

## REAL EARNINGS MANAGEMENT IN FAMILY GROUP AFFILIATION: A RESEARCH PROPOSAL

Wan Nadiah W Abdul Rahman<sup>1</sup>  
Noorhayati Mansor<sup>2\*</sup>

<sup>1</sup> Faculty of Economics and Management Sciences, Universiti Sultan Zainal Abidin, Terengganu, Malaysia.  
Email: w\_nads@yahoo.com

<sup>2</sup> Faculty of Economics and Management Sciences, Universiti Sultan Zainal Abidin, Terengganu, Malaysia.  
Email: nhayatimansor@unisza.edu.my

\*Corresponding author

**Accepted date:** 12 March 2017

**Published date:** 24 June 2018

**To cite this document:** Abdul Rahman, W. N. W., & Mansor, N. (2018). Real Earnings Management in Family Group Affiliation: A Research Proposal. *International Journal of Accounting, Finance and Business (IJAFB)*, 3(11), 82 - 96.

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**Abstract:** *Financial frauds and reporting quality of annual reports continue to be topics of interest in business and accounting research. Financial manipulations involving both Accrual Earnings Management (AEM) and Real Earnings Management (REM) are getting the attention of both the corporate sector and the public due to the continuing complexity of business structures and arrangements. To date, research on managing real earnings through business group affiliation is still scarce and largely unexplored especially in developing countries. Previous studies suggest that family group affiliation contribute to the earnings manipulation. This is a major concern in Malaysia since more than fifty per cent of its publicly own companies are dominated by family group businesses. This unique characteristic and the limited research on REM provide the main justifications for this study. The primary objective of this article is to present the literature on REM and propose a new research model to further highlight the influence of family group affiliation on REM activities in listed companies. The new research will cover a ten-year period from year 2006 until 2015 which coincides with different market conditions. These different environments may affect REM practices differently and the findings are expected to provide new insight on REM behaviour of family group affiliated companies in different market conditions. This study will enhance awareness and knowledge of REM and assist policy makers in improving the current governance mechanisms thus, strengthening the regulations and governance strategies in the capital market.*

**Keywords:** *Capital Market, Family Group Affiliation; Real Earnings Management; Pyramidal Structures; Complex Ownership Structures.*

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### Introduction

Financial frauds and accounting manipulations are not new in today's capital market. In recent years, there is a growing trend for large companies to hire professional forensic accountants in attempting to prevent or reduce the potential of frauds which have been growing rapidly

(Abdullahi and Mansor, 2015). Frauds are costly and time-consuming to investigate and uncover. Thus, understanding when and how organizations can contribute to incidence of frauds can help save firm resources and increase stakeholders' confidence.

It is normal for investors, regulators and all stakeholders to rely on information in published financial reports to make informed business and investment decisions. Thus, these users require financial reports to be relevant and presented fairly the financial conditions of the business operations. According to Healy and Wahlen (1999) earnings management happens when managers intentionally alter their financial reports either to mislead users or to influence the outcomes of their actions as a result of users relying on the reported accounting numbers. Generally, these managers benefit from the practice of earnings management in terms of both personal and business gains. They possess additional advantages over external users of financial information through managerial control of firm specific information.

Earnings management can be categorized into Accrual Earnings Management (AEM) and Real Earnings Management (REM). The former does not involve economic sacrifices while the latter carries the intention of managers to deceive stakeholders in trusting and using the earnings information in the published reports (Roychowdhury, 2006). Managers generally preferred REM to AEM possibly because it is less detectable, even though it is more costly for firms to engage in (Cohen, Dey, and Lys, 2008). REM is also considered to be less ethical than AEM (Graham, Harvey, and Rajgopal, 2005), and it may diminish firm's future valuation (Cohen and Zarowin, 2010).

Malaysia ranks in the top 10 positions among 34 countries with the worst earnings management rating (Bhattacharya, Daouk, and Welker, 2003). Notable examples of Malaysian mini-Enron financial scandals include Transmile Group Berhad and Megan Media Berhad. Even though Malaysia has implemented the Malaysian Financial Reporting Standards (MFRS) which is in full convergence with the International Financial Reporting Standards (IFRS), it has been reported that some listed firms are still suffering from low financial reporting quality. As a result, the desired level of transparency in financial statement reporting is not achieved and consequently contributes to the loss of quality earnings information to investors (Ball, Robin, and Wu, 2003).

Family-affiliated business groups dominate about 56% of the Malaysian market (Claessens, Fan, and Lang, 2006). The establishment of business groups by controlling families can increase agency problems due to pyramidal structure, entrenchment by controlling families and tunneling (Almeida and Wolfenzon, 2006). Expropriations activities by controlling shareholders in Malaysian firms are significantly higher among listed firms in other countries (Claessens, Djankov, Fan, and Lang, 2002). Huei (2014) argues that the establishment of business groups in Malaysia could be part of controlling shareholder's strategy to smooth their expropriation activities. Thus, in effort to protect their private benefits, controlling shareholders may camouflage minority shareholders' wealth expropriations via opportunistic earnings management to evade the investors and regulators from taken any disciplinary actions towards firms (Kim and Yi, 2006; Saggese, 2013).

To date, research on the ability of firms to manage earnings through business group affiliation remains largely unexplored (Kim and Yi, 2006; Rodríguez-pérez and Hemmen, 2010; Thomas, Herrmann, and Inoue, 2004). With regards to developing economies, it has been documented that the impact of business groups and earnings manipulation is significant, as most of the corporate governance mechanisms in these markets are still weak in relation to investors'

protection and legal institutions (Sarkar and Sarkar, 2008). In Malaysia, limited studies have been conducted on REM (Mohd Suffian, Sanusi, and Mastuki, 2015). The unique characteristic of Malaysian firms which is dominated by family businesses and the limited research provide the main justifications for this study. The primary objective of this paper is to present the literature on REM and propose a new research to further highlight the influence of family group affiliation on REM activities in Malaysian listed companies. This study contributes to enhance awareness and knowledge of earnings management in the capital market and provide input for policy makers in improving the governance mechanisms.

