"DON'T MEASURE PROFITS, GO FOR THE GOALS": PRELIMINARY INVESTIGATION INTO HOW OWNER-OPERATOR OBJECTIVES IMPACT PERCEIVED SME PERFORMANCE

Rick Newby: University Of Western Australia, City?, Wa, Australia
John Watson: The University Of Western Australia, Crawley Wa, Australia

~

Contact: Rick Newby, University of Western Australia, Accounting and Finance, Business School, MBDP 250, 23 Stirling Highway, 6009 City?, WA, Australia, (T) +61 8 6488 2798, (F) +61 8 6488 1047, Email: Rick.Newby@uwa.edu.au

Abstract
By examining their relative usefulness in explaining the utility owners receive from their firms, this study finds that both "objective" economic return and "subjective" owner-operator goal achievement play a significant role. However, "objective" economic return was found to be less effective than its "subjective" alternative, thereby debunking the argument that income/wealth maximization is the only, or even the best, way to assess a SME owner's utility. The findings also support the contention that measures of SME performance should incorporate how effectively firms in achieving their owner-operators' goals.

The Role of Owner-operator Goals
Jensen (2002) argues that the capitalist motivation of increasing returns on owners' contributions is best for the success of a firm and for society as a whole. This belief in the paramount importance of economic success is built on the theory of demand, being based on the concept that individuals seek to maximize their utility (defined as "the capacity to satisfy human wants and desires" - Gove and Merriam-Webster Inc., 1993). Given the difficulties in quantifying this "*psychological thing which is incapable of measurement in absolute units*" (Bannock et al., 1972, p. 411), it is argued that utility can only be accurately determined by some form of objective proxy. For individuals, this is usually the economic value of goods and services that they can consume without reducing their wealth (Alexander, 1962). For firms, it is the difference between the receipts from, and the costs of, production (Hicks, 1946), or alternatively, the change in its market value (Jensen, 2002). Utility maximization is, therefore, assumed to come from maximizing income or wealth.

Many contend, however, that income or wealth maximization is, at best, only a noisy proxy for utility. Moreover, use of this proxy appears to ignore the extensive literature on job satisfaction which hypothesizes (Herzberg et al., 1959; Maslow, 1954), and demonstrates, how non-economic factors can motivate both employed (for example, see Lang and Johnson, 1994; Mitchell et al., 2001; Petty et al., 1984; Pool, 1997; Rowley et al., 1992) and self-employed individuals (for example, see LeCornu et al., 1996; Naughton, 1987; Thompson et al., 1992; Vandenberg and Lance, 1992; VandenHeuvel and Wooden, 1997).

Why has the income, or wealth maximization, proxy become so dominant? The answer lies in the type of subjects examined in most business research. The majority of performance-related studies have been based on the small number of businesses at the "big end of town", where all information about a firm is assumed to funnel towards the volume, price, and volatility of shares traded (Kothari, 2001). Given these firms are generally publicly owned and professionally managed, it is likely that most of the utility derived from their ownership will come from economic returns (although it has been suggested that utility might be gained simply from ownership of a blue or green chip company or through ethical investments – see Mackenzie and Lewis, 1999; Spiller, 2000; Tippet and Leung, 2001). Hence, income or wealth maximization would seem a suitable proxy for utility in this small subset of businesses.

However, the suitability of such a proxy to owner-operated SMEs that outnumber professionally managed listed companies in Australia by some 750 to 1 (Australian Bureau of Statistics, 2002; Australian Stock Exchange, 2001) appears, at best, questionable. Based on the view that economic performance may not be valid in gauging subjective constructs (Poiesz and von Grumbkow, 1988), income or wealth maximisation seems to disregard the utility that SME owner can derive from other sources (such as being independent, proving you can achieve, having personal relationships with customers and improved relationships with family and friends). For example, Keats and Bracker (1988, p. 53) noted that "*performance may have a different set of meanings for small firms than for large firms*" and Kuratko, Naffziger and Hornsby (1997) suggested that the goals of owner-operators might be uniquely related to their individual situations. Similarly, Gimeno et al. (1997, p. 751) indicated that "*Owners may seek 'amenity potential' from their businesses – gaining utility from being able to influence the type of goods produced by the firm*" while Buttner and Moore (1997, p. 34) found that female small business owners measured success in terms of "*self-fulfilment and goal achievement. Profits and business growth, while important, were less substantial measures of their success.*" However, despite this recognition of the importance of non-financial objectives to the SME owner-operator, it would appear that much SME research has concentrated on traditional economic measures of performance.

