# An Empirical Investigation of Agency Costs and Ownership Structure in Unlisted Small Businesses

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**Abstract:** The study uses panel data to investigate agency costs, both principal-agent (PA) and principal-principal (PP), in 240 small businesses not listed on the New Zealand Stock Exchange. Results show that both forms of agency cost vary according to industry, the life of the business and size. The results indicate that the degree of owner involvement in the business influences firm PA and PP agency costs. Moreover, this study finds non-linear relationship between agency costs and ownership structure align with convergence of interest hypothesis and managerial entrenchment hypothesis. It is noted that the distortion between equity returns and debt returns gives rise to a preference for quasi-equity and distorts the productive base and effective pricing of risk. The analysis indicates there is considerable variability in the burden of agency cost and that this raises the potential for regulatory and policy reforms that may enhance the productivity and growth in the sector.

## INTRODUCTION

Aspects of agency cost have been researched for small and large listed companies, but unlisted small businesses, many of which are unincorporated, have received relatively less robust empirical analysis. "Although agency costs can affect both large and small firms, the initial separation between ownership and control typically occurs when firm is still small" (Danielson & Scott, 2007). Definitions for small and medium size enterprises (SMEs) vary from country to country. In New Zealand, the Ministry of Economic Development (2007) defines SMEs as having less than twenty employees. In New Zealand, the number of SMEs increased by 2% between February 2006 and February 2007, and 2008's statistics show SMEs represent 97.1% of all New Zealand businesses enterprises. As small businesses are important in most economies, contributing significantly to gross domestic product (GDP), employment and government taxation revenue, it is important to understand the agency cost issues related to SMEs.

In the Jensen and Meckling (1976) agency theory, the zero agency-cost base case is, by definition, the firm owned solely by a single owner-manager. When management owns less than 100% of the firm's equity, shareholders incur agency costs resulting from management's shirking and perk consumption. Thus Jensen and Meckling's (1976) zero agency cost base case is common in SMEs, due to most of the unincorporated businesses

being owned solely by a single-owner manager. Therefore, a traditional principal-agent (PA) agency cost is not a significant issue for those single-owner manager small businesses. However, non-solely owned SMEs still have PA agency costs due to their level of separation. The absence of information about these unincorporated firms makes this problem worse. Instead of traditional PA agency costs, conflict between the majority shareholders and minority shareholders is a significant issue of small firms. This may be because owners of SMEs tend to hold considerable and undiversified equity position (Hewa-Wellalage & Locke, 2011).

This paper presents PA and PP agency costs using a sample of New Zealand unlisted firms. Following Ang, Cole and Lin (2000) this study used an expense ratio and asset utilisation ratios, which are proxies for PA agency cost for small business. Small businesses may not pay dividends, and this is obviously true for unincorporated firms; therefore, dividend pay-out ratio cannot be used as proxy for PP agency costs, which were used by Faccio, Lang and Young (2000) who measured PP agency cost for large firms. An income distribution metric is used as the PP agency costs proxy for this study. The SME sector is important and this study extends the current literature on agency costs into the smaller business group. The PP cost in particular has been articulated in the context of listed public companies in mature capital markets. The extent to which PP is applicable for small business is developed in this paper. Additionally, this research uses the recent dataset period in New Zealand, 1998-2008, whereas prior studies covered mostly US and UK firms and spanned only a few years. In particular, the adoption of the generalised method of moment (GMM) technique to control endogeneity effect on agency costs, provide robust results.

The paper proceeds as follows. The next section is reporting prior research in literature, which points to several hypotheses. This is followed by a description of data, sample and variable measures. The method and empirical results are then presented. Implications and limitations are provided in the final section.

## LITERATURE REVIEW

Costs associated with a lack of goal congruence between two parties were brought to the fore by Ross (1973) and were further explored by Jensen and Meckling (1976). These costs are often referred to as agency costs and can occur between a principal and agent and also between principal and principal. A PA problem arises when agents pursue their own goals rather than the goals of the principal. It is the result of conflicting interests among managers and owners and asymmetric information (Chrisman, Jess, Chua, & Litz, 2004). In many instances, agents will possess more or better information than the principals about strategic and operational decisions and the results of those decisions (Ross, 1973). A consequence of this divergence of knowledge about the firm is the potential for moral hazards and adverse selection to occur.

