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Relation between Corporate Governance Attributes and Financial Performance in Oil and Gas Industries

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Abstract: *This study explores the relationship between the structure of company board of directors (BOD) and financial performance looking at a sample of Malaysian oil and gas companies. In order to show a link exists between BODs and financial performance of a firm, the authors examined 28 Malaysian oil and gas companies listed on Bursa Malaysia, using annual data from 2007–2011 fiscal years. A multiple regression analysis examined the relationship between the characteristics of BODs and the firms performance relying on financial ratios namely, Return on Equity (ROE) and Return on Assets (ROA). Measures of corporate governance attributes employed are: composition of the board, CEO/Chairman duality, board size, independence of nomination committee and a risk management committee. The results revealed that an effective board size had a positive impact on financial performance for the Malaysian oil and gas industry but was the study was unable to establish if composition of the board and existence of risk management had a role. Interestingly, the findings indicate that independence of nomination committee and non-dual leadership structure are significantly and inversely related to financial performance. The outcome of the study implies that in pursuing the true spirit of corporate governance, having a board that is truly independent of management, with an appropriate number of directors is deemed vital for good financial performance.*

Keywords: Corporate Governance, Characteristics of Board of Directors, ROA, ROE, Oil and Gas.

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1. Introduction

The financial crisis in 1997 alarmed Asia, including Malaysia, and brought the issue of corporate governance to the fore. As a developing economy, strong

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corporate governance is essential for Malaysia to attract capital investments into the country. With a remarkable stock market presentation, considerable foreign investments have poured into the country. Dar, Nassem and Rehman (2011) believe good corporate governance practices enable a company to realise their strategic objectives and meet legal requirements while at the same time demonstrate their corporate accountability to stakeholders and investors alike. Dar et al. (2011) opine that in an emerging market, corporate governance strengthens property rights, reduce capital costs, develops capital market and cushions vulnerability during financial distress. Thus, corporate governance mechanism is critical as one of the company's efforts to protect investors and stabilise the capital market.

Malaysia has its own Code of Corporate Governance (the Code) of best practices to ensure and protect investor confidence against corporate scandals or financial crisis. The Code serves as a point of reference and monitoring mechanism for corporate governance best practices in Malaysia. According to Shleifer and Vishny (1996), corporate governance provides assurance for investors' investment returns. Thus, it appears that investors' and financial lenders' confidence is based on the principles of corporate governance. As a result, businesses in Malaysia need to make the most strategic decisions in order to remain competitive in the market. Therefore, Malaysia must embrace the concept of good corporate governance for sustainable growth. Malaysian companies need to sustain and develop in the global market to attract reputable investors as shareholders or joint venture partners. Thus, good financial standing is a critical parameter for attracting investments. Hence, from an investor's perspective, corporate governance and financial performance are two key areas to be considered before making a decision on investment.

Good corporate governance practices enhance transparency and improve a firm's financial performance. This is because the corporate governance code acts as an instrument to overcome irregular information, provides checks and balances and protects shareholders' interests. The need for an independent board is evident in mitigating this principal–agent relationship. The creation of a board of directors as part of corporate governance attributes is to monitor the firm's performance, thus, protecting the interest of shareholders. It is therefore anticipated that if the firms adhere to good corporate governance practices via an effective board of directors, the firm's value will increase and shareholders' wealth enhanced accordingly. The Asian economic slowdown in late 1990s revealed shocking and egregious and rampant corporate scandals, Coupled with companies' seemingly poor performance such as Trasmile Group Bhd, makes it imperative for firms' to incorporate good corporate governance attributes to boost financial performance.

A number of studies have explored the relationship between corporate governance and financial performance focusing on overall Malaysian public listed companies, critically, there are other specific sectors that need to be

analysed in terms of the large facet of corporate governance. For instance, despite the importance of corporate governance in every organisation, to the knowledge of this researcher, little emphasis has been placed on oil and gas companies in Malaysia. There is a dearth of empirical studies on corporate governance issues examining Malaysian oil and gas industry players.

Oil and gas operations are an interesting research area. They demand heavy capital commitment and there is an inherent risk that requires top-notch strategic planning and decision-making. According to Searle (2010), the negative social and environmental consequences resulting from integrated oil and gas industry activities are far-reaching. Lazonick (2010) concurred with this and concluded that the uncertain environment of the industry discourages strategic planning and financial commitment needed for the development of innovative enterprise. With the increase in oil and gas recovery operations, risks to humans, property and the environment are certainly high. Thus, good governance practices are indeed crucial for oil and gas companies to achieve their desired financial performance by being competitive, ethical and sustainable.

The Malaysian government has acknowledged the importance of integrated oil and gas support services to facilitate upstream activities (Khalid, 2012). The strategic industry is acknowledged as having the ability to create economic multiplier effects and contribute significantly to Vision 2020 namely, achieving fully developed nation status by 2020. The importance of the industry is seen from the government's support to promote growth as outlined in the Third Industrial Master Plan (IMP3) 2003-2006. In addition, the oil and gas industry contributes significantly to the nation's coffers as well as create as job opportunities. A survey conducted by Halliburton in 2012 confirmed that the oil and gas sector is the mainstay of Malaysia's economy contributing approximately 20% of gross domestic products (Abdullah, 2012).

From the foregoing, it is clear that there is a positive relationship between corporate governance attributes and financial performance, particularly in the oil and gas industry which merits further discussion. Thus, given the significant contribution of the oil and gas industry towards the Malaysian economy and the importance of good business judgement, the researchers had set out to investigate the relation between corporate governance attributes and financial performance of a sample of Malaysian oil and gas companies in Malaysia. Studies on corporate governance and financial performance of companies in Malaysia are mostly based on traditional elements of corporate governance attributes such as the size of the board, its composition and CEO duality without considering the importance of the independence of nomination committee and risk management committee in contributing towards a firm's financial performance.

Given the high risk associated with the oil and gas industry, the researcher decided to include risk management committees as one the

corporate governance attributes, which is not a compulsory requirement under the Malaysian Code on Corporate Governance (MCCG) , to assess the effectiveness of the committee in enhancing financial performance. For instance, in the global market, risk management is recognised as important by a leading Russian company, which operates a young fleet of 21 vessels, through its advanced safety management, quality and environmental risk committee (Demidenko & McNutt, 2010).

In the Malaysian context, most companies used as case studies in earlier research were randomly selected from Malaysian public listed companies without any particular focus on critical industries such as the oil and gas companies. Thus, this study is unique in that it uses a different research context (i.e. oil and gas companies) and includes risk management committees as one of its corporate governance attributes.

This study aims to contribute to the research in the area by examining the relationship between corporate governance attributes, particularly board composition, CEO/Chairman duality, board size, independence of nomination committee, risk management committee and financial performance of Malaysian oil and gas companies in Malaysia. The findings of the currently study are significant for the sustainability of Malaysian firms, particularly in the oil and gas sector. The research focus is on the relationship between corporate governance attributes and financial performance of Malaysian oil and gas companies and if the former has any significant effect on the latter

This study is organised in the following manner. Section 2 is a discussion of important and relevant literature on this area and hypothesis development while Section 3 outlines the study methodology. Section 4 Discusses the results and highlights the findings while Section 5 provides conclusion and implication of the study.

2. Literature Review and Hypotheses Development

This section provides a brief review of major studies on this topic as well as hypotheses development. The literature review focuses on the relationship between corporate governance attributes and financial performance of the organisation.