## Literature Review

### *Business group affiliation*

A business group represents a combination of different standalone companies which are governed under the same administrative and financial controls. Besides, they also pursue mutual goals and objectives (Hsieh, Yeh, and Chen, 2010). In practice, different countries generally apply different definitions to distinguish family business groups from non-family business groups. In Korea, firms are viewed as group affiliates when they are tied by vertical integration of inputs and outputs (Chang and Hong, 2000). However, in Yemen, business groups are characterized through the family association of a company with their shareholding companies (Alawi, Rahman, Amran, and Nejati, 2016; Chung, 2001). According to Khanna and Rivkin (2006) business groups are also linked through interlocking directorships, mutual banks, equity cross holdings and other non-family connections. Meanwhile, Almeida and Wolfenzon (2006) refer to a family business group as a group that is controlled by a single family. Table 1 provides definitions for selected developing countries.

**Table 1: Definition of Business Groups According to Country**

Country	Definition
Malaysia, Hong Kong, Indonesia, Singapore	The family is the largest owner (firms are considered as belonging to the same group when they have a common controlling family)
South Korea	The company's CEO sits in the group's President's breakfast
Philippines	A family member sits on the Management Board and/or the Board of Directors
Taiwan	The firm is counted as group-affiliated if other firms in the group own 20% of the stock.
Thailand	The firm is listed as a related company in the annual report of the leading company in the group.

**Source: Adapted from Claessens et al. (2006)**

Business group affiliations are prevalent in emerging markets and they exist as a result of organizational response to weak institutional context (Bhaumik and Gregoriou, 2010; Guillén, 2000; Khanna and Palepu, 2000). This form of business has played a central role in supporting the growth of developing economies (Khanna and Palepu, 2000). In addition, it is also marked as one of the effective ways to expand firm business empire and equipped a solution to overcome resource scarcity in small domestic markets (Chu and Song, 2011). In India, for example, Khanna and Palepu (2000) find that affiliates business groups surpassed the standalone firms as the internal capital market of Indian groups strongly resemble the efficiency

of developed economies financial market. Meanwhile, in China, the presence of strong internal capital market by business group affiliations act as remedy in facilitating risk sharing and helping to relief the financial constraints faced by affiliated members, especially among state-owned firms and firms in the regions with least developed markets (He, Mao, Rui, and Zha, 2013).

In East Asian countries, most affiliated groups belong to family-controlled firms (Claessens et al., 2002; Tam and Tan, 2007). As family members normally inherit the firms operations, they typically organize the ownership in a pyramidal structure (Abdul Rahman, 2006; Almeida and Wolfenzon, 2006; Claessens et al., 2006). In this manner the members gain greater control over the chain of ownerships. In Malaysia, about 39.3 per cent of listed firms use the pyramid structure (Claessens, Djankov and Lang, 2000). Business groups, especially family group affiliation is unique because they not only influence the ownership, governance, management and success but also the objectives, strategies and structure of the companies (Chua, Chrisman, and Sharma, 1999).

Despite the growing stream of literature, only a few studies have extensively explored the earnings management issue in complicated business group's structure. Huei (2012, 2014) suggests that special regulators' attention is needed for business group, particularly those with large number of listed affiliates and complex in structure because a poor corporate transparency to govern business group could bind to a greater expropriation of resources by controlling shareholders. Accordingly, this present study extends upon Huei (2012, 2014) by further examine the issue of size and structure in relation to REM.

### ***Real Earnings Management***

Academic literature has long been interested in AEM. However, less attention has been given to REM. Roychowdhury (2006) defines REM as "management actions that deviate from normal business practices, undertaken with the primary objective of meeting certain earnings thresholds". REM is most preferred among managers since it is hard to be discovered by outside parties in comparison to AEM (Cohen and Zarowin, 2010; Graham et al., 2005; Gunny, 2010; Ho and Sung, 2012; Zang, 2012). Since REM changes the structure and timing of actual business transactions, the activities can be applied throughout the fiscal year, while accruals manipulation normally takes place after the fiscal year end, but before the earnings release date (Zang, 2012).

Generally, both types of earnings management (i.e., AEM and REM) can be categorised as fraudulent accounting. According to Abdullahi and Mansor (2018) based on a study of fraud in the Nigerian public sector, detecting and preventing fraud is very challenging and requires comprehensive knowledge of fraud, and how it can be obscured and perpetrated by fraudsters. Similarly, among auditors, REM is considered the most difficult to detect (Ho and Sung, 2012). Earnings manipulations through real business operations are more costly than accruals as it involves cash flow consequences (Cohen et al., 2008; Ewert and Wagenhofer, 2005; Graham et al., 2005). Furthermore, as compared to accruals manipulation, REM could possibly wreck firm's fundamental performance (Baber and Fairfield, 1991; Bange and De Bondt, 1998; Burgstahler and Dichev, 1997).

In developing countries, REM is more often implemented by family firms rather than AEM (Bhojraj, Hribar, Picconi, and Mcinnis, 2009; Cohen and Zarowin, 2010). Ewert and

Wagenhofer (2005) and Tang (2007) provide evidence that the presence of strict and tighter accounting standards have raised difficulties to implement the earnings management of accruals. These improved conditions have influenced managers to deliberately implement REM in order to achieve their income target. Cohen et al. (2008) confirm that close scrutiny of accounting practices after the passage of Sarbanes Oxley Act have shifted the manager in U.S firms away from accruals to REM.

