THE RELATIONSHIP BETWEEN AGENCY COST AND MANAGERIAL EQUITY OWNERSHIP IN SMALL FIRMS

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Abstract

Despite contradicting views regarding the role of managerial equity ownership (MEO) in reducing agency cost, some evidences from both the United States (US) and United Kingdom (UK) document that this corporate governance mechanism has a significant relationship with the agency cost (Ang, Cole and Lin, 2000; Sing and Davidson, 2003; Florackis, 2008; and Mcknight and Wier, 2009). This study attempts to compare the relationship between MEO and agency cost of small firms in Malaysia. This study used return on assets (ROA), asset utilisation ratio (AUR) and selling, general and administration (SGA) expense ratio (Exp) as a proxy for agency cost. Using a sample of 78 companies listed on Bursa Malaysia, this study used a regression model to test the relationship. The regression results have provided evidences that MEO possessed a significant impact in reducing the agency cost depending on the size of the firms. This study found that ROA was significantly positively associated with MEO in small firms. Meanwhile, MEO significantly alleviated principal agent conflicts in small firms through efficient use of assets that resulted in a high AUR. The findings of this study are expected to guide managers to determine the right MEO for the company, which depends on the firm's size. Investors would be able to use the results as a basis to make investment decision since the analysis of the findings showed that MEO affected the performance and operations of the company.

Keywords: Agency Costs, Equity, Management Ownership, Corporate Governance

1.0   INTRODUCTION

Agency cost has become a common problem in companies as it can badly affect the companies' performance and share price. The recent accounting scandals of prominent companies such as Satyam Computer Services (2001), American International Group (2005) and Bernard L. Madoff Investment Securities LLC (2008) have directed the public's attention to the incidents of self satisfying behaviour by the managers. The consequences of this incident to the organisation and the people behind the organisation can be severe. A majority of these accounting companies faced bankruptcy or liquidity. The existing shareholders lost all their investments and debt holders were left with the unsettled liabilities. In cases such as these, the firm faces a reduction in the share price, loses its loyal customers and becomes an attractive candidate for takeover by other firms. Eventually, it brings a negative impact to the corporate image and to the shareholders' confidence.

Due to that, companies have taken a lot of strategies to reduce this problem. One of the governance mechanism strategies taken is giving shares to the managers. Various studies have been conducted in order to measure the effectiveness of introducing MEO to a firm.

## 2.0   AGENCY COST AND MANAGERIAL EQUITY OWNERSHIP

The separation of control and ownership contribute to agency problem in which the managers may participate in non-value increasing projects as they can satisfy their needs but this could cause a conflict with the outside shareholders' interests. According to Jensen and Meckling (1976), the convergence of interests hypothesis suggested that managerial shareholding helps to align the interests of shareholders and managers. When the shareholding increases, the managers' interests will be aligned with the outside shareholders' interests where they will act accordingly to increase their wealth as well (Berle & Means, 1932; Fama, 1980; Jensen & Murphy, 1990; Jensen, 2000). Subsequently, agency cost problems will be resolved and minimized and this will contribute to an increase in performance. Hence, the agency theory by Jensen and Meckling proposed that there is a linear relationship between MEO and firm value. DeAngelo and DeAngelo (1985) found that high insider ownership can solve information asymmetric problem between the managers and shareholders. The stockholding by the manager is an effective way to improve the company's performance and at the same time align the managers' interests and the shareholders' wealth. Consequently, according to the convergence of interests hypothesis (alignment hypothesis), the greater the MEO, the better the company's performance will be.

Studies conducted by Mork et al. (1988) and Kole (1995) showed that MEO did not always have a positive relationship in reducing the agency cost. Managers who are in the position where they own substantial shares vote and control the board of directors, will satisfy their position without endangering their employment or salary. The argument behind the negative relationship is the entrenchment hypothesis. The private benefits gained by the managers for not following the principal decision, outweigh the cost of reduction in stock return resulting from suboptimal choices. Fama and Jensen (1983) found out that managers can control the board of directors by owning enough shares which make it possible for them to expropriate the company's wealth. Stulz (1988) highlighted that managers who owned large shares were more easily entrenched and gave a negative impact to the company's performance. In short, excessive insider ownership will result in managerial entrenchment. This agrees with the entrenchment hypothesis.

As a result of these two opposing hypotheses (the convergence of interests and entrenchment hypotheses), previous literature reported mixed relationships between insider ownership and firm performance as the proxy for agency cost.