The PP problem is best described in a firm with one large shareholder and a fringe of small shareholders (Villalonga & Amit, 2004). In such a firm, the traditional agency cost or PA conflict is alleviated due to the large shareholder's greater incentive to monitor the manager. However, a second type of conflict emerges when large shareholders exercise their substantial control and influence over firm matters and, as agency theory suggests, they have incentives to consume the firm's resources at the expense of the minority shareholders (Anderson & Reeb, 2004). It is important to note that the PP problem is more likely to overshadow the PA problem when the large shareholder is an individual or

a family, as opposed to an institution. This is because an individual or a family will have incentives for both expropriation and monitoring, with a potentially greater incentive for expropriation.

In the finance literature it is often assumed that equity agency costs are zero in a 100 percent owner manager firms and equity agency costs increase with the separation of ownership and control (Fleming, Heaney, & McCosker, 2004). It is suggested that agency costs are inversely related to the proportion of ownership held by the primary owner (Ang et al., 2000). This argument is in line with Jensen's (1993) convergence of interests hypothesis, stating that managerial shareholdings create the alignment of the interests of the owners and managers, and as the proportion of managerial equity ownership increases firm performance also increases. Ang et al. (2000) claim that the incentive to consume perquisites declines as a manager's ownership share increases. They propose that because the manager's share of the firm's profits rises with ownership, managers will have less incentive to engage in non-value adding activities.

Chrisman et al. (2004) suggest that in small business where there is a conflict of interest between the owner and employee, theft and other forms of opportunistic behaviour may be present. This leads to PA agency costs in small business. As a solution of this problem, most of the small firms used owner-manager leadership that can effectively be used as a monitoring mechanism for small businesses. Using 68 SMEs in Norway, Randoy and Goel (2003) indicate that direct monitoring by owners is a guide to lower agency costs in small firms. This may be because small business owners usually invest their personal wealth into the business and business failure generates huge costs to them. Therefore, higher insider ownership is widely known to provide incentives to monitor management in small businesses.

A non-linear relationship between agency costs and ownership concentration is another important issue in empirical analysis (McKnight & Weir, 2009). Park and Jang (2010) find that until the optimal break point is reached, convergence of interest with insider ownership increases firm performance and then managerial entrenchment decreases firm performance after the optimal point. Using the asset turnover ratio as proxy for PA agency costs, they find significant negative relationship with managerial entrenchment. This leads to the first hypothesis in this study:

H1a: There is significant negative relationship between the working owner ratio and PA agency costs in small businesses.

H1b: PA agency costs will be higher at both the low and high percentages of working owner ratio.

Diversified shareholders will evaluate investments using rules that maximise the value of the firm's residual cash flows (Anderson & Reeb, 2004), but larger individual shareholders may evaluate investments based on their needs, such as firm growth, technological innovation or firm survival, rather than attempting to maximise shareholder value. Shleifer and Vishny (1997) explain that the expropriation hypothesis predicts that the high level of concentrated ownership increases expropriation of majority shareholders from minority shareholders. In line with that, Carney and Gedajlovic (2002) find higher PP agency costs when ownership and control are concentrated in a few individuals or their family. More specifically, Bennedsen and Nielsen (2010) explain that owner manager firm

control concentration does not increase firm performance, due to entrenchment problem persisting. Moreover, How, Verhoeven and Wu (2008) find that when the majority shareholders have control rights in excess of cash flow rights, they expropriate expenses of minority shareholders. This leads to a significant amount of tunnelling. However, in a recent study, Su, Xu and Phan (2008) find a non-linear relationship between the level of ownership concentration and PP conflict in the Chinese context. This may be because in small groups the controlling shareholders are generally involved in the firm's management, which includes balancing the monitoring issues. In order to sustain external equity in the firm, the majority shareholders establish a good reputation for not expropriating the firm's wealth (LaPorta, Lopez-de-Silanes, Shleifer, & Vishny, 2000), thereby limiting PP agency conflicts. However, after certain level due to entrenchment PP agency costs can increase. This leads to the second hypothesis in this study:

H2a:  There is a significant positive relationship between working owner ratio and PP agency costs in small businesses.