Even though earnings management has been studied in recent decades, research in the context of family business is still limited (Vieira, 2016). As family owners often play an active management role in the firms (Anderson and Reeb, 2003), therefore, they may enjoy a great deal of autonomy in adjusting firm's regular operational and investment activities. Razzaque, Ali, and Mather (2016) demonstrate that the involvement of family firms in REM surpassed the non-family firms in Bangladesh as the consequences from the higher concentration of family ownership. Family ownership to some extent may increase the agency conflict. Past studies indicate that business affiliate group are more likely to engage in earnings management than non-group firms (Bertrand, Mehta, and Mullainathan, 2002; Beuselinck and Deloof, 2014; Bonacchi, Cipollini, and Zarowin, 2013; Kim and Yi, 2006; Shuto, 2009; Thomas et al., 2004). To date, in Malaysia, the issue of REM in family group affiliation remain scant. Prior studies of REM in Malaysia mainly focus on firm performance (Alqerm and Obeid, 2013), firm value (Mohd Suffian et al., 2015) and non-affiliated firms leverage (Zamri, Abdul, Saatila, and Isa, 2013). Their studies conclude that firms in Malaysia opportunistically managed corporate earnings using REM techniques.

In emerging economies where there are still weak investors' right and legal protections issues related to REM continue to deserve research attention and empirical investigation. Accordingly, this study focuses on how family group affiliation influence REM. The main aim is to contribute to the growing literature on cash based manipulations by family firms in developing economies. The study proposes three REM measures as developed in previous study by Roychowdhury (2006). These are abnormal cash flow from operations, abnormal discretionary expenses and abnormal production costs.

### ***Abnormal cash flow from operations***

Sales manipulation is among the most common techniques used in REM. The act of manipulating earnings through price reduction, excessive sales discounts and grant more lenient credit terms may help to boost firm's current earnings. To some extent, these circumstances may reduce cash flows from operations (CFO) in the current period for a given level of sales. Hence, CFO stated below the normal level is an indication of REM implementation (Roychowdhury, 2006). The abnormal cash flow from operation is derived from the difference between the actual cash flow from operations and the predicted normal level of cash flow from operations.

Gunny (2010) confirms that managers cut prices to boost sales in the current period to embellish firm's reputation and signal excellent future earnings. Fazeli and Rasouli (2011) provide evidence that listed firms in Tehran offered price discounts and overproduce inventories as a means to accelerate sales in order to avoid reporting losses. Recently, Hamza and Bannouri (2015) document that after the implementation of Financial Security Law in 2005 vigorous activities of REM through sales manipulation have been detected in Tunisian firms.

On the other hand, some researchers found that firms with higher proportion of majority shareholder are more likely to prevent REM, as they are more concerned towards impairment in their own wealth and long term firm's performance. For instance, Goh, Lee, and Lee, (2013) find that greater majority shareholder ownership is more likely to mitigate REM through abnormal cash flow from operations. Alqerm and Obeid (2013) mention that operating cash flow are highly considered by investors during share pricing, thus any abnormality can easily get detected by them.

### ***Abnormal discretionary expenses***

Firms have greater latitude in determining their own expenses such as Research and Development (R&D), Selling, General and Administrative (SGA), marketing expenses, employees training as well as maintenance expenses. These expenses are charged in the current period and firms would significantly reported higher earnings by intentionally omitting them. Suspected firms normally exhibit unusually low discretionary expenses. Hence, abnormally lower discretionary expenses than the predicted normal level are considered as REM (Roychowdhury, 2006).

A number of studies suggest that firms tend to reduce discretionary costs such as SGA, R&D and advertising expenses in order to strengthen reported earnings (e.g., Baber and Fairfield, 1991; Bange and De Bondt, 1998; Damak and Halioui, 2013; Zang, 2012). According to Xu and Su (2010) Chinese firms were also involved in REM through exploitations of R&D expenses. Furthermore, Chapman and Steenburgh (2011) document that to smooth earnings firms could practice REM through alterations in advertising expenditures. Similarly, Cohen and Zarowin (2010) provide evidence that firms aggressively cut their R&D and advertising expenses in order to boost short term earnings. In France, Guidara and Boujelbene (2015) report that as part of firm's strategic plan, firms heavily invested in R&D also reduced their R&D spending and the main motivation for the practice of earnings management is to enhance firms' future performance.

During weak economic conditions managers have the tendency to adopt REM through discretionary expenses. The main intention is also to boost earnings since this manipulation is not easily detected by auditors compared to AEM (Joosten, 2012). Furthermore, in a survey of Chief Financial Officers, Graham et al. (2005) conclude that more than 70% of them were willing to decrease operational activities in order to meet earnings benchmark even though the manipulation might decrease the firm value. However, earnings manipulation through discretionary expenses has been linked to decrease operating performance in the future (Leggett, Parsons, and Reitenga, 2016).

### ***Abnormal production costs***

Producing excessive units or overproducing for inventory may be attempted by firms in order to reduce the unit fixed cost and thus, lower the cost of goods sold. Hence, these firms would report increased profit margin as long as the unit fixed cost is less than the marginal cost of production and inventory holding costs. According to Roychowdhury (2006), abnormally high production cost than the predicted normal level reflects a practice of REM.

Prior studies on REM by Malaysian firms include Alqerm and Obeid (2013), Mohd Suffian et al. (2015) and Zamri et al. (2013). Their studies provide strong evidence of the opportunistic

use of production cost to manipulate earnings. Thomas and Zhang (2000) further argue that firms overproduce inventory in order to decrease the cost of goods sold which eventually resulted in high earnings. Cook, Huston, and Kinney (2012) explore the relationship between inventory change and earnings manipulation in large sample of manufacturing firms in the year 1960 to 2006. They discover that high fixed cost firms appear to more likely engage in inventory manipulation than comparable firms with low fixed cost.