3.0   CONCEPTUAL FRAMEWORK OF THE STUDY

Figure 1: The conceptual framework for MEO and Agency Cost (ROA, AUR and Exp)
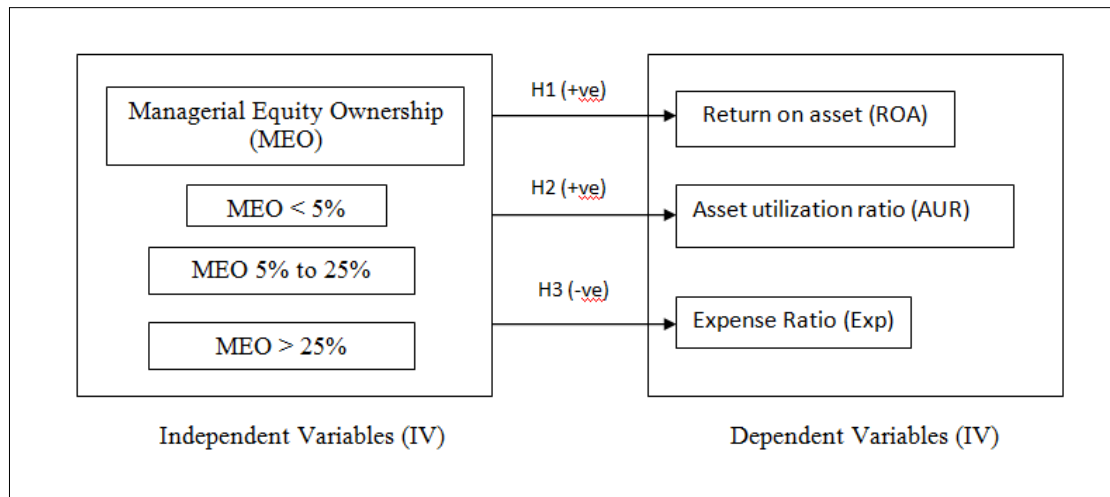
4.0   SAMPLE SELECTION AND DATA COLLECTION

The data selection process in the beginning was to include all public listed companies on the Main Board of Bursa Malaysia. Data was gathered from online sources (DataStream) and five years annual reports (2005 to 2009). Seven industries were chosen: construction, consumer, industrial, property, plantation, trading and technology. The sample size from each industry is made based on the 10 percent requirement of the total population in the industries, selected based on the lowest market capitalisation companies which represent small companies as at 31 December 2009.

5.0 HYPOTHESIS

H1 :   The ROA is significantly positively associated with MEO in large firms.

H2 :   The asset utilisation ratio (AUR) is significantly positively associated with MEO in large firms.

H3 :   The Exp is significantly negatively associated with MEO in large firms.

6.0   MULTIPLE REGRESSION ANALYSIS

6.1 ROA and MEO.

ROA = α + β1 MEO + β2 MEO < 5% + β3 MEO 5% to 25% + β4 MEO > 25% + β5 Leverage + ε_t

6.2 AUR and MEO.

AUR = α + β1 MEO + β2 MEO < 5% + β3 MEO 5% to 25% + β4 MEO > 25% + β5 Leverage + ε_t

Exp = α + β1 MEO + β2 MEO < 5% + β3 MEO 5% to 25% + β4 MEO > 25% + β5 Leverage + ε_t

ROA	=	the Income before extraordinary items (IBEI) divided by total assets.
AUR	=	the ratio of total asset by total sales.
Exp	=	the Selling, general and administration expenses (SGA) by Total Sales.
MEO	=	the aggregate number of shares held by the top five executives at a firm divided by the number of common shares outstanding
LEV	=	total Liabilities divided by Total Assets.
ε_t	=	the error term.

7.0   CORRELATION TEST

"Correlation matrix provides the nature, direction, and significance of the bivariate relationships of the variable used in the study", (Sekaran, 2006, p. 400). Correlation explains how one variable is related to another.

Table 1: Correlation Statistics for Large Firms' Variables

	ROA	AUR	Exp	MEO	MEO <5%	MEO 5%-25%	MEO >25%
ROA							
AUR							
Expense							
MEO	.004	.099*	-.014				
MEO < 5%	.023	-.101*	-.089	-.741***			
MEO 5% - 25%	-.062	.038	-.099**	.117**	-.710***		
MEO > 25%	.044	.094*	-.003	.881***	-.519***	-.232***	
Lev	-.405***	.058	-.038	-.018	-.066**	.904*	-.018

***. Correlation is significant at the 0.01 level (2-tailed). ** Correlation is significant at the 0.05 level (2 tailed) * Correlation is significant at the 0.1 level (2 tailed).

