISXP_{it-1}$: the discretionary expenses of a company I for a period $t-1$.

A_{it-2} : the total assets of a company I for a period $t-1$.

S_{it-2} : the net sales of a company I for a period $t-1$.

ε_{it-1} : Residuals in year $t-1$.

3.5.2.3 Aggregate real earnings management

Aggregate real earnings management ($SubREM1_{APC-1-ACFO-1}$): This model tests whether real earnings management occurs through abnormal production costs and the aggregate inverse of abnormal cash flows from operations. This is due to the reduction of sales discounts prices (which considers expenses in accounting) resulting in the increase of the income of the company, therefore the increase of real earnings management. However, overproduction is already leading to the increase of the company through the reduction of the cost of goods sold. See figure 3.1 and 3.2 below.

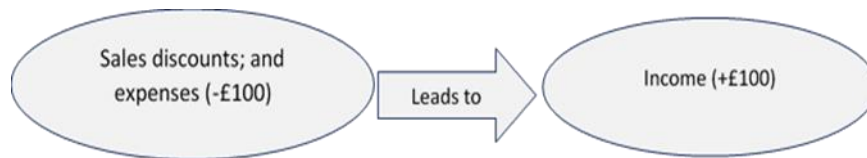


Figure 3.1: Before multiplying by (-1)

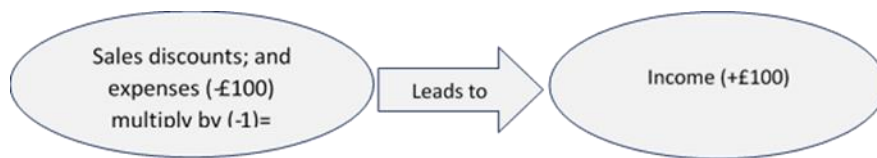


Figure 3.2: After multiplying by (-1)

Consequently, this study follows (Zang, 2012); and Cohen and Zarowin, 2010) and adopts the following equation:

$$SubREM_1 = APC_{It-1} + (-ACFO_{It-1})(10)$$

Aggregate real earnings management ($SubREM2_{ADE-1-ACFO-1}$): This model estimates real earnings management through combining the aggregate inverse of abnormal cash flows from operations and the aggregate inverse of abnormal

discretionary expenses. The explanation behind the inverse of both abnormal cash flows from operations and abnormal discretionary expenses is the reduction of expenses leads to the increase of the company income, thus the increase of real earnings management (Zang, 2012). See figure 1 and 2 above. Consequently, this study follows (Zang, 2012); and Cohen and Zarowin, 2010) and adopts the following equation:

$$SubREM_2 = (-ADE_{It-1}) + (-ACFO_{It-1}) \quad (11)$$

Aggregate real earnings management ($REM_{APC-1-ACFO-1-ADE-1}$): this model tests whether real earnings management occurs through combining abnormal production costs, the aggregate inverse of abnormal cash flows from operations and the aggregate inverse of abnormal discretionary expenses. This study follows (Zang, 2012), and adopts the following equation:

$$Total - REM_{it-1} = (-ADE_{It-1}) + (-ACFO_{It-1}) + APC_{It-1} \quad (12)$$

This study uses the last model ($REM_{APC-ACFO-ADE}$) as proxy for real earnings management in the main models, due to this model concludes all real earnings management techniques.

3.6 Independent variables:

3.6.1 Acquisition:

Accruals earnings management can serve as a key tool in achieving acquisition with the lowest costs when the costs of engaging in earnings management are not high (Erickson and Wang 1999). Prior studies such as Tutuncu, (2019); Lennox et al., (2018); Kassamany et al., (2017); Lehmann, (2016); Karim et al., (2016); Alsharairi, (2015); Louis (2004); and Erickson and Wang (1999) found that acquiring companies engage in earnings management pre-acquisition through income-increasing. This is attributed to several reasons: first, to attract to the target's shareholders and receive their approval. Second, managers cannot finance all transaction from their own

wealth. Third, acquiring companies have a strategic plan for acquisition, and they have enough time to engage in earnings management. Finally, managers of acquiring companies expect the market will reduce their stock prices, thus they engage in earnings management through income-increasing to increase their stock prices. However, these studies were not based on the GCC context or in the Middle East region (MENA), the shape of acquisition variable is an important study and thus a significant association is predictable. Acquisition is captured as a dummy variable takes 1 if the company had a successfully completed acquisition deal and 0 otherwise. Acquisition is shown in my research regression as ACQ.

3.6.2 External Audit Quality:

The high level of external audit quality company reduces earnings management (Grayson, 1999). (Alzoubi, 2018); (Chen et al., 2011); (Lin and Hwang, 2010); (Charles et al., 2010); and (Chen et al., 2005) found that auditors of Big4 have a significant negative impact on earnings management compared to non-Big4 auditors. They justified that this finding could be due the Big 4 audit companies have more experience derived of their human resources which allow them to create higher quality audits. They justified that this finding could be due a high audit quality assists in mitigating asymmetric information and the agency problems between shareholders and managers, thus boosting the transparency of financial reporting. In contrast, (Orazalin and Akhmetzhanov, 2019); (Habbash and Alghamdi, 2017); and Kouaib and Jarboui, (2014) found that there is no difference between the companies audited by the Big 4 and the companies audited by other audit companies regarding the effects of audit quality on accruals earnings management. The reasons behind this are the lack of investment protection and low regulatory regimes. In addition, Big 4 does not have a right to stop opportunistic behavior by managers. To capture the quality of the external audit, this study follows Hay et al., (2006); Naser and Nuseibeh, (2008) who use a Big4 audit company (Deloitte, Touche Tohmatsu, Price Water house Cooper, Ernst & Young, KPMG) as a proxy of quality of external audit. This study will use a

dummy variable, which equals to 1 if the company is audited by Big4, and 0 otherwise, and is shown in my research regression as EADUQ.

3.6.3 Institutional Ownership:

(Kusumaningtyas et al., 2019, Sakaki et al., 2017, Hessayri and Saihi, 2015a, Arouri et al., 2014b); found that institutional ownership mitigates engaging in earnings management. This negative association is attributed to the ability of the institutions to monitor managers' opportunistic behavior because they have resources (i.e., expertise and professionalism) drive them to access to the appropriate information and enhance their monitoring. In contrast, Maswadeh, (2018) found that there is no significant impact of institutional ownership on accruals earnings management due to the lack of adequate expertise of the institutional ownership of Jordanian companies operating in developing market. González and García-Meca (2014) found institutional ownership have an insignificant association with earnings management. According to Kusumaningtyas Metta et al., (2019); Maswadeh, (2018); Sakaki et al., (2017); Hessayri and Saihi, (2015); (Arouri et al., 2014); and González and García-Meca (2014), the institutional ownership is captured by shares numbers held by institutional shareholders as a ratio of the company's total shares. This proportion of institutional ownership is calculated by Thomson One database. Therefore, this study measures institutional ownership through the proportion of total shares held by institutions (i.e., insurance companies, pension fund companies, financial service companies, and banks) at the end of the fiscal year as suggested by the previous studies, and institutional ownership is shown in my research regression as INSTOWN.

3.6.4 State Ownership:

The state ownership is found to mitigate engaging in earnings management. This negative association could be due to state-ownership companies have better access to resources compared to other type of ownership in companies. Furthermore, governments seek to build credibility international markets. Moreover, the state ownership extends

appropriate control to the managers and tries to find solutions to company's issues in the difficult time. Therefore, companies with state ownership, feel less the need to be engaged in earnings management to attract investors as they can rely on the resources of state ((Wang et al., 2011); (Eljelly, 2009); (Ding et al., 2007); (Charumilind et al., 2006)). However, Almasarwah, (2015) found an insignificant relationship between state ownership and accruals earnings management in Jordanian companies. The justification of this result is there are interactions between different levels of state ownership resulting in a difficulty of understating the relationship between state ownership and accruals earnings management. In the context of the GCC, Al-Hadi et al., (2016); Arouri et al., (2014); Alfaraih et al., (2012); Omran et al., (2008) found a statistically significant negative association with firms' performance. The justification of this result is that state ownership in the GCC is more engaging in earnings management to obtain private benefits at the expense of their companies' shareholders. According to (Zhang and Xie, 2018); (Abdallah and Ismail, 2017b); Al-Hadi et al., (2016); Almasarwah, (2015); Arouri et al., (2014); Alfaraih et al., (2012); Wang et al., (2011); Eljelly, (2009); Omran et al., (2008); Ding et al., (2007); Charumilind et al., (2006), the state ownership is captured by shares numbers held by state shareholders as a ratio of the company's total shares. This proportion of state ownership is calculated by Thomson One database. Therefore, this study measures state ownership through the proportion of total shares held by government at the end of the fiscal year as suggested by the previous studies, and state ownership is shown in my research regression as STOWN.

3.6.5 Foreign Ownership:

The foreign ownership is found to mitigate engaging in earnings management. This is attributed to foreign investors are more skilled than others, thus they have the ability of monitoring financial reporting preparing more efficiently (Alzoubi, 2016); (Lel, 2013); (Jeon et al., 2011); (Choi and Hasan, 2005); (Bonin et al., 2005). In contrast, Maswadeh, (2018); Shiguang, (2015); Ji et al. (2015) found that foreign ownership is unable to mitigate engaging in accruals earnings management due to foreign ownership represents as minority shareholders compared to other types of

shareholders such as institutional ownership. However, (Paik and Koh, 2014); (Guo and Ma, 2015) found that foreign ownership assist managers to engage in earnings management. This is because the difference of environment and the distance make it difficult for foreign ownership to control the firm's financial statements process. According to efficiently Maswadeh, (2018); (Alzoubi, 2016); Shiguang, (2015); Ji et al. (2015);(Guo and Ma, 2015); (Paik and Koh, 2014);Greenaway et al., (2014); (Lel, 2013); (Jeon et al., 2011); (Choi and Hasan, 2005); (Bonin et al., 2005), the foreign ownership is captured by shares numbers held by foreign shareholders as a ratio of the company's total shares. This proportion of foreign ownership is calculated by Thomson One database. Therefore, this study measures foreign ownership through the proportion of total shares held by foreign investors at the end of the fiscal year as suggested by the previous studies, and foreign ownership is shown in my research regression as FOWN.

3.6.6 National Governance Quality:

The high level of national governance quality is found to reduce engaging in earnings management. This negative association could be due to national governance quality captures the properties of these countries that form them attractive to prospect investors (Dunning, 2009). Lang et al., (2006) who investigate earnings management across the world comparable with earnings management in the US. They found that cross-listed non-US companies, especially companies that located in weak investor protection countries, have earnings management higher than US companies. They attribute that to the weakness of legal environment in such countries. Likewise, (Dyreng et al., 2012) state that companies running their business in countries with a strong legal environment have a lower level of engaging in accruals earnings management. To the best of my knowledge, this is the first study to analyse the effect of national governance quality variable on accruals earnings management within the GCC contexts between 2007 to 2017. According to the World Bank (2017), National Governance Quality (NCQ) is measured thorough six dimensions: voice and accountability, political stability and absence of violence/terrorism, government

effectiveness, control of corruption, regulatory quality, and rule of law. The estimate of governance ranges from approximately -2.5 to 2.5. This means that weak governance performance is equal to -2.5, whereas strong governance performance is equal to 2.5. Prior researchers (Nguyen et al., (2015); Van Essen et al., (2013)) found that Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) as proxies of national governance quality. Due to that these indicators are directly associated with business life and the firm's operations. Consequently, this research uses these only these three indicators (GE, RQ and RL) as a proxy of national governance variable, and national governance quality is shown in my research regression as NGQ.

3.6.7 Acquisition Deals Characteristics:

To examine the effect of acquiring firms' characteristics acquisition deal characteristics on accruals earnings management within the GCC context, this study uses cross border acquisition, industry relatedness, shares acquired, and method of payment as independent variables in the third regression. The measurement of these variables as follows:

3.6.8 Cross border acquisition:

Cross border acquisition may lead acquiring companies engaging in earnings management due to information asymmetry between acquiring and target companies Baik et al., (2007). Botsari and Goh, (2014); Baik et al., (2007) found that acquiring companies engage more in earnings management when they involve in cross border acquisition deals. In contrast, Ho, (2010) found no difference between cross border and domestic acquisition deals in the engagement in earnings management. (Vo and Chu, 2019) found that acquiring companies with domestic acquisition deals engage in real earnings management before the acquisition. The explanation behind this is that the effects of the engagement in real earnings management are not recognizable in

the short run. The above studies were not based on the GCC context or in the Middle East region (MENA). Cross border acquisition is captured as a dummy variable takes 1 if the GCC acquiring companies acquire companies outside the GCC, and 0 otherwise as suggested by Botsari and Goh, (2014); Ho, (2010); and Baik et al., (2007), and it is shown in my research regression as CBACQ.

3.6.9 Industry unrelatedness:

(Vo and Chu, 2019);(Nico, 2016, Lehmann, 2016b); and (Baik et al, 2007)found the greater is the unrelated industries deals, the greater is the engagement in earnings management due to the acquisition pricing uncertainty, and the asymmetric information between the acquiring and target companies. In contrast, (Kassamany et al., 2017a)found that engaging in earning management is reduced by unrelated industries in the UK. This is due to unrelated industries generating a higher increased cash flow, when compared to the cash flows produced by engaging in earnings management ((Vasilescu and Millo, 2016); ((Khanchel El Mehdi and Seboui, 2011); and ((Jiraporn et al., 2008).The above studies were not based on the GCC context or in the Middle East region (MENA). Industry unrelatedness is captured as a dummy variable takes 1 if the acquiring and the target companies do not belong to the same industry sector, 0 otherwise as suggested by (Vo and Chu, 2019); (Kassamany et al., 2017a);(Nico, 2016, Lehmann, 2016b); and (Baik et al, 2007), and it is shown in my research regression as **INDR**.

3.6.10 Ownership Acquired:

Controlling ownership is an efficient mechanism in mitigating the engagement in earnings management. (Mellado and Saona, 2020); (Maswadeh, 2018); Ramadan

(2016); (Kouaib and Jarboui, 2014a); (Sáenz González and García-Meca, 2013); and (Alves, 2012); found that the large owners mitigate the engagement in earnings management due to the monitoring role undertaken by large owners. Acquiring companies often acquire target companies that experience poor earnings to accept acquirers' offers during acquisition negotiation without overestimation of acquirers' prices (Raman et al., 2013). Another potential explanation is the large size of acquisition deal occurs by large companies who have improved monitoring and control set and a good reputation that enhances mitigating engaging in earnings management (Xie et al., 2003); and (Klein, 2002). Moreover, acquiring companies perhaps have already some proportions of shares of the target companies before the acquisition which already have been inverted in the acquiring companies' share price (Mei and Sun, 2008). Therefore, no need in engaging in earnings management. However, these studies were not based on the GCC context or in the Middle East region (MENA), which shape ownership acquired variable important to study. Ownership acquired is captured as the proportion of shares acquired by acquiring companies, and it is shown in my research regression as OWNACQ.

3.6.11 Method of payment:

The payment methods are categorized into cash, stock-for-stock, and mixed (cash and stock exchange) (Erickson and Wang, 1999). (Louis, 2004); (Botsari and Meeks, 2008b) found stock-for-stock acquirers engage in earnings management before the acquisition to increase the market value of their stocks and achieve acquisition with the lowest costs. In contrast, other (Heron and Lie (2002) found the payment methods are not associated with earnings management, as auditors could detect engaging in earnings management during the audit in stock-for-stock, and cash payment. The above studies were not based on the GCC context or in the Middle East region (MENA), This shapes the payment methods variable important for examination. The payment methods are captured as a dummy variable taking the value of 1 if the acquisition

transaction is cash and 0 otherwise as suggested by (Erickson and Wang, 1999), and it is shown in my research regression as **PAYMETH**.

3.7 The control variables

The research employed several control variables to control for the likely effect on the dependent and independent variables, which were suggested by prior studies (Lennox et al., 2018); (Katmon and Farooque, 2017); (Lehmann, 2016); (Abdul Rahman and Ali 2006); (Klein, 2002). This research uses the firm's characteristics (firm size, Leverage, Growth, Profitability (ROA), and market to book value (MTB) as indicator to the perspective's growth of the company.

3.7.1 Firm size:

Jensen and Meckling (1976) suggest that size of the company impacts positively on the agency cost. This is due to the increase in opportunistic behaviour by managers. In addition, Pincus and Rajgopal (2002) perceive that large companies impose more effort on managing to state more predictable earnings. Prior studies such as Jo and Kim (2007); Lobo and Zhou (2006) argue that large companies increase earnings due to the complexity of company activities. Likewise, management has the motivation to change the financial reports, taking features of the complication of the company's structure and the hardness of understanding (Lobo and Zhou 2006). Furthermore, Bozec and Laurin (2008); and Watts and Zimmerman (1990) suggest that large companies reduce earnings due to political costs such as tax. In contrast, other studies such as Lennox (1999), Klein (2002), Xie et al. (2003), and Abdul Rahman and Ali (2006) argue that the company size is associated negatively with earnings management as the large companies take care regarding their reputation and have more sources. Company size is captured as the natural logarithm of total assets. Company size will be used as a control variable and that there is no clear evidence of a positive or negative relation between EM and size given the mixed evidence in the literature.

3.7.2 Growth:

The association between growth and earnings management is unclear. Prior studies such as Carcello et al., (2004) suggest that managers could have the motivation for engaging in earnings management to reach the targeted ratio of growth or to hide recession. Alzoubi (2016); González and García-Meca (2014); Lobo and Zhou (2006); and Abdul Rahman and Ali, (2006) found that faster growth is more likely to be positively associated with earnings management due to positive economic conditions tend to be reflected in a company's income. In contrast, an et al. (2016); AlNajjar and Riahi-Belkaoui (2001) the association between the growth rate and earnings management is negative. This is due to that companies that have imperfect growth are forced to engage in earnings management and publish their financial statements due to boost confidence among the financiers to obtain more fund. The growth of a company is captured by taking the company's assets growth ratio as measured by (Hassanein et al. 2018); and (González and García-Meca 2014); and (Jo and Kim (2007). However, Alzoubi (2016); Cheng et al. (2016); and Rusmin et al., (2014) captured growth ratio by taking the market value to book value (MTB). (Rebeca Cordeiro da Cunha and Márcio André Veras, 2018). This suggests that the market-to-book ratio (MTB) considers an indicator of a company's future investment opportunities due it is associated with the internal context (book value) and the investors' view (market value). Consequently, this study measures the growth as follows:

3.7.3 Company's assets Growth

In this research, company's assets growth ratio is captured by taking the company's sales to assets as measured by (Hassanein et al. 2018); and (González and García-Meca 2014); and (Jo and Kim (2007). The data is gathered from OSIRS database and is shown in my study regression as GROW.

3.7.4 Market to book value

The market value to book value as measured by (Rebeca Cordeiro da Cunha and Márcio André Veras, 2018); Alzoubi (2016); Cheng et al. (2016); and Rusmin et al., (2014). It is predictable to have a positive relationship with earnings management, as clarified above by Alzoubi (2016). The data is gathered from OSIRS database and is shown in my study regression as MTB.

3.7.5 Leverage:

Debt is an incentive for managers to engage in earnings management to give a signal of financial health (Spence, 2002). This view is supported by Rusmin et al., (2014); Teshima and Shuto, (2008); (Mather and Ramsay, (2006); and Gu et al., 2005) who further adds that managers engage in earnings management to present the current and future flows of the company and that companies could meet their obligations efficiently. In contrast, the issuance of debt is more capable to constrain agency problems and asymmetric information between shareholders and managers as result of the high monitoring by the lenders to secure their debts. (Jensen and Meckling, 1976; and Healy and Wahlen, 1999). This is supported by Park and Shin (2004); Zamri et al. (2013) who found that the higher the ratio of leverage, the lower the ratio of engaging in earnings management due to the control of lenders. Leverage ratio can be measured in this study as the ratio of total debts to total assets of the firm as suggested by (Alzoubi 2016); (Cheng and Tzeng, 2011); (Chen et al., 2011); (Gu et al., 2005); (Klein 2002), and it is shown in my regression research as LEV.

3.7.6 Profitability

Prior studies such as Anagnostopoulou and Tsekrekos (2017); Alzoubi (2016) argue that the profitability of the firm is linked negatively with engaging in earnings

management. They found that companies with lower profitability are forced to engage in earnings management to meet the request of shareholders who want a high profitability. In contrast, González and García-Meca (2014); and Jo and Kim (2007) found a higher firm's profitability, a higher engaging in earnings management due to managers seek to increase the opportunity of the company to obtain capital financing from the market. The return on assets (ROA) is employed as a proxy for the profitability. Anagnostopoulou and Tsekrekos (2017); and Cheng et al. (2016) captured ROA using the net income over the total assets. Consequently, this study employs the firm's ROA measured as the net income over the total assets, as it's suggested by the above studies. It is predictable to have a relationship with accruals earnings management, as clarified above by Anagnostopoulou and Tsekrekos (2017); and Alzoubi (2016). The data is gathered from OSIRS database and is shown in my study regression as ROA.

Table 3.6: The measurement of the Research Variables

The variables	The measurement
1. The dependent variable (EM):	
	$\frac{TACC_{it-1}}{A_{it-2}} = \frac{\beta_0}{A_{it-2}} + \frac{\beta_1(\Delta REV_{it-1} - \Delta REC_{it-2})}{A_{it-2}} + \frac{\beta_2(PPE_{it-1})}{A_{it-2}} + \varepsilon_{it-1} \quad 1.1$
	$\frac{TACC_{it-1}}{A_{it-2}} = \frac{\beta_0}{A_{it-2}} + \frac{\beta_1(\Delta REV_{it-1} - \Delta REC_{it-2})}{A_{it-2}} + \frac{\beta_2(PPE_{it-1})}{A_{it-2}} + \frac{\beta_3(ROA_{it-1})}{A_{it-2}} \varepsilon_{it-1} \quad 1.2$
1.1. AEM (Modified Jones Model) 1.2. AEM (Kothari Model) 1.3. Total REM	<p>$TACC_{it}$: the total of accruals of a company I for a period $t-1$.</p> <p>A_{it-2}: the total of assets of a company I for a period $t-1$.</p> <p>ΔREV_{it-1}: the change of revenues of a company I for a period $t-1$.</p> <p>ΔREC_{it-1}: the change of receivables of a company i for a period $t-1$.</p> <p>PPE_{it-1}: the total of plants, properties, and equipment of a company I for a period $t-1$.</p> <p>ROA_{it-1}: return on assets of a company i for a period $t-1$.</p> <p>ε_{it-1}: Residuals a company I for a period $t-1$.</p> <p>$TotalREM_{it-1} = APC_{It-1} + (-ACFO_{It-1}) + (-ADE_{It-1}) \quad (1.3)$</p>
2. The independent variables:	
2.1. Acquisition_{it}:	1 if the firm I is an acquiring firm, otherwise 0.
2.2. External Audit Quality_{it-1}:	1 if a firm I audited by Big4, otherwise 0.

The variables	The measurement
2.3. Institutional Ownership $it-1$:	The percentage of total shares held by institutional ownership.
2.4. State Ownership $it-1$:	The percentage of total shares held by government.
2.5. Ownership: Foreign Ownership $it-1$:	The percentage of total shares held by foreign investors.
2.6. National Governance Quality $it-1$:	The average of Government Effectiveness, Regulatory Quality, Rule of Law (-2.5-2.5).
2.7. Cross border acquisition:	1 if the GCC acquiring companies acquire companies outside the GCC, and 0 otherwise.
2.8. Industry unrelatedness:	1 if the acquiring and the target companies do not belong to the same industry sector, 0 otherwise.
2.9. Ownership Acquired:	The proportion of ownership acquired by acquiring companies
2.10. Method of payment:	1 if the acquisition transaction is cash, otherwise 0.
3. The Control Variables:	
3.1. Firm Size	The natural logarithm of total assets.
3.2. Growth	The percentage of growth (change in sales over the total assets).
3.3. Leverage:	Total debt over total assets
3.4. MTB	Market to book value as indicator of a company's future
3.5. ROA	Net income over total assets.

3.8 Empirical Procedures of Data Analysis:

3.8.1 Diagnostic Tests:

In the diagnostic tests, this research discusses the descriptive statistics, correlation matrix and VIF test for a multi-collinearity check. Descriptive statistics uses to achieve the description of data in terms of the central tendency test on a single variable, which contains the numbers of observations, mean, standard deviation, minimum, and maximum for all research variables. Multicollinearity is a prevalent issue when employing linear models. It is hard to identify the individual influences of the independent variables on the dependent variable due to multicollinearity. According to Farrar et al., (1967), high multicollinearity is an issue due to it is possible to exceed the variance of the coefficients and drive them to be very sensitive to smaller alterations in the model. This happens when there are high correlations between a

minimum of two explanatory variables that drive to unsteady and uncertain estimates in regression coefficients. However, the correlation coefficients matrix and VIF test are the prevalent approaches for testing the multicollinearity issue between independent variables (Choi et al., 2013; and Shafer, 2015). The correlation between the research variables is examined via a pairwise correlation matrix to clarify whether the research analysis is influenced by the linear link between independent variables. When a multicollinearity issue is over 80%, it could harm the regression analysis results (Grewal et al. 2004). Furthermore, VIF test is applied and is discussed in the next chapters.

3.8.2 Regression Analysis

To test the research hypotheses, regression analysis is conducted. However, to test if the panel or pooled regression is the more appropriate in this study, the Breusch-Pagan is conducted for the research regressions. (Twumasi et al., 2015). Panel data is the most appropriate empirical methodology (Wintoki et al. 2012). Panel data contains cross-section over a period. This could better reveal impacts that could otherwise not be detected in time-series data (Gujarati 2009). Panel data proposes that companies are heterogeneous and grants us to control for heterogeneity. In addition, panel data extends the research more informative data, higher freedom degrees, boosted variability, less collinearity between variables, therefore boosted the model efficiency (Kiviet, 2009). There are two widespread techniques to panel data model, that are, the fixed effect model and the random effect model. The fixed-effect model has relied on the assumption that the unobserved effect is correlated with the independent variables of the model, whereas the random effect model presumes that the two are uncorrelated. The perfect tool used to mark the appropriate technique for analysis among the fixed-effect model and random effect model is the Hausman test (Hausman 1978). If the null hypothesis of the Hausman test is rejected, the model is a fixed effect, otherwise, the model would be a random effect. The fixed effect model is adopted in the first research regression in accordance with the Hausman test result.

3.8.3 Additional Analyses and Robustness Checks:

This research conducted some additional analyses to confirm the robustness of the key research findings. Firstly, testing the effect of acquisition, corporate governance mechanisms (firm-level), national governance quality (country-level) on income-increasing and income-decreasing accruals earnings management. Secondly, to test whether the initial results are robust to different measures, the Kothari et al. (2005) model is adopted as an alternative to measure accruals earnings management.

3.9 Summary

The chapter explains and justifies the research methodology in agreement with its aims. The panel data regression models are adopted to examine the research hypotheses. In general, the fundamental procedures which are adopted in data analysis clarified by this chapter. These procedures contain measuring the research variables, diagnostic tests, the regression analysis and finally the robustness tests. This research uses 2,322 firm-year observations over the period 2007-2017 as a sample for measuring accruals earnings management and governance mechanisms among the GCC listed companies. In addition, this research uses 1892 firm-year observations over the period from 2007 to 2017 as a sample for measuring real earnings management and governance mechanisms. The final sample for measuring acquisition deal characteristics and accruals earnings management among the GCC listed companies is 259 firm-year observations over the period from 2007 to 2017. Whilst the final sample for measuring acquisition deal characteristics; and real earnings management among the GCC listed companies is 185 firm-year observations over the same period.

CHAPTER 4

THE FACTORS INFLUENCING ACCRUALS EARNINGS MANAGEMENT (ACQUISITION, FIRM-LEVEL GOVERNANCE, AND COUNTRY-LEVEL GOVERNANCE) IN THE GC

4.1 Introduction

This Chapter presents the findings of the factors influencing accruals earnings management in the GCC by using the absolute value of the Modified Jones model. These factors are acquisition, firm level governance mechanisms, and country level mechanism. The chapter starts with the summary statistics of the variables in section 4.2, followed by the effect of acquisition; the effect of four firm level governance mechanisms: external audit quality, institutional ownership, state ownership, and foreign ownership; and the effect of country level mechanism measured by national governance quality on accruals earnings management in section 4.3. Section 4.4 presents and discusses further analysis on accruals earnings management. Section 4.5 states the results of the robustness test employing signed accruals earnings management (the values of accruals earnings management calculated by the Modified Jones model before transforming them to absolute value). This study also employed Kothari et al.'s (2005) model again as an alternative estimator of discretionary accruals that is a proxy of absolute accruals earnings management. Finally, the conclusion of this chapter will be presented in section 4.6.

4.2 Summary Statistics of the GCC Companies

The analysis is applied to GCC listed companies between 2007-2017. The first section presents and discusses the descriptive statistics of all the variables (accruals earnings management, acquisition, external audit quality, institutional ownership, state ownership, foreign ownership, national governance quality, firm size, leverage, growth, market to book value, return on assets) employed in this research. In the

second section, there is discussion on the regression diagnostics such as normality test, heteroscedasticity test, and the pair-wise correlation matrix and the collinearity diagnostics. The third section presents and discusses the results from the Hausman fixed effects model applied to the GCC sample.

4.2.1 Descriptive Statistics of the GCC Companies:

Based on the availability of data, the sample in this Chapter consists of 308 companies (3,210 firm-year observations) for the financial year 2007-2017.

Table 4.1 states the mean, median, standard deviation, minimum, maximum, skewness, and kurtosis of the variables employed in the research. The table states accruals earnings management (AEM), ranges from a minimum of 0.00 to a maximum of 0.958 with a mean and median of 0.065 and 0.44, respectively. The average DACC presented by Al Nasser (2018) is found to be 0.050, which is relatively similar to average of DACC of 0.065 presented in this research results, with a minimum 0.00 and a maximum 0.20 of the GCC listed companies. The result of her study, however, was based on the GCC listed companies except for Kuwait country which represents 16% of the companies in the dataset, and the period from 2009 to 2013 which is a different period from this study. In addition, Al Nasser's study (2018) employs Defond and Park (2001) model for measuring the DACC instead of the Modified Jones model employed in this research. Even though, both models measure accruals earnings management, Defond and Park (2001) model uses items from the statement of financial position (Abnormal Working Capital) as a proxy of accruals earnings management, whereas the Modified Jones model uses items both from income statement and from the statement of financial position, which is further explained in detail in the Methodology Chapter. Furthermore, the average DACC presented by Abdelwahed (2018) is found to be 0.035, which is much lower than average of DACC of 0.065 presented in this research results, with a minimum 0.00 and a maximum 0.60 of the UK listed companies. As for the independent variables, the acquisition was measured by a dummy variable and has a mean value of 0.083, and median of 0, with a minimum of

0 and a maximum of 1. This indicates that only 8.3% of the firms in the sample were involved in acquisition. The quality of external audit was measured by a dummy variable, 1 if Big4 Auditing firms audits the company, and 0 otherwise. It is found to have a mean value of 0.663, and median of 1, indicating that 66.3% of firms in the sample were audited by Big 4 auditors. The average of the external audit quality presented by Shubita (2015) is found to be 0.695 of the GCC listed companies, which is relatively close to the average of the external audit quality of 0.663 presented in this research results. The mean value of the institutional ownership of the listed companies is 0.198, and median of 0.059, with a minimum of 0 and a maximum of 0.999. The mean value of 0.198 indicates that institutions on average holds 19.8% of the shares in firms in the sample. This average of the institutional ownership is almost double the institutional ownership average of USA companies of 10%, presented by Abdelwahed (2018), suggesting that institutional investors in the GGC companies are more than institutional investors in the USA companies as developed market. Therefore, it is expected that institutional investors in the GCC play a good role in mitigating the engagement in earnings management as institutional owners as one of the main corporate governance mechanisms tend to monitor managers' behavior to mitigate agency problems. The state ownership has a mean value of 0.054, and median of 0, with a minimum of 0.00 and a maximum of 0.937, with a standard deviation of 0.133. The mean value of 0.054 indicates that state ownership on average holds 5.4% of the shares in firms in the sample. This mean value is much lower than the mean value of the state ownership of 0.578, as found by (Du and Boateng, 2015) on the Chinese listed companies as developing market. The foreign ownership mean value is 0.061, and median of 0, with a minimum of 0.00 and a maximum of 0.996, with a standard deviation of 0.150. This indicates that foreign companies hold on average 6.1% of the shares in a company. This average is close to the average of Al-Sartawi (2018), which report a mean value foreign ownership of 0.04 on the GCC listed companies, even though his analysis was based only between 2015-2017 which is a different period from this research. National governance quality (country-level governance) has a mean value of 0.328, and median of 0.306, with a minimum and maximum of around -0.093 and 1.09, respectively. This implies that national

governance quality (government effectiveness, regulatory quality, and rule of law) on average is 32.8% in the GCC.

As for control variables, the firm size has a mean value of 16.8, with a minimum of 9.57 and a maximum of 24.28. This finding is close to the finding of the firm size of 17.4, as found by (Orazalin and Akhmetzhanov, 2019) on the Kazakhstan listed companies. The table also presents the mean value leverage of 0.203, with a minimum of 0.00 and a maximum of 1.664. This average is lower than the average obtained by Al-Sartawi, (2018) of 0.628. However, our mean value of leverage is higher than the mean value 0.087 obtained by Habbash and Alghamd, (2017) on Saudi Arabia listed companies which is a small part of our study' sample. The firms' growth has a mean value of 0.041, with a minimum of -0.936 and a maximum of 0.962. This mean value is similar to the mean value (0.406) of (Xing et al., 2019), on Chinese listed companies. The prospective firm's growth presented by MTB has a mean value of 1.94, with a min of -4.79 and a max of 36.63. Finally, the profitability of the company presented by return on assets (ROA) has a mean value of 0.058 with a minimum and maximum of around -0.775 and 0.396, respectively. This mean value is lower than the mean value (0.069) in Habbash and Alghamd, (2017) on Saudi Arabia listed companies.

Table 4.1: Descriptive Statistics of the GCC Firms

Variable	Obs	Mean	Median	Min	Max	Std. Dev.	Skewness	Kurtosis
AEM	2782	0.065	0.44	0.000	0.958	0.070	3.326	24.184
ACQ	2761	0.083	0	0	1	0.272	3.022	10.133
EAUDQ	2782	0.663	1	0	1	0.472	-0.690	1.476
INSTOWN	2782	0.198	0.059	0	0.999	0.264	1.319	3.755
STOWN	2780	0.054	0	0	0.937	0.133	3.405	15.181
FOWN	2782	0.061	0	0	0.996	0.150	3.283	14.761
NGQ	2782	0.328	0.306	-0.093	1.09	0.307	0.663	2.660
FSIZE	2782	16.837	17.352	9.565	24.275	3.523	-0.068	1.886
LEV	2780	0.203	0.164	0	1.664	0.194	1.213	5.757
GROW	2768	0.041	0.021	-0.936	0.962	0.153	0.799	11.717
MTB	2340	1.942	1.462	-4.786	36.626	1.987	5.996	76.865
ROA	2782	0.058	0.054	-0.775	0.396	0.090	-1.410	14.012

Where: ABS_DACct-1 = absolute value accruals earnings management in year t-1. ACQ= acquisition a dummy variable taking the value of 1, if it is an acquiring firm and 0 otherwise. EAUDQ-1= audit quality measured 1 if Big4 Auditing firms audits the company, and 0 otherwise in year t-1. INSTOWN-1=

institutional ownership measured through the proportion of total shares held by institutions. STOWN-1= state ownership measured through the proportion of total shares held by the government in year t-1. FOWN-1= foreign ownership measured through the proportion of total shares held by foreign investors in year t-1. NGQ-1= national governance quality in year t-1 measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE-1= the firm's size captured as the natural logarithm of total assets in year t-1. LEV-1= leverage ratio measured through the ratio of total debt to total assets in year t-1. GROW-1= growth ratio measured through the change of sale over total assets in year t-1. MTB-1= prospective firm's growth through the market to book value in year t-1. ROA-1 = firm's profitability captured through net income over total assets in year t-1.

4.2.2. Regression Diagnostics of The GCC Companies

The histogram and Q-Q plot donate the normality of the residual of accruals earnings management by using the Modified Jones model. As indicated in figure 4.1 and figure 4.2, the residuals of accruals earnings management are normally distributed. Second, heteroscedasticity issues ought to be checked for an appropriate model due to it leads to bias in estimating the variances of the estimated coefficients (Gujarati 2011). For checking heteroscedasticity, this study employed the Modified Wald test in fixed effect model. The result of the Modified Wald test suggests a significance level of 0.000 as presented below. This implies that there is heteroscedasticity in the data, therefore this study must run robust standard errors to fix this issue. Finally, the pair-wise correlation matrix and the collinearity diagnostics explained by the variance inflation coefficients (VIF) are shown in table 4.3 below. It is noted that there is no multi-collinearity between the independent variables as correlation coefficients are lower than 0.80, and all these variables have a VIF value less than 10.

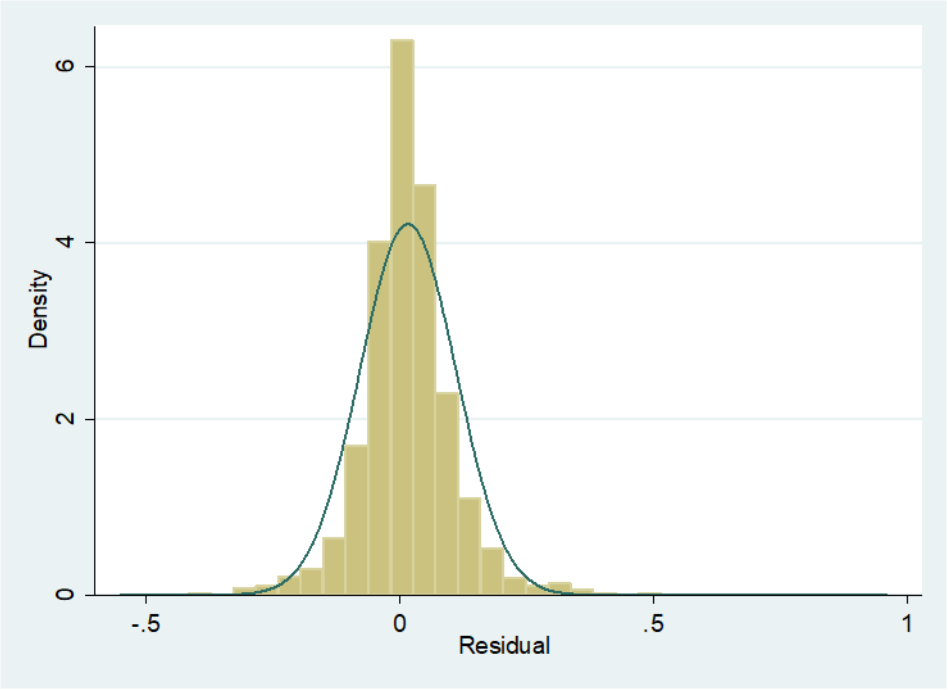


Figure 4.1: Histogram

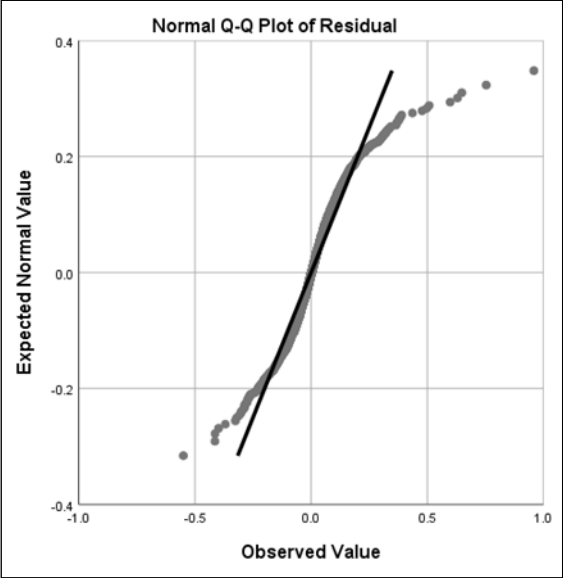


Figure 4.2:Q-Q Plot

Table 4.2: Modified Wald test for group wise heteroskedasticity in fixed effect regression model

Chi2 (293)	8.4e+31
Prob>chi2	0.0000
Heteroskedasticity	Yes
<i>It is noticed that there is heteroscedasticity in the data, therefore this study must run a robust regression to fix for this issue.</i>	

Table 4.3 below shows the pair-wise correlation matrix and the collinearity diagnostics explained by the variance inflation coefficients (VIF). It is noted that state ownership and institutional ownership have significant negative correlations with accruals earnings management at 1% and 5%, respectively. Similarly, firm size as a control variable is negatively and significantly related to accruals earnings management at 1%. While growth and market value as control variables have significant positive correlations with accruals earnings management at 1%. These findings are consistent with previous research that finds a negative association between ownership structure and earnings management, suggesting that ownership structure mitigates earnings management (Kusumaningtyas et al., 2019; Sakaki et al., 2017; and Ding et al., 2007). Also, all the independent variables have correlation coefficients lower than 0.80, Therefore, this analysis will not face any of the multicollinearity problems as correlation coefficients are lower than 0.80, as suggested by (Wooldridge 2010). Furthermore, the Variance Inflation Factors (VIF) for the variables to test for multicollinearity was estimated in the last column of Table 4.3. There is no evidence that the independent variables face multi-collinearity problems due all these variables have a VIF value less than 10, as suggested by econometrics literature (e.g., (Shafer, 2015); and Alghamdi and Ali, (2012)), which would point that multicollinearity issue is not present in the empirical estimates.

Table 4.3: Pair-wise correlation coefficients and variance inflation factor coefficients of The GCC sample

		ABS_DACC	ACQ	EAUDQ	INSTOWN	STOWN	FOWN	NGQ	FSIZE	LEV	GROW	MTB	ROA	VIF
ABS_DACC (AEM)	Corr	1												
	Sig.													
ACQ	Corr	0.012	1											1.04
	Sig.	(0.535)												
EAUDQ	Corr	-0.026	0.085***	1										1.23
	Sig.	(0.176)	(0.000)											
INSTOWN	Corr	-0.046**	0.016	-0.045**	1									1.14
	Sig.	(0.016)	(0.412)	(0.018)										
STOWN	Corr	-0.071***	0.042**	0.057***	-0.053***	1								1.06
	Sig.	(0.000)	(0.028)	(0.003)	(0.006)									
FOWN	Corr	-0.018	0.137***	0.084***	0.200***	0.108***	1							
	Sig.	(0.354)	(0.000)	(0.000)	(0.000)	(0.000)								1.12
NGQ	Corr	-0.028	0.028	0.278***	0.023	0.107***	0.140***	1						
	Sig.	(0.143)	(0.142)	(0.000)	(0.230)	(0.000)	(0.000)							1.84
FSIZE	Corr	-0.056***	0.100***	0.367***	0.212***	0.165***	0.199***	0.658***	1					
	Sig.	(0.003)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)						2.29
LEV	Corr	-0.025	0.005	0.103***	0.031*	-0.016	0.114***	0.023	0.090***	1				
	Sig.	(0.186)	(0.772)	(0.000)	(0.104)	(0.402)	(0.000)	(0.221)	(0.000)					1.16
GROW	Corr	0.112***	0.029	0.046**	-0.046**	-0.042**	-0.018	-0.005	-0.004	-0.019	1			
	Sig.	(0.000)	(0.127)	(0.016)	(0.015)	(0.027)	(0.346)	(0.800)	(0.850)	(0.313)				1.06
MTB	Corr	0.066***	-0.013	-0.070***	-0.071***	-0.024	-0.042**	-0.177***	-0.325***	-0.087***	0.139***	1		
	Sig.	(0.001)	(0.527)	(0.001)	(0.001)	(0.255)	(0.043)	(0.000)	(0.000)	(0.000)	(0.000)			1.21
ROA	Corr	0.030	0.003	0.039**	-0.031*	0.043**	-0.001	-0.050***	-0.055***	-0.294***	0.193***	0.177***	1	
	Sig.	(0.111)	(0.866)	(0.039)	(0.103)	(0.023)	(0.973)	(0.008)	(0.004)	(0.000)	(0.000)	(0.000)		1.19
***. Correlation is significant at the 0.01 level														
**. Correlation is significant at the 0.05 level														
*. Correlation is significant at the 0.10 level														

4.3. Regression Results of The GCC Companies

Table 4.4 below provides the robust results of the effect of acquisition, external audit quality, institutional ownership, state ownership, foreign ownership as firm-level, and national governance quality as country-level in the GCC listed companies on accruals earnings management. As mentioned in the Methodology Chapter, this study uses absolute accruals earnings management as the aim of this study to investigate the magnitude of accruals earnings management, not the direction (income-increasing and income-decreasing) of accruals earnings management.

To identify a suitable model for this research, some statistical issues ought to be considered. For examining whether the panel or pooled model is the most suitable model, the Breusch-Pagan test is applied for the first regression. Gujarati (2011) suggest that panel data is a more appropriate approach than the pooled method if the F-value in the Breusch-Pagan test is lower than 0.05. As the Breusch-Pagan test detected that the F-value was significant at the 0.00 level for the model, the panel data model is the more suitable approach for the first regression. Panel data could be analysed using fixed effects or random effects. The tool used to identify which type of effect is most appropriate is by applying the Hausman test (Hausman 1978). If the null hypothesis of the Hausman test is rejected, the model is a fixed effect. Otherwise, the model would be a random effect. As the result of the Hausman test in the model was very significant at the 0.000 level, the fixed-effect model will be adopted in research regressions.

Table 4.4 shows the value of R² for the first regression model is 0.036. Despite the relative low explanation power, there are some factors to statistically influence the AEM. The “rho” indicates that 42% of the variance is due to the differences across panels.

Table 4.4: The Robust Regression Results of the relationship between acquisition and CG mechanisms on AEM in the GCC Companies.

ABS_DACC		Fixed Effect	Random Effect	Random Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
ACQ	Coef	0.009*	0.005	0.008*	0.003	0.008
	P-value	(0.096)	(0.276)	(0.089)	(0.570)	(0.126)
EAUDQ	Coef	0.003	-0.001	0.000	-0.003	-0.000
	P-value	(0.760)	(0.707)	(0.923)	(0.257)	(0.898)
INSTOWN	Coef	-0.022*	-0.011*	-0.012*	-0.006	-0.010*
	P-value	(0.073)	(0.106)	(0.085)	(0.234)	(0.080)
STOWN	Coef	-0.041*	-0.031***	-0.015	-0.025***	-0.007
	P-value	(0.079)	(0.002)	(0.134)	(0.001)	(0.326)
FOWN	Coef	-0.012	0.000	0.000	0.006	0.005
	P-value	(0.363)	(0.980)	(0.990)	(0.522)	(0.572)
NGQ	Coef	-0.034***	-0.004	-0.036***	0.005	-0.036***
	P-value	(0.007)	(0.529)	(0.002)	(0.258)	(0.001)
FSIZE	Coef	-0.009	-0.000	-0.006***	-0.000	-0.006***
	P-value	(0.211)	(0.580)	(0.000)	(0.116)	(0.000)
LEV	Coef	0.015	-0.002	0.014	-0.003	0.016**
	P-value	(0.454)	(0.769)	(0.226)	(0.657)	(0.057)
GROW	Coef	0.044***	0.046***	0.040***	0.044***	0.037*
	P-value	(0.005)	(0.001)	(0.006)	(0.002)	(0.010)
MTB	Coef	0.000	0.001	0.001	0.001**	0.001**
	P-value	(0.614)	(0.095)	(0.117)	(0.018)	(0.027)
ROA	Coef	0.043	0.010	0.018	-0.014	0.001
	P-value	(0.147)	(0.622)	(0.425)	(0.396)	(0.933)
Country dummy		No	No	Yes	No	Yes
Industry dummy		No	No	Yes	No	Yes
number of observations		2310	2310	2310	2310	2310
R-squared		0.036	0.026	0.033	0.021	0.066
Rho		0.42				
F statistic (11, 2018)		5.10			3.90	5.52
Wald chi2(11)			36.12	1088.29		
Prob>F/ Prob>chi2(11)		0.000	0.002	0.000	0.000	0.000

Where: The Bold Model is the main model of the results explanations. Model (1)= the robust results of the fixed effect regression, Model (2)= the robust results of the random effect regression without country and industry dummies, Model (3)= the robust results of the random effect regression with country and industry dummies, Model (4)= the robust results of the OLS regression without country and industry dummies, Model (5)= the robust results of the OLS regression with country and industry dummies, Where: ABS_DACC= absolute value accruals earnings management in year t-1. ACQ= acquisition a dummy variable taking the value of 1, if it is an acquiring firm and 0 otherwise in year t. EAUDQ= audit quality measured 1 if Big4 Auditing firms audits the company, and 0 otherwise in year t-1. INSTOWN= institutional ownership measured through the proportion of total shares held by institutions in year t-1. STOWN= state ownership measured through the proportion of total shares held by the government in year t-1. FOWN= foreign ownership measured through the proportion of total shares held by foreign investors in year t-1. NGQ= national governance quality in year t-

1 measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through the ratio of total debt to total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= prospective firm's growth through the market.

4.3.1. Impact of Acquisition on Accruals Earnings Management in The GCC Listed Companies

According to Model 1 in Table 4.4 above, the acquisition variable has a statistically significant positive association with accruals earnings management, implying there is an association between acquisition and level of accruals earnings management before acquisition (H1a). This finding supports the agency theory suggestion (as noted by Erickson and Wang, 1999, and documented by Gong et al., 2008) that acquirers engage in earnings management before the acquisition motivations to boost their company's stock price before acquisition so that they can influence the exchange ratio. The result seen in Table 4.4 in GCC listed companies is in line with findings reported from studies investigating developed markets ((Tutuncu, 2019); Alsharairi, 2015); (Lehmann, 2016); (Karim et al., 2016); (Kassamany et al., 2017); (Louis 2004); and (Erickson and Wang 1999)). It is also in line Lennox et al. (2018) study who investigated accrual earnings management in Chinese market, a developing country. This result therefore can help shareholders in non-acquiring companies, to be aware of the consequences of earnings management used by managers. It is also can help target companies to be aware of the consequences of earnings management employed before the acquisition by acquiring companies. One of the main consequences is that acquiring companies experience underperformance after acquisition (Louis, 2004). This is attributable to earnings management masking the genuine information of the company (Parfet, 2000).²

²The coefficient of acquisition is statistically significant and positive in all the models reported in Table 4.4.

4.3.2. Impact of Firm-Level Governance Mechanisms on Accruals Earnings Management in The GCC Listed Companies

As can be seen from Model1 in Table 4.4 above, external audit quality has a statistically insignificant association with accruals earnings management. This result does not support the second hypothesis, suggesting that there is an association between companies audited by Big4 auditing firms and the level of accruals earnings management before acquisition.

It also does not support the agency theory argument, independent auditing firms as corporate governance mechanisms is a key factor in reducing agency problems through a statutory audit performed (Jensen and Meckling, 1976a). A possible explanation for the insignificant effect of Big 4 auditing firms in accrual earnings management lies in the variation of strength of rule of law (Bradbury et al., 2006, Maijoor and Vanstraelen, 2006); and (McMeeking et al., 2007), as law's effectiveness is the main determinant for efficiency of auditing companies (Krishansing Boolaky, 2011). Furthermore, Big 4 auditing firms do not have a right to stop opportunistic behaviour by managers (Kouaib and Jarboui, 2014b) and therefore they are less effective in influencing companies engaging in accruals earnings management. The insignificance effect reported for GCC listed companies in this study is in line with the insignificant result reported for other developing countries. Concretely, (Orazalin and Akhmetzhanov, 2019)'s study on Kazakhstan, (Habbash and Alghamdi, 2017)'s study on Saudi Arabia, and (Kouaib and Jarboui, 2014b)'s study on Tunisia. Based on this result, GCC companies should be conscious that Big4 auditing firms cannot mitigate the engagement in earnings management. The GCC companies could employ local auditing firms who seek to build credibility in the local markets and, thus, will provide a high audit quality with low audit fees.

The Institutional ownership variable in Table 4.4 has a statistically significant negative association with accruals earnings management, indicating that there is an association between companies with institutional ownership and level of accruals earnings management before acquisition. (H3a). This finding supports the agency theory perspective, Agency problems in companies are closely associated with the quality of corporate governance mechanisms. Institutional owners as one of the main corporate governance mechanisms tend to monitor managers' behavior to mitigate agency

problems. Institutional ownership has more expertise as they have access to resources, specialised knowledge and extensive research that is not available to other type of investors. Thus, institutional ownership could monitor managers at a lower level of cost than other shareholders. In addition, the controlling process taken by institutional ownership could drive managers to concentrate more on the firm performance; therefore, it may mitigate opportunistic managers (Arouri et al., 2014). Moreover, being long-term shareholders (Dalwai et al. 2015), institutional owners are more committed to monitoring managers' behaviour. The negative effect seen in Table 4.4 in GCC listed companies supports the findings reported from studies investigating developed countries ((Pound 1988), (Sakaki et al. 2017), (Kusumaningtyas Metta et al., 2019)). It is also in line with findings from studies analysing GCC such as Hessayri, and Saihi (2015) who test the effect of IFRS and ownership structure on earnings management. The author recommends that institutional ownership is an efficient tool in restraining engaging in accruals earnings management, as institutional ownership companies have more expertise and reasonable access to resources, which qualify them to obtain suitable information at a lower level of cost and therefore monitoring managers' opportunistic behaviour and mitigate engaging in earnings management (Arouri et al., 2014).

The state ownership variable in Table 4.4 has a statistically significant negative association with accruals earnings management, suggesting that there is an association between companies with state ownership and level of accruals earnings management before acquisition. (H4a). This finding supports the argument, state owners pay attention to political benefits and employment more than maximizing profits (Shleifer and Vishny, 1994). State owners often give advantages to the companies such as credit liquidity, thus there is less needed to engage in accruals earnings management. Moreover, State owners seek to build credibility in international markets (Eljelly, 2009). The negative effect seen in Table 4.4 in GCC listed companies supports the findings reported from studies investigating developing countries-China such as (Wang et al. 2011); (Ding et al., 2007) (Charumilind et al., 2006). This result can help policymakers to increase the percentage of state ownership or invest in state companies as state owned companies having easy ways

to access resources and having the aim of maintaining social stability rather than generating profit (Li and Zhang, 2010).³

The fourth and last firm level governance variable, foreign ownership has a statistically insignificant association with accruals earnings management. This finding does not support the researcher's fifth hypothesis (H5a) which argues there is an association between companies with foreign ownership and level of accruals earnings management before acquisition. This finding does not support the agency theory argument, according to which, large foreign shareholders actively monitor managers and likely alleviate a free-ride problem, thus reducing agency costs (Shleifer and Vishny, 1986). The explanation behind this result is that foreign ownership has different characteristics (i.e., culture, and religion) making them unable to monitor accurately (Dvorak, 2005). This result is consistent with Maswadeh (2018-Jordan), Guo and Shiguang (2015-China), Ji et al. (2015-China). This result can help policymakers in the GCC as they have been attracting more foreign investors. foreign ownership is observed to be an inefficient mechanism in mitigating engagement in both accruals and real earnings management.