H2b:  PP agency costs will be higher at both low and high percentages of the working owner ratio.

In order to safeguard their loans, private creditors conduct extensive monitoring of firms (Ang et al., 2000). A bank for instance, has access to a firms' non-public information and closely monitors the investment decisions of the firm (Anderson & Makhija, 1999). This monitoring leads firms to operate more efficiently by better utilising assets and limiting perk consumption, as the firm attempts to improve the reported financial performance to the bank (Ang et al., 2000). This bank monitoring complements shareholder monitoring of managers, and reduces agency costs incurred by the owner (Ang et al., 2000). The empirical evidence on U.S. firms seems to suggest that this is the case. For example, early evidence from James (1987 as cited in Anderson & Makhija 1999) and Lummer and McConnell (1989) reports that the performance of U.S. small firms responds favourably to announcements of bank financing. On the other hand, public creditors, such as bondholders, tend to have limited information about the firms' investment opportunities, as they have limited ability to ensure managers are pursuing optimal investment policy. Because of this, a borrower has opportunities to act contrary to the interests of public creditors (Singh & Davidson, 2003). It is therefore reasonable to expect that firms with a larger proportion of public debt financing in their capital structure will have higher agency costs than firms with a higher proportion of monitored private debt financing. Small businesses rely predominantly on owner loans, i.e. quasi-equity, and bank loans. Where loans are small and they are processed using a credit score algorithm by the bank, there is likely to be almost zero monitoring to reduce agency costs. A third hypothesis (a) is formulated regarding PA agency costs and debt level of the small firms.

H3a: PA agency costs will be higher as the debt level of the firm increases

A growing number of studies find that the level of financial leverage has significant negative impact on firm PP agency costs (Al-Malkawi & Nizar, 2007; Faccio et al., 2000). Their findings are explained due to highly levered firms maintaining their internal cash flows to fulfil firm requirements, then controlling shareholders cannot expropriate firm wealth. Moreover, Jensen (1993) and Agrawal and Jayaraman (1994) argue that because highly levered firms had greater commitments to their creditors, the excess funds available is reduced. However, Hamelin (2010) explains SMEs are sometimes financed by informed

minority shareholders, such as venture capitalists, and their monitoring ability of dominant shareholders is limited. Therefore, leverage does not have an ability to reduce majority shareholders extracting private benefits from firms. A third hypothesis (b) is formulated regarding PP agency costs and debt level of the small firms.

H3b:   PP agency costs will be higher as the debt level of the firm increases

## EMPIRICAL TEST

### Data and sample

The sample of New Zealand unlisted small businesses, covering the period 1998-2008 inclusive, was made available by the Management Research Centre at the University of Waikato. The data are collected annually in conjunction with the New Zealand Institute of Chartered Accountants, as part of a financial benchmarking reporting programme, and the total series reaches back to 1982. The eleven-year period is chosen to ensure there are adequate businesses in the sample, as the data for earlier years becomes increasingly sparse nearer 1982.

The random sample is drawn from accounting practices that prepare end of year financial returns for between 1000 small businesses each year. Following Ang et al. (2000), a zero equity benchmark is synthesised for sole proprietorship, removing those firms from the randomly generated sample. After adjustments, the dataset provides 2,640 observations from a total of 240 businesses appearing each year. Firms included in the study represent a range of industries categorised as primary, energy, goods, service and other.

### Variables and measures

This investigation of PA and PP costs is based on financial data supplied by individual businesses and differs from previous studies of small businesses that drew on government surveys or bank-supplied data. Consistent with Ang et al. (2000) the first dependent variable for PA agency costs is the logarithm of expense ratio (LNOPEXL). This is defined as the ratio of operating expenses to annual sales. Operating expenses exclude the labour related expenses. The second dependent variable of this study is the logarithm of assets utilisation ratio (LNASSET). This is defined as the ratio of annual sales to total assets. Faccio et al. (2000) propose measuring PP costs using dividend pay-out. In the case of small businesses, dividends may not necessarily be appropriate; for example for a non-company structured firm an alternative profit distribution metric is necessary. Therefore, the income distribution ratio (INCOME) is used as the third dependent variable of this study. This is defined as net income per working owner/ total sales.

