

The Role of Managerial Ownership in the Association between Goodwill and Firm Value

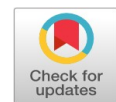
AGHDAS ZARGAR ^{1*}, ZALEHA ABDUL SHUKOR ²

^{1, 2} National University of Malaysia, Kajang, Malaysia

Abstract: This study aims to determine whether managerial ownership of Malaysian firms listed on the main board of Bursa Malaysia moderates the relationship between goodwill disclosure and firm value based on signaling and agency theory. In this quantitative study that uses a deductive approach, the analysis is based on the annual reports of 2,070 firms listed on the Bursa Malaysia website for the years from 2009 through 2011. Multiple regression was applied to analyze the data. The results show a positive and significant relationship between reported goodwill and firm value during these three years. However, when managerial ownership is included as a moderating variable, results show a significant negative association between reported goodwill and firm value. Results should alert Malaysian firms to the importance of understanding investors' reactions towards a firm's reported goodwill amounts. A high goodwill amount is not necessarily a good sign about a firm in the presence of high managerial ownership. Elevated levels of managerial ownership may not be seen as positive signs, even for family-owned firms in Malaysia. This is probably because managers are always perceived to be protecting their wealth rather than the firm's overall wealth.

Key Words: Managerial ownership, Goodwill, Malaysian listed firms

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INTRODUCTION

Goodwill is “an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized” (IFRS 3). Goodwill by itself could become a very important item in attracting firm stakeholders. Recently, high amount of goodwill has reported in financial statements of companies in some countries such as Malaysia (Boekestein, 2009; Ljungvall & Ibrahim, 2014; Song & Chu, 2011). The increase in goodwill amounts has resulted in more demand for more useful information about goodwill. Goodwill which is a valuable economic resource (Chen & Yuan, 2004; Jennings, Robinson, Thompson & Duvall, 1996) may be perceived as a competitive item and also as an advantage and value creation resource for firms by shareholders (Jennings, LeClere & Thompson, 2001). Shareholder's expectations about goodwill may be met by useful information carried by goodwill (Hirschey & Richardson, 2002).

Useful information carried by goodwill may present future economic benefits, help to shareholders to make more informed financial decisions and better evaluation of the firm's performance and position. Evidence from past studies has shown that goodwill reflects future economic benefits (Hirschey & Richardson, 2002), helps shareholders to make more informed financial decisions (Abeysekera, 2012), and also leads to an increase in profitability (Chauvin & Hirschey, 1994; Ding, Song & Zen, 2008), firm value (Dahmash, Durand & Watson, 2009); Kamil, Marzita, Radziah & Zaleha, 2003) and market value (Churyk, 2005; Jennings et al., 1996; Henning, Lewis & Shaw, 2000; McCarthy & Schneider, 1995; Zare, Aghjehkandi & Aghjehkandi, 2012) which in turn contributes towards economic growth via an increase in market capitalization.

Prior studies showed the amount or the level of goodwill increased among companies in some countries and they identified different reasons for goodwill increase. They found that new accounting standards adopted for business combinations (Jennings et al., 2001), a shift from manufacturing economy to knowledge-based activities (Jennings et al., 2001), an increase of merger and acquisition activities

*Corresponding author: Aghdas Zargar

†Email: aghdas.zargar@gmail.com

after crisis (Salleh, Siong-Hook, Ramachandran, Shuib & Noor, 2008), an increase of intellectual capital (Boekestein, 2009), an increase of overpayment (Churyk, 2005), an increase in premiums (Churyk, 2001) and an increase in intangible assets (Churyk, 2001) are some factors that could influence on the level of goodwill in companies. In this study, the level of goodwill refers to amount of reported goodwill on the balance sheet of Malaysian companies. Recently, an increase of service and knowledge sectors, intellectual property rights and merger and acquisition (M&A) activities with more overpayment in business combinations have resulted in higher amounts of reported goodwill by Malaysian companies (Boekestein, 2009; Song & Chu, 2011; Salleh et al., 2008).

High levels of recorded goodwill are more likely to be reported in companies with a high level of managerial ownership. High managerial ownership may tend to maximize their own benefits with decision making on activities such as M&A. They may have more overpayment to acquire a firm. More overpayment by high managerial ownership results to more amount of recorded goodwill (Churyk, 2005).

Malaysia as a developing country has accepted convergence with global accounting standards in order to achieve its national goals in international competitive markets. Malaysian firms may be affected by the updated version of goodwill reporting standards that have applied since 2006 and also with changes in the economic situation resulting from the financial crisis in 2008. The global financial crisis in 2008 resulted in some negative effects on the economics of some developed and developing countries. Malaysia, as an emerging market that actively was involved in its economic growth program, was likely more vulnerable to this global financial crisis and Malaysian firms were affected by this economic crisis. The economy of Malaysia was affected to some extent by more M&A activities (Nurhazrina & Pok, 2009). Increase in M&A activities after financial crisis 2008 has resulted in higher amounts of reported goodwill by Malaysian firm.

The willingness of high managerial ownership in investments on M&A activities for their personal benefits and more overpayment to acquire a company in competitive business environment lead to a higher amount of reported goodwill. Therefore, the reliability of high amount of reported goodwill by a company with high managerial ownership is questionable. Accordingly, both private benefits of high managerial ownership in M&A activities and their overpayment in business combinations may have an effect on firm value. Hence, this study, by logical arguments and empirical evidence, will attempt to determine whether managerial ownership has an effect on the relationship between goodwill and firm value.