There was a significant positive correlation between MEO and AUR, with the p value less than 0.1 as reported in Table 1. Looking at the level of MEO, there was a negative significant correlation between the medium levels of MEO, between 5 and 25 percent with Exp. This is in line with Singh and Davidson (2003) where higher inside ownership in large firms seemed to achieve alignment of interests of the shareholders and the management through a reduction in the Exp. This shows that in large firms, granting higher ownership to managers would prevent them from manipulating the firms' expenses for perquisites activities. In addition, there was a strong negative correlation between leverage and ROA with p value less than 0.01, over 99% of the time this correlation could exist.

There was also a negative significant correlation between leverage and low MEO, with p value less than 0.05. Higher leverage could control the management's opportunistic behaviour to the extent where the debt repayment limited the management's access to cash (Jensen, 1986). Higher leverage may have also proxy for an increase in monitoring level by the debt holder. This could reduce the role of equity shareholding in deterring the management's selfish behaviour. Jelinek and Stuerke (2009) reported that high leverage firms did not really depend on the strategy to grant managers shares whereas they already had the debt holders to protect the shareholders' interest. Debt financing not only encouraged lenders to monitor, but it also reduced the free cash flow for the managers to manipulate.

7.1   Regression analysis

The adjusted R^2 for all models were between 1 and 20 percent. The adjusted R^2 of 0.168 suggested that the model of MEO in small firms explained about 16.8% of the variance in ROA. This small adjusted R^2 is common in this type of study, as found in the studies of Ang *et al*. (1999), Singh and Davidson (2003), Seifert and Wright (2004), and Jelinek and Stuerke (2009).

Table 2: Regression Results for Relationship between ROA , AUR and Exp with MEO and Leverage.

	Constant	MEO	MEO 5%-25%	MEO >25%	Lev	F-statistic	R^2
ROA	0.092 (20.817)***	-.259 (-2.376)	0.071 (1.329)	0.281 (2.525)**	-.411 (-11.135) ***	25.945***	0.168
AUR	0.716 (20.257)***	-.018 (-.155)	0.064 (1.110)	0.126 (1.040)	0.054 (1.335)	2.436**	0.009
Exp	.146 ((17.978)***	.195 (1.639)*	-0.169 (-.2.919)***	-.214 (-1.769)*	-0.023 (-.584)	2.447**	0.009

Coefficient for each variable is shown with t – statistics in parentheses

 * Significant at 10% level (2-tailed test); * * Significant at 5% level (2-tailed test); * * * Significant at 1% level (2-tailed test)

7.1.1   Return on Asset (ROA) as a Proxy for Agency Cost

Higher amount of MEO did increase the ROA in large firms. Based on the model of large firms, the MEO had a positive significant relationship with ROA at more than 25 percent, with a p-value of more than 0.05. There was more than a 95 percent chance that by increasing 1 unit of the MEO it would lead to improvement in the ROA by 0.28 units. The results are consistent with a study by Singh and Davidson (2003) which showed that larger inside ownership aligned the interests of shareholders and management and appeared to lower agency costs which was signified through better ROA. Hence, the null hypothesis of no significant positive relationship between ROA and MEO in large firms was rejected. In large firms, it was highly recommended for the firms to increase the MEO since it could boost the firms' performance. As the inside ownership level increased, managers would have an incentive to monitor the business operation and companies' strategies. Owner managers works towards value maximising investment and very unlikely becoming entrenched. Grossman and Hart (1982) mentioned that the small or average shareholder has little or no incentive to exert monitoring behaviour. In contrast, Shlaifer and Vishny (1986) and Shleifer and Vishny (1997) agreed that owner managers with substantial stakes of shares had more incentives to supervise management more effectively and works towards better firms' performance. Consistent with that of Thomas and Pederson (2000), Wu and Cui (2000) and Core and Larker (2002), increases in suboptimal equity ownership are associated with increases in subsequent firm performance.

Leverage showed a negative significant coefficient with ROA for large firms, supporting the results under the univariate analysis of correlation that indicated that higher leverage firms adversely affected the firms' profit performance. These findings did not meet the expectation of a positive

relationship between leverage and ROA. However, this result is consistent with the previous study of Singh and Davidson, who found that leverage was negatively related to one of the agency costs measures in large firms. This meant that high leverage would reduce firm performance as a proxy of high agency cost.