If income/wealth maximization is a poor proxy for the utility SME owner-operators receive from their businesses, how might this utility be better measured? The answer lies in the very nature of SMEs, where their smaller size often means that the goals of the owners become the goals of the firm (Bhide, 1996; Birley and Westhead, 1990; Brush and Vanderwerf, 1992; Cliff, 1998; Naffziger et al., 1994). This is undoubtedly the view taken by Cooper (1993, p. 241), who stated

> *many entrepreneurs pursue personal goals, some of which are non-economic in nature. Thus, decisions about whether to found ventures, about how vigorously to grow them, or about whether or not to close down marginal businesses are all influenced by the personal values of entrepreneurs.*

In turn, this suggests that SME performance should be assessed by determining how effectively firms achieve their owner-operators' objectives (or goals, as suggested by Murphy et al., 1996). Using business owner's perceptions of their firm's success as a single proxy for the utility owner-operators receive from their firms, this paper reports on a study that seeks to determine the relative usefulness of economic returns and/or multi-faceted goal achievement in explaining this utility measure.

Measuring performance

While SME performance has been most commonly measured by "objective" economic returns (Parasuraman et al., 1996), studies in the sector have also regularly measured performance in more "subjective" ways. Many of the SME studies that have resorted to assessing business performance with perceptual measures have done so because of difficulties in obtaining objective economic data from new and extant SMEs (Bamford et al., 2000; Bergeron et al., 2004; Covin, 1991) and/or because of doubts about the accuracy of their, generally, unaudited financial statements (Beal, 2000; Naman and Slevin, 1993; Raymond et al., 2001). For example, Caloghirou et al. (2004) gauged firm profitability in their comparative study of SMEs and large firms with subjective measures of profit margin, return on assets, and net profit; Chandler and Hanks (1993) developed a satisfaction index using eight subjective measures of SME financial performance; McGee and Peterson (2000) measured the performance of pharmacies with four items rating the financial position of SMEs relative to others; and Simon et al. (2003) asked managers to rate their firm's performance on six economic criteria.

However, while the use of subjective measures of SME economic performance is well established, research on how an SME owner's objectives impact on satisfaction with their firm's economic performance appears both limited and ambiguous. For example, although Brush and Chaganti (1999) revealed a positive relationship between an owner's commitment to the firm and the likelihood they would consider the firms cash flows positively; Cooper and Artz (1995, p. 440) "*found that the satisfaction of entrepreneurs emphasizing economic goals was not more sensitive to economic performance ... (but) those emphasizing non-economic goals did express higher levels of satisfaction*"; and Amit et al. (2001) discovered that wealth attainment was less important but not less satisfying for a group of high technology venturers. It should also be noted that SME researchers' use of subjective measures for profitability and economic returns has not always been independent of perceptions of other, more qualitative, aspects of business success. For example, Sapienza and Grimm (1997) quantified goal achievement with subjective evaluations of growth in sales, short-term profits, customer satisfaction and employee satisfaction; Kotey and Meredith's (1997) subjective measure of

(mainly economic) performance included technology use and community development; Sonfield et al (2001) asked their SME owners to consider non-financial as well as financial aspects when subjectively assessing their firm's performance; and Pelham and Lieb (2004) combined marketing effectiveness and profit in their subjective measure of firm performance.

Methodology

Our data is taken from 562 responses to a survey of the attitudes and expectations of SME owner-operators in Western Australia. Relevant questions for the study were: a single item measure of principal owner-operator's satisfaction with their business's overall performance; satisfaction measures for various goal items taken from a previously developed SME Owner-operator Objectives Scale (SOS, Newby et al., 2004);[1] firm size; firm age; industry; and business profitability. Analysis was undertaken using t-tests, Pearson correlation coefficients, nested F-tests and linear regression.

The dependent (proxy) variable for the utility owner-operators received from their firms was the single item measure of satisfaction with overall performance (based on a seven-point Likert-type scale). Principal independent variables included: a "hard" measure of economic performance (being profit per full-time owner as used by: Hartenian and Gudmundson, 2000; and Kara et al., 2005);[2] and standardised SOS satisfaction scores calculated using an orthogonal rotation. Other independent variables controlled for firm size, firm age, and industry. Firm size was measured by the natural logarithm of full-time equivalent (fte) staff (including owners); firm age was recognised by dummy variables given concerns that its impact might not be linear;[3] and industry was acknowledged in the usual manner with dummy variables.[4]