LITERATURE REVIEW

Goodwill that for many years has been in commercial use and has been widely used as a measure of the positive reputation of a business (Leake, 1914; Ding, Song & Zen, 2008) may be obtained gradually through the use of physical assets and by employing human resources in an entity (Gumrah & Adiloglu, 2011). Goodwill may result in a purchase deal when a company is acquired. Boekestein (2009) says that goodwill can be measured as the amount of payment in excess of the fair value of the goods that are purchased in a deal. Churyk (2005) states that goodwill arises when the amount paid to acquire a business is more than the fire value of its net identifiable assets. In their study, Holthausen and Watts (2001) explain that goodwill can be recognized when there is a difference between the market value of a firm and its recognized net assets. Churyk (2001) says that goodwill can arise from a premium that is paid over the fair value of the net identifiable assets of a firm. Paying a purchase price premium over the net assets of a firm during its acquisition could be a result of brand recognition, positive reputation, and a strong connection between the customers and the suppliers that are recorded as goodwill (Najihah & Ayoib, 2012). Through a review of the studies related to goodwill, it can be clarified that goodwill is considered as a part of accounting in practice (Giuliani & Brannstrom, 2011). It is a term that was invented by accountants to mean “the excess of the purchase price over the net book value of assets acquired” (Zare et al., 2012).

The difficulty of defining goodwill could be due to the fact that it is composed of many different elements (Bloom, 2008; Giuliani & Brannstrom, 2011; Henning, 2000; Higson, 1998). The elements comprising goodwill cannot be separately valued and cannot be separately viewed as assets. All of these elements are included under the name goodwill. Henning, Lewis and Shaw (2000) explain three components

of goodwill: going concern, synergy, and the residual part of goodwill (overpayments). Going-concern goodwill is the difference between the fair value of a target's recognized assets and its pre-acquisition market value; synergy goodwill is the combined cumulative abnormal returns obtained by the acquired and the acquiring firm on the date of acquisition; residual goodwill or overpayment refers to the difference between the amount of purchase price and the components of going concern and synergy. Henning, Lewis and Shaw (2000) explain that the different components of goodwill are perceived by investors to have different values. Going concern goodwill has similar value as assets. Synergy goodwill has high value, and residual goodwill (overpayment) has negative value.

Recently, researchers have found that a significant part of goodwill is comprised of intellectual capital, including human capital, customer capital, and structural capital (Boekestein, 2009) and also, the amount of goodwill reflects an overpayment for an acquired firm (Churyk, 2005). Giuliani and Brannstrom (2011) identified three interpretations of goodwill, "core goodwill," "intangibles," and "core goodwill and intangibles". Core goodwill comprises all explanations that interpret goodwill as an accounting item for synergies and benefits, such as extra sales, economies of scale, and profitability. The intangibles include all of the intangibles of a firm that cannot be presented in financial statements according to IFR3, such as personnel, knowledge, and market position, or that cannot be recognized as separate from the firm. "Core goodwill and intangibles" included a combination of "core goodwill" and "intangibles".

In order to determine whether goodwill offers relevant information to investors in terms of firm evaluation, in general, past studies related to goodwill concluded that goodwill has characteristics of an asset (Jennings, Robinson, Thompson & Duvall, 1996; Johnson & Petrone, 1998; McCarthy & Schneider, 1995). A majority of past empirical studies that have tested the usefulness of goodwill information have found empirical evidence of the positive association between reported goodwill and market value (Chauvin & Hirschey, 1994; Dahmash, Durand & Watson, 2009; Godfrey & Koh, 2001; Henning, Lewis & Shaw, 2000; Jennings et al., 1996; McCarthy & Schneider, 1995; Kamil, et al., 2003).

In their study of US sample firms from 1989 to 1991, Chauvin and Hirschey (1994) examined the association between goodwill and both profitability and firm value. The results showed that reported goodwill has positive and significant effects on the market value of a firm. In their investigation about whether the market concerns reported goodwill as an asset in the determination of the value of firms in the US for the period from 1988 to 1992, McCarthy and Schneider (1995) found that goodwill is considered as an asset by investors. The results indicate that there was a significant positive correlation between goodwill and the market values of firms. Jennings et al. (1996) examined how recorded goodwill is related to the market equity values of US firms from 1982 to 1988. They suggested that goodwill is seen as an asset for which the value declines over time. Additionally, their results show a significant positive association between equity values and the amount of recorded goodwill.

Recently, researchers suggest two reasons for the negative relationship between goodwill and market value. One reason to explain the negative association between goodwill and firm share price is the effect of recent regulation on goodwill accounting (Salleh et al., 2008). Sahut, Boulerne and Teulon (2011) conducted a study that compared the information of intangible assets under IAS/IFRS and local GAAP for 1,855 European listed companies from 2002 to 2004. They found financial information included in capitalized goodwill to be less relevant to share price under IFRS than with local GAAP. Their results show that unidentified intangible assets included in goodwill provide less relevant information for shareholders than identified intangible assets capitalized on European investors. Their results show that the adoption of IFRS 3 and IAS 36 impact the evaluation of goodwill and stock exchanging profitability.

In addition to changes in goodwill accounting standards, economic conditions may also negatively affect the association between goodwill and firm share price (Salleh et al., 2008). Salleh et al. (2008) found a negative correlation between intangible assets and firm share price in their study on the value relevance of intangible, non-current assets in different economic conditions for companies listed on the main board of Bursa Malaysia from 1990 to 2002. They suggest that one reason for this negative correlation is the impairment of high amounts of reported goodwill. Another reason is changes in economic conditions. Their results that consider different economic conditions showed that, for years after a crisis, there is a significant negative association between non-current assets included in reported goodwill and firm share

price.

However, a review of relevant literature shows that some factors, such as changes in economic conditions (Salleh et al., 2008), changes in accounting standards (Sahut et al., 2011; Salleh et al., 2008) or other factors related to business environments, such as firm size (Zare et al., 2012), leverage (Churky, 2001), profitability (Chauvin & Hirschey, 1994; McCarthy & Schneider, 1995), and industry (Zare, Aghjehkandi & Aghjehkandi, 2012) affect the association between goodwill and firm value.