Ferentinou and Anagnostopoulou (2016) report that improved accounting standard after the IFRS adoption leads the substitution from AEM to REM since the post IFRS implementation period provides evidence of significant inventory overproduction. The unusual high production results in increased in firm's net income. Study by Hashemi and Rabiee (2011) focus primarily on the production costs as a proxy for REM using the sample of Iranian firms from year 2000 until 2010. They prove that firms use AEM subsequent to REM activities. The authors suggest that auditors should focus more on REM in detecting the early fraudulent financial reporting signs and symptoms.

### **Agency Theory**

Agency theory is one of the most widely used frameworks for the study of principal and agent relationships in organizations. The theory deals with managerial behaviour, motivations and performance and posits that conflicts may arise due to separation of ownership and control of organizations which may result in suboptimal behaviour (Jensen and Meckling, 1976). Due to the separation of owners (principal) and managers (agents) there is no guarantee that the agents will act in the best interest of the principal or shareholders of the firm. The principal may also suffer from lack of access to full and relevant information due to their inactive involvement in the business activities. The difference in information received by the agents and the principals is referred to as information asymmetry and may also create an imbalance which results in agency problem. The agency problem may also be attributable to contract-related issues (Fama & Jensen, 1983).

A direct result of the pyramid structure is a separation of actual ownership and control rights (Malan, Salamudin, and Ahmad, 2014). Among others, Claessens et al. (2006) argued that complex organization structures and complicated ownerships involving pyramid and cross-holding may also contribute to agency problems. This separation would increase the ability to practise earnings management and provides incentives for controlling shareholders to expropriate other shareholders (Claessens et al., 2000). In the case of family affiliated business groups, earnings management may be further induced and motivated since the ownership structure is usually complex and more elaborate than non-family affiliated firms.

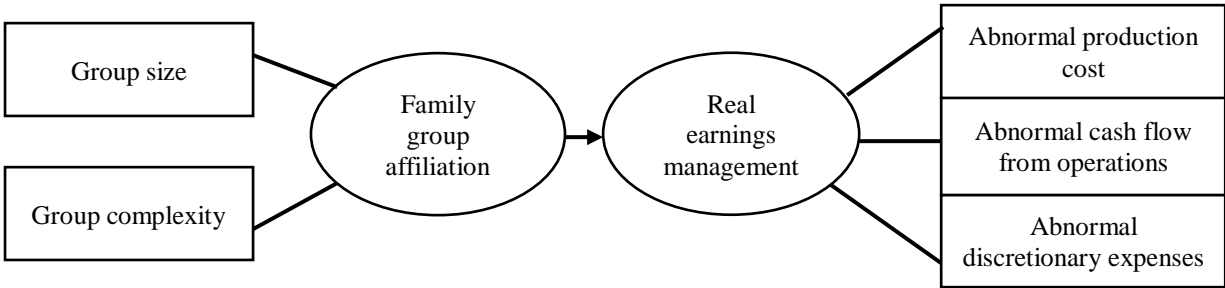
### **A Research Proposal**

Recent evidence suggests that business group affiliations contribute to the rise of earnings management. Prior studies on family businesses have used various measures to identify the business structure (e.g., Bertrand et al., 2002; Beuselinck and Deloof, 2014; Bonacchi et al., 2013; Kim and Yi, 2006; Shuto, 2009; Thomas et al., 2004). This proposed research is different from the previous studies by focusing on the effect of firm size and complex structure of family group affiliation towards the practice of REM. Not all family groups are the same especially on the level of complexity of the group structure. Nam and Nam (2004) argue that family-owned businesses in Malaysia, especially the large ones are not decently monitored by external

shareholders, executive boards and banks. Hence, large business group become more susceptible to tunnelling and expropriation as their business group formation become complicated and less transparent (Khanna and Palepu, 2000).

Accordingly, a new research is proposed to analyse the relationship between size and complexity of family group affiliation and REM in the context of emerging economy. This study is timely and appropriate in the case of the Malaysian capital market due to three major concerns. Firstly, there is a prevalence of highly concentrated ownership and control of business operations in family-affiliated business groups through pyramidal structure (e.g., Huei, 2012, 2014). Secondly, despite the higher rate of reported earnings management in Malaysia, studies by Mohd Suffian et al. (2015) documents that only limited studies have been conducted on REM. Thirdly, Rodríguez-pérez and Hemmen (2010) and Ruiz (2016) state that the ability of firms to manage earnings through business group affiliations is still largely unexplored in the literature.

This study will focus on the relationship between family group affiliation and REM in Malaysia and the proposed research model is presented in Figure 1.



**Figure 1: Proposed conceptual framework**

**Family group affiliation and real earnings management**

The structure of family-affiliated business groups becomes more complex as the number of affiliated firms increases. Recent studies provide evidence that expropriation activities are more prevalent in family affiliated groups than unaffiliated family firms (Bertrand et al., 2002; Bhaumik and Gregoriou, 2010). Existing research also suggest that agency and management problems increase proportionately with the combination of internal market, complex ownership and control structure of affiliated groups (Claessens and Fan, 2002), where those elements result in higher incentives for resource mismanagement in organizations. According to Huei (2014), the complexity of group structure necessarily allows for wealth expropriations by controlling shareholder as the transactions within the internal market can be easily concealed and remain undiscovered. Possibly, auditors may face difficulties in detecting the presence of earnings manipulation when firms grow in size and possess increasingly complex operations (Carcello and Nagy, 2004). Huei (2012) claims that expropriation activities gradually increase with the size of business group due to lack of transparency in firms with complex operations.