Overall, the findings in Table 4.4 shows that only two firm-level governance mechanisms: institutional ownership and state ownership are influential in reducing the engagement in accruals earnings management in GCC listed companies.

4.3.3. Impact of National Governance Quality (Country-Level) on Accruals Earnings Management in The GCC Listed Companies

Governance generally refers to the way authority is exercised, including the respect for the institutions organizing the economies and social interactions among people and the governing bodies (Al-Marhubi, 2004, Zahra, 2014). Country specific regulations and systems constitute the framework within which companies operate. Consequently, governmental efficiency, regulations quality, and empowerment of laws are found to affect company's activities and outcomes (Aguilera and Jackson, 2003, Baldini et al., 2018,

³The coefficient of state ownership is negative in all the models reported in Table 4.4. However, it is significant in few of them.

Ioannou and Serafeim, 2012) argue that the legitimacy of governance practices is derived from the degree of law and order in the society, the cultural view of competitiveness, and the extent to which corruption is embraced within a nation.

Countries apply legal rules and regulations to maintain shareholders' interests from corporate insiders undertaking activities that would benefit themselves or other stakeholders instead of the shareholders (Aguilera and Jackson, 2003). Thus, in countries with higher-quality governance, where laws and regulations protect shareholders' interests effectively, company management has incentives to address the interests of shareholders (Aguilera and Jackson, 2003, Ioannou and Serafeim, 2012). Mateescu, (2015) argues that companies operating in countries with higher rule of law, government effectiveness, and regulatory quality are more likely to be compliant with national governance codes and disclose more information. Also, companies operating in countries with higher levels of corruption are less likely to improve corporate disclosure and audit quality (Ioannou and Serafeim, 2012, Baldini et al., 2018).

Table 4.4 above shows a highly statically significant negative relationship between national governance quality and accruals earnings management practices of the GCC companies, suggesting that there is an association between companies with high national governance and level of accruals earnings management before acquisition (H6a). The result supports the institutional theory argument, earnings management motivations are influenced through the strength of formal (legal rules). Countries with strong investor protection are probably more engaged in ethical corporate practices as they respond to local institutional pressures an effort to achieve greater market share or to reduce transactions (Lourenço, 2018). Consistent with this argument, the level of investor protection (rule of law) reduces reporting manipulation of companies as strong investor protection mitigates the ability of management to acquire private benefits of control at the expense of investors (Leuz et al., 2003a). This finding supports the prior studies' findings of Elkalla, (2017); (Lang et al., 2006); and (Dyreng et al., 2012) who found that that companies running their business in countries with a strong legal environment have a lower level of engagement in accruals earnings management. Based on this national governance quality is found to be an efficient tool in restraining engagement in accrual earnings management.

However, national governance quality in each country in the GCC region is not in the same level or close to each other, for example, a high national governance quality was in the UAE, and Qatar, but the lowest national governance quality was in Saudi Arabia, Therefore, the highest level of this the engagement in accruals earnings management in Saudi Arabia. This result could help policymakers in the GCC to review and improve the national governance quality factors in Saudi Arabia, Kuwait, Oman and Bahrain to mitigate the engagement in accruals earnings management.⁴

In terms of control variables, the growth represented by the change in net sale over total assets is noted to have a positive and high significant relationship with accruals earnings management. This is consistent with Chan et al., (2006); Alzoubi (2016); González and García-Meca (2014); Lobo and Zhou (2006); and Abdul Rahman and Ali, (2006). High growth companies tend to engage more in earnings management to mitigate fluctuations in earnings as such fluctuations deliver negative signals to participants in the market. However, Table 4.4 shows that the relationships between the rest of control variables (firm size, leverage, market to book value, ROA) and accruals earnings management are insignificant.

⁴The negative trend of the association between accruals earnings management and national governance quality is consistent in all the models reported in Table 4.4. In addition, it is significant in all models except GLS and OLS model without country and industry dummies.

Table 4.5: Findings' Summary of the GCC Companies

Hypotheses	Expected Signs	Results	Theory	Prior Studies
H1a: There is an association between acquisition and level of accruals earnings management before acquisition.	+/-	+	Agency theory	Alsharairi,(2015); Lehmann, (2016);Karim et al., (2016);Kassamany et al., (2017);Louis (2004); and Erickson; Wang (1999); Tutuncu, (2019); and Lennox et al., (2018)
H2a: There is an association between companies audited by Big4 auditing firms and level of accruals earnings management before acquisition.	+/-	Insignificant	Agency theory	(Alzoubi, 2018);(Chen et al., 2011); (Lin and Hwang, 2010); (Charles et al., 2010); and (Chen et al., 2005)
H3a: There is an association between companies with institutional ownership and level of accruals earnings management before acquisition.	+/-	-	Agency theory	Pound (1988),Sakaki et al. (2017), Kusumaningtyas Metta et al., (2019), Hessayri, and Saihi (2015), (Arouri et al., 2014),
H4a: There is an association between companies with state ownership and level of accruals earnings management before acquisition.	+/-	-	Agency theory	Wang et al. (2011),Ding et al. (2007), and Charumilind et al. (2006)
H5a: There is an association between companies with foreign ownership and level of accruals earnings management before acquisition.	+/-	Insignificant	Agency theory	Alzoubi (2016), Lel (2013), (Jeon et al., 2011);(Choi and Hasan, 2005); Bonin et al. (2005)
H6a: There is an association between companies with high national governance and level of accruals earnings management before acquisition.	+/-	-	Institutional theory	(Lang et al., 2006), and (Dyrenge et al., 2012)

4.4. Additional descriptive statistics and Analysis

4.4.1. Descriptive Statistics of accruals earnings management and national governance quality level in the GCC

National quality governance plays a crucial role in the stability, liquidity, and efficiency of the stock market of any country. With the persistence of global financial scandals involving high profile corporations, investors' sensitivity to the operations of companies has heightened on the one hand. On the other hand, investors now probe more into country governance quality as opposed to corporate governance policies. This is against the backdrop that companies do not operate in a vacuum; rather, they are affected by the governance systems of their host environments (Boadi and Amegbe, 2017). The efficiency of the quality governance framework at the company level is dependent on the overall structure and quality of country-level governance systems in force in the environment of operations of such companies. Governance systems connote the institutional arrangements that regulate the markets. The evolvement of economies in the Gulf Cooperation Council (GCC) countries have increased steadily in the last few decades. This growth is, in part, attributed to the development of their stock markets. For example, the MSCI GCC countries index rose from -43.59% in 2006 to 16.71% (MSCI, 2018). This is, however, not without some downward trends in between.

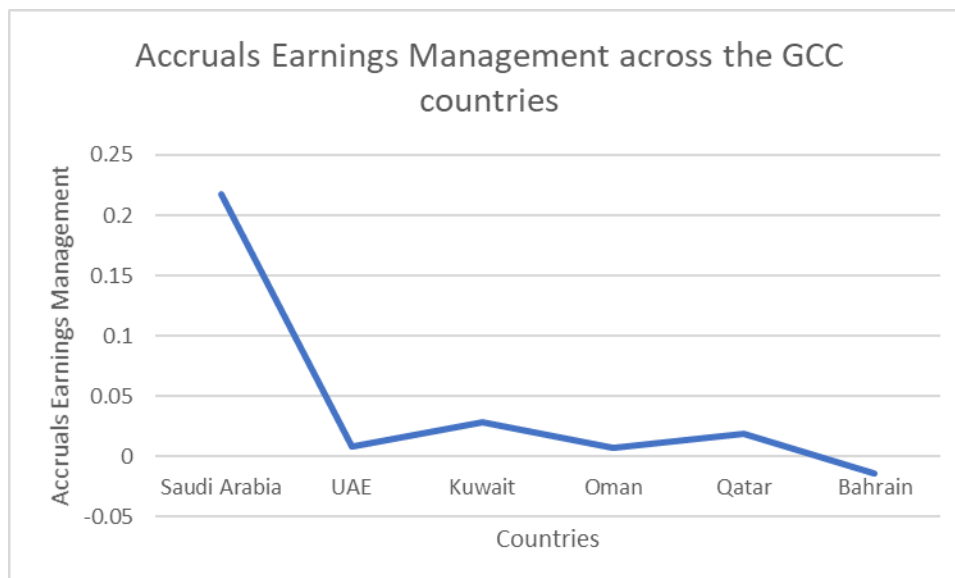


Figure 4.3: Accruals earning management across the GCC countries

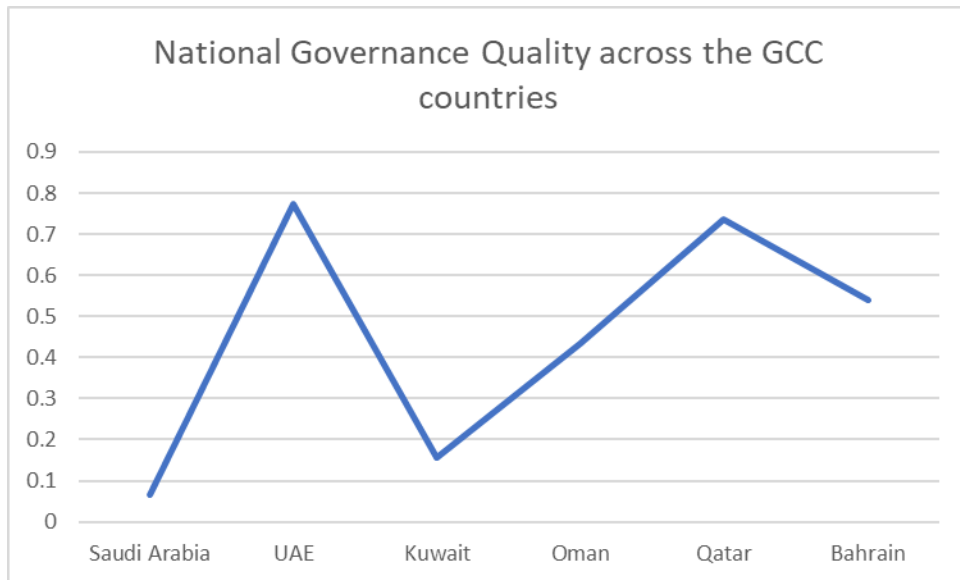


Figure 4.4: National government quality across the GCC countries

As it was indicated in the result in figure 4.3 that the highest engagement in accruals earning management across the GCC is in Saudi Arabia, whereas the lowest engagement in accruals earning management is in UAE, and Bahrain. This is due to the that the lowest national governance quality across the GCC is in Saudi Arabia, whereas the highest national governance quality is in UAE and Qatar (see figure 4.4). This result supports the argument of the World Bank, (2016) that the UAE, and Qatar have a relatively better-developed governance system compared to other countries in the same region. Likewise, figure (4.4) presents that national governance quality in Bahrain and Oman is high, and it mitigates the engagement in accruals earnings management. Although national governance quality in Kuwait is not high, it affects the engagement in accruals earnings management. This implies that that the legal and regulatory systems are efficient mechanisms in mitigating the engagement in earnings management (Leuz et al., 2003a). It is strongly recommended that policy makers concentrate on developing the national governance system to mitigate firms' engagement in accruals earnings management.

4.4.1.1. Descriptive Statistics of accruals earnings management and national governance quality level for the period from 2007-2017 in the GCC

Figure 4.5 shows the highest engagement in accruals earnings management is in year 2009. It can be argued that periods of economic downturn (financial crisis 2008-2009) should be associated with higher level of earnings management (Kumar and Vij, 2017). However, in year 2010, the engagement in accruals earnings management in the GCC was in the lowest level. This is due to Qatar, Kuwait, and Bahrain followed Oman, UAE, and Saudi Arabia for applying corporate governance regulations. Furthermore, year 2017 experienced the highest level of national governance quality (government effectiveness, regulatory quality, and rule of law), therefore, the engagement in accruals earnings management went to a very low level. This asserts that the GCC Companies have been developing corporate governance regulations which play an important role in mitigating earnings management and increase investor protection. It is strongly recommended that policy makers continue in developing the national governance system to mitigate firm's engagement in accruals earnings management.



Figure 4.5: Accruals earnings management across years

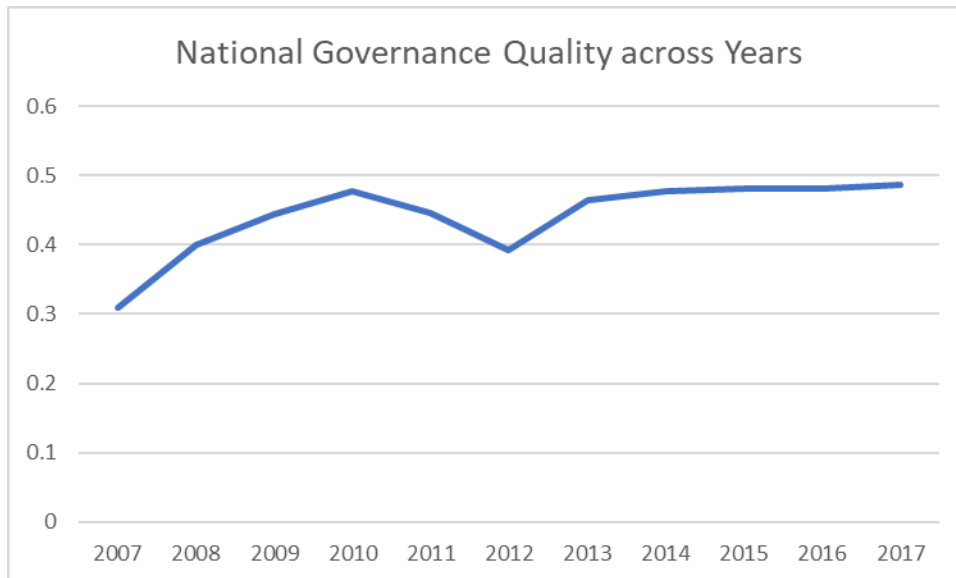


Figure 4.6: National government quality across years

4.4.2. Additional Analysis

4.4.2.1. *Income increasing vs income decreasing accruals earnings management*

The main results in Table 4.4 use the absolute value of accruals earnings management to capture the combined impact of positive and negative accruals earnings management (Gul et al., 2009). To enhance the strengths of the main results, in this section I present the results when using signed accruals earnings management instead of absolute accruals earnings management. The signed accruals earnings management is divided into two groups namely, income-increasing, and income-decreasing. This procedure follows the vast empirical studies Tutuncu, (2019); Lennox et al., (2018); Kassamany et al., (2017); Lehmann, (2016); Karim et al., (2016); Alsharairi, (2015); (García-Meca and Sánchez-Ballesta, 2009); Louis (2004); and Erickson and Wang (1999). The final sample of the income-increasing group is 1303 observations and 281 companies, and the income-decreasing group is 1007 observations and 272 companies.

First, as seen in (model 3) table 4.6, the acquisition has a significant and positive association with income-increasing accruals earnings management. This implies that managers in acquiring companies engage in accruals earnings management by the end of the financial year through income-increasing when they involve in a higher level of

acquisition. This is consistent with the prior studies not based in the GCC such as Tutuncu, (2019); Lennox et al., (2018); Kassamany et al., (2017); Lehmann, (2016); Karim et al., (2016); Alsharairi, (2015); Louis (2004); and Erickson and Wang (1999), that found that acquiring companies engage in earnings management pre-acquisition through income-increasing, since managers seek to increase the opportunity of the company to attract more investors from the market. Thereby, an impression of confidence and a low level of risk could be generated among investors towards financing the company (Spence, 1973). Based on the findings of this research, policymakers, existing and potential investors in the GCC region should consider the findings from this research when they take their decision regarding the acquisition, as the acquisition deals seem to have a direct effect in increasing accruals earnings management. Second, external audit quality, institutional ownership, state ownership, and foreign ownership as firm-level and national governance quality as country-level have an insignificant association with income-increasing accruals earnings management. Consequently, policymakers in the GCC region should be aware that firm level and country level governance do not mitigate income-increasing accruals earnings management due to asymmetric information.

With the control variables, table 4.6 shows a significance and negative relationship between firm size and income-increasing accruals earnings management practices in the GCC companies. This implies that the higher firm size, the lower the engagement in income-increasing earnings management. This is consistent with Bozec and Laurin (2008), and Watts and Zimmerman (1990), who suggest that large companies reduce earnings due to higher tax payments associated with higher reported earnings. It is also consistent with Klein (2002) and Xie et al. (2003), who argue that large companies mitigate engaging in earnings management due to improved monitoring and control set in these companies.

However, ROA has a significant and positive relationship with income-increasing accruals earnings management practices of the GCC companies. This is consistent with Gunny (2010), who found that companies with high profitability intend to engage more in accruals earnings management to provide a signal regarding positive firm performance. Vo and Chu (2019) also found that return on assets has a positive relation with accruals earnings management to attract more foreign investors to the Vietnam market. The growth

represented by the change in net sale over total assets is noted to have a positive and high significant relationship with income-increasing accruals earnings management. This is consistence with Chan et al., (2006); Alzoubi (2016); González and García-Meca (2014); Lobo and Zhou (2006); and Abdul Rahman and Ali, (2006) who argue that high growth companies tend to engage in earnings management to mitigate fluctuations in earnings as such fluctuations deliver negative signals to participants in the market. Leverage is noted to have a positive and high significant relationship with income-increasing accruals earnings management to boost negotiation power by decreasing creditors' perceived risks (Watts and Zimmerman 1986).

Table 4.6: Regression Results of the effect of acquisition, firm-level, and country-level on income-increasing accruals earnings management in the GCC listed companies.

DACC (income-increasing)		Fixed Effect	Random Effect	Random Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
ACQ	Coef	0.013*	0.010	0.011*	0.009	0.012*
	P-value	(0.071)	(0.218)	(0.079)	(0.188)	(0.079)
EAUDQ	Coef	0.006	0.002	0.005	0.001	0.005
	P-value	(0.566)	(0.702)	(0.288)	(0.686)	(0.222)
INSTOWN	Coef	-0.016	-0.004	-0.009	0.000	-0.007
	P-value	(0.214)	(0.624)	(0.285)	(0.994)	(0.331)
STOWN	Coef	-0.026	-0.036**	-0.014	-0.039***	-0.011
	P-value	(0.399)	(0.028)	(0.412)	(0.007)	(0.437)
FOWN	Coef	-0.018	-0.018	-0.009	-0.014	-0.002
	P-value	(0.428)	(0.232)	(0.546)	(0.302)	(0.854)
NGQ	Coef	-0.015	-0.007	-0.022	-0.003	-0.029*
	P-value	(0.343)	(0.455)	(0.129)	(0.690)	(0.063)
FSIZE	Coef	-0.008	-0.000	-0.007***	-0.000	-0.008***
	P-value	(0.250)	(0.722)	(0.000)	(0.591)	(0.000)
LEV	Coef	0.069***	0.019	0.042***	0.013	0.040***
	P-value	(0.006)	(0.138)	(0.002)	(0.242)	(0.001)
GROW	Coef	0.057***	0.067***	0.064***	0.074***	0.068***
	P-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
MTB	Coef	0.000	0.000	0.000	0.000	0.000
	P-value	(0.716)	(0.511)	(0.726)	(0.456)	(0.770)
ROA	Coef	0.083**	0.036	0.051*	0.009	0.031
	P-value	(0.020)	(0.201)	(0.079)	(0.737)	(0.265)
Country dummy		No	No	Yes	No	Yes

DACC (income-increasing)	Fixed Effect	Random Effect	Random Effect	OLS	OLS
	(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
Industry dummy	No	No	Yes	No	Yes
number of observations	1303	1303	1303	1303	1303
R-squared	0.040	0.034	0.038	0.036	0.088
F statistic	3.89			4.47	4.67
Wald chi2(11)		47.38	90.17		
Prob>F/ Prob>chi2(11)	0.000	0.000	0.000	0.000	0.000

Where: The Bold Model is the main model of the results explanations. Model (1)= the results of the random effect regression with country and industry dummies, Model (2)= the results of the random effect regression without country and industry dummies, Model (3)= the results of the fixed effect regression, Model (4)= the results of the OLS regression without country and industry dummies, Model (5)= the results of the OLS regression with country and industry dummies, DACC= signed income increasing values accruals earnings management in year t-1 measured by using the Modified Jones Model. ACQ= acquisition a dummy variable taking the value of 1, if it is an acquiring firm and 0 otherwise in year t. EAUDQ= audit quality measured 1 if Big4 Auditing firms audits the company, and 0 otherwise in year t-1. INSTOWN= institutional ownership measured through the proportion of total shares held by institutions in year t-1. STOWN= state ownership measured through the proportion of total shares held by the government in year t-1. FOWN= foreign ownership measured through the proportion of total shares held by foreign investors in year t-1. NGQ= national governance quality in year t-1 measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through the ratio of total debt to total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= prospective firm's growth through the market to book value in year t-1. ROA= firm's profitability captured through net income over total assets in year t-1. * Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.

In terms of the income-decreasing group, Model 1 in table 4.7 shows acquisition, external audit quality (Big 4), state ownership, and foreign ownership have an insignificant association with income-decreasing accruals earnings management. However, institutional ownership as a firm-level governance mechanism has a significant and negative association with income-decreasing accruals earnings management. This negative association could be due to institutional ownership are sophisticated investors who look beyond current earnings in assessing firm value (Arouri et al., 2014). In addition, national governance quality at the country level is observed to have a significant and negative association with income-decreasing accruals earnings management. This implies that managers in acquiring companies engage less in accruals earnings management through income-decreasing when they have a higher quality of national governance. The possible justification behind this

result can be due to countries with a high national governance quality reducing reporting manipulation of companies as strong investor protection mitigates the ability of management to acquire private benefits of control at the expense of investors (Leuz et al., 2003). The results offer strong evidence that managers do not engage in accruals earnings management through income-decreasing due to pressure from institutional ownership and national governance quality. However, they engage in accruals earnings management through income-increasing, therefore, policymakers should be aware and improve firm-level and country-level governance mechanisms to mitigate the engagement through income-increasing.

Table 4.7: Regression Results of the effect of acquisition, firm-level, and country-level on income-decreasing accruals earnings management in the GCC listed companies.

ABS_DACC (income decreasing)*(-1) ¹		Fixed Effect	Random Effect	Random Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
ACQ	Coef	-0.001	-0.005	-0.001	-0.007	-0.001
	P-value	(0.848)	(0.395)	(0.807)	(0.294)	(0.769)
EAUDQ	Coef	-0.008	-0.006	-0.005	-0.010**	-0.007
	P-value	(0.560)	(0.162)	(0.272)	(0.016)	(0.115)
INSTOWN	Coef	-0.025*	-0.011	-0.007	-0.010	-0.006
	P-value	(0.063)	(0.133)	(0.365)	(0.153)	(0.421)
STOWN	Coef	-0.030	-0.014	-0.004	-0.009	0.001
	P-value	(0.188)	(0.270)	(0.748)	(0.428)	(0.917)
FOWN	Coef	-0.007	0.020*	0.010	0.028**	0.014
	P-value	(0.678)	(0.094)	(0.386)	(0.016)	(0.211)
NGQ	Coef	-0.037**	0.012	-0.036***	0.019**	-0.034**
	P-value	(0.014)	(0.131)	(0.008)	(0.011)	(0.014)
FSIZE	Coef	-0.004	-0.000	-0.003**	-0.001	-0.003***
	P-value	(0.587)	(0.441)	(0.031)	(0.154)	(0.007)
LEV	Coef	-0.067***	-0.036***	-0.026**	-0.030***	-0.021**
	P-value	(0.005)	(0.002)	(0.030)	(0.005)	(0.059)
GROW	Coef	0.000	0.004	-0.004	0.008	-0.004
	P-value	(0.960)	(0.690)	(0.700)	(0.473)	(0.737)
MTB	Coef	0.001	0.002*	0.002*	0.002**	0.002**
	P-value	(0.395)	(0.086)	(0.090)	(0.038)	(0.043)
ROA	Coef	-0.020	-0.029	-0.024	-0.033*	-0.023
	P-value	(0.486)	(0.151)	(0.250)	(0.098)	(0.257)
Country dummy		No	No	Yes	No	Yes
Industry dummy		No	No	Yes	No	Yes
number of observations		1007	1007	1007	1007	1007

ABS_DACC (income decreasing)*(-1) ¹	Fixed Effect	Random Effect	Random Effect	OLS	OLS
	(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
R-squared	0.039	0.008	0.028	0.039	0.11
F statistic	2.73			3.73	4.81
Wald chi2(11)		27.11	97.72		
Prob>F/ Prob>chi2(11)	0.001	0.001	0.000	0.000	0.000

Where: The Bold Model is the main model of the results explanations. Model (1)= the results of the fixed effect, Model (2)= the results of the random effect regression without country and industry dummies, Model (3)= regression the results of the random effect regression with country and industry dummies, Model (4)= the results of the OLS regression without country and industry dummies, Model (5)= the results of the OLS regression with country and industry dummies, DACC= signed income decreasing values accruals earnings management in year t-1 measured by using the Modified Jones Model. ACQ= acquisition a dummy variable taking the value of 1, if it is an acquiring firm and 0 otherwise in year t. EAUDQ= audit quality measured 1 if Big4 Auditing firms audits the company, and 0 otherwise in year t-1. INSTOWN= institutional ownership measured through the proportion of total shares held by institutions in year t-1. STOWN= state ownership measured through the proportion of total shares held by the government in year t-1. FOWN= foreign ownership measured through the proportion of total shares held by foreign investors in year t-1. NGQ= national governance quality in year t-1 measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through the ratio of total debt to total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= prospective firm's growth through the market to book value in year t-1. ROA= firm's profitability captured through net income over total assets in year t-1. Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level. 1= income-decreasing accruals earnings management is multiplied by (-1) to understand the results easily

In summary, the acquisition is observed to have a positive association with income-increasing accruals earnings management. Institutional ownership as a firm-level governance mechanism and national governance quality as a country-level mechanism is observed to have negative associations with income-decreasing accruals earnings management. Regarding control variables, there is a statistically significant negative relationship between firm size and income-increasing accruals earnings management practices in the GCC companies. ROA and growth have statistically significant positive relationships with income-increasing accruals earnings management in the GCC companies. Leverage is noted to have a positive and high significant relationship with income-increasing accruals earnings management and a significant negative relationship with income-decreasing.

4.2.2.2. Country based analysis:

This section aims to investigate the factors influencing accruals earnings management in each country of the GCC. These factors are acquisition, external audit quality, institutional ownership, state ownership, and foreign ownership as part of firm-level governance mechanisms, and country-level mechanisms. Table 4.8 shows the acquisition variable has a statistically significant positive association with accruals earnings management in Saudi Arabia, implying Saudi Arabia listed acquiring companies engage in a higher level of accruals earnings management than the Saudi Arabia non-acquiring companies. This is attributed to the national governance quality level being the lowest among the GCC countries (see figure 4.4). This result is in the line with the main results in table 4.4. This implies that the engagement in accruals earnings management by Saudi Arabia listed acquiring companies play an important role in the main result as Saudi Arabia represents 40% of the sample. The result seen in Table 4.4 in GCC listed companies is in line with findings reported from studies investigating developed markets (Tutuncu, 2019, Alsharairi et al., 2015, Lehmann, 2016a, Karim et al., 2016b, Kassamany et al., 2017b, Louis, 2004); and (Erickson and Wang, 1999). It is also in line with Lennox et al. (2018) study who investigated accrual earnings management in the Chinese market, a developing country. This result therefore can help shareholders in non-acquiring companies in Saudi Arabia, to be aware of the consequences of earnings management used by managers. It is also can help target companies in Saudi Arabia or across countries to be aware of the consequences of earnings management employed before the acquisition by Saudi Arabia listed acquiring companies.

External audit quality (Big 4) as firm-level governance mitigates the engagement in accruals earnings management in Oman country. This could be that Oman is the first country in the GCC to apply corporate governance, therefore Big 4 auditing firms in Oman country have more experience derived from their human resources which allows them to create higher quality audits (Alhadab, 2018). This result is consistent with, (Chen et al., 2011), and (Alhadab, 2018) from developing countries. In contrast, External audit quality (Big 4) as firm-level governance increases the engagement in accruals earnings management in Bahrain country. It could be that the Big 4 auditing firms in Bahrain do not

have a right to stop opportunistic behaviour by managers (Kouaib and Jarboui, 2014b) and, therefore, they are less effective in influencing companies engaging in accruals earnings management. This result is in the line with (Habbash and Alghamdi, 2017), and (Kouaib and Jarboui, 2014b). The policymakers and users of financial statements should be aware that accruals earnings management is employed by Bahraini companies even national governance quality is high compared to other countries in the GCC, calling for extra caution when auditing or analysing the financial information.

In terms of ownership structure as firm-level governance, institutional ownership is an efficient tool in mitigating the engagement in accruals earnings management in Saudi Arabia, whereas institutional ownership increases the engagement in accruals earnings management in Qatar. The study attributes this result to the lack of adequate expertise of the institutional ownership of Qatar companies operating in developing markets. This result can help regulators to concentrate on attraction expertise of the institutional ownership as they monitor managers' behaviours which mitigates the engagement in accruals earnings management.

Despite Qatar having a high national governance quality level, state ownership increases the engagement in accruals earnings management. This result is inconsistent with the main result which found that state ownership mitigates accruals earnings management. A possible explanation is that state-owned companies in Qatar engage in accruals earnings management to hide the expropriation of company resources for political aims. This result is consistent with (Nguyen, Nguyen, & Doan, 2020), and. Boghdady (2019). Investors in state-owned companies should be aware of the engagement in accruals earnings management when they use financial reports.

The fourth and last firm-level governance variable, foreign ownership has a statistically insignificant association with accruals earnings management in all the GCC countries. This result supports the main result in table 4.4. The explanation behind this result is that foreign ownership has different characteristics (i.e. culture, and religion) making them unable to monitor accurately (Dvorak, 2005). Similar to this research result, Maswadeh (2018-Jordan), Guo and Shiguang (2015-China), Ji et al. (2015-China). This result can help policymakers in the GCC as they have been attracting more foreign investors. foreign

ownership is observed to be an inefficient mechanism in mitigating engagement in both accruals and real earnings management. As foreign ownership has different characteristics (i.e., culture, and religion), it results in them being unable to monitor accurately (Dvorak, 2005).

In relation to national governance quality as country-level mechanisms, Table 4.8 shows that UAE, Qatar, and Bahrain among the GCC countries mitigate the engagement in accruals earnings management. This is due to the highest three levels of national governance quality are in UAE, Qatar, and Bahrain (see figure 4.4). This implies that the legal and regulatory systems are efficient mechanisms in mitigating the engagement in earnings management (Leuz et al., 2003). In contrast, the national governance quality level in Kuwait increases the engagement in accruals earnings management. This is attributed to the national governance quality in Kuwait being too low compared with UAE, Qatar, and Bahrain. It is strongly recommended that policymakers concentrate on developing the national governance system in Kuwait to mitigate firms' engagement in accruals earnings management.

In terms of control variables, Firm size mitigates accruals earnings management in Saudi Arabia, Kuwait, Qatar, and Bahrain. This is consistent with prior studies such as Lennox (1999), Klein (2002), Xie et al. (2003), and Abdul Rahman and Ali (2006) argue that the company size is associated negatively with earnings management as the large companies take care regarding their reputation and have more sources. However, leverage as a control variable increases accruals earnings management in Saudi Arabia, Qatar, Bahrain. This is in the line with Rusmin et al., (2014); Teshima and Shuto, (2008); (Mather and Ramsay, (2006); and Gu et al., 2005) who found that managers engage in earnings management to present the current and future flows of the company and that companies can meet their obligations efficiently.

Table 4.8: The effect of firm level and country level on accruals earnings management in each country of the GCC

ABS_DACC		Saudi Arabia	UAE	Kuwait	Oman	Qatar	Bahrain
		(Pooled)	(Pooled)	(Pooled)	(Pooled)	(Pooled)	(Pooled)
ACQ	Coef	0.016*	0.005	0.000	0.005	-0.018	-0.027
	P-value	(0.101)	(0.695)	(0.965)	(0.744)	(0.285)	(0.405)
EAUDQ	Coef	0.006	0.009	-0.009	-0.018*	0.047	0.077***
	P-value	(0.386)	(0.683)	(0.411)	(0.088)	(0.179)	(0.003)
INSTOWN	Coef	-0.029**	0.016	0.011	0.002	0.049**	0.018
	P-value	(0.043)	(0.396)	(0.460)	(0.870)	(0.033)	(0.528)
STOWN	Coef	0.008	-0.023	0.064	0.019	0.076*	0.058
	P-value	(0.724)	(0.464)	(0.412)	(0.482)	(0.095)	(0.230)
FOWN	Coef	0.001	-0.026	0.009	0.020	-0.029	-0.048
	P-value	(0.964)	(0.357)	(0.791)	(0.376)	(0.656)	(0.335)
NGQ	Coef	-0.035	-0.068***	0.054**	0.024	-0.156***	-0.268*
	P-value	(0.137)	(0.000)	(0.033)	(0.636)	(0.000)	(0.085)
FSIZE	Coef	-0.005**	-0.000	-0.008**	0.000	-0.009*	-0.091***
	P-value	(0.046)	(0.859)	(0.030)	(0.873)	(0.068)	(0.000)
LEV	Coef	0.046**	0.007	0.014	-0.009	0.064*	0.197**
	P-value	(0.024)	(0.808)	(0.674)	(0.668)	(0.082)	(0.040)
GROW	Coef	-0.021	-0.019	0.001	-0.002	0.042	-0.004
	P-value	(0.311)	(0.540)	(0.937)	(0.890)	(0.321)	(0.939)
MTB	Coef	-0.000	-0.000	0.002	0.002	0.006	-0.026
	P-value	(0.610)	(0.993)	(0.510)	(0.458)	(0.191)	(0.141)
ROA	Coef	0.029	-0.006	0.029	-0.022	0.442***	0.262
	P-value	(0.417)	(0.882)	(0.529)	(0.682)	(0.000)	(0.262)
Country dummy		No	No	No	No	No	No
Industry dummy		No	No	No	No	No	No
number of observations		965	350	326	390	179	100
R-squared		0.09	0.06	0.05	0.04	0.23	0.28
F statistic		8.63	2.17	1.79	1.60	4.74	3.71
Prob>F		0.000	0.015	0.054	0.097	0.000	0.001

Where: ABS_DACC= absolute value accruals earnings management in year t-1. ACQ= acquisition a dummy variable taking the value of 1, if it is an acquiring firm and 0 otherwise in year t. EAUDQ= audit quality measured 1 if Big4 Auditing firms audits the company, and 0 otherwise in year t-1. INSTOWN= institutional ownership measured through the proportion of total shares held by institutions in year t-1. STOWN= state ownership measured through the proportion of total shares held by the government in year t-1. FOWN= foreign ownership measured through the proportion of total shares held by foreign investors in year t-1. NGQ= national governance quality in year t-1 measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through the ratio of total debt to total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= prospective firm's growth through the market to book value in year t-1. ROA= firm's profitability captured through net income over total assets in year t-1. Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.*

Table 4.8 shows that ROA is insignificant in all the GCC except Qatar. ROA increases the engagement in accruals earnings management in Qatar. This result is in the line with González and García-Meca (2014); and Jo and Kim (2007) who found a higher firm's profitability, a higher engagement in earnings management due to managers seeking to increase the opportunity of the company to obtain capital financing from the market. In terms of Growth and market-to-book value, they are insignificant in all the GCC countries.

4.5. Robustness Check

In the key analysis reported in Table 4.4, this study used the modified Jones model to estimate discretionary accruals earnings management. In this section, I use Kothari et al.'s (2005) model as an alternative estimator of discretionary accruals, i.e., a proxy for absolute accruals earnings management.

The robustness test results in table 4.9 extend the evidence that the main result of this research is robust and consistent with various alternative signed accruals earnings management.

Table 4.9: The Robust Regression Results of the relationship between acquisition and CG mechanisms on signed AEM in the GCC Companies.

Signed_DACC		Fixed Effect	Random Effect	Random Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
ACQ	Coef	0.017**	0.012*	0.012*	0.009	0.009
	P-value	(0.021)	(0.062)	(0.076)	(0.155)	(0.170)
EAUDQ	Coef	0.019**	0.003	0.006	0.002	0.005
	P-value	(0.044)	(0.512)	(0.277)	(0.535)	(0.218)
INSTOWN	Coef	-0.001	-0.002	-0.004	-0.003	-0.006
	P-value	(0.929)	(0.821)	(0.618)	(0.669)	(0.403)
STOWN	Coef	0.023	-0.029***	-0.014	-0.038***	-0.021*
	P-value	(0.401)	(0.007)	(0.262)	(0.000)	(0.064)
FOWN	Coef	-0.002	-0.026*	-0.018	-0.030**	-0.019
	P-value	(0.880)	(0.056)	(0.173)	(0.014)	(0.116)
NGQ	Coef	-0.036**	-0.030***	-0.036**	-0.030***	-0.036**
	P-value	(0.024)	(0.000)	(0.014)	(0.000)	(0.011)
FSIZE	Coef	-0.006	0.000	-0.002	0.000	-0.002*
	P-value	(0.460)	(0.779)	(0.121)	(0.567)	(0.10)
LEV	Coef	0.120***	0.056***	0.069***	0.048***	0.061***
	P-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)

Signed_DACC		Fixed Effect	Random Effect	Random Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
GROW	Coef	0.093***	0.087***	0.086***	0.079***	0.081***
	P-value	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)
MTB	Coef	-0.001	-0.001	-0.002	-0.002*	-0.002**
	P-value	(0.503)	(0.199)	(0.167)	(0.051)	(0.038)
ROA	Coef	0.173***	0.113***	0.114***	0.095***	0.095***
	P-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Country dummy		No	No	Yes	No	Yes
Industry dummy		No	No	Yes	No	Yes
number of observations		2310	2310	2310	2310	2310
R-squared		0.062	0.055	0.058	0.051	0.070
F statistic (11, 2018)		5.45			10.43	7.45
Wald chi2(11)			74.98	1177.15		
Prob>F/ Prob>chi2(11)		0.000	0.000	0.000	0.000	0.000

The Bold Model is the main model of the results explanations. Where: Model (1)= the robust results of the fixed effect regression, Model (2)= the robust results of the random effect regression without country and industry dummies, Model (3)= the robust results of the random effect regression with country and industry dummies, Model (4)= the robust results of the OLS regression without country and industry dummies, Model (5)= the robust results of the OLS regression with country and industry dummies, Signed_DACC represents the signed value accruals earnings management before transforming to absolute value in year t-1. ACQ= acquisition a dummy variable taking the value of 1, if it is an acquiring firm and 0 otherwise in year t. EAUDQ= audit quality measured 1 if Big4 Auditing firms audits the company, and 0 otherwise in year t-1. INSTOWN= institutional ownership measured through the proportion of total shares held by institutions in year t-1. STOWN= state ownership measured through the proportion of total shares held by the government in year t-1. FOWN= foreign ownership measured through the proportion of total shares held by foreign investors in year t-1. NGQ= national governance quality in year t-1 measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through the ratio of total debt to total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= prospective firm's growth through the market to book value in year t-1. ROA= firm's profitability captured through net income over total assets in year t-1. * Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.

The robustness test results in table 4.10 extend the evidence that the main result of this research is robust and consistent with various alternative Kothari et al.'s (2005) model. Even though the values of coefficients and significance level were different, the trend of the association between accruals earnings management and acquisition, external audit quality, institutional ownership, state ownership, foreign ownership as firm-level governance mechanism, and national governance quality as country-level mechanism stay similar by Kothari et al.'s (2005) model as an alternative estimator of discretionary accruals.

Table 4.10: The Robust Regression Results of the relationship between acquisition and CG mechanisms on AEM in the GCC Companies by Kothari model as an alternative test

ABS_DACC		Fixed Effect	Random Effect	Random Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
ACQ	Coef	0.008	0.006	0.009*	0.003	0.009
	P-value	(0.113)	(0.223)	(0.062)	(0.460)	(0.084)
EAUDQ	Coef	0.002	-0.001	0.000	-0.002	-0.000
	P-value	(0.822)	(0.793)	(0.882)	(0.420)	(0.966)
INSTOWN	Coef	-0.024**	-0.011*	-0.012*	-0.007	-0.010*
	P-value	(0.043)	(0.085)	(0.069)	(0.175)	(0.066)
STOWN	Coef	-0.021	-0.031***	-0.019**	-0.031***	-0.018
	P-value	(0.279)	(0.001)	(0.022)	(0.000)	(0.013)
FOWN	Coef	-0.006	-0.000	-0.000	0.002	0.001
	P-value	(0.643)	(0.966)	(0.949)	(0.784)	(0.884)
NGQ	Coef	-0.026**	-0.002	-0.028**	0.004	-0.028***
	P-value	(0.036)	(0.659)	(0.014)	(0.334)	(0.006)
FSIZE	Coef	-0.010	-0.000	-0.005***	-0.000	-0.005***
	P-value	(0.144)	(0.497)	(0.000)	(0.164)	(0.000)
LEV	Coef	0.021	0.000	0.018	-0.000	0.018**
	P-value	(0.304)	(0.932)	(0.126)	(0.944)	(0.028)
GROW	Coef	0.050***	0.052***	0.048***	0.051***	0.047***
	P-value	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)
MTB	Coef	0.000	0.001	0.001	0.001**	0.001**
	P-value	(0.749)	(0.185)	(0.181)	(0.083)	(0.069)
ROA	Coef	0.051	0.016	0.021	-0.006	0.002
	P-value	(0.080)	(0.416)	(0.291)	(0.705)	(0.885)
Country dummy		No	No	Yes	No	Yes
Industry dummy		No	No	Yes	No	Yes
number of observations		2310	2310	2310	2310	2310
R-squared		0.036	0.028	0.034	0.026	0.056
F statistic (11, 2018)		4.87			4.42	6.22
Wald chi2(11)			39.62	91.47		
Prob>F/ Prob>chi2(11)		0.000	0.000	0.000	0.000	0.000

The Bold Model is the main model of the results explanations. Where: Model (1)= the robust results of the fixed effect regression, Model (2)= the robust results of the random effect regression without country and industry dummies, Model (3)= the robust results of the random effect regression with country and industry dummies, Model (4)= the robust results of the OLS regression without country and industry dummies, Model (5)= the robust results of the OLS regression with country and industry dummies, ABS_DACC represents absolute value accruals earnings management in year t-1 measured by using Korari Model. ACQ= acquisition a dummy variable taking the value of 1,

ABS_DACC	Fixed Effect	Random Effect	Random Effect	OLS	OLS
	(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
<i>if it is an acquiring firm and 0 otherwise in year t. EAUDQ= audit quality measured 1 if Big4 Auditing firms audits the company, and 0 otherwise in year t-1. INSTOWN= institutional ownership measured through the proportion of total shares held by institutions in year t-1. STOWN= state ownership measured through the proportion of total shares held by the government in year t-1. FOWN= foreign ownership measured through the proportion of total shares held by foreign investors in year t-1. NGQ= national governance quality in year t-1 measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through the ratio of total debt to total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= prospective firm's growth through the market to book value in year t-1. ROA= firm's profitability captured through net income over total assets in year t-1. * Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.</i>					

4.6. Summary

This chapter examines the effect of acquisition, external audit quality, institutional ownership, state ownership, foreign ownership, and national governance quality on accruals earnings management in GCC listed companies. The results in this Chapter provide evidence that the GCC listed companies engage in accruals earnings management with the mean value of 0.065, as indicated in table 4.1. In addition, the highest engagement in accruals earnings management across the GCC is in Saudi Arabia, whereas the lowest engagement in accruals earnings management is in UAE, and Qatar. This is due to that the lowest national governance quality across the GCC is in Saudi Arabia, whereas the highest national governance quality is in UAE, and Qatar. It is noted that acquiring companies engage more in accruals earnings management than non-acquiring companies. Acquiring companies engage in accruals earnings management through income increasing rather than income decreasing. External audit quality is observed to be an inefficient mechanism in mitigating engaging in accruals earnings management. In terms of ownership structure, institutional ownership and state ownership are obtained to be an efficient tool in restraining engaging in accruals earnings management, while foreign ownership is observed to be an inefficient mechanism in mitigating engaging in accruals earnings management. Finally, national governance quality is obtained to be an efficient tool in restraining engaging in accruals earnings management.

Based on the findings of this research, policymakers, existing and potential investors in the GCC region should consider the findings from this research when they take their decision regarding the acquisition, as the acquisition deals seem to have a direct effect in increasing accruals earnings management. Furthermore, the author recommends that institutional and state ownership are important firm level governance, as they influence GCC firms to engage less in accruals earnings management.

In terms of National governance quality, it is strongly recommended that policy makers concentrate on developing the national governance system to mitigate firm's engagement in accruals earnings management.

CHAPTER 5

THE FACTORS INFLUENCING REAL EARNINGS MANAGEMENT (ACQUISITION, FIRM-LEVEL GOVERNANCE, AND COUNTRY-LEVEL GOVERNANCE) IN THE GCC

5.1. Introduction

Corporate governance and the investors protection environment are considered key mechanisms in mitigating earnings management (Cohen et al. 2008). In the GCC, the investor protection environment is described as weak compared to developed countries (World Bank, 2017). It is expected that the lack of efficient corporate governance and weak investor protection lead to higher engagement in accrual and real earnings management. Empirical studies (Al-Haddad and Whittington, 2019); Elkalla, (2017); (Chen et al., 2012); and Kuo et al. (2012) on developing countries report that companies use real earnings management and accruals earnings management simultaneously, whereas in developed markets (Ge and Kim, (2013); and Zang, (2012)) companies only engaged in one type of earnings management techniques: real earnings management technique. Real earnings management is difficult to be detected by auditors as it occurs during the financial year whereas accruals earnings management occurs at the end of the financial year and therefore becomes more easily to be detected by auditors (Graham et al. (2005). Real earnings management can be achieved by engaging in three legal activities: (1) sales discounts to increase sales, (2) expenses reduction to increase income, and (3) overproduction to reduce cost of goods sold.

Based on the discussion above, this Chapter investigates whether GCC companies use accruals and real earnings managements simultaneously as complements or as substitutes. The accruals earnings management is used as an independent variable in the real earnings management regression as suggested by (Piosik and Genge, 2019); (Al-Haddad and Whittington, 2019); Elkalla, (2017); (Chen et al., 2012); and Kuo et al. (2012). The justification of including accruals earnings management in the regression

is that accrual earnings management affects real earnings management (Matsuura,2008). The acquisition variable; firm-level governance variable (external audit quality, institutional ownership, state ownership, and foreign ownership); and country-level governance level (national governance quality) are used as independent variables to explore whether they affect the engagement in real earnings management among GCC listed companies. By investigating these factors on real earnings management, this study is the first study to examine this relation within the GCC context.

This study estimates real earnings management (REM) through estimating abnormal discretionary expenses (ADE), abnormal cash flows from operations (ACFO); and abnormal production costs (APC) by using Roychowdhury model (2006), followed by combining these three estimators to capture the total effect of real earnings management as suggested by (Cohen et al., 2008); (Cohen and Zarowin, 2010); (Zang, 2012); (Sani et al., 2018).

The chapter starts with the summary statistics of the variables in section 5.2, followed by a discussion of the model findings in section 5.3. Section 5.4 presents and discusses further analysis on real earnings management. Section 5.5 presents and discusses the results of further robustness tests the same independent variables that used in the main model of real earnings management. The dependent variable is the three estimators of real earnings management (ADE, ACFO, and APC) without combining them as the main regression, but each estimator is as dependent variable to capture the effect of these three estimators as suggested by (Al-Haddad and Whittington, 2019); Elkalla, (2017); (Chen et al., 2012); and Kuo et al. (2012). In addition, this study tests when interacting accruals earnings management with acquisition variable, firm-level governance variable as robustness. Finally, the conclusion of this chapter will be presented in section 5.6.

5.2. Summary Statistics of the GCC Companies

The sample for this analysis consists of GCC listed companies between 2007-2017. Section 5.2.1 presents and discusses the descriptive statistics of all the variables employed in this research. In Section 5.2.2. there is discussion of the diagnostic tests: normality test and heteroscedasticity test. In this section, I also discuss the pair-wise correlation matrix and the collinearity diagnostic test. Section 5.2.3 presents and discusses the results from the Hausman-fixed effects model applied to the GCC sample.

5.2.1. Descriptive Statistics of the GCC Companies:

Based on the availability of data, the sample in this Chapter consists of 239 companies (1892 firm-year observations) for the financial year 2007-2017 and it is slightly smaller than the sample in Chapter 4 (308 companies (3210 firm-year observations) for the same period.

Table 5.1 states the mean, median, standard deviation, minimum, maximum, skewness, and kurtosis of the variables employed in the research. The table states the total real earnings management ($REM_{APC-ACFO-ADE}$), from a minimum of -0.394 to a maximum of 1.493 with a mean and median of 0.022 and 0.46, respectively. The average REM (-0.088) presented by Elkalla, (2017) on GCC listed companies is lower than the average of REM of 0.022 presented in this research results due to the difference in the time horizon (1996-2014) examined. (Al-Haddad and Whittington, 2019b) which investigated Jordan listed companies reported an average REM of 0.0000 suggesting that Jordanian listed companies do not engage in real earnings management. As for the independent variables, the average of signed accruals earnings management is 0.016 lower than real earnings management 0.022, which indicates that the GCC listed companies engage more in real earnings management on average than in accrual earnings management. The acquisition measured as a dummy variable has a mean value of 0.077 and median of 0. This indicates that only 7.7% of the firms in the sample were involved in acquisition. The quality of external audit was

measured by a dummy variable, taking a value of 1 if Big4 Auditing firms audits the company, and 0 otherwise. It is found to have a mean value, and median of 0.670, and 1 respectively, suggesting that 67% of firms in the sample were audited by Big 4 auditors. The average of the external audit quality presented by (Alhadab and Clacher, 2018) is found to be 0.466 of the UK listed companies, which is lower than the average of the external audit quality of 0.670 presented in this research results. The higher average value in Big 4 variable suggests that companies in developing countries like GCC are more likely to be audited by Big 4 firms than the companies in developed countries like the UK. The mean value of the institutional ownership of the listed companies is 0.186 with a median of 0.05, a minimum of 0 and a maximum of 0.997. The mean value of 0.186 indicates that institutions on average holds 18.6% of the shares in firms in the sample. The 0.186 is lower than the average value (0.394) reported by (Al-Haddad and Whittington, 2019b) for Jordanian listed companies. The state ownership has a mean value 0.058, a median of 0.058 and a minimum value of 0.00 and a maximum value of 0.937. The mean value of 0.058 is much higher than the mean value of the state ownership of 0.04, as found by Mellado and Saona, (2019) on the Latin America listed companies. The foreign ownership mean value is 0.063 with a median of 0, a minimum value of 0.00 and a maximum value of 0.996, with a standard deviation of 0.152. The average value 0.063 is lower than the average value (0.172) reported in of (Al-Haddad and Whittington, 2019b) for Jordanian listed companies, suggesting that foreign investors hold a lower ownership percentage in the GGC companies than in Jordanian companies. National governance quality (country-level) has a mean value of 0.319 with a median of 0.263, a minimum and maximum of around -0.093 and 1.09, respectively.

As for control variables, the firm size has a mean value of 16.5, with a minimum of 9.57 and a maximum of 24.28. This finding is lower than the finding of the firm size of 19.3, as found by (Kang and Kim, 2012) on the Korean listed companies. The table also presents the mean value leverage of 0.204, with a minimum of 0.00 and a maximum of 1.664. This average is lower than the average obtained by (Al-Haddad and Whittington, 2019b) of 0.338. The firms' growth has a mean value of 0.043, with a

minimum of -0.936 and a maximum of 0.962. This mean value is similar to the mean value of (El Diri et al., 2020), as they found a mean value firm growth of 0.563 on the USA markets. The prospective firm's growth presented by MTB has a mean value of 2.00, with a min of -4.786 and a max of 32.59. This average is half of the average found by (El Diri et al., 2020), as they found a mean value MTB of 4.0 on the concentrated markets. Finally, the profitability of the company presented by return on assets (ROA) has a mean value of 0.061 with a minimum and maximum of around -0.775 and 0.396, respectively. This mean value is much higher than the mean value 0.035 reported by Mellado and Saona, (2019) on the Latin America listed companies.

Table 5.1: Descriptive Statistics of the GCC Firms

Variable	Obs	Mean	Median	Min	Max	Std. Dev.	Skewness	Kurtosis
(REM_{APC-ACFO-ADE})	2263	0.022	0.46	-.394	1.493	0.281	-0.447	8.022
AEM	2289	0.016	0.011	-0.414	0.753	0.91	0.648	11.020
ACQ	2264	0.077	0	0	1	0.267	3.165	11.020
EAUDQ	2246	0.670	1	0	1	0.469	-0.727	1.529
INSTOWN	2264	0.186	0.05	0	0.997	0.258	1.368	3.911
STOWN	2262	0.058	0	0	0.937	0.147	3.261	14.154
FOWN	2264	0.063	0	0	0.996	0.152	3.259	14.618
NGQ	2264	0.319	0.263	-0.093	1.09	0.307	0.739	2.777
FSIZE	2264	16.471	16.706	9.565	24.275	3.478	0.083	1.879
LEV	2262	0.204	0.160	0	1.664	0.195	1.237	6.023
GROW	2254	0.043	0.025	-0.936	0.962	0.157	0.793	11.263
MTB	1918	2.009	1.543	-4.786	32.59	1.941	4.690	48.911
ROA	2264	0.061	0.057	-0.775	0.396	0.089	-0.995	11.896

Where: $(REM_{APC-ACFO-ADE})$ = abnormal production costs, the aggregate inverse of abnormal cash flows from operations and the aggregate inverse of abnormal discretionary expenses in year $t-1$, AEM= accruals earnings management in year $t-1$. ACQ= acquisition a dummy variable taking the value of 1, if it is an acquiring firm and 0 otherwise in year t . EAUDQ= audit quality measured 1 if Big4 Auditing firms audits the company, and 0 otherwise in year $t-1$. INSTOWN= institutional ownership measured through the proportion of total shares held by institutions in year $t-1$. STOWN= state ownership measured through the proportion of total shares held by the government in year $t-1$. FOWN= foreign ownership measured through the proportion of total shares held by foreign investors in year $t-1$. NGQ= national governance quality in year $t-1$ measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE= the firm's size captured as the natural logarithm of total assets in year $t-1$. LEV= leverage ratio measured through the ratio of total debt to total assets in year $t-1$. GROW= growth ratio measured through the change of sale over total assets in year t . MTB= prospective firm's growth through the market to book value in year $t-1$. ROA = firm's profitability captured through net income over total assets in year $t-1$.

5.2.2. Regression Diagnostics of The GCC Companies

The histogram and Q-Q plot donate the normality of the total of real earnings management by using by (Zang, 2012). As indicated in figure 5.1 and figure 5.2, the total of real earnings management is normally distributed. Second, heteroscedasticity issues ought to be checked for an appropriate model due to it leads to bias in estimating the variances of the estimated coefficients (Gujarati 2003). For checking heteroscedasticity, this study employed the Modified Wald test in fixed effect model. The result of the Modified Wald test suggests a significance level of 0.000 as presented below. This implies that there is heteroscedasticity in the data, therefore this study must run robust standard errors to fix for this issue. Finally, the pair-wise correlation matrix and the collinearity diagnostics explained by the variance inflation coefficients (VIF) are shown in table 5.3 below.