Because the main objective of financial statements is to provide useful information to users, the quality of information presented in financial statements is an important factor with which to evaluate a firm. Corporate governance, as a factor that maintains the credibility of financial statements (Bushman & Smith, 2003; Alves, 2012) and affects the quality of financial reporting (Cohen, Krishnamoorthy & Wright, 2004) may, as an effective mechanism, impact the quality of financial items that are reported on financial statements. Additionally, the existence of the strong correlation between corporate governance and firm performance (Brown & Caylor, 2004; Mashayekhi & Bazaz, 2008) and firm value (McConnell & Servaes, 1990; Morck et al., 1988) suggests that corporate governance may affect the association between balance-sheet-reported items, such as purchased goodwill, and firm value. Therefore, managerial ownership that is one of the main parts of the internal mechanisms of corporate governance (Najah et al., 2014) has positive relationship with firm performance (Huang, Ou, Chen & Lin, 2006; Morck, Shleifer & Vishny, 1988; Najah, Syukriah & Anita, 2014; Amran & Ahmad, 2013) and firm value (McConnell & Servaes, 1990; Lins, 2003; Wei, Xie & Zhang, 2005). It also enhances the quality and value relevance of published financial data (Alves, 2012) and may impact the association between reported goodwill and firm value.

Shareholders and managers have an agency relationship in which shareholders delegate the authority for decision making to an agent (manager) (Jensen & Meckling, 1976). This agency relationship connects managers and shareholders to each other, but their conflicts of interest ruin this connection. Shareholders cannot directly observe managers' actions. This leads to an inherent conflict of interest between managers and shareholders. A way to minimize conflicts of interest between managers and shareholders and maximize the monitoring mechanisms for managerial decisions is to make managers partial firm owners. This is known as managerial ownership. In simple terms, managerial ownership refers to the proportion of the firm's shares that are held by its managers. The extent of managerial ownership of a firm indicates the degree of congruence between the interests of management and shareholders (Singh & Davidson, 2003).

Managerial ownership motivates managers to minimize agency costs and maximize the profitability of a firm (Chen & Yuan, 2004; Margaritis & Psillaki, 2010; Sundar & Al Harthi, 2015). Managerial ownership increases the quality and credibility of financial reporting (Alves, 2012; Warfield & Wild, Wild, 1995) and maximizes firm value. Hence, high managerial ownership, as a positive internal monitoring mechanism, reduces agency conflicts (Ahmed, 2008) and costs (Jensen & Meckling, 1976) and increases firm value (Jensen & Meckling, 1976; Morck et al., 1988).

The literature review shows mixed findings in relation to managerial ownership and firm value. Some researchers, such as Demsetz (1983) and Demsetz and Lehn (1985) state that changes in managerial ownership cannot increase firm value. Morck et al. (1988) found a positive correlation between managerial ownership and firm value. Morck, Shleifer and Vishny (1988) demonstrate that low levels of managerial ownership increase the value of a firm. As managerial ownership increases, firm value decreases due to the expropriation of the rights of minority shareholders. They cite that a large proportion of manager-held shares increases firm value as a result of the profitable decisions of the managers. However, McConnell and Servaes (1990) demonstrated that a large proportion of managerial ownership decreases firm value. The findings of Short and Keasey (1999) and De Miguel, Pindado and De La Torre (2004) show a curvilinear relationship between managerial ownership and corporate value. The results of Davies, Hillier and McColgan (2005) also show a similar nonlinear relationship between managerial ownership and firm value. These researchers found a nonlinear relation between managerial ownership and firm value.

The review of the related-literature shows that additional factors, such as the incentives of managers and different levels of shareholdings by managers, firm size (Haslindar & Fazilah, 2011; Himmelberg,

Hubbard & Palia, 1999; Amran & Ahmad, 2013), leverage (e.g., Chang & Leng, 2004; Claessens, Djankov & Lang, 2000; Haslinder & Fazilah, 2011; Singh & Davidson, 2003), board size (e.g., Haslinder & Fazilah, 2011; Jensen, 1993), and auditors can affect the relationship between managerial ownership and firm value (Norman et al., 2009; Omer & Norman, 2011).

Many prior studies have found the positive and negative effects of managerial ownership on firm value (Arshad & Javid, 2014; Fahlenbrach & Stulz, 2009; Jensen & Meckling, 1976; Ahmed, 2008; Mustapha & Ahmad 2011; McConnell & Servaes, 1990; Morck et al., 1988; Amran & Ahmad, 2013; Stultz, 1988) and also, have found a positive effect on firm value (Kamil et al., 2003); however, they did not find conclusive evidence of a direct relationship between managerial ownership and goodwill.

Previous studies identified that managerial ownership may affect the amount of reported goodwill by affecting the amounts of premiums and overpayment. Goodwill can be interpreted as a purchase premium (Johnson & Petrone, 1998), and the amount of recorded goodwill may reflect an overpayment for the target (Churyk, 2005). "The larger the premium, the greater the amount allocated to goodwill" (Churyk, 2001). Therefore, managerial ownership that influences the amounts of premiums and overpayment may indirectly affect the amount of goodwill.

Churyk (2001) states the willingness of managers to pursue personal gain and private benefits of control results in overpayment by the acquirer. Overpayment for the control of a target firm increases as the proportion of equity owned by managers increases (Stulz, 1988). High levels of managerial ownership result in managers having more control over decisions about acquiring targets and the payment of high amounts for overvalued targets in order to gain control of target firms. Overpayment resulting from high managerial ownership results in high amounts of recorded goodwill (Churyk, 2001; Churyk, 2005).