Independent variables are separated into three groups, relating to ownership structure variables, external monitoring variables and control variables. Three variables relating to the ownership structure are used. First, following Vos and Roulston (2008), the first ownership structure variable is the working owner ratio (OWNER). This measures the degree of owner involvement in the firm. The ratio is calculated as the number of full time equivalent working owners divided by total number of full time equivalent workers. Second, high working ownership (HIGH), this is a dummy variable = 1, when firm working ownership is greater than or equal 0.75 of all working staff. Third, no owner involvement (LOW) is a dummy variable = 1, when firm working ownership is equal 0. Debt-to-assets ratio (DEBT) is included as an external monitoring variable. This ratio is calculated as total

debt divided by total assets. Several additional control variables are taken into account, including firm size (LNSALES), which is measured by a natural logarithm of total sales; firm maturity (AGE), which is measured by the number of years operating in the industry; and industry effects for the five main industries: primary, energy, goods, services and others. These industries are represented by four dummy variables in the regression models.

Table 1 presents the descriptive statistics for the data and it is apparent that the variables are normally distributed, except age, which is transformed to log (AGE) in the analysis. The mean number of working owners percentage (OWNER) is 44.3%, and 23% of sample firms have a higher percentage of owners engaged in businesses. Only 0.6 percent of firms have no owners engaged in business. This sample confirms owner involvement is prominent in small business. The debt-to-assets ratio ranges from 0.86 to 36.04, indicating small businesses' low reliance on debt. This study sample consists predominantly of young firms with 8 years as the average age and maturity range falls from 1 to 25 years. However, given the high churn over in small businesses, where in New Zealand 70% do not exist after 5 years, the mean of 8 years reflects solid going concerns.

**Table 1: Descriptive statistics**

| Variable | Obs | Mean | Median | Std.Dev | Min | Max |
|---|---|---|---|---|---|---|
| LNOPEXL | 2640 | -2.094913 | -2.12846 | .8022657 | -4.494563 | .2651079 |
| LNASSET | 2640 | .8703738 | 0.938751 | .9854159 | -2.802817 | 12.66509 |
| INCOME | 2640 | .130864 | 0.085387 | .190495 | -.3948126 | 3.232396 |
| OWNER | 2640 | 44.32244 | 33.33333 | 32.76039 | 0 | 100 |
| HIGH | 2640 | .225 | 0 | .4176614 | 0 | 1 |
| LOW | 2640 | .0064394 | 0 | .0800022 | 0 | 1 |
| LNSALES | 2640 | 13.43817 | 13.38354 | 1.34149 | -2.802817 | 18.38514 |
| DEBT | 2640 | .8658849 | 0.755117 | 1.490409 | 0 | 36.04424 |
| AGE | 2637 | 8.131968 | 8 | 3.992409 | 1 | 25 |
| LNAGE | 2637 | 1.939463 | 2.079442 | .6208633 | 0 | 3.218876 |
| INDUSTRY1 | 2640 | .2041667 | 0 | .4031677 | 0 | 1 |
| INDUSTRY2 | 2640 | .2 | 0 | .4000758 | 0 | 1 |
| INDUSTRY3 | 2640 | .2 | 0 | .4000758 | 0 | 1 |
| INDUSTRY4 | 2640 | .2 | 0 | .4000758 | 0 | 1 |
| INDCUTRY5 | 2640 | .195833 | 0 | .396916 | 0 | 1 |

*Method*

Panel data covering 11 years of variables for 240 businesses is prepared initially. Prior studies have used panel OLS to control heterogeneity over time and across firms. However, panel OLS requires that the independent variables are strictly orthogonal to the error term, and that these errors are independently and identically normally distributed with a mean of zero and variance equal to $\sigma2$. Singh and Davidson (2003) point out that it is reasonable to consider the ownership structure variables are determined endogenously. If the strict exogeneity condition fails, then panel OLS will be inconsistent. The Durbin-Wu-Hausman (DWH) test can be used as a diagnostic test for endogeneity of agency proxies and ownership structure variables. In the presence of endogeneity to obtain consistent and unbiased estimates, this study used a dynamic panel GMM estimator.