2.1 Corporate Governance and Financial Performance

Research findings indicate that companies with greater corporate governance are performing better financially and hence, possess higher market value. Notably, these works are inclusive. In general, studies show that there is a positive association between good governance practices and companies' financial performance in the form of greater Return on Assets (ROA), Return on Equity (ROE), Return on Investments (ROI), higher dividend pay-out and higher stock return (see Brown and Caylor, 2004; Drobetz *et al.,* 2003; Selvaggi and Upton, 2008). A study conducted by Bauer, Gunster and Otten (2003) looking at a sample of 242 of Europe's largest corporations listed in

the FTSE Eurotop 300 index found a positive relationship between corporate governance attributes and firm valuation. The research using Deminor Corporate Governance Ratings discovered that on average, companies with stronger corporate governance attributes were valued higher in terms of market value. Khan, Nemati and Ifthikar (2011) confirmed that efficient corporate governance mechanisms have a positive correlation with financial performance with good stock prices.

Azam et al. (2011) studied a sample of 14 oil and gas companies in Karachi in the period 2005–2010 with the objective of discovering if corporate governance influences a firm's performance. The financial measures used were Return on Assets (ROA), Return on Equity (ROE) and Net Profit Margin (NPM). It was found that a firm's financial performance is positively related with a strong corporate governance structure. Dar et al. (2011), who investigated the relationship between CEO status and Return on Equity (ROE) and profit margin (PM) in oil and gas companies listed on the Karachi Stock Exchange between 2004 and 2010, found a positive contribution of corporate governance attributes to firms' financial performance. Better corporate governance correlates with improved market valuation and operating performances in developing nations, according to some studies (Klapper & Love, 2004).

Agrawal and Knoeber (1996) noted investors looking for stable companies or a value strategy are willing to invest in governance while investors looking for a growth strategy are not concerned about corporate governance. This is due to the fact that from the investor's perspective, companies with good corporate governance will perform better, have lower risks and have better potential to attract further investment. A study conducted by Al-Matari et al. (2012) found that companies in Saudi Arabia may adopt corporate governance practices as a result of coercion from legislators; however, there is little likelihood that adoption of the regulations will improve organisational performance.

There are many studies and empirical findings associating corporate governance with financial performance with varying results. This could be due to differences in selected research methodologies, performance measurement, theoretical perspectives applied and business nature of the selected firm (Kakabadse *et al.,* 2001).

2.2 Board Composition and Financial Performance

One of the important elements of corporate governance is the structure of the board which refers to the formal organisation of the board of directors (BODs). According to Abdullah (2004), the BODs are a group of people responsible in setting the strategic direction of a company. The BODs hold fiduciary responsibilities to lead and direct the firm to achieve its corporate goal. Thus, it is critical for the company to ensure that the board is independent of management. This is because the board composition could potentially be

used to reduce the principal–agent problem, as the involvement of independent directors is used to improve the firm's ability to remain competitive.

According to Bliss (2011), independent directors are board members who do not hold a large amount of company stock and are not professionally related to the organisation they govern. Clifford and Evans (1997) agreed that except for their directorship, independent directors have no association with the company. There have been many studies,, observation on the issue of board composition and financial performance (Bhagat *et al.,*2008; Dalton *et al.,* 2008). There have been many studies on the effect of independent directors on a firm's financial with mixed results. Chen (2011) suggested firms should include more independent directors on their boards to ensure an efficient operation. It has also been suggested that younger and experienced board members with international exposure are imperative for a firm's effectiveness. According to Lam and Lee (2012), boards are perceived as effective if they consist of independent non-executive directors. Dalton and Dalton (2011) contended that the board members' ability and willingness to dutifully monitor the organisation is associated with their independence. In contrast, a study on successful Greek shipping companies which are mainly family-owned, (Koufopoulos *et al.,* 2010) noted a significant percentage of outside directors who were not independent. Other scholars however remained unconvinced (see Bhagat *et al.,*2002; Elloumi and Gueyie, 2001; Wen*,* Rwegasira and Bilderbeek, 2002). Fogel and Geier (2007) for instance, noted that that having a large number of independent directors on the board does not necessarily guarantee good corporate governance or higher shareholder returns. Dalton *et al.,*(2011) found no evidence linking a board's composition with a firm's financial performance. Sharing this observation, Yammeesri and Herath (2010) found that compared with outside directors, having a greater number of inside directors on the board leads to higher firm value. It is assumed that having a large number of independent directors leads to greater scrutiny and accountability ensuring better financial performance. Hence, the hypothesis is as follows:

H1: There is a positive relationship between the presence of independent directors on the board and financial performance.

2.3 CEO/Chairman Duality and Financial Performance

A common dilemma faced by many companies is whether the two key positions in a company - Board Chairman and CEO - should be held differently by two individuals or one person holds both positions. Many studies have addressed the CEO/Chairman duality issue with mixed results. Jensen et al. (1976) argued that there is a tendency for individuals holding the two top positions to succumb to personal interests potentially placing the firm's performance in jeopardy. Koufopoulos et al. (2010) noted that CEOs have a high level

of influence on most strategic decisions of an organisation. Thus, having a dual role means the CEO can influence the board's decision and with adverse effects on oversight of a firm's performance. According to Syriopoulos et al. (2012), dual responsibilities (assuming the role of both Chairman and CEO) can have an adverse effect on monitoring and oversight resulting in BODs making ill-informed decisions that work against shareholder interests. Dar et al. (2011) found that having a separate chairman and CEO can affect a firm's performance as agency problems mount when the same person holds both positions.

Feng, Goshan and Sirmans (2005) analysed the link between the BOD and Real Estate Investment Trust (REIT) performance. They found an insignificant relationship between dual leadership and financial performance. In contrast, the stewardship theory suggests that application of a single leadership structure may be good governance practice with positive contributions towards financial performance due to integration of instruction which expedites decision-making process (Mallin, 2007; Peng, Zhang and Li, 2007). It is assumed that being the chair ensures CEOs to have more control over board decisions and consequently reduces the board's role in monitoring the firm's financial performance. This study therefore proposes:

H2: There is a negative relationship between the CEO/Chairman duality and financial performance

2.4 Board Size and Financial Performance

The size of the Board has an inverse relationship with market performance implying that the market views large BODs as ineffective; however, a large board helps provide diversity and brings wealth and expertise on board. Empirical evidence on the relationship between board size and firm performance remains inconclusive and has yielded conflicting results. According to Cheng (2008), bigger boards mean lower profitability because larger boards are more conservative and less risk-taking, providing an effective corporate governance mechanism. In contrast to theories predicting that lesser boards are more effective, a study conducted by Mohamad (2009) on a sample of 174 financial institutions and savings-and-loan-holding companies between 1995 and 2002 confirmed that having a larger board r does not undermine their performance.

Chan and Li (2008) and De Andres, Azofra and Lopez (2005) disagreed with this finding arguing that bigger boards are linked with poor performance since increasing the size of the BODs results in it becoming less effective in monitoring. According to Wei, Tam and Tan (2010), monitoring capability is also much reduced in large boards. A study conducted by Dar et al. (2011) on Pakistan's oil and gas industry concluded the size of the board should be restricted for it to be effective. Concurring with this, Sulaiman et al. (2012) suggested the board should be an appropriate and acceptable size, i.e. not too

big or not too small and more importantly, companies should allow the board to proactively participate and contribute positively to making sound decisions. Koufopoulos et al. (2010) findings demonstrated that Greek shipping firms have smaller boards, ranging between five and seven members, due to their family-owned and controlled structure. Bliss (2011) noted a bigger Board is usually associated with inefficiency and a firm's poor financial performance.

H3: There is a positive association between the size of the board and financial performance.