In Korea, Kim and Yi (2006) demonstrate that firms affiliated with a Chaebols business groups are associated with greater incidence of earnings management than non-affiliated firms. Meanwhile, Bae and Jeong (2007) suggest that REM may have caused firms to lose credibility



and become irrelevant than standalone firms. On the contrary, Choi and Kim (2012) find that business group affiliations reduce both accrual and REM due to their concerns for long term group reputation by controlling family firms. Hence, it is postulated that in a relatively small economy and weak legal protection of minority shareholders like Malaysia, the influence of family-affiliated group size on REM is likely to be positive. Hence, based on the abovementioned arguments, the following hypothesis is proposed:

H1: The size of family-affiliated business groups has a positive effect on REM.

Firms with pyramidal structure have a greater divergence between cash flow rights and control rights (Claessens et al., 2000). Agency problem can be more severe within this type of firms as ultimate controlling shareholders may increase their control through a pyramidal structure (Bebchuk, Kraakman, and Triantis, 2000; Johnson, LaPorta, Lopez-de-Silanes, and Shleifer, 2000). Claessens, Djankov, Fan, and Lang (1999) state that business groups which are controlled by families through complex pyramidal ownership tend to expropriate non-controlling shareholders. Kim and Yi (2006) claim that complex business groups' structures may smooth self-dealing transactions and this condition makes outside investors unable to monitor the transactions.

The pyramidal structure of family-affiliated groups is often linked to earnings manipulation since the structure enables controlling shareholders to strengthen their influence on the management even though their ownership percentage remains unchanged. The entrenchment perspective suggests that tunneling activities due to the ownership separation and control motivates the controlling shareholders to manage earnings in order to avoid external interventions (Haw, Hu, Hwang, and Wu, 2004). Fan, Wei, and Xu (2011) document that complex ownership structures in developing economies expose greater opportunities for minority shareholder expropriation, and firms often manage earnings to conceal their entrenched behaviour (Jian and Wong, 2003). Furthermore, Saggese (2013) reveals that the pyramidal structure is linked to the practice of earnings management especially in countries with weak minority shareholders' protection. In a same vein, Muttakin, Khan, and Mihret (2017) suggest that in Bangladesh, poor investor protection and complex ownership structures trigger earnings management in business group affiliated firms. Meanwhile, Claessens et al. (2002) state that Malaysia has a large number of pyramidal firms and the act of tunneling could be significant relative to companies in the developed countries. Hence, the following hypothesis is proposed:

H2: The complexity of structure of family-affiliated business groups has a positive effect on REM.

## **Research methodology**

Firms listed on the Main Board of Bursa Malaysia will form the population for this study. Seven sectors of the industry namely, constructions, consumer, industrial, plantations, properties, services and technology will be involved. Data selection will be for the period 2006 to 2015 which coincides with economic boom, recession, recovery and stabilization. This period thus, allows for studies of REM practices during different economic conditions. This research will use a quantitative approach to determine the influence of family group affiliation towards REM

activities. All the financial data will be retrieved from DataStream database while non-financial data will be collected manually from annual reports.

Following La Porta, De-Silanes and Shleifer (1999) and Claessens et al. (2000), this research defines a family or an individual as the 'controlling family' when the entity mutually owns at least 10% of the firm's total shares and serve as the largest shareholder of the firm. Listed firms under the similar controlling owner are considered as affiliated with the same business group. The information of family group affiliation would be obtained from 'Corporate Structure' and 'Directors' Profile' sections in firm's annual report. Unlike previous studies, three primary measures of REM will be used in the proposed study. These are abnormal cash flows from operations, abnormal production costs and abnormal discretionary expenses. Family group affiliation will be measured by the group size and group complexity. Similar to Huei (2012, 2014) a dummy variable of 1 is assigned if a firm is affiliated with group size and group complexity, and 0 otherwise.

The proposed study will involve three group sizes, namely small group with only two public listed firms, medium group with only three to four listed firms and large group with five or more listed firms. The group complexity is divided into three levels. Firstly, there is a simple structure if the firms are affiliated with a business group in the absence of pyramidal structure. Secondly, there is a pyramidal structure if there is at least one firm in the group that is indirectly controlled by the family via another public listed firm. Thirdly, there is a complicated pyramidal structure if there is at least one public-listed firms controlled by a few public listed firms owned by the same group. Panel data regression will be adopted to analyse the data according to the proposed hypotheses. The use of panel data is considered to be more reliable since there are different temporal observations for each firms in the period studied. Panel data also have several advantages as it improves predictions for individual outcomes by pooling data rather than by generating predictions of individual outcomes using the data on the individual firm (Hsiao, 2004). E-views statistical software will be used to test all the hypotheses and to provide the descriptive analyses.

## **Conclusions**

Despite many new control mechanisms being put in place, the general trend for financial fraud is expected to continue to rise especially in developing countries. Thus, understanding the factors which influence the intentions to expropriate wealth through REM is very important and timely. REM is a very critical financial issue for any business for two main reasons. Firstly, it involves cash flow consequences, and secondly, it is very difficult to detect than AEM. This paper is organised in two parts. The first stage provides a summary of literature on earnings management with main focus on family business structure which is very common in the Asian countries. Recent evidence suggests that business group affiliation is one of the main factors which contributes to the increased possibility of earnings management (Bertrand et al., 2002; Beuselinck and Deloof, 2014; Bonacchi et al., 2013; Kim and Yi, 2006; Shuto, 2009; Thomas et al., 2004). Nevertheless, all the studies reviewed suffer from the fact that family group affiliation possibly influences REM, especially in emerging economies.

In the second stage this study addresses the current gap in the literature by proposing to investigate whether size and complexity of family group affiliations have significant impact on REM. Three types of REM are measured which are abnormal cash flow from operations, abnormal discretionary expenses and abnormal production costs. The findings are expected to

contribute to the literature by establishing new evidence on the practice of REM and provide comprehensive analysis related to family affiliated business groups. Furthermore, the study would help to enhance regulations, strengthen prevention strategies and controlling mechanisms in the capital market by providing insights to the Security Commission of Malaysia (SCM) and Bursa Malaysia in mitigating the potential act of earnings expropriations. The results are also important to assist in reducing the risk of earnings mismanagement in protecting the shareholders, debt holders and suppliers of financial capital. By understanding these characteristics, the stakeholders would be in a better position to identify and avoid firms with high level of informational asymmetry. Furthermore, the research findings may also be used as a reference guide to assist investors, analysts and fund managers in their investment decisions. This may help them in selecting the firms with low risk of potential expropriations in their investment portfolio. It is also hope that this study will improve the auditors' knowledge in detecting REM activities.