TABLE 1:
DESCRIPTIVE STATISTICS

PANEL A: SATISFACTION WITH OVERALL PERFORMANCE (n)*	mean	median	standard deviation
All firms (562)	4.74	5.00	1.69
Firm age:			
Young[Y] (106)	4.77	5.50	1.74
Intermediate[I] (114)	4.79	5.00	1.69
Mature[M] (342)	4.71	5.00	1.69
Industry:			
Agriculture, forestry, fishing & hunting (32)	4.22	5.00	1.93
Manufacturing (41)	4.37	5.00	1.67
Construction (77)	5.04	6.00	1.63
Wholesale (29)	4.31	5.00	1.95
Retail, accommodation, cafes and restaurants (137)	4.41	5.00	1.83
Communication, finance and insurance, property and business services (123)	5.10	6.00	1.48
Health and community services (35)	5.03	6.00	1.32
Educational, cultural and recreational services (24)	4.92	5.50	1.74
Personal and other services (34)	5.06	5.00	1.52
All other industries (30)	4.60	5.00	1.65
PANEL B: CONTINUOUS VARIABLES (n)	**mean**	**median**	**standard deviation**
Firm size:			
Natural logarithm of fte staff (562)	1.53	1.39	1.03
Economic performance:			
Transformed profit per owner[A] after notional owners' salaries[B] (562)	82.79	92.58	222.37

* Based on a seven-point Likert-type scale, with 1 indicating the least and 7 the most satisfaction with overall performance.

[A] Number of owners adjusted for part-time status (based on a 40 hour week).

[B] $10 per owner working hour.

[Y] Under five (5) years

[I] Five (5) to ten (10) years

[M] Over ten (10) years

Results

Descriptive statistics from the sample are given in Table 1. Panel A reports the mean, median and standard deviation for satisfaction with overall performance (the dependent variable) for all firms and the firm age and industry sub-groups. Mean, median and standard deviation values for the continuous firm size and economic performance variables are given in Panel B. (By definition the standardised SOS satisfaction scores have distributions with means of 0.00 and standard deviations of 1.00, hence they are not included on the Table).

Table 1 reveals that the sampled SME owner-operators had a mean score of 4.74 for satisfaction with their business's overall performance. Reference to the average values by firm age and industry show that while there was little difference in satisfaction between the young, intermediate and mature firms (4.77, 4.79 and 4.71, respectively), there was wide variation by industry (ranging from a low of 4.22 for agricultural, fishing, forestry and hunting businesses to a high of 5.10 for communications, finance and insurance, and property and business service firms).

Bi-variate analyses between the dependent and independent variables are provided in Tables 2 and 3, where the results of t-tests based on the dichotomous business age and industry control variables in Table 2 complement Panel A of Table 1. Further statistical insights on SME owner-operators satisfaction with overall performance are given in Table 3 through correlations with the continuous independent variables.

Table 2 shows that age of the firm had little relationship with the degree of satisfaction owners received from the performance of their business. A t-test of the small variation between young and mature firms was found to be insignificant (2-tailed p-value of 0.945), as were similar t-tests comparing young firms and mature firms to combinations of mature and intermediate and intermediate and young businesses, respectively.

TABLE 2:
T-TESTS BY DICHOTOMOUS CONTROL VARIABLES

	Satisfaction with overall performance*	
	t-statistic	2-tailed p-value
Firm age:		
Young[Y] v mature[M]	0.070	0.945
Young[Y] v intermediate[I] and mature[M]	0.354	0.723
Mature[M] v young[Y] and intermediate[I]	-0.872	0.383
Industry:		
Agriculture, forestry, fishing and hunting v all other businesses	-2.249	0.025
Manufacturing v all other businesses	-1.345	0.179
Construction v all other businesses	2.129	0.034
Wholesale v all other businesses	-1.540	0.124
Retail, accommodation, cafes and restaurants v all other businesses	-2.610	0.010
Communication, finance and insurance, property and business services v all other businesses	3.090	0.002
Health and community services v all other businesses	1.805	0.077
Educational, cultural and recreational services v all other businesses	0.055	0.956
Personal and other services v all other businesses	0.965	0.335
All other industries v all other businesses	-0.694	0.488

* Based on a seven-point Likert-type scale, with 1 indicating the least and 7 the most satisfaction with overall performance.

[Y] Under five (5) years
[I] Five (5) to ten (10) years
[M] Over ten (10) years

However, Table 2 reveals that industry was significantly associated with owner-operator subjective assessment of business performance. Owner-operators in the communication, finance and insurance, property and business services industry were significantly more satisfied than other businesses (2-tailed p-value of 0.002), as were those in the construction sector (2-tailed p-value of 0.034). Conversely, owner-operators of retail establishments, cafes, restaurants and providers of

accommodation were significantly less satisfied than those in other industries (2-tailed p-value of 0.010), with a similar situation applying to firms in the agricultural, forestry, fishing and hunting sector (2-tailed p-value of 0.025).