2.5 Independence of Nomination Committee and Financial Performance

The nomination committee is tasked with selecting an effective BODs. It recommends replacements should a position becomes vacant. The nomination committee also appraises the skills and competencies of the board in leading and monitoring the strategic direction of a company. Spira and Bender (2004) strongly recommended the establishment of a board sub-committee as part of good corporate governance practices. However, in establishing a sub-committee (including a nomination committee), listed companies in China lag substantially behind their counterparts in the west (Liu *et al*., 2010). A study conducted by Lam et al. (2012) using secondary data from 346 public listed companies in the Hong Kong Stock Exchange from 2001 to 2003 on the relationship between board committee and financial performance found that nomination committees have a positive relationship with financial performance depending on how independent the members are. From an emerging market perspective, Kumudini and Anona (2012), using data from top 50 listed companies in The Lanka Monthly Digest 50 (LMD) between 2003 and 2007, discovered that committees are positively associated with financial performance. Lam et al. (2012) concurred with the findings stating that an independent board committee improves a firm's corporate governance. It is suggested that having more independent directors on the nomination committee ensure effective appointments and evaluations of the board. This will produce a more effective board, thus contributing positively to the firm's financial performance. It is therefore suggested that:

H4: There is a positive relationship between the independence of the nomination committee and financial performance.

2.6 Risk Management Committee and Financial Performance

According to the Australian Securities Exchange Corporate Governance Council (2007), risk management involves the culture, structure and processes of taking opportunities while monitoring potential adverse effects. Demidenko et al. (2010) viewed risk management as an important element of corporate governance as it provides a means of realising a corporate outfit's objective and monitoring the performance of an agent by a principal, while Walker

(2009) stated that risk management committees monitor the level of risk while trying to maximise returns by advising the board on current risk exposures and future risk strategies. Culp (2002) defined risk management as specific efforts to establish buffers or contingencies to absorb adverse economic effects and impose controls that will mitigate extreme losses to company. As a result, many companies believe that risk management is essential to sustain a competitive advantage. From the oil and gas industry perspective, Demidenko et al. (2010) believed the establishment of risk management committees are an effective mitigation mechanism especially when engaging in risky businesses such as the oil and gas sector.

Cummins et al. (2009) noted that risk management and financial activities improve a firm's efficiency and thus performance by reducing costs. Tufano (1996) however, found little empirical evidence to support the theory that risk management practices are a means to maximising shareholder value. The study discovered that a firm's risk management practices to reduce their exposure to risk such as hedging are more likely to be related to managerial risk aversion than to maximising shareholder value. Spellman (2012) opined that risk management committees have a useful role to play in ensuring successful risk management. A survey was conducted among executives in Ireland and Great Britain and the results that supported the contention that damage to a company's reputation or brand has become one of the most significant risks for business enterprises.

Yatim (2010) studied the impact of risk management committees on a firm's financial performance by examining 690 public listed companies in Malaysia in 2003. The study discovered a strong relationship between risk management committees and the board, thus demonstrating commitment and awareness of the importance of internal control systems. Risk management committees contribute towards risk mitigations, ultimately improving a firm's financial performance. This leads to the fifth hypothesis:

H5: There is a positive association between the risk management committee and financial performance.

3. Methodology

This section highlights the methodology adopted by the study which includes profile of study context, population and sampling method, data sources and collection and measurement of the study variables.

3.1 Profile of the Oil and Gas Industry

The oil and gas industry can be classified into three market segments: "upstream", "midstream" and "downstream". "Upstream" relates to exploration and production of oil and natural gas, which is dominated by state-owned national oil companies (Searle *et al.,* 2010). Upstream activities

are dominated by gigantic integrated oil and gas companies and national oil and gas companies. Integrated oil and gas companies are fully integrated multinational companies that are geographically diversified and engaged in exploration, production, refining and distribution as well as ownership or partial ownership of petrochemical plants. Examples of such companies are British Petroleum, Royal Dutch/Shell and ExxonMobil. National oil and gas companies, usually wholly owned by the government, are entrusted with the country's entire oil and gas resources. These companies such as Petronas and China National Offshore Oil Corporation are tasked with developing and adding value to the natural resources (Searle *et al.,* 2010). "Midstream" involves transportation and storage of products while "downstream" activities involve the refining and marketing of crude oil and which are usually dominated by publicly-owned companies (Searle *et al.,* 2010). According to Razalli (2005), downstream activities take place after the oil is transported to crude terminals from the reservoir.

The past decade has been extremely profitable for the oil and gas companies as oil prices plummeted dramatically from 2003 to 2008. The *Financial Times* even used the term "Seven Sisters" referring to the seven state-owned national companies led by Saudi Aramco, China National Petroleum Company, Russia's Gazprom, Venezuela's Pdvsa, the National Iranian Oil Company, Brazil's Petrobras and Malaysia's Petronas (Hoyos, 2007). This has forced major oil and gas companies to become increasingly aggressive in upstream projects and activities.

3.2 Population and Sampling

Sample Size

The population identified in this study comprises the service sector in the oil and gas industry listed on Bursa Malaysia from 2007 to 2011. The researcher chose oil and gas companies as the latter contribute significantly to Malaysia's gross domestic products and provide employment opportunities. The sampling in this study consists of all public listed oil and gas companies in Malaysia on the assumption that it would have convenience of access and offer accurate representation of oil and gas industry in Malaysia.

Selection of the companies is completed using a purposive sampling technique from all public listed companies listed on Bursa Malaysia. The sample selection is based on the condition that the core source of operating revenue is various integrated oil and gas activities contributing to the oil and gas industry. Hence, the sample includes a variety of companies operating in the oil and gas industry regardless of profitability, market value and firm size. The sample meets diverse corporate features covering various segments of business operations and different market capitalisations. Furthermore, it is anticipated that as shares are publicly traded, this will provide sufficient data

over the research period.

Data were collected based on a final sample of 28 oil and gas companies listed on Bursa Malaysia from 2007 to 2011 fiscal years. The selected companies provide various integrated services to support the oil and gas industry as one of its core businesses such as providing offshore support vessels, offshore construction and installation, offshore engineering, offshore fabrications, hook up and commissioning, ship building, ship repair, port services, berthing and towing services and other oil and gas activities. A list of the oil and gas companies and their oil and gas activities is provided in Appendix 2. Eleven companies have been excluded from the sample size as the listing date did not fall within the scope of study. The sample of 28 companies represents about 2.98% of 941 companies listed on Bursa Malaysia as at 31 December 2011, extracted from Bursa Malaysia's 2011 Annual Report.

The corporate governance attributes and financial performance of Malaysian public listed oil and gas companies were examined over a five-year period from 2007 to 2011. The year 2007 marked significant changes in MCCG highlighting the importance of corporate governance and disclosure requirements. Data is represented the new corporate governance after the implementation of the amended version of the MCCG in 2007.

Date Sources and Data Collection

As at 31 December 2011, 941 companies providing oil and gas services to the oil and gas sector were listed on the Bursa Malaysia. The final sample for the present study are limited to those listed on Bursa Malaysia from 2007 to the year 2011. Data were extracted from the respective companies' annual reports, available online from the Bursa Malaysia website.

Table 1 presents the distribution of sample companies based on oil and gas industry classification. The distribution over a five-year period is similar for all three classifications. The majority of the sample companies in each year (57.1%) are involved in upstream activities by providing support services for the oil and gas exploration activities conducted by the oil majors. According to Jamaludin (2011), under the Ninth Malaysia Plan (9MP), the government has allocated RM13.1 billion for upstream oil and gas activities. The allocation is for oil and gas players to maximise reserves recovery and exploration in the existing fields, as well as to invite international oil and gas companies to participate in deep-water exploration activities. The commitment given by the government has been successful in directly spurring exploration activities and spending by the oil majors to sustain and optimise production.

Wei (2012) stressed that the critical shortage of gas in Malaysia has encouraged oil majors to develop exploration activities, which in turn will benefit local oil and gas players supporting upstream activities. With the emphasis on exploration activities under the 9MP which comprise petroleum

exploration and petroleum field development, more upstream activities such as offshore support vessels, offshore fabrication and maintenance are required to support these operations. In addition, the upstream activities need significant capital commitment from the company supporting offshore exploration. Thus, most of the companies involved in the upstream activities are mainly public listed companies which depend on strong capital injection and investment, particularly from institutional investors, to ensure their sustainability. Being public listed provides these companies with better access to capital markets whenever they need to raise funds.