Ding, Song and Zen (2008) found that takeover premiums in Malaysia were significantly higher than those in developed countries in their investigation of 136 takeover transactions in Malaysia from 1990 to 1999. High concentration ownership that are mostly controlling shareholders in Malaysia, tend to M & A activities in order to maximize their personal benefits instead of shareholder's benefits. They may be willing to pay very high premiums in order to acquire targets, and such overpayment reduces shareholders' wealth and firm value. Ding et al. (2008) suggest that companies with high concentrations of familial ownership may result in lower amounts of premiums paid in compared to those paid by firms with different ownership structures.

The literature review shows that most of the companies in Malaysia are controlled by managers who have concentrated ownership. Large managerial ownership may play relevant role in the reported goodwill in Malaysia. Even though Malaysian companies have been required to apply IFRS standards related to goodwill accounting since 2006, there is still inadequate literature related to goodwill in Malaysia after the application of this new version of goodwill accounting. Hence, there is not a clear answer to the question of whether the information carried by reported goodwill that is disclosed by managers in financial statements meets investors' expectations and helps in their evaluations of a company.

As this literature review shows, goodwill is positively associated with firm value and managerial ownership positively and negatively influences on reported goodwill and firm value. However, the effect of managerial ownership on both goodwill and firm value has not yet been reported in the literature. In other words, the effect of managerial ownership on recorded goodwill when investors assess a company's reported goodwill in order to evaluate a firm has not been investigated. This study attempts to fill this gap by investigating the probable effects of managerial ownership on the relationship between goodwill and firm value and answer the following question:

Does managerial ownership affect the association between goodwill and firm value?

RESEARCH METHODOLOGY

This study investigates the effect of managerial ownership on the association between goodwill and firm value. The data required for this study was gathered from DataStream and companies' annual reports from the Bursa Malaysia website. The content analysis technique is used for this study. Content analysis involved observing the sample companies' websites, annual reports on the Bursa Malaysia website, reading annual reports from each company in the sample, and extracting the required data from them manually.

Share price data were collected from DataStream.

The procedures that this study used to select the sample are explained as follows. The primary sample of this study is indexed in the main board of Bursa Malaysia from 2009, 2010, and 2011. The years 2009, 2010, and 2011 were selected because M&A activities increased during these periods among Malaysian companies. Data from 2454 companies during the three years comprise the primary sample. From these companies, 207 companies' annual reports were inaccessible, 138 companies' share prices were not in the DataStream, and 30 companies were IPOs, so they were excluded from the sample. Eventually, data from 2079 companies from 2009, 2010, and 2011 were obtained for this research. These companies were categorized based on the Bursa Malaysia categorization, including: Properties, Construction, Industrial Products, Consumer Products, Trading Service, Plantation, Technology, IPC, Hotels, Finance, REITS, Closed-End Funds, and Mining.

This study estimated the following empirical regression model, which includes one dependent variable, one independent variable, one moderate variable, and several control variables, in order to test the hypotheses of this research.

$$FV = \alpha_0 + \alpha_1GW + \alpha_2MO + \alpha_3GW * MO + \alpha_4PROFIT + \alpha_5FSIZE + \alpha_6LEV + \alpha_7AUDBIG + \alpha_8BSIZE + \alpha_9IND + \epsilon$$

Where:

FV= Firm Value

GW=Goodwill

MO=Managerial Ownership

GW *MO= Interaction variable of goodwill with managerial ownership

PROFIT= Profitability

FSIZE= Firm Size

LEV = Leverage

AUD BIG = Big 4 Auditor

BSIZE = Board Size

IND = Industry

“ α ” intercept coefficient

“ α_i ” the coefficient for each of the variables

“ ϵ ” error term

RESULTS AND DISCUSSION

Finding of this research is provided in two sections: 1) descriptive statistics and 2) Diagnostic tests.

Descriptive statistics

Table 1 shows the descriptive statistics of the key variables of this study. Table 1 shows that goodwill has an average value of 33%. The maximum and minimum values for GWT are 92% and 0%, respectively.

Table 1: Descriptive statistics of the dependent and independent variables

Variables	Min	Max	Mean	Std. D	Skewness	Kurtosis
FV	5.860	10340	8215	0.751	0.673	0.832
GWT	0000	9239	3314	1483	0171	-1243
MO	0.000	100.000	7.086	13133	2363	9395
GAVT*MO	0.000	402000	19.284	55.602	4.006	17.538
PROFIT	-107.000	261.500	13A03	26140	3.586	24.041
LEV	0.000	2974	0327	0.604	1355	L670
FSIZE	4.055	11.463	8.563	0.666	-0.035	1467
AUDBIG	0.000	1.000	0.534	0.499	-0.136	-L984
BSIZE	0.000	18.000	7.507	1950	1022	2298

n = 1884

Note: FV = firm value measured by log of market capitalization. GWT = measured by log of total amount of goodwill. MO = the percentage of direct shareholding by executive shareholder. LOGMO*GWT = the interaction between goodwill and managerial ownership. PROFIT = profitability measured by earning per share. LEV = leverage measured by liability to book value of equity. FSIZE = firm size, measured by log of total assets. AUDBIG = Valued (1) if the auditor is one of the 4 big firms and valued (0) otherwise. BSIZE = the number of board members.

Diagnostic tests

This section of the study presents the results of the multiple regression analysis. The main objective of this study is to investigate the relationship between goodwill and firm value in the presence of managerial ownership.

In order to examine the relationship between Goodwill (GW) and Firm Value (FV), this study has applied the Pearson correlation and multiple regression analysis. In order to investigate the moderating role of MO on the relationship between goodwill and firm value, this study has applied moderated multiple regression. In other words, moderated multiple regression was applied in order to test the relationship between the interaction variable of managerial ownership with goodwill (MO*GWT) and FV. Table 2 shows the results of the multiple regression analysis:

$$FV = \alpha_0 + \alpha_1GW + \alpha_2MO + \alpha_3MO * GWT + \alpha_4PROFIT + \alpha_5FSIZE + \alpha_6LEV + \alpha_7AUDBIG + \alpha_8BSIZE + \alpha_9IND + \epsilon$$

The following subsection discusses the results of the analysis of the two hypotheses.