Pearson correlations and significances between the continuous dependent and independent variables are presented in Table 3. The Table provides strong support for the contention that both owner-operator goal achievement and economic return positively explain owner-operator perceptions of overall business success. Transformed profit per full-time owner after notional owners' salaries was significantly associated with overall satisfaction (r = 0.310, 1-tailed p-value of 0.000), as were the following SOS satisfaction factors: extrinsic rewards (r = 0.461, 1-tailed p-value of 0.000); time flexibility (r = 0.071, 1-tailed p-value of 0.046); staff relations (r = 0.097, 1-tailed p-value of 0.011); customer relations (r=0.090, 1-tailed p-value of 0.017); and intrinsic rewards (r = 0.097, 1-tailed p-value of 0.011). It should be noted that the correlation for objective economic return and overall satisfaction was lower than that for extrinsic rewards and overall satisfaction, with this difference statistically significant (p = 0.003 – not reported in the Table).

TABLE 3:
CORRELATIONS BETWEEN DEPENDENT VARIABLES AND CONTINUOUS INDEPENDENT VARIABLES

	Satisfaction with overall performance*	
	Pearson's r	2-tailed p-value
Firm size:		
Natural logarithm of fte staff	0.060	0.155
	Pearson's r	1-tailed p-value
Economic performance:		
Transformed profit per owner[A] after notional owners' salaries[B]	0.310	0.000
SOS standardised satisfaction:		
Extrinsic rewards	0.461	0.000
Time flexibility	0.071	0.046
Family	0.001	0.495
Staff relations	0.097	0.011
Customer relations	0.090	0.017
Independence	0.054	0.099
Intrinsic rewards	0.097	0.011

* Based on a seven-point Likert-type scale, with 1 indicating the least and 7 the most satisfaction with overall performance.

A Number of owners adjusted for part-time status (based on a 40 hour week).

B $10 per owner working hour.

Results of three multi-variate linear regression tests seeking to explain SME owner-operators satisfaction with overall business performance are presented in Table 4. The findings for the Table were generated using the following procedure. Initially, a regression model that incorporated the control variables for firm size, firm age and industry was established as the base case (ANOVA F-statistic p-value of 0.014, r = 0.211, adjusted r^2 of 0.024, not reported in Table 4). This was followed by the development of three linear models that incrementally built upon the control model. Transformed profit per full-time owner after notional owners' salaries was added to the base case for the regression model shown in columns 1 and 2 of Table 4, this was expanded to also include satisfaction with extrinsic rewards in columns 3 and 4, while the full specification regression comprising all independent variables is shown in columns 5 and 6 of Table 4.

In assessing the usefulness of economic returns and/or goal achievement to explain our proxy for owner-operator utility, Table 4's results suggest that the simultaneous inclusion of both "hard" measures of economic performance (transformed profit per full-time owner after notional owners' salaries) and "soft" measures of goal achievement (SOS satisfaction) is justified. Nested F-tests reveal that the addition of objective economic return to the controls for firm size, age and industry was statistically warranted (adjusted r^2 rose from 0.024 to 0.110, nested F-statistic p-value of 0.000), while the further inclusion of satisfaction with extrinsic rewards also generated a statistically significant improvement on the prior model (adjusted r^2 rose from 0.110 to 0.256, nested F-statistic p-value of 0.000). Furthermore, the final nested F-test on Table 4 suggested that the remaining SOS satisfaction scores were also statistically worthy of inclusion in our "best fit" model as the adjusted linear

regression r^2 rose from 0.256 to 0.279 (with a nested F-statistic p-value of 0.001). Additional SOS factors significantly associated with overall satisfaction were satisfaction with staff relations (one-tailed p-value of 0.002), satisfaction with customer relations (one-tailed p-value of 0.029) and satisfaction with intrinsic rewards (one-tailed p-value of 0.005).