The analysis includes a Hansan/Sargan overidentification test for serial correlation to ensure this model specification validity.

## RESULTS

Though, most of prior studies ignored the endogeneity between insider ownership and agency costs, Singh and Davidson (2003) and Fleming et al. (2004) point out the possibility of endogeinety. The results of DWH revealed that ownership structure and all agency proxies have a significant endogeneity problem, suggesting a need to address the issue of potential endogeneity.

**Table 2: Dynamic panel GMM estimator regressions of PA agency costs**

| Variables (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|
| Number of obs[a] | 2397 | 2397 | 2397 | 2397 | 2397 | 2397 |
| Number of groups=240 Regressor | LNOPEXL(1) | LNOPEXL(2) | LNOPEXL(3) | LNASSET(1) | LNASSET(2) | LNASSET(3) |
| $L_1$ | .0016996 | .0217318 | .0221613 | .0537026*** | .0557025 | |
| | (.0136537) | (.0129994) | (.0162223) | (.0068977) | (.009454) | |
| **Ownership structure variables** | | | | | | |
| working owners(OWNER) | -.0008162** | | | -.0027059*** | | |
| | (.0004077) | | | (.0004044) | | |
| High working owners>=0.75(HIGH) | | .0774228*** | | | -.1438689*** | |
| | | (.0192457) | | | (.0215891) | |
| zero working owners=0 (LOW) | | | .4937471*** | | | -.4985053*** |
| | | | (.0058517) | | | (.1217804) |
| **External monitoring variable** | | | | | | |
| Debt-to-assets ratio(DEBT) | .0321996*** | .0261252*** | .0285206*** | .1597869*** | .1445384*** | .1358483*** |
| | (.0034281) | (.0036624) | (.004852) | (.0112579) | (.0116519) | (.0124959) |
| **Control variables** | | | | | | |
| Log of sales(LNSALES) | -.2354477*** | -.2094045*** | -.2275834*** | .0506519*** | .0878353*** | .1298591*** |
| | (.0078637) | (.0067343) | (.0094158) | (.0110371) | (.008546) | (.0087263) |
| Maturity of firm(LNAGE) | -.0020987 | -.0062001** | -.0067198** | .0191987** | .0141462*** | .009811** |
| | (.0027196) | (.0024721) | (.0032404) | (.00419) | (.0043494) | (.0053049) |
| INDUSTY1 | -1.054351*** | .1279708 | -.8161404*** | -.2243119* | .4709797*** | -.1436754 |
| | (.2218467) | (.1163178) | (.2934103) | (.1794632) | (.3128512) | (.566154) |
| INDUSTY2 | -.9897903*** | .4650784*** | -.0567089 | -.5234006** | -.3202764*** | -2.282645*** |
| | (.207594) | (.1385707) | (.327862) | (.2240397) | (.235487) | (.5446683) |
| INDUSTY3 | .5673588** | -.1164321 | -.8592612*** | -2.478888*** | -2.1831*** | -2.570705*** |
| | (.2535652) | (.0896722) | (.2904678) | (.1775866) | (.2068124) | (.3797251) |
| INDUSTY4 | -.0355418 | .5624616*** | .1237879 | .4710332** | .367125 | .2637014 |
| | (.2017317) | (.1364101) | (.283809) | (.2293483) | (.2502849) | (.4288782) |
| **Regression summary statistics** | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| AR(1) | 0.1950 | 0.3482 | 0.2650 | 0.4844 | 0.6577 | 0.6284 |
| AR(2) | 0.0850 | 0.0822 | 0.0743 | 0.6577 | 0.6474 | 0.5632 |
| J-statistics | | | | | | |

*a Balanced panel; * Significant at 10% level; **Significant at 5% level; ***Significant at 1% level; This model provide standard error which are in parentheses*

Table 2 addresses the issue of potential endogenity (by means of lag instrumental variables) and PA agency costs proxies. Column 2-4 and column 5-7 report expense ratio and assets utilisation ratio respectively. The analysis confirms that PA cost is correlated with several variables that have been observed in prior studies, but as noted above these are in some instances reflecting confounding results typically reflected by sign reversals. The coefficient of OWNER variable is negative and statistically significant at 1% level for both the expense ratio and assets utilisation ratio, indicating working owners reduce firm expenses as well as asset utilisation. Hence, this finding accepts H1a: There is significant negative relationship between the working owner ratio and PA agency costs in small businesses.