The relationship between goodwill and firm value

The results of the relationship between goodwill, as an independent variable, and firm value, as a dependent variable, are presented in table 2. This table shows goodwill, which was measured by logging the total amount of reported goodwill has relationship with firm value that is measured by logging the market capitalization at the end of the fiscal year. Regarding signaling theory, this study hypothesized a positive relationship between goodwill and firm value. The regression results in table 2 show that there is a significant positive ($\beta = 0.022$, $p = 0.00$) relationship between goodwill and firm value in Malaysian companies.

Hence, this result supports hypothesis one (H1). Results of regression show that the high amount of goodwill reported on the financial statements indicates more firm value. This result is consistent with the findings of prior studies, such as that of McCarthy and Schneider (1995) and Jennings et al., (1996) that found goodwill is significantly associated with market value in US companies, and Kamil et al. (2003) that found significant positive relationship between reported goodwill and firm value in Malaysian companies. They found that goodwill numbers are value relevance for investors. The results of their studies indicate that the information in the financial statements is useful to investors for their investment decision making.

The results of the current study support the findings of a study conducted by Shukor, Ibrahim, Kaur and Hamezah (2011) on Malaysian companies. They found evidence that purchased goodwill as an asset including information affects the valuation of a firm.

In the examination of the relationship between reported goodwill and firm value in Malaysian companies listed on the main board of Bursa Malaysia by this study, the information about reported goodwill that was disclosed by companies significantly contributed to firm value. This means getting reported goodwill information to investors may meet investor's expectation about a firm's value. Investors may expect the existence of specific information, corporate information, and manager's activities information in figures of reported goodwill because this information could affect their evaluation of the firm and their investment decisions. Therefore, the findings of current study support the results of a local study done in Malaysia by Shukor et al. (2011).

Table 2: Multiple regression results

variables	EXP.Sign	b	Std.dev	p-value	t-vauae	Tolerane	VIF
(Constant)		3.212	0.168	0.00	19.128		
LOGGWT	+	0.022***	0.004	0.00	5.357	0.679	1.474
MO	+/-	0.002**	0.001	0.038	-2.072	0.578	1.729
MO*LOGGWT	+/-	-0.001**	0.00	0.046	-1.996	0.528	1.893
PROFIT	+	0.009***	0.00	0.00	17.837	0.842	1.187
AUDBIG	+	0.115***	0.24	0.00	4.74	0.899	1.113
LEV	-	M.083***	0.021	0.00	-4.044	0.893	1.12
FSIZE	+	0.513***	0.021	0.00	24.62	0.72	1.39
BSIZE	+	0.056***	0.006	0.00	8.993	0.907	1.103
PRO	+	-0.004	0.041	0.924	-0.095	0.793	1.261
IND	+	0.207	0.320	0.00	4.622	0.809	1.412
CON	+	0.066	0.055	0.232	1.196	0.891	1.123
CONS	+	-0.008	0.035	0.826	-0.22	0.754	1.327
TRA	+	0.207***	0.034	0.00	6.089	0.713	1.403
PLA	+	0.294***	0.052	0.00	5.633	0.835	1.197
TEC	+	0.249***	0.065	0.00	3.854	0.919	1.088
IPC	+	1.004***	0.207	0.00	4.856	0.966	1.035
HOT	+	0.346**	0.136	0.011	2.551	0.964	1.037
FIN	+	0.158*	0.093	0.09	1.697	0.929	1.076
REI	+	0.344**	0.111	0.002	3.104	0.968	1.033
MIN	+	0.212	0.289	0.463	0.733	0.989	1.011
F value 128,009							
Adjusted R^2 (moderator included) 0.556							
Adjusted R^2 (moderator excluded) 0.551							

Note: ***, **, and * denote significance at 0.01, 0.05, and 0.10 levels respectively. FV = firm value measured by log of market capitalization. GWT = measured by log of total amount of goodwill. MO = the percentage of direct shareholding by executive manager. LOGMO*GWT = the interaction between goodwill and managerial ownership. PROFIT = profitability measured by earning per share. LEV = leverage measured by liability to book value of equity. FSIZE = firm size, measured by log of total assets. AUDBIG = Valued (1) if the auditor is one of the four big firms and valued (0) otherwise. BSIZE = the number of board members. IND (industries: PRO, CON, IND, CONS, TRA, PLA, TEC, IPC, HOT, FIN, REI, MIN) a company belongs to one industry its score is one otherwise zero.

Moderating effect of managerial ownership

The third objective of this study is to examine the moderating role of managerial ownership on the association between goodwill and firm value. Regarding agency theory, this study hypothesized that managerial ownership moderates the relationship between goodwill and firm value. The results of multivariate analysis in table 2 show that the interaction term of managerial ownership and goodwill (MO*LOGGWT) has a significant negative ($\beta = -0.001$, $p = 0.046$) relationship with firm value. Therefore, this finding supports hypothesis two (H2). Table 2 also shows that the regression model has adjusted R2 of 0.551 in the absence of a moderator variable (MO*LOGGWT) and adjusted R2 of 0.556 in the presence of a moderator variable in the model of this study. As a result, it can be said that the presence of a moderating variable would improve the ability of independent variables to explain the dependent variables.

Ownership structure, as a one of the key elements of corporate governance, is important to investors when they evaluate a firm (Connelly et al., 2012; Limmon & Lins, 2003). Ownership structure affects the value of financial numbers, especially those of intangible assets, such as reported goodwill. Therefore, managerial ownership may be perceived as an important factor in the association between goodwill and firm value. Managerial ownership may increase manager or firm wealth. Managerial ownership is a double-edged sword. It can strengthen or weaken the association between reported goodwill and firm value. Because, there is a high level of managerial ownership that has significant control of Malaysian companies (Amran & Ahmad, 2013), it can be expected that managerial ownership can have moderating effect on the relation between goodwill and firm value of listed companies on the main board of Bursa Malaysia.