TABLE 4:
LINEAR REGRESSIONS OF SATISFACTION WITH OVERALL PERFORMANCE*

	Controls plus economic performance		Controls, economic performance and extrinsic rewards satisfaction		Controls, economic performance and SOS satisfaction	
	beta	2-tailed p-	beta	2-tailed p-	beta	2-tailed p-
Constant	4.420	0.000	4.627	0.000	4.577	0.000
Controls						
Natural logarithm of fte staff	-0.074	0.313	-0.111	0.100	-0.132	0.056
Young[Y]	0.165	0.455	0.199	0.326	0.219	0.273
Mature[M]	-0.054	0.763	-0.124	0.451	-0.114	0.485
Agriculture, forestry, fishing and hunting	-0.129	0.756	-0.184	0.627	-0.032	0.932
Manufacturing	-0.056	0.885	0.061	0.857	0.151	0.664
Construction	0.347	0.314	0.338	0.283	0.442	0.157
Wholesale trade	-0.373	0.373	-0.297	0.438	-0.181	0.632
Retail trade, accommodation, cafes and restaurants	-0.042	0.896	0.033	0.911	0.109	0.709
Finance and insurance, property and business services	0.406	0.213	0.328	0.272	0.398	0.177
Health and community services	0.171	0.669	0.131	0.721	0.217	0.550
Educational and recreational services	0.684	0.122	0.897	0.027	0.931	0.020
Personal and other services	0.624	0.122	0.530	0.150	0.217	0.139
Economic performance						
Transformed profit per owner[A] after notional owners' salaries[B]	0.003	0.000	0.002	0.000	0.002	0.000
SOS satisfaction with:						
Extrinsic rewards			0.695	0.000	0.702	0.000
Time flexibility					0.082	0.184
Family					0.036	0.569
Staff relations					0.184	0.004
Customer relations					0.118	0.057
Independence					0.083	0.173
Intrinsic rewards					0.160	0.009
n	562		562		562	
F-statistic (p-value)	6.354 (0.000)		14.814 (0.000)		11.877 (0.000)	
regression R	0.362		0.524		0.552	
adjusted R^2	0.110		0.256		0.279	
Nested F-statistic (p-value)		108.78 (0.000)		3.93 (0.001)		

* Based on a seven-point Likert-type scale, with 1 indicating the least and 7 the most satisfaction with overall performance.

[A] Number of owners adjusted for part-time status (based on a 40 hour week).
[B] $10 per owner working hour.

[Y] Under five (5) years
[M] Over ten (10) years

Additional checks were conducted on the robustness of the findings reported in Table 4 to differing orders of entry among the experimental independent variables. Table 5, therefore, presents summary regression results and appropriate nested F-tests from two further scenarios. Panel A first adds satisfaction with extrinsic rewards to the base case of control variables only, followed by the inclusion of transformed profit per full-time owner after notional owners' salaries and finishing with the full specification regression. Panel B also begins with the addition of satisfaction with extrinsic rewards to

the base case, but this is then followed by the inclusion of the remaining SOS satisfaction factors before concluding with the full specification regression.

TABLE 5:
SUMMARY STATISTICS FOR LINEAR REGRESSIONS OF SATISFACTION WITH OVERALL PERFORMANCE*

PANEL A	Controls plus extrinsic rewards satisfaction	Controls, extrinsic rewards satisfaction and economic performance[1]	Controls, SOS satisfaction and economic performance[2]
n	562	562	562
F-statistic (p-value)	13.587 (0.000)	14.814 (0.000)	11.877 (0.000)
regression R	0.494	0.524	0.552
adjusted R^2	0.224	0.256	0.279
Nested F-statistic (p-value)		23.55 (0.000)	3.93 (0.001)

PANEL B	Controls plus extrinsic rewards satisfaction[3]	Controls and SOS satisfaction	Controls, SOS satisfaction and economic performance[2]
n	562	562	562
F-statistic (p-value)	13.587 (0.000)	10.890 (0.000)	11.877 (0.000)
regression R	0.494	0.526	0.552
adjusted R^2	0.224	0.251	0.279
Nested F-statistic (p-value)		4.07 (0.001)	22.48 (0.000)

* Based on a seven-point Likert-type scale, with 1 indicating the least and 7 the most satisfaction with overall performance.

[1] These results are the same as the second model presented in Table 4.
[2] These results are the same as the third model presented in Table 4.
[3] These results are the same as for the first model presented in Panel A.

Results from Table 5 support the inferences generated from Table 4, namely, that simultaneous inclusion of both "hard" measures of economic performance and "soft" measures of goal achievement is justified.[5] Firstly, comparison of the first two columns in Panel A of Table 5 reveals that the addition of objective economic return to a model comprising satisfaction with extrinsic rewards and control variables statistically significantly increased the proportion of variation explained in dependent measure (adjusted r^2 rose from 0.224 to 0.256, nested F-statistic p-value of 0.000). Similarly, Panel B shows that even after allowing for all SOS satisfaction measures of goal achievement, objective economic return was statistically worthy of inclusion (adjusted r^2 rose from 0.251 to 0.279, nested F-statistic p-value of 0.000). Note also that Table 5 provides further support for the incorporation of all seven SOS satisfaction factors in our "best fit" model, with the second regression in Panel B being a statistically significant improvement on that reported for the control variables and satisfaction with extrinsic rewards only (adjusted r^2 rose from 0.224 to 0.251, nested F-statistic p-value of 0.001).