Furthermore, as can be seen from Table 2, the higher number of working owners($\geq 0.75$) and zero number of working owners are significantly positively related to PA, indicating higher insider ownership increases management entrenchment problems, and lower insider ownership increases misalignment of the management and owners. Hence, this study finding accepts H1b: PA agency costs will be higher at both low and high percentage of working owner ratio. Debt-to-assets ratio is significantly positively related to both the firm expense ratio and assets utilisation ratio at the 1% level. Hence, this study finding accepts H3a: PA agency costs will be higher at higher debt levels of the firm.

This suggests that at greater debt levels there is a larger expense version which included increased interest payments. Higher debt also appears to drive increased productivity through increased asset utilisation. Historical cost assets having low written down values while debt is at market value distorts the ratio and introduces an aging bias. Another distortion can occur due to quasi-equity in small businesses, where owners prefer to lend money to their businesses rather than buy more shares. The figures in Table 4 indicate that PA is related to industry type. Firm size is 1% significantly negatively correlated with PA, suggesting small firms have higher PA agency costs than larger firms. Firm age is significantly positively related to the assets utilisation ratio at the 1% level, indicating older firms have higher efficiency than younger firms.

**Table 3: Dynamic panel GMM estimator regressions of PP agency costs**

| Variables | | | |
|---|---|---|---|
| Number of obs[a] | 2397 | 2397 | 2397 |
| Number of groups=240 | | | |
| Regressor | INCOME(1) | INCOME(2) | INCOME(3) |
| $L_1$ | .0235788*** | .0323231*** | .0310854 |
| | (.0069025) | (.003084) | (.0045076) |
| **Ownership structure variables** | | | |
| Working owners(OWNER) | .0010004*** | | |
| | (.0000589) | | |
| High working owners>=75(HIGH) | | .0699248*** | |
| | | (.0040923) | |
| Zero working owners=0 (LOW) | | | -.0617952** |
| | | | (.0332695) |
| **External monitoring variable** | | | |
| Debt-to-assets ratio(DEBT) | -.0098881*** | -.007826*** | -.007182*** |
| | (.0017156) | (.0014987) | (.0021159) |
| **Control variables** | | | |
| Log of sales(LNSALES) | -.0408236*** | -.0455653*** | -.0570416*** |
| | (.0015457) | (.0013245) | (.0017349) |
| Maturity of firm(LNAGE) | -.0052647*** | -.0059485*** | -.005488*** |
| | (.0006338) | (.0006006) | (.0008209) |
| INDUSTY1 | .1143321*** | .2909645*** | .3884053*** |
| | (.0210085) | (.0277714) | (.0620123) |
| INDUSTY2 | .0528388** | 2536201*** | .4932888*** |
| | (.0292732) | (.053535) | (.0973942) |
| INDUSTY3 | .037221 | .2090994*** | .4687622*** |
| | (.0234979) | (.0190529) | (.0488554) |
| INDUSTY4 | -.0810902 | .2194696*** | .2320318*** |
| | (.0180862) | (.0305705) | (.0390559) |
| **Regression summary statistics** | | | |
| AR(1) | 0.0000 | 0.0000 | 0.0000 |
| AR(2) | 0.9912 | 0.9177 | 0.9173 |
| J-statistics | 0.8572 | 0.8662 | 0.8227 |

*a Balanced panel; * Significant at 10% level; **Significant at 5% level; ***Significant at 1% level;*
*This model provide standard error which are in parentheses*

Table 3 reports the PP agency costs regression results. The coefficient of OWNER variable is positively and statistically significant at 1% level for the INCOME variable, indicating working owners increase firm PP agency costs. Hence, this study accepts H2a: There is significant positive relationship between the working owner ratio and PP agency costs in small businesses.