Table 1 indicates that each year, 32.1% from the sample companies are contributed by the midstream activities. Jamaludin et al. (2011) noted these midstream activities are picking up especially with the RM5billion Pengerang Deepwater petroleum terminal and Petronas' RM60 billion Refinery and Petrochemical Industrial Development (RAPID) project. These contracts substantially stimulated the midstream activities among 45 public listed oil and gas companies from 2007–2011. Downstream activities are mainly involved in the refining and marketing of crude oil, with companies supporting the downstream activities mostly consisting of small to medium-sized companies. They are usually traders and private companies operating on a small scale and thus, compared with the upstream and midstream activities require less capital commitment. This explains the lowest percentage (10.7%) of downstream activities participated in by the sample companies throughout the five-year period.

Table 1: Sample distribution based on oil and gas industry classification for years 2007–2011

Year	Oil and Gas Industry Classifcation	No. of Companies	(%)
2007–2011	Upstream	16	57.1
	Midstream	9	32.1
	Downstream	3	10.7
		28	**100.0**

3.3 Variable Measurement

Figure 1 represents the operationalisation of research variables in this study.

Figure1: Operationalisation of research variables

Variables	Operationalisation
Independent Variables:	
Board composition (BODCOM)	Number of independent directors divided by total directors on board
CEO/Chairman duality (DUAL)	Binary variable coded as "1" for in case a person serves both as CEO and BOD Chairman i.e. those employing CEO duality and "0" for those not applying.

Figure1: (Continued)

Variables	Operationalisation
Independence of Nomination committee (NOMCOM)	Proportion of independent directors on nomination committee
Risk Management Committee (RMCOM)	Binary variable coded as "1" if there is risk management committee exist and "0" if there is no risk management committee exist
Control Variable:	
Company Size (SIZE)	Natural logarithm of total assets
Dependent Variables:	
Return on Equity (ROE)	Net income/average common stockholders' equity
Return on Asset (ROA)	Net income/average assets
Earnings Per Share (EPS)	Net income/weighted average common of shares

4. Results and Discussion

This section details and discusses the findings of the study such as profile of the sampled companies, descriptive analysis, correlation matrix and regression result.

4.1 Profile of the Sampled Companies

Table 2 presents the percentage of independent directors of the sample companies throughout the five-year period. The table shows that a great majority of these companies have more than 33% of independent directors in their board. Interestingly, there is no company with less than 33% of independent directors in its board except in one in 2007. Therefore, the recommendations contained in the MCCG 2007 for the board to comprise at least one-third of independent non-executive directors has been complied with by the majority of oil and gas companies. Data gathered also showed that from 2009 to 2011, the number of companies with 100% independent directors increased by 50% with two of the sample companies appointing all independent directors as board members to oversee the strategic directions of the company. This practice is not in compliance with the 2007 amended MCCG which recommended a balance between executive directors and non-executive directors in the Board to ensure no domination of power exists in the decision-making process.

Table 2: Distribution of Independent Directors of sample companies for year 2007–2011

Year	Range of Percentage (%)	No. of Companies	Percentage (%)
2007	0–32	1	3.6
	33–50	7	25.0
	More than 50	20	71.4
		28	**100.0**
2008	0–32	0	0.0
	33–50	5	17.9
	More than 50	23	82.1
		28	**100.0**
2009	0–32	0	0.0
	33–50	4	14.3
	More than 50	24	85.7
		28	**100.0**
2010	0–32	0	0.0
	33–50	4	14.3
	More than 50	24	85.7
		28	**100.0**
2011	0–32	0	0.0
	33–50	2	7.1
	More than 50	26	92.9
		28	**100.0**
Total Observations		**140**	

Table 3 shows the distribution of chairman or CEO duality practised by Malaysian oil and gas companies. Results suggested that throughout the five-year period, 78.6% of the sample companies practised CEO/Chairman duality. The, CEO/Chairman separation as recommended by MCCG 2007 is complied with by more than half of the Malaysian oil and gas companies. On the other hand, surprisingly, despite recommendations from MCCG 2007 on the separation of roles between the two key functions, 21.4% of the sample companies in each year still practised the duality structure, indicating the existence of a family-owned leadership structure among six Malaysian oil and gas companies.

Table 3: Distribution of Chairman/CEO duality of sample companies from 2007 to 2011

Year	Ranges of Responsibilities	No. of Companies	Percentage (%)
2007–2011	CEO/Chairman Duality	6	21.4
	CEO/Chairman Separation	22	78.6
		28	**100.0**

Table 4 shows that from 2007 to 2011, the majority of Malaysian oil and gas companies have between five and 10 board members. Lipton and Lorsh (1992) suggested an ideal board size of eight or nine, with 10 being the maximum number for a board to be effective. The results also showed that no Malaysian oil and gas companies had more than 10 board members as mentioned by Lipton et al. (1992).

Data showed there are only a few companies with fewer than five board members. For instance, between 2007 and 2008, only one company had less than five board members and no company had fewer than five board members between 2009 and 2010. However, in 2011, two companies had fewer than five board members. Huse (1990) suggests that the number of directors usually corresponds with the size of the company. Based on its logarithm total assets, these companies usually have between eight and nine BODs.

Interestingly, a great majority of the companies with fewer than five board members in the sample companies have family members in their board and assumed both the role of Chairman and CEO. This is consistent with the findings of the study conducted by Koufopoulos et al. (2010) where Greek shipping firms have a small board of between five and seven board members due to their family-owned and controlled structure. Theotokas (1998) suggested that the small size of boards in shipping firms can be linked to a lack of ownership and separation of management. This is consistent with some Malaysian oil and gas industry companies which practises CEO/Chairman duality. This may indicate that family-owned and controlled companies have fewer board members for easier monitoring and control.

Table 4: Distribution of Board size of sample companies for years (2007–2011)

Year	Range of Number of Directors on Board	No. of Companies	Percentage (%)
2007	< 5	1	3.6
	5–7	14	50.0
	8–10	13	46.4
	>10	0	0.0
		28	**100.0**
2008	<5	1	3.6
	5–7	12	42.9
	8–10	15	53.6
	>10	0	0.0
		28	**100.0**
2009	<5	0	0.0
	5–7	15	53.6
	8–10	13	46.4
	>10	0	0.0
		28	**100.0**

Table 4: (Continued)

Year	Range of Number of Directors on Board	No. of Companies	Percentage (%)
2010	<5	0	0.0
	5–7	13	46.4
	8–10	15	53.6
	>10	0	0.0
		28	**100.0**
2011	<5	2	7.1
	5–7	12	42.9
	8–10	14	50.0
	>10	0	0.0
		28	**100.0**
Total Observations		**140**	

4.2 Descriptive Statistics

Table 5 presents descriptive statistics for all variables of interest for the average of five years from 2007 to 2011 among 28 oil and gas companies. On average, EPS appears relatively stronger than ROE and ROA (EPS: mean = 14.174; ROE: mean = 0.119; ROA: mean = 0.072). However, in terms of EPS, there is a wide deviation between firms based on the minimum value, maximum value and standard deviation. Nonetheless, there is an indication of the economy's slowing down, as suggested by the negative minimum value of ROE, ROA and EPS figures.

According to Bank Negara Malaysia's 2008 Quarterly Bulletin, 2008 brought to Asia a host of economic catastrophes including spill-over effects from the subprime crisis and more devastatingly, the extraordinary surge in international oil prices causing its own spill-over effects and a slowdown in Malaysia's economy. Consequently, this has caused the oil majors to reduce exploration and production of oil and gas activities. They are more cautious in their spending, hence only a limited number of new contracts are tendered. Thus, the negative ROE, ROA and EPS suggest that the deteriorating performance of some companies in the oil and gas industry is possibly influenced by these external factors. Interestingly, there were increasing numbers of companies with negative ROE, ROA and EPS from 2008 to 2011. In 2011, 11 Malaysian oil and gas companies experienced net losses compared with only two in 2007. According to AmResearch (2011), while field development activities were expected to recover in 2011 and beyond, some oil and gas companies still struggled to fully recover from the financial crisis which explains the deteriorating performance of a large number of Malaysian oil and gas companies in 2011.