7.1.2   Asset Utilisation Ratio (AUR) as a Proxy for Agency Cost

Moreover, the findings of this relationship in large firms failed to reject the null hypothesis of there was no significant relationship between MEO at the higher level and AUR in large firms. The relationship between these two variables was not significant (p-value 0.18, 0.64, 0.126). Therefore, there was insufficient evidence at any confidence level that there was a positive significant relation between AUR and MEO in large firms. The relationship failed to reject the H0 of no significant relationship between MEO and AUR. H2b is not supported.

7.1.3   Expense Ratio (Exp) as a Proxy for Agency Cost

The coefficients for the Exp and MEO which are between 5 and 25 percent and MEO which is more than 25 percent were -0.169 (p value less than 0.01) and -0.214 (p value less than 0.1) respectively. Particularly, the coefficient indicated that there was sufficient evidence that Exp and MEO between the range 5 and 25 percent was negatively related to each other, with a significant at 99% confidence level. These results rejected H0 of there was no significant relationship between MEO and Exp. Inside shareholdings reduced the excessive unnecessary consumptions by managers, and lessen the agency cost. Specifically, the coefficient on MEO was -0.195 (p value less than 0.1), while the coefficient on MEO between 5 and 25 percent and MEO more than 25 percent are at -0.169 and -0.214 respectively. Taken together, the MEO coefficient indicated that when MEO was less than 5 percent of the total equity ownership, each additional 1 unit increase in MEO was associated with a 0.195 unit increase in the Exp. However, for MEO more than 5 percent, the Exp would decrease by 0.169 units for every unit increase in MEO and 0.214 units for each 1 unit increase in MEO above 25 percent. At lower than 5 percent MEO, the relationship was against what had been hypothesised earlier. Yet, as MEO continued to increase above the level, there was an incentive alignment effect that reduced the Exp. Lower Exps signified the effectiveness of the MEO in controlling the managers' lavish personal spending of corporate money. Similar trend of coefficient was demonstrated in the samples of pooled firms. In particular, the Exp increased 0.242 unit for each 1 unit increase in MEO up to 5 percent at a p value less than 0.01. However, as MEO continued to increase, the Exp decreased. Although the coefficient direction was negative as expected, there was no sufficient evidence to support the relationship (p-value more than 10 percent). However in large firms, MEO was an effective tool to reduce the agency cost, where there was a significant reduction in Exp.

Table 3: Summary of Regression Analysis between MEO and Agency Cost for Large Firms.

Dependent variables	No.	Expected	Findings
ROA	H1	(+ve) significant positive	Accepted
AUR	H2	(+ve) significant positive	Rejected
Exp	H3	(-ve) significant negative	Accepted

8.0   Summary of the Findings

This paper draws upon the ownership structure and agency cost theory, generally derived from the perspectives of the UK and US to analyse the impact of equity agency costs on Malaysian public listed companies. The motivation for this paper arises from the lack of measurement of the equity agency costs variable in the financial economic research especially in developing countries, where the ownership structure was different as compared to the widely dispersed ownerships in the UK and US.

It was found that agency costs was lower in firms with inside ownership (Ang *et al.*, 2000; Core & Larker, 2002; Singh & Davidson, 2003; Fleming, 2005) which was consistent with the argument that agency costs are reduced when there was an alignment in the separation of ownership. However, the effect was different, depending on the level of ownership. The agency cost decreased at higher level of MEO in large firms. Given that large firms were subjected to continuous security market monitoring; only large shareholding would be able to align the interests of managers and shareholders since it attracted more market attention on the managers' behaviour.

This study contributes to both research and practice. This study has proven that firms' sizes did give effects to the relationship between MEO and agency cost. Moreover, surprisingly the results showed a similarity with the results in the UK and US. The results of this study reflected significant relationship between ROA, AUR and Exp with MEO consistent with studies conducted by Mork *et al.*, (1988), McConnell and Servaes (2008), and Jelinek and Stuerke (2009).

These results give implications to the corporate governance practices. The results suggested that at a certain point, MEO may not have provided enough incentive to stop the management from consuming perquisites. The management from different size companies might have considered structuring the management incentives which were effective to control the managers' behaviour, based on the MEO level highlighted in this study.

There are several limitations in this study. Firstly, the study selected only companies with accounting data available on DataStream and in their annual reports. Only 10 percent of the samples out of the total population were selected based on the size. Out of the total companies listed on Bursa Malaysia in 2009, only 78 companies were chosen for this research. Future research should consider larger sample of companies to generalize the result and another sample of small firms for comparison.

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