The findings of this study regarding the negative effects of managerial ownership on the relationship between goodwill and firm value may show that managerial ownership may negatively affect investors' perceptions when assessing a company's reported goodwill. The negative perception of investors related

to managerial ownership may affect their judgment about companies that are owned by managers. Hence, it can be argued that managerial ownership has a negative impact on investors' perceptions about firm evaluation. The negative effect of managerial ownership on investors' views may arise from different reasons. For instance, in investors' opinions, manager-owners may use a company's wealth for their own benefits (Song & Chu, 2011). Further, investors may suppose that managerial ownership will involve activities that may increase entrenchment behaviours (Song & Chu, 2011). Furthermore, investors may perceive the discretion and incentives of managerial owners are intended to increase their benefits that may expropriate the minority shareholders' wealth (Song & Chu, 2011). Therefore, it can be concluded that the negative impact of managerial ownership on investors' perceptions may result from investors' negative evaluations of companies listed on the main board of Bursa Malaysia.

Control variables and firm value

This section of the study, with the information on table 2, shows the relationship between control variables and firm value. Firm value is measured by log market capitalization at the end of the fiscal year. According to the results of the regression model in table 2, there is a significant negative correlation between leverage (LEV) ($\beta = -0.083$, $p = 0.00$) and firm value and an insignificant negative correlation between the properties (PRO) ($\beta = -0.004$, $p = 0.924$) and consumer product (CONS) ($\beta = -0.008$, $p = 0.826$) industries and firm value. The results show that these sample companies have high leverage, and this could negatively impact investors' opinions about the financial situation of a firm. The negative relationship between the properties and construction industries and firm value may refer to the fact that these industries do not have high firm value compared to other industries. There is a significant positive correlation between profitability (PROFIT) ($\beta = 0.009$, $p = 0.00$) and firm value, firm size (FSIZE) ($\beta = 0.513$, $p = 0.00$) and firm value, big 4 auditor (AUD BIG) ($\beta = 0.115$, $p = 0.00$) and firm value, and board size (BSIZE) ($\beta = 0.056$, $p = 0.00$) and firm value. It can be concluded that profitable and large companies and companies with greater board sizes are highly valued by investors because investors may gain higher return on their investments. Additionally, the following industries have positive relationships with firm value: construction (CON) ($\beta = 0.066$, $p = 0.232$); industrial products (IND) ($\beta = 0.207$, $p = 0.00$); trading service (TRA) ($\beta = 0.207$, $p = 0.00$); plantation (PLA) ($\beta = 0.294$, $p = 0.00$); technology (TEC) ($\beta = 0.249$, $p = 0.00$), IPC ($\beta = 1.004$, $p = 0.00$), hotel (HOT) ($\beta = 0.346$, $p = 0.011$); finance (FIN) ($\beta = 0.158$, $p = 0.09$); REITs (REI) ($\beta = 0.344$, $p = 0.002$), mining (MIN) ($\beta = 0.212$, $p = 0.463$).

CONCLUSION AND RECOMMENDATIONS

Goodwill, as an intangible asset on financial statements, is a value creation resource for firms. Goodwill reflects the value of unidentified assets in financial statements such as intellectual capital (such as human capital, customer capital, and structural capital) and an overpayment for the acquired firm. The intellectual capital and overpayment conveys particular information to investors that could impact investors decision making processes. Providing high levels of reported goodwill by companies through activities such as M&A is a signal of more firm value, as perceived by investors.

Ownership structure has been identified as one of the important elements of corporate governance that influences on firm value. Managerial ownership was identified as a key factor that can have a positive influence on intangible assets and determine the amount of purchased goodwill by affecting the amount of overpayment paid by an acquiring firm. Companies with high levels of managerial ownership usually report higher amounts of reported goodwill. The managers of firms with high levels of managerial ownership are willing to act according to their own benefits and entrench themselves by discretionary decision making in investments projects, such as M&A. As the ownership of managerial ownership increases, the tendency for managers to seek private benefits and overpayment increases. With regard to overpayment, that it is a part of recorded goodwill, it can be expected that managerial ownership influences the amount of recorded goodwill.

Prior studies have found that managerial ownership may have positive and negative influences on firm value. According previous research studies, managerial ownership may send both positive and negative signals about a firm's position to investors. On one hand, investors believe that their rights will

be protected in companies that are owned by managers. This is because managerial ownership protects shareholders' wealth. On the other hand, managerial ownership may impact a company's operations and decision making according to the self-interests and benefits of managers and have a negative influence on investors' rights. In the case of reported goodwill, investors' perceptions are not clear about managerial ownership when they evaluate a company's reported goodwill. Therefore, the current research question is whether managerial ownership moderates the relationship between reported goodwill and firm value.

According to the results of the current study, managerial ownership has a significant negative moderating effect on the relationship between reported goodwill and firm value. Therefore, investors should be careful and cautious when a company is owned by managers. Investors should carefully analyze companies that are driven by high managerial ownership and report high amount of reported goodwill. High managerial ownership has discretion power on companies' decision making, companies' activities and also on what, where and how should be disclosed the companies' financial information. Therefore, managerial ownership authorities and self-interested behaviors may affect information related to reported goodwill and the effect of reported goodwill on firm value. The results of this study extend the literature related goodwill to show that the effect of reported goodwill on firm value is related to the level of managerial ownership. The inclusion of managerial ownership as a moderator variable in the multiple linear regression model helps financial statement users to better evaluate the association between goodwill and firm value. The results of this study also are important for investors in their investment decision making and for auditors to express correct opinions. The results of this study also support the implication of new accounting standard of goodwill. Finally, the results of this study may attract the attention of Malaysian regulatory bodies and encourage them to enact laws to enhance corporate governance in order to protect investors' wealth. This would improve the national economy.