As for the independent variables, the mean board size is about seven, suggesting that Malaysian oil and gas companies have a slightly lower number of board members. Based on the maximum board size of 10 and deviation of 1.552, the findings imply that Malaysian oil and gas companies have smaller boards. According to researchers, this ensures good financial performance. For instance, Lipton et al. (1992) recommended an ideal board size of eight or nine members, with 10 being the maximum number. The nomination committee (NOMCOM) has the second highest mean of 0.893. As expected, the setting up of more independent nomination committees has influenced the Malaysian oil and gas industry. This indicates that majority of Malaysian oil and gas companies' complied with MCCG's recommendation to establish an independent nomination committee.

Surprisingly, Chairman/CEO duality (DUAL) and establishment of risk management committee (RMCOM) score among the lowest mean (DUAL: mean = 0.210; RMCOM: mean = 0.29). This suggests that on average, the number of CEOs also serving as chairperson in Malaysian oil and gas companies constituted 21% for the five-year period. Hence, MCCG's recommendation for role separation between the board chairman and the CEO had been moderately complied with by 79% of the Malaysian oil and gas companies throughout the five-year period. On the other hand, 29% of Malaysian oil and gas companies throughout the review period set up risk management committees, which is relatively low, considering the importance of risk assessment in the oil and gas industry. This could be due to the emphasis placed by MCCG on the importance of BODs as a whole, but not on sub-committees within the board. The maximum and minimum values for all independent variables are 0 and 1, demonstrating the presence of corporate governance attributes in respective companies.

The company size (SIZE) as control variable is distributed with the mean of 8.929 and standard deviation of 0.696. This suggests that on average, during the five-year period, there was on average 9 BODs in the Malaysian oil and gas companies. The majority of bigger companies in the oil and gas industry are involved in upstream and midstream activities that require high capital commitment and healthy balance sheets to attract investors.

In summary, the great majority of the sampled companies complied with the MCCG's requirement to ensure one-third of independent non-executive directors in the board. Malaysian oil and gas companies have slightly fewer board members than recommended and some companies have CEO duality features, indicating a family-owned business. The majority of Malaysian oil and gas companies complied with the requirement to set up an independent nomination committee. The companies in the sample are less likely to set up a risk management committee in the future, despite their acknowledgment of the importance of risk assessment, which they carry out at the operational level.

Table 5: Descriptive Statistics Average for all Variables for Years 2007-2011

Variables	Minimum	Maximum	Mean	Std. Deviation	N
Dependent Variables					
ROE	-1.104	4.662	0.119	0.455	140
ROA	-1.060	2.852	0.072	0.279	140
EPS	-57.080	324.190	14.174	35.025	140
Independent Variables					
BODCOM	0.29	1.00	0.677	0.192	140
DUAL	0	1	0.210	0.412	140
BSIZE	4	10	7.230	1.552	140
NOMCOM	0.00	1.00	0.893	0.173	140
RMCOM	0	1	0.290	0.453	140
Control Variable					
SIZE	7	11	8.929	0.696	140

Notes:
BODCOM = Board composition
BSIZE = Board size
EPS = Earnings per Share
ROA = Return on Assets
NOMCOM = Independence of nomination committee
RMCOM = Risk management committee
DUAL = Chairman/CEO duality
SIZE = Company size
ROE = Return on Equity

4.3 Correlation Analysis

Pearson correlation analysis was performed in order to obtain an understanding of the relationship among all the variables in the study. The correlation matrix in Table 6 shows that there is no multicollinearity problem because most of the variables correlates below 0.8 (Hair *et al.,* 2010); however, ROA and EPS are highly correlated as both are the measures of company profitability. Based on Table 6, the independence of nomination committee (NOMCOM) is significantly and inversely correlated to all the firms' financial performance (ROE, ROA and EPS). The result suggests that the independence of nomination committee does not improve financial performance. This could due to the fact that the independence of a nomination committee was a response to slower growth.

Table 6: Pearson correlations average for all variables for year 2007 - 2011

	Variables		1	2	3	4	5	6	7	8	9
1	BODCOM	Pearson Correlation	1								
		Sig. (2-tailed)									
2	DUAL	Pearson Correlation	-.223**	1							
		Sig. (2-tailed)	0.008								
3	BSIZE	Pearson Correlation	.208*	-.291**	1						
		Sig. (2-tailed)	0.014	0							
4	NOMCOM	Pearson Correlation	.333**	-.277**	.190*	1					
		Sig. (2-tailed)	0	0.001	0.024						
5	RMCOM	Pearson Correlation	0.033	-.176*	.520**	-0.11	1				
		Sig. (2-tailed)	0.702	0.037	0.00	0.195					
6	SIZE	Pearson Correlation	.202*	0.129	.288**	0.037	0.134	1			
		Sig. (2-tailed)	0.017	0.128	0.001	0.666	0.116				
7	ROE	Pearson Correlation	-0.066	.238**	0.049	-.417**	-0.008	0.112	1		
		Sig. (2-tailed)	0.442	0.005	0.569	0.00	0.93	0.187			
8	ROA	Pearson Correlation	-0.039	.223**	0.1	-.415**	-0.009	0.017	.907**	1	
		Sig. (2-tailed)	0.651	0.008	0.238	0.00	0.917	0.841	0.00		
9	EPS	Pearson Correlation	0.123	.181*	0.127	-.386**	-0.025	.251**	.877**	.833**	1
		Sig. (2-tailed)	0.146	0.032	0.135	0.00	0.771	0.003	0.00	0.00	

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

4.4 Multiple Regression Analysis

All models above indicate that the Tolerance and VIF values are well below the cut-off points for determining the presence of multicollinearity, thus suggesting no multicollinearity problem with cross correlation. The findings from multiple regressions (Table 7) clearly indicate mixed results between the corporate governance variables and the performance variables measured using ROE, ROA and EPS, respectively.

Table 7: Regression result between corporate governance attributes, control variables and firm performance

	Model 1	**Model 2**	**Model 3**	**Tolerance**	**VIF**
Variables	Beta (t-value)	Beta (t-value)	Beta (t-value)		
Constant	0.316 (0.672)	0.522 (1.850)	-35.088 (-1.030)		
BODCOM	0.164 (0.835)	0.170 (1.440)	43.263 (3.045)**	0.823	1.215
DUAL	0.177 (1.887)	0.131 (2.332)*	9.386 (1.385)	0.790	1.266
BSIZE	0.070 (2.447) *	0.064 (3.743)**	6.535 (3.145)**	0.592	1.690
NOMCOM	-1.213 (-5.434)**	-0.788 (-5.885)**	-105.78 (-6.546)**	0.789	1.268
RMCOM	-0.164 (-1.784)	-0.127 (-2.313)*	-18.71 (-2.815)**	0.678	1.476
SIZE	0.031 (0.571)	-0.036 (-1.105)	7.89 (2.020)**	0.832	1.202
R^2	0.244	0.278	0.333		
Adjusted R^2	0.210	0.245	0.303		

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

Notes: Independent variables: BODCOM, DUAL, BSIZE, NOMCOM, RMCOM Control variable : SIZE

Dependent variable : ROE (Model 1)
Dependent variable : ROA (Model 2)
Dependent variable : EPS (Model 3)

The regression results suggest that BODCOM, DUAL, BSIZE and SIZE are positively associated with financial performance measured using ROE, while NOMCOM and RMCOM are inversely associated with financial performance measured using ROE. The result suggests that BSIZE and NOMCOM are significantly related with ROE, indicated by its statistically significant p-value, whereas BODCOM, DUAL, RMCOM and SIZE are insignificantly related with ROE, as indicated by its high p-value of > 0.05.

regression results found positive associations between BODCOM, DUAL, BSIZE and ROA while the remaining NOMCOM, RMCOM and SIZE is inversely related to a firm's performance measured using ROA. In terms of significance, DUAL, BSIZE, NOMCOM and RMCOM are significantly related with ROA due to its significant values. The remaining independent variables, which are BODCOM and SIZE, are insignificantly related to ROA, indicated by its p values of > 0.05. Five independent variables are significantly related to EPS, indicating the latter as the most significant measurement of financial indicator in the study. The regression results indicate almost similar correlation with ROE where EPS is positively correlated with BODCOM, DUAL, BSIZE and SIZE. The remaining NOMCOM, RMCOM and SIZE are all inversely related to firm performance measured using EPS. In terms of significance, all variables showed a significance correlation with EPS except DUAL, which is insignificantly correlated with EPS due to p-value of >0.05.