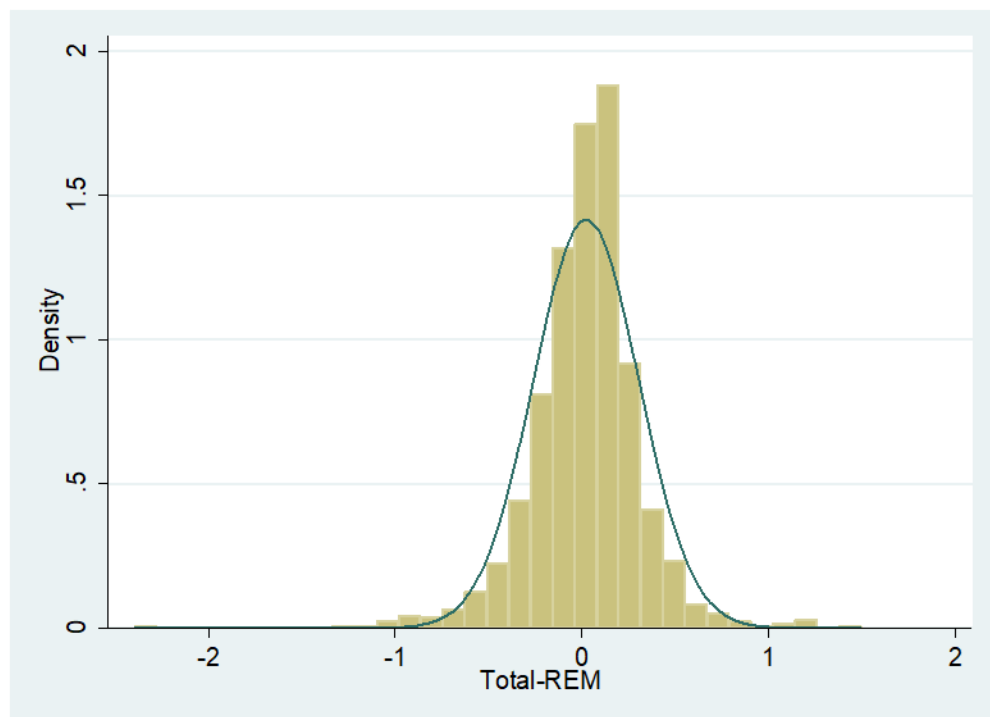


Figure 5.1: Histogram

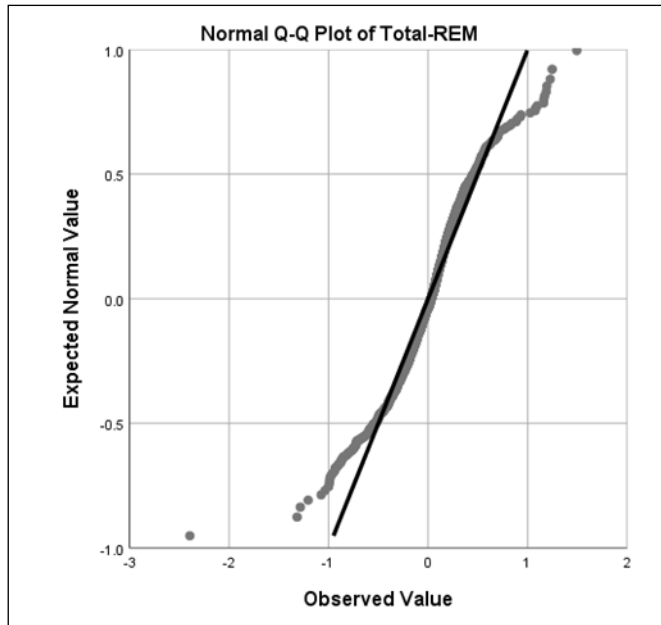


Figure 5.2: Q-Q Plot

Table 5.2: Modified Wald test for group wise heteroskedasticity in fixed effect regression model

Chi2 (239)	1.2e+05
Prob>chi2	0.0000
Heteroskedasticity	Yes
<i>It is noticed that there is heteroscedasticity in the data, therefore this study must run a robust regression to fix for this issue.</i>	

Table 5.3 below shows the pair-wise correlation matrix and the collinearity diagnostics explained by the variance inflation coefficients (VIF). Accruals earnings management and national governance quality have significant positive correlations with real earnings management at 1%. Acquisition and external audit quality have significant negative correlations with real earnings management at 10%, and 5%, respectively. State ownership, institutional ownership, and foreign ownership have significant negative correlations with real earnings management at 1%, 5%, and 10%, respectively. These findings are consistent with (Al-Haddad and Whittington, 2019b) who found a negative association between ownership structure and real earnings management. In terms of control variables, leverage and growth are positively and significantly related to real earnings management at 1%. While ROA and market value as control variables have significant negative correlations with real earnings

management at 1%. Also, all the independent variables have correlation coefficients lower than 0.80, Therefore, this analysis will not face any of the multi-collinearity problems as correlation coefficients are lower than 0.80, as suggested by (Wooldridge 2010). Furthermore, the Variance Inflation Factors (VIF) for the variables to test for multicollinearity was estimated in the last column of Table 5.3. There is no evidence that the independent variables face multi-collinearity problems due all these variables have a VIF value less than 10, as suggested by econometrics literature (e.g. (Shafer, 2015); Choi et al., (2013), Alghamdi and Ali, (2012)), which would point that multi-collinearity issue is not present in the empirical estimates.

Table 5.3: Pair-wise correlation coefficients and variance inflation factor coefficients of The GCC sample

		Total-REM	AEM	ACQ	EAUDQ	INSTOWN	STOWN	FOWN	NGQ	FSIZE	LEV	GROW	MTB	ROA	VIF
Total-REM	Corr	1													
	Sig.														
AEM	Corr	0.331***	1												1.05
	Sig.	(0.000)													
ACQ	Corr	-0.034*	0.027	1											1.04
	Sig.	(0.104)	(0.202)												
EAUDQ	Corr	-0.044**	-0.007	0.069***	1										1.22
	Sig.	(0.036)	(0.744)	(0.001)											
INSTOWN	Corr	-0.041**	-0.046**	0.032	-0.014	1									1.12
	Sig.	(0.054)	(0.029)	(0.134)	(0.507)										
STOWN	Corr	-0.102***	-0.069***	0.056***	0.067***	-0.036*	1								1.07
	Sig.	(0.000)	(0.001)	(0.007)	(0.001)	(0.091)									
FOWN	Corr	-0.035*	-0.045**	0.141***	0.105***	0.255***	0.097***	1							
	Sig.	(0.097)	(0.032)	(0.000)	(0.000)	(0.000)	(0.000)								1.17
NGQ	Corr	0.064***	-0.123***	0.017	.248***	0.071***	0.108***	0.126***	1						
	Sig.	(0.002)	(0.000)	(0.415)	(0.000)	(0.001)	(0.000)	(0.000)							1.99
FSIZE	Corr	0.006	-0.081***	0.093***	0.367***	0.212***	0.190***	0.222***	0.687***	1					
	Sig.	(0.782)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)						2.45
LEV	Corr	0.135***	0.059***	0.024	0.140***	0.031	-0.019	0.132***	0.004	0.061***	1				
	Sig.	(0.000)	(0.005)	(0.261)	(0.000)	(0.140)	(0.375)	(0.000)	(0.831)	(0.004)					1.20
GROW	Corr	0.077***	0.137***	0.016	0.035	-0.039*	-0.050**	-0.019	-0.015	-0.001	-0.026	1			
	Sig.	(0.000)	(0.000)	(0.438)	(0.096)	*0.061)	(0.018)	(0.363)	(0.488)	(0.977)	(0.212)				1.08
MTB	Corr	-0.172***	0.001	-0.015	-0.067***	-0.055**	-0.019	-0.033	-0.184***	-0.318***	-0.097***	0.144***	1		
	Sig.	(0.000)	(0.978)	(0.508)	(0.003)	(0.016)	(0.395)	(0.147)	(0.000)	(0.000)	(0.000)	(0.000)			1.21
ROA	Corr	-0.351***	0.107***	0.006	0.016	-0.037*	0.044**	-0.007	-0.065***	-0.049**	-0.320***	0.212***	0.216***	1	
	Sig.	(0.000)	(0.000)	(0.762)	(0.451)	(0.081)	(0.035)	(0.737)	(0.002)	(0.020)	(0.000)	(0.000)	(0.000)		1.24
***. Correlation is significant at the 0.01 level															
**. Correlation is significant at the 0.05 level															
*. Correlation is significant at the 0.10 level															

5.3. Potential Substitution between REM and AEM in GCC listed Companies

Table 5.4 presents the findings from the regression analysis using robust standard errors. As mentioned earlier in the introduction and in the Methodology Chapter, this study uses the aggregate real earnings management as the dependent variable. To identify a suitable regression model for this research dataset, some statistical issues ought to be considered. First, one needs to identify whether the panel or pooled model is the most appropriate model. Gujarati (2011) suggests that the panel data model is a more appropriate approach than the pooled method if the F-value in the Breusch-Pagan test is lower than 0.05. The F-value (0.029) in the Breusch-Pagan test is statistically significant with a p-value of 0.00 suggesting that the panel data model should be applied.

When analyzing panel data, one needs to decide whether fixed effects or random effects should be adopted. Selecting one type of effect over the other influences the effect of companies and time series in the regression results differently (Kim et al., 2012). Hausman test is applied to identify which type of effect is the most appropriate (Hausman 1978). If the null hypothesis of the Hausman test is rejected, the model is a fixed effect. Otherwise, the model would be a random effect. The statically significant p-value from the Hausman test shows that the fixed-effect model needs to be applied to this research. Table 5.4 shows the value of R² for the first regression model is 0.320, which is higher than the R² of 0.036 when investigating accruals earnings management in Chapter 4. The “rho” indicates that 71% of the variance is due to the differences across panels, which is higher than the “rho” of 42% when investigated accruals earnings management in Chapter 4.

Table 5.4: The Robust Regression Results of the relationship between AEM, acquisition, and CG mechanisms on REM in the GCC Companies.

Total-REM _{APC-ACFO-ADE}		Fixed Effect	Random Effect	Random Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
ACQ	Coef	-0.034*	-0.034*	-0.035*	-0.047**	-0.047**
	P-value	(0.072)	(0.073)	(0.062)	(0.023)	(0.020)
EAUDQ	Coef	-0.014	-0.013	-0.019	-0.011	-0.024**
	P-value	(0.476)	(0.402)	(0.251)	(0.281)	(0.030)
INSTOWN	Coef	-0.061*	-0.051*	-0.047	-0.049**	-0.042*
	P-value	(0.067)	(0.70)	(0.114)	(0.022)	(0.063)
STOWN	Coef	-0.104*	-0.108**	-0.104**	-0.100***	-0.074**
	P-value	(0.082)	(0.014)	(0.025)	(0.004)	(0.017)
FOWN	Coef	0.033	0.025	0.036	-0.012	0.036
	P-value	(0.392)	(0.483)	(0.333)	(0.747)	(0.296)
NGQ	Coef	-0.008	0.020	0.003	0.110***	0.015
	P-value	(0.791)	(0.531)	(0.921)	(0.000)	(0.729)
AEM	Coef	0.973***	0.986***	0.989***	1.171***	1.161***
	P-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
FSIZE	Coef	0.031	0.000	-0.001	-0.006**	-0.008**
	P-value	(0.127)	(0.842)	(0.894)	(0.012)	(0.048)
LEV	Coef	-0.028	0.006	0.009	-0.064*	-0.071*
	P-value	(0.703)	(0.897)	(0.868)	(0.052)	(0.058)
GROW	Coef	0.164***	0.165***	0.166***	0.259***	-0.261***
	P-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
MTB	Coef	-0.012***	-0.014***	-0.014***	-0.018***	-0.014***
	P-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ROA	Coef	-0.794***	-0.838***	-0.861***	-1.176***	-1.316***
	P-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Country dummy		No	No	Yes	No	Yes
Industry dummy		No	No	Yes	No	Yes
number of observations		1892	1892	1892	1892	1892
R-squared		0.320	0.317	0.317	0.317	0.401
Rho		0.71				
F statistic (12, 238)		25.95			38.94	24.97
Wald chi2(12)			355.61	531.13		
Prob>F/ Prob>chi2(11)		0.000	0.000	0.000	0.000	0.000

Where: **The Bold Model is the main model of the results explanations.** Model (1)= the robust results of the fixed effect regression of the total real earnings management, Model (2)= the robust results of the random effect regression of the total real earnings management without country and industry dummies, Model (3)= the robust results of the random effect regression of the total real earnings management with country and industry dummies, Model (4)= the robust results of the OLS regression of the total real earnings management without country and industry dummies, Model (5)= the robust results of the OLS regression of the total real earnings management with country and industry dummies, Total-REM = total real earnings management techniques of firm *l* in year *t*-1, AEM =accruals earnings management in year *t*-1. ACQ= acquisition a dummy variable taking the value of 1, if it is an acquiring firm and 0 otherwise in year *t*. EAUDQ= audit quality measured 1 if Big4 Auditing firms audits the company,

*and 0 otherwise in year t-1. INSTOWN= institutional ownership measured through the proportion of total shares held by institutions in year t-1. STOWN= state ownership measured through the proportion of total shares held by the government in year t-1. FOWN= foreign ownership measured through the proportion of total shares held by foreign investors in year t-1. NGQ= national governance quality in year t-1 measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through the ratio of total debt to total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= prospective firm's growth through the market to book value in year t-1. ROA = firm's profitability captured through net income over total assets in year t-1. * Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.*

5.3.1. Impact of Acquisition on Real Earnings Management in The GCC Listed Companies

According to Model1 in Table 5.4 above, the acquisition variable has a statistically significant negative association with real earnings management, implying the GCC acquiring companies engage less in real earnings management techniques than GCC non-acquiring companies (H2a). This negative relation can be attributed to the cost of engaging in real earnings management is higher than the cost of engaging in accruals earnings management (Zhang, 2015). In addition, the engagement in real earnings management not only negatively impacts on the current cash flow, but it negatively impacts on future cash flow (Zhang, 2015). The result seen in Table 5.4 in GCC listed companies supports the findings reported from studies investigating the effect of acquisition in the UK market ((Kassamany et al., 2017a); (Zhang 2015); and (Botsari and Meeks, 2008a)).

The primary beneficiaries of acquiring firm earnings management are shareholders of the acquiring firm, and manager-shareholders may have more at stake than other shareholders. The economic benefits to manager-shareholders from earnings management are especially significant because the stock issuance associated with a stock for stock merger dilutes management's control. In addition, managers have discretion over accounting policy, and it is reasonable to expect that the degree of discretion is positively related to the level of ownership. Therefore, (Erickson and Wang, 1999) predict that unexpected accounting accruals are positively related to the percentage of the acquiring's stock owned by management. However, this finding does not support agency theory would suggest (as noted by Erickson and Wang, 1999, and documented by Gong et al., 2008) that acquirers engage in earnings management before the acquisition motivations to boost their

company's stock price before acquisition so that they can influence the exchange ratio. Although acquisition mitigates the engagement in real earnings, it increases the engagement in accruals earnings (see chapter 4). This means the consequences of earnings management still exist around the acquisition.⁵

5.3.2. Impact of Governance Mechanisms (Firm-Level) on Real Earnings Management in The GCC Listed Companies

Governance is progressively recognized by the business community, regulators, and capital market authorities as a fundamental driver of corporate performance. The accelerated interests by the investing fraternity in the Gulf Cooperation Council (henceforth GCC) equity markets due to the myriad benefits accruing in the form of laudable trade policies, progressive growth strategies, tax holidays, guaranteed return on investments and political stability signals a radical shift in ensuring better surveillance and robust corporate governance.

Generally, better auditing plays a significant role in increasing the user's confidence on the earnings information. However, the emergence of highly publicised audit failure such as in the case of Enron, WorldCom in the US, Cadbury, and Oceanic Bank in Nigeria have raised questions on the quality of the external audit. Therefore, the quality of financial reports depends on the nature of the external auditors. Prior scholars suggest that Big4 auditors give better assurance on the quality of earnings numbers and constrains the effect of accrual earnings management (AEM) (Gavious et al., 2012, Mohammed et al., 2018). However, evidence on whether Big4 auditors constrain the real earnings management (REM) has still been research. (Zang, 2012) established that unlike AEM, the REM can have a direct consequence on the market value of the firms. Thus, the complexity of REM makes it difficult for the external auditors, investors, and financial analyst to detect and understand. The study examines whether Big4 can detect and constrain the effect of REM of listed companies in Nigeria (Bala et al., 2018). In addition, most of the companies found

⁵The coefficient of acquisition is statistically significant and negative in all the models reported in Table 5.4.

with corporate financial scandals have their accounts been audited by the Big4 auditors e.g., Cadbury Nigerian Plc, Afribank Plc, Oando Plc and Oceanic Bank Plc. This study contributes to the extent literature on real earnings management and audit quality (Big4 versus nonBig4). First, to the best of our knowledge, this study is among the earliest that examines the influence of Big4 auditors on REM in Nigeria.

As can be seen from Model1 in Table 5.4 above, external audit quality has a statistically insignificant association with real earnings management. This result does not support the sub-third hypothesis suggesting that there is an association between companies audited by Big4 auditing firms and level of real earnings management before acquisition. It also does not support the agency theory argument, independent auditing firms as corporate governance mechanisms is a key factor in reducing agency problems through a statutory audit performed (Jensen and Meckling, 1976a). This finding can be a result of Big4 auditing firms are not familiar with the local business environment compared to non- Big4 auditing firms (Sani et al., 2018). In addition, real earnings management techniques are difficult be detected by external monitoring and scrutiny as it occurs during the financial year and these techniques are considered legal business activities (Graham et al., 2005b). The insignificance coefficient is in line with findings reported in (Al-Haddad and Whittington, 2019b)'s study on Jordan, and (Doukakis, 2014)'s study on 22 European countries. This result confirms the argument of Graham et al., (2005b) who argue that real earnings management techniques are difficult to be detected by external auditing firms as it occurs during the financial year and these techniques are considered legal business activities. This due to our study found that Big 4 auditing firms do not mitigate both accruals and real earnings management. Consequently, policymakers should concentrate more on developing the quality of auditing firms to enhance financial reports quality as financial decision makers depend on the audited financial statements.

The Institutional ownership variable in Table 5.4 has a statistically significant negative association with real earnings management, indicating that there is an association between companies with institutional ownership and the level of real earnings management before the acquisition (H3b). This finding supports the agency theory argument, agency problems in companies are closely associated with the quality of corporate governance mechanisms.

Institutional owners as one of the main corporate governance mechanisms tend to monitor managers' behavior to mitigate agency problems. Institutional owners have vast expertise in monitoring managers, and this creates a resource for the company where institutional owners are present (Wernerfelt, 1984). This relation could be due to institutional ownership companies having more expertise and reasonable access to resources, which qualify them to obtain suitable information at a lower level of cost and therefore monitoring managers' opportunistic behavior and mitigate engaging in earnings management (Arouri et al., 2014). Moreover, being long-term shareholders (Dalwai et al. 2015), institutional owners are more committed to monitoring managers' behavior. The negative effect seen in Table 5.4 in GCC listed companies supports the findings reported from studies investigating developed countries ((Kałdoński et al., 2019) and Melladoa and Saonab, (2019)). It is also in line with findings from studies analyzing developing countries ((Al-Haddad and Whittington, 2019 - Jordan); (Kim et al., 2018- Korea); and Hsu and Wen, (2015- China)). It is strongly recommended that the GCC companies should increase institutional ownership as it is an efficient tool in restraining engaging in both accruals and real earnings management. In addition, individual investors should invest in companies where institutional ownership is high.[5]

The state ownership variable in Table 5.4 has a statistically significant negative association with real earnings management, suggesting that there is an association between companies with state ownership and the level of real earnings management before the acquisition (H4b). This finding supports the argument of agency theory, state owners pay attention to political benefits and employment more than maximizing and reporting higher profits (Shleifer and Vishny, 1994). The engagement in real earnings management not only negatively impacts the current cash flow, but it negatively impacts future cash flow (Zhang, 2015). State owners often give advantages to the companies such as credit liquidity, thus there is less needed to engage in real earnings management. Moreover, State owners seek to build credibility in international markets, therefore they mitigate engagement in earnings management (Eljelly, 2009). The negative effect seen in Table 5.4 in GCC listed companies supports the findings reported from studies investigating developing countries-China ((He et al., 2017); (Chen et al., 2013). It is strongly

recommended that individual investors should invest in state owned companies as it is an efficient tool in restraining engaging in both accruals and real earnings management.⁶

The fourth and last firm level governance variable, foreign ownership has an insignificant association with real earnings management. This finding does not support the researcher's sub-fifth hypothesis: there is an association between companies with foreign ownership and level of real earnings management before acquisition. It also does not support the argument of the agency theory, large foreign shareholders actively monitor managers and likely alleviate a free-ride problem, thus reducing agency costs (Shleifer and Vishny, 1986). As foreign ownership has different characteristics (i.e. culture, and religion) making them unable to monitor accurately (Dvorak, 2005). The insignificant association reported in Table 5.4 support (Al-Haddad and Whittington, 2019b) who found that foreign ownership in Jordan is unable to impact on managers behaviours as distance mitigates efficiency. The GCC countries have been attracting more foreign investors, policymaker should be aware as foreign investors do not mitigate both accruals and real earnings management. In summary, institutional ownership and state ownership are the firm-level governance mechanisms that reduces GCC companies' engagement in real earnings management.

5.3.3. The effect of National Governance Quality (Country-Level) on Real Earnings Management in The GCC Listed Companies

The analysis is conducted for National Governance Quality (Country-Level) in GCC region. This dataset includes a sample of firms from Bahrain, Qatar, Oman, Qatar, Saudi Arabia, Kuwait, and the United Arab Emirates. The analysis of the determinants of real earnings management begins with a model that examines firm-level and country-level determinants of real earnings management with dummy and interaction variables that distinguish between GCC country firms. This model also includes accruals earning management to examine the national governance quality, or otherwise, of the earnings

⁶The coefficient of state ownership is significant and negative in all the models reported in Table 5.4.

management techniques. As further analysis, a model is then discussed that examines the firm-level determinants of real earnings management. This is followed by a model that examines the country-level determinants. Following this, accruals earnings are employed in the firm-level model to examine the national governance quality, or otherwise, of earnings management techniques in the absence of country-level and interaction variables. Firm-level and country-level determinants are then combined in a single model to examine their joint effect.

Table 5.4 shows insignificant relationship between the country level national governance quality and engagement in real earnings management in GCC listed companies. This result does not support the researcher's sub-sixth hypothesis suggesting that There is an association between companies with high national governance and level of real earnings management before acquisition. It also does not support the institutional theory argument; earnings management motivations could be impacted through formal (legal rules) change which mitigates opportunistic behaviour. Real earnings management techniques are less likely to be penalized by regulators, as these techniques are considered legal business activities (Graham et al., 2005b). In addition, the GCC is described by weak rules compared to the developed countries, thus companies could be more able of engaging in real earnings management to achieve their aims. Furthermore, figures (5.3) and (5.4) show that countries with high national quality levels in the GCC (UAE, Qatar, and Bahrain) engage more in real earnings management, whereas these countries engage less in accruals earnings management see figure (4.3) Chapter4. This implies that the strength of national governance quality (government effectiveness, regulatory quality, and rule of law) in these countries assist shifting from the engagement in accruals earnings management to the engagement in real earnings management because real earnings management is difficult to be detected by law as it occurs during the financial year and these techniques are considered legal business activities (Graham et al., 2005b). However, countries with low national quality levels in the GCC (Saudi Arabia, Oman, and Kuwait) engage less in real earnings management, whereas these countries engage more in accruals earnings management see figure (4.3) Chapter4. This result contributes to the accounting literature by providing evidence that national governance quality does not equal an impact on all

types of earnings managements. In particular, real earnings management is shown as more closely reflecting institutional and market characteristics than accruals earnings management. This result could help policymakers in the GCC (especially in UAE, Qatar, and Bahrain) should focus more on developing national governance quality factors which mitigate the engagement in real earnings management.

5.3.4. The Relationship Between Real Earnings Management (REM) and Accruals Earnings Management (AEM) in The GCC Listed Companies

The Fixed effect regression results (Model 1) in Table 5.4 shows accruals earnings management has a statistically significant positive association with total real earnings management (Total-REM) at the 1% level. The positive coefficient suggests that GCC companies employ real and accruals earnings management mechanisms as complements (H7). This result supports the argument that companies cannot engage in accruals earnings management alone regardless the cost related to engaging in real earnings management due to accruals earnings management occurs at the end of the financial year and companies have limited time to for preparing the financial statements (Roychowdhury, 2006). In addition, in countries with weak investor protection, accruals earnings management will more largely used, therefore real earnings management will only be used as a complement when it is needed given the high cost associated with its use ((Al-Haddad and Whittington, 2019b). This result is in line with similar findings reported from studies on developing countries (Al-Haddad and Whittington, 2019b); Elkalla, (2017); (Chen et al., 2012); and Kuo et al. (2012). However, this result is inconsistent with the results reported in developed countries. For instance, Cohen and Zarowin (2010), and Zang (2012) found that companies in the USA employ real earnings management as substitute for accruals earnings management. This means there is a negative relationship between accruals and real earnings management due to the USA' strength investors protection.⁷

⁷The coefficient of accruals earnings management is positive and significant in all the models reported in Table 5.4.

In terms of the control variables, the growth represented by the change in net sale over total assets is noted to have a statistically significant positive relationship with real earnings management, which shows that firms with high growth are more likely to engage in real earnings management. High growth companies are in constant need of funding to finance their growth. They need to maintain the reputation of a profitable company and a company that meets the financial analysts' expectations to attract investors to finance their growth (Burgstahler and Dichev's, 1997). This positive result support the finding of (Cohen et al., 2008a)who argue that high growth companies tend to engage in real earnings management.

Table 5.4 shows a significant negative relationship between ROA and real earnings management practices. A possible explanation is that when firms report high profitability to their shareholders there is less needed to engage in earnings management (Alzoubi 2016). This negative result supports the finding of ((Elkalla, 2017); (Anagnostopoulou and Tsekrekos 2017); and (Alzoubi 2016)). A statistically significant negative relationship is also observed between market to book value (MTB) and real earnings management practices. A possible explanation is that companies with low market to book ratios engage more in earnings management to show less variation in profitability so that it can boost confidence among the financiers to obtain more fund (AlNajjar and Riahi-Belkaoui 2001). This negative association is in line with the findings reported in An et al. (2016); AlNajjar and Riahi-Belkaoui (2001). Firm size and leverage have insignificant effects on real earnings management. This result is contrary to (Al-Haddad and Whittington, 2019b) from Jordon who found firm size mitigates engaging in real earnings management due to improved financial monitoring sets in these large companies, and they found that Leverage increases engaging in real earnings management due to avoid debt covenant violation.

Table 5.5: Findings' Summary of the Companies

Hypotheses	Expected Signs	Results	Theories	Prior Studies
H1b: There is an association between acquisition and level of real earnings management before acquisition.	+/-	-	Agency theory	(Kassamany et al., 2017a); Zhang (2015); and (Botsari and Meeks, 2008a)
H2b: There is an association between companies audited by Big4 auditing firms and level of real earnings management before acquisition.	+/-	Insignificant	Agency theory	(Al-Haddad and Whittington, 2019b); and (Doukakis, 2014)
H3b: There is an association between companies with institutional ownership and level of real earnings management before acquisition.	+/-	-	Agency theory	(Kałdoński et al., 2019); and Melladoa and Saonab, (2019); (Al-Haddad and Whittington, 2019b); (Kim et al., 2018); and Hsu and Wen, (2015)
H4b: There is an association between companies with state ownership and level of real earnings management before acquisition.	+/-	-	Agency theory	(He et al., 2017); (Chen et al., 2013)
H5b: There is an association between companies with foreign ownership and level of real earnings management before acquisition.	+/-	Insignificant	Agency theory	, Maswadeh (2018), Guo and Shiguang (2015), Ji et al. (2015), and (Paik and Koh, 2014)
H6b: There is an association between companies with high national governance and level of real earnings management before acquisition.	+/-	Insignificant	Institutional theory	(Graham et al., 2005b); and (Francis et al., 2016)
H7: The GCC listed companies employ real earnings management techniques as complements for accruals earnings management.	+/-	+		(Al-Haddad and Whittington, 2019b); Elkalla, (2017);(Chen et al., 2012); and Kuo et al. (2012)

5.4. Additional Descriptive Statistics and Analysis

5.4.1. Real Earnings Management Vs Accruals earnings management in each country in the GCC

Figure (5.3) shows the levels of engagement in real and accruals earnings management, whereas figure (5.4) presents the levels of national governance quality across the GCC countries. As can be seen in figure (5.3) the highest levels of engagement in real earnings management in the GCC is in Bahrain, Qatar, and UAE. However, these countries experienced the lowest engagement in accruals earnings management. This implies that companies in Bahrain, Qatar, and UAE employ real earnings management as substitute for accruals earnings management. This means there is a negative relationship between accruals and real earnings management due to the strength investors protection (see figure 5.4). Saudi Arabia experienced the lowest level of real earnings management, whereas it has the highest level of accruals earnings management. This is due to Saudi Arabia having the lowest level of national governance quality compared to other countries in the GCC. This supports the argument that companies in countries with a low level of governance quality are likely to use accruals earnings management more than real earnings management because accruals earnings management is not being costly (Graham et al., 2005). It is strongly recommended that policymakers in the GCC especially in Saudi Arabia should concentrate more on developing the national governance system to mitigate firms' engagement in real and accruals earnings management.

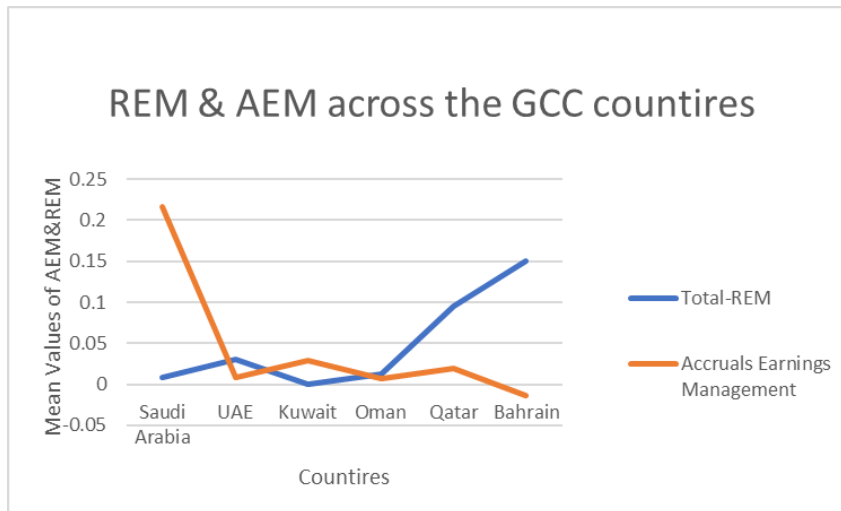


Figure 5.3: REM and AEM across the GCC countries

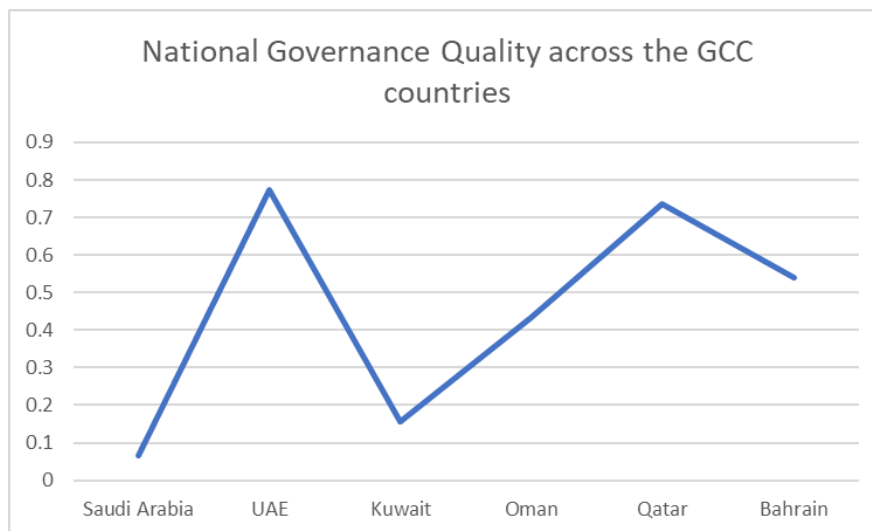


Figure 5.4: National governance quality across the GCC countries

5.4.2. Real Earnings Management Vs Accruals earnings management in the GCC over the period of 2007-2017:

Figure (5.5) shows the levels of engagement in real and accruals earnings management, whereas figure (5.6) presents the levels of national governance quality over the period from 2007-2017 in the GCC. Figure (5.5) shows that the highest engagement in both real and accruals earnings management is in the year 2009. However, the engagement in real earnings management is higher than the engagement in accruals earnings management. It can be argued that periods of economic downturn (financial crisis 2008-2009) should be

associated with a higher level of earnings management (Kumar and Vij, 2017). It is noted that the GCC companies engage more in real earnings management when they engage in accruals earnings management, suggesting a complementary effect between techniques. This is attributed to in countries with weak investor protection, accruals earnings management will be more largely used, therefore real earnings management will only be used as a compliment when it is needed given the high cost associated with its use (Al-Haddad and Whittington, 2019b). In addition, during the financial crisis auditors concentrate more on the financial statements, thus managers engage more in real earnings management than accruals earnings management as It is difficult for real earnings management to be detected by auditors as it is normal activity (Graham et al., 2005). Furthermore, Qatar, Kuwait, and Bahrain were not applying corporate governance regulations in the year 2009, whereas these countries followed Oman, UAE, and Saudi Arabia for applying corporate governance regulations in the year 2010. Therefore, the engagement in real and accruals earnings management was at the lowest level in the year 2010 as shown in figure (5.5). In terms of the level of national governance quality, the year 2017 experienced the highest level of national governance quality, therefore, the engagement in real and accruals earnings management was at the lowest level. This asserts that the GCC Companies have been developing corporate governance regulations which play an important role in mitigating earnings management and increasing investor protection. It is strongly recommended that policymakers continue in developing the national governance system to mitigate firms' engagement in accruals earnings management.

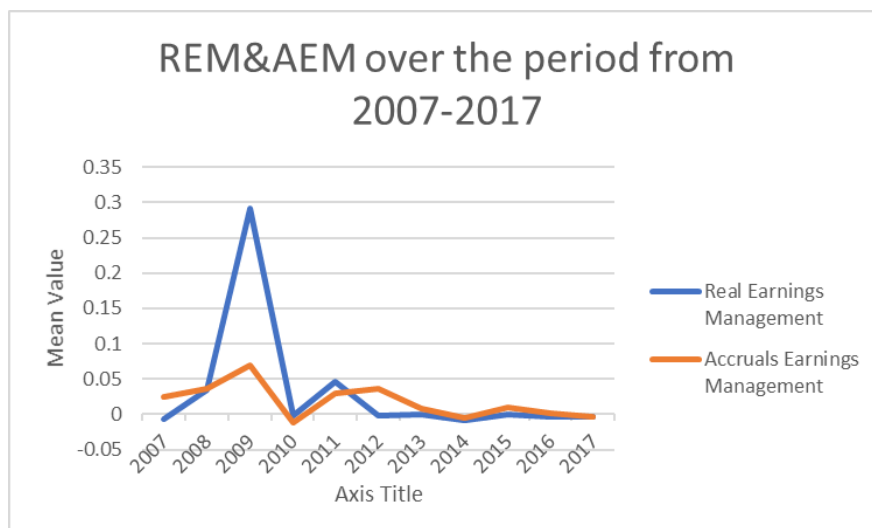


Figure 5.5: REM and AEM over the period from 2007 to 2017

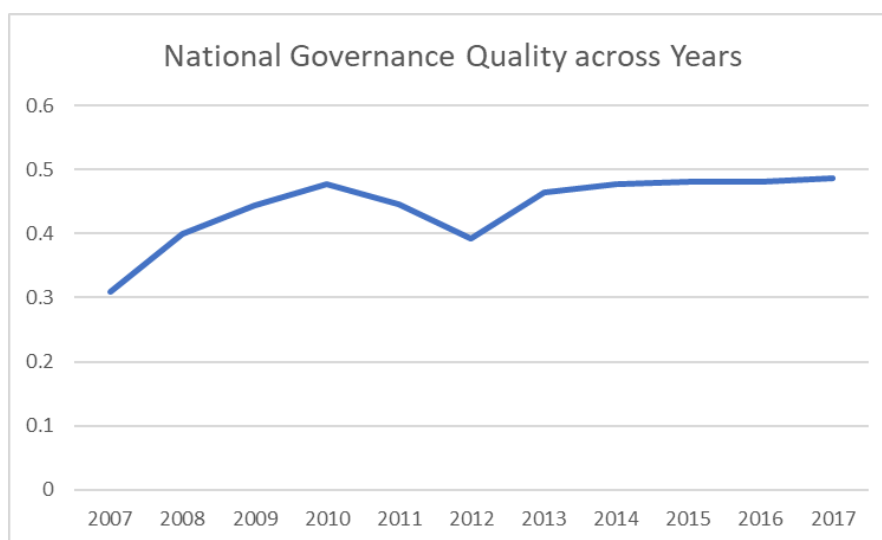


Figure 5.6: National governance quality across the years

A strong, stable corporate governance system in the GCC countries is still being developed. Regulators, investors, corporate managers, and professional accounting bodies need to support new initiatives in National governance if the region is to enhance its competitiveness and to become a regional financial and commercial centre. The challenge is to develop effective practices which will facilitate innovation and support business operations. Ensuring greater transparency to address the problems of information asymmetry is crucial if shareholders are to influence the decision-making process in their

companies. Central to national governance systems in the GCC countries is the establishment of the necessary implementation mechanisms, considering the requirements of a dynamic economy and the need to promote confidence and stability in the region. To ensure that effective monitoring takes place, laws, and legal regulations in the GCC will have to address several issues such as disclosure of affiliate and family relationships, a culture of independent non-executive directors and enforcement of regulations. A rule-based national governance system may be an appropriate path for GCC countries to take, owing to market imperfections and failures that hinder financial market discipline and the general development of the financial sector. The legal and regulatory environments of corporate governance in such countries tend to play a greater role as a mechanism through which shareholders and creditors can impose discipline on corporate managers (OECD, 2005). Finally, adopting best international practice in financial measurement and disclosure is essential for transparency and for effective national governance in the GCC countries. They should embrace national governance and enabling concepts while recognizing local distinguishing factors.

5.4.3. Additional Analysis

5.4.3.1. Real Earnings Management Vs Accruals Earnings Management

The main finding in Table 5.4 shows the existence of a complementary effect between accruals earnings management and real earnings management. It also indicates that acquisition, institutional ownership, and state ownership, mitigate engaging in real earnings management. To check the robustness of the results reported in Table 5.4, I rerun the regression excluding accruals earnings management as independent variable.

According to Model1 in Table 5.6 acquisition has an insignificant association with real earnings management. This insignificance contradicts the results for accruals earnings management reported in Chapter 4. In Chapter 4, I find a significant positive relationship between acquisition and accruals earnings management. This difference of the effect of acquisition on accruals and real earnings management suggests that acquiring firms engage in real earnings management only if they engage in accruals earnings management. This is attributed to in countries with weak investor protection, accruals earnings management

will more largely used, therefore real earnings management will only be used as a complement when it is needed given the high cost associated with its use ((Al-Haddad and Whittington, 2019b). This result asserts that the consequences of earnings management still exist around the acquisition, as acquiring companies use accruals earnings management more than real earnings management. This result therefore can help shareholders in non-acquiring companies, to be aware of the consequences of earnings management used by managers. It is also can help target companies to be aware of the consequences of earnings management employed before the acquisition by acquiring companies. One of the main consequences is that acquiring companies experience underperformance after acquisition (Louis, 2004). This is attributable to earnings management masking the genuine information of the company (Parfet, 2000).

Institutional ownership has a statistically significant negative association with real earnings management. This finding is consistent with the result of accruals earnings management in Chapter 4, indicating that GCC listed companies with institutional ownership engage at a lower level in accruals and real earnings management techniques than GCC listed companies with non-institutional ownership. This result can help regulators to concentrate on attraction expertise of the institutional ownership as they monitor managers' behaviours which mitigates the engagement in accruals and real earnings management. Likewise, state ownership has a statistically significant negative association with real earnings management. This result is in the line with the result of accruals earnings management in Chapter 4. It shows that GCC listed companies with state ownership engage at a lower level in accruals and real earnings management techniques than GCC listed companies with non-state ownership. This result can help policymakers to increase the percentage of state ownership or invest in state companies as state owned companies having easy ways to access resources and having the aim of maintaining social stability rather than generating profit (Li and Zhang, 2010). External audit quality, and foreign ownership have insignificant relationship with accruals and real earnings management. National governance quality as country-level mechanism reported in Table 5.6 has a statistically insignificant coefficient with real earnings management. However, it has a significant and negative association with accruals earnings management. This suggests that

national governance quality decreases the level of engagement in accruals earnings management but not in real earnings management. Real earnings management techniques are less likely to be penalized by regulators, as they are considered normal business practices (Graham et al., 2005b).

As for the control variables, Table 5.6 shows the growth has a significant positive relationship with real earnings management. A similar association was found in Chapter 4. ROA and MTB have significant negative relationships with real earnings management practices. In Chapter 4, these two variables have insignificant association with accruals earnings management. Firm size and leverage have an insignificant relationship with real earnings management. Similar results were reported for accruals earnings management.

Table 5.6: Regression Results of the effect of acquisition, firm-level, and country-level on real earnings management in the GCC listed companies.

Variables		Fixed Effect	Fixed Effect
		REM	AEM
ACQ	Coef	-0.013	0.009*
	P-value	(0.499)	(0.096)
EAUDQ	Coef	0.004	0.003
	P-value	(0.856)	(0.760)
INSTOWN	Coef	-0.072**	-0.022*
	P-value	(0.046)	(0.073)
STOWN	Coef	-0.109*	-0.041*
	P-value	(0.076)	(0.079)
FOWN	Coef	0.040	-0.012
	P-value	(0.324)	(0.363)
NGQ	Coef	-0.040	-0.034***
	P-value	(0.242)	(0.007)
FSIZE	Coef	0.014	-0.009
	P-value	(0.494)	(0.211)
LEV	Coef	0.115	0.015
	P-value	(0.152)	(0.454)
GROW	Coef	0.231***	0.044***
	P-value	(0.000)	(0.005)
MTB	Coef	-0.013***	0.000
	P-value	(0.001)	(0.614)
ROA	Coef	-0.566***	0.043
	P-value	(0.000)	(0.147)

Variables	Fixed Effect	Fixed Effect
	REM	AEM
Country dummy	No	No
Industry dummy	No	No
number of observations	1892	2310
R-squared	0.095	0.036
F statistic (11, 238)	8.37	5.10
Wald chi2(12)		
Prob>F/ Prob>chi2(11)	0.000	0.000

Where: The Bold Model is the main model of the results explanations. Model (1)= the robust results of the fixed effect regression of the total real earnings management, Model (2)= the robust results of the fixed effect regression of accruals earnings management. Total-REM = total real earnings management techniques in year t-1, AEM =accruals earnings management in year t-1. ACQ= acquisition a dummy variable taking the value of 1, if it is an acquiring firm and 0 otherwise in year t. EAUDQ= audit quality measured 1 if Big4 Auditing firms audits the company, and 0 otherwise in year t-1. INSTOWN= institutional ownership measured through the proportion of total shares held by institutions in year t-1. STOWN= state ownership measured through the proportion of total shares held by the government in year t-1. FOWN= foreign ownership measured through the proportion of total shares held by foreign investors in year t-1. NGQ= national governance quality in year t-1 measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through the ratio of total debt to total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= prospective firm's growth through the market to book value in year t-1. ROA = firm's profitability captured through net income over total assets in year t-1. * Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.

5.4.3.2. Country based Analysis

This section aims to investigate the factors influencing real earnings management. These factors are accruals earnings management, acquisition, external audit quality, institutional ownership, state ownership, and foreign ownership as part of firm level governance mechanisms, and country level mechanism in each country of the GCC. Table 5.7 shows the acquisition variable has a statistically significant positive association with real earnings management in UAE, implying the UAE listed acquiring companies engage in a higher level of real earnings management than the UAE non-acquiring companies. In countries with strong law rules, companies only engaged in one type of earnings management technique, the real earnings management technique, as it is difficult for it to be detected by auditors (Graham et al., 2005). In contrast, table 5.7 shows that acquiring companies in Kuwait are less likely to engage in real earnings management than non-

acquiring companies. The reason behind this could be real earnings management does not keep perfect performance forever, but it has a negative impact on the company' cash flow in the future (Zhang, 2015). Another explanation, in countries with low level of governance quality, companies are less likely use real earnings management due it is costly (Graham et al., 2005). This result therefore can help shareholders in target companies in UAE, to be aware of the consequences of real earnings management used by acquiring companies. It is also can help target companies in UAE or across countries to be aware of the consequences of real earnings management employed before the acquisition by UAE listed acquiring companies.

In terms of ownership structure as firm level governance, institutional ownership is an efficient tool in mitigating the engagement in real earnings management in Bahrain, whereas institutional ownership does not have any effect on real earnings management in the rest of the GCC countries. This result is in the line with the main result in table (5.4). This relation could be due to institutional ownership companies in Bahrain have more expertise and reasonable access to resources, which qualify them to obtain suitable information at a lower level of cost and therefore monitoring managers' opportunistic behavior and mitigate engaging in earnings management (Arouri et al., 2014). Likewise, foreign ownership is an efficient tool in mitigating the engagement in real earnings management in Bahrain. A highly skilled foreign ownership can boost the earnings quality. Foreign investors can bring new technologies into the local firms, which assists in monitoring and controlling the daily activities of firms (De Clercq et al., 2008). It is strongly recommended that the Bahrain companies should increase institutional and foreign ownership as they are efficient tools in restraining engaging in real earnings management. In contrast, foreign ownership increases the engagement in real earnings management in Oman. This is attributed to geographic distance constrains foreign investors in the monitoring of the opportunistic behaviours of managers (Al-Haddad and Whittington, 2019b). This result can help policymakers in Oman as they have been attracting more foreign investors. However, foreign ownership is observed to increase the engagement in real earnings management. As foreign ownership has different characteristics (i.e. Culture, and religion), it results in them being unable to monitor accurately (Dvorak, 2005).

In terms of external audit quality, Big4 auditing firms do not mitigate the engagement in real earnings management in all GCC countries. It is difficult for real earnings management to be detected by auditors as it is considered normal activities (Graham et al., 2005). The policymakers and users of financial statements should be aware that Big4 auditing firms do not mitigate the engagement in real earnings management in any country in the GCC, calling for extra caution when auditing or analysing the financial information. Similarly, State ownership is inefficient tool in mitigating real earnings management in all the GCC countries.

In relation to national governance quality as country level mechanisms, Table 5.7 shows that national governance quality level in UAE country mitigates the engagement in real earnings management. This is due to the highest level of national governance quality is in the UAE (see figure 5.6). This implies that the legal and regulatory systems in the UAE are efficient mechanisms in mitigating the engagement in real earnings management even if real earnings management is considered as normal activities. In contrast, Table 5.7 shows that national governance quality levels in Saudi Arabia, Oman and Qatar increases the engagement in real earnings management. This is attributed to national governance quality in these countries are low, therefore, it is difficult for real earnings management to be detected as it is considered normal activities (Graham et al., 2005). It is strongly recommended that policy makers in Saudi Arabia, Kuwait, Oman, Qatar, and Bahrain follow the UAE and concentrate on developing the national governance systems to mitigate firm's engagement in real and accruals earnings management.

Regarding the relationship between the real earnings management, and accruals earnings management, table 5.7 shows accruals earnings management has a statistically significant positive association with total real earnings management (Total-REM) at the 1% level in Saudi Arabia. The positive coefficient suggests that Saudi Arabia companies employ real and accruals earnings management mechanisms as complements. This result supports the argument that companies cannot engage in accruals earnings management alone regardless the cost related to engaging in real earnings management due to accruals earnings management occurs at the end of the financial year and companies have limited time to for preparing the financial statements (Roychowdhury, 2006). In addition, in

countries with weak level of national governance, accruals earnings management will more largely used, therefore real earnings management will only be used as a complement when it is needed given the high cost associated with its use (Al-Haddad and Whittington, 2019b). In contrast, table 5.7 shows accruals earnings management has a statistically significant negative association with total real earnings management (Total-REM) in UAE, and Bahrain. The negative coefficient suggests that companies in the UAE, and Bahrain employ real earnings management as substitute for accruals earnings management due to the UAE, and Bahrain' strength national governance compared to Saudi Arabia. This result is consistent with the results reported in developed countries. For instance, Cohen and Zarowin (2010), and Zang (2012) found that companies in the USA employ real earnings management as substitute for accruals earnings management. This means there is a negative relationship between accruals and real earnings management due to the USA' strength investors protection. This result adds to accounting literature that countries with high levels of national governance employ real earnings management as substitute for accruals earnings management regardless of whether they are in developed or developing markets. Policymakers in the GCC must concentrate on develop rules that mitigate earnings management, especially real earnings management as it is not only negatively impacts on the current cash flow, but it negatively impacts on future cash flow(Zhang, 2015).

In terms of control variables, Firm size mitigates real and accruals earnings management in Qatar. This is consistent with prior studies such as Lennox (1999), Klein (2002), Xie et al. (2003), and Abdul Rahman and Ali (2006) argue that the company size is associated negatively with earnings management as the large companies take care regarding their reputation and have more sources. However, Firm size in the UAE increases the engagement in real earnings management. large companies increase earnings due to the complexity of company activities. Likewise, management has the motivation to change the financial reports, taking features of the complication of the company's structure and the hardness of understanding (Lobo and Zhou 2006).

Leverage as control variable increases real and accruals earnings management in Saudi Arabia. This is in the line with Rusmin et al., (2014); Teshima and Shuto, (2008); (Mather and Ramsay, (2006); and Gu et al., 2005) who found that managers engage in earnings

management to present the current and future flows of the company and that companies can meet their obligations efficiently. However, Leverage as control variable decreases real and accruals earnings management in Oman. The higher the ratio of leverage, the lower the ratio of engaging in earnings management due to the control of lenders (Zamri et al., 2013). Likewise, MTB as control variable decreases real and accruals earnings management in Kuwait.

Table 5.7 shows ROA increases the engagement in real earnings management in Saudi Arabia. However, ROA decreases the engagement in real earnings management in Oman and Bahrain. This due to that companies with lower profitability are forced to engage in earnings management to meet the request of shareholders who want a high profitability. However, a higher firm's profitability, a higher engaging in earnings management due to managers seek to increase the opportunity of the company to obtain capital financing from the market (González and García-Meca, 2014); and (Jo and Kim, 2007).

Table 5.7: Factors influencing real earnings management in each country in the GCC

Total-REM		Saudi Arabia	UAE	Kuwait	Oman	Qatar	Bahrain
		(Pooled)	(Pooled)	(Pooled)	(Pooled)	(Pooled)	(Pooled)
ACQ	Coef	-0.035	0.076*	-0.064*	0.043	0.049	0.114
	P-value	(0.213)	(0.056)	(0.098)	(0.349)	(0.316)	(0.162)
EAUDQ	Coef	-0.036	-0.073	0.064	-0.009	0.094	0.035
	P-value	(0.407)	(0.569)	(0.423)	(0.878)	(0.658)	(0.836)
INSTOWN	Coef	0.011	0.026	0.040	-0.002	0.144	-0.147*
	P-value	(0.839)	(0.648)	(0.602)	(0.964)	(0.206)	(0.077)
STOWN	Coef	-0.018	0.003	-0.707	-0.034	0.293	0.043
	P-value	(0.856)	(0.971)	(0.808)	(0.701)	(0.137)	(0.822)
FOWN	Coef	-0.114	-0.002	-0.134	0.176**	-0.094	-0.518**
	P-value	(0.146)	(0.974)	(0.435)	(0.023)	(0.715)	(0.028)
NGQ	Coef	0.118*	-0.398***	0.039	1.283***	0.428***	0.167
	P-value	(0.074)	(0.000)	(0.620)	(0.000)	(0.002)	(0.682)
AEM	Coef	0.398***	-0.245**	-0.063	-0.000	0.165	-0.435***
	P-value	(0.000)	(0.035)	(0.626)	(0.998)	(0.306)	(0.002)
FSIZE	Coef	-0.009	0.034**	-0.022	0.018	-0.052*	-0.132
	P-value	(0.518)	(0.033)	(0.411)	(0.315)	(0.062)	(0.114)
LEV	Coef	0.148*	-0.103	0.105	-0.159*	-0.153	0.600
	P-value	(0.059)	(0.344)	(0.524)	(0.052)	(0.286)	(0.153)
GROW	Coef	-0.080	-0.043	0.021	0.047	-0.037	0.142
	P-value	(0.151)	(0.596)	(0.751)	(0.346)	(0.741)	(0.392)

Total-REM		Saudi Arabia	UAE	Kuwait	Oman	Qatar	Bahrain
		(Pooled)	(Pooled)	(Pooled)	(Pooled)	(Pooled)	(Pooled)
MTB	Coef	-0.069	0.007	-0.034**	0.007	0.027*	-0.016
	P-value	(0.167)	(0.146)	(0.024)	(0.500)	(0.074)	(0.793)
ROA	Coef	0.322***	-0.119	0.115	-0.536***	-0.643	-1.496*
	P-value	(0.007)	(0.420)	(0.515)	(0.132)	(0.001)	(0.063)
Country dummy		No	No	No	No	No	No
Industry dummy		No	No	No	No	No	No
number of observations		866	289	214	327	116	80
R-squared		0.31	0.33	0.32	0.32	0.32	0.31
F statistic		65.34	12.12	15.53	16.50	9.79	7.08
Prob>F		0.000	0.000	0.000	0.000	0.000	0.000

*Total-REM = total real earnings management techniques in year t-1, AEM =accruals earnings management in year t-1. ACQ= acquisition a dummy variable taking the value of 1, if it is an acquiring firm and 0 otherwise in year t. EAUDQ= audit quality measured 1 if Big4 Auditing firms audits the company, and 0 otherwise in year t-1. INSTOWN= institutional ownership measured through the proportion of total shares held by institutions in year t-1. STOWN= state ownership measured through the proportion of total shares held by the government in year t-1. FOWN= foreign ownership measured through the proportion of total shares held by foreign investors in year t-1. NGQ= national governance quality in year t-1 measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through the ratio of total debt to total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= prospective firm's growth through the market to book value in year t-1. ROA = firm's profitability captured through net income over total assets in year t-1. * Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level..*

5.5. Robustness Check

In the key analyses reported in Table 5.4, this study followed the (Roychowdhury, 2006, Zang, 2012) models to estimate the total real earnings management. To check for more robustness of this research findings and avoiding a double discounting issue that may be obtained from aggregating the three real earnings management techniques, this section examines the effect of the same independent variables on five alternative real earnings management measures. The five alternative real earnings measures are: (1) abnormal discretionary expenses (ADE); (2) abnormal cash flows from operations (ACFO); (3) abnormal production costs (APC) (Roychowdhury, 2006); (4) aggregate real earnings management (SubREM1_{APC-ACFO}) model; and (5) aggregate real earnings management (SubREM2_{ADE-ACFO}) (Zang, 2012), as suggested by (Wasan and Mulchandani, 2020); (El Diri et al., 2020); (Al-Haddad and Whittington, 2019b); and (Piosik and Genge, 2019). Based on the results of the Hausman test, the fixed effect model was used in all five earnings management techniques models in Table 5.8.