## References

- Abdullahi, R., and Mansor, N. (2015). Fraud triangle theory and fraud diamond theory: Understanding the convergent and divergent for future research. *European Journal of Business and Management*, Vol. 7, No. 22, pp. 30-37.
- Abdullahi, R., and Mansor, N. (2018). Fraud prevention initiatives in the Nigerian Public Sector: Understanding the relationship of fraud incidences ad the elements of fraud triangle theory. *Journal of Financial Crime*, Vol. 25, No. 2.
- Abdul Rahman, R. (2006). *Effective Corporate Governance, 1<sup>st</sup> Edition*. University Publication Centre (UPENA), UiTM, Shah Alam, Malaysia.
- Alawi, N. A. M., Rahman, A. A., Amran, A., and Nejati, M. (2016). Does family group affiliation matter in CSR reporting? Evidence from Yemen, *Afro-Asian J. of Finance and Accounting*, Vol. 6(1), No. 12, pp.12-30.
- Almeida, H., and Wolfenzon, D. (2006). A theory of pyramidal ownership and family business groups, *The Journal of Finance*, Vol.61, No.6, pp.2637-2680.
- Alqerm, J. F., and Obeid, S. N. S. (2013). The pricing of the real earnings management evidence from Malaysian Stock Exchange, *Journal of Al-Quds Open University for Research and Studies*, Vol.32, No.1, pp.27-49.
- Anderson, R. C., and Reeb, D. M. (2003). Founding-family ownership and firm performance: Evidence from the SandP 500, *The Journal of Finance*, Vol.58, No.3, pp.1301-1328.
- Baber, W. R., and Fairfield, P. M. (1991). The effect of concern about reported income on discretionary spending decisions: The case of research and development, *Accounting Review*, Vol.66, No.4, pp. 818-829.
- Bae, K. H., and Jeong, S. W. (2007). The value-relevance of earnings and book value, ownership structure, and business group affiliation: Evidence from Korean business groups, *Journal of Business Finance and Accounting*, Vol. 34, No. 5–6, pp. 740-766.
- Ball, R., Robin, A., and Wu, J. S. (2003). Incentives versus standards: properties of accounting income in four East Asian countries, *Journal of Accounting and Economics*, Vol.36, No. 1-3, pp.235-270.
- Bange, M. M., and De Bondt, W. F. (1998). R&D budgets and corporate earnings targets, *Journal of Corporate Finance*, Vol. 4, No.2, pp.153-184.
- Bebchuk, L. A., Kraakman, R., and Triantis, G. (2000). Stock Pyramids, Cross-Ownership, and Dual Class Equity: The Mechanisms and Agency Costs of Separating Control from Cash-Flow Rights.

- [http://www.law.harvard.edu/faculty/bebchuk/pdfs/2000.Bebchuk-Kraakman\\_Triantis.Stock.Pyramids.pdf](http://www.law.harvard.edu/faculty/bebchuk/pdfs/2000.Bebchuk-Kraakman_Triantis.Stock.Pyramids.pdf) (Accessed 24 October 2017)
- Bertrand, M., Mehta, P., and Mullainathan, S. (2002). Ferreting out tunnelling: an application to Indian business groups, *The Quarterly Journal of Economics*, Vol. 117, No.1, pp. 121-148.
- Beuselinck, C., and Deloof, M. (2014). Earnings management in business groups: tax incentives or expropriation concealment?, *The International Journal of Accounting*, Vol.49, No.1, pp.27-52.
- Bhattacharya, U., Daouk, H., and Welker, M. (2003). The world price of earnings opacity, *Accounting Review*, Vol.78, No. 3, pp.641-678.
- Bhaumik, S. K., and Gregoriou, A. (2010). “Family” ownership, tunnelling and earnings management: a review of the literature, *Journal of Economic Surveys*, Vol. 24, No. 4, pp.705-730.
- Bhojraj, S., Hribar, P., Picconi, M., and Mcinnis, J. (2009). Making sense of cents: an examination of firms that marginally miss or beat analyst forecasts, *The Journal of Finance*, Vol.64, No.5, pp.2361-2388.
- Bonacchi, M., Cipollini, F., and Zarowin, P. (2013). Parents use of subsidiaries to “push down” earnings management: Evidence from Italy, *Contemporary Accounting Research*, pp.1-31.
- Burgstahler, D., and Dichev, I. (1997). Earnings management to avoid earnings decreases and losses, *Journal of Accounting and Economics*, Vol.24, No.1, pp. 99-126.
- Carcello, J. V., and Nagy, A. L. (2004). Client size, auditor specialization and fraudulent financial reporting, *Managerial Auditing Journal*, Vol. 19, No.5, pp.651-668.
- Chang, S. J., and Hong, J. (2000). Economic performance of group-affiliated companies in Korea: intragroup resource sharing and internal business transactions, *The Academy of Management Journal*, Vol.43, No.3, pp.429-448.
- Chapman, C. J., and Steenburgh, T. J. (2011). An investigation of earnings management through marketing actions, *Management Science*, Vol.57, No.1, pp.72-92.
- Choi, J. J., and Kim, M. S. (2012). Reputation and Real Earnings Management in Business Groups  
[http://kafo.or.kr/eng/board\\_common/file\\_download.asp?Board\\_Key=372andFile\\_Key=431andflag=1](http://kafo.or.kr/eng/board_common/file_download.asp?Board_Key=372andFile_Key=431andflag=1) (Accessed 9 March 2016)
- Chu, E. Y., and Song, S. I. (2011). Large shareholders, capital structure and diversification of Malaysian Public Listed manufacturing firms, *African Journal of Business Management*, Vol.5, No.14, pp.6005-6010.
- Chua, J. H., Chrisman, J. J., and Sharma, P. (1999). Defining the family business by behaviour, *Entrepreneurship Theory and Practice*, Vol.23, pp. 19-39.
- Chung, C. (2001). Markets, culture and institutions: The emergence of large business groups in Taiwan, 1950s–1970s, *Journal of Management Studies*, Vol.38, No.5, pp. 719-745.
- Claessens, S., Djankov, S., Fan, J., & Lang, L. (1999). Corporate Diversification in East Asia: The Role of Ultimate Ownership and Group Affiliation.  
<http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN026628.pdf> (Accessed 14 August 2016)
- Claessens, S., Djankov, S., Fan, J. P. H., and Lang, L. H. P. (2002). Disentangling the incentive and entrenchment effects of large shareholdings, *The Journal of Finance*, Vol.57, No.6, pp.2741-2771.
- Claessens, S., Djankov, S., and Lang, L. H. (2000). The separation of ownership and control in East Asian corporations, *Journal of Financial Economics*, Vol.58, No.1, pp.81-112.