In order of importance, the regression findings also showed (according to β=-0.522, t=-6.546, p<0.01) that NOMCOM's relationship with EPS is the best significant variable, with beta of -0.522 and p values of <0.01. Overall, BSIZE and NOMCOM are found to be significantly correlated with all the three financial measures (ROE, ROA and EPS).

Table 8 provides a summary of the regression analysis interpretation. Five hypotheses were put forward in this study. The results based on regression analysis indicated that H1 (BODCOM) is found to be insignificantly correlated with financial performance, accept for EPS; H2 (DUAL) is significantly correlated to ROA and EPS but with different direction; H3 (BSIZE) is significantly and positively correlated to all financial performance; H4 (NOMCOM) is found to be significantly but negatively correlated to all the financial performance; and H5 (RMCOM) is rejected because no significant relationship was detected.

5. Discussions

In terms of board composition and financial performance, this result is surprising (ROE: β =0.164, p = 0.405; ROA: β = 0.170, p = 0.152), especially when considering more than 90% of oil and gas companies complied with the one-third independent non-executive directors requirement (as per the 2007 MCCG amended code). Consequently, the board of directors are viewed as independent but, in actual fact, may not be strictly independent of management. It is possible that organisations view compliance towards good governance practices more as coercion from regulatory bodies rather than as a right step towards organisational effectiveness. Nevertheless, the findings are similar with Annuar et al. (1994) suggesting that the insignificance of the results might be due to other determinants factors in defining the degree to which the board is independent of management. Conversely, for the association between board independence and firm performance measured using EPS (β = 43.263, p = 0.03), it is discovered that board independence is positively

related with financial performance as indicated by its statistically significant regression coefficients with EPS. The result reflects the importance of the having a greater number of independent directors in the boards to enhance the firm's financial performance.

It was observed that 60% of the Malaysian oil and gas companies that are practicing CEO/Chairman duality have bigger assets to generate income. This could be the reason that dual leadership structure is significantly related to financial performance in terms of ROA. The results suggest that the leadership structure preferred by companies does have significant bearing on financial performance and surprisingly, for those companies practicing CEO duality. The findings also imply that family firms with related directors are more likely to practise dual leadership structure consistent with a study on Hong Kong public companies (Lam et al., 2012). Conversely, CEO/Chairman duality is positively and insignificantly associated with financial performance measured using ROE and EPS, indicated by p values > 0.05. (ROE: $\beta = 0.177$, $p = 0.061$; EPS: $\beta = 9.385$, $p = 0.168$). This finding however is in line with earlier empirical studies (for instance, Mallin, et al., 2007; Peng, et al., 2007) that agree on the positive implications of CEO/Chairman duality for a firm's financial performance due to integration of instruction, resulting in a faster decision making process.

Analysing the leadership structure of Malaysian oil and gas companies further may shed some light on it. It was found that 67% of the companies that are practicing dual leadership structure began with the CEO as the founder or directly involved in the operations of the organisations prior to being appointed as the CEO/Chairman of the board. Thus, besides "entrepreneurship driven", most of the CEOs possess technical knowledge and management skills to lead the board and oversee the operations of the company. Effectively, this has given the companies an added advantage to compete in the oil and gas industry while at the same time monitoring company performance and promoting shareholder interests. On the other hand, it is possible that due to this nature, stakeholders perceive these companies as being more transparent in their performance and have well established policy, thus protecting employees from violating the system.

The result indicates that the board size has a significantly positive relationship with financial performance measured using ROE, ROA and EPS. (ROE: $\beta = 0.0.070$, $p = 0.016$; ROA: $\beta = 0.064$, $p < 0.01$; EPS: $\beta = 6.535$, $p = 0.02$). The result may suggest that increasing the number of directors in oil and gas companies will not undermine performance. This finding however, contradicts previous studies which found a bigger board is related to poor performance (for instance, Chan et al., 2008; De Andres et al., 2005). Nonetheless, it is important to note that most companies in the 70 sample companies that have between eight to 10 board members are stable companies with generous shareholder funds and asset-generated income. The result may indicate that having a stable number directors on board places pressures on

management to closely monitor the firm's operations to increase its financial performance. Thus, board size is positively related to firm performance measured using ROE, ROA and EPS.

It was found that independence of nomination committee has an inverse relationship and significant association with financial performance irrespective of measures employed to increase it (financial performance) (ROE, ROA or EPS). The result is statistically represented by (ROE: β = -1.213, $p<0.01$; ROA: β = -0.788, $p <0.01$; EPS: β = -105.787, $p <0.01$). The findings discovered significant association between independence of nomination committee and financial performance, but surprisingly not as expected. The result showed that the independence of the nomination committee depends on the independence of the board itself. The findingis also consistent with an earlier study conducted by Yammeesri et al. (2010) examining firms in Thailand.

Further examination of the composition of the nomination committee may shed some light on it. Based on the collected data, it was found that the composition of nomination committee have been well complied with (based on MCCG's recommendation). The study also showed an increasing trend of having outside directors in the nomination committee. As suggested by Lam et al. (2012), in general, the effectiveness of the committee relies on the independence of its composition. The nomination committee is established mainly to meet the MCCG's requirement, thus it might not much link with the directors' capability, skills and competencies towards improving the firm's financial performance.

The regression result indicates risk management committees are adversely and significantly associated with financial performance measured using ROA and EPS. The result is statistically represented by (ROA: β = -0.127, $p =0.022$; EPS: β = -18.712, $p =0.006$). Conversely, risk management committee is negatively and insignificantly related to financial performance measured using ROE indicated p-values which is >0.05 (ROE: β = -0.164, $p = 0.077$). Surprisingly, even though the study noted the association between risk management committee and financial performance (ROA & EPS), it was contrary to what was expected. This result might be attributable to the limited information the board had in respect of the risk associated to the decision making process. This findings, however, are consistent with Tufano et al. (1996) suggesting that risk management practice is more likely to be related with managing risk aversion and not necessarily an effective means to maximise shareholder value. The negative relationship could be explained by the operationalisation of the committee as most companies perform internal control and risk management assessment at the operation level without specifically setting up a risk management committee at the board level. In addition, the establishment of a risk management committee at the board level has caused resource, functions and skills' duplication with other committees

and thus, could be the reason why risk management committees have a negative effect on financial performance.