First, accruals earnings management has a significant positive association with all real earnings management techniques at the 1% level. A similar association was reported in Table 5.4. Second, the acquisition variable has a statistically negative association only when real earnings management technique is measured as abnormal production costs technique (model 3) attributing to the higher cost associated when engaging in real earnings management through overproduction technique leads to the increase of storage cost, and the reduction of the cash flow in companies, which it impacts on the company' growth in the future (Roychowdhury, 2006).

Third, institutional ownership is observed to have a significant negative association with three models: Abnormal cash flows from operations technique (model 2); The aggregate abnormal production costs technique with the Inverse of abnormal cash flows from operations (model 4). Fourth, state ownership variable has a statistically negative association with real earnings management in three out of five models: abnormal discretionary expenses (ADE); abnormal cash flows from operations (ACFO); and aggregate real earnings management (SubREM2_{ADE-ACFO}). The negative relation is consistent with the main results reported in Table 5.4.

Fifth, foreign ownership variable has a significant positive association with abnormal production costs technique (model 3). This suggests that GCC listed companies with foreign ownership engage at a higher level in abnormal production costs technique than GCC listed companies with non-foreign ownership. This result is contrary to the result of accruals earnings management in Chapter 4. Foreign ownership' influence in controlling could be less than domestic ownership due to distance and cultural characteristics making foreign investors unable to access to local information accurately (Dvorak, 2005).

Lastly, national governance quality is observed to have mixed results. It has significant and negative association with abnormal discretionary expenses (model1). This result is consistent with the result of accruals earnings management in Chapter 4. On the other hand, it has a significant and positive association with abnormal cash flows from operations technique (model 2). This indicates that national governance quality mitigates the engagement in real earnings management through abnormal discretionary expenses technique. However, national governance quality is unable to mitigates engaging in real earnings management through abnormal cash flows from operations technique. This is due to the GCC are described by weak rules compared to the developed countries, thus companies could be more able of engagement in real earnings management to achieve their aims.

Table 5.8: The Robust Regression Results of the relationship between AEM, acquisition, and CG mechanisms on REM in the GCC Companies by using five alternative real earnings management techniques.

Variables		ADE	ACFO	APC	SubREM1 _{APC-ACFO}	SubREM2 _{ADE-ACFO}
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
ACQ	Coef	-0.004	-0.011	-0.011*	-0.022	-0.015
	P-value	(0.324)	(0.391)	(0.085)	(0.164)	(0.283)
EAUDQ	Coef	-0.006	-0.006	-0.001	-0.007	-0.013
	P-value	(0.286)	(0.463)	(0.905)	(0.610)	(0.329)
INSTOWN	Coef	0.004	-0.045*	-0.005	-0.050*	-0.040
	P-value	(0.528)	(0.052)	(0.687)	(0.076)	(0.114)
STOWN	Coef	-0.029**	-0.072*	-0.004	-0.077	-0.102**
	P-value	(0.074)	(0.089)	(0.845)	(0.158)	(0.024)
FOWN	Coef	0.003	-0.003	0.030*	0.026	-0.000
	P-value	(0.724)	(0.874)	(0.079)	(0.417)	(0.990)

Variables		ADE	ACFO	APC	SubREM1 _{APC-ACFO}	SubREM2 _{ADE-ACFO}
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
NGQ	Coef	-0.033***	0.041*	-0.021	0.019	0.007
	P-value	(0.003)	(0.066)	(0.233)	(0.495)	(0.743)
AEM	Coef	0.040***	0.801***	0.128***	0.929***	0.842***
	P-value	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
FSIZE	Coef	0.020***	-0.017	0.027**	0.010	0.003
	P-value	(0.001)	(0.149)	(0.018)	(0.555)	(0.819)
LEV	Coef	0.043**	0.007	0.008	0.016	-0.036
	P-value	(0.025)	(0.874)	(0.775)	(0.806)	(0.492)
GROW	Coef	0.009	0.127***	0.026	0.154***	0.137***
	P-value	(0.290)	(0.000)	(0.222)	(0.000)	(0.000)
MTB	Coef	-0.000	-	-0.001	-0.011***	-0.010***
	P-value	(0.353)	0.009***	(0.381)	(0.000)	(0.000)
ROA	Coef	0.038*	-	-	-0.847***	-0.485***
	P-value	(0.103)	0.523***	0.323***	(0.000)	(0.000)
number of observations		1892	1892	1892	1892	1892
R-squared		0.066	0.383	0.110	0.351	0.370
F statistic (12, 238)		5.24	28.67	8.66	26.73	29.07
Prob>F		0.000	0.000	0.000	0.000	0.000

Where: Model (1)= the robust results of the abnormal discretionary expenses (ADE), Model (2)= the robust results of the abnormal cash flows from operations (ACFO), Model (3)= the robust results of abnormal production costs (APC), Model (4)= the robust results of the aggregate abnormal production costs and the aggregate inverse of abnormal cash flows from operations, Model (5)= the robust results of the aggregate inverse of abnormal cash flows from operations and the inverse of abnormal discretionary expenses, AEM =accruals earnings management in year t-1. ACQ= acquisition a dummy variable taking the value of 1, if it is an acquiring firm and 0 otherwise in year t. EAUDQ= audit quality measured 1 if Big4 Auditing firms audits the company, and 0 otherwise in year t-1. INSTOWN= institutional ownership measured through the proportion of total shares held by institutions in year t-1. STOWN= state ownership measured through the proportion of total shares held by the government in year t-1. FOWN= foreign ownership measured through the proportion of total shares held by foreign investors in year t-1. NGQ= national governance quality in year t-1 measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through the ratio of total debt to total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= prospective firm's growth through the market to book value in year t-1. ROA = firm's profitability captured through net income over total assets in year t-1. * Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.

For further robustness, this study aims to test the effect of the moderating role of accruals earnings management in mitigating the total real earnings management, as well as the power of these anticipated interaction effects in the GCC markets.

As seen in (model 1) table 5.9, accruals earnings management has a significant positive association with the total real earnings management at the 1% level. A similar association was reported in Table 5.4. However, the acquisition has statistically negative associations with the total real earnings management. Similar associations were reported in Table 5.4. As for the interaction between accruals earnings management and acquisition, it is not statistically significant, as reported in Table 5.9. External audit quality as firm-level, and the interaction between accruals earnings management and external audit quality, have an insignificant association with real earnings management. Likewise, institutional ownership as firm-level, has an insignificant association with real earnings management. However, the interaction between accruals earnings management and institutional ownership has a significant and negative association with real earnings management. This indicates that all companies that use accruals earnings management and have institutional owners, they are less likely to engage in real earnings management, suggesting a substitution effect between accruals earnings management and real earnings management for firms with institutional ownership. This asserts our results in table 5.7, as it shows that companies in Bahrain employ real earnings management as substitute for accruals earnings management due to Bahrain country has a high national governance level compared to other countries in the GCC such as Saudi Arabia (see figure 5.6).

State ownership variables have statistically negative associations with the total real earnings management. Similar associations were reported in Table 5.4. However, the interaction between accruals earnings management and state ownership is not statistically significant, as reported in Table 5.9. Foreign ownership as last firm-level variable, and the interaction between accruals earnings management and foreign ownership have an insignificant association with real earnings management. In terms of national governance quality as country level, it is not statistically significant, as reported in Table 5.9. However, the interaction between accruals earnings management and national governance quality has a significant and negative association with real earnings management, suggesting all companies that employ accruals earnings management and have national governance quality, they are less likely to engage in real earnings management. This indicates that a substitution effect between accruals earnings management and real earnings management

for firms with national governance quality. This asserts our results in table 5.7, as it shows that companies in UAE employ real earnings management as substitute for accruals earnings management due to UAE country has the highest national governance level among the GCC countries (see figure 5.6). Policymakers in countries with high national governance levels should be aware that companies use real earnings management as substitute for accruals earnings management, thus they must develop governance mechanisms that mitigate real earnings management.

Table 5.9: Regression Results of the effect of the interaction of accruals earnings management with acquisition, firm-level, and country-level on real earnings management in the GCC listed companies.

Total-REM		Fixed Effect	Random Effect	Random Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
AEM	Coef	1.314***	1.329***	1.334***	1.453***	1.454***
	P-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ACQ	Coef	-0.036*	-0.036*	-0.037*	-0.051**	-0.049**
	P-value	(0.068)	(0.065)	(0.053)	(0.023)	(0.023)
AEM* ACQ	Coef	0.037	0.051	0.058	0.120	0.114
	P-value	(0.816)	(0.754)	(0.722)	(0.653)	(0.669)
EAUDQ	Coef	-0.016	-0.016	-0.021	-0.014	-0.026**
	P-value	(0.417)	(0.316)	(0.194)	(0.148)	(0.024)
AEM* EAUDQ	Coef	-0.063	-0.067	-0.076	-0.078	-0.151
	P-value	(0.550)	(0.514)	(0.466)	(0.616)	(0.313)
INSTOWN	Coef	-0.043	-0.035	-0.031	-0.037*	-0.032
	P-value	(0.127)	(0.156)	(0.229)	(0.078)	(0.153)
AEM* INSTOWN	Coef	-0.828**	-0.832***	-0.843***	-0.779**	-0.890***
	P-value	(0.014)	(0.010)	(0.009)	(0.019)	(0.008)
STOWN	Coef	-0.095*	-0.102**	-0.097**	-0.099***	-0.072**
	P-value	(0.098)	(0.019)	(0.032)	(0.005)	(0.021)
AEM* STOWN	Coef	-0.404	-0.329	-0.355	0.042	-0.146
	P-value	(0.209)	(0.301)	(0.266)	(0.943)	(0.760)
FOWN	Coef	0.039	0.031	0.041	-0.004	0.039
	P-value	(0.303)	(0.383)	(0.255)	(0.906)	(0.253)
AEM* FOWN	Coef	-0.348	-0.437	-0.414	-0.823	-0.524
	P-value	(0.391)	(0.280)	(0.304)	(0.185)	(0.323)
NGQ	Coef	-0.002	-0.027	0.009	0.116***	0.018
	P-value	(0.951)	(0.409)	(0.780)	(0.000)	(0.763)
AEM* NGQ	Coef	-0.355*	-0.353*	-0.335*	-0.196	-0.034
	P-value	(0.084)	(0.087)	(0.103)	(0.513)	(0.903)
FSIZE	Coef	0.028	0.000	-0.001	-0.006**	-0.008**
	P-value	(0.178)	(0.881)	(0.856)	(0.012)	(0.049)

Total-REM		Fixed Effect	Random Effect	Random Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
LEV	Coef	-0.018	0.010	0.014	0.068**	-0.075**
	P-value	(0.806)	(0.840)	(0.814)	(0.042)	(0.047)
GROW	Coef	0.162***	0.164***	0.164***	0.258***	0.260***
	P-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
MTB	Coef	-0.012***	-0.014***	-0.014***	-0.019***	-0.014***
	P-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ROA	Coef	-0.805***	-0.848***	-0.870***	-1.185***	-1.327***
	P-value	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Country dummy		No	No	Yes	No	Yes
Industry dummy		No	No	Yes	No	Yes
number of observations		1892	1892	1892	1892	1892
R-squared		0.339	0.337	0.337	0.324	0.409
F statistic (18, 238)		29.61			29.16	22.61
Wald chi2(12)			536.55	684.13		
Prob>F/ Prob>chi2(11)		0.000	0.000	0.000	0.000	0.000

Where: The Bold Model is the main model of the results explanations. Model (1)= the robust results of the fixed effect regression of the total real earnings management, Model (2)= the robust results of the random effect regression of the total real earnings management without country and industry dummies, Model (3)= the robust results of the random effect regression of the total real earnings management with country and industry dummies, Model (4)= the robust results of the OLS regression of the total real earnings management without country and industry dummies, Model (5)= the robust results of the OLS regression of the total real earnings management with country and industry dummies, Total-REM = total real earnings management techniques in year t-1, AEM =accruals earnings management in year t-1. ACQ= acquisition a dummy variable taking the value of 1, if it is an acquiring firm and 0 otherwise in year t. EAUDQ= audit quality measured 1 if Big4 Auditing firms audits the company, and 0 otherwise in year t-1. INSTOWN= institutional ownership measured through the proportion of total shares held by institutions in year t-1. STOWN= state ownership measured through the proportion of total shares held by the government in year t-1. FOWN= foreign ownership measured through the proportion of total shares held by foreign investors in year t-1. NGQ= national governance quality in year t-1 measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through the ratio of total debt to total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= prospective firm's growth through the market to book value in year t-1. ROA = firm's profitability captured through net income over total assets in year t-1. * Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.

5.6. Summary

This chapter examines the effect of accruals earnings management, acquisition, external audit quality, institutional ownership, state ownership, foreign ownership as firm-level, and national governance quality as country-level in the GCC listed companies on real

earnings management. The results in this Chapter provide evidence that the GCC listed companies engage in real earnings management. It is also noted that the GCC companies engage more in real earnings management when they engage in accruals earnings management suggesting a complementary effect between techniques.

By comparing Chapter 4 and Chapter 5 findings, we can see that acquiring companies engage in accruals earnings management, but not in real earnings management. External audit quality is observed to be an inefficient mechanism in mitigating engagement in accruals and real earnings management. In terms of ownership structure, institutional ownership and state ownership are obtained to be an efficient tool in restraining engagement in accruals and real earnings management, whereas foreign ownership is observed to be an inefficient mechanism in mitigating engagement in both accruals and real earnings management. National governance quality is obtained to be an inefficient tool in restraining engagement in real earnings management. However, it is an efficient tool in restraining engagement in accruals earnings management. In terms of country-based effect, the highest levels of engagement in real earnings management in the GCC is in Bahrain, Qatar, and UAE. However, these countries experienced the lowest engagement in accruals earnings management. This implies that companies in Bahrain, Qatar, and UAE employ real earnings management as substitute for accruals earnings management due to the strength investors protection. Saudi Arabia experienced the lowest level of real earnings management, whereas it has the highest level of accruals earnings management. This is due to Saudi Arabia having the lowest level of national governance quality compared to other countries in the GCC. This supports the argument that companies in countries with a low level of governance quality are likely to use accruals earnings management more than real earnings management because accruals earnings management is not being costly (Graham et al., 2005). It is strongly recommended that policymakers in the GCC especially in Saudi Arabia should concentrate more on developing the national governance system to mitigate firms' engagement in real and accruals earnings management.

CHAPTER 6

ACCRUALS EARNINGS MANAGEMENT AND ACQUISITION DEAL CHARACTERISTICS IN THE GCC LISTED ACQUIRING COMPANIES

6.1. Introduction

This chapter presents the analysis' results of the four acquisition deals characteristics influencing accruals earnings management in the GCC by using the absolute value of the Modified Jones model. These four acquisition deals characteristics are cross border acquisition, Industry relatedness, ownership acquired, and payment methods. The chapter starts with the summary statistics in section 6.2, followed by the effect of these four acquisition deal characteristics on accruals earnings management within the GCC contexts in section 6.3. Section 6.4 presents and discusses further analysis on accruals earnings management. Section 6.5 states the results of the robustness test employing signed accruals earnings management. This study also employed Kothari et al.'s (2005) model again as an alternative estimator of discretionary accruals that is a proxy of absolute accruals earnings management. Finally, the conclusion of this chapter will be presented in section 6.6.

6.2. Summary Statistics of the GCC Acquiring Companies

The analysis is applied to GCC listed acquiring companies between 2007-2017. The first section presents and discusses the descriptive statistics of all the variables (accruals earnings management, cross border acquisition, Industry relatedness, ownership acquired, and payment methods, firm size, leverage, growth, market to book value, return on assets) employed in this research. In the second section, there is discussion on the regression diagnostics such as normality test, heteroscedasticity test, and the pair-wise correlation matrix and the collinearity diagnostics. The third section presents and discusses the results from the Hausman fixed effects model applied to the GCC acquiring sample.

6.2.1. Descriptive Statistics of the GCC Companies:

Based on the availability of data, the sample in this Chapter consists of 116 acquiring companies (259 firm-deal observations) for the financial year 2007-2017.

Table 6.1 states the mean, median, standard deviation, minimum, maximum, skewness, and kurtosis of the variables employed in the research. The table states accruals earnings management (AEM), from a minimum of 0.00 to a maximum of 0.648 with a mean and median of 0.067 and 0.39, respectively. The average AEM presented by (Alsharairi Malek, 2015) is found to be 0.010, which is much lower than the average of AEM of 0.067 presented in this research results. The result of his study, however, was based on the EU listed acquiring companies, and the period from 2003 to 2012 which is a different period from this study. In addition, Alsharairi Malek' study (2015) employs Kothari et al.'s (2005) model for measuring the AEM instead of the Modified Jones model employed in this research. Even though, both models measure accruals earnings management, Kothari et al.'s (2005) model added the ROA to the Modified Jones model as proxy for performance, which is further explained in detail in the Methodology Chapter. As of the independent variables, the cross-border acquisition (CBACQ) is found to have a mean value, and median of 0.517, and 1 respectively, suggesting that 51.7% of firms in the sample were cross border. The average of the cross-border acquisition presented by (Baik et al., 2015) is found to be 0.53 of the USA listed acquiring companies, which is close to the cross-border acquisition average presented in this research results. The lower average value suggests that acquiring companies in developing countries like the GCC are less likely to involve a cross border acquisition than the companies in developed countries like the USA. The industry unrelatedness (INDR) was measured by a dummy variable and it is found to have a mean value of 0.416 and median of 0, with a minimum of 0 and a maximum of 1, suggesting that 41.6% of firms in the sample were unrelated industries. The average of the unrelated industries deals presented by (Lehmann, 2016b) is found to be 0.63 of the UK listed acquiring companies, which is a higher than the average of unrelated industries deals of 0.416 presented in this research results. The lower average value in unrelated industries deals variable suggests that acquiring companies

in the GCC are less likely to acquire companies in different sectors than the companies in the UK. The ownership acquired (OWNACQ) has a mean value of 0.534, and median of 0.49, with a minimum of 0.003 and a maximum of 1, with a standard deviation of 0.372, suggesting that the 259 acquisition deals acquire a stake of 53.4%. The mean value of this research is a bit lower than the mean value of the ownership acquired of 0.58, as found by (de La Bruslerie, 2013) on the EU markets. The methods of payment (PAYMETH) were measured by a dummy variable, taking a value of 1 if the acquisition transaction is cash, and 0 otherwise. It is found to have a mean value, and median of 0.111, and 0 respectively, suggesting that 11.1% of acquisition transactions in the sample were cash payment. The average of the cash acquisition transactions presented by Beekhuis, (2017) is found to be 0.185 of the USA listed companies, which is a bit higher than the average of the cash acquisition transactions of 0.111 presented in this research results. The lower average value in the cash acquisition transactions variable suggests that acquiring companies in developing countries like the GCC are less likely to pay using cash than the companies in developed countries like the USA to increase the market value of their stocks and achieve acquisition with the lowest costs(Erickson and Wang, 1999).

As for the control variables, the firm size has a mean value of 18.40, with a minimum of 11.7 and a maximum of 23.8. This finding is higher than the finding of the firm size of 13.9 as found by (Lehmann, 2016b)on the UK listed acquiring companies. The table also presents a mean value leverage of 0.229. This average is much lower than the average of 0.596 obtained by (Lehmann, 2016b)on the UK listed acquiring companies. The sales' growth has a mean value of 0.090, with a minimum of -0.391 and a maximum of 0.971. This mean value is lower than the mean value (1.075) of (Vasilescu and Millo, 2016), on the UK listed companies. The market to book value (MTB) has a mean value of 1.812, with a min of 0 and a max of 7.655. This average is too close to the average of the MTB of 1.926 as found by (Lennox et al., 2018) on Chinese listed acquiring companies as developing market. Finally, the profitability of the company presented by return on assets (ROA) has a mean value of 0.074 with a minimum and maximum of around -0.598 and 0.436, respectively. This mean value is

higher than the mean value (0.048) of (Lennox et al., 2018), on Chinese listed acquiring companies as developing market.

Table 6.1: Descriptive Statistics of the GCC Acquiring Firms

Variable	Obs	Mean	Median	Min	Max	Std. Dev.	Skewness	Kurtosis
AEM	259	0.067	0.39	0.000	0.648	0.082	2.953	15.368
CBACQ	259	0.517	1	0	1	0.500	-0.069	1.004
INDR	259	0.416	0	0	1	0.494	0.336	1.113
OWNCQ	259	0.534	0.49	0.01	1	0.372	0.082	1.470
PAYMETH	259	0.111	0	0	1	0.315	2.461	7.057
FSIZE	259	18.402	19.314	11.691	23.753	3.591	-0.357	1.755
LEV	238	0.229	0.224	0	0.667	0.158	0.389	2.338
GROW	258	0.090	0.059	-0.391	0.971	0.176	2.195	10.023
MTB	241	1.812	1.598	0	7.655	1.420	1.119	4.720
ROA	259	0.074	0.067	-0.598	0.436	0.086	-1.188	21.852

Where: AEM=absolute value accruals earnings management of firm *i* in year *t-1*. CBACQ= cross border acquisition deals in year *t* measured 1 if the GCC acquiring companies acquire companies outside the GCC, and 0 otherwise. INDR= Industry unrelatedness in year *t* measured 1 if the acquiring and the target companies do not belong to the same industry sector, 0 otherwise. OWNCQ= the percentage of the target company's shares acquired by the acquirer in the acquisition in year *t*. PAYMETH= payment methods in year *t* measured 1 if the acquisition transaction is cash, 0 otherwise. FSIZE= the firm's size captured as the natural logarithm of total assets in year *t-1*. LEV= leverage ratio measured through total debt over total assets in year *t-1*. GROW= growth ratio measured through the change of sale over total assets in year *t-1*. MTB= market to book value in year *t-1*. ROA = acquiring firm's profitability captured through net income over total assets in year *t-1*.

6.2.2. Regression Diagnostics of The GCC Companies

The histogram and Q-Q plot donate the normality of the residual of accruals earnings management by using the Modified Jones model. As indicated in figure 6.1 and figure 6.2, the residual of accruals earnings management is normally distributed.

Second, heteroscedasticity issues ought to be checked for an appropriate model due to it leads to bias in estimating the variances of the estimated coefficients (Gujarati, 2011). For checking heteroscedasticity, this study employed the Modified Wald test in fixed effect model. The result of the Modified Wald test suggests a significance level of 0.000 as presented below. This implies that there is

heteroscedasticity in the data, therefore this study must run robust standard errors to fix this issue. Finally, the pair-wise correlation matrix and the collinearity diagnostics explained by the variance inflation coefficients (VIF) are shown in table 6.2 below. It is noted that there is no multi-collinearity between the independent variables as correlation coefficients are lower than 0.80, and all these variables have a VIF value less than 10.

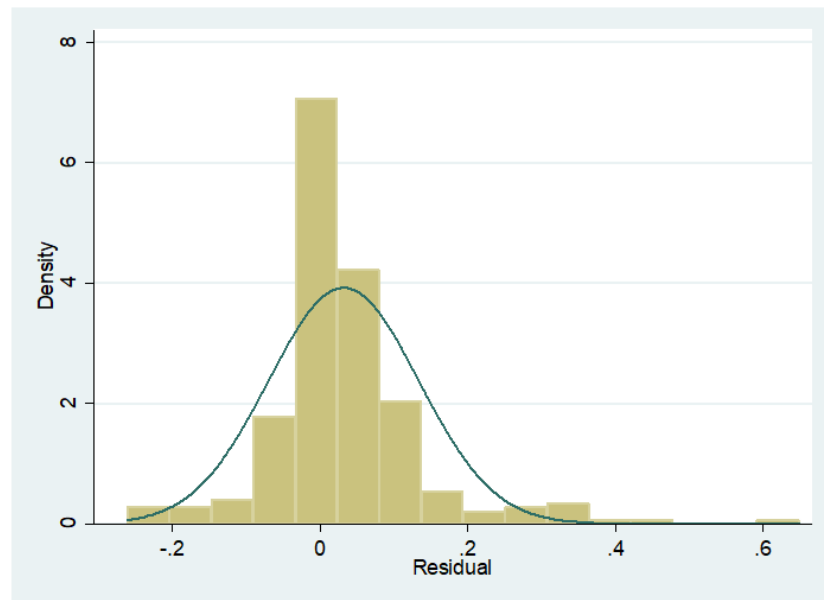


Figure 6.1: Histogram

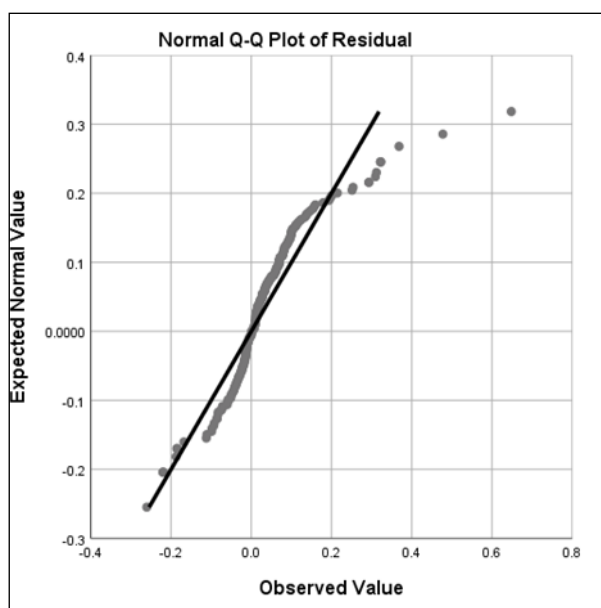


Figure 6.2: Q-Q Plot

Table 6.2: Modified Wald test for group wise heteroskedasticity in fixed effect regression model

Chi2 (94)	5838.47
Prob>chi2	0.0000
Heteroskedasticity	Yes
<i>It is noticed that there is heteroscedasticity in the data, therefore this study must run a robust regression to fix for this issue.</i>	

Table 6.3 below shows the pair-wise correlation matrix and the collinearity diagnostics explained by the variance inflation coefficients (VIF). It is noted that the cross-border acquisition deals have a significant positive correlation with accruals earnings management at 1%, which is consistent with (Lim et al., 2008). However, ownership acquired variable has a significant and negative correlation with accruals earnings management at 10%, which is in the line with (Billett and Ryngaert, 1997). Firm size as a control variable is negatively and significantly related to accruals earnings management at 1%. This finding is consistent with previous studies such as (Lehmann, 2016b); (Vasilescu and Millo, 2016); (Higgins, 2013). Also, all the independent variables have correlation coefficients lower than 0.80, and the Variance Inflation Factors (VIF) value less than 10, therefore, this analysis will not face any of the multi-collinearity problems as suggested by (Wooldridge 2010); (Shafer, 2015); Choi et al., (2013); Alghamdi and Ali, (2012)).

Table 6.3: Pair-wise correlation coefficients and variance inflation factor coefficients of The GCC Acquiring companies' sample

Pearson Correlations												
		AEM	CBACQ	INDR	OWNACQ	PAYMETH	FSIZE	LEV	GROW	MTB	ROA	VIF
AEM	Corr	1										
	Sig.											
CBACQ	Corr	0.217***	1									1.10
	Sig.	(0.000)										
INDR	Corr	-0.033	-0.108*	1								1.10
	Sig.	(0.597)	(0.083)									
OWNACQ	Corr	-0.101*	0.121*	-0.015	1							1.04
	Sig.	(0.104)	(0.052)	(0.807)								
PAYMETH	Corr	-0.026	-0.074	-0.002	0.010	1						1.03
	Sig.	(0.674)	(0.238)	(0.971)	(0.879)							
FSIZE	Corr	-.136***	0.056	-0.179***	0.017	-0.069	1					
	Sig.	(0.029)	(0.365)	(0.004)	(0.779)	(0.267)						1.19
LEV	Corr	0.028	0.048	-0.003	0.026	0.077	-0.060	1				
	Sig.	(0.672)	(0.458)	(0.968)	(0.685)	(0.237)	(0.359)					1.17
GROW	Corr	0.057	0.132**	-0.136**	-0.017	0.056	-0.051	0.008	1			
	Sig.	(0.363)	(0.034)	(0.029)	(0.790)	(0.372)	(0.414)	(0.904)				1.07
MTB	Corr	0.008	0.048	0.168***	0.076	0.055	-0.398***	0.168**	0.130**	1		
	Sig.	(0.901)	0.458	(0.009)	(0.240)	(0.399)	(0.000)	(0.012)	(0.044)			1.30
ROA	Corr	0.012	0.134**	-0.050	-0.013	0.076	0.151**	-0.202***	0.045	0.043	1	
	Sig.	(0.854)	(0.031)	(0.420)	(0.831)	(0.225)	(0.015)	(0.002)	(0.474)	(0.508)		1.19
***. Correlation is significant at the 0.01 level												
**. Correlation is significant at the 0.05 level												
*. Correlation is significant at the 0.10 level												

6.3. Regression Results of The GCC Companies

Table 6.4 below provides the robust results of the effect of cross border acquisition deals, industry unrelatedness, ownership acquired, and payment methods in the GCC listed acquiring companies on accruals earnings management. As mentioned in the Methodology Chapter, this study uses absolute accruals earnings management due to the aim of this study to identify the magnitude of accruals earnings management, not the direction (income-increasing and income-decreasing) of accruals earnings management.

To identify a suitable model for this research, some statistical issues ought to be considered. For examining whether the panel or pooled model is the most suitable model, the Breusch-Pagan test is applied for the first regression. Gujarati (2011) suggest that panel data is a more appropriate approach than the pooled method if the F-value in the Breusch-Pagan test is lower than 0.05. As the Breusch-Pagan test detected that the F-value was significant at the 0.00 level for the model, the panel data model is more suitable approach for the first regression. Panel data could be analysed using fixed effects or random effects. The tool used to identify which type of effect is most appropriate is by applying the Hausman test (Hausman 1978). If the null hypothesis of the Hausman test is rejected, the model is a fixed effect. Otherwise, the model would be a random effect. As the result of the Hausman test in the model was very significant at the 0.000 level, the fixed-effect model will be adopted in research regressions. Table 6.4 shows the value of R² for the first regression model is 0.308.

6.3.1. The Impact of Acquisition Deal Characteristics on Accruals Earnings Management of The GCC Acquiring Companies.

As can be seen from Model 1 in Table 6.4 below, cross border acquisition deals' variable (CBACQ) has a statistically significant positive association with accruals earnings management, suggesting that there is an association between companies with cross border acquisition deals and level of accruals earnings management before the

acquisition (H8a). This finding supports the agency theory, cross-border acquisitions can achieve shareholders' aims: investment risks reduction, and increase the company growth (Jensen and Meckling, 1976a). Companies face significant challenges in successfully accomplishing cross border acquisition deals due to asymmetric information faced by acquiring and target companies (Kang and Kim, 2008), therefore the degree of asymmetric information is associated positively with engagement in earnings management ((Richardson, 2000). Acquiring companies face "liability of foreignness"(Zaheer,1995) that increase asymmetric information in the host country, thus acquiring companies engage in earnings management to mitigate the cost related to a cross border acquisition ((Baik et al., 2015). The positive effect seen in Table 6.4 in GCC listed companies supports the findings reported from studies investigating developed countries, e.g. the USA, and the UK (Baik et al., 2015); and Botsari and Goh, (2014). This result therefore can help shareholders in non-companies, to be aware of the consequences of earnings management used by managers. It is also can help cross-border target companies to be aware of the consequences of earnings management employed before the acquisition by acquiring companies. One of the main consequences is that acquiring companies experience underperformance after acquisition (Louis, 2004). This is attributable to earnings management masking the genuine information of the company (Parfet, 2000). Policymakers in the GCC should encourage domestic acquisitions that mitigate the engagement in accruals earnings management.[1]

The industry unrelatedness' variable (INDR) in Table 6.4 has a statistically significant negative association with accruals earnings management, suggesting that there is an association between companies with industry relatedness deals and level of accruals earnings management before acquisition (H9a).This finding does not support the argument of agency theory, according to the level of asymmetric information is unrelated to the industries which is greater than industry relatedness companies ((Lim et al., 2008). Information asymmetry can rise the acquiring companies which will increase the risk, as they may overpay for the target companies, and they could face unreliable statements employed in due diligence (Alsharairi et al., 2015). Consequently, the level of engagement in earnings management in unrelated industries companies is high compared with these

industry relatedness companies (Baik et al., 2015). This is attributed to the unrelated industries deals generating a higher increased cash flow, when compared to the cash flows produced by engaging in earnings management (Vasilescu and Millo, 2016), (Khanchel El Mehdi and Seboui, 2011) and (Jiraporn et al., 2008). The negative effect seen in Table 6.4 in GCC listed companies supports the findings reported from (Kassamany et al., 2017a)'study investigating the UK. This result therefore can help to target companies to invest in unrelated industries to avoid the consequences of earnings management employed before the acquisition by acquiring companies. Policymakers in the GCC should encourage unrelated industries acquisition that mitigate the engagement in accruals earnings management. ⁸

The ownership acquired (OWNACQ) variable has a statistically significant negative association with accruals earnings management, suggesting that there is an association between companies with a high proportion of acquisition and level of accruals earnings management before the acquisition (H10a). This finding supports the agency theory argument, according to which, the roles of the large shareholders in monitoring management create shared benefits for all shareholders (Shleifer and Vishny, 1986). Acquiring companies often acquire target companies that experience poor earnings to accept acquirers' offers during acquisition negotiation without overestimation of acquirers' prices (Raman et al., 2013). Another potential explanation is controlling shareholders mostly affect strategy decisions rather than concentration on short-term performance (Piosik and Genge, 2019). Moreover, acquiring companies perhaps have already some proportions of shares of the target companies before the acquisition which already have been inverted in the acquiring companies' share price (Mei and Sun, 2008). Therefore, no need in engaging in earnings management. The negative effect seen in Table 6.4 in GCC listed companies supports the findings reported from studies investigating developing countries (Maswadeh, 2018); Ramadan (2016-Jordan); and (Kouaib and Jarboui, 2014a) who found that large shareholders mitigate the engagement in accruals earnings management. Target companies should deal with a high proportion of acquisition as it

⁸The coefficient of the industry unrelatedness deals is negative and significant in all the models reported in Table 6.4.

mitigates the engagement in accruals earnings management. Policymakers in the GCC should develop rules that encourage a high proportion of acquisition which mitigate the engagement in accruals earnings management.⁹

The fourth and last deal characteristics variable, the method of payment (PAYMETH) has a statistically insignificant association with accruals earnings management. This finding does not support the researcher's eleventh hypothesis (H11a) which argues there is an association between companies with stock-financed acquisitions and level of accruals earnings management before acquisition. It also does not support the argument that the stock-for-stock acquirers engage more in earnings management than cash-for-stock acquirers to increase the market value of their stocks and achieve acquisition with the lowest costs (Erickson and Wang, 1999). The explanation behind this result is that acquisition is an important stage of a company and might draw more attention and scrutiny from auditors which in turn could detect engaging in accruals earnings management during auditing stock-financed acquisitions, and cash-financed acquisitions (Cohen and Zarowin, 2010). Similar to this research result, Heron and Lie (2002) and (Cohen and Zarowin, 2010) found that the payment methods are not associated with accruals earnings management in the USA.

Overall, the findings in Table 6.4 shows that only two acquisition deal characteristics: industry unrelatedness and ownership acquired percentage, are influential in reducing the engagement in accruals earnings management; whereas cross border acquisition deals is influential in increasing the engagement in accruals earnings management in GCC listed acquiring companies. In terms of control variables, Table 6.4 shows that the relationships between all control variables (firm size, leverage, growth, market to book value, and ROA) and accruals earnings management are insignificant.

⁹The coefficient of the ownership acquired ratio is negative and significant in all the models reported in Table 6.4.

Table 6.4: The Regression Results of the relationship between Acquisition Deals Characteristics on AEM in the GCC Acquiring Companies.

AEM		Fixed Effect	Random Effect	Random Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
CBACQ	Coef	0.044*	0.046***	0.052***	0.041***	0.043***
	P-value	(0.062)	(0.004)	(0.001)	(0.000)	(0.000)
INDR	Coef	-0.026*	-0.021*	-0.023*	-0.017*	-0.022*
	P-value	(0.098)	(0.087)	(0.078)	(0.092)	(0.056)
OWNACQ	Coef	-0.056**	-0.031*	-0.041**	-0.029*	-0.043**
	P-value	(0.018)	(0.067)	(0.030)	(0.060)	(0.036)
PAYMETH	Coef	-0.003	-0.000	-0.000	-0.001	-0.004
	P-value	(0.823)	(0.989)	(0.972)	(0.884)	(0.671)
FSIZE	Coef	-0.050	-0.003*	-0.020***	-0.004***	-0.015***
	P-value	(0.137)	(0.073)	(0.000)	(0.004)	(0.000)
LEV	Coef	0.085	0.011	0.058	0.012	0.066
	P-value	(0.494)	(0.735)	(0.178)	(0.687)	(0.129)
GROW	Coef	0.032	0.023	0.043	0.006	0.029
	P-value	(0.477)	(0.468)	(0.200)	(0.809)	(0.327)
MTB	Coef	-0.008	-0.004	-0.004	-0.003	0.001
	P-value	(0.365)	(0.443)	(0.943)	(0.548)	(0.832)
ROA	Coef	0.354	0.049	0.102	-0.005	0.047
	P-value	(0.107)	(0.578)	(0.213)	(0.943)	(0.499)
Country dummy		No	No	Yes	No	Yes
Industry dummy		No	No	Yes	No	Yes
number of observations		219	219	210	219	210
R-squared		0.308	0.232	0.303	0.108	0.222
F statistic (9, 93)		3.05			3.02	5.41
Wald chi2(9)			14.30	139.03		
Prob>F/ Prob>chi2(9)		0.003	0.112	0.000	0.002	0.000

Where: The Bold Model is the main model of the results explanations. Model (1)= the robust results of the fixed effect regression, Model (2)= the robust results of the random effect regression without country and industry dummies, Model (3)= the robust results of the random effect regression with country and industry dummies, Model (4)= the robust results of the OLS regression without country and industry dummies, Model (5)= the robust results of the OLS regression with country and industry dummies, AEM =absolute value accruals earnings management in year t-1. CBACQ= cross border acquisition deals in year t measured 1 if the GCC acquiring companies acquire companies outside the GCC, and 0 otherwise. INDR= Industry unrelatedness deals in year t measured 1 if the acquiring and the target companies do not belong to the same industry sector, 0 otherwise. OWNACQ= the percentage of the target company's shares acquired by the acquirer in the acquisition in year t. PAYMETH= payment methods in year t measured 1 if the acquisition transaction is cash, 0 otherwise. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through total debt over total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= market to book value in t-1. ROA = acquiring firm's profitability captured through net income over total assets in year t-1. * Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.

Table 6.5: Findings' Summary of the GCC Companies

Hypotheses	Expected Signs	Results	Theory	Prior Studies
H8a: There is an association between companies with cross border acquisition deals and level of accruals earnings management before acquisition.	+/-	+	Agency theory	(Baik et al., 2015); and Botsari and Goh, (2014).
H9a: There is an association between companies with industry relatedness deals and level of accruals earnings management before acquisition	+/-	-	Agency theory	(Kassamany et al., 2017a)
H10a: There is an association between companies with a high proportion of acquisition and level of accruals earnings management before acquisition	+/-	-	Agency theory	(Maswadeh, 2018); Ramadan (2016-); and (Kouaib and Jarbou, 2014a)
H11a: There is an association between companies with stock-financed acquisitions and level of accruals earnings management before acquisition.	+/-	Rejected	Agency theory	Heron and Lie (2002); and (Cohen and Zarowin, 2010)

6.4. Additional Analysis

The main results in Table 6.4 use the absolute value of accruals earnings management on the firm's characteristics and acquisition deal characteristics. To enhance the strengths of the main results, in this section I present the results when using firm level governance (external audit quality, institutional ownership, state ownership, foreign ownership), and country level governance (national governance quality), along with acquisition deals characteristics (cross border acquisition deals, Industry unrelatedness deals, ownership acquired, and payment methods).

6.4.1. The Impact of Acquisition Deal Characteristics on Accruals Earnings Management of The GCC Acquiring Companies.

According to Model1 in Table 6.6 below, cross border acquisition deals variable (CBACQ) has a significant and positive association with accruals earnings management. This result is consistent with the main result reported in Table 6.6. Ownership Acquired (OWNACQ) has a statistically significant negative association with accruals earnings management. This result supports the main result reported in Table 6.6. Industry unrelatedness (INDR) has an insignificant association with accruals earnings management. This insignificance contradicts the main result for industry unrelatedness reported in Table 6.4. In the main result, I find a significant negative relationship between unrelated industries deals and accruals earnings management. This difference of the effect of unrelated industries deals on accruals earnings management suggests governance factors statistically affect the accruals earnings management. In terms of the methods of payment (PAYMETH), it is still insignificant as the main result reported in Table 6.4.

6.4.2. The Impact of Governance Mechanisms (Firm-Level) on Accruals Earnings Management of The GCC Acquiring Companies.

According to Model1 in Table 6.6, external audit quality has a statistically significant positive association with accruals earnings management, suggesting that acquiring firms audited by Big4 auditing firms engage at a higher level in accruals earnings management than the GCC listed acquiring firms not audited by Big4 auditing firms. A possible explanation for the significant positive effect of Big 4 auditing firms on accrual earnings is that Big 4 auditing firms do not have a right to stop opportunistic behavior by managers (Kouaib and Jarboui, 2014) and therefore they are less effective in influencing acquiring companies engaging in accruals earnings management. This result contradicts the results for external audit quality reported in Chapter 4. In Chapter 4, I find insignificant relationship between external audit quality and accruals earnings management.

The institutional ownership variable has a statistically significant negative association with accruals earnings management. This result is consistent with the results for Institutional ownership reported in Chapter 4, suggesting that GCC listed acquiring companies with institutional ownership engage less in accruals earnings management than GCC listed acquiring companies with non-institutional ownership. State ownership has an insignificant association with accruals earnings management. This insignificance contradicts the results for state ownership reported in Chapter 4. In Chapter 4, I find a statistically significant negative association with accruals earnings management. This difference of the effect of state ownership on accruals earnings management suggests firm's characteristics and acquisition deal characteristics statistically affect the accruals earnings management. Foreign ownership as firm-level has an insignificant association with accruals earnings management, which is similar to the main result reported in Chapter4.

6.4.3. The Impact of National Governance Quality (Country-Level) on Accruals Earnings Management of The GCC Acquiring Companies

Table 6.6 below shows a statically significant negative relationship between national governance quality and accruals earnings management practices of the GCC acquiring companies. This result is consistent with the results for national governance quality reported in Chapter 4, suggesting that GCC listed acquiring companies with national governance quality engage less in accruals earnings management than GCC listed acquiring companies with non-national governance quality. Furthermore, the coefficient of national governance quality is negative in all the models reported in Table 6.6. However, it is significant in all models except random effect and OLS regressions without country and industry dummies (models 2, and 4).

In terms of the control variables, ROA is noted to have a positive and significant relationship with accruals earnings management, suggesting the higher ROA, the higher engaging in accruals earnings management. A possible explanation is that acquiring companies prove positive firm performance to investors (Gunny, 2010). This result contradicts the results for accruals and earnings management reported in the main result of this Chapter and Chapter 4. As I find insignificant relationship between ROA and accruals earnings management. However, it is consistent with Gunny (2010); Vo and Chu (2019). Concerning the rest of control variables, Table 6.6 shows that the effects of firm size, leverage, growth and market to book value on accruals earnings management are insignificant.

In summary, concerning acquisition deal characteristics, cross border acquisition deals variable (CBACQ) has a significant and positive association with accruals earnings management. Ownership Acquired (OWNACQ) has a significant and negative association with accruals earnings management. Industry unrelatedness (INDR), and methods of payment (PAYMETH) are insignificant. In terms of firm level governance, external audit quality has a significant and positive association with accruals earnings management. Institutional ownership has a significant and negative association with accruals earnings management. State ownership, and foreign ownership have an insignificant association

accruals earnings management. National governance quality as country-level has a significant and negative association associations with accruals earnings management.

Table 6.6: The Robust Regression Results of the relationship between Acquisition Deals Characteristics and CG mechanisms on AEM in the GCC Acquiring Companies.

AEM		Fixed Effect	Random Effect	Random Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
CBACQ	Coef	0.039**	0.041***	0.040***	0.039***	0.032***
	P-value	(0.031)	(0.005)	(0.001)	(0.000)	(0.001)
INDR	Coef	-0.015	-0.020*	-0.017*	-0.017*	-0.017
	P-value	(0.310)	(0.103)	(0.145)	(0.085)	(0.119)
OWNACQ	Coef	-0.049**	-0.030*	-0.038**	-0.030*	-0.039**
	P-value	(0.016)	(0.075)	(0.032)	(0.065)	(0.050)
PAYMETH	Coef	-0.008	-0.002	-0.010	-0.004	-0.015
	P-value	(0.584)	(0.744)	(0.408)	(0.676)	(0.230)
EAUDQ	Coef	0.067*	0.030*	0.014	0.031*	0.013
	P-value	(0.010)	(0.066)	(0.428)	(0.043)	(0.419)
INSTOWN	Coef	-0.105**	-0.011**	0.009	0.002	0.012
	P-value	(0.027)	(0.677)	(0.704)	(0.915)	(0.598)
STOWN	Coef	0.094	-0.057	-0.036	-0.062	-0.029
	P-value	(0.445)	(0.397)	(0.619)	(0.320)	(0.679)
FOWN	Coef	-0.007	-0.043	-0.019	-0.012	-0.011
	P-value	(0.870)	(0.049)	(0.350)	(0.525)	(0.558)
NGQ	Coef	-0.132*	-0.037	-0.148**	-0.005	-0.139***
	P-value	(0.096)	(0.123)	(0.017)	(0.702)	(0.002)
FSIZE	Coef	-0.035	-0.002	-0.018***	-0.005***	-0.014***
	P-value	(0.213)	(0.423)	(0.000)	(0.007)	(0.001)
LEV	Coef	0.139	0.012	0.101*	0.001	0.111
	P-value	(0.209)	(0.715)	(0.059)	(0.963)	(0.028)
GROW	Coef	0.033	0.006	0.040	-0.004	0.028
	P-value	(0.368)	(0.829)	(0.218)	(0.877)	(0.334)
MTB	Coef	-0.002	-0.005	0.001	-0.004	0.001
	P-value	(0.831)	(0.332)	(0.762)	(0.418)	(0.765)
ROA	Coef	0.450*	0.064	0.175	-0.017	0.124
	P-value	(0.032)	(0.531)	(0.115)	(0.821)	(0.169)
Country dummy		No	No	Yes	No	Yes
Industry dummy		No	No	Yes	No	Yes
number of observations		219	219	210	219	210
R-squared		0.387	0.291	0.343	0.128	0.273
F statistic (14, 93)		2.67			2.54	3.05
Wald chi2(9)			22.39	151.85		
Prob>F/ Prob>chi2(9)		0.002	0.071	0.000	0.002	0.000

AEM	Fixed Effect	Random Effect	Random Effect	OLS	OLS
	(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
<p><i>Where: The Bold Model is the main model of the results explanations. Model (1)= the robust results of the fixed effect regression, Model (2)= the robust results of the random effect regression without country and industry dummies, Model (3)= the robust results of the random effect regression with country and industry dummies, Model (4)= the robust results of the OLS regression without country and industry dummies, Model (5)= the robust results of the OLS regression with country and industry dummies, AEM =absolute value accruals earnings management in year t-1. CBACQ= cross border acquisition deals in year t measured 1 if the GCC acquiring companies acquire companies outside the GCC, and 0 otherwise. INDR= Industry unrelatedness deals in year t measured 1 if the acquiring and the target companies do not belong to the same industry sector, 0 otherwise. OWNACQ= the percentage of the target company's shares acquired by the acquirer in the acquisition in year t. PAYMETH= payment methods in year t measured 1 if the acquisition transaction is cash, 0 otherwise. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through total debt over total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= market to book value in year t-1. ROA = acquiring firm's profitability captured through net income over total assets in year t-1.* Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.</i></p>					

6.5. Robustness Check

In the key analysis reported in Table 6.4, this study used the modified Jones model to estimate discretionary accruals earnings management. In this section, I use Kothari et al.'s (2005) model as an alternative estimator of discretionary accruals, i.e. a proxy for absolute accruals earnings management.

The robustness test results in table 6.7 extend the evidence that the main result of this research is robust and consistent with various alternative signed accruals earnings management. Even though the values of coefficients and significance level were different, the pattern of the associations between accruals earnings management and the factors are the same.

Table 6.7: The Robust Regression Results of the relationship between Acquisition Deals Characteristics on signed AEM in the GCC Acquiring Companies.

Signed_AEM		Fixed Effect	Random Effect	Random Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
CBACQ	Coef	0.039	0.018	0.020	0.009	0.000
	P-value	(0.212)	(0.338)	(0.356)	(0.469)	(0.977)
INDR	Coef	0.00	0.00	0.00	0.00	0.00
	P-value	(0.862)	(0.886)	(0.923)	(0.487)	(0.564)
OWNACQ	Coef	-0.066***	-0.032*	-0.036**	-0.026	-0.041*
	P-value	(0.005)	(0.089)	(0.034)	(0.159)	(0.074)
PAYMETH	Coef	-0.011	0.00	0.00	0.00	0.010
	P-value	(0.475)	(0.738)	(0.600)	(0.767)	(0.481)
FSIZE	Coef	-0.075*	-0.003	-0.016**	-0.003*	-0.007
	P-value	(0.065)	(0.129)	(0.036)	(0.064)	(0.159)
LEV	Coef	0.285	0.051	0.112*	0.024	0.083
	P-value	(0.130)	(0.235)	(0.060)	(0.509)	(0.127)
GROW	Coef	0.022	0.040	0.050	0.057	0.054
	P-value	(0.716)	(0.395)	(0.357)	(0.241)	(0.336)
MTB	Coef	-0.000	-0.000	0.00	0.000	0.002
	P-value	(0.969)	(0.929)	(0.838)	(0.952)	(0.725)
ROA	Coef	0.517*	0.211*	0.286**	0.152	0.217**
	P-value	(0.092)	(0.089)	(0.030)	(0.115)	(0.040)
Country dummy		No	No	Yes	No	Yes
Industry dummy		No	No	Yes	No	Yes
number of observations		219	219	210	219	210
R-squared		0.258	0.207	0.260	0.059	0.113
F statistic (9, 93)		1.96			1.48	2.90
Wald chi2(9)			12.47	63.77		
Prob>F/ Prob>chi2(9)		0.052	0.187	0.000	0.158	0.000
<p>Where: The Bold Model is the main model of the results explanations. Model (1)= the robust results of the fixed effect regression, Model (2)= the robust results of the random effect regression without country and industry dummies, Model (3)= the robust results of the random effect regression with country and industry dummies, Model (4)= the robust results of the OLS regression without country and industry dummies, Model (5)= the robust results of the OLS regression with country and industry dummies, , AEM =absolute value accruals earnings management in year t-1. CBACQ= cross border acquisition deals in year t measured 1 if the GCC acquiring companies acquire companies outside the GCC, and 0 otherwise. INDR= Industry unrelatedness deals in year t measured 1 if the acquiring and the target companies do not belong to the same industry sector, 0 otherwise. OWNACQ= the percentage of the target company's shares acquired by the acquirer in the acquisition in year t. PAYMETH= payment methods in year t measured 1 if the acquisition transaction is cash, 0 otherwise. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through total debt over total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB=</p>						

Signed_AEM	Fixed Effect	Random Effect	Random Effect	OLS	OLS
	(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
<i>market to book value in year t-1. ROA = acquiring firm's profitability captured through net income over total assets in year t-1. * Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.</i>					

The robustness test results in table 6.8 extend the evidence that the main result of this research is robust and consistent with various alternative Kothari et al.'s (2005) model. Even though the values of coefficients and significance level were different, the trend of the association between accruals earnings management and cross border acquisition deals, Industry unrelatedness, ownership acquired, and payment methods as acquisition deal characteristics stay similar by Kothari et al.'s (2005) model as an alternative estimator of discretionary accruals.

Table 6.8: The Robust Regression Results of the relationship between Acquisition Deals Characteristics on AEM in the GCC Acquiring Companies by Kothari model as an alternative test.

ABS_DACC		Fixed Effect	Random Effect	Random Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
CBACQ	Coef	0.048*	0.047***	0.052***	0.042***	0.042***
	P-value	(0.053)	(0.003)	(0.001)	(0.000)	(0.000)
INDR	Coef	-0.022	-0.018	-0.020	-0.015	-0.019
	P-value	(0.181)	(0.140)	(0.119)	(0.154)	(0.102)
OWNACQ	Coef	-0.063***	-0.032*	-0.024*	-0.068**	-0.042**
	P-value	(0.008)	(0.054)	(0.020)	(0.030)	(0.038)
PAYMETH	Coef	-0.004	-0.006	-0.001	-0.003	-0.006
	P-value	(0.778)	(0.931)	(0.868)	(0.755)	(0.557)
FSIZE	Coef	-0.051	-0.002	-0.016***	-0.003**	-0.001**
	P-value	(0.118)	(0.150)	(0.001)	(0.017)	(0.012)
LEV	Coef	0.070	0.011	0.053	0.008	0.059
	P-value	(0.570)	(0.760)	(0.231)	(0.786)	(0.188)
GROW	Coef	0.037	0.033	0.056*	0.022	0.043
	P-value	(0.433)	(0.318)	(0.085)	(0.461)	(0.164)
MTB	Coef	-0.008	-0.004	-0.003	-0.002	10.001
	P-value	(0.378)	(0.473)	(0.956)	(0.638)	(0.820)
ROA	Coef	0.395*	0.109	0.180**	0.068	0.138*
	P-value	(0.067)	(0.139)	(0.015)	(0.335)	(0.073)
Country dummy		No	No	Yes	No	Yes

Industry dummy	No	No	Yes	No	Yes
number of observations	219	219	210	219	210
R-squared	0.307	0.244	0.323	0.107	0.216
F statistic (9, 93)	4.18			2.81	3.11
Wald chi2(9)		13.43	107.99		
Prob>F/ Prob>chi2(9)	0.000	0.144	0.000	0.003	0.000

*Where: The Bold Model is the main model of the results explanations. Model (1)= the robust results of the fixed effect regression, Model (2)= the robust results of the random effect regression without country and industry dummies, Model (3)= the robust results of the random effect regression with country and industry dummies, Model (4)= the robust results of the OLS regression without country and industry dummies, Model (5)= the robust results of the OLS regression with country and industry dummies, AEM =absolute value accruals earnings management in year t-1. CBACQ= cross border acquisition deals in year t measured 1 if the GCC acquiring companies acquire companies outside the GCC, and 0 otherwise. INDR= Industry unrelatedness deals in year t measured 1 if the acquiring and the target companies do not belong to the same industry sector, 0 otherwise. OWNACQ= the percentage of the target company's shares acquired by the acquirer in the acquisition in year t. PAYMETH= payment methods in year t measured 1 if the acquisition transaction is cash, 0 otherwise. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through total debt over total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= market to book value in year t-1. ROA = acquiring firm's profitability captured through net income over total assets in year t-1. * Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.*

6.6. Summary

This chapter examines the effect of cross border acquisition deals, industry unrelatedness deals, ownership acquired, and payment methods on accruals earnings management in GCC listed acquiring companies. The results of this Chapter provide evidence that these GCC companies engage in accruals earnings management. It is noted that of cross border acquisition deals engage more in accruals earnings management than domestic acquisition deals. Industry unrelatedness deals and ownership acquired are obtained to be an efficient tool in restraining engaging in accruals earnings management, while payment methods are observed to be inefficient mechanisms in mitigating engaging in accruals earnings management.