Further, PP agency cost is significantly positively correlated with higher insider ownership group at the 1% level, indicating managerial entrenchment. Further, it is confirmed by lower insider ownership showing a significant negative relationship with PP agency costs at the 1% level. Hence, this study accepts H2b: PP agency costs will be higher at both low and high percentages of the working owner ratio. Intuitively, it seems likely that as a firm's size grows it reduces the ability for expropriation by majority shareholders. Next, it is noted that industry factors play an important role, with some industries being more prone to PP costs than others, which is similar to the observation of Chrisman et al. (2004). As reported in Table 3, the maturity of the business is negatively correlated with PP cost. This suggests that longer-life businesses are not only profitable in a sustainability sense, but also exploitation by senior owner(s) is not so apparent. PP cost has a significant negative correlation with leverage. This leads to accepting H3b: PP agency costs will be higher at higher debt levels of the firm.

As the proportion of debt in the capital structure increases, so too does the interest expense with associated demand on cash flow, and it appears this situation curtails the likelihood of a major owner diverting additional resources in his or her own direction. The Auto Regressive AR (1) and AR (2) tests report no serial correlation in order1 and order2 for all agency proxies. Therefore, there is no serial correlation in the original error, as desired. The second specification test is an overidentification test. The Hansan-Sargan J statistics are not significant under a 5 percent confidence level for three agency proxies, which mean that the instruments were valid.

## SUMMARY AND CONCLUSION

The analysis provides the first robust empirical analysis of small businesses that are not stock exchange listed companies. Data availability is a significant issue and this impedes the research process in terms of exploring independent variables that might reasonably be expected to be available for listed public companies. The results presented above indicate that the degree of owner involvement in the business influences firm PA and PP agency costs. Moreover, this study finds that a non-linear relationship between agency costs and ownership structure align with the convergence of interest hypothesis and managerial entrenchment hypothesis.

The analysis indicates there is considerable variability in the burden of agency cost and that this raises the potential for regulatory and policy reforms that may enhance the productivity and growth in the sector. The PP cost has received no prior consideration and this is of considerable importance based on the results. As the number of owner changes, the potential for one managing owner to expropriate the profit of other owners becomes more pronounced. The requirement for greater disclosure of financial reporting by all businesses, reducing opacity, will potentially reduce this distortion concerning the effective distribution of scarce capital resources. Due to highly concentrated ownership being more common in small firms, it is recommended to have legal and regulatory regimes that may act as mechanisms to protect minority shareholders, especially in the small firms context.

De Jure and de facto protection for creditors, investors and other related business parties need to be strengthened to avoid expropriation and tunnelling.

Agency cost has two components, typically referred to as PA and PP, and these require separate consideration. First, it is important to remove any taxation incentivisation for financial engineering in the small business sector. The distortion between equity returns and debt returns gives rise to a preference for quasi-equity and distorts the productive base and effective pricing of risk. The common requirement for personal guarantees for business financing similarly distorts the operational efficiency as personal risk is not limited, and in the absence of a gambling mentality, risk taking is reduced. The results tend to be found in unnecessary overhead loadings with very high bankruptcy costs impounded into the cost of capital.

Results indicate firm debt has a significant impact on firm PA and PP agency costs. However, the debt issues for smaller businesses are problematic. First, the provision of finance from banks is likely to be mechanical, requiring personal guarantees and mortgage of family home as collateral. Second, to avoid lower ranking equity in case of failure, owners exhibit performance for quasi-equity. This distorts the productive base and effective pricing of risk. This finding shows that the increase of availability and accessibility of small firm finance can have a benefit of low PA and PP agency conflicts.

**REFERENCES**

Agrawal, A., & Jayaraman, N. (1994). The dividend policies of all-equity firms: a direct test of the free cash flow theory. *Managerial and Decision Economics, 15,* 139-148.

Al-Malkawi, H., & Nizar, H. (2007). Determinants of Dividend Policy in Jordan, An application of Tobit Model. *Journal of Economic and Administrative Sciences, 23*(2), 44-70.

Anderson, C. W., & Makhija, A. K. (1999). Deregulation, disintermediation, and agency costs of debt: evidence from Japan. *Journal of Financial Economics, 51*(2), 309-339.

Anderson, R. C., & Reeb, D. M. (2004). Board Composition: Balancing Family Influence in S&P 500 Firms. *Administrative Sciences Quarterly,49,*209-237.