Table 8: Summary of multiple regression analysis interpretation

Financial Measurement	Independent Variable	Relationship Direction	Significant Value	Result on Hypothesis
ROE	BODCOM	Positive	0.405	H1 rejected
ROE	DUAL	Positive	0.061	H2 rejected
ROE	BSIZE	Positive	0.016*	H3 accepted
ROE	NOMCOM	Negative	0.000**	H4 accepted
ROE	RMCOM	Negative	0.077	H5 rejected
ROE	SIZE	Positive	0.569	None
ROA	BODCOM	Positive	0.152	H1 rejected
ROA	DUAL	Positive	0.021*	H2 accepted
ROA	BSIZE	Positive	0.000**	H3 accepted
ROA	NOMCOM	Negative	0.000**	H4 accepted
ROA	RMCOM	Negative	0.022*	H5 accepted
ROE	SIZE	Negative	0.271	None
EPS	BODCOM	Positive	0.003**	H1 accepted
EPS	DUAL	Positive	0.168	H2 rejected
EPS	BSIZE	Positive	0.002**	H3 accepted
EPS	NOMCOM	Negative	0.000**	H4 accepted
EPS	RMCOM	Negative	0.006**	H5 accepted
EPS	SIZE	Negative	0.045	None

Significance level *: $p<0.05$ (two-tailed); **:$p<0.01$ (two-tailed)

6. Conclusion and Implications

This study examined corporate governance attributes among 28 Malaysian oil and gas companies between 2007 and 2011. Five key variables, including one control variable, company size, were of interest namely, board composition, Chairman/CEO duality, board size, independence of nomination committee and risk management committee. These variables were examined because they contributed significantly to the board's effectiveness in discharging its responsibility to increase shareholder and firm value. The study anticipated that the selected corporate governance attributes would affect a firm's financial performance. Financial ratios – ROE, ROA and EPS – were then used as indicators to measure the financial performance.

The objective of the study was to discover if there was a relationship between corporate governance attributes and financial performance of Malaysian oil and gas companies. The result and evidence suggest companies

with good governance practices accomplish more than the others which underestimate their importance.

This study has a number of implications. The study provides useful insights which may be beneficial to the oil and gas companies specifically. The findings are consistent with earlier works and reinforced the theories of previous research. Alternatively, data from the study provide opportunities for researchers to investigate other potential factors that can add value to this field of study.

Indeed, the study offers a valuable insight into the Malaysian oil and gas environment with regard to its corporate governance practices. The findings contribute to the literature on corporation and managerial practice in three key areas. First, the findings provide guidelines for shareholders and managers to determine their degree of commitment to corporate governance practices in Malaysia, particularly in the oil and gas industry. Such input could be very useful to assist the government in improving corporate governance practices which is compatible with Malaysian culture, political and economic environments. It is also anticipated that good corporate governance attributes will effectively reduce corporate issues through effective monitoring by an independent board of directors. This includes maintaining a smaller board size of around eight members and the establishment of specific board committees that are truly independent of management. Effective monitoring by an independent and effective board of directors motivates managers to perform according to the interest of shareholders, hence, enhancing the firm's value.

In conclusion, it is hoped that this study contributes towards encouraging good governance practice among corporations, particularly the Malaysian oil and gas companies. It is indeed crucial for companies to ensure that adoption of good governance practice is not solely based on requirements from a regulatory body, but also on gaining confidence from investors to increase the firm's value. In that, the study has successfully achieved its objective.

References

Abdullah, R. (2012) *Oil and Gas Industry: Opportunities and Challenges ahead*, available at http://www.mida.gov.my/envs/uploads/events/Invest Malaysia2012/4 Oilngas Haliburton.pdf.

Abdullah, S.N. (2004) *Board Composition, Ceo Duality and Performance Among Malaysian Listed Companies,* Corporate Governance, 4(4): 47-61.

Agrawal, A. and Knoeber, C.R. (1996) "Firm Performance and Mechanism to Control Agency Problem Between Managers and Shareholders" *Journal of Financial and Quantitative Analysis*, 31: 377-397.

Al-Matari, Y., Al-Swidi, A.K. Fadzil, F.H. and Al-Matari, E.M. (2012) "Board of Directors, Audit Committee Characteristics and Performance of Saudi Arabia Listed Companies", *International Review of Management and Marketing*. 2(4): 241-251.

Australian Security Exchange Corporate Governance Council (2007)

Corporate Governance Principles and Recommendations (2 ed.), Sydney: Australian Security Exchange Corporate Council.

Azam, M., Usmani, S. and Abassi, Z. (2011) "The Impact of Corporate Governance on Firm's Performance: Evidence from Oil and Gas Sector of Pakistan*", Australian Journal of Basic and Applied Science*, 5(12): 2978-2983.

AmResearch. (2011) *AmResearch reaffirms positive outlook for O&G sector*. available at http://www.theborneopost.com/2011/04/05/amresearch-reaf frms-positive-outlook-for-og-sector/.

Bank Negara Malaysia. (2008) "*Development in the Malaysian Economy*", Quarterly Bulletin Fourth Quarter 2008, available 1t http://www.bnm.gov.my/files/publication/qb/2008/Q4/p3.pdf.

Bauer, R., Günster, N. and Otten, R. (2003) "Empirical Evidence on Corporate Governance in Europe: The Effect on Stock Returns, Firm Value and Performance*", Journal of Asset Management*, 91-104.

Bhagat, S. and Bolton, B. (2008) "Corporate Governance and Firm Performance*", Journal of Corporate Finance*, 12:257-273.

Bhagat, S., Bolton, B. and Romano, R. (2008) The Promise and Peril of Corporate Governance Indices*", Columbia Law Review*, 108: 1803-1882.

Bliss, M. (2011) Does CEO duality constrain board independence? Some Evidence from Audit Pricing*", Accounting & Finance*, 51(2): 361-380.

Brown, L.D and Caylor, M.L. (2004) *The Correlation Between Corporate Governance and Company Performance,* Institutional Shareholder Services, USA.

Chan, K. C. and Li, J. (2008) "Audit Committee and Firm Value: Evidence on Outside Top Executives as Expert Independent Directors*", Corporate Governance: An International Review*, 16(1): 16-31.

Chen, H.L. (2011) "Does Board Independence Influence the Top Management Team? Evidence from Strategic Decisions Towards Internalisation", *Corporate Governance: An International Review*, 19(4): 334-350.

Cheng, S. (2008). *Board Size and the Variability of Corporate Performance*. Journal of Financial Economics,87:157-176, (online) available at, http://www.sciencedirect.com/science/article/pii/S0304405X07001407.

Clifford, P. & R. T. Evans. (1997) Non-executive directors: A question of independence. *Corporate Governance*. 5(4). p.224-231.

Culp, C. (2002) *The Art of Risk Management: Alternative Risk Transfer, Capital Structure, and the Convergence of Insurance and Capital Markets*, Wiley: New York.

Cummins, J.D., Dionne, G., Gagne´, R. and Nouira, A.H. (2009) "Efficiency of Insurance Firms with Endogenous Risk Management and Financial Intermediation Activities*", Journal of Product Analysis*, 32:145–159.

Dalton, D.R., Hitt, M.A., Certo, S.T. and Dalton, C.M. (2008) The Fundamental Agency Problem and Its Mitigation: Independence, Equity, and the Market For Corporate Control, in J.P Walsh and A.P. Brief (eds). *Annals of the Academy Management*, (1):1-64.

Dalton, D. R. and Dalton, C.M. (2011) "Integration of Micro and Macro Studies in Governance Research: Ceo Duality, Board Composition, and Financial Performance*", Journal of Management*, 37(2): 404-411.

Dar L.A, Nassem M.A. and Rehman R.U. (2011) "Corporate Governance and Firm Performance a Case Study of Pakistan Oil and Gas Companies Listed in Karachi Stock Exchange"*, Global Journal of Management and Business Research*, (1): 8.

De Andres, P., Azofra, V. and Lopez, F. (2005) "Corporate Boards in OECD Countries: Size, Composition, Functioning and Effectiveness*", International Review*, 13(2): 197-210.

Demidenko, E. and McNutt, P. (2010) "The Ethics of Enterprise Risk Management as a Key Component of Corporate Governance*", International Journal of Social Economics*, 37(10): 802 – 815.

Drobetz, W., Schillhofer, A & Zimmermann, H. (2003) "*Corporate Governance and Expected Stock Returns: Evidence from Germany"* European Corporate Governance Institute (ECGI), Working paper No. 011/2003.