In terms of the effect of firm level governance, along with the acquisition deals characteristics, GCC listed companies audited by Big4 auditing firms engage at a higher level in accruals earnings management than the GCC listed companies not audited by Big4 auditing firms. However, GCC listed companies with institutional ownership engage at a lower level in accruals earnings management than GCC listed companies with non-institutional ownership. Likewise, GCC listed companies with national governance quality

engage at a lower level in accruals earnings management than GCC listed companies with non-national governance quality.

Policymakers, and existing and potential investors in the GCC region should consider the findings from this research when taking their decision regarding the acquisition, as the acquisition deals characteristics seem to have a direct effect on accruals earnings management. Furthermore, the author recommends that unrelated industries deals, and ownership acquired are important acquisition deals characteristics, as they influence GCC acquiring firms to engage less in accruals earnings management.

CHAPTER 7

REAL EARNINGS MANAGEMENT VERSUS ACCRUALS EARNINGS MANAGEMENT AND ACQUISITION DEAL CHARACTERISTICS IN THE GCC LISTED ACQUIRING COMPANIES

7.1. Introduction

This chapter presents the findings of the four acquisition deals characteristics influencing earnings management in the GCC by using real earnings management (REM) through estimating abnormal discretionary expenses (ADE), abnormal cash flows from operations (ACFO); and abnormal production costs (APC) by using Roychowdhury model(2006), followed by combining these three estimators to capture the total effect of real earnings management as suggested by (Cohen et al., 2008); (Cohen and Zarowin, 2010); (Zang, 2012); (Sani et al., 2018). The four acquisition deals characteristics are cross border acquisition deals, Industry relatedness deals, ownership acquired, and payment methods. The chapter starts with the summary statistics in section 7.2, followed by the effect of these four deal characteristics on the total real earnings management within the GCC acquiring contexts in section 7.3. Section 7.4 presents and discusses further analysis on the total real earnings management when interacting accruals earnings management with the four acquisition deals characteristics variables. Section 7.5 states the results of the robustness test employing the four acquisition deals characteristics variables, firm-level governance, country-level governance as independent variables. In addition, this study tests when the dependent variable is the three estimators of real earnings management (ADE, ACFO, and APC) without combining them as the main regression, but each estimator is as dependent variable to capture the effect of these three estimators as suggested by (Al-Haddad and Whittington, 2019); Elkalla, (2017); (C.-L. Chen et al., 2012); and Kuo et al. (2012). Finally, the conclusion of this chapter will be presented in section 7.6.

7.2. Summary Statistics of the GCC Acquiring Companies

The analysis is applied to GCC listed acquiring companies between 2007-2017. The first section presents and discusses the descriptive statistics of all the variables (real earnings management, cross border acquisition deals, Industry relatedness deals, ownership acquired, and payment methods, firm size, leverage, growth, market to book value, return on assets) employed in this research. In the second section, there is discussion on the regression diagnostics such as normality test, heteroscedasticity test, and the pair-wise correlation matrix and the collinearity diagnostics. The third section presents and discusses the results from the Hausman fixed effects model applied to the GCC acquiring sample.

7.2.1. Descriptive Statistics of the GCC Companies

Based on the availability of data, the sample in this Chapter consists of 72 acquiring companies (185 firm-deal observations) for the financial year 2007-2017 and it is slightly smaller than the sample in Chapter 6 (116 companies (259 firm-deal observations) for the same period.

Table 6.1 states the mean, median, standard deviation, minimum, maximum, skewness, and kurtosis of the variables employed in the research. The table states the total real earnings management ($REM_{APC-ACFO-ADE}$), from a minimum of -1.036 to a maximum of 1.161 with a mean and median of -0.10 and 0.023, respectively. The average REM (-0.027) presented by Alhadab and Nguyen, (2018) on the USA listed acquiring companies is a bit higher than the average of REM of -0.10 presented in this research results due to the difference in the time horizon (2001-2012) examined. As for the independent variables, the cross-border acquisition deals (CBACQ) were measured by a dummy variable, taking a value of 1 if the GCC acquiring companies acquire companies outside the GCC. It is found to have a mean value, and median of 0.529, and 1 respectively, suggesting that 52.9% of firms in the sample were cross-border acquisition deals. The average of the cross-border acquisition deals presented by Kling et al., (2014) is found to be 0.71 of the USA and EU listed acquiring companies,

which is higher than the average of the cross border of 0.529 presented in this research results. The lower average value suggests that acquiring companies in developing countries like the GCC are less likely to involve a cross border acquisition than the companies in developed countries like the USA. The industry unrelatedness deals (INDR) was measured by a dummy variable 1 if the acquiring and the target companies do not belong to the same industry sector. It is found to have a mean value of 0.432 and median of 0, with a minimum of 0 and a maximum of 1, suggesting that 43.2% of firms in the sample were unrelated industries. The average of the industry unrelatedness presented by (Kassamany et al., 2017a) is found to be 0.65 of the UK listed acquiring companies, which is higher than the average of unrelated industries of 0.432 presented in this research results. The lower average value in unrelated industries deals variable suggests that acquiring companies in the GCC are less likely to acquire companies in different sectors than the companies in the UK. The ownership acquired (OWNACQ) has a mean value of 0.550, and median of 0.49, with a minimum of 0.01 and a maximum of 1, with a standard deviation of 0.371, suggesting the 185 acquisition deals acquire a stake of that 55%. The mean value of this research is higher than the mean value of the ownership acquired of 0.34, as found by (Mellado and Saona, 2020) on the Latin America. The methods of payment (PAYMETH) was measured by a dummy variable, taking a value of 1 if the acquisition transaction is cash, and 0 otherwise. It is found to have a mean value, and median of 0.108, and 0 respectively, suggesting that 10.8% of acquisition transactions in the sample were cash payment. This average of the cash acquisition transactions presented by (Kassamany et al., 2017a) is found to be 0.619 of the UK listed companies, which is much higher than the average of the cash acquisition transactions of 0.108 presented in this research results. The lower average value in the cash acquisition transactions variable suggests that acquiring companies in developing countries like the GCC are less likely to pay cash than the companies in developed countries like the UK.

As for the control variables, the firm size has a mean value of 17.84, with a minimum of 11.69 and a maximum of 23.75. This finding is higher than the finding of the firm size of 5.39 as found by (Alhadab and Nguyen, 2018) on the USA listed

acquiring companies. The table also presents a mean value leverage of 0.260, with a minimum of 0.00 and a maximum of 0.667. This average is much lower than the average of 0.44 obtained by Alsharairi and Ahmad, (2012) on the USA acquiring companies. The firms' growth has a mean value of 0.074, with a minimum of -0.391 and a maximum of 0.971. This mean value is lower than the mean value (3.034) of (Alhadab and Clacher, 2018), on the London listed IPO companies. The market to book value (MTB) has a mean value of 1.851, with a min of 0 and a max of 7.655. This average is lower than the average of 4.977 as found by (Farooqi et al., 2017) on the USA listed acquiring companies. Finally, the profitability of the company presented by return on assets (ROA) has a mean value of 0.076 with a minimum and maximum of around -0.112 and 0.436, respectively. This mean value is higher than the mean value (-0.879) of (Alhadab and Clacher, 2018), on London listed acquiring companies.

Table 7.1: Descriptive Statistics of the Acquiring Firms

Variable	Obs	Mean	Median	Min	Max	Std. Dev.	Skewness	Kurtosis
$(REM_{APC-ACFO-ADE})$	185	-0.10	0.023	-1.036	1.161	0.308	0.061	4.904
CBACQ	185	0.529	1	0	1	0.500	-0.119	1.014
INDR	185	0.432	0	0	1	0.496	0.272	1.074
OWNACQ	185	0.550	0.49	0.01	1	0.371	0.091	1.445
PAYMETH	185	0.108	0	0	1	0.311	2.524	7.371
FSIZE	185	17.840	18.490	11.691	23.753	3.749	-0.108	1.564
LEV	168	0.260	0.261	0	0.667	0.163	0.175	2.174
GROW	184	0.074	0.043	-0.391	0.971	0.168	2.422	12.065
MTB	171	1.851	1.635	0	7.655	1.343	1.091	4.920
ROA	185	0.076	0.064	-0.112	0.436	0.074	2.440	11.187

Where: $(REM_{APC-ACFO-ADE})$ = abnormal production costs, the aggregate inverse of abnormal cash flows from operations and the aggregate inverse of abnormal discretionary expenses in year t-1. CBACQ= cross border acquisition deals in year t measured 1 if the GCC acquiring companies acquire companies outside the GCC, and 0 otherwise. INDR= Industry unrelatedness deals in year t measured 1 if the acquiring and the target companies do not belong to the same industry sector, 0 otherwise. OWNACQ= the percentage of the target company's shares acquired by the acquirer in the acquisition in year t. PAYMETH= payment methods in year t measured 1 if the acquisition transaction is cash, 0 otherwise. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through total debt over total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= market to book value in year t-1. ROA = acquiring firm's profitability captured through net income over total assets in year t-1.

7.2.2. Regression Diagnostics of The GCC Companies

The histogram and Q-Q plot donate the normality of the residual of a real earnings management. As indicated in figure 7.1 and figure 7.2, the singed value of real earnings management is normally distributed. Second, heteroscedasticity issues ought to be checked for an appropriate model due to it leads to bias in estimating the variances of the estimated coefficients (Gujarati 2003). For checking heteroscedasticity, this study employed the Modified Wald test in fixed effect model. The result of the Modified Wald test suggests a significance level of 0.000 as presented below. This implies that there is heteroscedasticity in the data, therefore this study must run robust standard errors to fix this issue. Finally, the pair-wise correlation matrix and the collinearity diagnostics explained by the variance inflation coefficients (VIF) are shown in table 7.3 below. it is noted that there is no multi-collinearity between the independent variables as correlation coefficients are lower than 0.80, and all these variables have a VIF value less than 10.

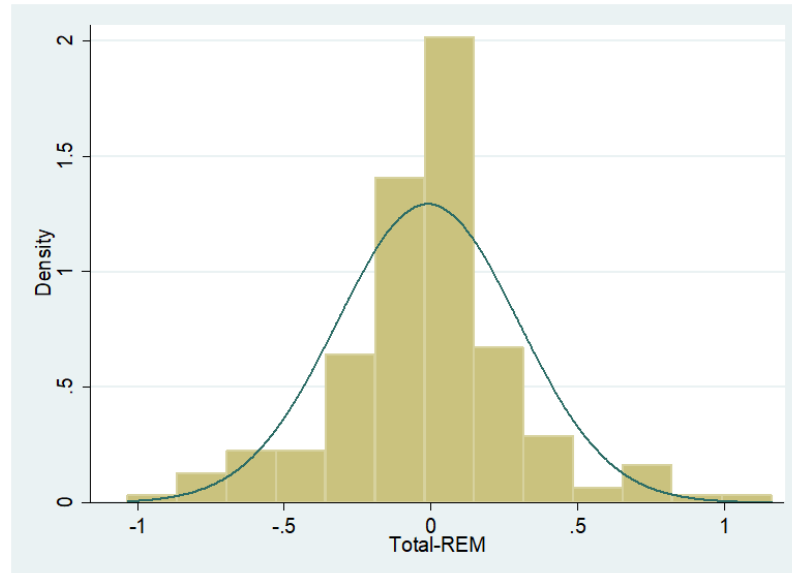


Figure 7.1: Histogram

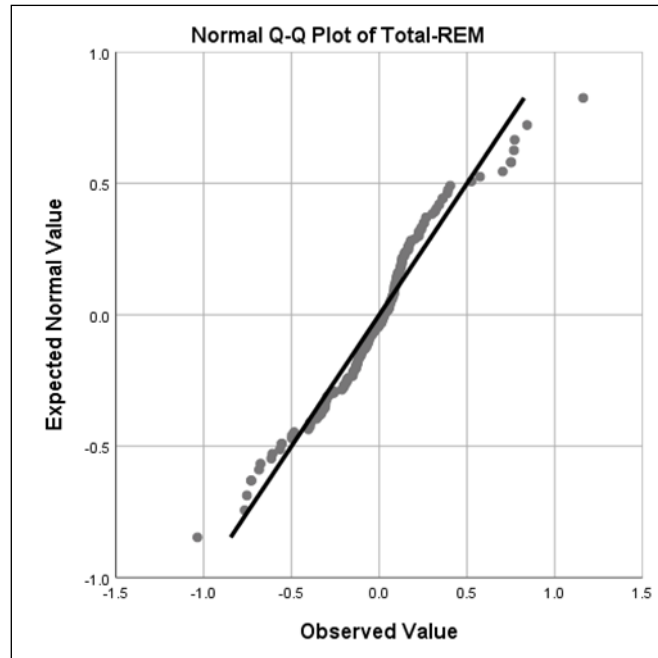


Figure 7.2: Q-Q Plot

Table 7.2: Modified Wald test for group wise heteroskedasticity in fixed effect regression model

Chi2 (72)	5.9e+31
Prob>chi2	0.0000
Heteroskedasticity	Yes
<i>It is noticed that there is heteroscedasticity in the data, therefore this study must run a robust regression to fix for this issue.</i>	

Table 7.3 below shows the pair-wise correlation matrix and the collinearity diagnostics explained by the variance inflation coefficients (VIF). Industries unrelatedness has a significant positive correlation with real earnings management at 1%. Ownership acquired has a significant negative correlation with real earnings management at 1%. Concerning control variables, leverage has a significant positive correlation with real earnings management at 10%. While ROA and market value as control variables have significant negative correlations with real earnings management at 5%. Also, all the independent variables have correlation coefficients lower than 0.80, and the Variance Inflation Factors (VIF) value less than 10, therefore, this analysis will not face any of the multi-collinearity problems as suggested by (Wooldridge 2010); (Shafer, 2015); Choi et al., (2013); Alghamdi and Ali, (2012)).

Table 7.3: Pair-wise coefficients and variance inflation factor coefficients of The GCC Acquiring companies' sample

Pearson Correlations												
		Total-REM	CBACQ	INDR	OWNACQ	PAYMETH	FSIZE	LEV	GROW	MTB	ROA	VIF
Total-REM	Corr	1										
	Sig.											
CBACQ	Corr	-0.086	1									1.06
	Sig.	(0.247)										
INDR	Corr	0.213***	-0.074	1								1.09
	Sig.	(0.004)	(0.318)									
OWNACQ	Corr	-0.229***	0.105	-0.034	1							1.03
	Sig.	(0.002)	(0.154)	(0.643)								
PAYMETH	Corr	-0.044	-0.125*	0.083	0.055	1						1.10
	Sig.	(0.550)	(0.089)	(0.264)	(0.454)							
FSIZE	Corr	-0.032	0.053	-0.145**	0.056	-0.088	1					
	Sig.	(0.668)	(0.476)	(0.049)	(0.451)	(0.233)						1.16
LEV	Corr	0.127*	0.084	0.033	0.045	0.121	-0.015	1				
	Sig.	(0.101)	(0.277)	(0.671)	(0.560)	(0.120)	(0.846)					1.34
GROW	Corr	-0.012	0.006	-0.092	-0.057	0.125*	-0.134*	0.053	1			
	Sig.	(0.873)	(0.939)	(0.213)	(0.443)	(0.092)	(0.069)	(0.492)				1.13
MTB	Corr	-0.164**	-0.012	0.131*	0.013	0.159**	-0.318***	0.275***	0.143*	1		
	Sig.	(0.032)	(0.873)	(0.088)	(0.863)	(0.038)	(0.000)	(0.001)	(0.063)			1.32
ROA	Corr	-0.152**	-0.009	-0.078	0.045	0.078	0.257***	-0.182**	0.029	0.035	1	
	Sig.	(0.038)	(0.906)	(0.294)	(0.540)	(0.293)	(0.000)	(0.018)	(0.692)	(0.651)		1.26
***. Correlation is significant at the 0.01 level												
**. Correlation is significant at the 0.05 level												
*. Correlation is significant at the 0.10 level												

7.3. Regression Results of The GCC Companies

Table 7.4 presents the findings from the regression analysis using robust standard errors. As mentioned earlier in the introduction and in the Methodology Chapter, this study uses the aggregate real earnings management ($REM_{APC-ACFO-ADE}$) as dependent variable.

To identify a suitable regression model for this research dataset, some statistical issues ought to be considered. First, one needs to identify whether the panel or pooled model is the most appropriate model. Gujarati (2011) suggest that panel data model is a more appropriate approach than the pooled method if the F-value in the Breusch-Pagan test is lower than 0.05. Breusch-Pagan test suggests that the panel data model should be applied.

When analyzing a panel data, ones need to decide whether a fixed effects or random effects should be adopted. Selecting one type of effect over the other influences the effect of companies and time series in the regression results differently (Kim et al., 2012). Hausman test is applied to identify which type of effect is the most appropriate (Hausman 1978). If the null hypothesis of the Hausman test is rejected, the model is a fixed effect. Otherwise, the model would be a random effect. The statically significant p-value from Hausman test show that the random-effect model needs to be applied to this research. Table 7.4 shows the value of R2 for the first regression model is 0.161, which is lower than the R2 of 0.308 when investigated accruals earnings management; and firm's characteristics and acquisition deal characteristics in Chapter6.

7.3.1. The Impact of firm's characteristics and Acquisition Deal Characteristics on Real Earnings Management of The GCC Acquiring Companies.

Cross border acquisition deals' variable (CBACQ) reported in Table 7.4 has a statistically insignificant coefficient with real earnings management. This insignificance contradicts the results for accruals earnings management reported in Chapter 6. In Chapter 6, I find a significant positive relationship between cross border acquisition deals and accruals earnings management. This difference of the effect of cross border acquisition deals on accruals and real earnings management suggests that acquiring companies with cross border acquisition deals engage in accruals earnings management, but not in real earnings

management. The explanation behind this is that the higher costs in engaging in real earnings management as compared to engaging in accrual earnings management (Zang, 2012). This result seen in Table 7.4 in GCC listed acquiring companies supports the findings reported from studies investigating the USA such as, Ho, (2010); and (Vo and Chu, 2019). However, this result does not support the researcher's eighth hypothesis (H8b) which argues there is an association between companies with cross border acquisition deals and level of real earnings management before acquisition.¹⁰

The unrelated industries deals' variable (INDR) in Table 7.4 has a statistically significant positive association with real earnings management, suggesting there is an association between companies with industry unrelatedness and level of real earnings management before acquisition (H9b). This finding supports the argument of agency theory, according to which, the level of asymmetric information in unrelated industries companies is greater than industry relatedness companies ((Lim et al., 2008). Information asymmetry can increase the acquiring companies risk, as they may overpay for the target companies, and they could face unreliable statements employed in due diligence (Alsharairi et al., 2015). Consequently, the level of engagement in earnings management in unrelated industries companies is high compared with these industry relatedness companies (Baik et al., 2015). The positive effect seen in Table 7.4 in GCC listed acquiring companies supports the findings reported from studies investigating developed countries-USA such as (Vo and Chu, 2019). This positive result contradicts the results for accruals earnings management reported in Chapter 6. In Chapter 6, there is a significant negative relationship between unrelated industries and accruals earnings management. This implies that acquiring companies with unrelated industries employ real earnings management as substitute for accruals earnings management. This difference of the effect of unrelated industries deals on accruals and real earnings management due to real earnings management are not detectable in the short run (Vo and Chu, 2019). This result therefore can help shareholders in non-companies, to be aware of the consequences of real earnings management used by managers. It is also can help unrelated industries target companies to be aware of the

¹⁰The coefficient of the cross-border acquisition deals remains similar in all the models reported in Table 7.4.

consequences of real earnings management employed before the acquisition by acquiring companies.¹¹

The Ownership acquired (OWNACQ) variable has a statistically significant negative association with real earnings management, suggesting that there is an association between companies with a high proportion of acquisition and level of real earnings management before acquisition (H10b). This finding supports the agency theory argument, according to which, the roles of the large shareholders in monitoring management create shared benefits for all share's holders (Shleifer and Vishny, 1986). Acquiring companies often acquire target companies that experience poor earnings to accept acquirers' offers during acquisition negotiation without overestimation of acquirers' prices (Raman et al., 2013). Another potential explanation is controlling shareholders mostly affect strategy decisions rather than concentration on short-term performance (Piosik and Genge, 2019). Moreover, acquiring companies perhaps have already some proportions of shares of the target companies before the acquisition which already have been inverted in the acquiring companies' share price (Mei and Sun, 2008). The negative effect seen in Table 7.4 in GCC listed companies supports the findings reported from studies investigating in Latin American Markets (Mellado and Saona, 2020) who found that large shareholders mitigate the engagement in real earnings management . Target companies should deal with a high proportion of acquisition as it mitigates the engagement in real earnings management. Policymakers in the GCC should develop rules that encourage a high proportion of acquisition which mitigate the engagement in real earnings management. ¹²

The fourth and last firm's characteristics and deal characteristics variable, the method of payment (PAYMETH) has a statistically significant negative association with real earnings management, suggesting that there is an association between companies with stock-financed acquisitions and level of real earnings management before acquisition (11b). This finding supports the argument, stock-for-stock acquirers engage more in earnings management than cash-for-stock acquirers to increase the market value of their stocks and

¹¹The coefficient of the industries unrelatedness is positive and significant in all the models reported in Table 7.4.

¹²The coefficient of the ownership acquired ratio is negative and significant in all the models reported in Table 7.4.

achieve acquisition with the lowest costs (Erickson and Wang, 1999). This is attributed to the high cost of engaging in real earnings management if it is detected by target companies. For example, target companies could request a higher exchange ratio or threaten to cancel the acquisition transaction (Louis, 2004). In addition, the engagement in real earnings management not only negatively impacts on the current cash flow, but it negatively impacts on future cash flow (Zhang, 2015). The negative effect seen in Table 7.4 in GCC listed acquiring companies supports the findings reported from studies investigating developed countries-USA such as (Erickson and Wang, 1999); (Louis, 2004); and (Botsari and Meeks, 2008b). This negative result contradicts the results for accruals earnings management reported in Chapter 6. In Chapter 6, I find an insignificant relationship between the methods of payments and accruals earnings management. This suggests that GCC cash-financed acquisitions decreases the level of engagement in real earnings management but not in accruals earnings management. Acquiring companies engage in real earnings management when they involve stock-for-stock acquisition deals, due to real earnings management techniques are less likely to be penalized by regulators, as they are considered normal business practices (Graham et al., 2005b). Target companies should deal with a cash-financed acquisitions as it mitigates the engagement in real earnings management. Policymakers in the GCC should develop rules that encourage a cash-financed acquisitions which mitigate the engagement in real earnings management.

Overall, ownership acquired is influential in reducing the engagement in accruals and real earnings management. Cash payment methods are influential in reducing the engagement in real earnings management, whereas it is insignificant with accruals earnings management. Acquiring companies with unrelated industries deals engage in real earnings management but not in accruals earnings management. Cross-border acquisition deals are influential in reducing the engagement in accruals earnings management, whereas it is insignificant with real earnings management.

In terms of control variables, Table 7.4 shows that the relationships between all control variables (firm size, leverage, growth, market to book value, and ROA) and real earnings management are insignificant.

Table 7.4: The Regression Results of relationship between Acquisition Deals Characteristics on REM in the GCC Acquiring Companies.

Total-REM		Random Effect	Random Effect	Fixed Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
CBACQ	Coef	-0.00	-0.00	0.030	-0.039	-0.034
	P-value	(0.910)	(0.898)	(0.590)	(0.375)	(0.481)
INDR	Coef	0.113**	0.111**	0.110*	0.121**	0.135**
	P-value	(0.047)	(0.039)	(0.079)	(0.011)	(0.011)
OWNACQ	Coef	-0.172**	-0.150**	-0.145**	-0.184***	-0.209***
	P-value	(0.022)	(0.029)	(0.049)	(0.002)	(0.001)
PAYMETH	Coef	-0.106**	-0.087	-0.072	-0.090**	-0.160***
	P-value	(0.035)	(0.062)	(0.199)	(0.045)	(0.002)
FSIZE	Coef	-0.016	-0.00	0.013	-0.00	-0.010
	P-value	(0.542)	(0.908)	(0.861)	(0.418)	(0.607)
LEV	Coef	0.256	0.236	0.125	0.264	0.359*
	P-value	(0.332)	(0.306)	(0.721)	(0.097)	(0.096)
GROW	Coef	0.103	0.109	0.178	0.052	0.017
	P-value	(0.324)	(0.337)	(0.107)	(0.783)	(0.891)
MTB	Coef	-0.016	-0.024	-0.011	-0.051**	-0.028
	P-value	(0.514)	(0.352)	(0.721)	(0.016)	(0.136)
ROA	Coef	-0.132	-0.224	-0.204	-0.413	-0.071
	P-value	(0.820)	(0.674)	(0.749)	(0.471)	(0.909)
Country dummy		Yes	No	No	No	Yes
Industry dummy		Yes	No	No	No	Yes
number of observations		150	153	153	153	150
Wald chi2(24)		162.37	29.52			
F statistic (10, 71)				3.39	4.50	7.12
R-squared		0.161	0.156	0.172	0.172	0.441
Prob>chi2(24)/ Prob>F		0.000	0.000	0.000	0.000	0.000

Where: The Bold Model is the main model of the results explanations. Model (1)= the robust results of the random effect regression with country and industry dummies, Model (2)= the robust results of the random effect regression without country and industry dummies, Model (3)= the robust results of the fixed effect regression, Model (4)= the robust results of the OLS regression without country and industry dummies, Model (5)= the robust results of the OLS regression with country and industry dummies, , Total-REM = total real earnings management techniques in year t-1 CBACQ= cross border acquisition deals in year t measured 1 if the GCC acquiring companies acquire companies outside the GCC, and 0 otherwise. INDR= Industry unrelatedness in year t measured 1 if the acquiring and the target companies do not belong to the same industry sector, 0 otherwise. OWNACQ= the percentage of the target company's shares acquired by the acquirer in the acquisition in year t. PAYMETH= payment methods in year t measured 1 if the acquisition transaction is cash, 0 otherwise. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through total debt over total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= market to book value in yeart-1. ROA = acquiring firm's profitability captured through net income over total assets in year t-1. Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.*

Table 7.5: Findings' Summary of the Companies

Hypotheses	Expected Signs	Results	Theory	Prior Studies
H8b: There is an association between companies with cross border acquisition deals and level of real earnings management before acquisition.	+/-	Insignificant	Agency theory	Ho, (2010); and (Vo and Chu, 2019).
H9b: There is an association between companies with industry unrelatedness and level of real earnings management before acquisition.	+/-	+	Agency theory	(Vo and Chu, 2019).
H10b: There is an association between companies with a high proportion of acquisition and level of real earnings management before acquisition.	+/-	-	Agency theory	(Mellado and Saona, 2020)
H11b: There is an association between companies with stock-financed acquisitions and level of real earnings management before acquisition.	+/-	-	Agency theory	(Erickson and Wang, 1999); (Louis, 2004); and (Botsari and Meeks, 2008b)

7.4. Additional Analysis

The main results in Table 7.4 use the total real earnings management on the deal characteristics. To enhance the strength of the main results, in this section I investigate whether GCC companies use accruals and real earnings managements simultaneously as complements or as substitutes. The accruals earnings management is used as an independent variable in the real earnings management regression as suggested by (Piosik and Genge, 2019); (Al-Haddad and Whittington, 2019); Elkalla, (2017); (C.-L. Chen et al., 2012); and Kuo et al. (2012). The justification of including accruals earnings management in the regression is that accrual and real earnings management are used as substitute or complement to each other (Matsuura,2008). The acquisition deals characteristics (cross border acquisition deals, Industry unrelatedness deals, ownership acquired, and payment methods) are used as independent variables to explore whether they affect the engagement in real earnings management among GCC listed companies. For further robustness, this study aims to test the effect of the moderating role of accruals earnings management in mitigating the total real earnings management, as well as the power of these anticipated interaction effects in the GCC markets.

7.4.1. The impact of Accruals Earnings Management on Real Earnings Management of The GCC Acquiring Companies.

The Random effect regression results (Model 1) in Table 7.6 shows accruals earnings management has a statistically significant positive association with total real earnings management (Total-REM) at the 10% level. This finding is consistent with the result of real earnings management in Chapter 5, indicating that GCC acquiring companies employ real and accruals earnings management mechanisms as complements due to the weak investors' protection in the GCC (Abdallah and Ismail, 2017b).

7.4.2. The impact of Acquisition Deal Characteristics on Real Earnings Management of The GCC Acquiring Companies.

Unrelated industries deal increase engaging in real earnings management before acquisition. A similar association was reported in Table 7.4. However, the percent of ownership acquired, and cash payment method variables decrease engaging in real earnings management before acquisition. Similar associations were reported in Table 7.4. Cross border acquisition deals have an insignificant association with real earnings management. A similar association was reported in Table 7.4.

Concerning the interaction effect suggested in this regression, the interaction between accruals earnings management and cross border acquisition deals has a significant and positive association with real earnings management. This indicates that all acquiring companies that use accruals earnings management and cross border deals are more likely to engage in real earnings management, suggesting a complement effect between accruals earnings management and real earnings management for acquiring companies with cross border acquisition deals. As for the interaction between accruals earnings management and unrelated industries, accruals earnings management and ownership acquired, accruals earnings management and payment methods, they are not statistically significant, as reported in Table 7.6.

Table 7.6: Regression Results of the effect of the interaction of accruals earnings management with acquisition Deals Characteristics on Real Earnings Management in the GCC Acquiring Companies.

Total-REM		Random Effect	Random Effect	Fixed Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
AEM	Coef	0.890*	0.922**	0.761*	1.494**	1.250*
	P-value	(0.063)	(0.029)	(0.092)	(0.044)	(0.092)
CBACQ	Coef	-0.009	0.014	0.005	0.028	-0.014
	P-value	(0.844)	(0.776)	(0.922)	(0.515)	(0.726)
AEM* CBACQ	Coef	0.901*	0.789*	0.680	0.342	0.724
	P-value	(0.052)	(0.102)	(0.340)	(0.533)	(0.176)
INDR	Coef	0.083**	0.089**	0.065	0.109**	0.076**
	P-value	(0.044)	(0.044)	(0.139)	(0.028)	(0.040)

Total-REM		Random Effect	Random Effect	Fixed Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
AEM*INDR	Coef	-0.677	-0.594	-0.462	-0.301	-0.457
	P-value	(0.136)	(0.171)	(0.451)	(0.547)	(0.344)
OWNACQ	Coef	-0.139**	-0.111*	-0.091	-0.145**	-0.184***
	P-value	(0.039)	(0.075)	(0.167)	(0.017)	(0.005)
AEM*OWNACQ	Coef	-0.167	-0.111	0.591	-1.387*	-1.029
	P-value	(0.761)	(0.814)	(0.370)	(0.089)	(0.171)
PAYMETH	Coef	-0.066*	-0.053*	-0.044	-0.040	-0.095*
	P-value	(0.060)	(0.086)	(0.222)	(0.446)	(0.107)
AEM*PAYMETH	Coef	-0.047	-0.054	0.317	-0.963	-0.693
	P-value	(0.929)	(0.914)	(0.447)	(0.140)	(0.363)
FSIZE	Coef	-0.013	0.003	0.059	-0.002	-0.011
	P-value	(0.592)	(0.662)	(0.498)	(0.697)	(0.513)
LEV	Coef	0.147	0.152	-0.088	0.228	0.256
	P-value	(0.400)	(0.346)	(0.653)	(0.113)	(0.162)
GROW	Coef	0.032	0.041	0.141	-0.066	-0.087
	P-value	(0.775)	(0.727)	(0.210)	(0.753)	(0.542)
MTB	Coef	-0.024	-0.029	-0.021	-0.049**	-0.027*
	P-value	(0.236)	(0.150)	(0.467)	(0.015)	(0.106)
ROA	Coef	-0.170	-0.243	-0.102	-0.477	0.085
	P-value	(0.778)	(0.669)	(0.857)	(0.433)	(0.887)
Country dummy		Yes	No	No	No	Yes
Industry dummy		Yes	No	No	No	Yes
number of observations		150	153	153	153	150
R-squared		0.419	0.425	0.461	0.227	0.564
F statistic (14, 138)				19.25	4.64	6.77
Wald chi2(9)		266.53	97.19			
Prob>F/ Prob>chi2(9)		0.000	0.000	0.000	0.000	0.000

Where: The Bold Model is the main model of the results explanations. Model (1)= the robust results of the random effect regression with country and industry dummies, Model (2)= the robust results of the random effect regression without country and industry dummies, Model (3)= the robust results of the fixed effect regression, Model (4)= the robust results of the OLS regression without country and industry dummies, Model (5)= the robust results of the OLS regression with country and industry dummies, Total-REM = total real earnings management techniques in year t-1, AEM = accruals earnings management in year t-1, CBACQ= cross border acquisition deals in year t measured 1 if the GCC acquiring companies acquire companies outside the GCC, and 0 otherwise. INDR= Industry unrelatedness in year t measured 1 if the acquiring and the target companies do not belong to the same industry sector, 0 otherwise. OWNACQ= the percentage of the target company's shares acquired by the acquirer in the acquisition in year t. PAYMETH= payment methods in year t measured 1 if the acquisition transaction is cash, 0 otherwise. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through total debt over total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= market to book value in year t-1. ROA = acquiring firm's profitability captured through net income over total assets in year t-1. * Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.

7.5. Robustness Check

In the key analyses reported in Table 7.4, this study followed the (Roychowdhury, 2006, Zang, 2012) models to estimate the total real earnings management. To check for more robustness of this research findings, in this section I present the results when using firm level governance (external audit quality, institutional ownership, state ownership, foreign ownership), and country level governance (national governance quality), along with acquisition deals characteristics (cross border acquisition deals, industry unrelatedness, the percent of share acquired, and payment methods).

7.5.1. The impact of Acquisition Deal Characteristics on Real Earnings Management of The GCC Acquiring Companies.

According to Model 1 in Table 7.7 below, cross border acquisition deals variable (CBACQ) has an insignificant association with real earnings management. This result supports the main result reported in Table 7.4. Unrelated industries deals (INDR) increases engaging in real earnings management before the acquisition. This result supports the main result reported in Table 7.4. The percentage of ownership Acquired (OWNACQ), and the methods of payment (PAYMETH) decrease engaging in real earnings management before the acquisition. These results support the main results reported in Table 7.4.

7.5.2. The impact of Governance Mechanisms (Firm-Level), and (country- level) on Real Earnings Management of The GCC Acquiring Companies.

According to Model 1 in Table 7.7, external audit quality has a statistically significant positive association with real earnings management, suggesting that acquiring firms audited by Big4 auditing firms engage at a higher level in real earnings management than the GCC listed acquiring firms not audited by Big4 auditing firms. Real earnings management techniques are difficult to be detected by external monitoring and scrutiny as it occurs during the financial year and these techniques are considered legal business activities (Graham et al., 2005b). The institutional ownership, state ownership, foreign

ownership as firm-level variables has insignificant associations with real earnings management. Concerning country-level governance, national governance quality has an insignificant association with real earnings management.

In terms of the control variables, Table 7.7 shows that the effects of firm size, leverage, growth, market to book value, and ROA on real earnings management are insignificant.

Table 7.7: The Robust Regression Results of the relationship between Acquisition Deals Characteristics and CG mechanisms on real earnings management in the GCC Acquiring Companies.

Total-REM		Random Effect	Random Effect	Fixed Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
CBACQ	Coef	-0.030	-0.020	-0.025	-0.031	-0.052
	P-value	(0.576)	(0.702)	(0.671)	(0.498)	(0.270)
INDR	Coef	0.117**	0.112**	0.135**	0.101**	0.113**
	P-value	(0.043)	(0.032)	(0.034)	(0.024)	(0.011)
OWNACQ	Coef	-0.102**	-0.169**	-0.134*	-0.187***	-0.218***
	P-value	(0.017)	(0.013)	(0.080)	(0.001)	(0.001)
PAYMETH	Coef	-0.114**	-0.081*	-0.082*	-0.087*	-0.176***
	P-value	(0.027)	(0.088)	(0.100)	(0.089)	(0.001)
EAUDQ	Coef	0.186***	0.217***	0.245***	0.117**	0.073
	P-value	(0.010)	(0.000)	(0.000)	(0.047)	(0.424)
INSTOWN	Coef	-0.101	-0.107	-0.095	-0.067	-0.106
	P-value	(0.396)	(0.374)	(0.537)	(0.530)	(0.331)
STOWN	Coef	-0.562	-0.658**	-0.987*	-0.453	-0.294
	P-value	(0.151)	(0.040)	(0.062)	(0.179)	(0.353)
FOWN	Coef	-0.113	-0.163*	-0.149	-0.146**	-0.097
	P-value	(0.235)	(0.072)	(0.205)	(0.045)	(0.105)
NGQ	Coef	0.225	0.005	-0.510**	0.261***	-0.071
	P-value	(0.112)	(0.956)	(0.011)	(0.003)	(0.695)
FSIZE	Coef	0.00	-0.00	0.078	-0.022***	-0.001
	P-value	(0.949)	(0.625)	(0.299)	(0.008)	(0.942)
LEV	Coef	0.235	0.187	0.099	0.127	0.325
	P-value	(0.325)	(0.335)	(0.693)	(0.414)	(0.134)
GROW	Coef	0.042	0.020	0.074	-0.031	-0.037
	P-value	(0.696)	(0.855)	(0.554)	(0.872)	(0.780)
MTB	Coef	-0.020	-0.035*	-0.008	-0.052***	-0.027
	P-value	(0.335)	(0.085)	(0.685)	(0.008)	(0.147)

Total-REM		Random Effect	Random Effect	Fixed Effect	OLS	OLS
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
ROA	Coef	-0.171	-0.484	0.188	-0.572	0.108
	P-value	(0.748)	(0.278)	(0.739)	(0.282)	(0.875)
Country dummy		Yes	No	No	No	Yes
Industry dummy		Yes	No	No	No	Yes
number of observations		150	153	153	153	150
R-squared		0.347	0.320	0.398	0.283	0.463
F statistic (14, 138)				12.82	5.27	5.57
Wald chi2(9)		123.67	66.19			
Prob>F/ Prob>chi2(9)		0.000	0.000	0.000	0.000	0.000

*Where: The Bold Model is the main model of the results explanations. Model (1)= the robust results of the random effect regression with country and industry dummies, Model (2)= the robust results of the random effect regression without country and industry dummies, Model (3)= the robust results of the fixed effect regression, Model (4)= the robust results of the OLS regression without country and industry dummies, Model (5)= the robust results of the OLS regression with country and industry dummies, Total-REM = total real earnings management techniques in year t-1, CBACQ= cross border acquisition deals in year t measured 1 if the GCC acquiring companies acquire companies outside the GCC, and 0 otherwise. INDR= Industry unrelatedness in year t measured 1 if the acquiring and the target companies do not belong to the same industry sector, 0 otherwise. OWNACQ= the percentage of the target company's shares acquired by the acquirer in the acquisition in year t. PAYMETH= payment methods in year t measured 1 if the acquisition transaction is cash, 0 otherwise. EAUDQ= audit quality in year t-1 measured 1 if Big4 Auditing firms audits the company, and 0 otherwise. INSTOWN= institutional ownership in year t-1 measured through the proportion of total shares held by institutions. STOWN= state ownership in year t-1 measured through the proportion of total shares held by the government. FOWN= foreign ownership in year t-1 measured through the proportion of total shares held by foreign investors. NGQ= national governance quality in year t-1 measured through the average of Government Effectiveness (GE), Regulatory Quality (RQ), and Rule of Law (RL) between -2.5 to 2.5 as per The World Bank indicator. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through total debt over total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= market to book value in year t-1. ROA = acquiring firm's profitability captured through net income over total assets in year t-1. * Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.*

For further robustness of this research findings and avoiding a double discounting issue that may be obtained from aggregating the three real earnings management techniques, this section examines the effect of the same independent variables on five alternative real earnings management measures. The five alternative real earnings measures are: (1) abnormal discretionary expenses (ADE); (2) abnormal cash flows from operations (ACFO); (3) abnormal production costs (APC) (Roychowdhury, 2006); (4) aggregate real earnings management (SubREM1_{APC-ACFO}) model; and (5) aggregate real earnings management (SubREM2_{ADE-ACFO}) (Zang, 2012), as suggested by (Wasan and Mulchandani, 2020); (El Diri et al., 2020); (Al-Haddad and Whittington, 2019b); and (Piosik and Genge, 2019).

First, cross border acquisition deals variable (CBACQ) has an insignificant association with all real earnings management techniques. A similar association was reported in Table 7.4.

Second, unrelated industries increase engaging in real earnings management when real earnings management technique is measured as abnormal discretionary expenses technique (model 1). The positive association is similar to the result reported in Table 7.4. Third, the percentage of ownership acquired (OWNACQ) decreases engaging in all real earnings management techniques except abnormal production costs technique (model 3). This result supports the main results reported in Table 7.4.

Lastly, the methods of payment (PAYMETH) decreases engaging in all real earnings management except abnormal discretionary expenses technique (model 1). This result supports the main results reported in Table 7.4.

Table 7.8: The Robust Regression of the relationship between Acquisition Deals Characteristics on REM in the GCC acquiring Companies by using five alternative real earnings management techniques.

Variables		ADE	ACFO	APC	SubREM1 _{APC-ACFO}	SubREM2 _{-ADE-ACFO}
		(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
CBACQ	Coef	-0.003	-0.012	-0.013	-0.021	-0.021
	P-value	(0.690)	(0.679)	(0.420)	(0.578)	(0.531)
INDR	Coef	0.015*	0.039	0.029	0.067	0.054
	P-value	(0.094)	(0.258)	(0.138)	(0.168)	(0.163)
OWNACQ	Coef	-0.028**	-0.058*	-0.039	-0.089*	-0.085**
	P-value	(0.027)	(0.103)	(0.135)	(0.096)	(0.041)
PAYMETH	Coef	0.010	-0.078***	-0.064***	-0.138***	-0.067**
	P-value	(0.483)	(0.000)	(0.004)	(0.001)	(0.015)
FSIZE	Coef	0.00	-0.015	-0.000	-0.015	-0.015
	P-value	(0.760)	(0.140)	(0.920)	(0.385)	(0.356)
LEV	Coef	-0.013	0.236*	0.105	0.327	0.239
	P-value	(0.787)	(0.076)	(0.236)	(0.136)	(0.159)
GROW	Coef	-0.011	0.017	0.102*	0.116	0.026
	P-value	(0.553)	(0.671)	(0.074)	(0.157)	(0.638)
MTB	Coef	-0.009**	0.013	-0.018*	-0.004	0.006
	P-value	(0.044)	(0.349)	(0.085)	(0.818)	(0.701)
ROA	Coef	0.204**	-0.206	-0.188	-0.428	0.018
	P-value	(0.027)	(0.592)	(0.352)	(0.383)	(0.967)

Variables	ADE	ACFO	APC	SubREM1 _{APC-ACFO}	SubREM2 _{-ADE-ACFO}
	(Model1)	(Model2)	(Model3)	(Model4)	(Model5)
number of observations	150	150	150	150	150
R-squared	0.226	0.145	0.110	0.141	0.139
Wald chi2(23)	242.42	96.34		154.64	76.58
Prob>F	0.000	0.000	0.000	0.000	0.000

Where: Model (1)= the robust results of the abnormal discretionary expenses (ADE), Model (2)= the robust results of the abnormal cash flows from operations (ACFO), Model (3)= the robust results of abnormal production costs (APC), Model (4)= the robust results of the aggregate abnormal production costs and the aggregate inverse of abnormal cash flows from operations, Model (5)= the robust results of the aggregate inverse of abnormal cash flows from operations and the inverse of abnormal discretionary expenses, CBACQ= cross border acquisition deals in year t measured 1 if the GCC acquiring companies acquire companies outside the GCC, and 0 otherwise. INDR= Industry unrelatedness in year t measured 1 if the acquiring and the target companies do not belong to the same industry sector, 0 otherwise. OWNACQ= the percentage of the target company's shares acquired by the acquirer in the acquisition in year t. PAYMETH= payment methods in year t measured 1 if the acquisition transaction is cash, 0 otherwise. FSIZE= the firm's size captured as the natural logarithm of total assets in year t-1. LEV= leverage ratio measured through total debt over total assets in year t-1. GROW= growth ratio measured through the change of sale over total assets in year t-1. MTB= market to book value in year t-1. ROA = acquiring firm's profitability captured through net income over total assets in year t-1. *Significance at the 0.10 level, ** Significance at the 0.05 level, *** Significance at the 0.01 level.

7.6. Summary

This chapter examines the effect of cross border acquisition deals, Industry unrelatedness, ownership acquired, and payment methods as acquisition deal characteristics on real earnings management in GCC listed acquiring companies. The results in this Chapter provide evidence that the GCC listed acquiring companies engage in real earnings management.

By comparing Chapter 6 and Chapter 7 findings, we can see that acquiring companies with cross border acquisition deals are likely to engage in accruals earnings management before the acquisition, but not in real earnings management. Acquiring companies with unrelated industries deals engage in real earnings management, but not in accruals earnings management. The large percentage of ownership acquired is obtained to be an efficient tool in restraining engagement in accruals and real earnings management. Finally, cash acquisition deal (methods of payments) is obtained to be an efficient tool in restraining engagement in real earnings management. However, it is an inefficient tool in restraining engagement in accruals earnings management.

CHAPTER 8

CONCLUSION

8.1. Introduction

This research aimed to examine factors influencing accruals and real earnings management in the GCC over the period from 2007 to 2017. The study fundamentally examined the role of acquisition, external audit quality, institutional ownership, state ownership, foreign ownership and national governance quality in mitigating accruals and real earnings management in GCC listed companies. It also examined the relationship between real earnings management and accruals earnings management in the GCC listed companies. Moreover, this research examined the effect of acquisition deal characteristics on accruals and real earnings management of acquiring firms in the GCC. This research enhances the understanding of earnings management in emerging markets during acquisitions since, as (Bao and Lewellyn, 2017) identified, it is search area that has not being explored. In addition, the consequences of earnings management are very important for shareholders to have awareness of, especially in mergers and acquisition.

One of main consequences is that acquiring companies experience underperformance after acquisition (Louis, 2004). This is attributable to earnings management making the genuine information of the company (Parfet, 2000). For example, interested shareholders in a certain company depend on the reported earnings as an indicator of the efficiency and profitability of the firm. In addition, they take their decision to deal with a company without considering that these reported earnings may not be genuine. Subsequently, this issue will appear in the future when they invest in a company and the performance does not match with their expectations (Dechow, Ge and Schrand, 2010).

It is important to investigate this in the Gulf Cooperation Council (GCC). This region has six countries (Saudi Arabia, UAE, Kuwait, Qatar, Oman, and Bahrain) which influence the global economy through their vast oil reserves (specifically 40% of the world oil reserves), and the GCC is an important player in the international political system (IEMS, 2013). In relation to mergers and acquisition, the last three decades have experienced a rapid growth in the

GCC. For example, Saudi Arabia and the United Arab Emirates are emerging as attractive destinations for mergers and acquisitions by foreign direct investment because of their increasing gross domestic product (GDP) over the years. Mergers and acquisition deals in Saudi Arabia have grown from USD 1550 million in year 2000 to USD 4943 million in 2013 due to accelerating gross domestic product (Dubey and Kummer, 2016).

Although, large number of mergers and acquisition are occurring, the countries in the GCC are still developing as the corporate governance is weaker than in developed countries (Abdallah and Ismail, 2017). In the countries with weak investor protection, it would be costly to adopt a high level of corporate governance mechanisms because they are less financially developed (Doidge et al., 2007). For, example, all of the GCC countries have chosen voluntary compliance of corporate governance mechanisms except the UAE which adopted mandatory compliance (Abdallah and Ismail, 2017b). In addition, national governance differs from country to country; for example, the UAE has a well-developed governance system compared to other countries in the same region (World Bank, 2016). Given this, this chapter illustrates the research results, the implications of the results, the research limitations and, finally, presents some ideas for future research.

8.2. Summary of the fundamental findings

First, this study found that the GCC listed companies engage in accruals and real earnings management. It is also noted that the GCC companies engage more in real earnings management when they engage in accruals earnings management, suggesting a complementary effect between techniques. In countries with weak investor protection, accruals earnings management will more largely used, suggesting, real earnings management will only be used as a complement when it is needed given the high cost associated with its use (Al-Haddad and Whittington, 2019b). Acquisition is found to be a tool in increasing the engagement in accruals earnings management but not in real earnings management. In addition, the engagement in real earnings management not only negatively impacts on the current cash flow, but it negatively impacts on future cash flow (Zhang, 2015). External audit quality is observed to be an inefficient mechanism in mitigating engagement in accruals and real earnings management. This is attributed to the Big 4 auditing firms do not have a right to

stop opportunistic behaviour by managers (Kouaib and Jarboui, 2014) and, therefore, they are less effective in influencing companies that engage in accruals earnings management. Moreover, real earnings management techniques are difficult to be detected by external monitoring and scrutiny as it occurs during the financial year and these techniques are considered legal business activities (Graham et al., 2005b).

In terms of ownership structure, institutional ownership is obtained to be an efficient tool in restraining engagement in accruals and real earnings management. Institutional ownership companies have more expertise and reasonable access to resources, which qualify them to obtain suitable information at a lower level of cost and therefore to monitor the opportunistic behaviour of managers and mitigate engagement in earnings management (Arouri et al., 2014). Moreover, being long-term shareholders (Dalwai et al., 2015), institutional owners are more committed to the monitoring of the behaviour of managers. Likewise, state ownership is found to be an efficient tool in restraining engagement in accruals and real earnings management. State owners often give advantages to the companies such as credit liquidity, thus there is less needed to engage in earnings management. Moreover, state owners seek to build credibility in international markets, therefore they mitigate engagement in earnings management (Eljelly, 2009). However, foreign ownership is observed to be an inefficient mechanism in mitigating engagement in both accruals and real earnings management. As foreign ownership has different characteristics (i.e., culture, and religion), it results in them being unable to monitor accurately (Dvorak, 2005). In respect of country level governance, national governance quality is found to be an efficient tool in restraining engagement in accrual earnings management. However, it is an inefficient tool in restraining engagement in real earnings management in the GCC as one sample. In terms of national governance quality and earnings management in each country, this research found that countries with high national quality levels in the GCC (UAE, Qatar, and Bahrain) engage more in real earnings management, whereas these countries engage less in accruals earnings management. This implies that the strength of national governance quality (government effectiveness, regulatory quality, and rule of law) in these countries assist shifting from the engagement in accruals earnings management to the engagement in real earnings management because real earnings management is difficult be detected by law as it occurs during the financial year and these techniques are considered legal business activities (Graham et al., 2005b).

However, countries with low national quality levels in the GCC (Saudi Arabia, Oman, and Kuwait) engage less in real earnings management, whereas these countries engage more in accruals earnings management. This result contributes to the accounting literature by providing evidence that national governance quality does not equal an impact on all types of earnings managements. In particular, real earnings management is shown as more closely reflecting institutional and market characteristics than accruals earnings management.

In terms of four acquiring acquisition deals characteristics influencing accruals and real earnings management in the GCC, this study found that acquiring companies with cross border deals are likely to engage in accruals earnings management before the acquisition but not in real earnings management. The explanation behind this is that there are higher costs in engaging in real earnings management as compared to engaging in accrual earnings management (Zang, 2012).

Acquiring companies with unrelated industries deals engage in real earnings management but not in accruals earnings management. Information asymmetry can increase the acquiring companies increased risk, as they may overpay for the target companies, and they could face unreliable statements employed in due diligence (Alsharairi et al., 2015). Consequently, the level of engagement in real earnings management in unrelated industries companies is high compared with these industry relatedness companies (Baik et al., 2015). The large percentage of ownership acquired was found to be an efficient tool in restraining engagement in accruals and real earnings management. Acquiring companies often acquire target companies that experience poor earnings to accept acquirers' offers during acquisition negotiation without overestimation of acquirers' prices (Raman et al., 2013). Another potential explanation is the large percentage of ownership acquired occurs by controlling shareholders who have improved monitoring and control set and a good reputation that enhances mitigating engaging in earnings management (Xie et al., 2003); and (Klein, 2002). Furthermore, controlling shareholders mostly affect strategy decisions rather than concentration on short-term performance (Piosik and Genge, 2019). Moreover, acquiring companies perhaps have already some proportions of shares of the target companies before the acquisition which already have been inverted in the acquiring companies' share price (Mei and Sun, 2008).

Finally, the cash payment acquisition was found to be an efficient tool in restraining engagement in real earnings management, but not in accruals earnings management. This is

attributed to the high cost of engaging in earnings management if it is detected by target companies. For example, target companies could request a higher exchange ratio or threaten to cancel the acquisition transaction (Louis, 2004). In addition, the engagement in real earnings management not only negatively impacts on the current cash flow, but it negatively impacts on future cash flow(Zhang, 2015).

In terms of the country effect, we found Bahrain, Qatar, and UAE use the real earnings management as substitute to accruals earnings management, as it is difficult for it to be detected by auditors when national governance is high (Graham et al., 2005). Although some countries in the GCC experienced high levels of governance, these countries are described as developing countries, and therefore our results confirm the argument that companies in developing countries use real earnings management and accruals earnings management simultaneously (Al-Haddad and Whittington, 2019), (Elkalla, 2017) and (Chen et al.,2012). Saudi Arabia experienced the lowest level of real earnings management, whereas it has the highest level of accruals earnings management. This means that Saudi Arabia use accruals earnings management as substitute to real earnings management. This is due to Saudi Arabia has the lowest level of national governance quality compared to other countries in the GCC. This supports the argument that companies in countries with low level of governance quality are likely to use accruals earnings management more than real earnings management due it not costly (Graham et al., 2005). It is strongly recommended that policymakers in the GCC especially in Saudi Arabia should concentrate more on developing the national governance system to mitigate firm's engagement in real and accruals earnings management.