- Claessens, S., and Fan, J. (2002). Corporate governance in Asia: a survey, *International Review of Finance*, Vol.3, No.2, pp.71-103.
- Claessens, S., Fan, J., and Lang, L. (2006). The benefits and costs of group affiliation: evidence from East Asia, *Emerging Markets Review*, Vol.7, No.1, pp.1-26.
- Cohen, D., Dey, A., and Lys, T. (2008). Real and accrual-based earnings management in the pre- and post-Sarbanes-Oxley periods, *Accounting Review*, Vol.83, No.3, pp.757-787.
- Cohen, D., and Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings, *Journal of Accounting and Economics*, Vol.50, No.1, pp.2-19.
- Cook, K. A., Huston, G. R., and Kinney, M. R. (2012). Managing earnings by manipulating inventory: the effects of Cost Structure and Valuation Method. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=997437](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=997437) (Accessed 8 October 2017)
- Damak, S. T., and Halioui, K. (2013). Accounting treatment of R&D expenditures and earnings management: an empirical study on French listed companies, *Global Journal of Business Research*, Vol.2, No.1, pp.50-71.
- Ewert, R., and Wagenhofer, A. (2005). Economic effects of tightening accounting standards to restrict earnings management, *The Accounting Review*, Vol.80, No.4, pp.1101-1124.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, Vol.26, No.2, pp.301-325.
- Fan, J. P. H., Wei, K. C. J., and Xu, X. (2011). Corporate finance and governance in emerging markets: a selective review and an agenda for future research, *Journal of Corporate Finance*, Vol.17, No.2, pp.207-214.
- Fazeli, Y. S., and Rasouli, H. A. (2011). Real earnings management and the value relevance of earnings, *International Research Journal of Finance and Economics*, Vol.62, pp.28-37.
- Ferentinou, A. C., and Anagnostopoulou, S. C. (2016). Accrual-based and real earnings management before and after IFRS adoption, *Journal of Applied Accounting Research*, Vol.17, No.1, pp.2-23.
- Goh, J., Lee, H., and Lee, J. (2013). Majority shareholder ownership and real earnings management: evidence from Korea, *Journal of International Financial Management and Accounting*, Vol.24, No.1, pp.26-61.
- Graham, J. R., Harvey, C. R., and Rajgopal, S. (2005). The economic implications of corporate financial reporting, *Journal of Accounting and Economics*, Vol. 40, No.1-3, pp.3-73.
- Guidara, R., and Boujelbene, Y. (2015). R&D expenditures and earnings targets: evidence from France, *Journal of Economics Finance and Accounting*, Vol.2, No.2, pp.164-180.
- Guillén, M. F. (2000). Business groups in emerging economies: a resource-based, *Academy of Management*, Vol.43, No.3, pp.362-380.
- Gunny, K. A. (2010). The relation between earnings management using real activities manipulation and future performance: evidence from meeting earnings benchmarks, *Contemporary Accounting Research*, Vol.27, No.3, pp.855-888.
- Hashemi, S. A., and Rabiee, H. (2011). The relation between real earnings management and accounting earnings management: evidence from Iran, *Business and Management Review*, Vol.1, No.8, pp.25-33.
- Hamza, S. E., and Bannouri, S. (2015). The detection of real earnings management in MENA countries: the case of Tunisia. *Afro-Asian Journal of Finance and Accounting*, Vol.5, No.2, pp.135-159.
- Haw, I. M., Hu, B., Hwang, L. S., and Wu, W. (2004). Ultimate ownership, income management, and legal and extra-legal institutions, *Journal of Accounting Research*, Vol.42, No.2, pp.423-462.