Discussion and conclusion

Through its examination of the relative effectiveness of economic return and goal achievement measures to explain the utility owner-operators receive from their firm, this investigation clearly suggests that both types of business performance metric play a role. However, results from the study reveal that economic return is unlikely to be the most effective way of judging the level of utility owner-operators derive from their businesses, as evidenced by economic return explaining only half the variation in satisfaction with overall business performance than that achieved by satisfaction with extrinsic rewards (with this falling to an even small proportion when all SOS factors are taken into account). This paper's findings, therefore, appear to question the assertion that income/wealth maximization is the most appropriate metric to use in assessing SME owners utility from business ownership and, hence, sustains the well-established use of subjective economic performance measures used in many past SME studies. The findings also support the argument that measures of SME performance should incorporate how effectively firms achieve their owner-operators' goals, with this being an area for future research.

NOTES

[1] These goal achievement measures were based on seven factors further validated by Newby (2006) and comprised: extrinsic rewards; time flexibility; family; staff relations; customer relations; independence; and intrinsic rewards.

[2] This measure allowed for owners' remuneration at the minimum wage rate in Western Australia over the period the data was collected (being $10 per hour). A significant positive skew required transformation from raw values using a square root adjustment based on absolute values (which were then recoded to negative values where appropriate).

[3] "Young" firms being up to 5 years old, "intermediate" firms from 5 to 10 years old, and "mature" firms older than 10 years.

[4] Being: Agriculture, forestry, fishing and hunting; Manufacturing; Construction; Wholesale trade; Retail trade, accommodation, cafes and restaurants; Finance and insurance plus property and business services; Health and community services; Education and recreational services; Personal and other services; and Other (including mining and transport and storage). The regression models used the Other category as the reference group.

[5] It should be noted, however, that if only a single experimental independent is used with the control variables the explanatory power of the linear regression including satisfaction with extrinsic rewards is twice that for the linear regression including transformed profit per full-time owner after notional owners' salaries (adjusted r^2s of 0.224 and 0.110, respectively).

REFERENCES

Alexander, S. S. (1962). "Income Measurement in a Dynamic Economy." in W. T. Baxter and S. Davidson (eds), *Studies in Accounting Theory.* (2nd). Richard D. Irwin Inc., Homewood, IL, USA.

Amit, R., K. R. MacCrimmon, C. Zietsma and J. M. Oesch. (2001). "Does Money Matter?: Wealth Attainment as the Motive for Initiating Growth-oriented Ventures." *Journal of Business Venturing.* 16(2): 119-143.

Australian Bureau of Statistics. (2002). *Small Business in Australia, 2001*. Australian Bureau of Statistics, Canberra, ACT, Australia.

Australian Stock Exchange. (2001). *2000 ASX Year-end Statistics.*

Bamford, C. E., T. J. Dean and P. P. McDougall. (2000). "An Examination of the Impact of Initial Founding Conditions and Decisions Upon the Performance of New Bank Start-ups." *Journal of Business Venturing.* 15(3): 253-277.

Bannock, G., R. E. Baxter and R. Rees. (1972). *The Penguin Dictionary of Economics.* Penguin, Harmondsworth, England.

Beal, R. M. (2000). "Competing Effectively: Environmental Scanning, Competitive Strategy, and Organizational Performance in Small Manufacturing Firms." *Journal of Small Business Management.* 38(1): 27-47.

Bergeron, F., L. Raymond and S. Rivard. (2004). "Ideal Patterns of Strategic Alignment and Business Performance." *Information & Management.* 41(8): 1003-1020.

Bhide, A. (1996). "The Questions Every Entrepreneur Must Answer." *Harvard Business Review.* 74(6): 120-130.

Birley, S. and P. Westhead. (1990). "Growth and Performance Contrasts Between 'Types' of Small Firms." *Strategic Management Journal.* 11(7): 535-557.

Brush, C. G. and P. A. Vanderwerf. (1992). "A Comparison of Methods and Sources for Obtaining Estimates of New Venture Performance." *Journal of Business Venturing.* 7(2): 157-170.

Brush, C. G. and R. Chaganti. (1999). "Businesses Without Glamour? An Analysis of Resources on Performance by Size and Age in Small Service and Retail Firms." *Journal of Business Venturing.* 14(3): 233-257.