8.3. The implications of the findings

This study has several implications for policymakers, as well as existing and potential investors in the GCC region. The first implication is that investors should consider the findings from this research when taking their decision regarding the acquisition, as the GCC listed acquiring companies engage in accruals earnings management before the acquisition. Investors should take their decision to deal with the acquiring company with consideration that the reported earnings may not be genuine. Subsequently, this issue will appear in the future when they invest in a company and it is found that the performance does not match

with their expectations (Dechow, Ge and Schrand, 2010). New investors should invest in the same region and industry as the GCC acquiring companies engage more in accruals earnings management when they acquire companies outside the GCC. Moreover, when the acquiring and the target companies do not belong to the same industry sector, the acquiring companies engage more in real earnings management. The author recommends that the size of acquired ownership is an important acquisition deal characteristic as it influences GCC acquiring firms to engage less in accruals and real earnings management. Furthermore, the author recommends that the cash payment method influences GCC acquiring firms to engage less in real earnings management. Furthermore, the GCC policymakers should create policies to enhance cash payment acquisition to mitigate the engagement in earnings management.

The second implication is that the GCC companies should be conscious that Big4 auditing firms cannot mitigate the engagement in earnings management. The GCC companies could employ local auditing firms who seek to build credibility in the local markets.

The third implication is that the GCC listed companies could benefit from attracting institutional owners and state owners. These types of owners can mitigate the engagement in accruals and real earnings management and therefore, enhance the firm performance and protect minority shareholders. Institutional ownership companies have more expertise and reasonable access to resources, which qualify them to obtain suitable information at a lower level of cost and therefore to monitor the opportunistic behaviour of managers and mitigate engagement in earnings management (Arouri et al., 2014c). State owners often give advantages to companies such as credit liquidity, thus there is less needed to engage in earnings management. Moreover, state owners seek to build credibility in international markets, therefore they mitigate engagement in earnings management (Eljelly, 2009). In terms of national governance quality, it is strongly recommended that policy makers concentrate on developing the national governance system as it mitigates the firm's engagement in earnings management.

8.4. The research limitations and suggestions for future research

Although the procedures have been taken into account to confirm the robustness of the results of this study, several prospective limitations remain. One of these limitations is the relationship between real earnings management on accruals earnings management. This study examined the effect of accruals earnings management on real earnings management due to the lower cost associated when engaging in accruals earnings management (Zang, 2012). However, there is a chance that real earnings management affects accruals earnings management due to real earnings management occurring during the financial year whereas accruals earnings management occurs at the end of the financial year and, therefore, becomes more easily detected by auditors (Graham et al., 2005). It is worthwhile examining this issue in future research. Secondly, this study employed the Big4 auditing firms to measure external audit quality whilst previous literature such as the work of Lin and Hwang (2010), Chen et al. (2005) and Charles et al. (2010), uses auditor size, audit fees, auditor tenure, and industry specialist auditor as proxy of audit quality. The researcher used Big4 auditing firms as proxy for external audit quality as suggested by (Habbash and Alghamdi, 2017). Future research could investigate this issue further by using other proxies for external audit quality in the GCC. Third, this study examined the effect of the acquisition, firm level governance, and country level governance on accruals and real earnings management which added value to this research. Analysing the interaction effect of the acquisition with firm level governance and country level governance could be an effective mechanism in mitigating the engagement in accrual and real earnings management which has been not examined in this research. This strategy will compare acquiring firms with firm level governance and country level governance without firm level governance and country level governance to measure the effect of firm level governance and country level governance on the acquiring firms themselves. It is worthwhile examining this issue in future research. Fourth, this study examined the acquiring companies and the acquisition deals companies on the engagement in accruals and real earnings management whilst previous literatures, such as (Erickson and Wang, 1999) and (Fakhfakh and Nasfi, 2012), used deal size and relative size as deal characteristics. The researcher did not use these deal characteristics due to data unavailability. Future research could investigate this issue further by using these deal characteristics in the GCC. Furthermore, this research used ownership acquired during the

acquisition year as a deal characteristic whilst previous literature such as Mei and Sun (2008) argued that the percentage of ownership of the target company owned by the acquiring company before the acquisition affects the acquiring companies' share price in the USA; therefore, there is no need in engaging in earnings management. It is important examining this issue in future research. Finally, this study provides evidence based on external audit quality, institutional ownership, state ownership and foreign ownership data. Previous studies such as (Piosik and Genge, 2019, Al-Haddad and Whittington, 2019b) argued that other types of firm level governance (board of directors' characteristics and audit committee characteristics) affect earnings management. These types of firm level governance are not included in this study due to data unavailability; it is important that future research investigates these variables in both acquiring and non-acquiring companies in the GCC countries.

References

- ABDALLAH, A. A.-N. & ISMAIL, A. K. 2017a. Corporate governance practices, ownership structure, and corporate performance in the GCC countries. *Journal of International Financial Markets, Institutions & Money*, 46, 98-115.
- ABDALLAH, A. A.-N. & ISMAIL, A. K. 2017b. Corporate governance practices, ownership structure, and corporate performance in the GCC countries. *Journal of International Financial Markets, Institutions and Money*, 46, 98-115.
- ABDUL RAHMAN, R. & HANEEM MOHAMED ALI, F. 2006. Board, audit committee, culture and earnings management: Malaysian evidence. *Managerial Auditing Journal*, 21, 783-804.
- AGUILERA, R. V. & JACKSON, G. 2003. The cross-national diversity of corporate governance: Dimensions and determinants. *Academy of management Review*, 28, 447-465.
- AL-HADDAD, L. & WHITTINGTON, M. 2019a. The impact of corporate governance mechanisms on real and accrual earnings management practices: evidence from Jordan. *Corporate Governance: The international journal of business in society*.
- AL-HADDAD, L. & WHITTINGTON, M. 2019b. The impact of corporate governance mechanisms on real and accrual earnings management practices: evidence from Jordan. *Corporate Governance: The International Journal of Business in Society*, 19, 1167-1186.
- AL-HAMADI, R. S. A. 2021. *The Changing Regional Order: The Case of Gulf Cooperation Council and the Blockade of Qatar In 2017*.
- AL-HARKAN, A. 2006. *An investigation into the emerging corporate governance framework in Saudi Arabia*. PhD, Cardiff University.
- AL-MARHUBI, F. 2004. The determinants of governance: A cross-country analysis. *Contemporary Economic Policy*, 22, 394-406.
- AL NASSER, Z. 2018. *The effect of internal corporate governance on earnings quality, firm performance and firm value in GCC Countries*. Trinity College Dublin.
- ALAM CHOUDHURY, M. & ZIAUL HOQUE, M. 2006. Corporate governance in Islamic perspective. *Corporate Governance: The international journal of business in society*, 6, 116-128.
- ALAREENI, B. 2018. The impact of firm-specific characteristics on earnings management: evidence from GCC countries. *International Journal of Managerial and Financial Accounting*, 10, 85-104.
- ALHADAB, M. & CLACHER, I. 2018. The impact of audit quality on real and accrual earnings management around IPOs. *The British Accounting Review*, 50, 442-461.
- ALHADAB, M. & NGUYEN, T. 2018. Corporate diversification and accrual and real earnings management: A non-linear relationship. *Review of Accounting and Finance*, 17, 198-214.
- ALHADAB, M. M. 2018. Real and accrual earnings management around initial public offerings in Jordan. *International Business Research*, 11, 204-216.
- ALI, A., CHEN, T.-Y. & RADHAKRISHNAN, S. 2007. Corporate disclosures by family firms. *Journal of Accounting and Economics*, 44, 238-286.
- ALJIFRI, K. & MOUSTAFA, M. 2007. The Impact of Corporate Governance Mechanisms on the Performance of UAE Firms: An Empirical Analysis. *Journal of Economic and Administrative Sciences*, 23, 71-93.
- ALMAZAN, A., HARTZELL, J. C. & STARKS, L. T. J. F. M. 2005. Active institutional shareholders and costs of monitoring: Evidence from executive compensation. 34, 5-34.
- ALQATAMIN, R. M., ARIBI, Z. A. & ARUN, T. 2017. The effect of the CEO's characteristics on EM: evidence from Jordan. *International Journal of Accounting & Information Management*, 25, 356-375.
- ALQATAN, D., ALBITAR, K. & HUANG, W. 2019. The role of board characteristics on the relationship between International Financial Reporting Standards (IFRS) adoption and earnings management: Evidence from China. *Journal of Accounting and Taxation*, 11, 145-154.
- ALSHARAI, M., BLACK, E. L. & HOFER, C. 2015. The impact of pre-merger earnings management on non-cash acquisition premia: Evidence from the European market for corporate control. *Corporate Ownership and Control*, 12, 587-602.
- ALSHARAI MALEK, B. E. L., HOFER CHRISTOPH 2015. The Impact of Pre-merger Earnings Management on Non-cash Acquisition Premia: Evidence from the European Market for Corporate Control. *Corporate Ownership and Control*, 12, 586-601.
- ALSHARIF, A. 2011. Gulf bloc to consider Jordan, Morocco membership. *Reuters.com*. 10 May 2011.

- ALVES, S. 2012. Ownership Structure and Earnings Management: Evidence from Portugal. *Australasian accounting, business & finance journal*, 6, 57-74.
- ALZOUBI, E. S. S. 2018. Audit quality, debt financing, and earnings management: Evidence from Jordan. *Journal of International Accounting, Auditing and Taxation*, 30, 69-84.
- AMICO, A. 2012a. *Priorities for improving governance and performance of state-owned enterprises in the Middle East and North Africa*.
- AMICO, A. 2012b. The role of MENA stock exchanges in corporate governance. OECD Report, July.
- ANNELLS, M. 1996. Grounded Theory Method: Philosophical Perspectives, Paradigm of Inquiry, and Postmodernism. *Qualitative Health Research*, 6, 379-393.
- AROURI, H., HOSSAIN, M. & BADRUL MUTTAKIN, M. 2014a. Effects of board and ownership structure on corporate performance: Evidence from GCC countries. *Journal of Accounting in Emerging Economies*, 4, 117-130.
- AROURI, H., HOSSAIN, M. & MUTTAKIN, M. B. 2014b. Effects of board and ownership structure on corporate performance: Evidence from GCC countries. *Journal of Accounting in Emerging Economies*.
- AROURI, M., RAULT, C. & TEULON, F. 2014c. Economic policy uncertainty, oil price shocks and GCC stock markets. *Economics Bulletin*, 34, 1822-1834.
- ASLAN, H. & KUMAR, P. 2014. National governance bundles and corporate agency costs: A cross-country analysis. *Corporate Governance: An International Review*, 22, 230-251.
- BABBIE, E., BEITING-LIPPS, E. & KINDSTROM, K. 2015. *The practice of social research*, Mason, OH, CENGAGE Learning.
- BAIK, B., CHO, K., CHOI, W. & KANG, J.-K. 2015. The Role of Institutional Environments in Cross-Border Mergers: A Perspective from Bidders' Earnings Management Behavior. *Management international review*, 55, 615-646.
- BALA, H., AMRAN, N. A. & SHAARI, H. 2018. Auditor brand name and financial reporting fraud of listed companies in Nigeria. *Journal of Advanced Research in Business and Management Studies*, 11, 84-94.
- BALDINI, M., DAL MASO, L., LIBERATORE, G., MAZZI, F. & TERZANI, S. 2018. Role of country-and firm-level determinants in environmental, social, and governance disclosure. *Journal of Business Ethics*, 150, 79-98.
- BALL, R., KOTHARI, S. & ROBIN, A. 2000. The effect of international institutional factors on properties of accounting earnings. *Journal of accounting and economics*, 29, 1-51.
- BANGE, M. M. & DE BOND, W. F. J. O. C. F. 1998. R&D budgets and corporate earnings targets. 4, 153-184.
- BAO, S. R. & LEWELLYN, K. B. 2017. Ownership structure and earnings management in emerging markets—An institutionalized agency perspective. *International business review*, 26, 828-838.
- BASUIL, D. A. & DATTA, D. K. 2019. Effects of Firm-specific and Country-specific Advantages on Relative Acquisition Size in Service Sector Cross-Border Acquisitions: An Empirical Examination. *Journal of International Management*, 25, 66-80.
- BAYDOUN, N., MAGUIRE, W., RYAN, N. & WILLETT, R. 2012. Corporate governance in five Arabian Gulf countries. *Managerial Auditing Journal*, 28, 7-22.
- BEKIRIS, F. V. & DOUKAKIS, L. C. 2011. Corporate Governance and Accruals Earnings Management. *Managerial and Decision Economics*, 32, 439-456.
- BEN-NASR, H., BOUBAKRI, N. & COSSET, J.-C. 2015. Earnings quality in privatized firms: The role of state and foreign owners. *Journal of Accounting and Public Policy*, 34, 392-416.
- BERG, B. L. 2009. *Qualitative research methods for the social sciences*, Boston, MA; London, Allyn & Bacon.
- BILLET, M. T. & RYNGAERT, M. 1997. Capital structure, asset structure and equity takeover premiums in cash tender offers. *Journal of Corporate Finance*, 3, 141-165.
- BOADI, I. & AMEGBE, H. 2017. The link between quality of governance and stock market performance: International level evidence. *European Journal of Government and Economics*, 6, 78-101.
- BÖS, D. 1991. PRIVATIZATION AND THE TRANSITION FROM PLANNED TO MARKET ECONOMIES. *Annals of Public and Cooperative Economics*, 62, 183-195.
- BOTSARI, A. & MEEKS, G. 2008a. Do Acquirers Manage Earnings Prior to a Share for Share Bid? *Journal of Business Finance and Accounting*, 66.
- BOTSARI, A. & MEEKS, G. 2008b. Do Acquirers Manage Earnings Prior to a Share for Share Bid? *Journal of Business Finance & Accounting*, 35, 633-670.
- BRADBURY, M., MAK, Y. T. & TAN, S. M. 2006. Board Characteristics, Audit Committee Characteristics and Abnormal Accruals. *Pacific Accounting Review*, 18, 47-68.
- BURGSTHALER, D. & DICHEV, I. 1997. Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics*, 24, 99-126.

- BUSHEE, B. J. & NOE, C. F. 2000. Corporate disclosure practices, institutional investors, and stock return volatility. *Journal of accounting research*, 171-202.
- CALEGARI, M. J. 2000. The effect of tax accounting rules on capital structure and discretionary accruals. *Journal of Accounting and Economics*, 30, 1-31.
- CHANG, K., KANG, E. & LI, Y. J. O. B. R. 2016. Effect of institutional ownership on dividends: An agency-theory-based analysis. 69, 2551-2559.
- CHARLES, S. L., GLOVER, S. M. & SHARP, N. Y. 2010. The Association between Financial Reporting Risk and Audit Fees before and after the Historic Events Surrounding SOX. *Auditing: A Journal of Practice & Theory*, 29, 15-39.
- CHARUMILIND, C., KALI, R. & WIWATTANAKANTANG, Y. 2006. Connected Lending: Thailand before the Financial Crisis. *The Journal of Business*, 79, 181-218.
- CHEN, C.-L., HUANG, S.-H. & FAN, H.-S. 2012. Complementary association between real activities and accruals-based manipulation in earnings reporting. *Journal of Economic Policy Reform*, 15, 93-108.
- CHEN, C., SHI, H. & XU, H. 2013. Underwriter Reputation, Issuer Ownership, and Pre-IPO Earnings Management: Evidence from China: Underwriter Reputation, Issuer Ownership, and Pre-IPO Earnings Management. *Financial Management*, 42, 647-677.
- CHEN, H., CHEN, J. Z., LOBO, G. J. & WANG, Y. 2011. Effects of audit quality on earnings management and cost of equity capital: Evidence from China. *Contemporary Accounting Research*, 28, 892-925.
- CHEN, K. Y., LIN, K.-L. & ZHOU, J. 2005. Audit quality and earnings management for Taiwan IPO firms. *Managerial Auditing Journal*, 20, 86-104.
- CHEN, X., HARFORD, J. & LI, K. 2007. Monitoring: Which institutions matter? *Journal of Financial Economics*, 86, 279-305.
- CHOI, B. B., LEE, D. & PARK, Y. 2013. Corporate Social Responsibility, Corporate Governance and Earnings Quality: Evidence from Korea. *Corporate Governance: An International Review*, 21, 447-467.
- CHOI, S. & HASAN, I. 2005. Ownership, Governance, and Bank Performance: Korean Experience. *Financial Markets, Institutions & Instruments*, 14, 215-242.
- CHUNG, R., FIRTH, M., KIM, J. B. J. C. O. & CONTROL 2005. FCF agency costs, earnings management, and investor monitoring. 2, 51-61.
- COHEN, D. A., DEY, A. & LYS, T. Z. 2008a. Real and Accrual-Based Earnings Management in the Pre- and Post-Sarbanes-Oxley Periods. *The Accounting Review*, 83, 757-787.
- COHEN, D. A., DEY, A. & LYS, T. Z. J. T. A. R. 2008b. Real and accrual-based earnings management in the pre-and post-Sarbanes-Oxley periods. 83, 757-787.
- COHEN, D. A. & ZAROWIN, P. 2010. Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of accounting and Economics*, 50, 2-19.
- COLLIS, J. & HUSSEY, R. 2003. *Business research: a practical guide for undergraduate and postgraduate students*, New York; Houndmills, Basingstoke, Hampshire; Palgrave Macmillan.
- COOPER, I. A. & KAPLANIS, E. 2000. Partially segmented international capital markets and international capital budgeting. *Journal of International Money and Finance*, 19, 309-329.
- CORNETT, M., MARCUS, A. & TEHRANIAN, H. 2008a. Corporate governance and pay-for-performance: The impact of earnings management. *Journal of financial economics*, 87, 357-373.
- CORNETT, M. M., MARCUS, A. J. & TEHRANIAN, H. J. J. O. F. E. 2008b. Corporate governance and pay-for-performance: The impact of earnings management. 87, 357-373.
- CRANE, A. D., MICHENAUD, S. & WESTON, J. P. J. T. R. O. F. S. 2016. The effect of institutional ownership on payout policy: Evidence from index thresholds. 29, 1377-1408.
- CROTTY, M. 1998. *The foundations of social research: meaning and perspective in the research process*, London, SAGE.
- DADFAR, H. 1984. Organization as a Mirror for Reflection of National Culture. A study of organizational characteristics in Islamic nations. *First International Conference on Organization Symbolism and Corporate Culture*.
- DALWAI, T. A. R., BASIRUDDIN, R. & ABDUL RASID, S. Z. 2015a. A critical review of relationship between corporate governance and firm performance: GCC banking sector perspective. *Corporate Governance*, 15, 18-30.
- DALWAI, T. A. R., BASIRUDDIN, R. & RASID, S. Z. A. 2015b. A critical review of relationship between corporate governance and firm performance: GCC banking sector perspective. *Corporate Governance*.
- DAVIDSON, R., GOODWIN-STEWART, J. & KENT, P. 2005. Internal governance structures and earnings management. *Accounting and Finance*, 45, 241-267.

- DE CLERCQ, D., DANIS, W. M. & DAKHLI, M. 2010. The moderating effect of institutional context on the relationship between associational activity and new business activity in emerging economies. *International Business Review*, 19, 85-101.
- DE LA BRUSLERIE, H. 2013. Crossing takeover premiums and mix of payment: An empirical test of contractual setting in M&A transactions. *Journal of banking & finance*, 37, 2106-2123.
- DECHOW, P., GE, W. & SCHRAND, C. 2010. Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of accounting and economics*, 50, 344-401.
- DECHOW, P. M. & DICHEV, I. D. 2002. The quality of accruals and earnings: The role of accrual estimation errors. *The accounting review*, 77, 35-59.
- DECHOW, P. M., KOTHARI, S. P. & WATTS, R. L. 1998. The relation between earnings and cash flows. *Journal of accounting and Economics*, 25, 133-168.
- DECHOW, P. M., SLOAN, R. G. & SWEENEY, A. P. 1995a. Detecting earnings management. *Accounting review*, 193-225.
- DECHOW, P. M., SLOAN, R. G. & SWEENEY, A. P. 1995b. Detecting Earnings Management. *The Accounting Review*, 70, 193-225.
- DEFOND, M. L. 2010. Earnings quality research: Advances, challenges and future research. *Journal of accounting and economics*, 50, 402-409.
- DENG, P. 2009. Why do Chinese firms tend to acquire strategic assets in international expansion? *Journal of world business : JWB*, 44, 74-84.
- DENG, S. & ELYASIANI, E. 2008. Geographic Diversification, Bank Holding Company Value, and Risk. *Journal of Money, Credit and Banking*, 40, 1217-1238.
- DENIS, D. J., DENIS, D. K. & YOST, K. 2002. Global Diversification, Industrial Diversification, and Firm Value. *The Journal of Finance*, 57, 1951-1979.
- DEPAMPHILIS, D. 2010. *Mergers and acquisitions basics: all you need to know*, Academic Press.
- DIMAGGIO, P. J. & POWELL, W. W. J. A. S. R. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. 147-160.
- DING, Y., ZHANG, H. & ZHANG, J. 2007. Private vs State Ownership and Earnings Management: evidence from Chinese listed companies. *Corporate Governance: An International Review*, 15, 223-238.
- DOIDGE, C., ANDREW KAROLYI, G. & STULZ, R. M. 2007. Why do countries matter so much for corporate governance? *Journal of Financial Economics*, 86, 1-39.
- DONG, N., WANG, F., ZHANG, J. & ZHOU, J. 2020. Ownership structure and real earnings management: Evidence from China. *Journal of Accounting and Public Policy*, 39, 106733.
- 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, 551-572.
- DU, M. & BOATENG, A. 2015. State ownership, institutional effects and value creation in cross-border mergers & acquisitions by Chinese firms. *International Business Review*, 24, 430-442.
- DUBEY, A. & KUMMER, C. 2016. Analysis of Mergers and Acquisitions in Gulf Cooperation Council Countries since Year 2000—Impact and Imperatives. *Arabian Journal of Business and Management Review* 5, 1.
- DUGGAL, R. & MILLAR, J. A. 1999. Institutional ownership and firm performance: The case of bidder returns. *Journal of Corporate Finance*, 5, 103-117.
- DUNNING, J. H. 1980. Toward an Eclectic Theory of International Production: Some Empirical Tests. *Journal of International Business Studies*, 11, 9-31.
- DUNNING, J. H. 2009. Location and the Multinational Enterprise: A Neglected Factor? *Journal of International Business Studies*, 40, 5-19.
- DVOŘÁK, T. 2005. Do domestic investors have an information advantage? Evidence from Indonesia. *The Journal of Finance*, 60, 817-839.
- DYRENG, S. D., HANLON, M. & MAYDEW, E. L. 2012. Where do firms manage earnings? *Review of Accounting Studies*, 17, 649-687.
- EISENHARDT, K. M. 1989a. Agency Theory: An Assessment and Review. *Academy of Management Review*, 14, 57-74.
- EISENHARDT, K. M. J. A. O. M. R. 1989b. Agency theory: An assessment and review. 14, 57-74.
- EL DIRI, M., LAMBRINOUDAKIS, C. & ALHADAB, M. 2020. Corporate governance and earnings management in concentrated markets. *Journal of Business Research*, 108, 291-306.
- ELJELLY, A. M. 2009. Ownership And Firm Performance: The Experience Of Saudi Arabias Emerging Economy. *International Business & Economics Research Journal (IBER)*, 8.
- ELKALLA, T. 2017. *An empirical investigation of earnings management in the MENA region*. University of the West of England.

- ENOMOTO, M., KIMURA, F. & YAMAGUCHI, T. 2015. Accrual-based and real earnings management: An international comparison for investor protection. *Journal of Contemporary Accounting & Economics*, 11, 183-198.
- ERICKSON, M. & WANG, S.-W. 1999. Earnings management by acquiring firms in stock for stock mergers. *Journal of Accounting and Economics*, 27, 149-176.
- ERICKSON, M., WANG, S.-W. J. J. O. A. & ECONOMICS 1999. Earnings management by acquiring firms in stock for stock mergers. 27, 149-176.
- ESSEN, M., ENGELEN, P.-J. & CARNEY, M. 2013. Does "good" corporate governance help in a crisis? The impact of country- and firm-level governance mechanisms in the European financial crisis. *Corporate Governance: An International Review*, 21, 201.
- EULAIWI, B., AL-HADI, A., TAYLOR, G., AL-YAHYAE, K. H. & EVANS, J. 2016a. Multiple directorships, family ownership and the board nomination committee: International evidence from the GCC. *Emerging Markets Review*, 28, 61-88.
- EULAIWI, B., AL-HADI, A., TAYLOR, G., AL-YAHYAE, K. H. & EVANS, J. J. E. M. R. 2016b. Multiple directorships, family ownership and the board nomination committee: International evidence from the GCC. 28, 61-88.
- FAKHFAKH, H. & NASFI, A. F. 2012. The Determinants of Earnings Management by the Acquiring Firms. *Journal of Business Studies Quarterly*, 3, 43-57.
- FAMA, E. F. & JENSEN, M. C. 1983. Separation of Ownership and Control. *The Journal of Law & Economics*, 26, 301-325.
- FAROOQI, J., NGO, T. & JORY, S. 2017. Real activities manipulation by bidders prior to mergers and acquisitions. *Review of Accounting and Finance*, 16, 322-347.
- FERRARINI, G. & FILIPPELLI, M. 2015. *Independent directors and controlling shareholders around the world*.
- FICH, E. M. & SHIVDASANI, A. 2006. Are Busy Boards Effective Monitors? *The Journal of Finance*, 61, 689-724.
- FILATOTCHEV, I., JACKSON, G. & NAKAJIMA, C. 2013. Corporate governance and national institutions: A review and emerging research agenda. *Asia Pacific Journal of Management*, 30, 965-986.
- FIRTH, M., FUNG, P. M. Y. & RUI, O. M. 2007. Ownership, two-tier board structure, and the informativeness of earnings – Evidence from China. *Journal of accounting and public policy*, 26, 463-496.
- FISHELL, V., ABERLE, E., JUDGE, M. & PERRY, T. J. J. O. A. S. 1985. Palatability and muscle properties of beef as influenced by preslaughter growth rate. 61, 151-157.
- FRANCIS, B., HASAN, I. & LI, L. 2016. A cross-country study of legal-system strength and real earnings management. *Journal of Accounting and Public Policy*, 35, 477-512.
- FRANCIS, J., LAFOND, R., OLSSON, P. & SCHIPPER, K. 2005. The market pricing of accruals quality. *Journal of accounting and economics*, 39, 295-327.
- FRANCIS, J. R. & WANG, D. 2008. The joint effect of investor protection and Big 4 audits on earnings quality around the world. *Contemporary accounting research*, 25, 157-191.
- FREEMAN, R. E. 2016. *A stakeholder theory of the modern corporation. The corporation and its stakeholders*. University of Toronto Press.
- GARCÍA-MECA, E. & SÁNCHEZ-BALLESTA, J. P. 2009. Corporate Governance and Earnings Management: A Meta-Analysis. *Corporate Governance: An International Review*, 17, 594-610.
- GASPAR, J.-M., MASSA, M. & MATOS, P. J. J. O. F. E. 2005. Shareholder investment horizons and the market for corporate control. 76, 135-165.
- GATTOUFI, S., AL-MUHARRAMI, S. & AL-KIYUMI, A. 2009. The impact of mergers and acquisitions on the efficiency of GCC banks. *Banks and Bank Systems*, 4, 94-101.
- GATTOUFI, S., AL-MUHARRAMI, S. & SHAMAS, G. 2014. Assessment of mergers and acquisitions in GCC banking. *International Journal of Accounting and Finance*, 4, 358-377.
- GAUGHAN, P. A. 2010. *Mergers, acquisitions, and corporate restructurings*, John Wiley & Sons.
- GAUGHAN, P. A. 2013. *Maximizing corporate value through mergers and acquisitions: A strategic growth guide*, John Wiley & Sons.
- GAVIOUS, I., SEGEV, E. & YOSEF, R. 2012. Female directors and earnings management in high-technology firms. *Pacific Accounting Review*.
- GE, W. & KIM, J.-B. 2014. Real earnings management and the cost of new corporate bonds. *Journal of Business Research*, 67, 641-647.
- GLOBERMAN, S. & SHAPIRO, D. J. W. D. 2002. Global foreign direct investment flows: The role of governance infrastructure. 30, 1899-1919.
- GONZÁLEZ, J. S. & GARCÍA-MECA, E. 2014. Does corporate governance influence earnings management in Latin American markets? *Journal of business ethics*, 121, 419-440.

- GRAHAM, J. R., HARVEY, C. R. & RAJGOPAL, S. 2005a. The economic implications of corporate financial reporting. *Journal of accounting and economics*, 40, 3-73.
- GRAHAM, J. R., HARVEY, C. R. & RAJGOPAL, S. 2005b. The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, 40, 3-73.
- GUGLER, K., MUELLER, D. C., YURTOGLU, B. B. J. O. I. & STAATSWISSENSCHAFT, T. E. Z. F. D. G. 2007. Corporate governance and the determinants of investment. 598-626.
- GUNA, W. & HERAWATY, A. 2010. The influence of good corporate governance mechanisms, auditor's independency, leverage, audit quality, profitability and company's size on the earnings management practices in manufacturing companies listed in Indonesia Stock Exchange. *Journal of Business*, 12, 53-68.
- GUNNY, K. A. 2010. The relation between earnings management using real activities manipulation and future performance: Evidence from meeting earnings benchmarks. *Contemporary accounting research*, 27, 855-888.
- GUO, F. & MA, S. 2015. Ownership Characteristics and Earnings Management in China. *The Chinese Economy*, 48, 372-395.
- HABBASH, M. & ALGHAMDI, S. 2017. Audit quality and earnings management in less developed economies: the case of Saudi Arabia. *Journal of Management & Governance*, 21, 351-373.
- HAMDAN, S. 2012. A call for private investment in Gulf health care. *New York Times*.
- HARTZELL, J. C. & STARKS, L. T. J. O. F. 2003. Institutional investors and executive compensation. 58, 2351-2374.
- HE, K., PAN, X. & TIAN, G. G. 2017. Political Connections, Audit Opinions, and Auditor Choice: Evidence from the Ouster of Government Officers. *Auditing: A Journal of Practice & Theory*, 36, 91-114.
- HEALY, P. M. & WAHLEN, J. M. 1999. A Review of the Earnings Management Literature and Its Implications for Standard Setting. *Accounting Horizons*, 13, 365-383.
- HELD, D. & ULRICHSEN, K. 2013a. *The transformation of the Gulf: politics, economics and the global order*, Routledge.
- HELD, D. & ULRICHSEN, K. 2013b. *The transformation of the Gulf: politics, economics and the global order*, Routledge.
- HERTOG, S. 2013. Globalization and the Politics of Development in the Middle East. By Clement M. Henry and Robert Springborg. New York: Cambridge University Press, 2010. 382p. \$90.00 cloth, \$30.99 paper. - Political Change in the Arab Gulf States: Stuck in Transition. Edited by Mary Ann Tétreault, Gwenn Okruhlik, and Andrzej Kapiszewski. Boulder, CO: Lynne Rienner, 2011. 369p. \$68.50. *Perspectives on Politics*, 11, 261-263.
- HESSAYRI, M. & SAIHI, M. 2015a. Monitoring earnings management in emerging markets: IFRS adoption and ownership structure. *Journal of Economic and Administrative Sciences*, 31, 86-108.
- HESSAYRI, M. & SAIHI, M. 2015b. Monitoring earnings management in emerging markets: IFRS adoption and ownership structure. *Journal of Economic and Administrative Sciences*.
- HIGGINS, H. N. 2013. Do stock-for-stock merger acquirers manage earnings? Evidence from Japan. *Journal of Accounting and Public Policy*, 32, 44-70.
- HITT, M. A., HOSKISSON, R. E. & KIM, H. 1997. International Diversification: Effects on Innovation and Firm Performance in Product-Diversified Firms. *The Academy of Management Journal*, 40, 767-798.
- HO, L. C. J., LIAO, Q. & TAYLOR, M. 2015. Real and accrual-based earnings management in the pre-and post-IFRS periods: Evidence from China. *Journal of International Financial Management & Accounting*, 26, 294-335.
- HOANG, T. C., ABEYSEKERA, I. & MA, S. 2019. Earnings Quality and Corporate Social Disclosure: The Moderating Role of State and Foreign Ownership in Vietnamese Listed Firms. *Emerging Markets Finance and Trade*, 55, 272-288.
- HOFSTEDE, G., HOFSTEDE, G. J. & MINKOV, M. 2005. *Cultures and organizations: Software of the mind*, Mcgraw-hill New York.
- HOPE, J. & FRASER, R. 2003. *Beyond budgeting: how managers can break free from the annual performance trap*, Harvard Business Press.
- HUANG, J. 2018. Foreign earnings management of US multinational companies: The role of decision rights. *Journal of International Business Studies*, 49, 552-574.
- HUSSAIN, F. F., CHAND, P. V., RANI, P. J. A. & TAXATION 2012. The impact of IFRS for SMEs on the accounting profession: Evidence from Fiji. 4, 107-118.
- IANNOTTA, G., NOCERA, G. & SIRONI, A. 2013. The impact of government ownership on bank risk. *Journal of Financial Intermediation*, 22, 152-176.

- IOANNOU, I. & SERAFEIM, G. 2012. What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, 43, 834-864.
- 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, 281-300.
- JENSEN, M. C. & MECKLING, W. H. 1976a. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- JENSEN, M. C. & MECKLING, W. H. J. O. F. E. 1976b. Theory of the firm: Managerial behavior, agency costs and ownership structure. 3, 305-360.
- JEON, J. Q., LEE, C. & MOFFETT, C. M. 2011. Effects of foreign ownership on payout policy: Evidence from the Korean market. *Journal of Financial Markets*, 14, 344-375.
- JIRAPORN, P., KIM, Y. S. & MATHUR, I. 2008. Does corporate diversification exacerbate or mitigate earnings management?: An empirical analysis. *International Review of Financial Analysis*, 17, 1087-1109.
- JOHN, K., KNYAZEVA, A. & KNYAZEVA, D. J. O. F. E. 2011. Does geography matter? Firm location and corporate payout policy. 101, 533-551.
- JONES, J. J. 1991. Earnings Management During Import Relief Investigations. *Journal of Accounting Research*, 29, 193-228.
- JUDGE, W., FILATOTCHEV, I. & AGUILERA, R. 2010. Comparative Corporate Governance & International Business Research. *Corporate Governance: An International Review*, 18, 493-495.
- JUDGE, W. Q., DOUGLAS, T. J. & KUTAN, A. M. 2008. Institutional Antecedents of Corporate Governance Legitimacy. *Journal of Management*, 34, 765-785.
- KAŁDOŃSKI, M., JEWARTOWSKI, T. & MIZERKA, J. 2019. Capital market pressure, real earnings management, and institutional ownership stability - Evidence from Poland. *International Review of Financial Analysis*.
- KANG, S.-A. & KIM, Y.-S. 2012. EFFECT OF CORPORATE GOVERNANCE ON REAL ACTIVITY-BASED EARNINGS MANAGEMENT: EVIDENCE FROM KOREA / ĮMONIŲ VALDYMO POVEIKIS, PAGRĮSTAS DARBO UŽMOKESČIO VALDYMU: KORĖJOS PAVYZDYS. *Journal of Business Economics and Management*, 13, 29-52.
- KARIM, M. A., SARKAR, S. & ZHANG, S. 2016a. Earnings management surrounding M&A: Role of economic development and investor protection. *Advances in accounting*, 35, 207-215.
- KARIM, M. A., SARKAR, S. & ZHANG, S. 2016b. Earnings management surrounding M&A: Role of economic development and investor protection. *Advances in Accounting, incorporating Advances in International Accounting*, 35, 207-215.
- KASSAMANY, T., IBRAHIM, S. & ARCHBOLD, S. 2017a. Accrual and real-based earnings management by UK acquirers: Evidence from pre- and post-Higgs periods. *Journal of Accounting & Organizational Change*, 13, 492-519.
- KASSAMANY, T., IBRAHIM, S. & ARCHBOLD, S. 2017b. Accrual and real-based earnings management by UK acquirers: evidence from pre-and post-Higgs periods. *Journal of Accounting & Organizational Change*.
- KEASEY, K., WRIGHT, M. J. A. & RESEARCH, B. 1993. Issues in corporate accountability and governance: An editorial. 23, 291-303.
- KHANCHEL EL MEHDI, I. & SEBOUI, S. 2011. Corporate diversification and earnings management. *Review of Accounting and Finance*, 10, 176-196.
- KIEL, G. C. & NICHOLSON, G. J. 2003. Board Composition and Corporate Performance: how the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: An International Review*, 11, 189-205.
- KIM, S. I., BYUN, J. H. & SHIN, H. J. 2018. Largest Shareholder Ownership and Downward Real-activity Earnings Management in Korean Seasoned Equity Offerings Firms. *Asia-Pacific Journal of Financial Studies*, 47, 546-570.
- KIM, Y., PARK, M. S. & WIER, B. 2012. Is earnings quality associated with corporate social responsibility? *The accounting review*, 87, 761-796.
- KIRSCHENHEITER, M. & MELUMAD, N. D. 2002. Can "Big Bath" and Earnings Smoothing Co-Exist as Equilibrium Financial Reporting Strategies? *Journal of Accounting Research*, 40, 761-796.
- KLEIN, A. 2002. Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 33, 375-400.
- KNUDSEN, J. S. 2011. Company Delistings from the UN Global Compact: Limited Business Demand or Domestic Governance Failure? *Journal of Business Ethics*, 103, 331-349.
- KOTHARI, S. P., LEONE, A. J. & WASLEY, C. E. 2005. Performance matched discretionary accrual measures. *Journal of accounting and economics*, 39, 163-197.

- KOUAIB, A. & JARBOUI, A. 2014a. External audit quality and ownership structure: interaction and impact on earnings management of industrial and commercial Tunisian sectors.
- KOUAIB, A. & JARBOUI, A. 2014b. External audit quality and ownership structure: interaction and impact on earnings management of industrial and commercial Tunisian sectors. *Journal of Economics, Finance and Administrative Science*, 19, 78-89.
- KOUAIB, A. & JARBOUI, A. 2014c. External audit quality and ownership structure: interaction and impact on earnings management of industrial and commercial Tunisian sectors. *Journal of Economics Finance and Administrative Science*, 19, 78-89.
- KRISHANSING BOOLAKY, P. 2011. Auditing and reporting in Europe: an analysis using country-level data. *Managerial Auditing Journal*, 27, 41-65.
- 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, 101-136.
- KURY, K. W. Decoupled earnings: An institutional perspective of the consequences of maximizing shareholder value. Accounting Forum, 2007a. Taylor & Francis, 370-383.
- KURY, K. W. 2007b. Decoupled earnings: An institutional perspective of the consequences of maximizing shareholder value. *Accounting Forum*, 31, 370-383.
- KUSUMANINGTYAS, M., CHARIRI, A. & YUETTA, E. N. A. Board of commissioners, audit committee gender, institutional ownership and earnings management. 5th International Conference on Accounting and Finance (ICAF 2019), 2019. Atlantis Press, 103-108.
- KUSUMANINGTYAS METTA, CHARIRI ANIS & AFRI, Y. E. N. 2019. Information Asymmetry, Audit Quality, And Institutional Ownership On Earnings Management: Evidence From Mining Companies Listed On The Indonesia Stock Exchange *International Journal of Engineering and Advanced Technology (IJEAT)*, 8, 126-139.
- LANG, M., SMITH RAEDY, J. & WILSON, W. 2006. Earnings management and cross listing: Are reconciled earnings comparable to US earnings? *Journal of Accounting and Economics*, 42, 255-283.
- LEE, J., LIN, L. & NARANJO, A. 2018. Going Abroad in a Risky World: Geographic Diversification, Institutional Frictions, and Corporate Leverage.
- LEE, K. & PENNING, J. M. 1996. Mergers and acquisitions: strategic-organizational fit and outcomes. *The Wharton School, University of Pennsylvania*.
- LEGRENZI, M. 2015. *The GCC and the International Relations of the Gulf*, Bloomsbury Publishing.
- LEHMANN, N. 2016a. The role of corporate governance in shaping accruals manipulation prior to acquisitions. *Accounting and Business Research*, 46, 327-364.
- LEHMANN, N. 2016b. The role of corporate governance in shaping accruals manipulation prior to acquisitions. *Accounting and Business Research*, 46, 327-364.
- 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, 21-40.
- LENSINK, R., MEESTERS, A., NAABORG, I. J. O. B. & FINANCE 2008. Bank efficiency and foreign ownership: Do good institutions matter? 32, 834-844.
- LEUZ, C., NANDA, D. & WYSOCKI, P. D. 2003a. Earnings management and investor protection: an international comparison. *Journal of Financial Economics*, 69, 505-527.
- LEUZ, C., NANDA, D. & WYSOCKI, P. D. J. J. O. F. E. 2003b. Earnings management and investor protection: an international comparison. 69, 505-527.
- LIM, C. Y., THONG, T. Y. & DING, D. K. 2008. Firm diversification and earnings management: evidence from seasoned equity offerings. *Review of Quantitative Finance and Accounting*, 30, 69-92.
- LIN, J. W. & HWANG, M. I. 2010. Audit Quality, Corporate Governance, and Earnings Management: A Meta-Analysis. *International Journal of Auditing*, 14, 57-77.
- LO, K. 2008. Earnings management and earnings quality. *Journal of Accounting and Economics*, 45, 350-357.
- LOUIS, H. 2004. Earnings management and the market performance of acquiring firms. *Journal of Financial Economics*, 74, 121-148.
- LOURENÇO, I. C., RATHKE, A., SANTANA, V. & BRANCO, M. C. 2018a. Corruption and earnings management in developed and emerging countries. *Corporate Governance: The International Journal of Business in Society*.
- LOURENÇO, I. C., RATHKE, A., SANTANA, V. & BRANCO, M. C. J. C. G. T. I. J. O. B. I. S. 2018b. Corruption and earnings management in developed and emerging countries.
- MAIJOR, S. J. & VANSTRAELEN, A. 2006. Earnings management within Europe: the effects of member state audit environment, audit firm quality and international capital markets. *Accounting and Business Research*, 36, 33-52.

- MALLIN, C. A. 2007. *Corporate governance*, Oxford, Oxford University Press.
- MAMUN, A. A., YASSER, Q. R. & RAHMAN, M. 2013. A discussion of the suitability of only one vs more than one theory for depicting corporate governance.
- MASWADEH, S. 2018. The effect of the ownership structure on earnings management practices. *Investment Management and Financial Innovations*, 15, 48-60.
- MATEESCU, R.-A. 2015. Corporate governance disclosure practices and their determinant factors in European emerging countries. *Journal of Accounting and Management Information Systems*, 14, 170-192.
- MAURO, P. J. T. Q. J. O. E. 1995. Corruption and growth. 110, 681-712.
- MAZAHERI, N. 2013. The Saudi monarchy and economic familism in an era of business environment reforms. *Business and Politics*, 15, 295-321.
- MCMEEKING, K. P., PEASNELL, K. V. & POPE, P. F. 2007. The effect of large audit firm mergers on audit pricing in the UK. *Accounting and Business Research*, 37, 301-319.
- MCNICHOLS, M. F. 2002. Discussion of the quality of accruals and earnings: The role of accrual estimation errors. *The accounting review*, 77, 61-69.
- MELLADO, C. & SAONA, P. 2020. Real earnings management and corporate governance: a study of Latin America. *Ekonomika istraživanja*, 33, 2229-2268.
- MEYER, J. W. & ROWAN, B. 1977a. Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, 83, 340-363.
- MEYER, J. W. & ROWAN, B. J. A. J. O. S. 1977b. Institutionalized organizations: Formal structure as myth and ceremony. 83, 340-363.
- MOHAMMED, I. A., CHE-AHMAD, A. & MALEK, M. 2018. IFRS adoption and audit delay: The role of shareholders in the audit committee. *International Journal of Accounting and Financial Reporting*, 8, 325-343.
- MUELLER, D. C. & PEEV, E. J. J. O. C. E. 2007. Corporate governance and investment in Central and Eastern Europe. 35, 414-437.
- NAM, D. I., PARK, H. D. & ARTHURS, J. D. 2014. Looking Attractive until You Sell: Earnings Management, Lockup Expiration, and Venture Capitalists. *Journal of Management Studies*, 51, 1286-1310.
- NGUYEN, A. H. & DUONG, C. T. 2020. Provincial governance quality and earnings management: empirical evidence from Vietnam. *The Journal of Asian Finance, Economics, and Business*, 7, 43-52.
- NGUYEN, A. H., NGUYEN, L. H. & DOAN, D. T. 2020. Ownership Structure and Earnings Management: Empirical Evidence from Vietnam Real Estate Sector. *Real estate management and valuation*, 28, 37-51.
- NGUYEN, T., LOCKE, S. & REDDY, K. 2015. Ownership concentration and corporate performance from a dynamic perspective: Does national governance quality matter? *International Review of Financial Analysis*, 41, 148-161.
- NICO, L. 2016. The role of corporate governance in shaping accruals manipulation prior to acquisitions. *Accounting and Business Research*, 46, 327-364.
- ORAZALIN, N. & AKHMETZHANOV, R. 2019. Earnings management, audit quality, and cost of debt: evidence from a Central Asian economy. *Managerial Auditing Journal*, 34, 696-721.
- PAIK, H. & KOH, Y. 2014. Ownership structure and managerial behaviour to beat market expectation in Korea. *The Journal of Applied Business Research*, 30, 10-63.
- PAN, Y., TENG, L., SUPAPOL, A. B., LU, X., HUANG, D. & WANG, Z. 2014. Firms' FDI ownership: The influence of government ownership and legislative connections. *Journal of International Business Studies*, 45, 1029-1043.
- PARFET, W. U. 2000a. Accounting subjectivity and earnings management: A preparer perspective. *Accounting Horizons*, 14, 481.
- PARFET, W. U. 2000b. Accounting Subjectivity and Earnings Management: A Preparer Perspective. *Accounting Horizons*, 14, 481-488.
- PARK, H.-Y., CHAE, S.-J. & CHO, M.-K. 2017. Controlling shareholders' ownership structure, foreign investors' monitoring, and investment efficiency. *Investment Management and Financial Innovations*, 13, 159-170.
- PEASNELL, K. V., POPE, P. F. & YOUNG, S. 2000. Accrual management to meet earnings targets: UK evidence pre- and post-Cadbury. *The British Accounting Review*, 32, 415-445.
- PIOSIK, A. & GENGE, E. 2019. The Influence of a Company's Ownership Structure on Upward Real Earnings Management. *Sustainability*, 12, 152.
- PIOSIK, A. & GENGE, E. 2020. The influence of a company's ownership structure on upward real earnings management. *Sustainability*, 12, 152.
- PORTA, R. L., LOPEZ-DE-SILANES, F. & SHLEIFER, A. 1999. Corporate Ownership around the World. *The Journal of Finance*, 54, 471-517.

- PORTA, R. L., LOPEZ-DE-SILANES, F., SHLEIFER, A. & VISHNY, R. 2002. Investor Protection and Corporate Valuation. *The Journal of Finance*, 57, 1147-1170.
- POUND, J. 1988. Proxy contests and the efficiency of shareholder oversight. *Journal of Financial Economics*, 20, 237-265.
- POWELL, W. W. & DIMAGGIO, P. J. 1991. *The new institutionalism in organizational analysis*, London;Chicago;; University of Chicago Press.
- RAMAN, K., SHIVAKUMAR, L. & TAMAYO, A. 2013. Target's earnings quality and bidders' takeover decisions. *Review of accounting studies*, 18, 1050-1087.
- RAVICHANDRAN, D. 2009. Effect of financial crisis over mergers and acquisitions in GCC countries. Available at SSRN 1360249.
- REBECA CORDEIRO DA CUNHA, A. & MÁRCIO ANDRÉ VERAS, M. 2018. Book-to-Market Ratio, return on equity and Brazilian Stock Returns. *Revista de Administração*, 53, 324-344.
- REED, D. 2002. Corporate Governance Reforms in Developing Countries. *Journal of Business Ethics*, 37, 223-247.
- RICHARDSON, V. J. 2000. Information Asymmetry and Earnings Management: Some Evidence. *Review of Quantitative Finance and Accounting*, 15, 325-347.
- ROOSENBOOM, P. & VAN DER GOOT, T. 2005. The effect of ownership and control on market valuation: Evidence from initial public offerings in The Netherlands. *International Review of Financial Analysis*, 14, 43-59.
- ROYCHOWDHURY, S. 2006. Earnings management through real activities manipulation. *Journal of accounting and economics*, 42, 335-370.
- RYAN, B., SCAPENS, R. W. & THEOBALD, M. 2002. *Research method and methodology in finance and accounting*, London, Thomson Learning.
- SÁENZ GONZÁLEZ, J. & GARCÍA-MECA, E. 2013. Does Corporate Governance Influence Earnings Management in Latin American Markets? *Journal of business ethics*, 121, 419-440.
- SAINT-ONGE, H. & CHATZKEL, J. 2008. *Beyond the deal: a revolutionary framework for successful mergers & acquisitions that achieve breakthrough performance gains*, McGraw Hill Professional.
- SAKAKI, H., JACKSON, D. & JORY, S. 2017. Institutional ownership stability and real earnings management. *Review of Quantitative Finance and Accounting*, 49, 227-244.
- SAONA, P. & MURO, L. 2018. Firm- and Country-Level Attributes as Determinants of Earnings Management: An Analysis for Latin American Firms. *Emerging markets finance & trade*, 54, 2736-2764.
- SARA DING, X., MO, J. & ZHONG, L. 2017. The Effect of Cross-Border Mergers and Acquisitions on Earnings Quality: Evidence from China: Cross-border M&As and Earnings Quality: Evidence from China Ding et al. *Thunderbird International Business Review*, 59, 519-531.
- SAUNDERS, M. N. K., LEWIS, P. & THORNHILL, A. 2019. *Research methods for business students*, Boston, Pearson.
- SHAFER, W. E. 2015. Ethical Climate, Social Responsibility, and Earnings Management. *Journal of Business Ethics*, 126, 43-60.
- SHEDDEN, M. 2016. *The Impact of Country-level Characteristics on Cross-Border Merger and Acquisition Premiums*. Master, the College of Graduate Studies and Research.
- SHIVAKUMAR, L. 2000. Do firms mislead investors by overstating earnings before seasoned equity offerings? *Journal of Accounting and Economics*, 29, 339-371.
- SHLEIFER, A., MORCK, R. & VISHNY, R. W. 1988. Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20, 293-315.
- SHLEIFER, A. & VISHNY, R. W. 1986a. Large Shareholders and Corporate Control. *Journal of Political Economy*, 94, 461-488.
- SHLEIFER, A. & VISHNY, R. W. 1986b. Large shareholders and corporate control. *Journal of political economy*, 94, 461-488.
- SHLEIFER, A. & VISHNY, R. W. 1997. A Survey of Corporate Governance. *The Journal of Finance*, 52, 737-783.
- SHUBITA, M. F. 2015. The impact of income smoothing on earnings quality in emerging markets: Evidence from GCC markets. *Journal of accounting in emerging economies*.
- SOURAL, M. 2004. Corporate Governance in the Middle East: An Overview, Egypt Ministry of Foreign Trade.
- SU, Y., XU, D. & PHAN, P. H. 2008. Principal-Principal Conflict in the Governance of the Chinese Public Corporation. *Management and Organization Review*, 4, 17-38.
- SWEENEY, A. P. 1994. Debt-covenant violations and managers' accounting responses. *Journal of Accounting and Economics*, 17, 281-308.
- TAMOSIUNIENE, R. & DUKSAITE, E. 2009. The importance of mergers and acquisitions in today's economy. *KSI Transactions on Knowledge Society*, 2, 11-15.
- TEOH, S. H., WELCH, I. & WONG, T. J. 1998. Earnings Management and the Long-Run Market Performance of Initial Public Offerings. *The Journal of Finance*, 53, 1935-1974.

- TSAMENYI, M., ENNINFUL-ADU, E. & ONUMAH, J. 2007. Disclosure and corporate governance in developing countries: evidence from Ghana. *Managerial Auditing Journal*, 22, 319-334.
- TUTUNCU, L. 2019. Earnings management and performance of management buyouts. *Managerial Finance*.
- UNERMAN, J. D., C 2011. *Financial Accounting Theory*, Maidenhead, McGraw-Hill, Inc.
- VAN ESSEN, M., ENGELEN, P. J. & CARNEY, M. 2013. Does “Good” Corporate Governance Help in a Crisis? The Impact of Country-and Firm-Level Governance Mechanisms in the European Financial Crisis. *Corporate Governance: An International Review*, 21, 201-224.
- VASILESCU, C. & MILLO, Y. 2016. Do industrial and geographic diversifications have different effects on earnings management? Evidence from UK mergers and acquisitions. *International Review of Financial Analysis*, 46, 33-45.
- VO, X. V. & CHU, T. K. H. 2019. Do foreign shareholders improve corporate earnings quality in emerging markets? Evidence from Vietnam. *Cogent Economics & Finance*, 7.
- WALLACE, R. O. & GERON, H. J. J. O. A. L. 1991. Frameworks for international comparative financial accounting. 10, 209-264.
- WANG, L. & YUNG, K. 2011. Do State Enterprises Manage Earnings More than Privately Owned Firms? The Case of China. *Journal of Business Finance & Accounting*, 38, 794-812.
- WASAN, P. & MULCHANDANI, K. 2020. Corporate governance factors as predictors of earnings management. *Journal of General Management*, 45, 71-92.
- WILSON, R. 2009a. The development of Islamic finance in the GCC.
- WILSON, R. 2009b. The Gulf Region: A New Hub of Global Financial Power. Blackwell Publishing, Ltd.
- WINTOKI, M. B., LINCK, J. S. & NETTER, J. M. 2012. Endogeneity and the dynamics of internal corporate governance. *Journal of Financial Economics*, 105, 581-606.
- XING, L., DUAN, T. & HOU, W. 2019. Do Board Secretaries Influence Management Earnings Forecasts? *Journal of Business Ethics*, 154, 537-574.
- YAZDIFAR, H. J. S. C. 2003. Management accounting in the twenty-first-century firm: a strategic view. 12, 109.
- YEOH, P.-L. 2004. International learning: antecedents and performance implications among newly internationalizing companies in an exporting context. *International Marketing Review*, 21, 511-535.
- YOUNG, G. J., STEDHAM, Y. & BEEKUN, R. I. J. J. O. M. S. 2000. Boards of directors and the adoption of a CEO performance evaluation process: Agency—and institutional—Theory perspectives. 37, 277-296.
- YU, J.-S. & HASSAN, M. K. 2008. Global and regional integration of the Middle East and North African (MENA) stock markets. *Quarterly Review of Economics and Finance*, 48, 482-504.
- ZAHRA, S. A. 2014. Public and corporate governance and young global entrepreneurial firms. *Corporate Governance: An International Review*, 22, 77-83.
- ZANG, A. Y. 2012. Evidence on the Trade-Off between Real Activities Manipulation and Accrual-Based Earnings Management. *The Accounting Review*, 87, 675-703.
- ZHANG, Z. 2015. Under-performance of listed companies? Real earnings management and M&A: Chinese empirical evidence. *Journal of industrial engineering and management*, 8, 322-334.
- ZHANG, Z. & XIE, X. 2018. State Ownership and Cross-border M&As: Evidence from Chinese MNCs. *Academy of Management Proceedings*, 2018.