- He, J., Mao, X., Rui, O. M., and Zha, X. (2013). Business groups in China, *Journal of Corporate Finance*, Vol.22, No.1, pp.166-192.
- Healy, P., and Wahlen, J. (1999). A review of the earnings management literature and its implications for standard setting, *Accounting Horizons*, Vol.13, No.4, pp.365-383.
- Ho, S. J., and Sung, H. C. (2012). The informational and strategic impacts of real earnings management, *Annals of Economics and Finance*, Vol.13, No.2, pp.355-380.
- Hsiao, C. (2004). Analysis of panel data, *Computers & Mathematics with Applications*, Vol.47, No.6-7, pp.1147-1148.
- Hsieh, T. J., Yeh, R.S., and Chen, Y.J. (2010). Business group characteristics and affiliated firm innovation: the case of Taiwan, *Industrial Marketing Management*, Vol.39, No.4, pp.560-570.
- Huei, N. S. (2012). The influence of ownership, control, governance and diversification on the performance of family-controlled firms in Malaysia. Unpublished PhD thesis, Northumbria University, Newcastle.
- Huei, N. S. (2014). How does group affiliation affect the diversification performance of family-controlled firms in Malaysia? A governance perspective, *Asian Academy of Management Journal of Accounting and Finance*, Vol.10, No.2, pp.81-115.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, Vol.3, No.4, pp.305–360.
- Jian, M., and Wong, T. (2003). Earnings management and tunnelling through related party transactions: evidence from Chinese corporate groups.  
<http://www.ssrn.com/abstract=424888> (Accessed 2 January 2017).
- Johnson, S., LaPorta, R., Lopez-de-Silanes, F., and Shleifer, A. (2000). Tunneling, *The American Economic Review*, Vol.90, No.2, pp.22-27.
- Joosten, C. (2012). Real earnings management and accrual-based earnings management as substitutes. Unpublished Master's Thesis. Tilburg University, Tilburg, Netherlands.
- Khanna, T., and Palepu, K. (2000). Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups, *The Journal of Finance*, Vol.55, No.2, pp.867-891.
- Khanna, T., and Rivkin, J. W. (2006). Interorganizational ties and business group boundaries: evidence from an emerging economy. *Organization Science*, Vol.17, No.3, pp.333-352.
- Kim, J., and Yi, C. H. (2006). Ownership structure, business group affiliation, listing status and earnings management: evidence from Korea. *Contemporary Accounting Research*, Vol.23, No.2, pp.427-464.
- La Porta, R., De Silanes, F. L., & Shleifer, A. (1999). Corporate ownership around the world. *Journal of Finance*, Vol.54, No.2, pp.471-517.
- Leggett, D., Parsons, L. M., and Reitenga, A. L. (2016). Real earnings management and subsequent operating performance. *Journal of Accounting Research*, Vol.54, No.5, pp.1233-1266.
- Malan, I. N. B., Salamudin, N., and Ahmad, N. (2014). Empirical research on characterization of pyramid structure and firm performance. *Middle-East Journal of Scientific Research*, Vol.21, No.11, pp.2156-2168.
- Mohd Suffian, M. T., Sanusi, Z. M., and Mastuki, N. (2015). Real earnings management and firm value: empirical evidence from Malaysia. *Malaysian Accounting Review*, Vol.14, No.1, pp.25-47.
- Muttakin, M. B., Khan, A., and Mihret, D. G. (2017). Business group affiliation, earnings management and audit quality: evidence from Bangladesh. *Managerial Auditing Journal*, Vol.32, No.4-5, pp.427-444.

- Nam, S.W., and Nam, I.C. (2004), *Corporate Governance in Asia: Recent Evidence from Indonesia, Republic of Korea, Malaysia and Thailand*, Asian Development Bank Institute, Tokyo.
- Razzaque, R. M. R., Ali, M. J., and Mather, P. R. (2016). Real earnings management in family firms: evidence from an emerging economy. *Pacific-Basin Finance Journal*, Vol.40, Part B, pp.237-250.
- Rodríguez-pérez, G., and Hemmen, S. Van. (2010). Debt, diversification and earnings management. *Journal of Accounting and Public Policy*, Vol.29, No.2, pp.138-159.
- Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, Vol.42, No.3, pp.335-370.
- Ruiz, C. V. (2016). Literature Review of Earnings Management : Who, Why, When, How and What for?  
<http://verkkolehdet.jamk.fi/finnish-business-review/files/2016/03/FBR-2015-5.pdf>  
 (Accessed 21 April 2016)
- Saggese, S. (2013). The Effect of Pyramidal Structures on Earnings Management in Italy.  
<http://euram2011.mindworks.ee/public/papers/paper/426> (Accessed 27 August 2016)
- Sarkar, J., and Sarkar, S. (2008). Debt and corporate governance, *Economics of Transition*, Vol.16, No.2, pp.293-334.
- Shuto, A. (2009). Earnings management to avoid earnings decreases: a comparative analysis of consolidated earnings and parent-only earnings, *Journal of International Financial Management and Accounting*, Vol.20, No.3, pp. 199-239.
- Tam, O. K., and Tan, M. G. (2007). Ownership, governance and firm performance ownership, governance and firm performance in Malaysia, *Corporate Governance*, Vol.15, No.2, pp.208-222.
- Tang, Y. L. (2007). Accrual management vs. cash flow management. Unpublished Bachelor's Thesis, University of Amsterdam, Amsterdam.
- Thomas, J., and Zhang, X. (2000). Identifying unexpected accruals: a comparison of current approaches, *Journal of Accounting and Public Policy*, Vol.19, No. 4-5, pp.347-376.
- Thomas, W., Herrmann, D., and Inoue, T. (2004). Earnings management through affiliated transactions, *Journal of International Accounting Research*, Vol.3, No. 2, pp.1-25.
- Vieira, E. F. S. (2016). Earnings management in public family firms under economic adversity, *Australian Accounting Review*, Vol.26, No.2, pp.190-207.
- Xu, X., and Su, L. (2010). Studies on R&D Expenditure Earnings Management of Chinese High-Tech Listed Companies. Proceedings of the Information Engineering and Electronic Commerce (IEEC), Ternopil, Ukraine, pp.1-4
- Zamri, N., Abdul, R., Saatila, N., and Isa, M. (2013). The impact of leverage on real earnings management, *Procedia Economics and Finance* Vol.7, pp.86-95.
- Zang, A. Y. (2012). Evidence on the trade-off between real activities manipulation and accrual-based earnings management, *Accounting Review*, Vol. 87, No.2, pp.675-703.