The current study includes managerial ownership as a moderating variable on the association between goodwill and firm value. Future studies can include other factors of corporate governance as moderating variables between reported goodwill and firm value. This study investigated the moderating effect of managerial ownership on the relationship between goodwill and firm value in the period after a crisis. Future studies could investigate it before crisis or at other times. This study was done in Malaysia, which has an emerging market. Because different countries have different political and cultural environments, future studies could investigate the moderating role of managerial ownership on the relationship between goodwill and firm value in the other countries and markets. Also, other methodologies could be used to determine how (successful) investors use goodwill information or perceive firms with high levels of managerial ownership.

REFERENCES

- Abeysekera, I. (2012). Measuring and recognizing the value of purchased goodwill: A note on market value measurement method. *Academy of Taiwan Business Management Review*, 8(3), 57-65.
- Ahmed, H. J. A. (2008). Managerial ownership concentration and agency conflict using logistic regression approach: Evidence from Bursa Malaysia. *Journal of Management Research*, 1(1), 1-10.
- Alves, S. (2012). Ownership structure and earnings management: *Evidence from Portugal*. *Australasian Accounting Business and Finance Journal*, 6(1), 57-74.
- Amran, N. A., & Che Ahmad, A. C. (2013). Family business, board dynamics and firm value: Evidence from Malaysia. *Journal of Financial Reporting and Accounting*, 7(1), 53-74.
- Arshad, H., & Javid, A. Y. (2014). *Does inside ownership matters in financial decisions and firm performance: Evidence from manufacturing sector of Pakistan* (No.107). Islamabad, Pakistan: Pakistan Institute of Development Economics.
- Bloom, M. (2008). Accounting for goodwill. *Abacus*, 45(3), 379-389.
- Boekestein, B. (2009). Acquisitions reveal the hidden intellectual capital of pharmaceutical companies. *Journal of Intellectual Capital*, 10(3), 389-400.
- Brown, L. D., & Caylor, M. L. (2004). *Corporate governance and firm performance*. Retrieved from

<https://goo.gl/Q3WgdN>

- Bushman, R. M., & Smith, A. J. (2003). Transparency, financial accounting information, and corporate governance. *Financial Accounting Information, and Corporate Governance. Economic Policy Review*, 9(1), 65-87.
- Chang, A., & Leng, A. (2004). The impact of corporate governance practices on firm's financial performance: Evidence from Malaysian companies. *ASEAN Economic Bulletin*, 21(3), 308-318.
- Chauvin, K. W., & Hirschey, M. (1994). Goodwill, profitability, and the market value of the firm. *Journal of Accounting and Public Policy*, 13(2), 159-180.
- Chen, K. C., & Yuan, H. (2004). Earnings management and capital resource allocation: Evidence from China's accounting-based regulation of rights issues. *The Accounting Review*, 79(3), 645-665.
- Churyk, N. T. (2005). Reporting goodwill: Are the new accounting standards consistent with market valuations? *Journal of Business Research*, 58(10), 1353-1361.
- Churyk, N. T. (2001). *Goodwill: Characteristics and impairment*. University of South, Carolina, Columbia, SC.
- Claessens, S., Djankov, S., & Lang, L. H. (2000). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, 58(1), 81-112.
- Cohen, J. R., Krishnamoorthy, G., & Wright, A. (2004). The corporate governance mosaic and financial reporting quality. *Journal of Accounting Literature*, 87-152.
- Dahmash, F. N., Durand, R. B., & Watson, J. (2009). The value relevance and reliability of reported goodwill and identifiable intangible assets. *The British Accounting Review*, 41(2), 120-137.
- Davies, J. R., Hillier, D., & McColgan, P. (2005). Ownership structure, managerial behavior and corporate value. *Journal of Corporate Finance*, 11(4), 645-660.
- De Miguel, A., Pindado, J., & De La Torre, C. (2004). Ownership structure and firm value: New evidence from Spain. *Strategic Management Journal*, 25(12), 1199-1207.
- Demsetz, H. (1983). The structure of ownership and the theory of the firm. *The Journal of Law and Economics*, 26(2), 375-390.
- Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93(6), 1155-1177.
- Ding, Y., Song, X., & Zen, Y. (2008). Forecasting financial condition of Chinese listed companies based on support vector machine. *Expert Systems with Applications*, 34(4), 3081-3089.
- Fahlenbrach, R., & Stulz, R. M. (2009). Managerial ownership dynamics and firm value. *Journal of Financial Economics*, 92(3), 342-361.
- Giuliani, M., & Brannstrom, D. (2011). Defining goodwill: A practice perspective. *Journal of Financial Reporting and Accounting*, 9(2), 161-175.
- Godfrey, J., & Koh, P. S. (2001). The relevance to firm valuation of capitalising intangible assets in total and by category. *Australian Accounting Review*, 11(24), 39-48.
- Gumrah, U., & Adiloglu, B. (2011). Value relevance and reliability of goodwill and intangibles on financial statements: The case of Istanbul Stock Exchange. *Istanbul University Journal of the School of Business*, 40(2), 155-165.
- Haslindar, I., & Fazilah, A. (2011). Corporate governance mechanisms and performance of public family-ownership in Malaysia. *International Journal of Economics and Finance*, 3(1), 105-115.
- Henning, S. L., Lewis, B. L., & Shaw, W. H. (2000). Valuation of the components of purchased goodwill. *Journal of Accounting Research*, 38(2), 375-386.
- Higson, C. (1998). Goodwill. *The British Accounting Review*, 30(2), 141-158.
- Himmelberg, C. P., Hubbard, R. G., & Palia, D. (1999). Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of Financial Economics*, 53(3), 353-384.
- Hirschey, M., & Richardson, V. J. (2002). Information content of accounting goodwill numbers. *Journal of Accounting and Public Policy*, 21(3), 173-191.
- Holthausen, R. W., & Watts, R. L. (2001). The relevance of the value-relevance literature for financial accounting standard setting. *Journal of Accounting and Economics*, 31(1), 3-75.