- ABDALLAH, A. A.-N. & ISMAIL, A. K. 2017a. Corporate governance practices, ownership structure, and corporate performance in the GCC countries. *Journal of International Financial Markets, Institutions and Money*, 46, 98-115.
- ABDALLAH, A. A.-N. & ISMAIL, A. K. 2017b. Corporate governance practices, ownership structure, and corporate performance in the GCC countries. *Journal of International Financial Markets, Institutions & Money*, 46, 98-115.
- ABDUL RAHMAN, R. & HANEEM MOHAMED ALI, F. 2006. Board, audit committee, culture and earnings management: Malaysian evidence. *Managerial Auditing Journal*, 21, 783-804.
- AGUILERA, R. V. & JACKSON, G. 2003. The cross-national diversity of corporate governance: Dimensions and determinants. *Academy of management Review*, 28, 447-465.
- AL-HADDAD, L. & WHITTINGTON, M. 2019a. The impact of corporate governance mechanisms on real and accrual earnings management practices: evidence from Jordan. *Corporate Governance: The international journal of business in society*.
- AL-HADDAD, L. & WHITTINGTON, M. 2019b. The impact of corporate governance mechanisms on real and accrual earnings management practices: evidence from Jordan. *Corporate Governance: The International Journal of Business in Society*, 19, 1167-1186.
- AL-HAMADI, R. S. A. 2021. *The Changing Regional Order: The Case of Gulf Cooperation Council and the Blockade of Qatar In 2017*.
- AL-HARKAN, A. 2006. *An investigation into the emerging corporate governance framework in Saudi Arabia*. PhD, Cardiff University.
- AL-MARHUBI, F. 2004. The determinants of governance: A cross-country analysis. *Contemporary Economic Policy*, 22, 394-406.
- AL NASSER, Z. 2018. *The effect of internal corporate governance on earnings quality, firm performance and firm value in GCC Countries*. Trinity College Dublin.
- ALAM CHOUDHURY, M. & ZIAUL HOQUE, M. 2006. Corporate governance in Islamic perspective. *Corporate Governance: The international journal of business in society*, 6, 116-128.
- ALAREENI, B. 2018. The impact of firm-specific characteristics on earnings management: evidence from GCC countries. *International Journal of Managerial and Financial Accounting*, 10, 85-104.
- ALHADAB, M. & CLACHER, I. 2018. The impact of audit quality on real and accrual earnings management around IPOs. *The British Accounting Review*, 50, 442-461.
- ALHADAB, M. & NGUYEN, T. 2018. Corporate diversification and accrual and real earnings management: A non-linear relationship. *Review of Accounting and Finance*, 17, 198-214.
- ALHADAB, M. M. 2018. Real and accrual earnings management around initial public offerings in Jordan. *International Business Research*, 11, 204-216.
- ALI, A., CHEN, T.-Y. & RADHAKRISHNAN, S. 2007. Corporate disclosures by family firms. *Journal of Accounting and Economics*, 44, 238-286.
- ALJIFRI, K. & MOUSTAFA, M. 2007. The Impact of Corporate Governance Mechanisms on the Performance of UAE Firms: An Empirical Analysis. *Journal of Economic and Administrative Sciences*, 23, 71-93.
- ALMAZAN, A., HARTZELL, J. C. & STARKS, L. T. J. F. M. 2005. Active institutional shareholders and costs of monitoring: Evidence from executive compensation. 34, 5-34.
- ALQATAMIN, R. M., ARIBI, Z. A. & ARUN, T. 2017. The effect of the CEO's characteristics on EM: evidence from Jordan. *International Journal of Accounting & Information Management*, 25, 356-375.
- ALQATAN, D., ALBITAR, K. & HUANG, W. 2019. The role of board characteristics on the relationship between International Financial Reporting Standards (IFRS) adoption and earnings management: Evidence from China. *Journal of Accounting and Taxation*, 11, 145-154.

- ALSHARAI, M., BLACK, E. L. & HOFER, C. 2015. The impact of pre-merger earnings management on non-cash acquisition premia: Evidence from the European market for corporate control. *Corporate Ownership and Control*, 12, 587-602.
- ALSHARAI MALEK, B. E. L., HOFER CHRISTOPH 2015. The Impact of Pre-merger Earnings Management on Non-cash Acquisition Premia: Evidence from the European Market for Corporate Control. *Corporate Ownership and Control*, 12, 586-601.
- ALSHARIF, A. 2011. Gulf bloc to consider Jordan, Morocco membership. *Reuters.com*. 10 May 2011.
- ALVES, S. 2012. Ownership Structure and Earnings Management: Evidence from Portugal. *Australasian accounting, business & finance journal*, 6, 57-74.
- ALZOUBI, E. S. S. 2018. Audit quality, debt financing, and earnings management: Evidence from Jordan. *Journal of International Accounting, Auditing and Taxation*, 30, 69-84.
- AMICO, A. 2012a. *Priorities for improving governance and performance of state-owned enterprises in the Middle East and North Africa*.
- AMICO, A. 2012b. The role of MENA stock exchanges in corporate governance. OECD Report, July.
- ANNELLS, M. 1996. Grounded Theory Method: Philosophical Perspectives, Paradigm of Inquiry, and Postmodernism. *Qualitative Health Research*, 6, 379-393.
- AROURI, H., HOSSAIN, M. & BADRUL MUTTAKIN, M. 2014a. Effects of board and ownership structure on corporate performance: Evidence from GCC countries. *Journal of Accounting in Emerging Economies*, 4, 117-130.
- AROURI, H., HOSSAIN, M. & MUTTAKIN, M. B. 2014b. Effects of board and ownership structure on corporate performance: Evidence from GCC countries. *Journal of Accounting in Emerging Economies*.
- AROURI, M., RAULT, C. & TEULON, F. 2014c. Economic policy uncertainty, oil price shocks and GCC stock markets. *Economics Bulletin*, 34, 1822-1834.
- ASLAN, H. & KUMAR, P. 2014. National governance bundles and corporate agency costs: A cross-country analysis. *Corporate Governance: An International Review*, 22, 230-251.
- BABBIE, E., BEITING-LIPPS, E. & KINDSTROM, K. 2015. *The practice of social research*, Mason, OH, CENGAGE Learning.
- BAIK, B., CHO, K., CHOI, W. & KANG, J.-K. 2015. The Role of Institutional Environments in Cross-Border Mergers: A Perspective from Bidders' Earnings Management Behavior. *Management international review*, 55, 615-646.
- BALA, H., AMRAN, N. A. & SHAARI, H. 2018. Auditor brand name and financial reporting fraud of listed companies in Nigeria. *Journal of Advanced Research in Business and Management Studies*, 11, 84-94.
- BALDINI, M., DAL MASO, L., LIBERATORE, G., MAZZI, F. & TERZANI, S. 2018. Role of country-and firm-level determinants in environmental, social, and governance disclosure. *Journal of Business Ethics*, 150, 79-98.
- BALL, R., KOTHARI, S. & ROBIN, A. 2000. The effect of international institutional factors on properties of accounting earnings. *Journal of accounting and economics*, 29, 1-51.
- BANGE, M. M. & DE BONDT, W. F. J. J. O. C. F. 1998. R&D budgets and corporate earnings targets. 4, 153-184.
- BAO, S. R. & LEWELLYN, K. B. 2017. Ownership structure and earnings management in emerging markets—An institutionalized agency perspective. *International Business Review*, 26, 828-838.
- BASUIL, D. A. & DATTA, D. K. 2019. Effects of Firm-specific and Country-specific Advantages on Relative Acquisition Size in Service Sector Cross-Border Acquisitions: An Empirical Examination. *Journal of International Management*, 25, 66-80.
- BAYDOUN, N., MAGUIRE, W., RYAN, N. & WILLETT, R. 2012. Corporate governance in five Arabian Gulf countries. *Managerial Auditing Journal*, 28, 7-22.
- BEKIRIS, F. V. & DOUKAKIS, L. C. 2011. Corporate Governance and Accruals Earnings Management. *Managerial and Decision Economics*, 32, 439-456.
- BEN-NASR, H., BOUBAKRI, N. & COSSET, J.-C. 2015. Earnings quality in privatized firms: The role of state and foreign owners. *Journal of Accounting and Public Policy*, 34, 392-416.
- BERG, B. L. 2009. *Qualitative research methods for the social sciences*, Boston, MA; London, Allyn & Bacon.
- BILLET, M. T. & RYNGAERT, M. 1997. Capital structure, asset structure and equity takeover premiums in cash tender offers. *Journal of Corporate Finance*, 3, 141-165.
- BOADI, I. & AMEGBE, H. 2017. The link between quality of governance and stock market performance: International level evidence. *European Journal of Government and Economics*, 6, 78-101.
- BÖS, D. 1991. PRIVATIZATION AND THE TRANSITION FROM PLANNED TO MARKET ECONOMIES. *Annals of Public and Cooperative Economics*, 62, 183-195.

- BOTSARI, A. & MEEKS, G. 2008a. Do Acquirers Manage Earnings Prior to a Share for Share Bid? *Journal of Business Finance & Accounting*, 35, 633-670.
- BOTSARI, A. & MEEKS, G. 2008b. Do Acquirers Manage Earnings Prior to a Share for Share Bid? *Journal of Business Finance and Accounting*, 66.
- BRADBURY, M., MAK, Y. T. & TAN, S. M. 2006. Board Characteristics, Audit Committee Characteristics and Abnormal Accruals. *Pacific Accounting Review*, 18, 47-68.
- BURGSTHALER, D. & DICHEV, I. 1997. Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics*, 24, 99-126.
- BUSHEE, B. J. & NOE, C. F. 2000. Corporate disclosure practices, institutional investors, and stock return volatility. *Journal of accounting research*, 171-202.
- CALEGARI, M. J. 2000. The effect of tax accounting rules on capital structure and discretionary accruals. *Journal of Accounting and Economics*, 30, 1-31.
- CHANG, K., KANG, E. & LI, Y. J. O. B. R. 2016. Effect of institutional ownership on dividends: An agency-theory-based analysis. 69, 2551-2559.
- CHARLES, S. L., GLOVER, S. M. & SHARP, N. Y. 2010. The Association between Financial Reporting Risk and Audit Fees before and after the Historic Events Surrounding SOX. *Auditing: A Journal of Practice & Theory*, 29, 15-39.
- CHARUMILIND, C., KALI, R. & WIWATTANAKANTANG, Y. 2006. Connected Lending: Thailand before the Financial Crisis. *The Journal of Business*, 79, 181-218.
- CHEN, C.-L., HUANG, S.-H. & FAN, H.-S. 2012. Complementary association between real activities and accruals-based manipulation in earnings reporting. *Journal of Economic Policy Reform*, 15, 93-108.
- CHEN, C., SHI, H. & XU, H. 2013. Underwriter Reputation, Issuer Ownership, and Pre-IPO Earnings Management: Evidence from China: Underwriter Reputation, Issuer Ownership, and Pre-IPO Earnings Management. *Financial Management*, 42, 647-677.
- CHEN, H., CHEN, J. Z., LOBO, G. J. & WANG, Y. 2011. Effects of audit quality on earnings management and cost of equity capital: Evidence from China. *Contemporary Accounting Research*, 28, 892-925.
- CHEN, K. Y., LIN, K.-L. & ZHOU, J. 2005. Audit quality and earnings management for Taiwan IPO firms. *Managerial Auditing Journal*, 20, 86-104.
- CHEN, X., HARFORD, J. & LI, K. 2007. Monitoring: Which institutions matter? *Journal of Financial Economics*, 86, 279-305.
- CHOI, B. B., LEE, D. & PARK, Y. 2013. Corporate Social Responsibility, Corporate Governance and Earnings Quality: Evidence from Korea. *Corporate Governance: An International Review*, 21, 447-467.
- CHOI, S. & HASAN, I. 2005. Ownership, Governance, and Bank Performance: Korean Experience. *Financial Markets, Institutions & Instruments*, 14, 215-242.
- CHUNG, R., FIRTH, M., KIM, J. B. J. C. O. & CONTROL 2005. FCF agency costs, earnings management, and investor monitoring. 2, 51-61.
- COHEN, D. A., DEY, A. & LYS, T. Z. 2008a. Real and Accrual-Based Earnings Management in the Pre- and Post-Sarbanes-Oxley Periods. *The Accounting Review*, 83, 757-787.
- COHEN, D. A., DEY, A. & LYS, T. Z. J. T. A. R. 2008b. Real and accrual-based earnings management in the pre-and post-Sarbanes-Oxley periods. 83, 757-787.
- COHEN, D. A. & ZAROWIN, P. 2010. Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics*, 50, 2-19.
- COLLIS, J. & HUSSEY, R. 2003. *Business research: a practical guide for undergraduate and postgraduate students*, New York; Houndmills, Basingstoke, Hampshire; Palgrave Macmillan.
- COOPER, I. A. & KAPLANIS, E. 2000. Partially segmented international capital markets and international capital budgeting. *Journal of International Money and Finance*, 19, 309-329.
- CORNETT, M., MARCUS, A. & TEHRANIAN, H. 2008a. Corporate governance and pay-for-performance: The impact of earnings management. *Journal of financial economics*, 87, 357-373.
- CORNETT, M. M., MARCUS, A. J. & TEHRANIAN, H. J. J. O. F. E. 2008b. Corporate governance and pay-for-performance: The impact of earnings management. 87, 357-373.
- CRANE, A. D., MICHENAUD, S. & WESTON, J. P. J. T. R. O. F. S. 2016. The effect of institutional ownership on payout policy: Evidence from index thresholds. 29, 1377-1408.
- CROTTY, M. 1998. *The foundations of social research: meaning and perspective in the research process*, London, SAGE.
- DADFAR, H. 1984. Organization as a Mirror for Reflection of National Culture. A study of organizational characteristics in Islamic nations. *First International Conference on Organization Symbolism and Corporate Culture*.

- DALWAI, T. A. R., BASIRUDDIN, R. & ABDUL RASID, S. Z. 2015a. A critical review of relationship between corporate governance and firm performance: GCC banking sector perspective. *Corporate Governance*, 15, 18-30.
- DALWAI, T. A. R., BASIRUDDIN, R. & RASID, S. Z. A. 2015b. A critical review of relationship between corporate governance and firm performance: GCC banking sector perspective. *Corporate Governance*.
- DAVIDSON, R., GOODWIN-STEWART, J. & KENT, P. 2005. Internal governance structures and earnings management. *Accounting and Finance*, 45, 241-267.
- DE CLERCQ, D., DANIS, W. M. & DAKHLI, M. 2010. The moderating effect of institutional context on the relationship between associational activity and new business activity in emerging economies. *International Business Review*, 19, 85-101.
- DE LA BRUSLERIE, H. 2013. Crossing takeover premiums and mix of payment: An empirical test of contractual setting in M&A transactions. *Journal of banking & finance*, 37, 2106-2123.
- DECHOW, P., GE, W. & SCHRAND, C. 2010a. Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of accounting and economics*, 50, 344-401.
- DECHOW, P., GE, W., SCHRAND, C. J. J. O. A. & ECONOMICS 2010b. Understanding earnings quality: A review of the proxies, their determinants and their consequences. 50, 344-401.
- DECHOW, P. M. & DICHEV, I. D. 2002. The quality of accruals and earnings: The role of accrual estimation errors. *The accounting review*, 77, 35-59.
- DECHOW, P. M., KOTHARI, S. P. & WATTS, R. L. 1998. The relation between earnings and cash flows. *Journal of accounting and Economics*, 25, 133-168.
- DECHOW, P. M., SLOAN, R. G. & SWEENEY, A. P. 1995a. Detecting Earnings Management. *The Accounting Review*, 70, 193-225.
- DECHOW, P. M., SLOAN, R. G. & SWEENEY, A. P. 1995b. Detecting earnings management. *Accounting review*, 193-225.
- DEFOND, M. L. 2010. Earnings quality research: Advances, challenges and future research. *Journal of accounting and economics*, 50, 402-409.
- DENG, P. 2009. Why do Chinese firms tend to acquire strategic assets in international expansion? *Journal of world business : JWB*, 44, 74-84.
- DENG, S. & ELYASIANI, E. 2008. Geographic Diversification, Bank Holding Company Value, and Risk. *Journal of Money, Credit and Banking*, 40, 1217-1238.
- DENIS, D. J., DENIS, D. K. & YOST, K. 2002. Global Diversification, Industrial Diversification, and Firm Value. *The Journal of Finance*, 57, 1951-1979.
- DEPAMPHILIS, D. 2010. *Mergers and acquisitions basics: all you need to know*, Academic Press.
- DIMAGGIO, P. J. & POWELL, W. W. J. A. S. R. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. 147-160.
- DING, Y., ZHANG, H. & ZHANG, J. 2007. Private vs State Ownership and Earnings Management: evidence from Chinese listed companies. *Corporate Governance: An International Review*, 15, 223-238.
- DOIDGE, C., ANDREW KAROLYI, G. & STULZ, R. M. 2007. Why do countries matter so much for corporate governance? *Journal of Financial Economics*, 86, 1-39.
- DONG, N., WANG, F., ZHANG, J. & ZHOU, J. 2020. Ownership structure and real earnings management: Evidence from China. *Journal of Accounting and Public Policy*, 39, 106733.
- 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, 551-572.
- DU, M. & BOATENG, A. 2015. State ownership, institutional effects and value creation in cross-border mergers & acquisitions by Chinese firms. *International Business Review*, 24, 430-442.
- DUBEY, A. & KUMMER, C. 2016. Analysis of Mergers and Acquisitions in Gulf Cooperation Council Countries since Year 2000–Impact and Imperatives. *Arabian Journal of Business and Management Review* 5, 1.
- DUGGAL, R. & MILLAR, J. A. 1999. Institutional ownership and firm performance: The case of bidder returns. *Journal of Corporate Finance*, 5, 103-117.
- DUNNING, J. H. 1980. Toward an Eclectic Theory of International Production: Some Empirical Tests. *Journal of International Business Studies*, 11, 9-31.
- DUNNING, J. H. 2009. Location and the Multinational Enterprise: A Neglected Factor? *Journal of International Business Studies*, 40, 5-19.
- DVOŘÁK, T. 2005. Do domestic investors have an information advantage? Evidence from Indonesia. *The Journal of Finance*, 60, 817-839.
- DYRENG, S. D., HANLON, M. & MAYDEW, E. L. 2012. Where do firms manage earnings? *Review of Accounting Studies*, 17, 649-687.

- EISENHARDT, K. M. 1989a. Agency Theory: An Assessment and Review. *Academy of Management Review*, 14, 57-74.
- EISENHARDT, K. M. J. A. O. M. R. 1989b. Agency theory: An assessment and review. 14, 57-74.
- EL DIRI, M., LAMBRINOUDAKIS, C. & ALHADAB, M. 2020. Corporate governance and earnings management in concentrated markets. *Journal of Business Research*, 108, 291-306.
- ELJELLY, A. M. 2009. Ownership And Firm Performance: The Experience Of Saudi Arabias Emerging Economy. *International Business & Economics Research Journal (IBER)*, 8.
- ELKALLA, T. 2017. *An empirical investigation of earnings management in the MENA region*. University of the West of England.
- ENOMOTO, M., KIMURA, F. & YAMAGUCHI, T. 2015. Accrual-based and real earnings management: An international comparison for investor protection. *Journal of Contemporary Accounting & Economics*, 11, 183-198.
- ERICKSON, M. & WANG, S.-W. 1999. Earnings management by acquiring firms in stock for stock mergers. *Journal of accounting and economics*, 27, 149-176.
- ERICKSON, M., WANG, S.-W. J. J. O. A. & ECONOMICS 1999. Earnings management by acquiring firms in stock for stock mergers. 27, 149-176.
- ESSEN, M., ENGELEN, P.-J. & CARNEY, M. 2013. Does "good" corporate governance help in a crisis? The impact of country- and firm-level governance mechanisms in the European financial crisis. *Corporate Governance: An International Review*, 21, 201.
- EULAIWI, B., AL-HADI, A., TAYLOR, G., AL-YAHYAEE, K. H. & EVANS, J. 2016a. Multiple directorships, family ownership and the board nomination committee: International evidence from the GCC. *Emerging Markets Review*, 28, 61-88.
- EULAIWI, B., AL-HADI, A., TAYLOR, G., AL-YAHYAEE, K. H. & EVANS, J. J. E. M. R. 2016b. Multiple directorships, family ownership and the board nomination committee: International evidence from the GCC. 28, 61-88.
- FAKHFAKH, H. & NASFI, A. F. 2012. The Determinants of Earnings Management by the Acquiring Firms. *Journal of Business Studies Quarterly*, 3, 43-57.
- FAMA, E. F. & JENSEN, M. C. 1983. Separation of Ownership and Control. *The Journal of Law & Economics*, 26, 301-325.
- FAROOQI, J., NGO, T. & JORY, S. 2017. Real activities manipulation by bidders prior to mergers and acquisitions. *Review of Accounting and Finance*, 16, 322-347.
- FERRARINI, G. & FILIPPELLI, M. 2015. *Independent directors and controlling shareholders around the world*.
- FICH, E. M. & SHIVDASANI, A. 2006. Are Busy Boards Effective Monitors? *The Journal of Finance*, 61, 689-724.
- FILATOTCHEV, I., JACKSON, G. & NAKAJIMA, C. 2013. Corporate governance and national institutions: A review and emerging research agenda. *Asia Pacific Journal of Management*, 30, 965-986.
- FIRTH, M., FUNG, P. M. Y. & RUI, O. M. 2007. Ownership, two-tier board structure, and the informativeness of earnings – Evidence from China. *Journal of accounting and public policy*, 26, 463-496.
- FISHELL, V., ABERLE, E., JUDGE, M. & PERRY, T. J. J. O. A. S. 1985. Palatability and muscle properties of beef as influenced by preslaughter growth rate. 61, 151-157.
- FRANCIS, B., HASAN, I. & LI, L. 2016. A cross-country study of legal-system strength and real earnings management. *Journal of Accounting and Public Policy*, 35, 477-512.
- FRANCIS, J., LAFOND, R., OLSSON, P. & SCHIPPER, K. 2005. The market pricing of accruals quality. *Journal of accounting and economics*, 39, 295-327.
- FRANCIS, J. R. & WANG, D. 2008. The joint effect of investor protection and Big 4 audits on earnings quality around the world. *Contemporary accounting research*, 25, 157-191.
- FREEMAN, R. E. 2016. *A stakeholder theory of the modern corporation*. The corporation and its stakeholders. University of Toronto Press.
- GARCÍA-MECA, E. & SÁNCHEZ-BALLESTA, J. P. 2009. Corporate Governance and Earnings Management: A Meta-Analysis. *Corporate Governance: An International Review*, 17, 594-610.
- GASPAR, J.-M., MASSA, M. & MATOS, P. J. J. O. F. E. 2005. Shareholder investment horizons and the market for corporate control. 76, 135-165.
- GATTOUFI, S., AL-MUHARRAMI, S. & AL-KIYUMI, A. 2009. The impact of mergers and acquisitions on the efficiency of GCC banks. *Banks and Bank Systems*, 4, 94-101.
- GATTOUFI, S., AL-MUHARRAMI, S. & SHAMAS, G. 2014. Assessment of mergers and acquisitions in GCC banking. *International Journal of Accounting and Finance*, 4, 358-377.
- GAUGHAN, P. A. 2010. *Mergers, acquisitions, and corporate restructurings*, John Wiley & Sons.

- GAUGHAN, P. A. 2013. *Maximizing corporate value through mergers and acquisitions: A strategic growth guide*, John Wiley & Sons.
- GAVIOUS, I., SEGEV, E. & YOSEF, R. 2012. Female directors and earnings management in high-technology firms. *Pacific Accounting Review*.
- GE, W. & KIM, J.-B. 2014. Real earnings management and the cost of new corporate bonds. *Journal of Business Research*, 67, 641-647.
- GLOBERMAN, S. & SHAPIRO, D. J. W. D. 2002. Global foreign direct investment flows: The role of governance infrastructure. 30, 1899-1919.
- GONZÁLEZ, J. S. & GARCÍA-MECA, E. 2014. Does corporate governance influence earnings management in Latin American markets? *Journal of business ethics*, 121, 419-440.
- GRAHAM, J. R., HARVEY, C. R. & RAJGOPAL, S. 2005a. The economic implications of corporate financial reporting. *Journal of accounting and economics*, 40, 3-73.
- GRAHAM, J. R., HARVEY, C. R. & RAJGOPAL, S. 2005b. The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, 40, 3-73.
- GUGLER, K., MUELLER, D. C., YURTOGLU, B. B. J. O. I. & STAATSWISSENSCHAFT, T. E. Z. F. D. G. 2007. Corporate governance and the determinants of investment. 598-626.
- GUNA, W. & HERAWATY, A. 2010. The influence of good corporate governance mechanisms, auditor's independency, leverage, audit quality, profitability and company's size on the earnings management practices in manufacturing companies listed in Indonesia Stock Exchange. *Journal of Business*, 12, 53-68.
- GUNNY, K. A. 2010. The relation between earnings management using real activities manipulation and future performance: Evidence from meeting earnings benchmarks. *Contemporary accounting research*, 27, 855-888.
- GUO, F. & MA, S. 2015. Ownership Characteristics and Earnings Management in China. *The Chinese Economy*, 48, 372-395.
- HABBASH, M. & ALGHAMDI, S. 2017. Audit quality and earnings management in less developed economies: the case of Saudi Arabia. *Journal of Management & Governance*, 21, 351-373.
- HAMDAN, S. 2012. A call for private investment in Gulf health care. *New York Times*.
- HARTZELL, J. C. & STARKS, L. T. J. T. J. O. F. 2003. Institutional investors and executive compensation. 58, 2351-2374.
- HE, K., PAN, X. & TIAN, G. G. 2017. Political Connections, Audit Opinions, and Auditor Choice: Evidence from the Ouster of Government Officers. *Auditing: A Journal of Practice & Theory*, 36, 91-114.
- HEALY, P. M. & WAHLEN, J. M. 1999. A Review of the Earnings Management Literature and Its Implications for Standard Setting. *Accounting Horizons*, 13, 365-383.
- HELD, D. & ULRICHSEN, K. 2013a. *The transformation of the Gulf: politics, economics and the global order*, Routledge.
- HELD, D. & ULRICHSEN, K. 2013b. *The transformation of the Gulf: politics, economics and the global order.*, Routledge.
- HERTOG, S. 2013. Globalization and the Politics of Development in the Middle East. By Clement M. Henry and Robert Springborg. New York: Cambridge University Press, 2010. 382p. \$90.00 cloth, \$30.99 paper. - Political Change in the Arab Gulf States: Stuck in Transition. Edited by Mary Ann Tétreault, Gwenn Okruhlik, and Andrzej Kapiszewski. Boulder, CO: Lynne Rienner, 2011. 369p. \$68.50. *Perspectives on Politics*, 11, 261-263.
- HESSAYRI, M. & SAIHI, M. 2015a. Monitoring earnings management in emerging markets: IFRS adoption and ownership structure. *Journal of Economic and Administrative Sciences*.
- HESSAYRI, M. & SAIHI, M. 2015b. Monitoring earnings management in emerging markets: IFRS adoption and ownership structure. *Journal of Economic and Administrative Sciences*, 31, 86-108.
- HIGGINS, H. N. 2013. Do stock-for-stock merger acquirers manage earnings? Evidence from Japan. *Journal of Accounting and Public Policy*, 32, 44-70.
- HITT, M. A., HOSKISSON, R. E. & KIM, H. 1997. International Diversification: Effects on Innovation and Firm Performance in Product-Diversified Firms. *The Academy of Management Journal*, 40, 767-798.
- HO, L. C. J., LIAO, Q. & TAYLOR, M. 2015. Real and accrual-based earnings management in the pre-and post-IFRS periods: Evidence from China. *Journal of International Financial Management & Accounting*, 26, 294-335.
- HOANG, T. C., ABEYSEKERA, I. & MA, S. 2019. Earnings Quality and Corporate Social Disclosure: The Moderating Role of State and Foreign Ownership in Vietnamese Listed Firms. *Emerging Markets Finance and Trade*, 55, 272-288.

- HOFSTEDE, G., HOFSTEDE, G. J. & MINKOV, M. 2005. *Cultures and organizations: Software of the mind*, McGraw-hill New York.
- HOPE, J. & FRASER, R. 2003. *Beyond budgeting: how managers can break free from the annual performance trap*, Harvard Business Press.
- HUANG, J. 2018. Foreign earnings management of US multinational companies: The role of decision rights. *Journal of International Business Studies*, 49, 552-574.
- HUSSAIN, F. F., CHAND, P. V., RANI, P. J. A. & TAXATION 2012. The impact of IFRS for SMEs on the accounting profession: Evidence from Fiji. 4, 107-118.
- IANNOTTA, G., NOCERA, G. & SIRONI, A. 2013. The impact of government ownership on bank risk. *Journal of Financial Intermediation*, 22, 152-176.
- IOANNOU, I. & SERAFEIM, G. 2012. What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, 43, 834-864.
- 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, 281-300.
- JENSEN, M. C. & MECKLING, W. H. 1976a. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- JENSEN, M. C. & MECKLING, W. H. J. O. F. E. 1976b. Theory of the firm: Managerial behavior, agency costs and ownership structure. 3, 305-360.
- JEON, J. Q., LEE, C. & MOFFETT, C. M. 2011. Effects of foreign ownership on payout policy: Evidence from the Korean market. *Journal of Financial Markets*, 14, 344-375.
- JIRAPORN, P., KIM, Y. S. & MATHUR, I. 2008. Does corporate diversification exacerbate or mitigate earnings management?: An empirical analysis. *International Review of Financial Analysis*, 17, 1087-1109.
- JOHN, K., KNYAZEVA, A. & KNYAZEVA, D. J. J. O. F. E. 2011. Does geography matter? Firm location and corporate payout policy. 101, 533-551.
- JONES, J. J. 1991. Earnings Management During Import Relief Investigations. *Journal of Accounting Research*, 29, 193-228.
- JUDGE, W., FILATOTCHEV, I. & AGUILERA, R. 2010. Comparative Corporate Governance & International Business Research. *Corporate Governance: An International Review*, 18, 493-495.
- JUDGE, W. Q., DOUGLAS, T. J. & KUTAN, A. M. 2008. Institutional Antecedents of Corporate Governance Legitimacy. *Journal of Management*, 34, 765-785.
- KAŁDOŃSKI, M., JEWARTOWSKI, T. & MIZERKA, J. 2019. Capital market pressure, real earnings management, and institutional ownership stability - Evidence from Poland. *International Review of Financial Analysis*.
- KANG, S.-A. & KIM, Y.-S. 2012. EFFECT OF CORPORATE GOVERNANCE ON REAL ACTIVITY-BASED EARNINGS MANAGEMENT: EVIDENCE FROM KOREA / ĮMONIŲ VALDYMO POVEIKIS, PAGRĮSTAS DARBO UŽMOKESČIO VALDYMU: KORĖJOS PAVYZDYS. *Journal of Business Economics and Management*, 13, 29-52.
- KARIM, M. A., SARKAR, S. & ZHANG, S. 2016a. Earnings management surrounding M&A: Role of economic development and investor protection. *Advances in Accounting, incorporating Advances in International Accounting*, 35, 207-215.
- KARIM, M. A., SARKAR, S. & ZHANG, S. 2016b. Earnings management surrounding M&A: Role of economic development and investor protection. *Advances in accounting*, 35, 207-215.
- KASSAMANY, T., IBRAHIM, S. & ARCHBOLD, S. 2017a. Accrual and real-based earnings management by UK acquirers: Evidence from pre- and post-Higgs periods. *Journal of Accounting & Organizational Change*, 13, 492-519.
- KASSAMANY, T., IBRAHIM, S. & ARCHBOLD, S. 2017b. Accrual and real-based earnings management by UK acquirers: evidence from pre-and post-Higgs periods. *Journal of Accounting & Organizational Change*.
- KEASEY, K., WRIGHT, M. J. A. & RESEARCH, B. 1993. Issues in corporate accountability and governance: An editorial. 23, 291-303.
- KHANCHEL EL MEHDI, I. & SEBOUI, S. 2011. Corporate diversification and earnings management. *Review of Accounting and Finance*, 10, 176-196.
- KIEL, G. C. & NICHOLSON, G. J. 2003. Board Composition and Corporate Performance: how the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: An International Review*, 11, 189-205.
- KIM, S. I., BYUN, J. H. & SHIN, H. J. 2018. Largest Shareholder Ownership and Downward Real-activity Earnings Management in Korean Seasoned Equity Offerings Firms. *Asia-Pacific Journal of Financial Studies*, 47, 546-570.

- KIM, Y., PARK, M. S. & WIER, B. 2012. Is earnings quality associated with corporate social responsibility? *The accounting review*, 87, 761-796.
- KIRSCHENHEITER, M. & MELUMAD, N. D. 2002. Can "Big Bath" and Earnings Smoothing Co-Exist as Equilibrium Financial Reporting Strategies? *Journal of Accounting Research*, 40, 761-796.
- KLEIN, A. 2002. Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 33, 375-400.
- KNUDSEN, J. S. 2011. Company Delistings from the UN Global Compact: Limited Business Demand or Domestic Governance Failure? *Journal of Business Ethics*, 103, 331-349.
- KOTHARI, S. P., LEONE, A. J. & WASLEY, C. E. 2005. Performance matched discretionary accrual measures. *Journal of accounting and economics*, 39, 163-197.
- KOUAIB, A. & JARBOUI, A. 2014a. External audit quality and ownership structure: interaction and impact on earnings management of industrial and commercial Tunisian sectors. *Journal of Economics, Finance and Administrative Science*, 19, 78-89.
- KOUAIB, A. & JARBOUI, A. 2014b. External audit quality and ownership structure: interaction and impact on earnings management of industrial and commercial Tunisian sectors. *Journal of Economics Finance and Administrative Science*, 19, 78-89.
- KOUAIB, A. & JARBOUI, A. 2014c. External audit quality and ownership structure: interaction and impact on earnings management of industrial and commercial Tunisian sectors.
- KRISHANSING BOOLAKY, P. 2011. Auditing and reporting in Europe: an analysis using country-level data. *Managerial Auditing Journal*, 27, 41-65.
- 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, 101-136.
- KURY, K. W. 2007a. Decoupled earnings: An institutional perspective of the consequences of maximizing shareholder value. *Accounting Forum*, 31, 370-383.
- KURY, K. W. Decoupled earnings: An institutional perspective of the consequences of maximizing shareholder value. *Accounting Forum*, 2007b. Taylor & Francis, 370-383.
- KUSUMANINGTYAS, M., CHARIRI, A. & YUETTA, E. N. A. Board of commissioners, audit committee gender, institutional ownership and earnings management. 5th International Conference on Accounting and Finance (ICAF 2019), 2019. Atlantis Press, 103-108.
- KUSUMANINGTYAS METTA, CHARIRI ANIS & AFRI, Y. E. N. 2019. Information Asymmetry, Audit Quality, And Institutional Ownership On Earnings Management: Evidence From Mining Companies Listed On The Indonesia Stock Exchange *International Journal of Engineering and Advanced Technology (IJEAT)*, 8, 126-139.
- LANG, M., SMITH RAEDY, J. & WILSON, W. 2006. Earnings management and cross listing: Are reconciled earnings comparable to US earnings? *Journal of Accounting and Economics*, 42, 255-283.
- LEE, J., LIN, L. & NARANJO, A. 2018. Going Abroad in a Risky World: Geographic Diversification, Institutional Frictions, and Corporate Leverage.
- LEE, K. & PENNING, J. M. 1996. Mergers and acquisitions: strategic–organizational fit and outcomes. *The Wharton School, University of Pennsylvania*.
- LEGRENZI, M. 2015. *The GCC and the International Relations of the Gulf*, Bloomsbury Publishing.
- LEHMANN, N. 2016a. The role of corporate governance in shaping accruals manipulation prior to acquisitions. *Accounting and Business Research*, 46, 327-364.
- LEHMANN, N. 2016b. The role of corporate governance in shaping accruals manipulation prior to acquisitions. *Accounting and Business Research*, 46, 327-364.
- 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, 21-40.
- LENSINK, R., MEESTERS, A., NAABORG, I. J. J. O. B. & FINANCE 2008. Bank efficiency and foreign ownership: Do good institutions matter? 32, 834-844.
- LEUZ, C., NANDA, D. & WYSOCKI, P. D. 2003a. Earnings management and investor protection: an international comparison. *Journal of Financial Economics*, 69, 505-527.
- LEUZ, C., NANDA, D. & WYSOCKI, P. D. J. J. O. F. E. 2003b. Earnings management and investor protection: an international comparison. 69, 505-527.
- LIM, C. Y., THONG, T. Y. & DING, D. K. 2008. Firm diversification and earnings management: evidence from seasoned equity offerings. *Review of Quantitative Finance and Accounting*, 30, 69-92.
- LIN, J. W. & HWANG, M. I. 2010. Audit Quality, Corporate Governance, and Earnings Management: A Meta-Analysis. *International Journal of Auditing*, 14, 57-77.
- LO, K. 2008. Earnings management and earnings quality. *Journal of Accounting and Economics*, 45, 350-357.

- LOUIS, H. 2004. Earnings management and the market performance of acquiring firms. *Journal of financial economics*, 74, 121-148.
- LOURENÇO, I. C., RATHKE, A., SANTANA, V. & BRANCO, M. C. 2018a. Corruption and earnings management in developed and emerging countries. *Corporate Governance: The International Journal of Business in Society*.
- LOURENÇO, I. C., RATHKE, A., SANTANA, V. & BRANCO, M. C. J. C. G. T. I. J. O. B. I. S. 2018b. Corruption and earnings management in developed and emerging countries.
- MAIJOOR, S. J. & VANSTRAELEN, A. 2006. Earnings management within Europe: the effects of member state audit environment, audit firm quality and international capital markets. *Accounting and Business Research*, 36, 33-52.
- MALLIN, C. A. 2007. *Corporate governance*, Oxford, Oxford University Press.
- MAMUN, A. A., YASSER, Q. R. & RAHMAN, M. 2013. A discussion of the suitability of only one vs more than one theory for depicting corporate governance.
- MASWADEH, S. 2018. The effect of the ownership structure on earnings management practices. *Investment Management and Financial Innovations*, 15, 48-60.
- MATEESCU, R.-A. 2015. Corporate governance disclosure practices and their determinant factors in European emerging countries. *Journal of Accounting and Management Information Systems*, 14, 170-192.
- MAURO, P. J. T. Q. J. O. E. 1995. Corruption and growth. 110, 681-712.
- MAZAHERI, N. 2013. The Saudi monarchy and economic familism in an era of business environment reforms. *Business and Politics*, 15, 295-321.
- MCMEEKING, K. P., PEASNELL, K. V. & POPE, P. F. 2007. The effect of large audit firm mergers on audit pricing in the UK. *Accounting and Business Research*, 37, 301-319.
- MCNICHOLS, M. F. 2002. Discussion of the quality of accruals and earnings: The role of accrual estimation errors. *The accounting review*, 77, 61-69.
- MELLADO, C. & SAONA, P. 2020. Real earnings management and corporate governance: a study of Latin America. *Ekonomika istraživanja*, 33, 2229-2268.
- MEYER, J. W. & ROWAN, B. 1977a. Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, 83, 340-363.
- MEYER, J. W. & ROWAN, B. J. A. J. O. S. 1977b. Institutionalized organizations: Formal structure as myth and ceremony. 83, 340-363.
- MOHAMMED, I. A., CHE-AHMAD, A. & MALEK, M. 2018. IFRS adoption and audit delay: The role of shareholders in the audit committee. *International Journal of Accounting and Financial Reporting*, 8, 325-343.
- MUELLER, D. C. & PEEV, E. J. J. O. C. E. 2007. Corporate governance and investment in Central and Eastern Europe. 35, 414-437.
- NAM, D. I., PARK, H. D. & ARTHURS, J. D. 2014. Looking Attractive until You Sell: Earnings Management, Lockup Expiration, and Venture Capitalists. *Journal of Management Studies*, 51, 1286-1310.
- NGUYEN, A. H. & DUONG, C. T. 2020. Provincial governance quality and earnings management: empirical evidence from Vietnam. *The Journal of Asian Finance, Economics, and Business*, 7, 43-52.
- NGUYEN, A. H., NGUYEN, L. H. & DOAN, D. T. 2020. Ownership Structure and Earnings Management: Empirical Evidence from Vietnam Real Estate Sector. *Real estate management and valuation*, 28, 37-51.
- NGUYEN, T., LOCKE, S. & REDDY, K. 2015. Ownership concentration and corporate performance from a dynamic perspective: Does national governance quality matter? *International Review of Financial Analysis*, 41, 148-161.
- NICO, L. 2016. The role of corporate governance in shaping accruals manipulation prior to acquisitions. *Accounting and Business Research*, 46, 327-364.
- ORAZALIN, N. & AKHMETZHANOV, R. 2019. Earnings management, audit quality, and cost of debt: evidence from a Central Asian economy. *Managerial Auditing Journal*, 34, 696-721.
- PAIK, H. & KOH, Y. 2014. Ownership structure and managerial behaviour to beat market expectation in Korea. *The Journal of Applied Business Research*, 30, 10-63.
- PAN, Y., TENG, L., SUPAPOL, A. B., LU, X., HUANG, D. & WANG, Z. 2014. Firms' FDI ownership: The influence of government ownership and legislative connections. *Journal of International Business Studies*, 45, 1029-1043.
- PARFET, W. U. 2000a. Accounting subjectivity and earnings management: A preparer perspective. *Accounting Horizons*, 14, 481.
- PARFET, W. U. 2000b. Accounting Subjectivity and Earnings Management: A Preparer Perspective. *Accounting Horizons*, 14, 481-488.

- PARK, H.-Y., CHAE, S.-J. & CHO, M.-K. 2017. Controlling shareholders' ownership structure, foreign investors' monitoring, and investment efficiency. *Investment Management and Financial Innovations*, 13, 159-170.
- PEASNELL, K. V., POPE, P. F. & YOUNG, S. 2000. Accrual management to meet earnings targets: UK evidence pre- and post-Cadbury. *The British Accounting Review*, 32, 415-445.
- PIOSIK, A. & GENGE, E. 2019. The Influence of a Company's Ownership Structure on Upward Real Earnings Management. *Sustainability*, 12, 152.
- PIOSIK, A. & GENGE, E. 2020. The influence of a company's ownership structure on upward real earnings management. *Sustainability*, 12, 152.
- PORTA, R. L., LOPEZ-DE-SILANES, F. & SHLEIFER, A. 1999. Corporate Ownership around the World. *The Journal of Finance*, 54, 471-517.
- PORTA, R. L., LOPEZ-DE-SILANES, F., SHLEIFER, A. & VISHNY, R. 2002. Investor Protection and Corporate Valuation. *The Journal of Finance*, 57, 1147-1170.
- POUND, J. 1988. Proxy contests and the efficiency of shareholder oversight. *Journal of Financial Economics*, 20, 237-265.
- POWELL, W. W. & DIMAGGIO, P. J. 1991. *The new institutionalism in organizational analysis*, London;Chicago;, University of Chicago Press.
- RAMAN, K., SHIVAKUMAR, L. & TAMAYO, A. 2013. Target's earnings quality and bidders' takeover decisions. *Review of accounting studies*, 18, 1050-1087.
- RAVICHANDRAN, D. 2009. Effect of financial crisis over mergers and acquisitions in GCC countries. Available at SSRN 1360249.
- REBECA CORDEIRO DA CUNHA, A. & MÁRCIO ANDRÉ VERAS, M. 2018. Book-to-Market Ratio, return on equity and Brazilian Stock Returns. *Revista de Administração*, 53, 324-344.
- REED, D. 2002. Corporate Governance Reforms in Developing Countries. *Journal of Business Ethics*, 37, 223-247.
- RICHARDSON, V. J. 2000. Information Asymmetry and Earnings Management: Some Evidence. *Review of Quantitative Finance and Accounting*, 15, 325-347.
- ROOSENBOOM, P. & VAN DER GOOT, T. 2005. The effect of ownership and control on market valuation: Evidence from initial public offerings in The Netherlands. *International Review of Financial Analysis*, 14, 43-59.
- ROYCHOWDHURY, S. 2006. Earnings management through real activities manipulation. *Journal of accounting and economics*, 42, 335-370.
- RYAN, B., SCAPENS, R. W. & THEOBALD, M. 2002. *Research method and methodology in finance and accounting*, London, Thomson Learning.
- SÁENZ GONZÁLEZ, J. & GARCÍA-MECA, E. 2013. Does Corporate Governance Influence Earnings Management in Latin American Markets? *Journal of business ethics*, 121, 419-440.
- SAINT-ONGE, H. & CHATZKEL, J. 2008. *Beyond the deal: a revolutionary framework for successful mergers & acquisitions that achieve breakthrough performance gains*, McGraw Hill Professional.
- SAKAKI, H., JACKSON, D. & JORY, S. 2017. Institutional ownership stability and real earnings management. *Review of Quantitative Finance and Accounting*, 49, 227-244.
- SAONA, P. & MURO, L. 2018. Firm- and Country-Level Attributes as Determinants of Earnings Management: An Analysis for Latin American Firms. *Emerging markets finance & trade*, 54, 2736-2764.
- SARA DING, X., MO, J. & ZHONG, L. 2017. The Effect of Cross-Border Mergers and Acquisitions on Earnings Quality: Evidence from China: Cross-border M&As and Earnings Quality: Evidence from China Ding et al. *Thunderbird International Business Review*, 59, 519-531.
- SAUNDERS, M. N. K., LEWIS, P. & THORNHILL, A. 2019. *Research methods for business students*, Boston, Pearson.
- SHAFER, W. E. 2015. Ethical Climate, Social Responsibility, and Earnings Management. *Journal of Business Ethics*, 126, 43-60.
- SHEDDEN, M. 2016. *The Impact of Country-level Characteristics on Cross-Border Merger and Acquisition Premiums*. Master, the College of Graduate Studies and Research.
- SHIVAKUMAR, L. 2000. Do firms mislead investors by overstating earnings before seasoned equity offerings? *Journal of Accounting and Economics*, 29, 339-371.
- SHLEIFER, A., MORCK, R. & VISHNY, R. W. 1988. Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20, 293-315.
- SHLEIFER, A. & VISHNY, R. W. 1986a. Large Shareholders and Corporate Control. *Journal of Political Economy*, 94, 461-488.
- SHLEIFER, A. & VISHNY, R. W. 1986b. Large shareholders and corporate control. *Journal of political economy*, 94, 461-488.
- SHLEIFER, A. & VISHNY, R. W. 1997. A Survey of Corporate Governance. *The Journal of Finance*, 52, 737-783.

- SHUBITA, M. F. 2015. The impact of income smoothing on earnings quality in emerging markets: Evidence from GCC markets. *Journal of accounting in emerging economies*.
- SOURAL, M. 2004. Corporate Governance in the Middle East: An Overview, Egypt Ministry of Foreign Trade.
- SU, Y., XU, D. & PHAN, P. H. 2008. Principal–Principal Conflict in the Governance of the Chinese Public Corporation. *Management and Organization Review*, 4, 17-38.
- SWEENEY, A. P. 1994. Debt-covenant violations and managers' accounting responses. *Journal of Accounting and Economics*, 17, 281-308.
- TAMOSIUNIENE, R. & DUKSAITE, E. 2009. The importance of mergers and acquisitions in today's economy. *KSI Transactions on Knowledge Society*, 2, 11-15.
- TEOH, S. H., WELCH, I. & WONG, T. J. 1998. Earnings Management and the Long-Run Market Performance of Initial Public Offerings. *The Journal of Finance*, 53, 1935-1974.
- TSAMENYI, M., ENNINFUL-ADU, E. & ONUMAH, J. 2007. Disclosure and corporate governance in developing countries: evidence from Ghana. *Managerial Auditing Journal*, 22, 319-334.
- TUTUNCU, L. 2019. Earnings management and performance of management buyouts. *Managerial Finance*.
- UNERMAN, J. D., C 2011. *Financial Accounting Theory*, Maidenhead, McGraw-Hill, Inc.
- VAN ESSEN, M., ENGELEN, P. J. & CARNEY, M. 2013. Does “Good” Corporate Governance Help in a Crisis? The Impact of Country-and Firm-Level Governance Mechanisms in the European Financial Crisis. *Corporate Governance: An International Review*, 21, 201-224.
- VASILESCU, C. & MILLO, Y. 2016. Do industrial and geographic diversifications have different effects on earnings management? Evidence from UK mergers and acquisitions. *International Review of Financial Analysis*, 46, 33-45.
- VO, X. V. & CHU, T. K. H. 2019. Do foreign shareholders improve corporate earnings quality in emerging markets? Evidence from Vietnam. *Cogent Economics & Finance*, 7.
- WALLACE, R. O. & GERON, H. J. J. O. A. L. 1991. Frameworks for international comparative financial accounting. 10, 209-264.
- WANG, L. & YUNG, K. 2011. Do State Enterprises Manage Earnings More than Privately Owned Firms? The Case of China. *Journal of Business Finance & Accounting*, 38, 794-812.
- WASAN, P. & MULCHANDANI, K. 2020. Corporate governance factors as predictors of earnings management. *Journal of General Management*, 45, 71-92.
- WILSON, R. 2009a. The development of Islamic finance in the GCC.
- WILSON, R. 2009b. The Gulf Region: A New Hub of Global Financial Power. Blackwell Publishing, Ltd.
- WINTOKI, M. B., LINCK, J. S. & NETTER, J. M. 2012. Endogeneity and the dynamics of internal corporate governance. *Journal of Financial Economics*, 105, 581-606.
- XING, L., DUAN, T. & HOU, W. 2019. Do Board Secretaries Influence Management Earnings Forecasts? *Journal of Business Ethics*, 154, 537-574.
- YAZDIFAR, H. J. S. C. 2003. Management accounting in the twenty-first-century firm: a strategic view. 12, 109.
- YEOH, P.-L. 2004. International learning: antecedents and performance implications among newly internationalizing companies in an exporting context. *International Marketing Review*, 21, 511-535.
- YOUNG, G. J., STEDHAM, Y. & BEEKUN, R. I. J. J. O. M. S. 2000. Boards of directors and the adoption of a CEO performance evaluation process: Agency—and institutional—Theory perspectives. 37, 277-296.
- YU, J.-S. & HASSAN, M. K. 2008. Global and regional integration of the Middle East and North African (MENA) stock markets. *Quarterly Review of Economics and Finance*, 48, 482-504.
- ZAHRA, S. A. 2014. Public and corporate governance and young global entrepreneurial firms. *Corporate Governance: An International Review*, 22, 77-83.
- ZANG, A. Y. 2012. Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *The accounting review*, 87, 675-703.
- ZHANG, Z. 2015. Under-performance of listed companies? Real earnings management and M&A: Chinese empirical evidence. *Journal of industrial engineering and management*, 8, 322-334.
- ZHANG, Z. & XIE, X. 2018. State Ownership and Cross-border M&As: Evidence from Chinese MNCs. *Academy of Management Proceedings*, 2018.

Appendix A: Accruals Earnings Management, Acquisition, Firm level Governance, and Country level Governance.

Table 1: Breusch-Pagan Test.

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of emabs

chi2(1) = 89.24

Prob > chi2 = 0.0000

Table 2: Modified WaldTest.

Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0: $\sigma(i)^2 = \sigma^2$ for all i

chi2 (293) = 8.4e+31

Prob>chi2 = 0.0000

Table 3: Hausman Test for Absolute Accruals Earnings Management, Acquisition, Firm Level governance, and Country Level Regression Results

. hausman fe re

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fe	(B) re		
acquisition	.009182	.0055753	.0036067	.0019486
auditfirms~e	.0031011	-.001728	.0048292	.007307
institutio~l	-.0221536	-.0115037	-.0106499	.0070309
state	-.041128	-.0315908	-.0095373	.0153101
foregin	-.0126848	.0002818	-.0129666	.0098916
ncg	-.0344611	-.0041288	-.0303324	.0083158
firmsize	-.0091692	-.0003796	-.0087896	.0051976
leverage	.0159056	-.0028131	.0187187	.0140682
growth	.0444581	.0460092	-.0015511	.0029714
mb	.0005085	.0013698	-.0008613	.0005993
roa	.0433318	.0102877	.0330441	.0121033

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(11) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 47.92
Prob>chi2 = 0.0000

Table 4: Accruals Earnings Management, Acquisition, Firm Level governance, and Country Level Regression Results

```

Fixed-effects (within) regression      Number of obs   =   2310
Group variable: id                    Number of groups =   293

R-sq:  within = 0.0362                Obs per group:  min =    1
      between = 0.0066                  avg   =    7.9
      overall = 0.0062                  max   =   11

corr(u_i, Xb) = -0.7453                F(11,292)      =    5.10
                                           Prob > F       =    0.0000

```

(Std. Err. adjusted for 293 clusters in id)

emabs	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
acquisition	.009182	.0054923	1.67	0.096	-.0016276	.0199915
auditfirmsize	.0031011	.0101491	0.31	0.760	-.0168736	.0230758
institutional	-.0221536	.0122994	-1.80	0.073	-.0463603	.002053
state	-.041128	.0232961	-1.77	0.079	-.0869777	.0047216
foregin	-.0126848	.0139277	-0.91	0.363	-.0400963	.0147267
ncg	-.0344611	.0126557	-2.72	0.007	-.0593691	-.0095531
firmsize	-.0091692	.0073215	-1.25	0.211	-.0235788	.0052404
leverage	.0159056	.0212231	0.75	0.454	-.0258641	.0576754
growth	.0444581	.0157303	2.83	0.005	.013499	.0754172
mb	.0005085	.0010063	0.51	0.614	-.001472	.002489
roa	.0433318	.0297846	1.45	0.147	-.0152879	.1019514
_cons	.2247844	.1213124	1.85	0.065	-.013973	.4635419
sigma_u	.05057742					
sigma_e	.05966622					
rho	.41811369	(fraction of variance due to u_i)				

Appendix B: Additional Analysis for Accruals Earnings Management, Acquisition, Firm level Governance, and Country level Governance.