Buttner, E. H. and D. P. Moore. (1997). "Women's Organizational Exodus to Entrepreneurship: Self-reported Motivations and Correlates with Success." *Journal of Small Business Management.* 35(1): 34-46.

Caloghirou, Y., A. Prorogerou, Y. Spanos and L. Papagiannakis. (2004). "Industry- versus Firm-specific Effects on Performance: Contrasting SMEs and Large-sized Firms." *European Management Journal.* 22(2): 231-243.

Chandler, G. N. and S. H. Hanks. (1993). "Measuring the Performance of Emerging Businesses: A Validation Study." *Journal of Business Venturing.* 8(5): 391-408.

Cliff, J. E. (1998). "Does One Size Fit All? Exploring the Relationship Between Attitudes Towards Growth, Gender, and Business Size." *Journal of Business Venturing.* 13(6): 523-542.

Cooper, A. C. (1993). "Challenges in Predicting New Firm Performance." *Journal of Business Venturing.* 8(3): 241-253.

Cooper, A. C. and K. W. Artz. (1995). "Determinants of Satisfaction for Entrepreneurs." *Journal of Business Venturing.* 10(6): 439-457.

Covin, J. G. (1991). "Entrepreneurial versus Conservative Firms: A Comparison of Strategies and Performance." *Journal of Management Studies.* 28(5): 439-462.

Gimeno, J., T. B. Folta, A. C. Cooper and C. Y. Woo. (1997). "Survival of the Fittest? Entrepreneurial Human Capital and the Persistence of Underperforming Firms." *Administrative Science Quarterly.* 42(4): 750-783.

Gove, P. B. and Merriam-Webster Inc. (1993). *Webster's Third New International Dictionary of the English Language.* Merriam-Webster,

Hartenian, L. S. and D. E. Gudmundson. (2000). "Cultural Diversity in Small Business: Implications for Firm Performance." *Journal of Developmental Entrepreneurship.* 5(3): 209-219.

Herzberg, F. I., B. Mausner and B. Snyderman. (1959). *The Motivation to Work.* Wiley, New York, NY, USA.

Hicks, J. R. (1946). *Value and Capital: An Inquiry into Some Fundamental Principles of Economic Theory.* (2nd). Clarendon Press, Oxford, England.

Jensen, M. (2002). "Value Maximization, Stakeholder Theory, and the Corporate Objective Function." *Business Ethics Quarterly.* 12(2): 235-264.

Kara, A., J. E. Spillan and O. W. DeShields, Jr. (2005). "The Effect of a Market Orientation on Business Performance: A Study of Small-sized Service Retailers Using MARKOR Scale." *Journal of Small Business Management.* 43(2): 105-118.

Keats, B. W. and J. S. Bracker. (1988). "Toward a Theory of Small Firm Performance: A Conceptual Model." *American Journal of Small Business.* 12(4): 41-58.

Kotey, B. and G. G. Meredith. (1997). "Relationships Among Owner/manager Personal Values, Business Strategies, and Enterprise Performance." *Journal of Small Business Management.* 35(2): 37-64.

Kothari, S. P. (2001). "Capital Markets Research in Accounting." *Journal of Accounting & Economics.* 31(1-3): 105-231.

Kuratko, D. F., J. H. Hornsby and D. W. Naffziger. (1997). "An Examination of Owner's Goals in Sustaining Entrepreneurship." *Journal of Small Business Management.* 35(1): 24-33.

Lang, J. R. and N. B. Johnson. (1994). "Job Satisfaction and Firm Size: An Interactionist Perspective." *Journal of Socio Economics.* 23(4): 405-423.

LeCornu, M. R., R. G. P. McMahon, D. M. Forsaith and A. M. J. Stanger. (1996). "The Small Enterprise Financial Objective Function." *Journal of Small Business Management.* 34(3): 1-14.

Mackenzie, C. and A. Lewis. (1999). "Morals and Markets: The Case of Ethical Investing." *Business Ethics Quarterly.* 9(3): 439-452.

Maslow, A. (1954). *Motivation and Personality.* Harper and Row, New York, NY, USA.

McGee, J. E. and M. Peterson. (2000). "Toward the Development of Measures of Distinctive Competencies Among Small Independent Retailers." *Journal of Small Business Management.* 38(2): 19-33.

Mitchell, T. R., B. C. Holtom, T. W. Lee, C. J. Sablynski and M. Erez. (2001). "Why People Stay: Using Job Embeddedness to Predict Voluntary Turnover." *Academy of Management Journal.* 44(6): 1102-1121.

Murphy, G. B., J. W. Trailer and R. C. Hill. (1996). "Measuring Performance in Entrepreneurship Research." *Journal of Business Research.* 36(1): 15-23.