Ang, J., S.Rebel, A.Cole, & Lin, J. W. (2000). Agency Costs and Ownership Structure. *The Journal of Finance, LV*(1), 81-106.

Bennedsen, M., & Nielsen, K. (2010). Incentive and Entrenchment Effects in European Ownership. *Journal of Banking and Finance 34*, 2212-2229.

Carney, M., & Gedajlovic, E. (2002). The coupling of ownership and control and the allocation of financial resources: evidence from Hong Kong. *Journal of Management Studies, 39*, 123–146.

Chrisman, J., Jess, J., Chua, H., & Litz, R. A. (2004). Comparing the Agency Costs of Family and Non-Family Firms: Conceptual Issues and Exploratory Evidence. *Entrepreneurship Theory and Practice, 28*(4), 335-354.

Danielson, M. G., & Scott, J. A. (2007). A note on agency conflicts and the small firm investment decision. *Journal of Small Business Management, 45(1)*, 157-175.

Faccio, M., Lang, L. H. P., & Young, L. (2000). Dividends and Expropriation. *European Financial Management Journal,91(1)*,54-80.

Fleming, G., Heaney, & McCosker, R. (2004). Agency Costs and ownership structure in Australia. *Pacific-Basin Finance Journal, 13(1)*, 29-52.

Hamelin, A. (2010). Small Business Groups enhance performance and promote stability, not expropriation. Evidance from French SMEs.Retrived from http://ifs.u- strasbg.fr/large/publications/2010/2010-04.pdf

Hewa-Wellalage, N., & Locke, S. (2011). Agency Costs, Ownership Structure and Corporate Governance Mechanisms: A Case Study in New Zealand Unlisted Small Companies. *International Research Journal of Finance and Economics*(78), 178-192

How, J., Verhoeven, C. Y. P., & Wu, C. L. (2008). Dividends and Expropriation in Hong-Kong. Asian Accemdamy of Management. *Journal of Accounting and Finance, 4*(1), 71-85.

Jensen, M. (1993). The Modern Industrial Revolution. *Journal ofFinance, 48*(3), 831-880.

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

LaPorta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Agency problems and dividend policies around the world. *The Journal of Finance, 55*(1-33)

Lummer, S., & McConnell, J. (1989). Further Evidence on the Bank Lending Process and the Capital Market Response to Bank Loan Agreements. *Journal of Financial Economics, 25*, 99-122.

McKnight, P. J., & Weir, C. (2009). Agency costs, corporate governance mechanisms and ownership structure in large UK publicly quoted companies: A panel data analysis. *The Quarterly Review of Economics and Finance, 49*(2), 139–158.

Ministry of Economic development. (2007) Retrieved from http://www.med.govt.nz/business-growth-internationalisation/pdf-docs-library/ BA%200009%20-20 SMEs% 20in% 20%New%20Zealand%20Structure%20and%20Dynamics%20-291%20kB%20 PDF.pdf

Park, K., & Jang, S. (2010). Insider ownership and firm performance: An examination of restaurant firms. *International Journal of Hospitality Management, 29*(3), 448-458.

Randoy, T., & Goel, S. (2003). Ownership structure, founder leadership, and performance in Norwegian SMEs:implications for financing entrepreneurial opportunities. *Journal of Business Venturing, 18*(5), 619-637.

Ross, S. A. (1973). The Economic Theory of Agency: The Principal's Problem.

Shleifer, A., & Vishny, R. (1997). A survey of corporate governance. *Journal of Finance, 52*, 737–783.

Singh, M., & Davidson, W. N. (2003). Agency costs, ownership structure and corporate governance mechanisms. *Journal of Banking and Finance, 27*(5), 793-816.

Su, Y., Xu, D., & Phan, P. H. (2008). Principal-principal conflict in the governance of the Chinese public corporation. *Management and Organization Review, 4*(1), 17–38.

Villalonga, B., & Amit, R. (2004). How Are U.S. Family Firms Controlled? *Review of Financial Studies, 22*(8), 3047-3091.

Vos, E., & Roulston, C. (2008). SME owner involvement and business performance: Financial security rather than growth. *Small Enterprise Research, 16*(1), 70-85.