Table 1: Hausman Test for Income-increasing Accruals Earnings Management, Acquisition, Firm Level governance, and Country Level Regression Results

. hausman fe re

	— Coefficients —			
	(b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
acquisition	.0136826	.010266	.0034166	.003415
auditfirms~e	.0063973	.0020392	.0043581	.0097918
institutio~l	-.0167581	-.004258	-.0125002	.0102994
state	-.0262393	-.0368535	.0106142	.0262389
foregin	-.018604	-.0185501	-.0000539	.0175863
ncg	-.015225	-.0071807	-.0080443	.0128453
firmsize	-.0087741	-.0003486	-.0084255	.0075533
leverage	.0696761	.0191229	.0505532	.0219831
growth	.0575317	.0678078	-.0102761	.0057821
mb	.0005744	.0008214	-.0002471	.0009654
roa	.0831624	.0365345	.0466279	.0212037

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(11) = (b-B)' [(V_b-V_B)^(-1)] (b-B)
 = 12.88
 Prob>chi2 = 0.3015

Table 2: Regression Results of the effect of acquisition, firm-level, and country-level on income-increasing accruals earnings management in the GCC listed companies.

```

Random-effects GLS regression           Number of obs   =   1303
Group variable: id                    Number of groups =    281

R-sq:  within = 0.0380                 Obs per group:  min =    1
        between = 0.1354                avg   =    4.6
        overall = 0.0867                max   =   11

                                           Wald chi2(26)   =   90.17
                                           Prob > chi2     =   0.0000

corr(u_i, X) = 0 (assumed)

```

incomeincreas~g	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
acquisition	.0118599	.0067588	1.75	0.079	-.0013872	.0251069
auditfirmsize	.0057096	.0053694	1.06	0.288	-.0048143	.0162335
institutional	-.0093749	.0087605	-1.07	0.285	-.0265451	.0077953
state	-.0141459	.01724	-0.82	0.412	-.0479357	.0196439
foregin	-.0096409	.0159824	-0.60	0.546	-.0409659	.0216841
ncg	-.0226779	.0149375	-1.52	0.129	-.0519549	.0065991
firmsize	-.0076165	.0019714	-3.86	0.000	-.0114802	-.0037527
leverage	.0427996	.013703	3.12	0.002	.0159423	.0696569
growth	.0640708	.0135529	4.73	0.000	.0375077	.0906339
mb	.0004463	.0012729	0.35	0.726	-.0020486	.0029412
roa	.0514657	.0293078	1.76	0.079	-.0059766	.108908
countrydummy1	-.0796419	.0181459	-4.39	0.000	-.1152071	-.0440767
countrydummy2	-.0163673	.0150995	-1.08	0.278	-.0459618	.0132273
countrydummy3	-.0172852	.0160889	-1.07	0.283	-.0488188	.0142484
countrydummy4	-.0355814	.0140584	-2.53	0.011	-.0631354	-.0080274
countrydummy5	-.0045904	.0163127	-0.28	0.778	-.0365628	.027382
industrydummy1	-.0558051	.0406819	-1.37	0.170	-.1355401	.0239299
industrydummy2	-.0562343	.0398544	-1.41	0.158	-.1343474	.0218788
industrydummy3	-.0447284	.0396796	-1.13	0.260	-.1224989	.0330421
industrydummy4	-.0556844	.0399731	-1.39	0.164	-.1340302	.0226615
industrydummy5	-.0472564	.0399517	-1.18	0.237	-.1255602	.0310475
industrydummy6	-.0499092	.0413403	-1.21	0.227	-.1309348	.0311163
industrydummy7	-.0751011	.0412854	-1.82	0.069	-.1560191	.0058169
industrydummy8	-.052968	.03989	-1.33	0.184	-.131151	.0252149
industrydummy9	-.0612892	.0407556	-1.50	0.133	-.1411686	.0185903
industrydummy10	-.0560026	.0435138	-1.29	0.198	-.1412882	.0292829
_cons	.2809988	.0531565	5.29	0.000	.1768141	.3851835
sigma_u	.02646955					
sigma_e	.06105894					
rho	.15819905	(fraction of variance due to u_i)				

Table 3: Hausman Test for Income-decreasing Accruals Earnings Management, Acquisition, Firm Level governance, and Country Level Regression Results

```

. hausman fe re

----- Coefficients -----
              (b)      (B)              (b-B)      sqrt(diag(V_b-V_B))
              fe       re       Difference      S.E.
-----
auditfirms~e      .0316595      .0307463      .0009132      .0657483
institutio~l     -.0660404     -.0654435     -.0005969      .0549927
state             .1138145      -.033174      .1469885      .0923482
foregin          .5052897      .2954394      .2098503      .0601626
ncg              .138531      -.0144715     .1530025      .0605437
firmsize        -.0700446     .0060166     -.0760612     .0350522
leverage        -.0749438     -.0086976     -.0662462     .0998974
growth          -.0086249     .0112588     -.0198837     .0357514
mb              .0008324     .0032403     -.0024079     .0057267
roa             .0559274     .0829455     -.0270181     .0999437

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(10) = (b-B)'[(V_b-V_B)^(-1)](b-B)
          = 27.67
Prob>chi2 = 0.0020

```


Appendix C: Robustness Check for Accruals Earnings Management, Acquisition, Firm level Governance, and Country level Governance.

Table 1: Hausman Test for signed Accruals Earnings Management, Acquisition, Firm Level governance, and Country Level Regression Results.

. hausman fe re

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fe	(B) re		
acquisition	.017073	.0129611	.0041119	.0029427
auditfirms~e	.0195547	.0038359	.0157188	.0102341
institutio~l	-.0013917	-.0020992	.0007075	.0100214
state	.023552	-.0294141	.0529661	.0216603
foregin	-.0025271	-.0264094	.0238823	.0142268
ncg	-.0363593	-.0305072	-.0058521	.0118138
firmsize	-.006818	.0002388	-.0070568	.0071667
leverage	.1200446	.0565382	.0635064	.019789
growth	.0933301	.0872916	.0060385	.0045796
mb	-.0013552	-.0019296	.0005743	.0008757
roa	.1736777	.1132583	.0604195	.0176914

b = consistent under Ho and Ha; obtained from xtreg
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(11) = (b-B)'[(V_b-V_B)^(-1)](b-B)
 = 35.63
 Prob>chi2 = 0.0002

Table 2: The Robust Regression Results of the relationship between acquisition and CG mechanisms on signed accruals earnings management in the GCC Companies.

```

Fixed-effects (within) regression      Number of obs   =   2310
Group variable: id                   Number of groups =   293

R-sq:  within = 0.0629                Obs per group:  min =    1
      between = 0.0208                  avg   =    7.9
      overall  = 0.0288                  max   =   11

                                         F(11,292)      =    5.45
corr(u_i, Xb) = -0.5052                Prob > F       =    0.0000

```

(Std. Err. adjusted for 293 clusters in id)

residual	Robust					[95% Conf. Interval]	
	Coef.	Std. Err.	t	P> t			
acquisition	.017073	.0073396	2.33	0.021	.0026278	.0315181	
auditfirmsize	.0195547	.0096835	2.02	0.044	.0004964	.0386129	
institutional	-.0013917	.0156317	-0.09	0.929	-.0321567	.0293733	
state	.023552	.0280203	0.84	0.401	-.0315954	.0786994	
foregin	-.0025271	.0167216	-0.15	0.880	-.0354373	.0303831	
ncg	-.0363593	.0160278	-2.27	0.024	-.067904	-.0048147	
firmsize	-.006818	.0092157	-0.74	0.460	-.0249557	.0113197	
leverage	.1200446	.0282154	4.25	0.000	.0645134	.1755759	
growth	.0933301	.0257014	3.63	0.000	.0427465	.1439136	
mb	-.0013552	.0020179	-0.67	0.502	-.0053267	.0026162	
roa	.1736777	.0426508	4.07	0.000	.0897357	.2576198	
_cons	.090649	.1544118	0.59	0.558	-.2132521	.3945501	
sigma_u	.05208003						
sigma_e	.0821745						
rho	.28656478	(fraction of variance due to u_i)					

Table 3: Hausman Test for Absolute Accruals Earnings Management by Kothari model as an alternative test, Acquisition, Firm Level governance, and Country Level Regression Results.

```
. hausman fe re
```

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fe	(B) re		
acquisition	.0087183	.0061335	.0025848	.0019932
auditfirms~e	.0022636	-.001168	.0034316	.0073028
institutio~l	-.024014	-.0119187	-.0120954	.0070579
state	-.0212085	-.0317838	.0105753	.0153397
foregin	-.0064922	-.0004878	-.0060044	.0099527
ncg	-.026897	-.0028711	-.0240259	.0083405
firmsize	-.0108681	-.0004658	-.0104024	.0051751
leverage	.0217873	.0007935	.0209938	.0140755
growth	.0504565	.0523504	-.0018939	.0030652
mb	.0003517	.0011744	-.0008227	.0006058
roa	.0511978	.0165169	.0346809	.0122344

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(11) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 36.55
Prob>chi2 = 0.0001

Table 4: Absolute Accruals Earnings Management by Kothari model as an alternative test, Acquisition, Firm Level governance, and Country Level Regression Results.

```
Fixed-effects (within) regression
```

Number of obs	=	2310
Group variable: id	Number of groups	= 293

```
R-sq: within = 0.0365
```

Obs per group: min	=	1
between = 0.0097	avg	= 7.9
overall = 0.0066	max	= 11

```
corr(u_i, Xb) = -0.7787
```

F(11,292)	=	4.87
Prob > F	=	0.0000

(Std. Err. adjusted for 293 clusters in id)

absem	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
acquisition	.0087183	.0054787	1.59	0.113	-.0020645 .0195011
auditfirmsize	.0022636	.0100747	0.22	0.822	-.0175647 .0220919
institutional	-.024014	.0118381	-2.03	0.043	-.0473127 -.0007153
state	-.0212085	.0195709	-1.08	0.279	-.0597265 .0173094
foregin	-.0064922	.0139823	-0.46	0.643	-.034011 .0210266
ncg	-.026897	.0127574	-2.11	0.036	-.0520052 -.0017888
firmsize	-.0108681	.0074102	-1.47	0.144	-.0254524 .0037161
leverage	.0217873	.0211381	1.03	0.304	-.019815 .0633897
growth	.0504565	.015534	3.25	0.001	.0198836 .0810294
mb	.0003517	.0010972	0.32	0.749	-.0018079 .0025112
roa	.0511978	.0291165	1.76	0.080	-.006107 .1085025
_cons	.248586	.1229487	2.02	0.044	.006608 .490564
sigma_u	.05252417				
sigma_e	.0593907				
rho	.43887517	(fraction of variance due to u_i)			

Appendix D: Real Earnings Management, Accruals Earnings Management, Acquisition, Firm level Governance, and Country level Governance

Table 1: Modified WaldTest.

Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0: $\sigma(i)^2 = \sigma^2$ for all i

chi2 (239) = 1.2e+05

Prob>chi2 = 0.0000

Table 2: Hausman Test for Real Earnings Management, Accruals Earnings Management, Acquisition, Firm Level governance, and Country Level Regression Results

. hausman fe re

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fe	(B) re		
aem	.9734046	.9861557	-.0127511	.0055242
acquisition	-.0347032	-.034903	.0001998	.0020608
auditfirms~e	-.0147075	-.0139248	-.0007828	.0123555
institutio~l	-.061155	-.0518479	-.0093071	.0112598
state	-.1049019	-.1083355	.0034336	.0250976
foregin	.033542	.0259055	.0076365	.0148947
ncg	-.0089249	.0206646	-.0295894	.0120404
firmsize	.0314267	.0009185	.0305082	.0133245
leverage	-.0289104	.0068822	-.0357926	.0261036
growth	.1645532	.1655351	-.0009819	.003852
mb	-.0122122	-.0145648	.0023525	.0007379
roa	-.7947345	-.8384275	.043693	.0185808

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(12) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 40.69
Prob>chi2 = 0.0001

Table 3: The Robust Regression Results of the relationship between AEM, acquisition, and CG mechanisms on REM in the GCC Companies

```

Fixed-effects (within) regression                Number of obs   =   1892
Group variable: id                             Number of groups =   239

R-sq:  within = 0.3204                          Obs per group: min =    1
        between = 0.1066                          avg =    7.9
        overall = 0.1698                          max =   11

corr(u_i, Xb) = -0.2128                          F(12,238)      =   25.95
                                                Prob > F       =   0.0000

```

(Std. Err. adjusted for 239 clusters in id)

totalrem	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
aem	.9734046	.0646687	15.05	0.000	.8460084	1.100801
acquisition	-.0347032	.0192221	-1.81	0.072	-.0725704	.0031639
auditfirmsize	-.0147075	.0206123	-0.71	0.476	-.0553133	.0258983
institutional	-.0611155	.0332787	-1.84	0.067	-.1267135	.0044035
state	-.1049019	.060086	-1.75	0.082	-.2232702	.0134664
foregin	.033542	.0391326	0.86	0.392	-.0435485	.1106325
ncg	-.0089249	.0337126	-0.26	0.791	-.075338	.0574882
firmsize	.0314267	.020548	1.53	0.127	-.0090524	.0719058
leverage	-.0289104	.0756532	-0.38	0.703	-.1779458	.120125
growth	.1645532	.033699	4.88	0.000	.0981668	.2309396
mb	-.0122122	.0032376	-3.77	0.000	-.0185902	-.0058343
roa	-.7947345	.114585	-6.94	0.000	-1.020465	-.5690042
_cons	-.4050439	.3325578	-1.22	0.224	-1.060177	.2500888
sigma_u	.21963124					
sigma_e	.13923372					
rho	.71332582	(fraction of variance due to u_i)				

Appendix E: Additional Analysis for Real Earnings Management, Acquisition, Firm level Governance, and Country level Governance.

Table 1: Regression Results of the effect of acquisition, firm-level, and country-level on real earnings management in the GCC listed companies.

Fixed-effects (within) regression	Number of obs	=	1892
Group variable: id	Number of groups	=	239
R-sq: within = 0.0959	Obs per group: min	=	1
between = 0.1166	avg	=	7.9
overall = 0.1035	max	=	11
	F(11,238)	=	8.37
corr(u_i, Xb) = -0.0209	Prob > F	=	0.0000

(Std. Err. adjusted for 239 clusters in id)

totalrem	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
acquisition	-.0138984	.0205259	-0.68	0.499	-.054334 .0265372
auditfirmsize	.0042732	.0234996	0.18	0.856	-.0420206 .0505671
institutional	-.0721704	.0359554	-2.01	0.046	-.1430018 -.001339
state	-.1091352	.0613257	-1.78	0.076	-.2299458 .0116753
foregin	.0404637	.04094	0.99	0.324	-.0401873 .1211148
ncg	-.0401705	.0342201	-1.17	0.242	-.1075834 .0272424
firmsize	.014145	.0206465	0.69	0.494	-.0265282 .0548182
leverage	.1154784	.0803588	1.44	0.152	-.042827 .2737837
growth	.2317742	.0403184	5.75	0.000	.1523477 .3112007
mb	-.0131882	.0040102	-3.29	0.001	-.0210883 -.0052881
roa	-.5667645	.1070195	-5.30	0.000	-.777591 -.355938
_cons	-.1517245	.3327247	-0.46	0.649	-.807186 .5037371
sigma_u	.2103121				
sigma_e	.16054879				
rho	.63180998	(fraction of variance due to u_i)			

Appendix F: Robustness Check for the five alternative real earnings measures are: (1) abnormal discretionary expenses (ADE); (2) abnormal cash flows from operations (ACFO); (3) abnormal production costs (APC); (4) aggregate real earnings management (SubREM1_{APC-ACFO}) model; and (5) aggregate real earnings management (SubREM2_{ADE-ACFO}).

Table 1: Regression Results of the effect of acquisition, firm-level, and country-level on abnormal discretionary expenses (ADE)

```

Fixed-effects (within) regression      Number of obs   =   1892
Group variable: id                    Number of groups =    239

R-sq:  within = 0.0668                Obs per group:  min =    1
      between = 0.0003                  avg   =    7.9
      overall  = 0.0002                  max   =   11

corr(u_i, Xb) = -0.6380                F(12,238)      =    5.24
                                           Prob > F       =    0.0000

```

(Std. Err. adjusted for 239 clusters in id)

abexpl	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
residual	.0409839	.0126196	3.25	0.001	.0161236	.0658442
acquisition	-.0043577	.0044109	-0.99	0.324	-.0130471	.0043316
auditfirmsize	-.0065227	.0060999	-1.07	0.286	-.0185393	.005494
institutional	.0046819	.0074083	0.63	0.528	-.0099122	.019276
state	-.0295061	.0164305	-1.80	0.074	-.0618738	.0028616
foregin	.0035361	.0099912	0.35	0.724	-.0161465	.0232186
ncg	-.0330895	.0111125	-2.98	0.003	-.0549809	-.0111981
firmsize	.0202702	.0062864	3.22	0.001	.0078862	.0326543
leverage	-.0439614	.0195296	-2.25	0.025	-.0824344	-.0054884
growth	.0098687	.0093146	1.06	0.290	-.0084809	.0282183
mb	-.00097	.0010427	-0.93	0.353	-.0030241	.0010841
roa	.038748	.0236625	1.64	0.103	-.0078667	.0853628
_cons	-.3105996	.1021625	-3.04	0.003	-.5118579	-.1093413
sigma_u	.10116518					
sigma_e	.0331328					
rho	.90312698	(fraction of variance due to u_i)				

Table 2: Regression Results of the effect of acquisition, firm-level, and country-level on abnormal cash flows from operations (ACFO)

```

Fixed-effects (within) regression      Number of obs   =    1892
Group variable: id                   Number of groups =    239

R-sq:  within = 0.3833                Obs per group:  min =     1
      between = 0.3324                avg =              7.9
      overall = 0.3448                max =              11

corr(u_i, Xb) = -0.3004                F(12,238)       =    28.67
                                          Prob > F         =    0.0000

```

(Std. Err. adjusted for 239 clusters in id)

afcl	Robust		t	P> t	[95% Conf. Interval]	
	Coef.	Std. Err.				
residual	.8010701	.0497226	16.11	0.000	.7031174	.8990227
acquisition	-.0111619	.0129957	-0.86	0.391	-.0367631	.0144394
auditfirmsize	-.0069344	.0094282	-0.74	0.463	-.0255077	.0116389
institutional	-.0450091	.0230637	-1.95	0.052	-.0904441	.0004259
state	-.072922	.0427164	-1.71	0.089	-.1570724	.0112285
foregin	-.003874	.0244015	-0.16	0.874	-.0519445	.0441964
ncg	.0410374	.0222353	1.85	0.066	-.0027657	.0848406
firmsize	-.0171815	.0118657	-1.45	0.149	-.0405567	.0061936
leverage	.0075274	.0474512	0.16	0.874	-.0859506	.1010054
growth	.1276841	.0193905	6.58	0.000	.0894852	.165883
mb	-.0097511	.0018732	-5.21	0.000	-.0134413	-.006061
roa	-.5238571	.0802175	-6.53	0.000	-.6818841	-.36583
_cons	.3455887	.1901052	1.82	0.070	-.028915	.7200925
sigma_u	.07171327					
sigma_e	.09669557					
rho	.35485095	(fraction of variance due to u_i)				

Table 3: Regression Results of the effect of acquisition, firm-level, and country-level on abnormal production cost (APC).

```

Fixed-effects (within) regression      Number of obs   =   1892
Group variable: id                    Number of groups =   239

R-sq:  within = 0.1107                Obs per group:  min =    1
      between = 0.0192                  avg   =    7.9
      overall = 0.0214                  max   =   11

corr(u_i, Xb) = -0.5835                F(12,238)       =    8.66
                                          Prob > F         =   0.0000

```

(Std. Err. adjusted for 239 clusters in id)

abnormalprod	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
residual	.1280839	.0270469	4.74	0.000	.074802	.1813658
acquisition	-.0116081	.0067084	-1.73	0.085	-.0248236	.0016074
auditfirmsize	-.001043	.0087173	-0.12	0.905	-.018216	.01613
institutional	-.0051838	.0128649	-0.40	0.687	-.0305275	.0201599
state	-.0045861	.0233567	-0.20	0.845	-.0505985	.0414262
foregin	.030828	.0174799	1.76	0.079	-.0036072	.0652632
ncg	-.0211649	.0177145	-1.19	0.233	-.0560621	.0137324
firmsize	.0275902	.0116143	2.38	0.018	.0047102	.0504702
leverage	.0088477	.0309683	0.29	0.775	-.0521593	.0698548
growth	.026518	.0216657	1.22	0.222	-.0161631	.069199
mb	-.0014477	.0016489	-0.88	0.381	-.0046959	.0018006
roa	-.3236028	.0556708	-5.81	0.000	-.4332733	-.2139322
_cons	-.4282578	.1934437	-2.21	0.028	-.8093384	-.0471773
sigma_u	.13666017					
sigma_e	.06594211					
rho	.81114086	(fraction of variance due to u_i)				

Table 4: Regression Results of the effect of acquisition, firm-level, and country-level on REM1.

```

Fixed-effects (within) regression      Number of obs   =   1892
Group variable: id                    Number of groups =   239

R-sq:  within = 0.3511                 Obs per group:  min =    1
      between = 0.3876                   avg   =    7.9
      overall = 0.3723                   max   =   11

                                         F(12,238)      =   26.73
corr(u_i, Xb) = 0.1216                 Prob > F       =   0.0000

```

(Std. Err. adjusted for 239 clusters in id)

rem1	Robust		t	P> t	[95% Conf. Interval]	
	Coef.	Std. Err.				
residual	.929154	.063501	14.63	0.000	.8040582	1.05425
acquisition	-.02277	.0163178	-1.40	0.164	-.0549157	.0093757
auditfirmsize	-.0079775	.0156122	-0.51	0.610	-.0387333	.0227784
institutional	-.0501929	.028162	-1.78	0.076	-.1056715	.0052857
state	-.0775081	.0547066	-1.42	0.158	-.1852791	.030263
foregin	.0269539	.0331195	0.81	0.417	-.0382908	.0921986
ncg	.0198726	.0291114	0.68	0.495	-.0374763	.0772214
firmsize	.0104087	.0175988	0.59	0.555	-.0242606	.045078
leverage	.0163753	.0667103	0.25	0.806	-.1150427	.1477934
growth	.154202	.0304379	5.07	0.000	.0942399	.2141641
mb	-.0111988	.0026545	-4.22	0.000	-.0164281	-.0059695
roa	-.8474597	.1149641	-7.37	0.000	-1.073937	-.6209826
_cons	-.0826691	.2856494	-0.29	0.773	-.6453931	.4800549
sigma_u	.13761869					
sigma_e	.12678301					
rho	.54091317	(fraction of variance due to u_i)				

Table 5: Regression Results of the effect of acquisition, firm-level, and country-level on REM2.

```

Fixed-effects (within) regression      Number of obs   =   1892
Group variable: id                    Number of groups =   239

R-sq:  within = 0.3701                Obs per group:  min =    1
      between = 0.3158                  avg   =    7.9
      overall = 0.3601                  max   =   11

                                          F(12,238)      =   29.09
corr(u_i, Xb) = 0.0951                Prob > F       =   0.0000

```

(Std. Err. adjusted for 239 clusters in id)

rem2	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
residual	.842054	.0502154	16.77	0.000	.7431305 .9409774
acquisition	-.0155196	.0144109	-1.08	0.283	-.0439088 .0128696
auditfirmsize	-.0134571	.0137587	-0.98	0.329	-.0405616 .0136473
institutional	-.0403272	.0254275	-1.59	0.114	-.0904189 .0097646
state	-.102428	.045	-2.28	0.024	-.1910773 -.0137788
foregin	-.000338	.0267782	-0.01	0.990	-.0530906 .0524147
ncg	.0079479	.02426	0.33	0.743	-.0398438 .0557396
firmsize	.0030887	.0135049	0.23	0.819	-.0235157 .0296931
leverage	-.0364339	.0529029	-0.69	0.492	-.1406516 .0677837
growth	.1375528	.0194812	7.06	0.000	.0991751 .1759305
mb	-.0107211	.0022898	-4.68	0.000	-.015232 -.0062103
roa	-.485109	.0781198	-6.21	0.000	-.6390037 -.3312144
_cons	.0349891	.2165088	0.16	0.872	-.3915293 .4615076
sigma_u	.09941471				
sigma_e	.10263527				
rho	.4840646	(fraction of variance due to u_i)			

Table 6: Regression Results of the effect of the interaction of accruals earnings management with acquisition, firm-level, and country-level on real earnings management in the GCC listed companies.

```

Fixed-effects (within) regression      Number of obs   =   1892
Group variable: id                    Number of groups =   239

R-sq:  within = 0.3395                Obs per group: min =    1
      between = 0.1233                  avg =    7.9
      overall = 0.1907                  max =   11

corr(u_i, Xb) = -0.1661                F(18,238)      =   29.61
                                           Prob > F        =   0.0000

```

(Std. Err. adjusted for 239 clusters in id)

totalrem	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
residual	1.314521	.0986058	13.33	0.000	1.12027	1.508773
acquisition	-.0360738	.0197073	-1.83	0.068	-.0748969	.0027492
auditfirmsize	-.0163304	.0200866	-0.81	0.417	-.0559007	.02324
institutional	-.0439282	.0287063	-1.53	0.127	-.100479	.0126227
state	-.0983218	.0586282	-1.68	0.095	-.2138182	.0171746
foregin	.0392584	.038018	1.03	0.303	-.0356365	.1141532
ncg	-.0020658	.0336259	-0.06	0.951	-.0683081	.0641766
AEM_ACQ	.0374055	.1604267	0.23	0.816	-.2786322	.3534432
AEM_AUD	-.0633063	.1058244	-0.60	0.550	-.2717785	.1451659
AEM_INS	-.828985	.3334485	-2.49	0.014	-1.485872	-.1720976
AEM_ST	-.4048477	.3215178	-1.26	0.209	-1.038232	.2285365
AEM_FO	-.3489448	.4056664	-0.86	0.391	-1.1481	.4502106
NCG_AEM	-.3552485	.2044337	-1.74	0.084	-.7579791	.0474822
firmsize	.0284055	.0210057	1.35	0.178	-.0129752	.0697863
leverage	-.018816	.0765957	-0.25	0.806	-.1697081	.132076
growth	.162507	.0339526	4.79	0.000	.0956209	.2293931
mb	-.0121923	.0032816	-3.72	0.000	-.0186571	-.0057276
roa	-.8053521	.117557	-6.85	0.000	-1.036937	-.573767
_cons	-.3634373	.340021	-1.07	0.286	-1.033272	.3063977
sigma_u	.21470031					
sigma_e	.13751887					
rho	.70908907	(fraction of variance due to u_i)				

Appendix G: Accruals Earnings Management: and firm’s characteristics and Acquisition Deal Characteristics in the GCC listed Acquiring Companies.

Table 1: Modified WaldTest.

Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0: $\sigma(i)^2 = \sigma^2$ for all i

chi2 (94) = 5838.47
Prob>chi2 = 0.0000

Table 2: Hausman Test for Accruals Earnings Management and Acquisition Deal Characteristics in the GCC listed Acquiring Companies.

. hausman fe re

	— Coefficients —			
	(b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
cbacq	.044259	.0462216	-.0019626	.0117033
indr	-.0260657	-.0219588	-.0041069	.009407
ownacq	-.0565054	-.0311648	-.0253406	.0112402
paymeth	-.0032341	-.0001109	-.0031232	.0075165
fsize	-.0506602	-.0036904	-.0469697	.0212695
lev	.0856649	.0118042	.0738607	.080499
grow	.0325278	.0234817	.0090462	.02324
mtb	-.0086165	-.0045437	-.0040727	.0061023
roa	.3545578	.0491034	.3054544	.1038487

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(9) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 27.84
Prob>chi2 = 0.0010

Table 3: The Regression Results of the relationship between Acquisition Deals Characteristics on AEM in the GCC Acquiring Companies.

```

Fixed-effects (within) regression      Number of obs   =    219
Group variable: id                   Number of groups =    94

R-sq:  within = 0.3084                Obs per group:  min =    1
      between = 0.0114                  avg   =    2.3
      overall  = 0.0397                  max   =   14

corr(u_i, Xb) = -0.9244                F(9,93)         =    3.05
                                           Prob > F        =    0.0030

```

(Std. Err. adjusted for 94 clusters in id)

abs_dacc	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
cbacq	.044259	.0234747	1.89	0.062	-.0023571	.0908751
indr	-.0260657	.0155968	-1.67	0.098	-.0570378	.0049064
ownacq	-.0565054	.0233377	-2.42	0.018	-.1029275	-.0100833
paymeth	-.0032341	.0144005	-0.22	0.823	-.0318307	.0253624
fsize	-.0506602	.0337927	-1.50	0.137	-.1177658	.0164455
lev	.0856649	.1246898	0.69	0.494	-.1619442	.3332741
grow	.0325278	.0456074	0.71	0.477	-.0580393	.123095
mtb	-.0086165	.0092797	-0.93	0.356	-.0270441	.0098112
roa	.3545578	.2177701	1.63	0.107	-.0778905	.7870061
_cons	.9857256	.6101155	1.62	0.110	-.225843	2.197294
sigma_u	.18638756					
sigma_e	.06485317					
rho	.89200673	(fraction of variance due to u_i)				

Appendix H: Additional Analysis for Accruals Earnings Management, and Acquisition Deal Characteristics in the GCC listed Acquiring Companies

Table 1: The Robust Regression Results of the relationship between Acquisition Deals Characteristics and CG mechanisms on AEM in the GCC Acquiring Companies.

```

Fixed-effects (within) regression      Number of obs   =      219
Group variable: id                    Number of groups =      94

R-sq:  within = 0.3871                Obs per group:  min =      1
      between = 0.0128                  avg   =      2.3
      overall  = 0.0461                  max   =     14

                                          F(14,93)       =      2.67
corr(u_i, Xb) = -0.9028                Prob > F       =     0.0026
    
```

(Std. Err. adjusted for 94 clusters in id)

abs_dacc	Robust				
	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
cbacq	.0393101	.0179082	2.20	0.031	.003748 .0748723
indr	-.0152663	.0149457	-1.02	0.310	-.0449455 .014413
ownacq	-.0492279	.0201084	-2.45	0.016	-.0891593 -.0092966
paymeth	-.0087028	.0158562	-0.55	0.584	-.0401901 .0227845
eaudq	.0676074	.025771	2.62	0.010	.0164314 .1187834
instown	-.1051212	.0466529	-2.25	0.027	-.1977647 -.0124778
stown	.0942696	.1227965	0.77	0.445	-.1495799 .3381191
fown	-.0074077	.0452033	-0.16	0.870	-.0971725 .0823571
ncg	-.1326479	.078938	-1.68	0.096	-.2894032 .0241074
fsize	-.0357832	.0285587	-1.25	0.213	-.0924952 .0209288
lev	.1395437	.1103068	1.27	0.209	-.0795037 .3585912
grow	.0332347	.0367018	0.91	0.368	-.0396477 .1061171
mtb	-.0020669	.009663	-0.21	0.831	-.0212558 .017122
roa	.4506375	.2071657	2.18	0.032	.0392475 .8620275
_cons	.6857975	.509672	1.35	0.182	-.3263101 1.697905
sigma_u	.16746449				
sigma_e	.06241287				
rho	.87804006	(fraction of variance due to u_i)			

Appendix I: Robustness Check for Accruals Earnings Management, and firm’s characteristics and Acquisition Deal Characteristics in the GCC listed Acquiring Companies

Table 1. The Robust Regression Results of the relationship between Acquisition Deals Characteristics on signed AEM in the GCC Acquiring Companies.

```

Fixed-effects (within) regression      Number of obs   =    219
Group variable: id                   Number of groups =    94

R-sq:  within = 0.2588                Obs per group:  min =    1
      between = 0.0134                  avg   =    2.3
      overall  = 0.0304                  max   =   14

                                         F(9,93)        =    1.96
corr(u_i, Xb) = -0.9556                Prob > F        =    0.0527

```

(Std. Err. adjusted for 94 clusters in id)

signedaem	Robust					[95% Conf. Interval]	
	Coef.	Std. Err.	t	P> t			
cbacq	.0397572	.0316647	1.26	0.212	-.0231227	.1026371	
indr	.0045067	.025828	0.17	0.862	-.0467826	.0557961	
ownacq	-.066641	.0231422	-2.88	0.005	-.1125968	-.0206852	
paymeth	-.0112142	.0156475	-0.72	0.475	-.042287	.0198587	
fsize	-.0755275	.040384	-1.87	0.065	-.1557221	.004667	
lev	.2854934	.186686	1.53	0.130	-.085228	.6562147	
grow	.0229641	.0630294	0.36	0.716	-.1021999	.148128	
mtb	-.000481	.0124555	-0.04	0.969	-.0252152	.0242532	
roa	.5175048	.3039205	1.70	0.092	-.086021	1.121031	
_cons	1.331364	.7195091	1.85	0.067	-.0974382	2.760167	
sigma_u	.28164797						
sigma_e	.0841936						
rho	.91796988	(fraction of variance due to u_i)					

Table 2. The Robust Regression Results of the relationship between Acquisition Deals Characteristics on AEM in the GCC Acquiring Companies by Kothari model as an alternative test.

```

Fixed-effects (within) regression      Number of obs   =   219
Group variable: id                    Number of groups =   94

R-sq:  within = 0.3078                Obs per group:  min =    1
      between = 0.0103                  avg   =    2.3
      overall = 0.0330                  max   =   14

corr(u_i, Xb) = -0.9242                F(9,93)         =    4.18
                                           Prob > F         =    0.0001

```

(Std. Err. adjusted for 94 clusters in id)

abs_dacc	Robust		t	P> t	[95% Conf. Interval]	
	Coef.	Std. Err.				
cbacq	.0481155	.0245943	1.96	0.053	-.000724	.0969549
indr	-.0225308	.0167127	-1.35	0.181	-.055719	.0106574
ownacq	-.063713	.0233931	-2.72	0.008	-.1101671	-.0172589
paymeth	-.0040807	.0144029	-0.28	0.778	-.0326819	.0245206
fsize	-.0516168	.0326715	-1.58	0.118	-.116496	.0132624
lev	.0701295	.1228912	0.57	0.570	-.173908	.314167
grow	.0376992	.04783	0.79	0.433	-.0572816	.13268
mtb	-.0086923	.0098223	-0.88	0.378	-.0281975	.0108129
roa	.3955284	.2131097	1.86	0.067	-.0276653	.8187221
_cons	1.003884	.5896686	1.70	0.092	-.1670812	2.174849
sigma_u	.1909035					
sigma_e	.06996889					
rho	.88157547	(fraction of variance due to u_i)				

Appendix J: Real Earnings Management and Acquisition Deal Characteristics in the GCC listed Acquiring Companies

Table 1: Modified WaldTest.

Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0: $\sigma(i)^2 = \sigma^2$ for all i

chi2 (72) = 5.9e+31

Prob>chi2 = 0.0000

Table 2: Hausman Test for Real Earnings Management, Accruals Earnings Management, and Acquisition Deal Characteristics in the GCC listed Acquiring Companies.

. hausman fe re

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fe	(B) re		
cbacq	.0305879	-.0066352	.0372231	.0341303
indr	.1108676	.1114115	-.0005439	.0282446
ownacq	-.1454836	-.1500268	.0045432	.0393362
paymeth	-.0723616	-.0872227	.0148611	.0268041
fsize	.0137445	-.0012165	.014961	.0624542
lev	.1250056	.2366661	-.1116605	.2450007
grow	.1787492	.1097454	.0690038	.0616013
mtb	-.011999	-.0242203	.0122213	.0183295
roa	-.2046291	-.2241746	.0195455	.2975224

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(9) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 5.66
Prob>chi2 = 0.7730

Appendix K: Additional Analysis for Real Earnings Management and Acquisition Deal Characteristics in the GCC listed Acquiring Companies.

Table 1: Regression Results of the effect of the interaction of accruals earnings management with acquisition Deals Characteristics on Real Earnings Management in the GCC Acquiring Companies.

Random-effects GLS regression	Number of obs	=	150
Group variable: id	Number of groups	=	72
R-sq: within = 0.4191	Obs per group: min =		1
between = 0.5546	avg =		2.1
overall = 0.5287	max =		8
	Wald chi2(28)	=	266.53
corr(u_i, X) = 0 (assumed)	Prob > chi2	=	0.0000

(Std. Err. adjusted for 72 clusters in id)

totalrem	Robust					[95% Conf. Interval]
	Coef.	Std. Err.	z	P> z		
signedaem	.8908526	.478465	1.86	0.063	-.0469216	1.828627
bacq	-.0099333	.0504388	-0.20	0.844	-.1087915	.0889249
indr	.0837611	.0416366	2.01	0.044	.0021548	.1653673
ownacq	-.139706	.067795	-2.06	0.039	-.2725818	-.0068303
paymeth	-.066874	.0355832	-1.88	0.060	-.1366158	.0028677
CBACQ_AEM	.9013962	.4634893	1.94	0.052	-.0070262	1.809819
INDR_AEM	-.6774795	.4543447	-1.49	0.136	-1.567979	.2130197
ownacq_AEM	-.1674728	.5501456	-0.30	0.761	-1.245738	.9107927
paymeth_AEM	-.0474401	.5350544	-0.09	0.929	-1.096127	1.001247
fsize	-.0135227	.0252588	-0.54	0.592	-.063029	.0359836
lev	.1470497	.1748975	0.84	0.400	-.1957432	.4898425
grow	.0320551	.1119625	0.29	0.775	-.1873873	.2514976
mtb	-.0241195	.0203363	-1.19	0.236	-.0639778	.0157389
roa	-.1703433	.6052857	-0.28	0.778	-1.356682	1.015995
countrydummy1	.2494649	.2324352	1.07	0.283	-.2060997	.7050296
countrydummy2	.5344061	.2019785	2.65	0.008	.1385355	.9302767
countrydummy3	.1962507	.2131789	0.92	0.357	-.2215723	.6140737
countrydummy4	.4027813	.1966038	2.05	0.040	.0174449	.7881177
countrydummy5	.3511711	.2065083	1.70	0.089	-.0535777	.7559199
industrydummy1	.2475275	.206308	1.20	0.230	-.1568287	.6518837
industrydummy2	.0012956	.1406907	0.01	0.993	-.2744531	.2770443
industrydummy3	.0303968	.1250365	0.24	0.808	-.2146701	.2754638
industrydummy4	-.1691125	.1930581	-0.88	0.381	-.5474995	.2092745
industrydummy5	-.0511232	.1479375	-0.35	0.730	-.3410753	.2388289
industrydummy6	-.0662455	.1757994	-0.38	0.706	-.410806	.278315
industrydummy7	.1924777	.1943986	0.99	0.322	-.1885366	.5734921
industrydummy8	.1553482	.1508385	1.03	0.303	-.1402898	.4509862
industrydummy9	-.2638335	.142621	-1.85	0.064	-.5433655	.0156985
_cons	-.0205708	.5848654	-0.04	0.972	-1.166886	1.125744
sigma_u	.19144657					
sigma_e	.15159162					
rho	.61463488	(fraction of variance due to u_i)				

Appendix L: Robustness Check for Real Earnings Management; and firm’s characteristics and Acquisition Deal Characteristics in the GCC listed Acquiring Companies.

Table 1: The Robust Regression Results of the relationship between Acquisition Deals Characteristics and CG mechanisms on real earnings management in the GCC Acquiring Companies.

Random-effects GLS regression	Number of obs	=	150
Group variable: id	Number of groups	=	72
R-sq: within = 0.3461	Obs per group: min =		1
between = 0.3586	avg =		2.1
overall = 0.4108	max =		8
	Wald chi2(28)	=	123.67
corr(u_i, X) = 0 (assumed)	Prob > chi2	=	0.0000

(Std. Err. adjusted for 72 clusters in id)

totalrem	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
cbacq	-.0306385	.0548305	-0.56	0.576	-.1381043	.0768273
indr	.1171896	.0577819	2.03	0.043	.0039392	.23044
ownacq	-.1825711	.0766559	-2.38	0.017	-.3328139	-.0323283
paymeth	-.1143318	.0516177	-2.21	0.027	-.2155006	-.0131631
eaudq	.1865674	.0728411	2.56	0.010	.0438015	.3293332
instown	-.1016318	.1197409	-0.85	0.396	-.3363197	.1330561
stown	-.5624098	.3920705	-1.43	0.151	-1.330854	.2060343
fown	-.113331	.0953663	-1.19	0.235	-.3002455	.0735835
ncg	-.2258675	.1422967	-1.59	0.112	-.5047639	.0530288
fsize	.0018668	.0290566	0.06	0.949	-.055083	.0588167
lev	.2353034	.2392834	0.98	0.325	-.2336835	.7042904
grow	.0429422	.110003	0.39	0.696	-.1726596	.2585441
mtb	-.0200582	.0208237	-0.96	0.335	-.060872	.0207556
roa	-.1714678	.533131	-0.32	0.748	-1.216385	.8734498
countrydummy1	.2684631	.2575606	1.04	0.297	-.2363463	.7732725
countrydummy2	.4967835	.2265355	2.19	0.028	.0527821	.9407849
countrydummy3	.1303279	.264006	0.49	0.622	-.3871143	.6477702
countrydummy4	.3734386	.2231056	1.67	0.094	-.0638404	.8107175
countrydummy5	.3629491	.2425295	1.50	0.135	-.1123999	.8382982
industrydummy1	.4466797	.2440554	1.83	0.067	-.03166	.9250195
industrydummy2	.230781	.1972124	1.17	0.242	-.1557481	.6173102
industrydummy3	.2115147	.1955874	1.08	0.280	-.1718296	.5948589
industrydummy4	.0817188	.2676167	0.31	0.760	-.4428002	.6062379
industrydummy5	.1629542	.2199217	0.74	0.459	-.2680844	.5939929
industrydummy6	.2828535	.2973757	0.95	0.342	-.2999923	.8656992
industrydummy7	.3903019	.2253465	1.73	0.083	-.0513692	.831973
industrydummy8	.3013507	.1930829	1.56	0.119	-.0770849	.6797863
industrydummy9	-.0707768	.2375417	-0.30	0.766	-.5363501	.3947964
_cons	-.4819836	.6817783	-0.71	0.480	-1.818245	.8542773
sigma_u	.25044787					
sigma_e	.16034685					
rho	.70926623	(fraction of variance due to u_i)				

Table 2: The Robust Regression Results of the relationship between Acquisition Deals Characteristics on REM in the GCC acquiring Companies by using five alternative real earnings management techniques (abnormal discretionary expenses (ADE)).

```

Random-effects GLS regression           Number of obs   =    150
Group variable: id                     Number of groups =     72

R-sq:  within = 0.2260                  Obs per group: min =     1
      between = 0.3065                  avg =             2.1
      overall = 0.3735                  max =             8

                                           Wald chi2(23)   =   242.42
corr(u_i, X) = 0 (assumed)              Prob > chi2     =    0.0000

```

(Std. Err. adjusted for 72 clusters in id)

ade	Robust		z	P> z	[95% Conf. Interval]	
	Coef.	Std. Err.				
cbacq	-.0036998	.0092621	-0.40	0.690	-.0218531	.0144535
indr	.0152801	.0091176	1.68	0.094	-.0025901	.0331503
ownacq	-.0287882	.0130422	-2.21	0.027	-.0543504	-.003226
paymeth	.0109835	.0156527	0.70	0.483	-.0196952	.0416621
fsize	.0028339	.0092792	0.31	0.760	-.0153531	.0210208
lev	-.0134651	.0497797	-0.27	0.787	-.1110315	.0841013
grow	-.0116635	.0196662	-0.59	0.553	-.0502085	.0268815
mtb	-.0092636	.0046006	-2.01	0.044	-.0182806	-.0002465
roa	.2040705	.0921011	2.22	0.027	.0235556	.3845853
countrydummy1	.0776392	.0746003	1.04	0.298	-.0685747	.223853
countrydummy2	.0962629	.0587525	1.64	0.101	-.0188898	.2114156
countrydummy3	.0493856	.0645596	0.76	0.444	-.0771488	.1759201
countrydummy4	.0640719	.0605545	1.06	0.290	-.0546127	.1827565
countrydummy5	.0572801	.0592398	0.97	0.334	-.0588278	.173388
industrydummy1	.0169773	.0593248	0.29	0.775	-.0992971	.1332517
industrydummy2	-.0425055	.0442253	-0.96	0.336	-.1291856	.0441745
industrydummy3	-.07065	.0382482	-1.85	0.065	-.1456152	.0043152
industrydummy4	-.0635055	.0570329	-1.11	0.265	-.1752878	.0482769
industrydummy5	-.0913294	.0471056	-1.94	0.053	-.1836546	.0009958
industrydummy6	-.0824322	.0555702	-1.48	0.138	-.1913478	.0264834
industrydummy7	-.0328841	.051125	-0.64	0.520	-.1330874	.0673191
industrydummy8	-.0273632	.0390451	-0.70	0.483	-.1038902	.0491639
industrydummy9	-.1806598	.0438868	-4.12	0.000	-.2666763	-.0946432
_cons	-.0454784	.2148097	-0.21	0.832	-.4664977	.3755408
sigma_u	.07412314					
sigma_e	.03692839					
rho	.80114953	(fraction of variance due to u_i)				

Table 3: The Robust Regression Results of the relationship between Acquisition Deals Characteristics on REM in the GCC acquiring Companies by using five alternative real earnings management techniques (abnormal cash flows from operations (ACFO)).

```

Random-effects GLS regression                Number of obs   =    150
Group variable: id                          Number of groups =    72

R-sq:  within = 0.1451                      Obs per group:  min =    1
        between = 0.3004                      avg =    2.1
        overall = 0.3168                      max =    8

corr(u_i, X) = 0 (assumed)                  Wald chi2(23)   =    96.34
                                                Prob > chi2     =    0.0000

```

(Std. Err. adjusted for 72 clusters in id)

acfo	Robust				
	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
cbacq	-.0120389	.029087	-0.41	0.679	-.0690484 .0449706
indr	.0397758	.0351298	1.13	0.258	-.0290773 .108629
ownacq	-.058865	.0360849	-1.63	0.103	-.1295901 .0118602
paymeth	-.0787803	.021203	-3.72	0.000	-.1203374 -.0372232
fsize	-.0159016	.0107677	-1.48	0.140	-.0370059 .0052027
lev	.2363218	.1290027	1.83	0.067	-.0165188 .4891624
grow	.0178661	.0587565	0.30	0.761	-.0972946 .1330268
mtb	.0130928	.0139899	0.94	0.349	-.014327 .0405125
roa	-.206411	.3853691	-0.54	0.592	-.9617206 .5488986
countrydummy1	.0588141	.0735131	0.80	0.424	-.0852689 .2028971
countrydummy2	.2258379	.069045	3.27	0.001	.0905123 .3611636
countrydummy3	.122388	.0667669	1.83	0.067	-.0084726 .2532487
countrydummy4	.16281	.0681316	2.39	0.017	.0292745 .2963456
countrydummy5	.1843513	.0984754	1.87	0.061	-.008657 .3773595
industrydummy1	.2696477	.1137801	2.37	0.018	.0466428 .4926526
industrydummy2	.1623495	.1047481	1.55	0.121	-.042953 .367652
industrydummy3	.2238328	.0981682	2.28	0.023	.0314266 .4162389
industrydummy4	.0743388	.1259569	0.59	0.555	-.1725321 .3212097
industrydummy5	.1545005	.1102981	1.40	0.161	-.0616799 .3706808
industrydummy6	.2722602	.139241	1.96	0.051	-.0006471 .5451674
industrydummy7	.3269339	.1326487	2.46	0.014	.0669473 .5869206
industrydummy8	.2015783	.1287654	1.57	0.117	-.0507972 .4539537
industrydummy9	.1275468	.1119775	1.14	0.255	-.0919251 .3470187
_cons	-.0489724	.3077643	-0.16	0.874	-.6521792 .5542345
sigma_u	.11917492				
sigma_e	.1011865				
rho	.58109107	(fraction of variance due to u_i)			

Table 4: The Robust Regression Results of the relationship between Acquisition Deals Characteristics on REM in the GCC acquiring Companies by using five alternative real earnings management techniques (abnormal production costs (APC)).

```

Random-effects GLS regression           Number of obs   =   150
Group variable: id                     Number of groups =    72

R-sq:  within = 0.1004                 Obs per group:  min =    1
      between = 0.4624                   avg   =    2.1
      overall = 0.4461                   max   =    8

corr(u_i, X) = 0 (assumed)             Wald chi2(23)   =  193.56
                                           Prob > chi2     =   0.0000

```

(Std. Err. adjusted for 72 clusters in id)

apc	Robust					[95% Conf. Interval]	
	Coef.	Std. Err.	z	P> z			
cbacq	-.0123316	.0177794	-0.69	0.488	-.0471787	.0225154	
indr	.0280978	.0231243	1.22	0.224	-.0172251	.0734206	
ownacq	-.0363386	.0282359	-1.29	0.198	-.0916801	.0190028	
paymeth	-.062283	.0272514	-2.29	0.022	-.1156949	-.0088712	
fsize	-.0008979	.0098743	-0.09	0.928	-.0202512	.0184554	
lev	.1068814	.1121856	0.95	0.341	-.1129984	.3267611	
grow	.1036824	.0616122	1.68	0.092	-.0170754	.2244401	
mtb	-.0173065	.0104652	-1.65	0.098	-.0378179	.0032049	
roa	-.1921178	.2317057	-0.83	0.407	-.6462525	.262017	
countrycode1	-.0518154	.0574911	-0.90	0.367	-.164496	.0608652	
countrycode2	.0308809	.0401888	0.77	0.442	-.0478876	.1096494	
countrycode3	-.0650836	.0515238	-1.26	0.207	-.1660684	.0359012	
countrycode4	.0110834	.0421165	0.26	0.792	-.0714634	.0936303	
countrycode5	.0018846	.0327857	0.06	0.954	-.0623741	.0661434	
industrydummy1	.1771262	.0902277	1.96	0.050	.0002832	.3539692	
industrydummy2	.0376086	.0623335	0.60	0.546	-.0845629	.1597801	
industrydummy3	.0375341	.0651756	0.58	0.565	-.0902077	.1652758	
industrydummy4	.045501	.0861853	0.53	0.598	-.1234191	.2144211	
industrydummy5	.0236193	.0709445	0.33	0.739	-.1154294	.162668	
industrydummy6	.0329662	.0962654	0.34	0.732	-.1557105	.2216429	
industrydummy7	.0381958	.0571427	0.67	0.504	-.0738019	.1501934	
industrydummy8	.0758835	.0569373	1.33	0.183	-.0357116	.1874785	
industrydummy9	-.0999352	.0764305	-1.31	0.191	-.2497363	.049866	
_cons	.0278836	.2192001	0.13	0.899	-.4017408	.457508	
sigma_u	.07462386						
sigma_e	.08479963						
rho	.43643043	(fraction of variance due to u_i)					

Table 5: The Robust Regression Results of the relationship between Acquisition Deals Characteristics on REM in the GCC acquiring Companies by using five alternative real earnings management techniques (REM1).

```

Random-effects GLS regression           Number of obs   =       150
Group variable: id                     Number of groups =        72

R-sq:  within = 0.1411                 Obs per group:  min =         1
      between = 0.4020                   avg =           2.1
      overall  = 0.4273                   max =           8

                                           Wald chi2(23)   =       154.64
corr(u_i, X) = 0 (assumed)             Prob > chi2     =        0.0000

```

(Std. Err. adjusted for 72 clusters in id)

rem1	Robust				
	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
cbacq	-.0215736	.0387986	-0.56	0.578	-.0976175 .0544703
indr	.0672488	.0487971	1.38	0.168	-.0283919 .1628894
ownacq	-.0899923	.0540305	-1.67	0.096	-.19589 .0159055
paymeth	-.1384891	.0400784	-3.46	0.001	-.2170413 -.0599369
fsize	-.0158244	.018209	-0.87	0.385	-.0515134 .0198645
lev	.3277899	.2197921	1.49	0.136	-.1029948 .7585745
grow	.1160967	.0819465	1.42	0.157	-.0445156 .2767089
mtb	-.0048534	.0210723	-0.23	0.818	-.0461545 .0364476
roa	-.4281721	.4907146	-0.87	0.383	-1.389955 .5336108
countrydummy1	.0129534	.0996792	0.13	0.897	-.1824143 .2083211
countrydummy2	.2538517	.0827519	3.07	0.002	.091661 .4160425
countrydummy3	.0558282	.0915839	0.61	0.542	-.1236728 .2353293
countrydummy4	.1712656	.0753943	2.27	0.023	.0234954 .3190358
countrydummy5	.181445	.1035824	1.75	0.080	-.0215729 .3844629
industrydummy1	.4387479	.1853761	2.37	0.018	.0754174 .8020784
industrydummy2	.1902494	.1437915	1.32	0.186	-.0915768 .4720757
industrydummy3	.2494701	.1384967	1.80	0.072	-.0219784 .5209185
industrydummy4	.1103576	.1836279	0.60	0.548	-.2495466 .4702617
industrydummy5	.1695539	.1634458	1.04	0.300	-.150794 .4899019
industrydummy6	.2874903	.2126338	1.35	0.176	-.1292644 .7042449
industrydummy7	.35209	.1663546	2.12	0.034	.026041 .6781389
industrydummy8	.2685539	.1553762	1.73	0.084	-.0359778 .5730856
industrydummy9	.0135293	.1613064	0.08	0.933	-.3026255 .329684
_cons	-.0253014	.4448956	-0.06	0.955	-.8972808 .846678
sigma_u	.17171104				
sigma_e	.15062615				
rho	.56513383	(fraction of variance due to u_i)			

Table 6: The Robust Regression Results of the relationship between Acquisition Deals Characteristics on REM in the GCC acquiring Companies by using five alternative real earnings management techniques (REM2).

```

Random-effects GLS regression           Number of obs   =       150
Group variable: id                     Number of groups =       72

R-sq:  within = 0.1398                  Obs per group:  min =       1
      between = 0.3257                    avg =       2.1
      overall = 0.3732                    max =       8

                                           Wald chi2(23)   =       76.58
corr(u_i, X) = 0 (assumed)              Prob > chi2     =       0.0000

```

(Std. Err. adjusted for 72 clusters in id)

rem2	Robust				
	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
cbacq	-.0219004	.0349925	-0.63	0.531	-.0904845 .0466837
indr	.0548654	.0392983	1.40	0.163	-.0221578 .1318887
ownacq	-.0854707	.0417704	-2.05	0.041	-.1673392 -.0036022
paymeth	-.0671272	.027627	-2.43	0.015	-.1212752 -.0129792
fsize	-.0159602	.0172843	-0.92	0.356	-.0498368 .0179164
lev	.2392024	.1697126	1.41	0.159	-.0934282 .5718329
grow	.0263135	.0559139	0.47	0.638	-.0832757 .1359026
mtb	.0067259	.0175237	0.38	0.701	-.0276199 .0410717
roa	.0183899	.4387303	0.04	0.967	-.8415058 .8782855
countrydummy1	.1151858	.1321156	0.87	0.383	-.143756 .3741277
countrydummy2	.3256321	.1147473	2.84	0.005	.1007315 .5505328
countrydummy3	.17248	.1219203	1.41	0.157	-.0664795 .4114394
countrydummy4	.2246709	.1132377	1.98	0.047	.002729 .4466127
countrydummy5	.2467755	.1416176	1.74	0.081	-.0307899 .5243409
industrydummy1	.3014926	.1588053	1.90	0.058	-.0097601 .6127454
industrydummy2	.1328723	.1382915	0.96	0.337	-.138174 .4039187
industrydummy3	.1660255	.1270852	1.31	0.191	-.083057 .415108
industrydummy4	.0149753	.1686826	0.09	0.929	-.3156366 .3455871
industrydummy5	.075372	.1485467	0.51	0.612	-.2157742 .3665182
industrydummy6	.2040384	.1820413	1.12	0.262	-.1527561 .5608328
industrydummy7	.3083715	.1772279	1.74	0.082	-.0389888 .6557318
industrydummy8	.1931639	.1554116	1.24	0.214	-.1114371 .497765
industrydummy9	-.0317263	.1398712	-0.23	0.821	-.3058688 .2424162
_cons	-.0583941	.4543229	-0.13	0.898	-.9488507 .8320624
sigma_u	.17548101				
sigma_e	.11056919				
rho	.71581141	(fraction of variance due to u_i)			