- Huang, S. M., Ou, C. S., Chen, C. M., & Lin, B. (2006). An empirical study of relationship between IT investment and firm performance: A resource-based perspective. *European Journal of Operational Research*, 173(3), 984-999.
- Jennings, R., LeClere, M., & Thompson, R. B. (2001). Goodwill amortization and the usefulness of earnings. *Financial Analysts Journal*, 57(5), 20-28.
- Jennings, R., Robinson, J., Thompson, R. B., & Duvall, L. (1996). The relation between accounting goodwill numbers and equity values. *Journal of Business Finance & Accounting*, 23(4), 513-533.
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(3), 831-880.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Johnson, L. T., & Petrone, K. R. (1998). Commentary: Is goodwill an asset? *Accounting Horizons*, 12(3), 1-14.
- Kamil, M. I., Marzita, M. S., Radziah, A. L., & Zaleha, A. S. (2003). Value-relevance of accounting numbers: An empirical investigation of accounting of purchased goodwill. *Malaysian Accounting Review*, 2(1), 106-23.
- Leake, P. D. (1914). *Goodwill: Its nature and how to value it*. Birmingham, UK: Gee & Company.
- Lemmon, M. L., & Lins, K. V. (2003). Ownership structure, corporate governance, and firm value: Evidence from the East Asian financial crisis. *The Journal of Finance*, 58(4), 1445-1468.
- Lins, K. V. (2003). Equity ownership and firm value in emerging markets. *Journal of Financial and Quantitative Analysis*, 38(01), 159-184.
- Ljungvall, S., & Patel, I. (2014). *Accounting treatment of goodwill under IFRS in the EU: The impact of enforcement*. Gothenburg, Sweden: University of Gothenburg.
- Margaritis, D., & Psillaki, M. (2010). Capital structure, equity ownership and firm performance. *Journal of Banking & Finance*, 34(3), 621-632.
- Mashayekhi, B., & Bazaz, M. S. (2008). Corporate governance and firm performance in Iran. *Journal of Contemporary Accounting and Economics*, 4(2), 156-172.
- McCarthy, M. G., & Schneider, D. K. (1995). Market perception of goodwill: Some empirical evidence. *Accounting and Business Research*, 26(1), 69-81.
- McConnell, J. J., & Servaes, H. (1990). Additional evidence on equity ownership and corporate value. *Journal of Financial Economics*, 27(2), 595-612.
- Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20, 293-315.
- Mustapha, M., & Ahmad, A. C. (2011). Agency theory and managerial ownership: Evidence from Malaysia. *Managerial Auditing Journal*, 26(5), 419-436.
- Najah, M., Syukriah, A. & Anita, A. H. (2014). Managerial shareholdings and performance of listed companies in Malaysia. Paper presented in *proceeding of 5th international conference on business and economic research* (pp. 36-50), Kuching, Sarawak: Malaysia.
- Nurhazrina, M. R., & Pok, W. C. (2009). Shareholder wealth effects of M & As: The third wave from Malaysia. *International Journal of Managerial Finance*, 9(1), 49-69.
- Omer, N., & Norman, M. S. (2011). Family and government influence on goodwill impairment: Evidence from Malaysia. Paper presented in *international conference on financial management and economics (IPCSIT)* (pp. 40-404). Male, Maldives, IACSIT Press.
- Sahut, J. M., Boulerne, S., & Teulon, F. (2011). Do IFRS provide better information about intangibles in Europe? *Review of Accounting and Finance*, 10(3), 267-290.
- Salleh, N. H. M., Siong-Hook, L., Ramachandran, S., Shuib, A., & Noor, Z. M. (2008). Asian tourism demand for Malaysia: A bound test approach. *Contemporary Management Research*, 4(4), 351-368.
- Short, H., & Keasey, K. (1999). Managerial ownership and the performance of firms: Evidence from the UK. *Journal of Corporate Finance*, 5(1), 79-101.

- Shukor, Z. A., Ibrahim, M. K., Kaur, J., & Hamezah, M. N. (2011). The value relevance of intangible non-current assets during different economic conditions and accounting environments. *Malaysian Accounting Review*, 8(2), 43-66.
- Singh, M., & Davidson III, W. N. (2003). Agency costs, ownership structure and corporate governance mechanisms. *Journal of Banking and Finance*, 27(5), 793-816.
- Song, S. I., & Chu, E. Y. (2011). Corporate take-overs in Malaysia: Value creation or agency conflicts? *Journal of Finance and Economics*, 75, 138-156.
- Stulz, R. (1988). Managerial control of voting rights: Financing policies and the market for corporate control. *Journal of Financial Economics*, 20, 25-54.
- Sundar, C. S., & Al Harthi, F. N. S. (2015). Impact of capital structure on firm's profitability with reference to companies listed on MSM (Muscat Securities Market). *International Journal of Business and Administrative Studies*, 1(1), 23-28.
- Warfield, T. D., Wild, J. J., & Wild, K. L. (1995). Managerial ownership, accounting choices, and informativeness of earnings. *Journal of Accounting and Economics*, 20(1), 61-91.
- Wei, Z., Xie, F., & Zhang, S. (2005). Ownership structure and firm value in China's privatized firms: 1991-2001. *Journal of Financial and Quantitative Analysis*, 40(01), 87-108.
- Zare, I., Aghjehkandi, M. O., & Aghjehkandi, G. O. (2012). Study of relationship between reported items of intangible assets and market value. *American Journal of Scientific Research*, 47, 41-47.

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