Elloumi F. and Gueyie J. (2001) "Financial Distress and Corporate Governance: An Empirical Analysis*:, Corporate Governance: International Journal of Business in Society*. 1(1): 15- 23.

Fogel, E. M. and Geier, A. M. (2007) "Strangers in the House. Rethinking Sarbanes-Oxley and the Independent Board of Directors"*, Delaware Journal of Corporate Law*, 32:33-72.

Feng. Z., Ghosh, C. and Sirmans, C. (2005) "How Important is the Board of Directors to REIT Performance?*", Journal of Real Estate Portfolio Management*. 11(3): 281-293.

Huse, M. (1990) "Board Composition in Small Enterprise*s", Entrepreneurship and Regional Development*, 12(4): 363-74.

Hoyos, C. (2007) "*The New Seven Sisters: Oil and Gas Giants Dwarf Western Rivals",* The Financial Times , available at http://www.ft.com/intl/cms/s/2/471ae1b8-d001-11db-94cb-000b5df10621.html#axzz2QzB8uUez.

Jamaludin, F. (2011) *Shipping and the Malaysian Oil and Gas Industry*, available at http://www.skrine.com/shipping-and-the-malaysian-oil-and-gas-industry.

Jensen, M.C. and Meckling, W. H. (1976) Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure", *Journal of Financial Economics*, 3(4): 305-360.

John, K. and Senbet, L. (1998) "Corporate Governance and Board Effectiveness*", Journal of Banking and Finance*, 22(4): 371-403.

Kakabadse, N. Kakabadse, A and Kouzmin, A. (2001) "*Board Governance and Company Performance: Any Correlations?" Corporate Governance*, 1: 24-30.

Khalid, N. (2012) *Potential in Shipping,* available at http://thestar.com.my/maritime/story.asp?file=/2012/9/3/maritime/1195422&sec=maritime.

Khan, K., Nemati, A. R. and Ifthikar, M. (2011) "Impact of Corporate Governance on Firm Performance: Evidence from the Tobacco Industry of Pakistan", *International Research Journal of Finance and Economics*, 61.

Klapper, L. F. and Love, I. (2004) "Corporate Governance, Investor Protection and Performance in Emerging Markets*", Journal of Corporate Finance*. 10(5): 703-728.

Koufopoulos, D., Lagoudis I., Theotokas, I. and Syriopoulos, T. (2010) "Corporate Governance and Board Practices by Greek Shipping Management Companies*", Corporate Governance: The International Journal of Business in Society*, 10(3): 261-278.

Kumudini, H and Anona, A. (2012). *The Impact of Corporate Governance On Firm Performance in an Unstable Economic and Political Environment: Evidence from Sri Lanka*, paper submitted to the conference on corporate governance in emerging markets, available at http://www.icffr.org/

assets/pdfs/March-2012/The-Impact-of-Corporate Governance-on-firm-perform.aspx.

Lam, T. Y. and Lee, S. K. (2012) "Family ownership, Board Committees and Firm Performance : Evidence from Hong Kong*", Corporate Governance*. 12(3): 353-366.

Lazonick, W. (2010) *Social Conditions of Innovative Enterprise*, UMass Lowell Centre for Industrial Competitiveness.

Lipton, M. and Lorsch, J.W. (1992) "Modest proposal for improved corporate governance", *The Business Lawyer*, 48: 59-77, available at http://ezproxy.upm.edu.my:2852/discover/10.2307/40687360?uid:6552064&uid:3738672&uid .

Liu, H. and Fong, M.W.L. (2010) "Board Characteristics of Medium and Large Chinese Companies" *Corporate Governance*, 10(2): 163-175.

Mallin, C. (2007) *Corporate Governance*, (2nd ed.),Oxford: Oxford University Press.

Mohamed .B. (2009) "Board of Directors' Size and Performance in the Banking Industry*", International Journal of Managerial Finance*, 5(2): 201 – 221.

Pallant, J. (2011) *A Step by Step Guide to Data Analysis Using SPSS*, 4th Edition*,* Australia: Allen and Unwin.

Peng, W., Zhang, S. and Li, X. (2007) "CEO Duality and Firm Performance During China's Institutional Transitions", *Management and Organisation Review*, 3(20): 205-225.

Razalli, R.M. (2005) *The Malaysian Oil and Gas Industry: An Overview,* Jurutera (1), Institute of Engineers Malaysia.

Searle, R. (2010) *Corporate Governance in the Major Oil and Gas Companies*, University of Massachusetts Lowell.

Securities Commission. (2007) *Malaysian Code of Corporate Governance.* [online] Revised 2007, Securities Commission, Kuala Lumpur available at http:www.sc.com.my.eng/html/cg/cg2007.pdf.

Selvaggi, M and Upton, J. (2008) *Governance and performance of corporate Britain, ABI Research Paper 7, Association of British Insurers*. available at http://www.abi.org.uk/content/contentfilemanager.aspx?contentide:24976.

Shleifer, A., R. Vishny. (1996) *A Survey of Corporate Governance*, Working Paper No W5554, National Bureau of Economic Research, Cambridge, United States.

Spellman, M. (2012) Better risk management, better bottom line. *Accountancy Ireland*. 44(1): 47.

Spira, L. F. & Bender, R. (2004) Compare and contrast: perspectives on board committees. *Corporate Governance: An International Review*. 12(4): 489-99.

Sulaiman, A. (2012) "What has Changed? The Development of Corporate Governance in Malaysia*", Journal of Risk Finance*, 22.

Syriopoulos, T. and Tsatsaronis, M. (2012) "Corporate Governance Mechanisms and Financial Performance: Ceo Duality in Shipping Firms"*, Eurasian Business Review*, 2(1): 1-30.

Tabachnik, B.G. and Fidell, L.S. (1989) *Using Multivariate Statistics* (2nd ed.), New York: Harper Collins.

Theotokas, I. (1998) Organisational and Managerial Patterns of Greek-Owned Shipping Companies and the Internationalization Process from the Post-War Period to 1990, in Starkey, D. and Harlaftis, G, (eds), *Global*

Markets: The Internationalization of the Sea Transport Industries since 1850, Research in Maritime History,14: 303-18.

Third Industrial Master Plan. (2012) available at http://www.miti.gov.my/cms/content.jsp?id=com.tms.cms.section.Section_8ab58e8f-7f000010-72f772f7-dbf00272.

Tufano, P. (1996) Who Manages Risk? An Empirical Examination of Risk Management Practices in the Gold Mining Industry*", The Journal of Finance*, 51(4): 1097-1137.

Walker, D. (2009) *A Review oof Corporate Governance in UK Banks and other Financial Industry Entities: Final Recommendations*, avalable at http://www.hm-treasury.gov.uk/d/walker_review_261109.pdf.

Wei, H., Tam, O. and Tan, M. (2010) "Internal Governance Mechanisms And Firm Performance in China", *Asia Pac Journal Management*, 27:727-749.

Wei, Q.H. (2012) *Petronas to go 'Full Throttle' on O&G Projects* available at http://www.theborneopost.com/2012/01/05/petronas-to-go-full throttle-on-og-projects/#ixzz2M13gVUgt.

Wen, Y., Rwegasira, K. and Bilderbeek, J. (2002) *Corporate Governance and Capital Structure Decisions of the Chinese Listed Firms.* Corporate Governance: An International Review, 10(2): 75-83*,* available at http://dx.dpo.org/10.1111/1467-8683.00271.

Yammeesri, J. and Herath, S. K. (2010) "Board Characteristics and Corporate Value: Evidence from Thailand*", Corporate Governance,* 10(3): 279 – 292.

Yatim, (2010) Board Structures and the Establishment of a Risk Management Committee by Malaysian Listed Firms*", Journal of Management and Governance*, 14(1): 17-36.