Naffziger, D. W., J. S. Hornsby and D. F. Kuratko. (1994). "A Proposed Research Model of Entrepreneurial Motivation." *Entrepreneurship Theory and Practice.* 18(3): 29-42.

Naman, J. L. and D. P. Slevin. (1993). "Entrepreneurship and the Concept of Fit: A Model and Empirical Tests." *Strategic Management Journal.* 14(2): 137-153.

Naughton, T. J. (1987). "Quality of Working Life and the Self-employed Manager." *American Journal of Small Business.* 12(2): 33-40.

Newby, R., J. Watson and D. Woodliff. (2004). "A Scale for Measuring SME Owner-Operator Objectives: Further Development and Validation." in L. M. Gillin, J. Yencken and F. La Pira (eds), *Regional Frontiers of Entrepreneurship Research: Refereed Proceedings of the First AGSE-Babson Entrepreneurship Research Conference.* Swinburne University of Technology, Melbourne, VIC, Australia.

Newby, R. (2006). *Examining the Goals of Small and Medium Enterprise Owner-operators.* Unpublished PhD thesis. University of Western Australia, Perth, WA.

Parasuraman, S., Y. S. Purohit and V. M. Godshalk. (1996). "Work and Family Variables, Entrepreneurial Career Success and Psychological Well-being." *Journal of Vocational Behavior.* 48(3): 275-300.

Pelham, A. M. and P. Lieb. (2004). "Differences Between Presidents' and Sales Managers' Perceptions of the Industry Environment and Firm Strategy in Small Industrial Firms: Relationship to Performance Satisfaction." *Journal of small Business M`.* 42(2): 174-189.

Petty, M. M., G. W. McGee and J. W. Cavender. (1984). "A Meta-analysis of the Relationships Between Individual Job Satisfaction and Individual Performance." *Academy of Management Review.* 9(4): 712-721.

Poiesz, T. B. C. and J. von Grumbkow. (1988). "Economic Well-being, Job Satisfaction, Income Evaluation and Consumer Satisfaction: An Integrative Attempt." in G. M. van Veldhoven,, K-E. Warneryd, and W. Fred van Raaij (eds), *Handbook of Economic Psychology.* Kluwer Academic Publishers, Dordrecht, Netherlands,

Pool, S. W. (1997). "The Relationship of Job Satisfaction with Substitutes of Leadership, Leadership Behavior, and Work Motivation." *Journal of Psychology.* 131(3): 271-283.

Raymond, L., J. Brisoux and A. Azami. (2001). "Marketing Information Systems Practices in Small Manufacturing Firms: Antecedents and Consequences." *The Journal of Computer Information Systems.* 41(3): 32-41.

Rowley, D. J., J. G. Rosse and O. J. Harvey. (1992). "The Effects of Belief Systems on the Job-related Satisfaction of Managers and Subordinates." *Journal of Applied Social Psychology.* 22(3): 212-231.

Sapienza, H. J. and C. M. Grimm. (1997). "Founder Characteristics, Start-up Process, and Strategy/Structure Variables as Predictors of Shortline Railroad Performance." *Entrepreneurship Theory and Practice.* 22(1): 5-24.

Simon, M., S. M. Houghton and S. Savelli. (2003). "Out of the Frying Pan...? Why Small Business Managers Introduce High-risk Products." *Journal of Business Venturing.* 18(3): 419-440.

Sonfield, M., R. Lussier, J. Corman and M. McKinney. (2001). "Gender Comparisons in Strategic Decision-making: An Empirical Analysis of the Entrepreneurial Strategy Matrix." *Journal of Small Business Management.* 39(2): 165-173.

Spiller, R. (2000). "Ethical Business and Investment: A Model for Business and Society." *Journal of Business Ethics.* 27(1-2): 149-160.

Thompson, C. A., R. E. Kopelman and C. A. Schriesheim. (1992). "Putting All One's Eggs in the Same Basket: A Comparison of Commitment and Satisfaction Among Self- and Organizationally-employed Men." *Journal of Applied Psychology.* 77(5): 738-743.

Tippet, J. and P. Leung. (2001). "Defining Ethical Investment and its Demography in Australia." *Australian Accounting Review.* 11(3): 44-55.

Vandenberg, R. J. and C. E. Lance. (1992). "Examining the Causal Order of Job Satisfaction and Organizational Commitment." *Journal of Management.* 18(1): 153-167.

VandenHeuvel, A. and M. Wooden. (1997). "Self-employed Contractors and Job Satisfaction." *Journal of Small Business Management.* 35(3): 11-20.